

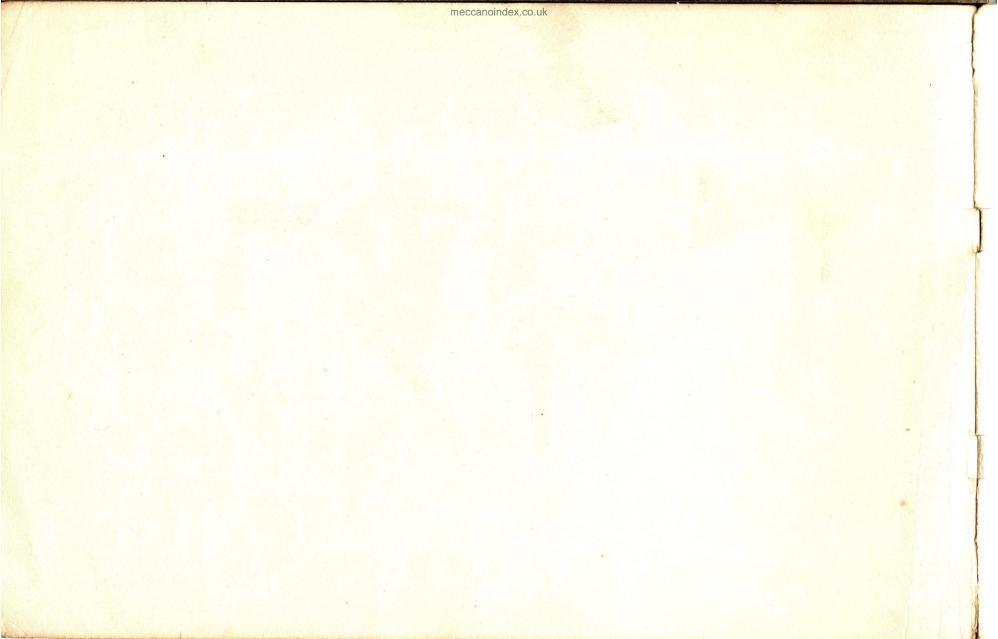
COMPLETE MANUAL OF INSTRUCTION

Full details of construction given for all Models that
can be built with the Thirteen 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.



THE

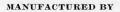
AMERICAN MODEL BUILDER

THE TOY FOR THE BOY



Marvelous Mechanical Models Can be Built by Any Boy





THE AMERICAN MECHANICAL TOY CO. DAYTON, OHIO, U. S. A.





The American Model Builder

To Strengthen the Mind is to Exercise not Rest-Pope



HE AMERICAN MODEL BUILDER is designed to teach the boy the first steps in practical mechanics. Every part in this outfit is a miniature machine part made of steel and brass, double plated and polished. This makes the outfit practically indestructible.

Each Pulley, Flanged and Grooved Wheel, Gear, Pinion, Bush Wheel, Eccentric Drive Wheel, Car Wheel, Auto Wheel, and Sprocket is equipped with a brass Collar and case-hardened Set Screw, cupped at the end, which provides a positive fastening when used in any of the work-

ing models.

All Gears are accurately cut to pitch and all Strips are made with rounded edges, so as to avoid the possibility of cutting the fingers when building the models. All Cranks and 4'' and $4\frac{1}{2}''$ Axle Rods are drilled for threading the string when used for hoisting purposes, and the cranks as well as the axles have rounded ends.

The most up-to-date and modern machinery has been installed in our factory to make the American Model Builder the most complete and practical steel construction outfit on the market.

First familiarize yourself with the various parts and their names, as described on pages 78 and 79; then start to erect all the Models, beginning with letter A. and take them in regular rotation until the capacity of your set is exhausted. Many mechanical principles are demonstrated in the smaller Models that will make the building of the more complicated ones much easier.

IMPORTANT.—Be sure to study the standard details of con-

struction illustrated on pages 74 and 75.

The American Model Builder is made in eight regular progressive sets, numbered from 0 to 7, as shown on page 80. The outfits numbered from 0½ to 6½ are Accessory Sets and should only be purchased for use in enlarging the regular sets. For instance, if you possess a No. 2 Outfit, the purchase of a No. 2½ Accessory Set will supply sufficient parts to convert a No. 2 into a regular No. 3 set. The No. 3½ Accessory Outfit contains enough parts to convert a No. 3 into a regular No. 4 set, and so on. We recommend the purchase of Accessory Outfits as the boy's knowledge increases. They are furnished in neat cardboard boxes, where all the parts may be kept when not in use. However, individual

parts may also be purchased separately at the prices shown on

We have designed special Motors, Transformers and a Countershaft for boys desiring to operate their Models by Electricity. These are by far the most efficient small devices ever offered the

public, and a full description will be found on page 76.

We maintain an Experimental Department at our factory where new designs and Models are constantly made. We want the name and address of each owner of an American Model Builder, as well as the number of your Outfit, so that we can keep you advised from time to time of any new models that can be built with your set. Please fill in the blank post card which is enclosed in your set and mail to us for this purpose.

PRIZE CONTEST

The charm and instruction in these Outfits lies in the building of original models. To encourage inventive genius, we are offering for the best original suggestions, submitted to us by April 1st, 1916, for the building of new models.

155 PRIZES, as follows:

1st Priz	e	value	\$100.00		\$100.00
Two Prizes			25.00	each	50.00
Three	**		15.00	"	45.00
Four	"		7.50	"	30.00
Ten	••		5.00	**	50.00
Twenty	"		3.00	**	60.00
Fifty	"		2.00	"	100.00
Sixty-fiv	e	Prizes	1.00	••	65.00

\$500.00

No entrance fee of any kind will be charged. In order to compete for these prizes it is not necessary for the contestant to own or buy an AMERICAN MODEL BUILDER OUTFIT,—simply send us a sketch, drawing, photograph or model made up of steel, cardboard, wood, tin or any other material, and all will receive equal consideration. These suggestions will then be submitted to three members of the Board of Directors of the Y. M. C. A. of Dayton, Ohio, and the awards made by them between April 15 and May 1, 1916.

The committee will be governed in awarding the prizes by the mechanical and structural features involved in the design, as well as their practicability,

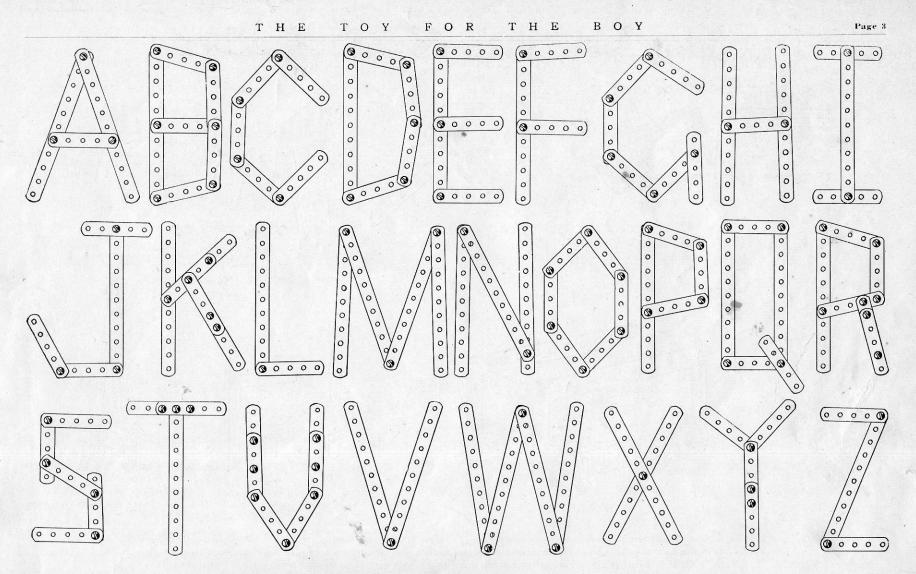
usefulness and symmetry.

In submitting models, photos or suggestions BE SURE to give your FULL NAME and Postoffice address.

We want every user of The American Model Builder to feel free to write us at any time when difficulties arise in the building of Models and we will gladly give our suggestions and help.

THE AMERICAN MECHANICAL TOY COMPANY,

DAYTON, OHIO, U. S. A.



The 26 Letters shown on this page can be made with The American Model Builder No. 1, or with No. 0 and No. 01/2 Combined.

All Models shown on this page can be made with The American Model Builder Outfit No. 1, or with No. 0 and No. 01/2 Combined. HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

SETTEE

Fig. No. 33

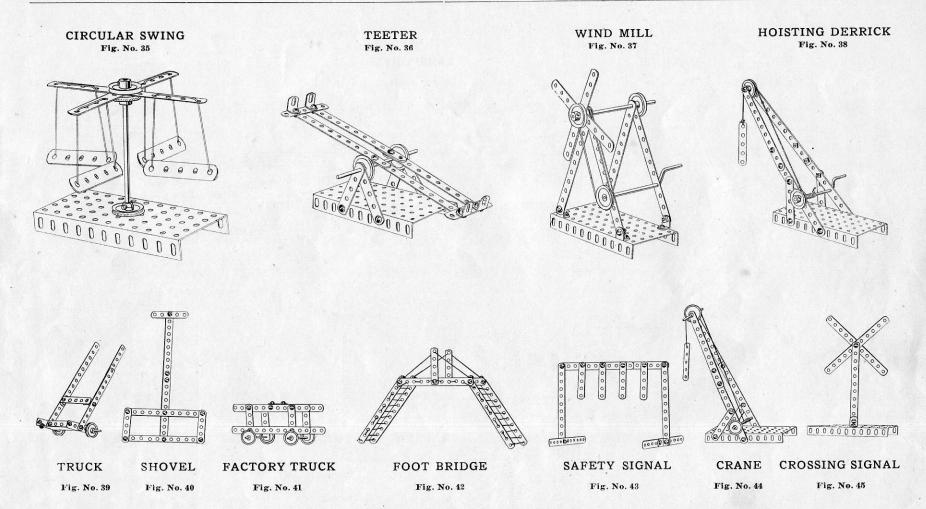
RAILWAY SIGNAL

Fig. No. 34

BOX TRUCK

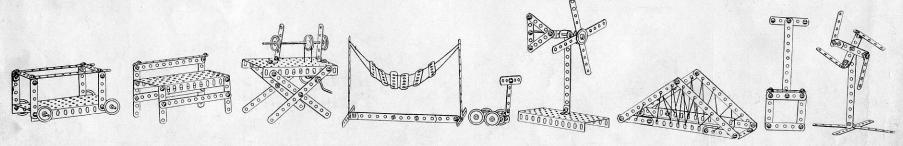
Fig. No. 32

Fig. No. 31



F .

LADDER BED DERRICK TRANSPORTER REEL SAW STEP BUCK LADDER Fig. No. 46 Fig. No. 47 Fig. No. 48 Fig. No. 49 Fig. No. 50 Fig. No. 51 Fig. No. 52 0000000000 00000000000



HAND TRUCK Fig. No. 53 SETTEE

Fig. No. 54

LATHE

Fig. No. 55

HAMMOCK

Fig. No. 56

COASTER

Fig. No. 57

WEATHER VANE

Fig. No. 58

BRIDGE

Fig. No. 59

SCRAPER

SWASTIKA

Fig. No. 60

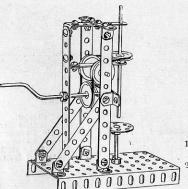
Fig. No. 61

HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED

BOY THE THE FOR TOY

DRILL PRESS

Fig. No. 106

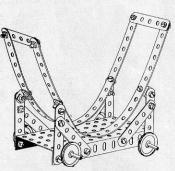


PARTS REQUIRED

- 1-Large Plate 3-51/2" Strips
- 2-31/2" Strips
- 4-21/2" Strips 1-Bush Wheel
- 4-1" Pulleys
- 1-41/2" Axle Rod 2-2" Axle Rods
- 1-41/2" Crank
- 11-Angle Brackets
- 4-Collars
- 23-Nuts and Screws

WALL PAPER TRUCK

Fig. No. 107



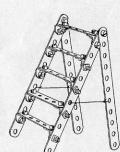
PARTS REQUIRED

- 1-Large Plate 2-121/2" Strips
- 10-21/2" Strips
- 2-41/2" Axle Rods
- 4-1" Pulleys
- 4-Angle Brackets

24-Nuts and Screws

MACHINISTS' LADDER

Fig. No. 108



PARTS REQUIRED

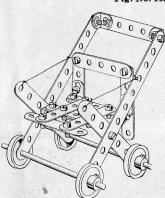
4-51/2" Strips

5-21/2" Strips

10-Angle Brackets

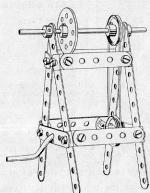
22-Nuts and Screws

FOLDING CHAIR Fig. No. 109



PARTS REQUIRED

- 2-51/2" Strips
- 2-31/2" Strips 9-21/2" Strips
- 6-Angle Brackets
- 2-41/2" Axle Rods
- 4-1" Pulleys
- 20-Nuts and Screws



GRIND STONE

Fig. No. 110



- 2-1" Pulley Wheels 3-Collars and Set Screws
- 16-Nuts and Screws

LATHE

Fig. No. 111

This is a simple type of Turning Lathe and will turn up soft material such as a candle or chalk.

Any material to be turned should be fastened to the Bush Wheel by means of Angle Brackets and the 2" Axle Rod inserted in the opposite end.

This little model can also be operated by motor by attaching another 1" Pulley Wheel to the 4½" Crank.

PARTS REQUIRED



1-Bush Wheel 3-1" Pulleys

2-2" Axle Rods

1-41/2" Crank

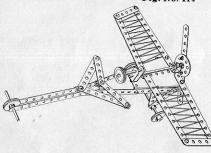
4-Collars

9-Angle Brackets

18-Nuts and Screws

MONOPLANE

Fig. No. 112



PARTS REQUIRED

4—1" Pulleys
1—Bush Wheel
4—Collars
2—12½" Strips
4—5½" Strips
10—2½" Strips
5—Angle Brackets
1—Single Bent Strip
1—Sector Plate
2—4½" Axle Rods
2—2" Axle Rods
4—Nuts and Screws

WELL DRILL

Fig. No. 113

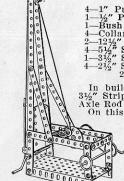
PARTS REQUIRED

4—1" Pulleys
1—½" Pulley
1—Bush Wheel
4—Collars
2—12½" Strips
4—5½" Strips
1—3½" Strips
4—2½" Strip
4—2½" Strips
24—Nuts and Screws

In building the Well Drill, note that a 3½" Strip is used as a bearing for the 2" Axle Rod which holds the Bush Wheel. On this Bush Wheel is then attached the

1/2" Pulley over which the cord passes which operates the Drill. Both Cranks should be oper-

ated at the same time, the one in the rear giving the up-anddown movement to the Drill, while the one in the front extends the length of the rope as the Drill sinks.



AUTO RACER

Fig. No. 114

PARTS REQUIRED

4-1" Pulley Wheels	10-21/6" Strips
1—Bush Wheel	10-2½" Strips 3-2½" Angle Strips
2—Collars	6-Angle Brackets
2—12½" Strips	1—Large Plate
2—12½" Strips 2—5½" Strips 2—3½" Strips	2-41/2" Axle Rods
2-31/2" Strips	22-Nuts and Bolts

REVOLVING CRANE

Fig. No. 115

PARTS REQUIRED



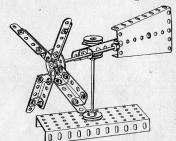
In making the
Revolving Crane a
1" Pulley Wheel is
attached to the 2"
Axle Rod on the under side of the
Large Plate. This
holds the boom in
place so that it can
be freely turned
from one side to the
other.

A Collar is attached to the 2" Axle Rod on the top of the Sector Plate to hold the platform securely.

Owing to the view of the picture it is impossible to show these two parts.

WEATHER VANE

Fig. No. 116



PARTS REQUIRED

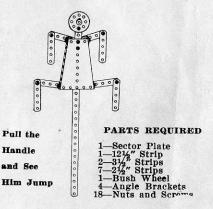
1—Large Plate
1—Sector Plate
1—54½" Strip
8—2½" Strips
2—4½" Axle Rods
1—Bush Wheel
3—1" Pulleys
3—Collars
1—Single Bent Strip
10—Angle Brackets
24—Nuts and Screws

The Weather Vane is a clever little model and is so well balanced that if it is set in an open space where a free circulation of air can get to it, the wheel will revolve freely.

A Single Bent Strip should be fastened securely to the 5½" Strip which is bolted to the Sector Plate. This Single Bent Strip forms the bearing on which the entire device turns.

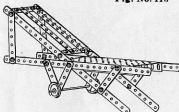
The two Pulley Wheels at the top of the 41/2" Axle Rod are simply used as bearings to keep the upper part of the framework in place.

JUMPING JACK Fig. No. 117



SLOPING BAGGAGE TRUCK

Fig. No. 118

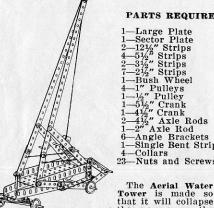


PARTS REQUIRED

- 2-1" Pulley Wheels
- 4-121/2" Strips
- 2-5%" Strips
- 8-21/2" Strips
- 4-Angle Brackets 1-41/4" Axle Rod
- 2-31/2 Strips
- 22-Nuts and Bolts

AERIAL WATER TOWER

Fig. No. 121



PARTS REQUIRED

1-Large Plate 1-Sector Plate 1—Sector Flate 2—12½" Strips 4—5½" Strips 2—3½" Strips 7—2½" Strips 1—Bush Wheel 4—1" Pulleys 1—½" Pulley Crank 41/3" Crank 2—4½" Axle Rods 1—2" Axle Rod 6—Angle Brackets 1—Single Bent Strip 23-Nuts and Screws

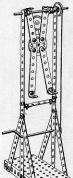
Tower is made so that it will collapse

the same as the water tower that is used by the fire depart-

By turning the lower crank the tower can be raised or lowered at will, while the upper crank will change the location of the tower after it is raised.

PERFORMING ACROBAT

Fig. No. 119



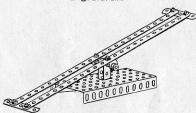
PARTS REQUIRED

- 1-Large Plate
- 2-121/2" Strips
- 4-51/2" Strips
- 2-31/2" Strips
- 4-21/2" Strips
- 1-41/2" Crank
- 1-41/2" Axle Rod
- 1-Bush Wheel
- 3-1" Pulleys
- 4-Collars
- 8-Angle Brackets
- 22-Nuts and Screws

Turn the Crank and See Him Do the Giant Swing.

TEETER

Fig. No. 122



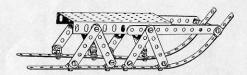
PARTS REQUIRED

- 1—Large Plate 2—12½" Strips 2—2½" Strips 1—Single Bent Strip

- 2-Angle Brackets
- -2" Axle Rod
- 2-Collars
- 7-Nuts and Screws

MOUNTAIN COASTER

Fig. No. 120

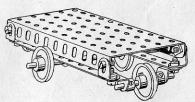


PARTS REQUIRED

- 1-Large Rectangular Plate
- 2-121/4" Perforated Strips
- 2-51/2" Perforated Strips
- 9-21/2" Perforated Strips
- 10-Angle Brackets
- 24-Nuts and Screws

REVOLVING TRUCK

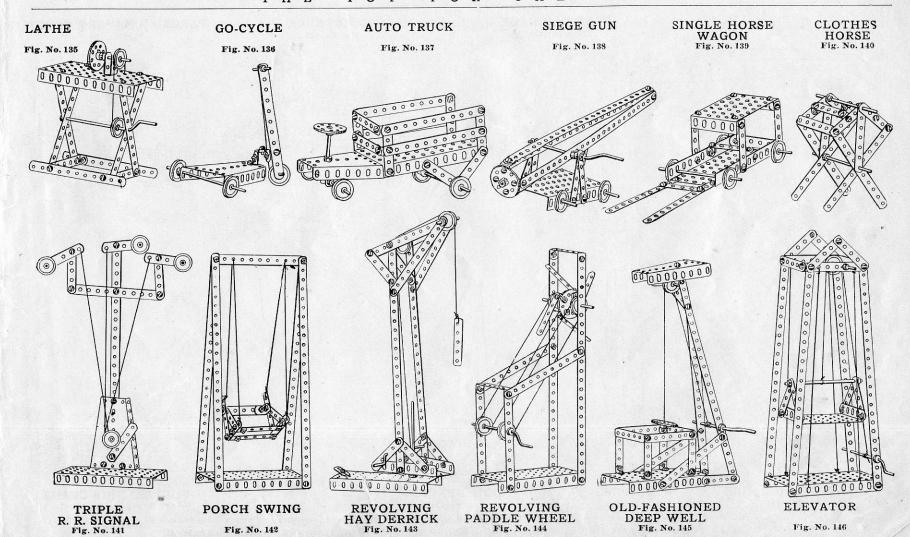
Fig. No. 123

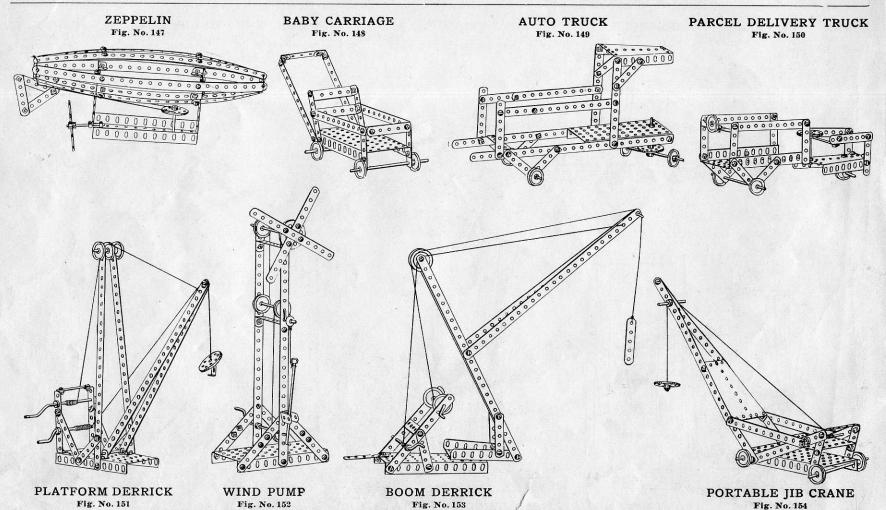


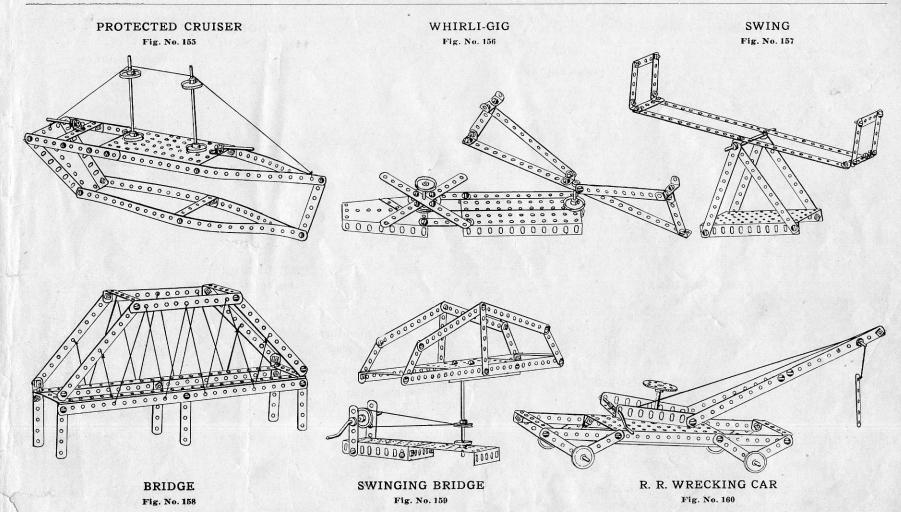
PARTS REQUIRED

- 1—Large Plate 2—5½" Strips 3—1" Pulleys
- 8—Angle Brackets 1—4½" Axle Rod 1—2" Axle Rod
- 2-Collars
- 10-Nuts and Screws

All Models shown on this page can be made with The American Model Builder Outfit No. 1, or with No. 0 and No. 0½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

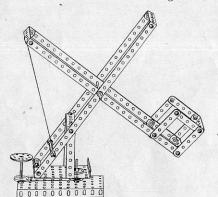






REVOLVING STEAM SHOVEL

Fig. No. 161



PARTS REQUIRED

4-1" Pulley Wheels

2-Angle Brackets

18-Nuts and Bolts

3-121/2" Strips

6-21/2" Strips

2-31/2" Strips

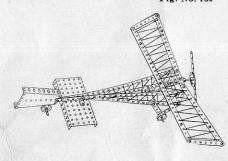
1-Large Plate

PARTS REQUIRED

-1" Pulley Wheels -½" Pulley Wheel Bush Wheel Collars 2½" Strips Strips -2½" Strips -2½" Angle Strips -Angle Brackets -Large Rectangular Plate Sector Plate -41/2" Axle Rods -41/2" Crank 51/2" Crank 1—Single Bent Strip 2—2" Axle Rods 22—Nuts and Bolts

MONOPLANE

Fig. No. 162

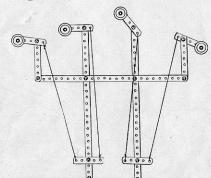


PARTS REQUIRED

4—1" Pulley Wheels 1—Bush Wheel 4-Collars 4—121/4" Strips
5—51/2" Strips
2—31/2" Strips
2—31/2" Strips
2—21/2" Angle Strips
4—Angle Brackets 4—Angre Plate
1—Large Plate
1—Sector Plate
1—Single Bent Strip
2—4½" Axle Rods
2—2" Axle Rods
24—Nuts and Bolts

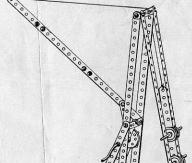
4 ARM R. R. SIGNAL

Fig. No. 163



PILE DRIVER

Fig. No. 164



PARTS REQUIRED

4-1" Pulley Wheels

1-Bush Wheel 1-1/2" Pulley Wheel

3-Collars

.4-121/2" Strips

6-51/2" Strips

2-31/2" Strips 10-21/2" Strips

2--21/2" Angle Strips

6-Angle Brackets 1-Large Plate

2-41/2" Axle Rods 2-2" Axle Rods

1-51/2" Crank

23-Nuts and Bolts

THE TOY FOR THE BOY

TROLLEY CAR Fig. No. 165

PARTS REQUIRED

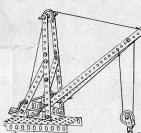


TRACK FOR CAR

6-Collars 2—12½" Strips 2—4½" Axle Rods

REVOLVING and ELEVATING BOOM DERRICK

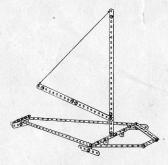
Fig. No. 167



PARTS REQUIRED

-1" Pulley Wheels 1—½" Pulley Wheel 1—Bush Wheel 5-Collars 2—12½" Strips 6—5½" Strips 1-Single Bent Strip 3-Angle Brackets 1--Large Plate 1-Sector Plate -2" Axle Rods 1—4½" Crank 1—5½" Crank 18-Nuts and Bolts

ICE BOAT Fig. No. 168



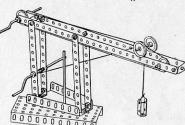
PARTS REQUIRED

3-121/2" Strips 5-51/2" Strips 5-21/2" Strips 2-21/2" Angle Strips 1-Angle Bracket

19-Nuts and Bolts

REVOLVING TRAVELING CRANE

Fig. No. 166

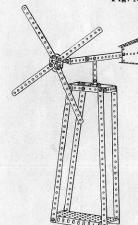


PARTS REQUIRED

4—1" Pulley Wheels 1—½" Pulley Wheel 1—Bush Wheel 6-Collars -12½" Strips -5½" Strips 8—Angle Brackets 1—Single Bent Strip 1—Large Plate 1—Sector Plate 1—4½" Axle Rod 2—2" Axle Rods 1—4½" Crank 1—5½" Crank 16—Nuts and Bolts

WIND MILL

Fig. No. 169



PARTS REQUIRED

-Bush Wheel

2-Collars

4-121/2" Strips

5-51/2" Strips

3-21/2" Strips

2-31/2" Angle Strips

2-21/2" Angle Strips

1-Angle Bracket

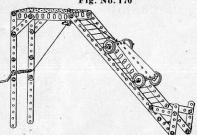
1-Large Plate

1-Sector Plate

1-41/2" Axle Rod

23-Nuts and Bolts

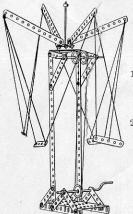
INCLINED RAILWAY Fig. No. 170



PARTS REQUIRED

4-1" Pulley Wheels	2-Angle Brackets
1-1/2" Pulley	1—Large rlate
4—Collars	1—Sector Plate
2-121/2" Strips	2-41/2" Axle Rods
4-5½" Strips	1—2" Axle Rod
7—2½" Strips	1-41/2" Crank
1-Single Bent Strip	23-Nuts and Bolts

CIRCLE SWING Fig. No. 171



PARTS REQUIRED

-1" Pulley Wheels -Bush Wheel 1—Bush Wheel
6—Collars
2—12½" Strips
4—5½" Strips
10—2½" Strips
10—2½" Angle Strips
4—2½" Angle Brackets
1—Large Plate
2—4½" Axle Rods
1—5½" Crank
20—Nuts and Bolts 20-Nuts and Bolts

REVOLVING DREDGE

Fig. No. 172

PARTS REQUIRED

4—1" Pulley Wheels 1—Bush Wheel 6-Collars 5—Collars
1—121/2" Strips
8—21/2" Strips
1—21/2" Angle Strips
1—21/2" Angle Strips
1—Large Plate
1—Large Plate -Small Plate 1—4½" Axle Rod 2—2" Axle Rods 1—4½" Crank 24—Nuts and Bolts



PARTS REQUIRED

3—1" Pulley Wheels 1—½" Pulley Wheel 1—Bush Wheel 6-Collars -Collars -12½" Strips -3½" Strips -2½" Strips -3½" Angle Strips -Angle Brackets 1-Large Plate 2—2" Axle Rods 1—4½" Crank 1—5½" Crank 15—Nuts and Bolts



The Platform Derrick completes the models that may be made with The American Model Builder Outfit No. 1. By purchasing Accessory Outfit No. 1½, many additional models can be made, 59 of which are shown on the following pages.

For price of separate parts and Accessory Outfits, see pages 79 and 80.

For special Transformer and Countershaft for operating models with Electricity, see page 76.



All Models shown on this page can be made with The American Model Builder Outfit No. 2, or with No. 1 and No. 1½ Combined. HALF THE TUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

Fig. No. 180

Fig. No. 181

REVOLVING CRANE

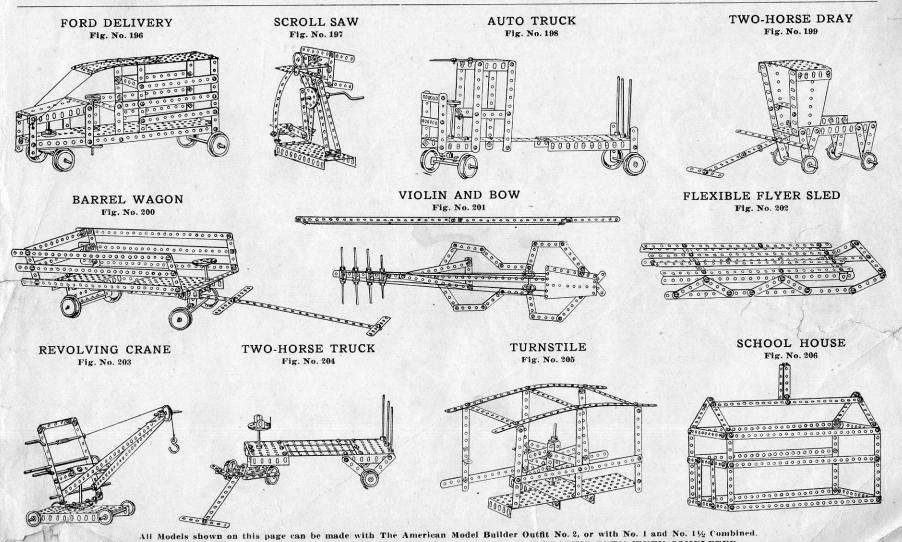
Fig. No. 182

PRESS

Fig. No. 184

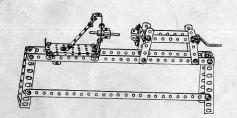
Fig. No. 183

HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN. COMPLETED.

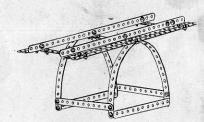


HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

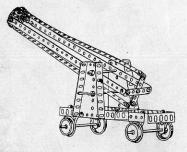
LATHE Fig. No. 207 CULVERT Fig. No. 208 SIEGE GUN Fig. No. 209 AUTO DUMP TRUCK Fig. No. 210



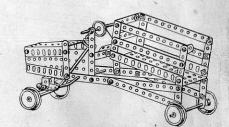
LOCOMOTIVE TENDER
Fig. No. 211



FLAT CAR Fig. No. 212

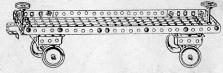


COAL CAR Fig. No. 213

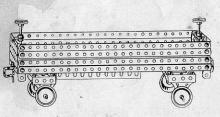


CATTLE CAR Fig. No. 214

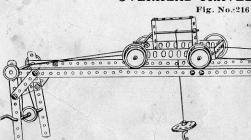


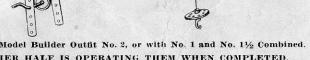


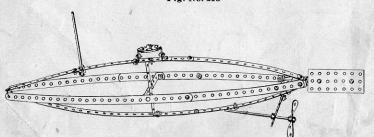
SUBMARINE Fig. No. 215



OVERHEAD TRAVELING CRANE



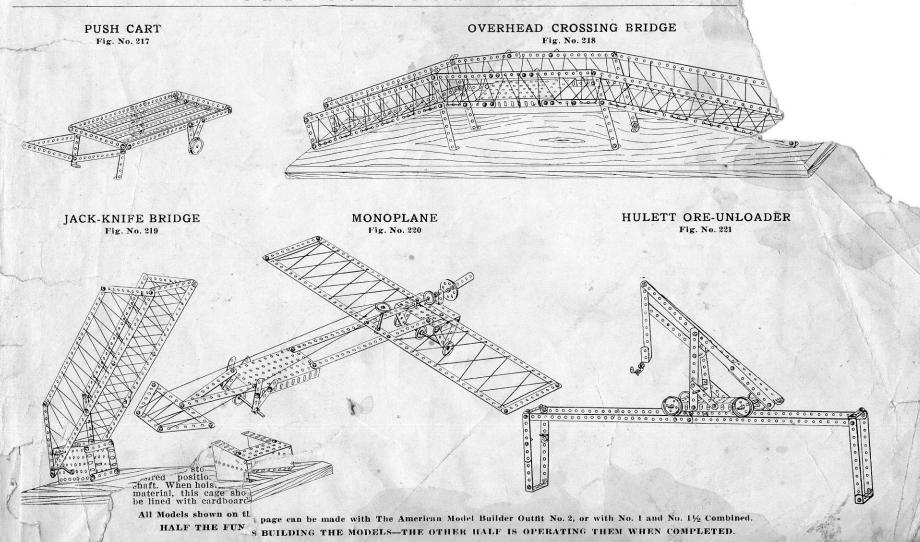




All Models shown on this page can be made with The American Model Builder Outfit No. 2, or with No. 1 and No. 1½ Combined.

HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

THE TOY FOR THE BOY



THE AMERICAN MODEL BUILDER

AND GRINDER

Fig. No. 222

PARTS REQUIRED

- 1—Large Plate 4—5½" Strips 2—3½" Strips 2-3/2" Strips 9-21/2" Strips 1-51/2" Crank 1-31/2" Axle Rod 1-2" Axle Rod 7-Angle Brackets
- 4-Collars

5—1" Pulleys 1—Bush Wheel

26 -Nuts and Screws

DUMP CAR

Fig. No. 223

PARTS REQUIRED

- 1—Large Plate 2—Sector Plates 2—346" Strips
 10—2½" Strips
 1—4½" Crank
 5—1" Pulleys
 3—4½" Axle Rods
 6—Angle Brackets

- 6-Collars
- 23-Nuts and Screws

OIL WELL DRILL

Fig. No. 224

PARTS REQUIRED

- 1—Large Plate 1—Small Plate 2—Sector Plates 1—Bush Wheel

- 6—1" Pulleys 6—Collars

- 6—Collars
 4—121½" Strips
 5—51½" Strips
 2—31½" Strips
 2—21½" Strips
 2—2" Axie Rods
 1—31½" Axie Rod
 2—41½" Axie Rod
 1—51½" Crank
 1—51½" Crank

- 1-Hook
- 10-Angle Brackets
- 35—Nuts and Screws 4—Wood Screws

2-Obtuse Angle Brackets

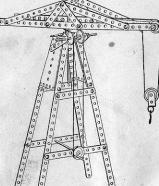
1-Large Plate

1—Small Plate 2—Sector Plates

REVOLVING DERRICK

Fig. No. 225

OVERHEAD ROTARY CRANE Fig. No. 226



PARTS REQUIRED

- 1—Large Plate 2—Sector Plates
- 6—1" Pulleys 1—Bush Wheel

- 1—Bush Wheel
 6—Collars
 6—1214" Strips
 6—572" Strips
 2—342" Strips
 8—242" Strips
 8—244" Crank
 1—442" Crank
 1—442" Axle Rod
 2—2" Axle Rod
 2—2" Axle Rod
 2—2" Axle Rod
 2—2" Rod Rod 2-Angle Brackets
- 1-Single Bent Strip -Hook
- 34-Nuts and Sc.ew

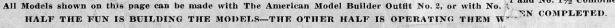
PARTS REQUIRED

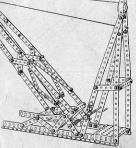
AUTO COUPE

Fig. No. 227

- 1—C. 'lar' 3—1" Pulleys 4—Car Wheels 2—121/2" ins

- 2—Sector Plates
 1—5½" Flat Plate
 2—3½" Flat Plates
 4½" Axle Rods
 Axle Rod
 ts and Bolts





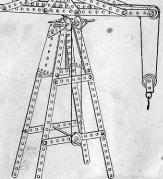
1—Sector Plate 6—1" Pulleys 1—½" Pulley 1—Bush Wheel

1—Large Plate 1—Small Plate

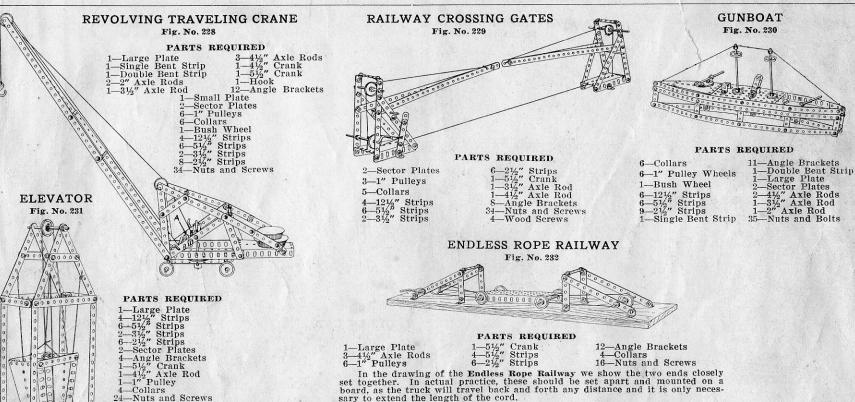
1—Bush Wheel
6—Collars
6—12½" Strips
6—5½" Strips
7—2½" Strips
1—Double Bent Strip
10—Angle Brackets
1—4½" Axle Rod
1—3½" Axle Rod
2—2" Axle Rods
1—4½" Crank
1—5½" Crank
1—Hook
36—Nuts and Screws

PARTS REQUIRED

- 36-Nuts and Screws 4-Wood Screws



THE TOY FOR THE BOY



An automatic stop can be provided for this Elevator

by inserting a 4½" Axle Rod in the hole just above the Crank. This Axle Rod will come in contact with the Crank handle and the

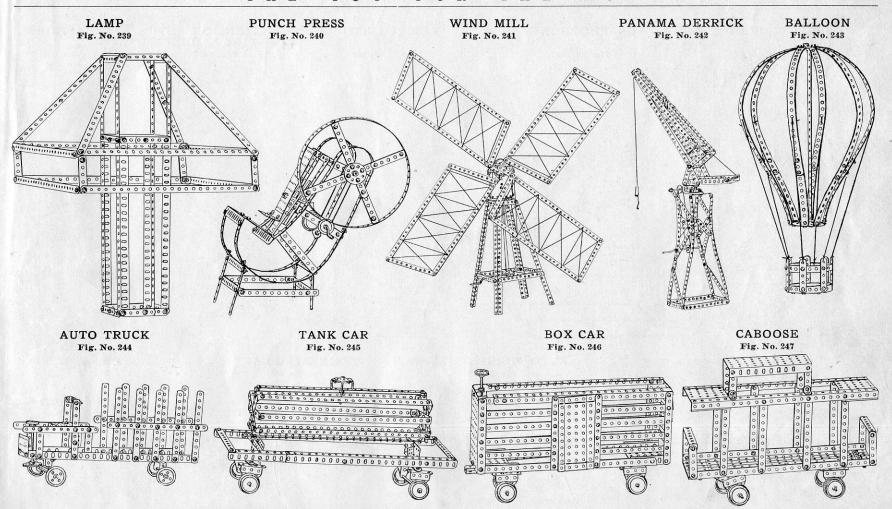
cage can be stopped at any desired position in the shaft. When hoisting small

material, this cage should be lined with cardboard The Endless Rope Railway completes the models which can be made with The American Model Builder Outfit No. 2. By purchasing Accessory Outfit No. 2½, many more Models can be made, 39 of which are shown on the following pages.

For price of separate parts and Accessory Outfits, see pages 79 and 80. For special Motors, Transformers and Countershaft for operating Models by Electricity, see page 76.

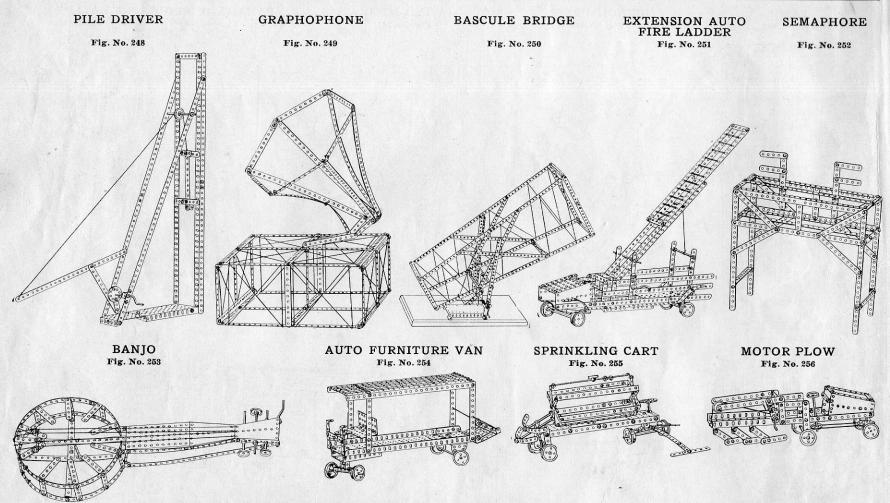
All Models shown on this page can be made with The American Model Builder Outfit No. 3, or with No. 2 and No. 2½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

THE TOY FOR THE BOY



All Models shown on this page can be made with The American Model Builder Outfit No. 3, or with No. 2 and No. 2½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

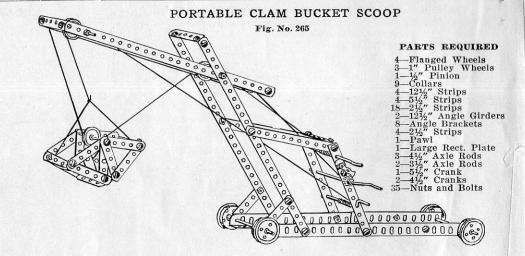
THE AMERICAN MODEL BUILDER



All Models shown on this page can be made with The American Model Builder Outfit No. 3, or with No. 2 and No. 2½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

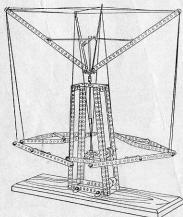
THE AMERICAN MODEL BUILDER

PARTS REQUIRED 2—Flanged Wheels 1—I" Pulley Wheel 1—Bush Wheel 3—Collairs 6—12½" Strips 1—3½" Strips 1—3½" Strips 1—3½" Strips 1—3½" Strips 1—3½" Angle Strip 18—Collairs 1—Sector Plate 1—5" Axle Rod 1—4½" Axle Rod 1—2" Axle Rod 1—2" Axle Rod 1—2" Axle Rod



CIRCLE SWING

Fig. No. 266



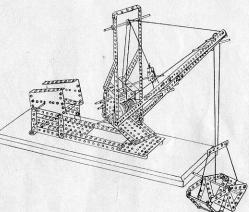
53-Nuts and Bolts

PARTS REQUIRED

1—Large Plate
1—Small Plate
4—12½" Angle Girders
12—12½" Strips
6—5½" Strips
1—2½" Strip
1—5½" Crank
3—5" Rods
1—3½" Rod
5—1" Pulley Wheels
2—Shaft Connectors
8—Collars
1—Bush Wheel
22—Angle Brackets
52—Nuts and Bolts
4—2½" Angle Strips



Fig. No. 267



PARTS REQUIRED

4—Car Wheels
4—Truck Frames
4—"T" Strips
2—Bolster Plates
4—1" Pulley Wheels
1—Bush Wheel
9—Collars
6—121/4" Strips
9—216/2 Strips
9—216/2 Margle Strips
4—21/2 Angle Strips
4—21/2 Angle Strips
7—Angle Brackets

1—Double Bent Strip
1—Single Bent Strip
2—Small Rect. Plates
2—38/2 Flat Plates
3—41/2 Axle Rods
3—24/2 Axle Rods
3—27 Axle Rods
1—31/2 Crank
2—Washers
60—Nuts
58—Bolts

THE BOY TOY FOR THE

TAUBE MONOPLANE

Fig. No. 268

PARTS REQUIRED



The Taube Monoplane is a very interesting model to build. It is an exact duplicate of the machines being used exclusively in the German army. The cords will take the place of the wires used in the original machine, and cardboard can be fastened to the wings to make them more realistic.

R. R. STEAM SHOVEL Fig. No. 270



PARTS	KEGUIKED
4—Car Wheels 4—Truck Frames 4—"T" Strips	1—Double Bent Strip 1—Single Bent Strip 2—Small Rect. Plates 2—Sector Plates
2—Bolster Plates 4—1" Pulleys 1—Bush Wheel	2—3½" Flat Plates 1—5½" Flat Plate 3—4½" Axle Rods
9—Collars 6—12½" Strips 6—5½" Strips 9—2½" Strips	1—3½" Axle Rod 3—2" Axle Rods 1—5½" Crank 1—4½" Crank
2—121/2" Angle Girde 4—21/2" Angle Strips 7—Angle Brackets	rs 2—Washers

R. R. WRECKING DERRICK

Fig. No. 269

PARTS REQUIRED

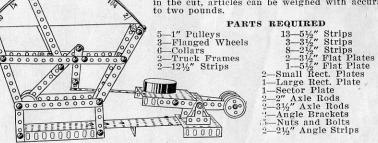
		COLLEGE
	2-Flanged Wheels	1—Pawl
	4—Car Wheels	1—Hook
	4—Truck Frames	2—Small Rect. Plates
	4—"T" Strips	2—Sector Plates
	2—Bolster Plates	2—3½" Flat Plates
	5—1" Pulleys	1-5½" Flat Plate
	1—Bush Wheel	3—4½" Axle Rods
	1—1/2" Pinion	1-3½" Axle Rod
	7—Collars	2—2" Axle Rods
	6—121/4" Strips	1-5½" Crank
3	6—121/2" Strips 4—21/2" Strips 2—121/2" Angle Girders	1-4½" Crank
9	2-121/2" Angle Girders	2—Washers
	2-31/2" Angle Strips	29-Nuts and Bolts

The Railroad Steam Shovel is similar to those in daily use by the railroads in loading cars with ballast at the gravel pits, to be used in the building and maintenance of their lines. The wheels on this model can be adjusted, so as to be used in connection with an Electric Train.

COUNTER SCALES

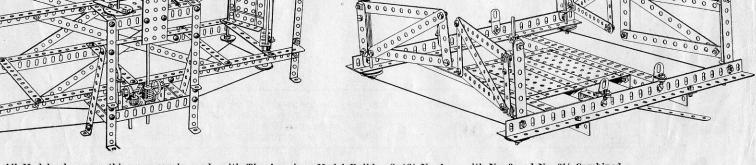
Fig. No. 271

The Counter Scales are not only ornamental, but useful. By cutting a piece of cardboard, and marking it properly, and fastening it in position as shown in the cut, articles can be weighed with accuracy up



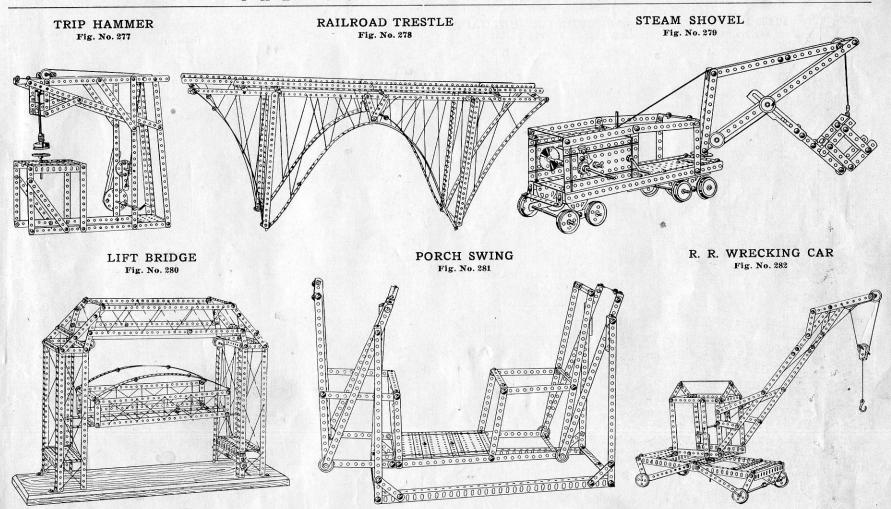


The Counter Scale completes the models that may be made with The American Model Builder Outfit No. 3. By purchasing Accessory Outfit No. 3½, many more models can be made, 43 of which are shown on the following pages. For price of separate parts and Accessory Outfits see pages 79 and 80. For special Motors, Transformers and Countershaft for operating Models by Electricity, see page 76.

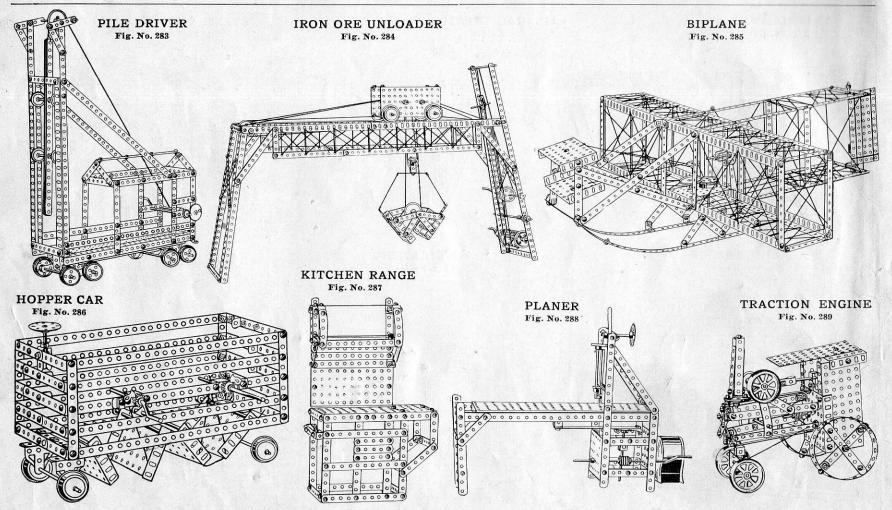


All Models shown on this page can be made with The American Model Builder Outfit No. 4, or with No. 3 and No. 3½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

THE TOY FOR THE BOY



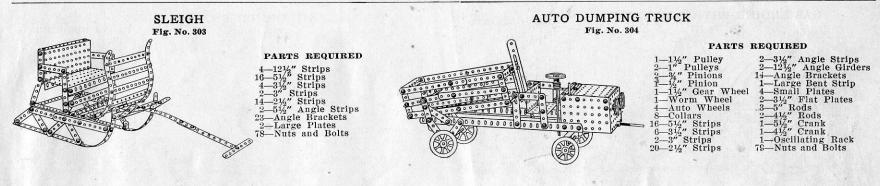
All Models shown on this page can be made with The American Model Builder Outfit No. 4, or with No. 3 and No. 3½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.



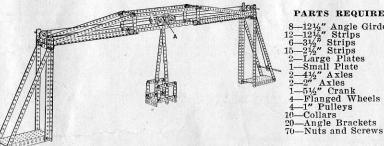
All Models shown on this page can be made with The American Model Builder Outfit No. 4, or with No. 3 and No. 3½ Combined.

HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

THE BOY TOY FOR THE



FERRY Fig. No. 305

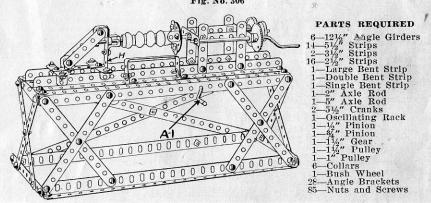


This Model of a Ferry demonstrates the principle of transporting material from one side of a stream to another, and when completed is about four feet wide. The upright bracing for the carrying truck is made of six 121/2" Strips, fastened together with six 21/2" Strips, as shown in the cut. In attaching the 21/2" upright Strips to the 121/2" Angle Girders, which form the track, Angle Brackets should be used at the bottom so as to give sufficient clearance for the wheels as they move back and forth. The carriage is simple and needs no particular explanation.

PARTS REQUIRED

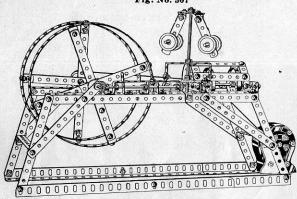
8—12½" Angle Girders 12—12½" Strips 6—3½" Strips 15—2½" Strips 2—Large Plates 1—Small Plate 41/4" Axles 2—2" Axles 1—5½" Crank 4—Flanged Wheels -1" Pulleys 20-Angle Brackets

TURNING LATHE Fig. No. 306



The Turning Lathe is one of the most practical models shown and can be used for turning up soft material. In the cut, we show a candle turned up in the form of a pillar. The frame work needs no explanation. The article to be turned is held securely in position between the Double Bent Strip and the Angle Brackets attached to the Bush Wheel. The 5½" Crank at the side furnishes the power. To this is attached a 1½" Gear Wheel which meshes with the ¾" Crown, fastened to the main Axle. At the end of this Axle Rod is attached the Bush Wheel which forms the Chuck for the Lethe Wheen a Condle is inverted in the Chuck same can be turned with the use of a Lathe. When a Candle is inserted in the Chuck, same can be turned with the use of a dull knife or screw driver held against the Large Bent Strip.

GAS ENGINE WITH GOVERNOR Fig. No. 307



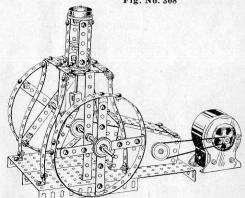
1—1½" Pulley 6—1" Pulleys 1-Bush Wheel 2—½" Pinions 2—¾" Crown Gears -Auto Wheels 11-Collars 21-Angle Brackets 2-5" Rods 2-4½" Rods 4-2" Rods 1-41/2" Crank 2-Shaft Connectors 80-Nuts and Bolts

In building the Gas Engine, note that the governor is operated by an Axle In building the Gas Engine, note that the governor is operated by an Axle Rod, at each end of which is attached a ½" Pinion, one of which meshes with a ¾" Crown Gear, which is attached to the axle of the fly-wheel and the other to the axle rod of the governor. The engine crank is used as the axle between the two fly-wheels, and to this is attached a 5½" Strip, which operates the piston in the front part of the engine, as shown by cut No. 14 on page 75. For Connecting Governor, see cut No. 11, page 75. The model is operated by a 4½" Crank mounted on the far side of the frame of the engine, having bearings on the frame and on one of the 3½" Strips which constitute the wall of the cylinder. On this is mounted a 1½" Pulley which is belted to a 1" Pulley on the axle of the engine. the engine.

PARTS REQUIRED

-Conars -121/" Strips -51/2" Strips -31/2" Strips -21/2" Strips -21/2" Angle Strip -51/2" Angle Strip 6-121/2" Angle Girders 1-Single Bent Strip 2—Double Bent Strips 1—Large Bent Strip

AIR COMPRESSOR Fig. No. 308

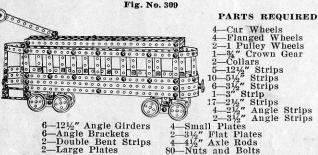


PARTS REQUIRED

2-Flanged Wheels 5—1" Pulleys 1—1%" Pulleys 1-Collars 4—Collars
2—12½" Strips
6—5½" Strips
6—3½" Strips
2—3" Strips
9—2½" Strips
2—2½" Angle Strips
2—1½" Angle Strips
22—Angle Brackets
1—Single Bent Strip 1-Single Bent Strip 2-Large Plates 2-Small Plates 2—Smail Plates
2—Sector Plates
1—3½" Flat Plate
1—5" Rod
2—3½" Rods
1—4½" Crank
2—Shaft Connectors 1-Engine Crank 72-Nuts and Bolts

In the Air Compressor model the motor is belted to the 1" Pulley, carried by an Axle Rod running between the two Sector Plates, on which is also mounted inside the Sector Plates a 1" Pulley, from which the belt runs to a pulley on the axle between the two fly-wheels. The center part of this axle between the two fly-wheels is composed of an engine crank connected to the two short axles by means of shaft connectors. This engine crank drives the piston in the cylinder. For details of this connection, see cut No. 14, page 75.

STREET CAR



1-Bush Wheel 4—Auto Wheels 4—121/4" Strips 12—51/2" Strips 9-Collars 6-31/2" Strips 6-21/2" Strips

AUTO DELIVERY VAN Fig. No. 310

PARTS REQUIRED

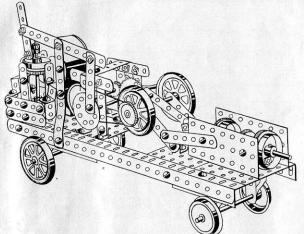
1—1½" Pulley Wheels 4—12½" Angle Girders 2—1" Pulley Wheels 16—Angle Brackets 2—Single Bent Strips 2-Double Bent Strips 4-Small Plates 2-314" Flat Plates 1-5" Rod 1-414" Rod 4-2" Rods 2—Truck Frames Angle Strips 80-Nuts and Bolts

All Models shown on this page can be made with The American Model Builder Outfit No. 4, or with No. 3 and No. 31/2 Combined.

HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

PORTABLE GAS ENGINE AND PUMP

Fig. No. 311



PARTS REQUIRED

2-Car Wheels 3-Flanged Wheels —1½" Pulley Wheels —1" Pulley Wheels —Bush Wheel -¾" Pinion -1½" Gear Wheel -Auto Wheels -Collars -51/2" Strip -51/2" Strips -3" Strips -21/2" Angle Strips -31/2" Strip 3-Angle Brackets 2-121/2" Angle Girders 1—Single Bent Strip 2-Double Bent Strips 4-Small Plates -3½" Flat Plates -4½" Axle Rods -3" Axle Rods 1-2" Axle Rod 1-41/2" Crank 1-Engine Crank -Truck Frames 78-Nuts and Bolts

This model of a **Portable Gas Engine** and **Pump** is an attractive as well as an instructive one, for the reason that the power automatically operates both engine and pump.

The bed is made of two 12½" Angle Girders fastened together with four Small Plates, to form the bed of the truck. The usual truck wheel construction is used.

The speed of the pump piston is reduced by belting from a small Pulley on the Engine Crank to a larger Pulley on the 4½" Crank, and again by using a Pinion and Gear on a 4½" Ayle Rod as described below.

4½" Axle Rod as described below.

The crank which operates this model is shown on the far side and carries a ¾" Pluion which meshes with a ½" Gear Wheel, which in turn operates a Bush Wheel, acting as an Eccentric drive. This Eccentric moves the walking beam, which operates the piston on the pump. An ½" Pulley mounted on the Crank is belted to a 1" Pulley on the Engine Crank, and this in turn operates the piston on the engine. For details of piston connections, see cut No. 14, page 75.

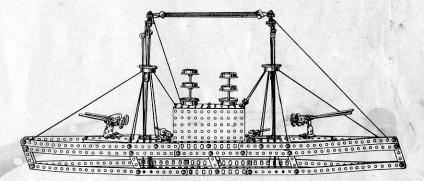
DREADNAUGHT Fig. No. 312

PARTS REQUIRED

4—Flanged Wheels
4—Car Wheels
6—1" Pulley Wheels
1—1/2" Pulley Wheel
1—Bush Wheel
2—4" Pinions
2—1/2" Pinions
1—1/4" Gear Wheel
2—4" Crown Gears

12—Collars 2—31/2"
12—121/4" Strips 1—51/2"
2—51/2" Strips 4—41/2"
4—121/2" Strips 4—41/2"
4—121/2" Angle Girders 2—31/2"
21—Angle Brackets 4—2" A
2—Large Plates 2—51/2"
3—Small Plates 69—Nuts
2—Sector Plates

2—3½" Flat Plates
1—5½" Flat Plate
4—5" Axle Rods
4—4½" Axle Rods
2—3½" Axle Rods
4—2" Axle Rods
2—5½" Cranks
69—Nuts and Bolts



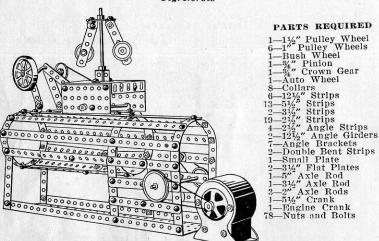
In building the **Dreadnaught**, four 12½" Angle Girders are used in the middle section to stiffen the framework. Between the upper pair of these Girders are bolted Flat Plates to form the deck, supporting the superstructure, and the rapid fire guns.

At each end of the deck is bolted a Sector Plate which supports the forward and rear turnets. Truck Frames are utilized for the mounting of the turnet guns, and are permitted to swivel by the use of a bolt with lock nuts below the deck.

The construction of the superstructure, the masts and funnels needs no explanation.

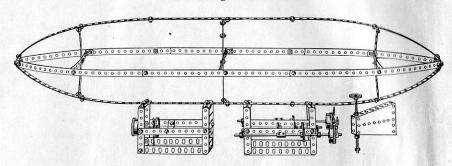
Every boy should build this model so that he may get some idea of how the Dreadnaught used in the European conflict looks in miniature.

STATIONARY ENGINE



The Stationary Engine shown here is an exact duplicate of the engine and boiler commonly used in country saw mills. It may be operated by an electric motor belted to a 1½" Pulley, mounted on the axle, shown on the side of the fire box. On the opposite end of this axle is a 1" Pulley from which a belt runs to a similar pulley on the far end of an axle running through the steam chest. In the center of this chest is mounted, on an axle, a 1½" Crown Gear, which meshes with a ¾" Pinion on the bottom of the governor shaft.

ZEPPELIN Fig. No. 314



PARTS REQUIRED

3—Flanged Wheels 1—1½" Pulley Wheels 6—1" Pulley Wheels 11—Collars 12—12½" Strips 12—5½" Strips 6—3½" Strips	2—5½" Angle Strips 2—3½" Angle Strips 2—2½" Angle Strips 17—Angle Brackets 8—Obtuse Angles 1—Double Bent Strip 2—Large Plates	2—Sector Plates 4—4½" Axle Rods 2—3½" Axle Rods 1—2" Axle Rod 2—Shaft Connectors 78—Nuts and Bolts
5—2½" Strips	3—Small Plates	

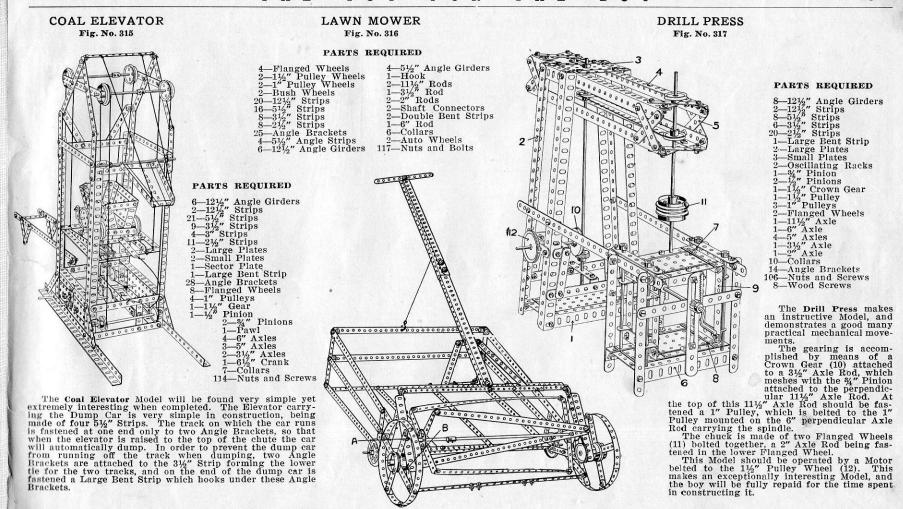
In building the Zeppelin model the extreme ends of the gas bag are fastened together by the use of Obtuse Angle Brackets. The bearings for the propeller axles are provided by placing a $3\frac{1}{2}$ " Strip on each end of the engine room with the ends extending one hole beyond the sides. The pulleys on the axles of the propellers are belted to two pulleys on the central axle. The rudder may be operated by a belt passing around a pulley mounted on the rod supporting the rudder. This belt passes through holes in the lower strip of the main frame and then down around a flanged wheel in the front of the cabin.



The Zeppelin completes the models that may be made with The American Model Builder Outfit No. 4. By purchasing Accessory Outfit No. 4½, many additional Models can be made, 22 of which are shown on the following pages.

For price of separate parts and Accessory Outfits, see pages 79 and 80.

For special Transformer and Countershaft for operating Models by Electricity, see page 76.



00000000000000000

WAREHOUSE WITH ELEVATOR Fig. No. 318

PARTS REQUIRED

8-121/2" Angle Girders	4-1" Pulleys
D 8-121/2" Angle Girders 13-121/2" Strips	4-Flanged Wheels
13-51/2" Strips	1-11/2" Gear Wheel
2-31/2" Strips	1-34" Pinion
7—2½" Strips	1—Hook
2—Large Plates	2—6" Axles
2—Small Plates	3—5" Axles
27—Angle Brackets	2—2" Axles
1-134" Spring	10—Collars
1_11/4" Pulley	Qy Nate and Serowe

In building the Warehouse with Elevator, the following parts should be noted: The pulley wheel (A) should run loose on the axle. Pulley wheel (B) is attached to the axle supported in center of frame carrying the elevator. (C) is a 1½" gear which meshes with a ¾" pinion when elevator is to be operated. (D) is two flanged wheels over which is passed a 5½" strip (E) which forms a brake. This 5½" strip is fastened to two angle brackets, and these in turn are fastened to an axle rod in the front part of the elevator frame. When it is desired to raise the cage of the elevator pull down on the cord which will throw the 1½" gear wheel in mesh. When it is desired to lower the cage simply release the cord and the cage will drop down of its own weight. weight.

OIL WELL DRILL

Fig. No. 319

PARTS REQUIRED

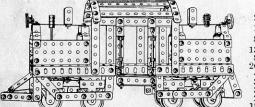
8—12½" Angle Girders 8—12½" Strips 18—5½" Strips 1—3½" Strip	2—Eccen. Drive Wheel
18-5½" Strips	1-34" Pinion 2-1/2" Pinions
1-3½" Strip	1—1½" Pulley
9—2½" Strips	2-1" Pulleys
2—Large Bent Strips 2—11½" Axle Rods	1—½" Pulley 1—¾" Crown Gear
1—6" Axle Rod	1—Worm
1-5" Axle Rod	10—Collars
2-3½" Axle Rods	9-Angle Brackets
1—2" Axle Rod	1-Single Bent Strip
1—4½" Crank 1—Oscillating Rack	2—Washers 82—Nuts and Screws
. Oberrating Mack	cz—nuts and screws

The Automatic Oil Well Drill is a very effective Model and considerable care should be used in its construction. The framework can be easily built from the drawing itself. The Cord which operates the Plunger is fastened to the Eccentric Drive Wheel "C," then passes over the 1½" Pulley Wheel at the top, then down over the ½" Pulley Wheel at the top of the Plunger, then over the 1" Pulley Wheel at the top, then over the 1" Pulley Wheel at the top, then over the 1" Pulley Wheel at tached to the upper side of the frame, then fastened to the 3½" Axle Rod, to the end of which is attached a ½" Pinion marked "A." "B" is the Oscillating Rack, which is attached to the Eccentric Drive Wheel at the end of the 4½" Crank "D" and meshes with the ½" Pinion Wheel mounted on to the 11½" Axle Rod. "D" is the ¾" Crown Gear attached to the bottom of the 6" Axle Rod and meshes with the ¾" Pinion mounted on the 4½" Crank. When the Crank is turned, the Plunger will move up and down automatically and at the same time the string automatically and at the same time the string operating this Plunger will lengthen automat-

ELECTRIC LOCOMOTIVE

Fig. No. 320

PARTS REQUIRED



2-1" Pulleys 1-Worm Wheel 8-Car Wheels 4-Small Plates 112-Nuts and Bolts

7—Obtuse Angles 2—Single Bent Strips 2—Double Bent Strips 4—31/2" Flat Plates 4—31/2" Rods 3—2" Rods

SUSPENSION BRIDGE

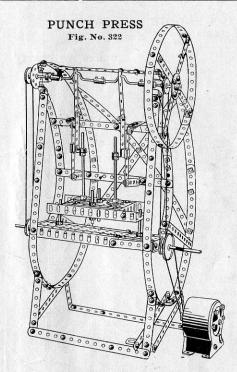
Fig. No. 321

PARTS REQUIRED

8—12½" Angle Girders 14—12½" Strips 12—5½" Strips 12—5½" Strips 8—2½" Strips 8—2½" Strips 36—Angle Brackets 2—Large Plates

3-Small Plates

108-Nuts and Screws



PARTS REQUIRED

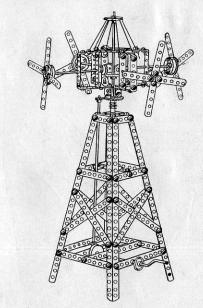
PARTS	REQUIRED
1—1½" Pulleys 6—1" Pulleys 2—Bush Wheels 2—34" Pinjons	2-5½" Angle Strip 4-Obtuse Angles 25-Angle Brackets 2-Double Bent Str
2-34" Pinions 2-12" Pinions 12-Collars 8-1214" Strips 23-512" Strips	2—Large Plates 2—Small Plates 3—4½" Rods 6—2" Rods
8-31/2" Strips 2-3" Strips 2-21/2" Strips 4-2" Strips 3-21/2" Angle Strips	1-6½" Crank 2-Eye Pieces 4-Shaft Connectors 2-Engine Cranks 119-Nuts and Bolts

GEARED WIND MILL

Fig. No. 323

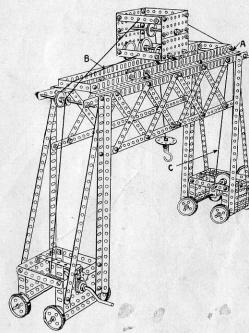
PARTS REQUIRED

4—12½" Angle Girders 16—5½" Strips 8—3½" Strips 20—2½" Strips 4—Flanged Wheels 2—Bush Wheels 2—1½" Crown Gears 2—¾" Pinions	1—Worm Wheel 1—1" Pulley 12—Collars 2—11½" Rods 4—3½" Rods 13—Angle Brackets 100—Nuts and Bolts 1—5½" Crank 2—5½" Angle Strips
2—¼" Pinions 2—¾" Crown Gears 1—1½" Gear Wheels	1-3½" Angle Strips 6-2½" Angle Strips 4-2" Perforated Strips



GANTRY CRANE Fig. No. 324

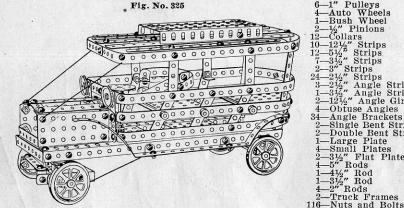
BOY



PARTS REQUIRED

8—Flanged Wheels	6-21/2" Strips 2-21/2" Angle Strips
1—1½" Pulley 4—1" Pulleys	4-31/6" Angle Strips
4—Car Wheels	8—12½" Angle Girders 4—5½" Angle Girders
1—Bush Wheel 1—¾" Pinion	4—Angle Brackets \\1—Hook
1—Pawl	4—Small Plates
1—½" Pulley 12—Collars	4—3½" Flat Plates 5—4½" Rods
8-121/6" Strips	4-5" Rods
16—5½" Strips 8—3½" Strips	1—6½" Crank 1—5½" Crank
4—3" Strips	97-Nuts and Bolts

LIMOUSINE

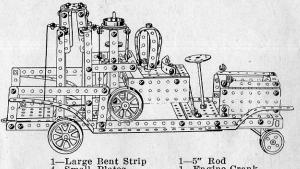


PARTS REQUIRED

6-1" Pulleys 4-Auto Wheels 1-Bush Wheel 1—Bush Wheel
2—¼" Pinions
12—Collars
10—12½" Strips
12—5½" Strips
7—3½" Strips
2—3" Strips
24—2½" Strips
3—2½" Angle Strips
1—3½" Angle Strip
2—12½" Angle Girders
4—Obtuse Angles 4—Obtuse Angles 34—Angle Brackets 2-Single Bent Strips 2-Double Bent Strips 1—Large Plate 4—Small Plates 4—Small Plates 2—3½" Flat Plates 4—5" Rods 1—4½" Rod 1—3½" Rod 4—2" Rods 2-Truck Frames

MOTOR FIRE ENGINE

Fig. No. 326



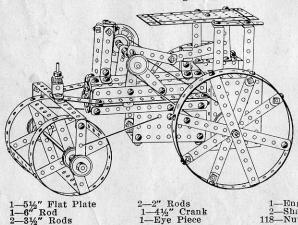
4-Small Plates 4-3½" Flat Plates 5-4½" Rods

1-Engine Crank 120-Nuts and Bolts 2-1/2" Pulleys

PARTS REQUIRED

4—Flanged Wheels 2—1½" Pulleys 6—1" Pulleys 4-Auto Wheels 2—Bush Wheels 1—1½" Gear Wheel 9—Collars 4—12½" Strips 9—5½" Strips 6—3½" Strips 4—2" Strips 3" Strips 3-3" Strips 21-24" Strips 2-34" Angle Strips 1-24" Angle Strip 4-54" Angle Strips 4-Obtuse Angles 43—Angle Brackets
4—5½" Angle Girders
1—Single Bent Strip

ROAD ROLLER Fig. No. 327



1—5½" Flat Plate 1—6" Rod 2—3½" Rods

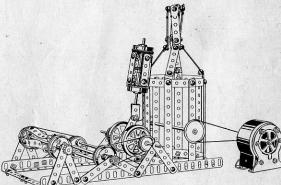
PARTS REQUIRED 1-Flanged Wheel

2-1½" Pulley Wheels 6-1" Pulley Wheels 1-Bush Wheel 1-Worm Wheel 12-Collars 12—Collars
6—121½" Strips
12—51½" Strips
6—31½" Strips
4—2" Strips
16—21½" Strips
16—21½" Angle Strips
4—31½" Angle Strips
4—21½" Angle Strips
4—21½" Angle Strips
2—51½" Angle Strips 2-5½" Angle Girders 33-Angle Brackets 3—Obtuse Angles -Single Bent Strips 2—Single Bent Strips
2—Double Bent Strips
4—Small Plates
2—31/2" Flat Plates
1—Engine Crank

2-Shaft Connectors

118-Nuts and Bolts

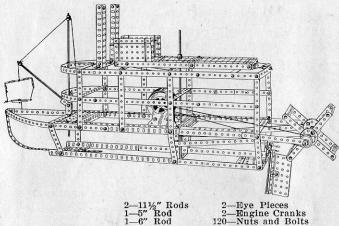
HOISTING ENGINE Fig. No. 328



PARTS REQUIRED

6-Flanged Wheels 4-1" Pulleys 2-Auto Wheels 1-1½" Pulley 12-Collars 12—Collars
2—¼" Pinions
12—51½" Strips
1—31½" Strips
4—3" Strips
22—21½" Strips
2—12½" Angle Girders
24—Angle Brackets
8—Obtuse Angles
1—Single Bent Strip
1—6" Rod 1—Single Bent Strip 1—6" Rod 5—4½" Rods 2—2" Rods 1—6½" Crank 2—Shaft Connectors 1-Engine Crank 73-Nuts and Bolts

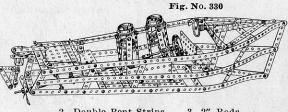
STERN WHEELER Fig. No. 329



PARTS REQUIRED

2—1½" Pulleys 5—1" Pulleys 2—½" Pulleys 2—Bush Wheels 12-Collars 14—12½" Strips 21—5½" Strips 7—3½" Strips 4—2½" Strips 4—2½" Strips
4—5½" Angle Strips
1—3½" Angle Strip
6—2½" Angle Strips
2—Hanger Strips
8—12½" Angle Girders
4—5½" Angle Girders
2—Single Bent Strips
20—Angle Brackets
2—Obtuse Angles
1—Large Bent Strip
2—Large Plates
4—Small Plates
1—31½" Flat Plate 1—3½" Flat Plate 2—5½" Flat Plates

MOTOR BOAT



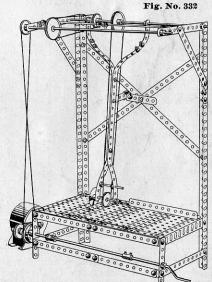
2-Double Bent Strips 4-Small Plates 2-Sector Plates 4—3½" Flat Plates 1—6" Rod

3—2" Rods 2—3½" Rods 2—Engine Cranks 3—Shaft Connectors 120—Nuts and Bolts

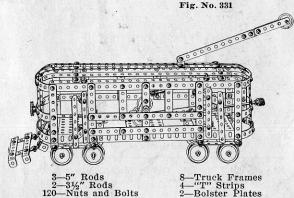
PARTS REQUIRED

4—Flanged Wheels 1—1½" Pulley 1—1" Pulley 1—Auto Wheel 1—Bush Wheel 1-Worm Wheel 11-Collars 11—Collars
12—12½" Strips
5—5½" Strips
8—3½" Strips
4—3" Strips
16—2½" Strips
3—2" Strips
3—1½" Angle Strips
1—5½" Angle Strip
32—Angle Brackets
4—Obtuse Angles
2—Single Bent Strips

SWING SAW



PAY-ENTER CAR



PARTS REQUIRED

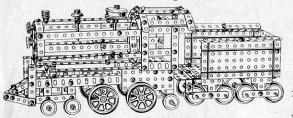
1-Worm Wheel 6—1" Pulleys 8—Car Wheels 12-Collars 12—Collars
4—12½" Strips
12—5½" Strips
8—3½" Strips
4—3" Strips
29—2½" Strips
1—2½" Angle Strip
4—3½" Angle Strips
4—12½" Angle Girders
19—Angle Brackets
1—Single Bent Strip
1—Haper Strip 1—Hanger Strip
1—Double Bent Strip
3—Small Plates 4-41/2" Rods

PARTS REQUIRED

1—Flanged Wheel 2—1½" Pulleys 4—1" Pulleys 1—1½" Gear Wheel 10—Collars 10—Collars
4—124/" Strips
12—51/2" Strips
12—34/2" Strips
5—24/2" Strips
5—24/2" Strips
12—Angle Brackets
2—124/2" Angle Girders
3—51/2" Angle Girders
2—Large Plates
2—11/4" Rods
1—6" Rod
2—2" Rods
1—31/4" Rod 1—3½" Rod 1—4½" Crank 1-Eye Piece 2—Shaft Connectors 56—Nuts and Bolts

LOCOMOTIVE AND TENDER

Fig. No. 333



10—Obtuse Angles 2—Double Bent Strips 2—Large Plates 3—Small Plates -3½" Flat Plates

Rods 8-Truck Frames 120-Nuts and Bolts

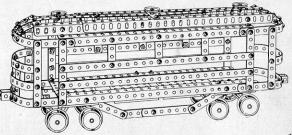
PARTS REQUIRED

6—1" Pulley Wheels 8—Car Wheels 4-Auto Wheels 1—¾" Pinion 1—Flanged Wheel 1—1½" Crown Gear 2—¾" Crown Gears 1—Worm Wheel 7-Collars 7—Collars
2—1214" Strips
10—514" Strips
8—314" Strips
4—3" Strips
30—214" Strips
4—2" Strips
4—2" Angle Strips
4—214" Angle Strips
2—314" Angle Girders
23—Angle Brackets

PARTS REQUIRED

PULLMAN CAR

Fig. No. 334



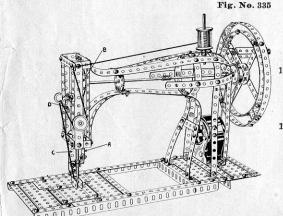
PARTS REQUIRED

3—1" Pulleys
8—Car Wheels
6—12½" Strips
8—5½" Strips
8—3½" Strips
4—3" Strips
4—2" Strips
4—2" Strips
2—3½" Angle Strips
8—12½" Angle Girders
4—Angle Brackets
6—Obtuse Angles 6—Obtuse Angles 2—Double Bent Strips 4—Small Plates 4—3½" Rods 8—Truck Frames 4—"T" Strips 2—Bolster Plates 120-Nuts and Bolts

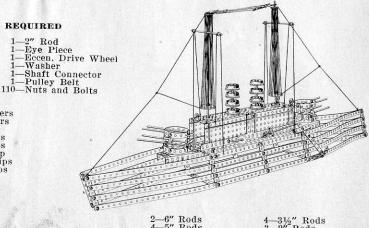
BATTLESHIP

Fig. No. 336

SEWING MACHINE



1—Flanged Wheel 1—1" Pulley 1—Bush Wheel 1-2" Rod 1—Eye Piece 8-Collars 1-Washer 8—Collars 110—12½" Strips 15—5½" Strips 14—3'4" Strips 1104—3" Strips 5—2½" Strips
5—2½" Strips
2—12½" Angle Girders
18—Angle Brackets
18—Angle Brackets
18—Angle Strips 1-Pulley Belt -Angle Brackets -5½" Angle Strips -2½" Angle Strips -Single Bent Strip -Double Bent Strips -Large Bent Strips 1-Hanger Strip 1-Hook 2-Large Plates 2—31/2" Flat Plates 2—51/2" Flat Plates 2—6" Rods 2—31/2" Rods



2—6" Rods 4—5" Rods 6—4½" Rods -3½" Rods -2" Rods 120-Nuts and Bolts

PARTS REQUIRED

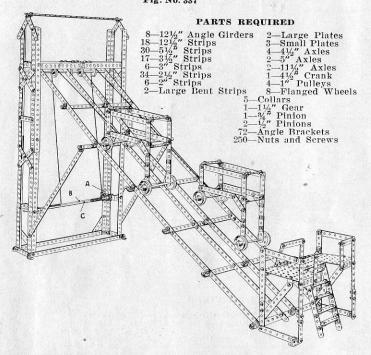
8-Flanged Wheels 6—1" Pulleys 3—½" Pulleys -Car Wheels 2—Bush Wheels 2—Bush Wheels
2—34" Pinions
2—12" Pinions
2—11/" Crown Gears
2—34" Crown Gears
1—Worm Wheel 1—Worm Wheel
12—Collars
20—12½" Strips
6—5½" Strips
8—3½" Strips
25—2½" Strips
4—2" Strips
2—2½" Angle Strips
20—Angle Brackets
6—12½" Angle Girde 20—Angle Brackets
6—12½" Angle Girders
2—Double Bent Strips
2—Large Plates
2—Small Plates
2—Sector Plates
4—3½" Flat Plates
2—5½" Flat Plates
2—11½" Rods



The Battleship completes the models that may be made with The American Model Builder Outfit No. 5. By purchasing Accessory Outfit No. 5½, many additional Models can be made, 16 of which are shown on the following pages. For price of separate parts and Accessory Outfits, see pages 79 and 80.

For special Transformer and Countershaft for operating Models by Electricity, see page 76.

MOUNTAIN CABLE RAILROAD Fig. No. 337



The Mountain Cable Railroad is used mainly in hilly cities for trans-

porting passengers as well as vehicles to higher elevations.

The tower should be erected first. The bracing can easily be followed from the cut. The roof can be made of cardboard and fastened in place with Angle Brackets. The loading platform should be made next, followed by the railing and bracing, all plainly shown in the cut.

At the top the tracks are fastened to Angle Brackets bolted fast on the under side of the Large Plates.

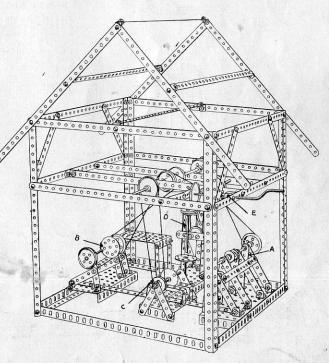
The power is applied by means of two ½" Pinions attached to two 11½" Axle Rods, "B" and "C." These ½" Pinions mesh with each other, causing the Axles to revolve in opposite directions. A ¾" Pinion should then be attached to axle "B" on the outside of the Large Bent Strip, and this should mesh with the 1½" Gear "A" attached to the 4½" Crank. When the Crank is operated both cars will move in opposite directions.

MACHINE SHOP Fig. No. 338

	PARTS REQUIRED	
6—Flanged Wheels	19—12½" Strips	4—Small Plates
3—1½" Pulleys	10—5½" Strips	2—Large Plates
6—1" Pulleys	6—3½" Strips	1—11½" Axle Rod
2—Bush Wheels	4—3" Strips	4-41/2" Axle Rods
1—½" Pinion	20—2½" Strips	2-31/2" Axle Rods
1—1½" Gear	8—12½" Angle Girders	4—2" Axle Rods
1—1½" Crown	56—Angle Brackets	1—6½" Crank
2—¾" Crowns 16—Collars	2—Large Bent Strips 1—Double Bent Strip	165—Nuts and Screws

The Machine Shop is a combination of small models, all operated from a main shaft. "A" is a small Lathe; "B" is a Turning Lathe: "C" is a small Power Saw: "D" a Drill Press. By mounting a 1" Pulley Wheel on the outside of the framework to the 61/3" Crank, same can be belted to a Geared Countershaft and this Countershaft can be belted directly to one of the small models, so that all of the models can be set in operation at one time by simply turning the lever on the Motor.

Note that the main D ive Shaft in the upper part of the building has mounted on the 11½" Axle Rod, three 1½" Pulleys and two Flanged and Grooved Wheels. One of these is lelted direct to the Drill Press, one to the Large Lathe, one to the Power Saw and one to the Turning Lathe.



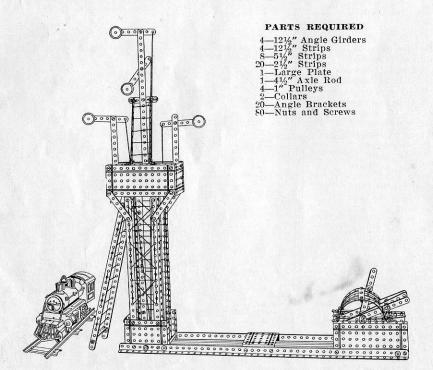
The Models shown on this page can be made with The American Model Builder Outfit No. 6, or with No. 5 and No. 51/2 Combined.

HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

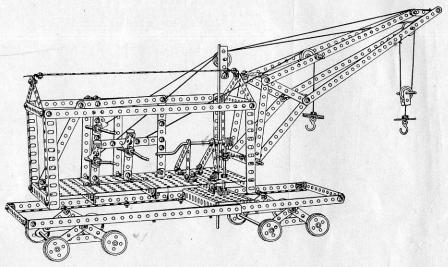
R. R. TOWER SIGNAL Fig. No. 339

The Railroad Semaphore can be seen in every day use in any railroad yard and is used for giving the engineer the right of way over certain tracks.

The matter of attaching the Signals and the Ladders is very simple and can be easily followed from the cut. One signal cord is attached to each lever, and when the lever is thrown back the signal should rise into proper position.



WRECKING CAR



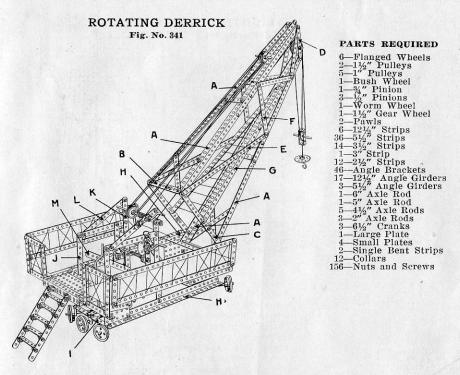
PARTS REQUIRED

-Flanged Wheels -1½" Pulley -1" Pulleys	4-5½" Angle Girders 13-2½" Strips 2-2" Strips 4-12½" Angle Girders	3—Large Plates 4—Small Plates 1—11½" Axle Rod 4—6" Axle Rods
-½" Pulleys -Bush Wheels	4-3" Strips	1—5" Axle Rod
-¾" Pinions -½" Pinions	17—3½" Strips 39—Angle Brackets	1-4½" Axle Rod 1-3½" Axle Rod
-1½" Gear Wheel -Collars	1—Single Bent Strip 1—Double Bent Strip	1—2" Axle Rod 3—1" Axle Rods
-Worm Wheel -121/" Strips -51/" Strips	1—Hanger Strip 3—Pawls	3-51/2" Cranks 1-41/2" Crank
-51/6" Strips	2—Hooks	124-Nuts and Screws

The Wrecking Car is submitted as a test Model and therefore no explanation is given.

The Models shown on this page can be made with The American Model Builder Outfit No. 6, or with No. 5 and No. 5½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

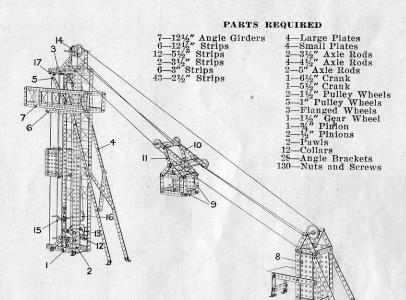
1— 15—



In this Model, build the boom first, the outside frame of which is constructed of eight 12½" Angle Girders (A), those for the upper frame overlapping six holes and those for the lower frame five holes, bolted together at the front end and separated at the rear by two 3½" Strips (B) overlapped five holes. The upper and lower frames should then be fastened at the rear by two 5½" Strips (C) overlapped three holes and at the front by a 3½" Strip (D), and braced by a 12½" diagonal Strip (E) and three 5½" diagonal Strips (F). Strips (F).

Next, construct the main lower frame, which is made of four 12½" Angle Girders (H). The Strips (I) support the Flanged Wheels, which you will note are set at an angle so that the crane will revolve in a complete circle.

CABLE SPAN Fig. No. 342

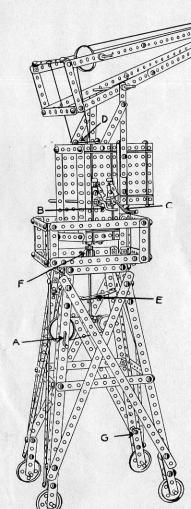


The Cable Span is used in hilly countries for transporting ore and other sub-

The Cable Span is used in filly countries for transporting ore and other substances across gulleys or deep ravines.

The gearing on this model is accomplished by means of a 5½" Crank, and attached to this is a ¾" Pinion (12) which meshes with an 1½" Gear (13) mounted on a 4½" Axle Rod. On this same Axle Rod is mounted a Flanged Wheel. This Flanged Wheel is then belted to one of the Flanged Wheels (14) mounted at the extreme top of the model and controls the movement of the riding carriage. You will notice this carriage rides on two cables tightly stretched, and is operated by a belt which passes over the Flanged Wheel at the top of the main structure and around the 1½" Pulley Wheel mounted on the loading relations.

The second Crank (15) that is mounted through the ninth hole from the bottom in the Angle Girders operates the elevator cage. At the end of this Crank (16) is attached an 1½" Pulley Wheel that is belted to the 1" Pulley Wheel mounted on a 5" Axle Rod (17) which operates and controls the up-and-down movement of the elevator cage.



TRAVELING ROTARY CRANE

Panama Type Fig. No. 343

PARTS REQUIRED

4—Flanged Wheels
2—11/2" Pulleys
3—1" Pulleys
2—Bush Wheels
1—34" Pinion
2—1/2" Pinions
1—Worm
15—Collars
16—121/2" Strips
16—51/2" Strips
27—21/2" Strips
4—3" Strips
27—21/2" Strips
4—121/2" Angle Girders
34—Angle Brackets
1—Single Bent Strip
1—Double Bent Strip
1—Double Bent Strip
1—Hook
2—Large Plates
4—Small Plates
1—111/2" Axle Rod
1—5" Axle Rod
2—41/2" Cranks
1—61/2" Cranks
2—14/2" Cranks

143-Nuts and Screws

The Traveling Rotary Crane is a type of Crane used during the excavation of the Panama Canal. The lower framework is made of four 12½" Angle Girders, braced on each side by two 12½" Strips, with a Small Plate mounted in the top. The 11½" Axle Rod which forms the axis for the upper Boom is supported by two 5½" Strips set crossways, marked "E" in the drawing. This Axle Rod passes through a Double Bent Strip attached to the Small Plate at the point marked "F" and passes through a 2½" Strip at the top, at point marked "D." "A" is a 6½" Crank, to which is attached a 1½" Pulley Wheel. This is belted to a 1" Pulley Wheel, mounted on a 5" Axle Rod. To this Axle Rod is attached a Worm Wheel which meshes with the ¾" Pinion mounted on the lower end of the 11½" Axle Rod. When this Crank is turned, the entire upper Boom revolves in a circle. "B" is a 4½" Crank which operates the Boom up and down while Crank "C" controls the load. "G" shows two 2½" Strips bolted to the Angle Girders between which the Flanged Wheels are mounted.

LIGHTHOUSE Fig. No. 344

PARTS REQUIRED

8—12½" Angle Girders
19—12½" Strips
19—5½" Strips
3—3½" Strips
1—Bush Wheel
2—1½" Gear Wheels
1—1½" Pinion
1—1½" Pinion
1—1½" Rods
2—11½" Rods
1—Shaft Connector
1—6½" Crank
1—Large Bent Strip
4—Large Plates
4—Small Plates
22—Angle Brackets
141—Nuts and Bolts

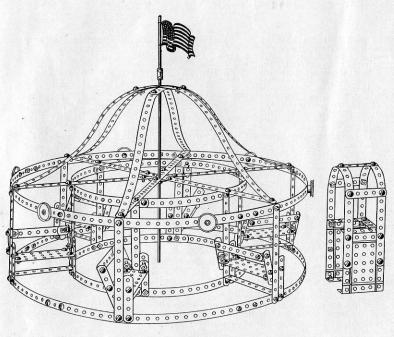
Lighthouse. The construction of this model is plainly shown in the cut, and therefore no detailed description is necessary.

Attention might be called, however, to the method of transmitting the power from a horizontal shaft to a vertical, by means of a Pinion and a Crown Gear, which at the same time reduces the speed. See cut No. 8, page 74.

Also note that the speed of the lantern is reduced at two other points by means of a Pinion meshed with Gears as shown. See cut No. 10, page 75. Colored glass may be used in the lantern, or colored paper pasted on clear glass. A very pretty effect is obtained at night by suspending an electric light in the lantern.

MERRY-GO-ROUND

Fig. No. 345



PARTS REQUIRED

- 1-Flanged Wheel
- 6-1" Pulleys
- 1-Bush Wheel
- 1—2¼" Gear Wheel 1—Worm Wheel -Collars
- -12½" Strips -5½" Strips -3½" Strips
- Strips Strips Strips
- 6—3½" Angle Strips 3—5½" Angle Girders 59-Angle Brackets 16-Obtuse Brackets 1—Large Bent Strip 6—3½" Flat Plates 1—11½" Rod 1—5" Rod 1-41/2" Rod 1-Shaft Connector 1-No. 150 Motor 229-Nuts and Bolts

Ticket Office

-Small Plates -12½ Strips -2½ Strips 20-Nuts and Bolts

The Merry-Go-Round is a model that will prove to be both instructive and amusing to every boy and girl. It is shown in two sections, the power plant and the swinging portion.

The power plant should be built first and securely fastened by means of Angle Brackets and Wood Screws to a large wooden base, so that when the swinging portion is mounted in position it will keep it from toppling over.

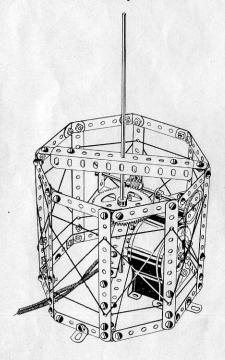
ane Motor should be mounted inside of the power plant and belted to a 11/4" Pulley Wheel, which is fastened to the same Axle on which the Worm Wheel is mounted. This Worm Wheel drives the 21/2" Gear mounted on the 111/2" upright Axle which revolves the swing. See cut No. 1, page 74.

Across the power plant is bolted several Angle Girders to stiffen the framework and carry the weight of the swinging portion. The construction of the swinging portion is very simple, and the details can easily be followed from the

At the top center of the swinging portion where the cross members meet which holds the circle of the swing together is mounted a Bush Wheel, which is to receive the 11½" Axle Rod extending upward from the power plant. When the swinging portion is thus mounted the Set Screw in the Bush Wheel should be fastened tight to the Axle Rod, as otherwise the swing will not revolve.

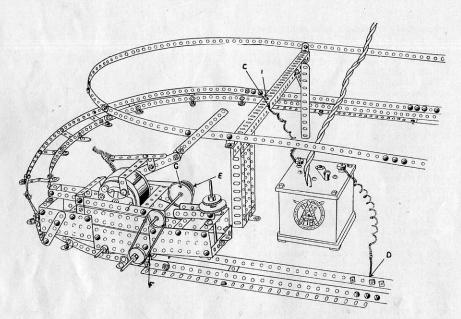
The construction of the small ticket booth at the right of the swing needs no explanation. It can be made with a round top as shown in the cut, or with a gable roof, and it should be fastened to the wood base on which the power plant is mounted.

Detail of Merry-Go-Round



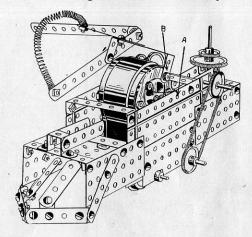
ELECTRIC RAILWAY

Fig. No. 346



This model shows how an overhead Electric Railway can be made. The cut shows only one-half of the model, the other half being exactly the same and forms a complete oval. In building the engine attach a Large Bent Strip to one of the terminals on the model at point marked "B," which carries the current into a trolley pole. Ground a copper wire from the other terminal at the frame of the car at point marked "A." The motor is belted to a 1½" Pulley Wheel "G" mounted on a 3½" Axle, on each end of which is mounted a 1" Pulley Wheel marked "E," — these Pulley Wheels being belted to the driving axle below, as shown in the cut of the engine. The power is obtained by attaching one wire from the transformer to the track at point marked "C." You will note that the spring in the sectional view of the ergine takes up the play in the tralley note.

Detail of Engine on Electric Railway



gine takes up the play in the trolley pole. This is the regular 1%" spring pulled apart so as to loosen the tension. When this model is properly constructed the engine will travel continuously around the oval track, and if desired a small car can be made and hooked on to the tender.

PARTS REQUIRED

Electric Engine

2—Flanged Wheels 2—Car Wheels 2—1½" Pulleys 5—1" Pulleys 4—Collars 2—5½" Strips 1—3½" Strips 6—2½" Strips 4—2" Strips

7—2½" Strips 3—Angle Brackets 4—Obtuse Angles

2—Double Bent Strips
1—Large Bent Strip
1—Large Plate
6—3½" Flat Plates
2—5½" Flat Plates
3—4½" Axle Rods
1—3½" Axle Rod
2—Pulley Belts

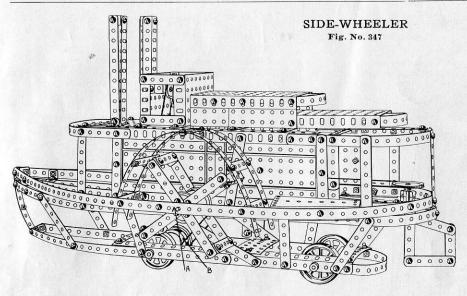
1—Motor No. 150 50-Nuts and Bolts

Track

12—12½" Strips 2—5½" Strips 36—2½" Strips 8—12½" Angle Girders 36—Angle Brackets 151—Nuts and Bolts

Overhead Trolley System

12—12½" Strips 2—5½" Strips 2—12½" Girders 2—5½" Girders 2—Large Plates 10—Angle Brackets 48—Nuts and Bolts



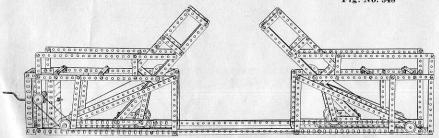
Side Wheeler. The construction of this model is comparatively simple. A wheel is constructed on each side of the boat and mounted on the Axle Rod "A" which passes through the entire boat. These side wheels are driven by a belt passing over the Flanged and Grooved Wheels, and over the two 1½" Pulley Wheels mounted on the lower axle at point marked "B." When this model is pulled over the floor the friction on the auto wheels will cause the side wheels to revolve.

PARTS REQUIRED

4—Flanged Wheels	31—2½" Strips	2—Small Plates
3—1½" Pulleys	9—2" Strips	2—Sector Plates
5—1" Pulleys	4—2½" Angle Strips	5—31/2" Flat Plates
2—Bush Wheels	1-5½" Angle Strip	4—5½" Flat Plates
4—Auto Wheels	6-12½" Angle Girders	3—6" Axle Rods
13—Collars	4—5½" Angle Girders	2-5" Axle Rods
22—12½" Strips	50—Angle Brackets	1-31/2" Axle Rod
20—5½" Strips	6—Obtuse Angles	1-2" Axle Rod
18—3½" Strips	2—Double Bent Strips	1—Motor, No. 150
4—3" Strips	3—Large Plates	250—Nuts and Bolts

BASCULE BRIDGE

Fig. No. 348

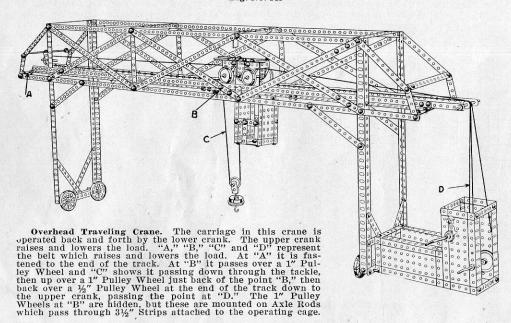


Bascule Bridge. The sectional view is taken from the rear of the left side of the bridge and clearly shows how the belts are carried from the lower axle to the moving section. On the other half of the bridge the belt should be crossed so that the sections will move in the opposite direction. This model when completed makes an interesting study as it is built on strictly scientific principles.

PARTS REQUIRED

1-5½" Crank
4-Flanged Wheels
6-1" Pulleys
2-1½" Pulleys
1-½" Pinion
8-12½" Strips
16-5½" Strips
12-3½" Strips
32-2½" Strips
32-2½" Strips
2-1½" Axle Rods
2-3½" Axle Rods
2-3½" Axle Rods
1-Angle Brackets
2-Bush Wheels
12-Nuts and Screws

OVERHEAD TRAVELING CRANE Fig. No. 349



PARTS REQUIRED

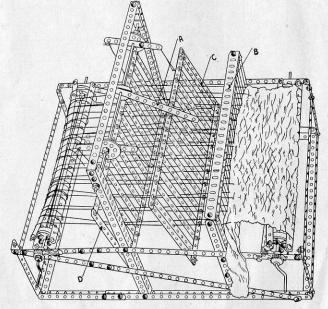
	TAILS MEQUITED	
3—Flanged Wheels 1—1½" Pulley 4—1" Pulleys 3—½" Pulleys 2—Bush Wheels 4—Car Wheels 3—½" Pinions 2—¾" Pinions 13—Collars	31—5½" Strips 9—3½" Strips 4—3" Strips 24—2½" Strips 6—2" Strips 6—5½" Angle Strips 10—12½" Angle Girders 8—5½" Angle Girders 28—Angle Brackets	8-2" Axle Rods 4-4½" Axle Rods 1-6½" Crank 1-5½" Crank 4-Truck Frames 1-Pawl 180-Nuts and Bolts 2-Small Plates 4-Large Plates
24—12½" Strips	2—Single Bent Strips 3—3½" Axle Rods	

CARPET LOOM

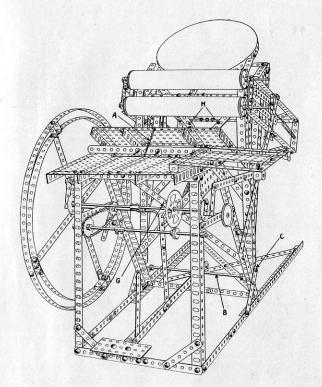
Fig. No. 350

PARTS REQUIRED

4—Flanged Wheels	22—Angle Brackets
2—Bush Wheels	2—Double Bent Strips
2-34" Pinions	2—Pawls 2—11½" Axle Rods
1-11/2" Gear Wheel	1—6" Axle Rod
6—Collars	1-31/2" Axle Rod
19—12½" Strips	1—2" Axle Rod
36—5½" Strips 2—3½" Strips	1-61/2" Crank
2-3½" Strips	1-4½" Crank
8—12½" Angle Girders 6—5½" Angle Girders	4-Shaft Connectors
6-5½" Angle Girders	145—Nuts and Bolts



Carpet Loom. Lever "A" separates the cords by raising and lowering the frames "C" and "D." The yarn to be woven is then passed through these cords and drawn tight by pulling frame "B" forward. This model will actually weave a strip of carpet 12" wide.

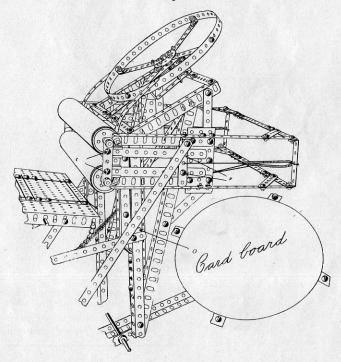


JOB PRINTING PRESS Fig. No. 351

The Job Printing Press is one of the most complete models shown in the book, and when the outside framework is built up will not be nearly as complicated as it at first appears. It is operated by the foot treadle pivoted on Axle "B," and attached to an engine crank by means of a 5½" and 2½" Strip. On the outside end of the engine crank is attached a large fly wheel, the crank being belted to the main driving shaft by means of a sprocket chain. The front frame of the press is stationary, and is held rigid by two 12½" Cross Strips "G" bolted to Angle Girders. "H" represents two crossed 12½" Strips which support the sides of the back frame,

which, as indicated by the detail cut, swings back and forth, and is pivoted at point marked "C." This back frame is operated back and forth by the Crank made of a Hanger Strip and attached to the back frame at point marked "D" by means of two Angle Brackets. The rollers are mounted on 21/2" Strips and on the screws "E" and "F" should be placed lock nuts so as to allow the rollers to adjust themselves when passing over the ink plate. "A" represents an ordinary rubber band which is attached to the movable bed to help draw it back when the rollers return to their home position.

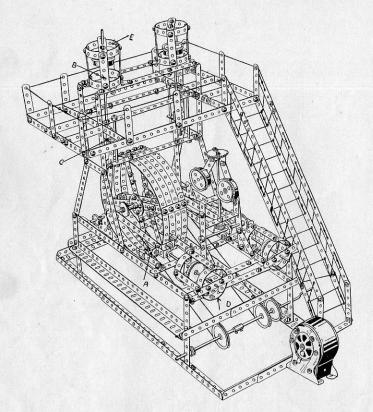
Detail of Job Press



PARTS REQUIRED

- 4—Flanged Wheels
 1—1½" Pulley
 3—½" Pulleys
 2—Bush Wheels
 1—3½" Pinion
 2—1½" Gears
 1—2½" Gear
 1—2½" Strips
 34—12½" Strips
 36—5½" Strips
- 11—3½" Strips
 8—3" Strips
 15—2½" Strips
 2—2½" Angle Strips
 10—12½" Angle Girders
 8—5½" Angle Girders
 28—Angle Brackets
 4—Double Bent Strips
 1—Large Bent Strip
 4—Hanger Strips
- 4—Large Plates
 6—314" Flat Plates
 4—512" Flat Plates
 2—111½" Axle Rods
 1—8" Axle Rod
 1—6" Axle Rods
 4—314" Axle Rods
 1—2" Axle Rod
 1—2" Axle Rod
 1—5" Axle Rod
 1—5" Axle Rod
- 4—Eye Pieces
 1—Chain
 2—Washers
 1—1" Sprocket
 1—1½" Sprocket
 2—Pulley Belts
 4—Shaft Connectors
 250—Nuts and Bolts
 4—5½" Angle Strips

THE AMERICAN MODEL BUILDER



STATIONARY ENGINE

Fig. No. 352

The Stationary Engine makes a very interesting and beautiful model when complete. The cylinders at the top marked "E" are made of two 31/2" Strips, bent in a circle. These cylinder heads are held together by 21/2" Strips marked "B" and should be adjusted directly over the driving shaft of the fly wheel. At point marked "C" the axle forming the piston rod passes through a double bent strip which is attached to a 21/2" Strip which operates up and down on the two 31/2" Axle Rods to keep the piston centered. A 51/2" Strip is then bolted to this 21/2" Strip by means of two Angle Brackets. This 51/2" Strip is then fastened to the engine crank below. The front cylinder heads are made of a 51/2" and 21/2" Strip overlapped and properly bent, marked "D." A second 51/2" Strip is attached to the engine crank to operate the forward cylinders, and this strip is connected to the forward pistons between four angle brackets attached to a double bent strip at point marked "A,"the outside angle bracket being attached to eye pieces which slide forward and back on the 21/2" Strips. The engine is operated by the lower driving shaft with pulley belts on both sides of fly wheels. The governor is operated by being belted to the axle on the right-hand side of the fly wheel, where two 1" pulley wheels are placed side by side. While this model may seem complicated from the cut, yet if the framework is built first and the fly wheel and pistons mounted afterwards it will be found comparatively simple in construction.

PARTS REQUIRED

4-Flanged Wheels	36-51/2" Strips	3-5" Axle Rods
3-11/2" Pulleys	10-31/2" Strips	1-41/2" Axle Rod
4-1" Pulleys	6—3" Strips	5-31/2" Axle Rods
2—Bush Wheels	56—21/2" Strips	1-2" Axle Rod
1-%" Pinion	10-2" Strips	1-61/2" Crank
2-1/2" Pinions	8-21/2" Angle Strips	4—Eye Pieces
1-11/2" Gear Wheel	4-51/2" Angle Strips	3-Shaft Connecto
2-11/2" Crown Gears	60—Angle Brackets	2—Drive Shafts
2-34" Crown Gears	4-Double Bent Strips	2—Truck Frames
16—Collars	2-Large Bent Strips	250-Nuts and Bolts
14-121/6" Strips	2-8" Axle Rods	

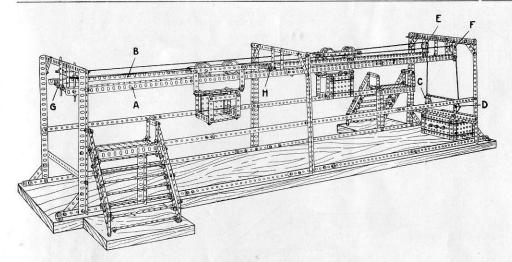


The Stationary Engine completes the models than can be built with Outfit No. 6. By purchasing Accessory Outfit No. 6½, many additional Models can be made, 18 of which are shown on the following pages.

For prices of separate parts and Accessory Outfits, see pages 79 and 80.

For special Transformers and Countershaft for operating Models by Electricity, see page 76.

THE TOY FOR THE BOY



MONORAIL

Fig. No. 353

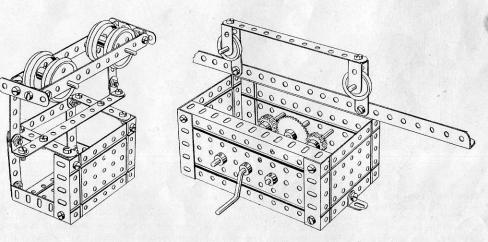
PARTS REQUIRED

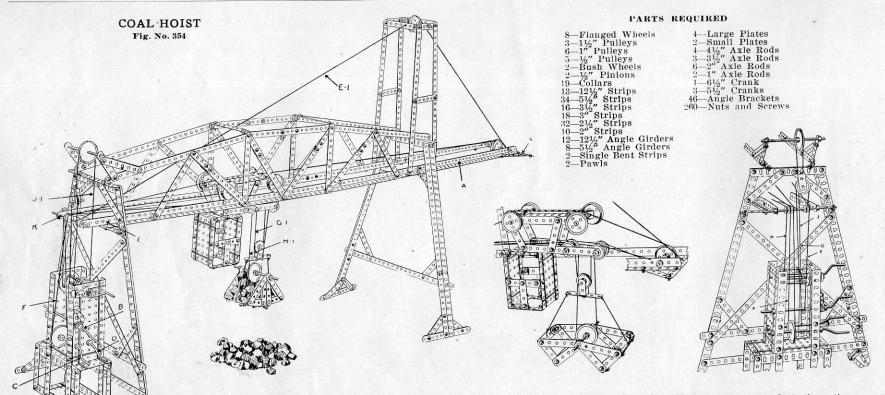
2-31/2" Axle Rods 18-121/2" Angle Girders 4-2" Axle Rods 2-51/2" Angle Girders 4-1" Axle Rods 18-121/2" Strips 42-51/9" Strips 1-61/3" Crank 2-31/2" Strips 2-3/4" Pinions 1-11/2" Gear 2-3" Strips 30-21/9" Strips 6-1" Pulleys 8-Flanged Wheels 16-2" Strips 10-Collars 4-Hanger Strips 4-Large Plates 84-Angle Brackets 6-Small Plates 290-Nuts and Screws 2-41/2" Axle Rods

The Monorali is comparatively simple... The upright frames are made first, as shown in the cut, and these are held together by eight $12\frac{1}{2}$ " Strips, bolted at the bottom and in the center of these frames.

The track is made of eight 121/2" Angle Girders "A" and "B," fastened together by three 51/2" Strips. This track is held in position by six 21/2" upright Strips, bolted to the 51/2" cross Strips "G" and "H." These 21/2" Strips should be set five holes apart so as not to interfere with the cars as they pass back and forth. The Pulleys "E" and "F" are held in position by two Hanger Strips bolted to the Angle Girder at the top and to the side of the track at the bottom. The Pulleys "C" and "D," fastened above the Gear housing, are held in position by two Hanger Strips bolted to the 121/2" Angle Girder and held apart by 51/2" Strips fastened across the top. When fastening the string, both cars should be placed directly under the center frame. One end of the string should be fastened to the rear end of one car and pass around the horizontal Pulleys on the left side of the structure and the other end fastened to the opposite car. Then attach a separate string to the front end of each car, passing same over Pulleys "E" and "F" and fasten the other ends to the two Axles in the Gear housing.

If this model is to be operated by a Motor, a Countershaft should be used to reduce the speed of the Motor and belt it to a 1½" Pulley attached to the 6½" Crank in the Gear housing.

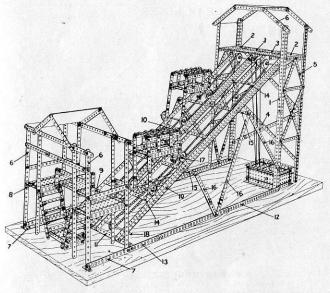




The Coal Hoist is one of the most interesting models shown in the book. It has four distinct movements—first, the entire carriage with cage and grab bucket moves back and forth over the track; second, the grab bucket can be raised or lowered at any point; third, the grab bucket can be opened and closed at any point; fourth, the overhanging runway at the extreme right can be raised or lowered to admit docking vessels.

In the detail cuts, we show the construction of the carriage and grab bucket and also the arrangement of the various cables, cranks and windlass from which they are operated. The overhanging runway is operated by cord "E" and "E-1" and is attached to Crank "B." The carriage is operated back and forth by cord "F," which is fastened to one end of the carriage, then passes over the 1½" Pulley Wheel mounted on Crank "C," then around the 1½" Flanged Wheel, then fastened to the other end of the carriage.

The grab bucket is operated by two cords marked "G" and "G-1" and "H" and "H-1." Both wind on the windlass. The grab bucket is opened and closed by Crank "D." To this Crank, cord "J" and "J-1" is attached and passes over the 1½" Pulley Wheel and is fastened in the Single Bent Strip. By operating the Crank it shortens and lengthens the cord, thus opening and closing the grab bucket. "L" represents two 3½" Strips bolted on the Angle Girder to support Shaft "K."



INCLINED CHAIN RAILWAY

Fig. No. 355

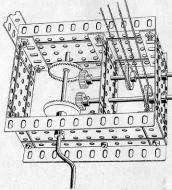
The Inclined Chain Railway is a model similar to the inclines used in a great many cities where it is necessary to mount exceptionally steep hills. First, erect the rear Tower, placing in position the upper platform, made of two Large Plates (2) and four Small Plates (3), all bolted together. The rear of the platform should be braced with diagonal Strips as shown. The loading platform is should next be made of two Small Plates (9) bolted together. The four inclined tracks should next be made of three 12½" Angle Girders (10) overlapping two holes and bolted at the top to the under side of Plates "2" and "3" and fastened at the bottom to two $5\frac{1}{2}$ " Strips (11).

The track should be stiffened by six $5\frac{1}{2}$ " cross Strips (14) and two $12\frac{1}{2}$ " cross Strips (15). A Hanger Strip should be attached on the under side of the Large Plate, forming the bottom of the car, and the lower end of this should be fastened to the Chain by means of an Angle Bracket. The Gearing is shown in the detail cut. The Sprocket Wheels at the top should be fastened to the Axle Rod, while those at the bottom should run loose on the $11\frac{1}{2}$ " Axle Rod (18) as they revolve in opposite directions. When completed, this model stands $2\frac{1}{2}$ feet high by $3\frac{1}{2}$ feet long and is most realistic in all its workings. When using a Motor, be sure to use a Countershaft, so as to reduce the speed and increase the power.

PARTS REQUIRED

24-121/6" Angle Girders 4-5" Axle Rods 5-51/2" Angle Girders 1-61/2" Crank 21-121/9" Strips 2-11/2" Crown Gears 50-51/2" Strips 2-34" Pinions 9-31/2" Strips 4-1" Pulley Wheels 24-21/2" Strips 8-Flanged Wheels 8-2" Strips 2-11/2" Sprockets 2-1" Sprockets 2-Hanger Strips 8-Large Plates 2-Chains 10-Small Plates 12-Collars 1-111/9" Axle Rod 70-Angle Brackets 4-41/2" Axle Rods 350-Nuts and Screws





EIFFEL TOWER

Fig. No. 356

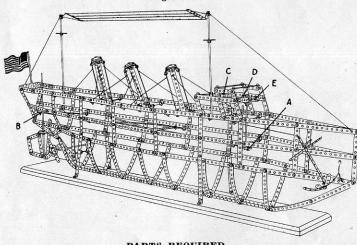
PARTS REQUIRED

12—12½" Angle Girders 20—12½" Strips 10—5½" Strips -8—3½" Strips 17—2½" Strips 44—Angle Brackets
1—Bush Wheel
1—11/4" Gear Wheel
1—13/4" Pinion
1—Pawl
1—61/4" Company 1-6½" Crank 2-5" Axle Rods 2-6" Axle Rods 2-1" Pulleys 6-Collars 8—Large Plates 2—Small Plates 146-Nuts and Screws

This Model is a miniature of the famous Eiffel Tower located at Paris. The construction of this is very simple, and the model itself pleasing in effect. The construction of the main framework, the dome and the railing around the plates is very clearly shown and needs no particular instruction. The elevator which moves up and down is made of two Small Plates fastened at the top and bottom with 21/2" Strips. The cage at the bottom is made of two Small Plates fastened together at the end with four 31/2" Strips. On either side of the Small Plates is mounted a 31/2" Strip extending over the edge two holes which forms the axis for the shaft which raises and lowers the elevator. The gearing is very simple and is accomplished by means of a 61/3" Crank at the end of which is attached a 11/4" Gear Wheel which meshes with the 34" Pinion mounted on the 5" Axle Rod. The top mechanism consists of two 6" Axles, on each of which is mounted a 1" Pulley. This model can be operated by a motor, in which case the Crank should be replaced by a 5" Axle Rod. on the end of which should be mounted a 11/2" Pulley.

OCEAN LINER

Fig. No. 357



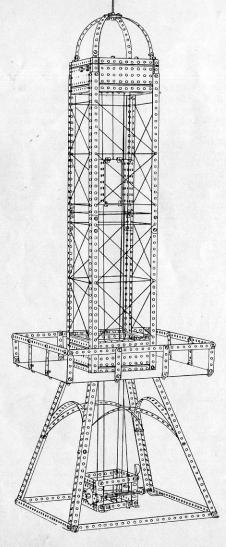
PARTS REQUIRED

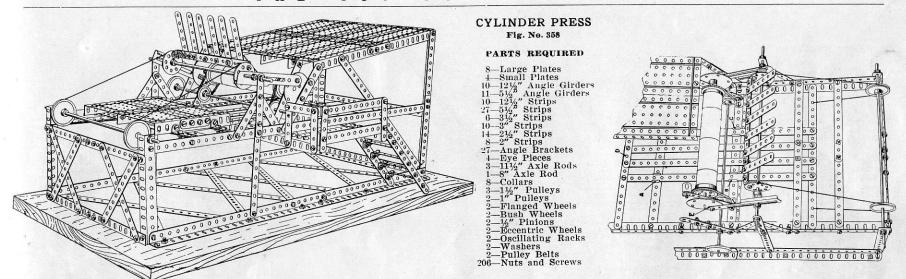
-1½" Pulley -Flanged Wheels 1-Small Plate 3-121/2" Angle Girders 66-Angle Brackets 5-Bush Wheels -34" Pinion -34" Crown Gear 2-5" Axle Rods 3—6" Axle Rods 1—8" Axle Rod 3—11½" Axle Rods 20—Collars 26—12½" Strips 66—5½" Strips 25—3½" Strips 18—2½" Strips 2—Hanger Strips 2—6½" Cranks 264—Nuts and Screws 1-Double Bent Strip 4-Wood Screws 1-Large Bent Strip

The Ocean Liner is a most realistic model when completed. The construction is comparatively simple and needs no particular explanation.

struction is comparatively simple and needs no particular explanation. We have marked several parts and these are as follows:

"C" is a Bush Wheel attached to a 4½" Axle Rod. The bearing for this Wheel is formed by fastening a Double Bent Strip to the 5½" Strip at point marked "E." "D" is a 3½" Pinion mounted on this 4½" Axle Rod and this meshes with the ¾" Crown Gear. At the lower end of the Axle carrying this ¾" Crown Gear is mounted a Flanged Wheel at point marked "A." This Flanged Wheel is belted to the 1½" Pulley Wheel at point marked "B," which operates the rudder from side to side. The tailpiece at the upper rear end of the Boat is formed by bending a 5½" Strip around the Small Plate, in which the flag is mounted. around the Small Plate, in which the flag is mounted.





The Base frame of the Cylinder Press should be made first of four 121/2" Angle Girders bolted together and braced by the 121/2" diagonal Strips as shown in the large cut. Then attach two upright 51/3" Angle Girders in the front and two 51/2" Angle Girders bolted together in the rear. To these should be fastened the eight Large Plates all bolted together with 2" Strips which forms the feed table. This table is fastened in front to the main frame by a diagonal brace on each side made of a 31/2" and 21/2" Strip bolted together. A 121/2" diagonal Strip should then be bolted on each side.

Two 121/2" Angle Girders should then be bolted on the under side of the frame and allowed to extend over the side to form the support for the feeder's platform.

Next attach the diagonal Strip which carries the Cylinder. This is made by bolting a 31/4" and 21/4" Strip together, then fasten the lower end to the 121/4" Angle Girder and bolt the upper end in the fourth hole of the Large Plate as shown in the sectional cut. An 8" Axle should then be passed through the fourth hole from the top of this diagonal Strip to which should be attached two Flanged Wheels and on the outside two Eccentric Drive Wheels. The Cylinder is made of stiff paper rolled and placed in the flanges of the wheels with three small rubber bands to hold it together, as shown in the sectional cut. In the third hole below the 8" Axle should be inserted a 111/4" Axle which forms the Driving Shaft and carries two 1" Pulleys which should be belted to the Flanged Wheels forming the cylinder. At the extreme left end of this 111/4" Axle should be mounted an 11/4" Pulley, to which the Motor should be belted. This 111/4" Axle Rod supplies the power for the operation of the entire Model, and care should be taken to see that all Set Screws are securely fastened.

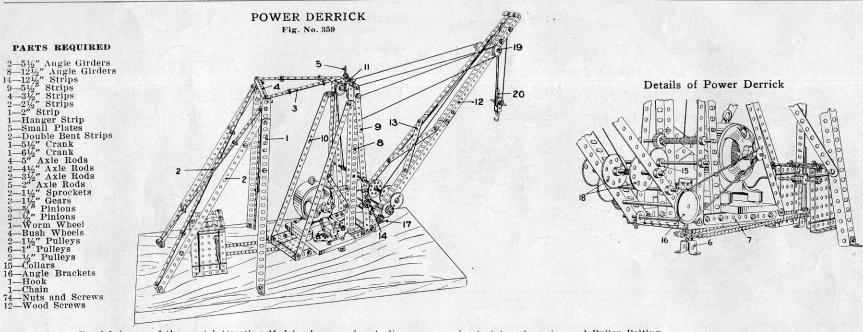
Next construct the fly, which is made of two Bush Wheels attached to a 11½" Axle which is passed through the side supports as shown in the large-cut. On the outside of the Bush Wheels should be mounted two ½" Pinions with the Collars turned in and these mesh with the two Oscillating Racks attached to the Eccentric Drive Wheels. (See sectional cut.) Note one of these Oscillating Racks has the teeth turned up while the other has the teeth turned down. These Racks should be bolted in the second hole nearest the center of the Eccentric Drive Wheel so as to give the proper throw to the fly.

The fly is made of five 3" Strips bolted to a 51/2" Strip and fastened to the Bush Wheels by means of Angle Brackets.

The Plate bed should then be made of four 12½" Strips, the outside Strips passing through four Eye Pieces (A, B and C) bolted to the Angle Girders. These Strips should then be bolted to two 5½" Strips fastened together. This Plate bed slides back and forth as the press operates. The front end of this bed is fastened by cord which passes over the two 1½" Pulleys mounted at the front of the Press and fastened to the Bush Wheels. An ordinary rubber band is fastened at the rear end of this bed at (D) and then fastened to the Cross Strip at the rear of the press (see large cut). This Rubber Band pulls the bed back when the fly moves forward.

This Model should be operated by a Motor belted to a Countershaft so as to reduce the speed. The Countershaft should then be belted to the 1½" Pulley attached to the outside of the 11½" Axle which is mounted under the Cylinder.

While this is a very complicated Model, the action of the press is most beautiful and perfect, and shows every movement of a real printing press.



The Power Derrick is one of the most interesting Models shown and embodies many good principles of gearing and Pulley Belting.

The rear upright frame as well as the braces should be built and fastened to a board with Wood Screws. At the top of this frame should be fastened four 5½" Strips (3) overlapped seven holes. Then measure the distance from the top of the rear frame to the Axle Rod (5) and locate the Double Bent Strip (6) shown in the sectional cut and fasten this to the board with two Wood Screws.

Next construct the revolving upright frame by using as a base three Small Plates with the flanges turned up and held together by 5½" Strips (7) bolted at the sides. To this base should then be bolted two upright 12½" Angle Girders (8) and braced by four 12½" Strips (9 and 10) and held together at the top by a 2½" Strip. To this Strip should be bolted the Bush Wheel (11), through which the 2" Axle Rod (5) passes. Then mount the frame on a 2" Axle Rod, which passes through a Bush Wheel mounted on the under side of the Small Plate and through the Double Bent Strip (6). On this 2" Axle should also be mounted an 1½" Sprocket and the Set Screws in both the Bush Wheel and Sprocket securely fastened, as it is on this Axle that the entire Derrick revolves.

The gearing which operates the tackle consists of three $5\frac{1}{2}$ " Axles. On the lower Axle should be mounted the $1\frac{1}{2}$ " Pulley (16), to which the Motor is belted, and on the opposite side the $\frac{3}{4}$ " Pinion (17) which meshes with an $1\frac{1}{2}$ " Gear on the second Axle. To this Axle should also be attached a $\frac{3}{4}$ " Pinion which meshes with the $1\frac{1}{2}$ " Gear on the third Axle. On the third Axle should also be mounted the two Bush Wheels (18) which form the Windlass.

In belting up the boom, the string should be fastened to the upright Angle Girder (8) and passed over the 1" Pulley, then back over the 1" Pulley in the upright frame, then over the other Pulley on the side of the boom, then over the second Pulley in the upright frame and fastened to the Axle Rod.

The string on the tackle should be tied to the Hanger Strip (20), passed over the front 1" Pulley, then down over the 1" Pulley in the tackle, then over the second 1" Pulley and fastened to the Windlass.

You will note by this method of gearing that the speed of the Motor is reduced one-fourth in addition to the reduction of speed obtained by belting the Motor to the 11/2" Pulley.

This Model is true in all its dimensions, and when completed forms an interesting study. This makes the best Model of Derricks that we show, and every boy should try to build this one.

WRIGHT AEROPLANE

Fig. No. 360

PARTS REQUIRED

4—Flanged Wheels	14-31/2" Strips
2-11/9" Pulleys	4-3" Strips
4—1" Pulleys	26-21/2" Strips
2—Bush Wheels	65-Angle Brackets
2—1½" Gear Wheels	1-8" Axle Rod
2-34" Pinions	4-6" Axle Rods
10—Collars	2-4½" Axle Rods
10-121/2" Angle Girders	1-6½" Crank
28—12½" Strips 29—5½" Strips	4—Propel'er Blades
29-51/6" Strips	213—Nuts and Screws

Through the courtesy of the Wright Brothers, we reproduce an exact Model of their original Aeroplane, which stands 36" wide and 43" long.

The center frame is made of six 12½" Angle Girders (A and B) overlapped three holes and fastened at the bottom by six 3½" Strips. Then attach six 5½" upright Strips (O) on either side and to these bolt six 12½" Strips overlapped three holes. These are fastened together at the top with six 3½" Strips, to which the top sail is fastened.

Next construct the framework which carries the front

sail. This is made of eight 12½" Strips (C, D, E and F) crossed in the center. The front sail is made of four 12½" Strips supported by nine upright 2½" Strips. This front sail is then fastened to the framework made of the 12½" Strips and attached to the glider frame by means of two 2½" Strips (P). The glider frame is made of four 12½" Angle Girders (K, L, M and N), and at the rear of the two lower Girders are fastened two 12½" Strips bolted in the seventh hole. To this frame are then attached the wheels which support the frame while it is rising from the ground. The rear framework supporting the tail sail is made of six 12½" Strips (G, H, I, J and Q) and supported by four 5½" Strips in the rear. To this frame is then attached the tail sail, which is made of two 12½" Strips (R) and fastened by two 3½" Strips and four 2½" Strips.

In mounting the Axles that carry the Propeller Blades, it will be necessary to fasten a 5½" Strip (S) in the center of the Plane so as to give the Axle Rod two bearings. The 1" Pulley Wheels mounted on the Axles carrying the Propeller Blades should be belted directly to the two 1½" Pulleys (T).

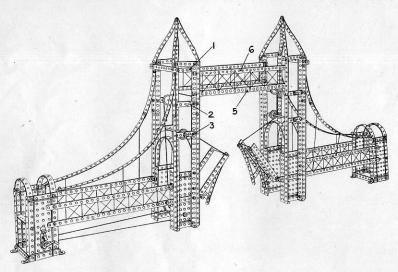
In the sectional view, we clearly show the gearing. The Propeller Blades are operated by revolving Crank (U), on which is fastened an 1½" Gear, which meshes with the ¾" Pinion (V) mounted on a 5" Axle. On this same Axle is mounted an 1½" Gear which meshes with the ¾" Pinion attached to the Axle Rod carrying the two 1½" Pulleys (T). By this method of gearing the Propeller Blades revolve six times while the Crank is turned once.

The tail sail is tilted by means of the cords running over the 1" Pulleys (W) and is operated by the 2½" Strip (X) attached to the top of the main frame. This Strip is attached directly above where the operator's seat would be located. Cardboard can be used to represent the sails on the main frame as well as on the front and tail sails, and these can be fastened by screws or paper fasteners.

Sectional View

LONDON TOWER BRIDGE

Fig. No. 361



The London Tower Bridge is a duplicate of the famous Tower Bridge crossing the Thames River at London.

Begin by building the towers first, which are constructed of four 12½" Angle Girders, and to these are attached four 5½" Angle Girders overlapping three holes. These are fastened together at the sides with three 2½" Strips (1, 2 and 3), and are boilted fast at the bottom to two Large Plates. The two arches are formed of two 12½" Strips (4) slightly bent and fastened between the Angle Girders and the Large Plates. The upper bridge at the top of the towers is made of two 12½" Angle Girders, 5) boilted together with three 3½" Strips, while the upper sides are made of two 12½" Strips (6). You will note that all of the Large Plates used at the base of the towers are supported on the inside by Small Plates. These can be used for the purpose of supporting the track in case it is desirable to run a small engine across the bridge.

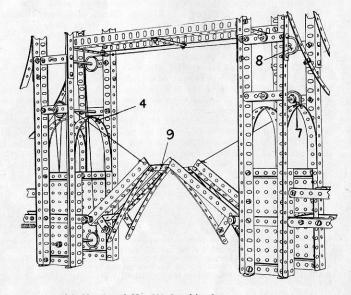
The raising and lowering of the center lower bridge is accomplished by a cord that is attached to the end of each half of the lower bridge and drawn over the Pulley Wheels and connected at the rear to the Crank. In order to have both halves of the bridge operate at the same time, it is necessary to have the cord attached to the right-hand half, run over two Pulley Wheels (7and 8) in the tower and then cross over to the left-hand tower down through the Small Plate and back to the Crank. With the aid of the sectional views which we show in this model, no difficulty will be found whatever in the construction of same.

A Spring should be fastened to the 3½" cross Strip on the under side of each approach and to these should be attached a string and this fastened at the ends of the raising sections at point marked (9). Be sure and draw the string tight so as to put a tension on the Spring, as this will cause the moving sections to pull into place readily when the Crank is operated.

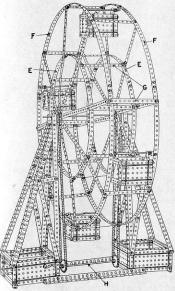
PARTS REQUIRED

6-1" Pulley Wheels 2-Springs 1-1/2" Pinion 180-Nuts and Screws 18-Collars 16-Wood Screws 1-Pawl 1-61/2" Crank 10-121/2" Angle Girders 4-5" Axle Rods 1-41/2" Axle Rod 10-51/2" Angle Girders 2-Large Bent Strips 20-121/2" Strips 26-51/2" Strips 26-Angle Brackets 8-Large Plates 9-31/2" Strips 4-Small Plates 14-21/2" Strips

Sectional View



FERRIS WHEEL Fig. No. 362



PARTS REQUIRED

38—12½" Strips
25—5½" Strips
37—2½" Strips
10—12½" Angle Girders
12—5½" Angle Girders
46—Angle Brackets
2—11½" Axle Rods
1—6" Axle Rods
1—6½" Crank
2—1½" Sprocket Wheels
2—Chains
4—Bush Wheels
2—34" Pinions
1—1½" Crown Gear
4—Bush Wheel
1—1½" Crown Gear
6—Large Plates
8—Small Plates
13—Collars
255—Nuts and Screws

In the Ferris Wheel model no difficulty will be found in building the framework, the cars, nor the wheel itself if the drawing given here is closely followed.

The gearing consists of an 11½" Axle (H) extending through the Large Plates at the bottom of the towers on which are mounted two 1" Sprockets. On the left end of this Axle should be attached an 1½" Crown Gear which meshes with a ¾" Pinion mounted on a 6" Axle. On this same Axle should be mounted an 1½" Gear which meshes with a ¾" Pinion mounted on the 5½" Axle.

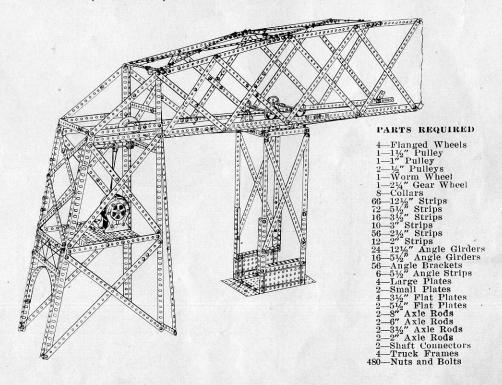
The Ferris Wheel makes a most excellent working Model and the principles of structural bracing are

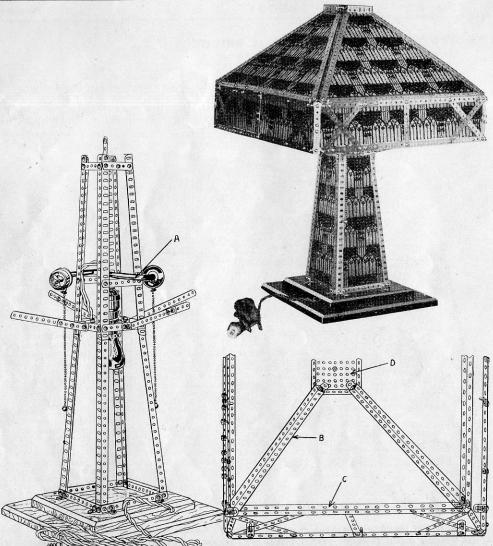
The Ferris Wheel makes a most excellent working Model and the principles of structural bracing are clearly demonstrated all through the Model. When completed, this Model stands three feet high, and is symmetrical and well proportioned.

AERIAL BRIDGE

Fig. No. 363

This is a duplicate of the **Aerial Bridge** at Duluth, Minnesota. Only one-half the structure is shown, the other half being an exact duplicate. The ferry is operated by means of a Motor, which is belted to a 1" Pulley Wheel on the 8" Axle Rod. On this Rod is a Worm Wheel which meshes with the 2¼" Gear above. On the same Axle Rod with this Gear is mounted a 1½" Pulley, over which the cord passes which operates the car back and forth.





THE

LIBRARY LAMP Fig. No. 364

PARTS REQUIRED

 28—12½"
 Strips
 68—Angle Brackets

 36—5½"
 Strips
 36—Obtuse Angles

 7—3½"
 Strips
 2—Small Plates

 24—2½"
 Strips
 220—Bolts

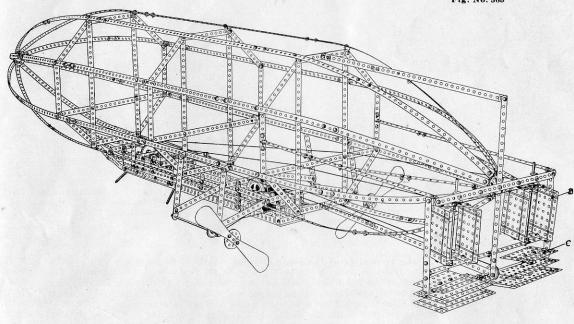
 8—12½"
 Angle Girders
 240—Nuts

The Library Lamp is useful as well as ornamental and will make an elegant present for any parent. The construction is extremely simple, as shown by the various cuts, and when the framework is completed it is only necessary to cut some old pieces of glass in triangular and square shapes and fit these between the Strips "B" and "C." "D" forms the top and is made of two Small Rectangular Plates fastened to the 121/2" Strips by Angle Brackets. Enough transparent art glass paper for covering the glass can be purchased in any store for 10c. The electrical attachment "A" consists of a goose-neck and cord, with three sockets for electric light bulbs, and the cost of one of these varies from \$1.30 to \$1.50. The base should be made of two pieces of wood fastened together as shown in the cut. When completed this will give you as handsome a lamp as can be purchased in any store from \$10.00 to \$15.00 at a cost of about \$1.50 in addition to the cost of the few Strips and Plates which are used.

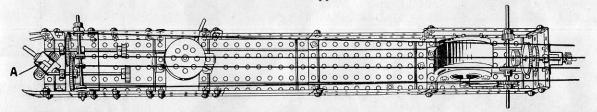
Boys! this will make an elegant surprise for your parents for Xmas. Try it!

THE TOY FOR THE BOY

ZEPPELIN Fig. No. 365



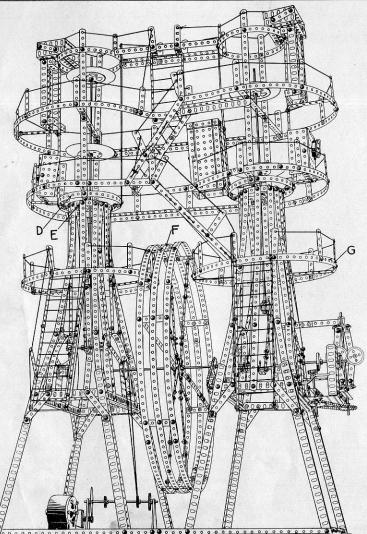
Details of Zeppelin



PARTS REQUIRED

4-11/2" Pulleys	6-Double Bent Strips
6-1" Pulleys	1-Large Bent Strip
4—½" Pulleys	3-Large Rect. Plates
5—Bush Wheels	4-21/2" Angle Strips
3-%" Pinions	4—Small Rect. Plates
4—1/2" Pinions	5-51/2" Flat Plates
2-11/2" Gear Wheels	8-31/2" Flat Plates
1-%" Crown Gear	3-8" Axle Rods
20—Collars	3—6" Axle Rods
66-121/2" Strips	1-41/2" Axle Rod
61-51/2" Strips	3-31/2" Axle Rods
18-21/2" Strips	3—2" Axle Rods
13-2" Strips	4-Propeller Blades
2-51/2" Angle Girders	1—Shaft Connector
68-Angle Brackets	1-Motor, No. 150
16—Obtuse Angles	365-Nuts and Bolts
2-Single Bent Strips	

The Zeppelin is a type of the Dirigible Balloon which is being used in the present European warfare. The construction of the framework is comparatively simple. The movements of the Dirigible are controlled entirely from the Cabin below, by operating the tail pieces "C" up and down to raise or lower it and operating the rudders "B" from left to right in order to turn it. These mechanisms are operated by the cord passing over the top of the cabin, as shown in the detail cut. At the present time a good many of these Dirigibles are also armed with rapid-firing guns such as shown in the bottom of the Cabin marked "A." When this model is completed, it is about 5 feet long, 2 feet wide, and presents a most realistic appearance. The Motor can be used for operating the Propeller Blades located on each side of the machine.



VERTICAL CROSS COMPOUND BLOWING ENGINE Fig. No. 366

PARTS REQUIRED

6-Flanged Wheels	24—3" Strips	2-5½" Flat Plates
2-11/2" Pulleys	70-21/2" Strips	3-111/2" Axle Rods
2-1" Pulleys	16-2" Strips	3—8" Axle Rods
2—½" Pulleys	22-121/2" Angle Girders	1-41/2" Axle Rod
4—Bush Wheels	12-51/2" Angle Girders	4-31/2" Axle Rods
2—Eccen. Drive Wheels	76—Angle Brackets	1-2" Axle Rod
1-34" Pinion	1—Obtuse Angle	1-51/2" Crank
4-11/2" Gear Wheels	9-21/2" Angle Strips	1—4' Chain
2-21/4" Gear Wheels	5—3½" Angle Strips	4—Washers
1—1½" Crown Gears	2-51/2" Angle Strips	3—1½" Sprockets
20—Collars	5—Large Plates	1—1" Sprocket
66-121/2" Strips	6—Small Plates	3-Shaft Connectors
69-51/2" Strips	1—Sector Plate	1-No. 150 Motor
34-31/4" Strips	8-31/2" Flat Plates	550-Nuts and Bolts

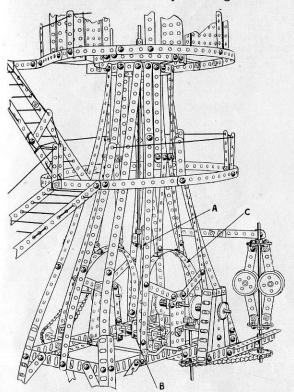
The Vertical Cross Compound Blowing Engine is the most scientific model shown in the book. It stands about 4 feet high and about $2\frac{1}{2}$ feet wide when completed. In constructing this model, the two bases should be constructed first. As shown in the detail cut, "B" is the Crank Shaft which operates the pistons and is made up of two $3\frac{1}{2}$ " Strips, on the bottom of which is attached a Double Bent Strip and through this passes an Axle Rod. To this Axle Rod is attached a Hanger Strip, which is connected to the piston rod by means of a $5\frac{1}{2}$ " Strip, at point "A." This $5\frac{1}{2}$ " Strip is fastened to a Double Bent Strip held on the bottom of the piston rod by means of two Collars. "F" is the Fly Wheel, the circumference of which is made by overlapping five $12\frac{1}{2}$ " Strips. The top of the lower base marked "E" is made with a $12\frac{1}{2}$ " Strip overlapping three holes, while the lower part of the cylinder "D" is made with a $12\frac{1}{2}$ " and $5\frac{1}{2}$ " Strip overlapping four holes. The lower platform "G" is made with three $12\frac{1}{2}$ " Strips.

The gearing of the governor is clearly shown in the detail cut. If the model is operated with a Motor, a Countershaft should be used and attached, as shown in the cut of the complete model. This model is so perfectly balanced that when the Fly Wheel is started, it will operate several revolutions of its own momentum. While this cut may seem somewhat complicated, on account of the various runways and bridges which are constructed around the cylinders, at the same time it is comparatively simple and no trouble will be experienced in the building of it.

OBSERVATION TOWER

Fig. No. 367

Details of Cross Compound Engine



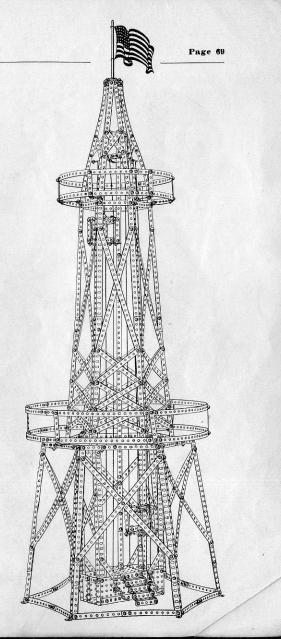
PARTS REQUIRED

4-1" Pulleys	2—Single Bent Strips
1—Bush Wheel	24—12½" Angle Girders
3—Collars	6—5½" Angle Girders 98—Angle Brackets
	8—Small Plates
49—12½" Strips 65—5½" Strips	2—1" Axle Rods
14—3½" Strips	2-61/4" Cranks
17—3" Strips	2—1/2" Pinions
53-21/9" Strips	2—Pawls
29—2" Strips	476—Nuts and Screws

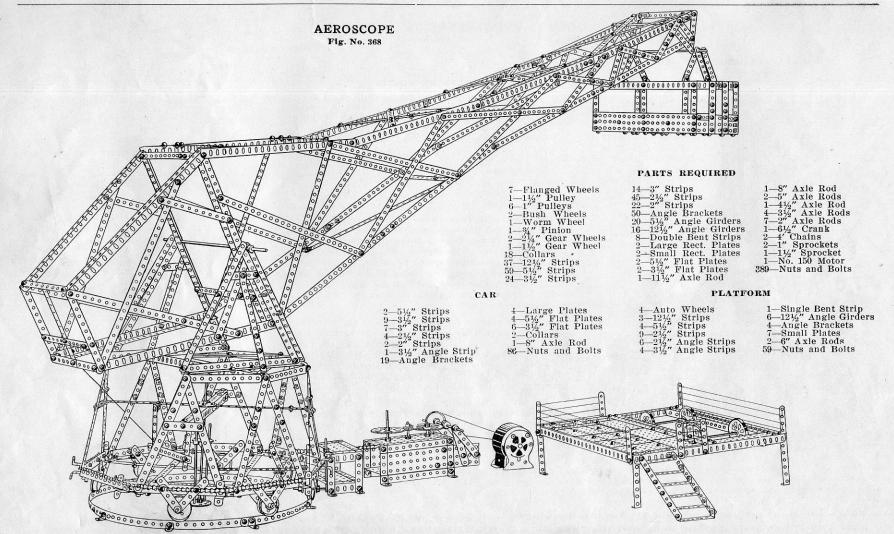
The Observation Tower, when completed, stands 4 ft. 6 in. high. In constructing this model, the lower base should be made first. The first balcony is then made and fastened to the lower platform at the corners. The main upright tower is made of Angle Girders braced by Strips, as shown in the cut. The upper balcony is fastened to the main tower by six 2" Strips. The upper peak of the tower is made of Strips bolted to Angle Brackets mounted on a Bush Wheel in the peak.

The two Elevators are operated by two 6½" Cranks, located at the sides of the stairs. One continuous cable should be attached from car to car and passed over the two 1" Pulley Wheels, mounted in the two Single Bent Strips at the top. The two guide ropes should also be stretched on either side of these cars and passed through the Angle Brackets, so as to guide them in the up and down movement.

Through the center of this Tower are mounted $12\frac{1}{2}$ " Strips connected together, which run from the top of the Pulley Wheels to the Small Plate mounted on the top of the Power Plant. These Strips prevent the cars from coming in contact with each other when passing in their up and down movements.

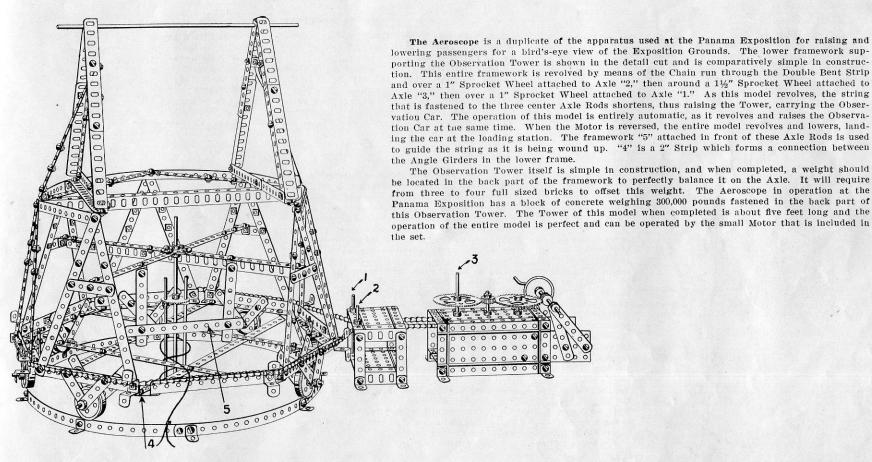


THE AMERICAN MODEL BUILDER



The Model shown on this page can be made with The American Model Builder Outfit No. 7, or with No. 6 and No. 6½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

Details of Aeroscope



The Model shown on this page can be made with The American Model Builder Outfit No. 7, or with No. 6 and No. 6½ Combined. HALF THE FUN IS BUILDING THE MODELS—THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

GRANDFATHER'S CLOCK Fig. No. 369

PARTS REQUIRED

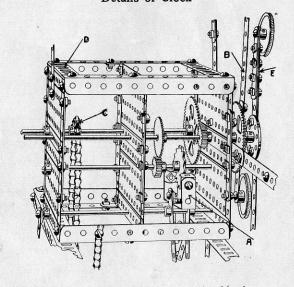
6-51/2" Flat Plates 6-3" Strips 2-11/2" Pulleys 2-8" Axle Rods 23-21/2" Strips 2-Bush Wheels 2-6" Axle Rods 29-2" Strips 1-11/2" Gear Wheel 22-121/2" Angle Girders 1-31/2" Axle Rod 2-21/4" Gear Wheels 2-2" Axle Rods 12-51/2" Angle Girders 3-3/4" Pinions 2-4' Chains 32-Angle Brackets 17-Collars 2-1" Sprockets 1-Large Bent Strip 34-121/2" Strips 1-11/4" Sprocket 72-51/2" Strips 4-51/9" Angle Strips 350-Nuts and Bolts 2-Sector Plates 40-31/2" Strips

The Grandfather's Clock is beyond a doubt the most interesting model shown in the book. When properly constructed, it will actually run for two hours with one winding. By means of the gearing used, the hour hand will move from one figure to the next, while the minute hand is making a complete revolution of the face.

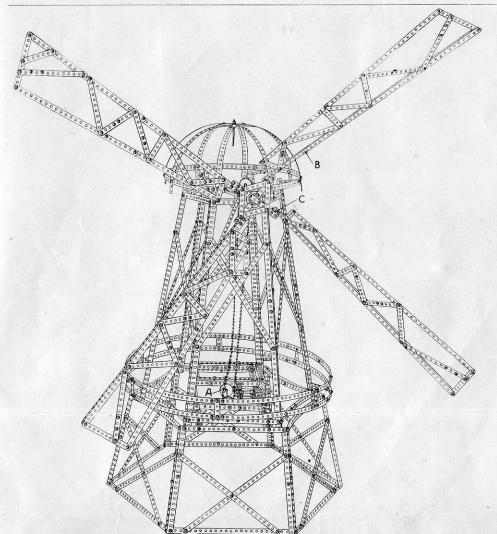
The entire mechanism is shown in the detail. The upper and lower framework of this detail is made of four 51/2" Angle Girders "D," and these are supported on the sides and in the center by two 51/2" Flat Plates, although the center plate can be omitted entirely. The weight is carried by two 1" Sprocket Wheels attached to the Axle at point "C." At the opposite end of this Axle is attached a 21/4" Gear which meshes with the 3/4" Pinion. On the same Axle with the 3/4" Pinion is mounted a 11/2" Gear which meshes with the 34" Pinion on the escapement Axle. The escapement "A" is made with a Double Bent Strip, at each end of which is attached an Angle Bracket which regulates the escapement in connection with the 11/3" Sprocket Wheel. The hour hand "B" is fastened to a 21/4" Gear and meshes with the 3/4" Pinion shown on the face of the Clock in the large cut. The Set Screw on this 21/4" Gear should not be fastened so as to allow the Axle Rod supporting the minute hand to move freely. When constructing this model the minute hand should be properly balanced by means of extra Nuts, as shown at point "E." The weight for operating this model is made up of 51/2" and 31/2" Strips and has a 1" Sprocket mounted in the top of it, around which the Chain passes.

Boys, don't fail to build one of these models.

Details of Clock



FOR THE TOY THE BOY



OLD DUTCH WINDMILL

Fig. No. 370

The Old Dutch Windmill makes a large, unique model. It is very simple in construction and operates perfectly. The Hexagonal base should be constructed first, using six 12½" Angle Girders for the uprights, connected at the bottom by 12½" Strips, and at the top by two 5½" Strips overlapped one hole. Across the top of this framework construct two parallel girders consisting of one 12½" and one 5½" Angle Girders overlapped two holes, and attached to the Strip at the top of the framework by means of Angle Brackets bolted into the 4th hole from each end of the Strips, as shown in the cut just below "A."

These girders support the gear housing as well as the main tower. This These girders support the gear housing as well as the main tower. This tower is made of six upright girders, each composed of two 12½" Angle Girders overlapped three holes and held apart at the base by two 5½" Strips overlapped three holes, and at the top by one 5½" Strip. The bracing of the lower framework, as well as of the main tower is simple, and clearly shown in the cut. The dome is supported by 2½" Strips extending out from the top of the tower, and fastened by Angle Brackets to the second hole from the top of the six upright girders. The arms of the Windmill are made by using 12½" Angle Girders along one edge, and 12½" Strips along the other edge, braced as shown in the cut at "B."

A 11½" Axle Rod extends through the top of the tower, and is kept in position by means of Collars and Set Screws. The end of this Axle Rod extends far enough beyond the circumference of the dome to receive a Bush Wheel, to which is fastened the ends of the arms. At point marked "C" two Obtuse Angle Brackets are used in each arm so as to give them a slight incline. At point marked "A" a 1½" Crown Gear is mounted on an Axle Rod, which meshes with the ¾" Pinion in the gear housing. You will note that several Gears and Pinions are used in the gear housing in order to reduce the speed of the arms.

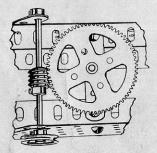
On the Axle "A" is also mounted a Sprocket Wheel from which a Chain runs to a similar Sprocket Wheel on the 11½" Axle Rod in the top of the tower, which in turn revolves the arms. The two bands at the base of the tower are formed of Strips separated by 21/3" Strips and are merely for ornamentation.

PARTS REQUIRED

	THE TO THE CHAIN	
1-1" Pulley	10-3" Strips	1-5" Axle Rod
1—Bush Wheel	39-21/2" Strips	1-31/2" Axle Rod
3-34" Pintons	8-2" Strips	1-61/2" Crank
2-11/2" Gear Wheels	22-121/2" Angle Girders	1—4' Chain
1—1½" Crown Gear	12-51/2" Angle Girders	1-11/2" Sprocket
12—Collars	40-Angle Brackets	1—1" Sprocket
66-121/2" Strips	12—Obtuse Angles	2-Large Plates
66-51/2" Strips	1-111/2" Axle Rod	462-Nuts and Bolts
12-31/2" Strips	1-8" Axle Rod	

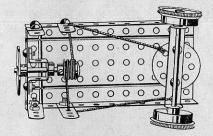
The Model shown on this page can be made with The American Model Builder Outfit No. 7, or with No. 6 and No. 61/2 Combined. HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

STANDARD DETAILS OF CONSTRUCTION AS USED IN AMERICAN MODEL BUILDER OUTFITS.



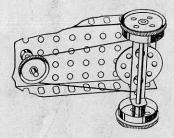
No. 1

Construction showing mounting of worm wheel when used to mesh with gear wheel to produce slow speed.



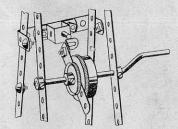
No. 2

Steering arrangement for automobile by means of worm attached to inclined steering rod. This arrangement gives a positive action.



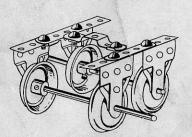
No. 3

Simple form of steering for truck with vertical steering rod.



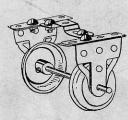
No. 4

Arrangement for raising and dropping trip hammer.



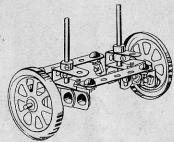
No. 5

Construction of double truck for various kinds of cars. This can be made to fit any width track by loosening the screws and nuts in the bolster plates.



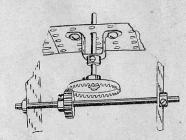
No. 6

Single truck for cars and engine. This can also be made to fit any width track by loosening screws and nuts in bolster plates.



No. 7

Automobile steering arrangement used on all heavy trucks. The screws and nuts in the tie bars should be loose so as to permit both wheels to turn at the same time on their upright bearings.

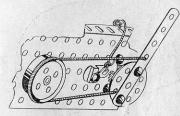


No. 8

Transmission of power from a horizontal to a vertical axle. This is accomplished by meshing a crown gear with a pinion as shown in the cut.

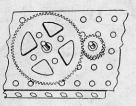
THE TOY FOR THE BOY

STANDARD DETAILS OF CONSTRUCTION AS USED IN AMERICAN MODEL BUILDER OUTFITS.



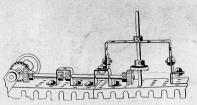
No. 9

Simple form of powerful brake. Ratchet pawl can be dropped to lock brake in position. By pulling a string attached to the ratchet the brake will be released.



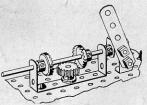
No. 10

Method of meshing gears with pinions. If motor is belted to the axle holding the pinion the speed would be decreased. If motor is belted to axle holding the gear wheel the speed would be increased.



No. 11

Showing how power is transmitted from a horizontal axle through pinions to a vertical axle by means of crown gears.



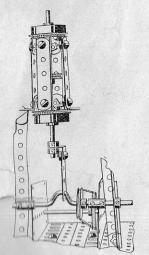
No. 12

Simple form of gear shift for raising and lowering the load with the same axle by moving the upright lever forward and back, and bringing the crown gears alternately into mesh with the pinion.



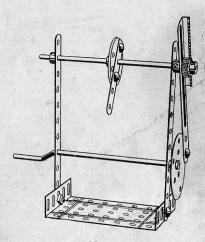
No. 13

Simple form of lock for crank by attaching an angle bracket to the side of a plate or strip.



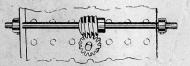
No. 14

Illustrates how a piston is operated from an engine crank. This constriction can be used either in an apright or horizontal position.



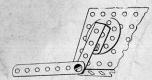
No. 15

Trip hammer arrangement operated by an eccentric drive wheel and oscillating rack.



No. 16

This illustration shows method of meshing worm with small pinion, where slow speed is desired for the axle rod upon which the pinion is mounted. This form of gearing cannot be driven by applying power to the axle upon which the pinion is mounted.



No. 17

Illustrates how a crank motion can be obtained by attaching a hanger strip to a bush wheel.



No. 18

Simple form of lock nut by attaching two nuts on one screw. The lower nut should be drawn up tight against the upper nut to hold it in position.



No. 19

This illustrates the use of the ratchet pawl. The ratchet can be thrown from one side of the pinion to the other, depending upon the direction in which the axle revolves.

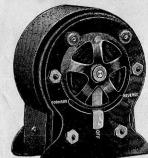


MOTOR Style No. 100

This Motor has been especially designed for operating the models built with the American Model Builder in connection with our Geared Countershaft No. 350. The Motor can be run from one or two dry cells or from city current through our No. 400 or No. 410 Transformer. It current through our No. 400 or No. 410 Transformer. It is made of steel, with bronze bearings throughout and is high grade in every respect. It stands 3½" high and has a three-pole armature 1½" in diameter. It will run smoothly and wear indefinitely with just an occasional oiling. The base is flauged and perforated so it can easily be mounted on a Rectangular Plate. This Motor is equal to any Motor on the market of double its price.

MOTOR Style No. 150

Our No. 150 Motor is an exact duplicate of our No. 100 Motor, except that it is equipped with a switch, mounted on the inside of the Motor, which enables the operator to Start, Stop and Reverse the Motor without disconnecting the wires. The base is flanged and perforated so it can be mounted on a Rectangular Plate. This Motor is capable of operating any model made with The American Model Builder Outfits, when used in connection with our No. 350 Countershaft.



MOTOR Style No. 150

MOTOR Style No. 100

The No. 410 Transformer is designed especially for operating Electric Trains, Merry-Go-Rounds, Machine Shops, Etc. It is 50-Watts capacity and will not be injured by short circuits. By means of the Rheostat at the top of the Transformer, 4, 6, 10, 14 or 20 volts can be secured. IT IS DESIGNED FOR USE ONLY WITH ALTERNATING CUR-RENT-110 to 125 volts.

For free delivery anywhere in U. S. A., add .25

No. 410 TRANSFORMER



No. 400 TRANSFORMER

The No. 400 Transformer will entirely displace the use of storage batteries and dry cells and will operate any electrical toys not requiring over 9 volts. It is equipped with three binding posts and is 4½" long, 3¾" wide and 3" high, and weighs 5 pounds. This Transformer is 50-Watts capacity and will carry a 50% overload. It is furnished with flexible cord and plug for attachment direct to a lamp socket. Will give either 3, 6, or 9 volts as desired. IT IS DESIGNED ONLY FOR USE WITH ALTERNATING CURRENT—110 to 125

For free delivery anywhere in U. S. A., add .25

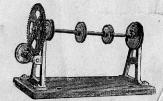


UNIVERSAL MOTOR, Style No. 325

Our No. 325 Universal Motor develops 1/100 H. P. and can be connected direct to either 110 Volts DIRECT or ALTERNATING current. Dry cells, Storage Batteries or and wishes to run small pieces of machinery.

The No. 350 Countershaft will enable the owner of a small Motor to operate two or more models at the same time. It is especially designed for operating American Model Builder models. The power of the Motor is increased seventy times, which makes it possible to pull heavy loads without stalling the Motor. The Shaft has cast iron hangers, ½" Axle, which is supplied with three 1" Pulleys and one 1½" Pulley, all of which are adjustable on the Shaft. It is mounted on a black enameled steel base.

Price, complete For free delivery anywhere in United States, add.....

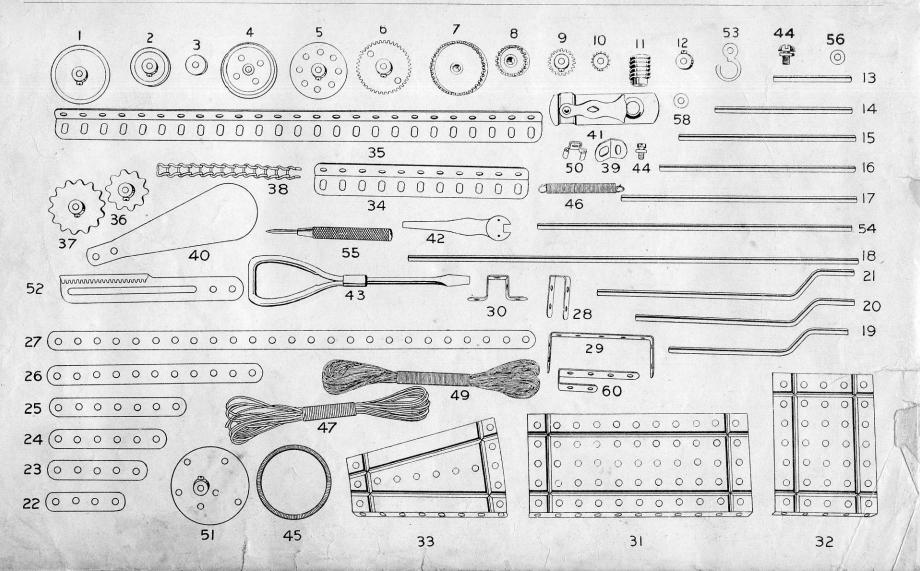


No. 350 WORM-DRIVEN COUNTERSHAFT

HALF THE FUN IS BUILDING THE MODELS-THE OTHER HALF IS OPERATING THEM WHEN COMPLETED.

LIST OF CONTENTS

7	х + a x + x v v x + y v y + y v v v v v v v v v v v v v v
62	
9	& x & c + & y y & y + y y y y y y y y y y y y y
52	T T H H M M M M M M
•	жыжжы жылын ыл ын түргүн кан тан тан тан тан тан тан тан тан тан т
42	4
4	4+6044+909HHH -0
23. 23.	H
•	4 Q 4
7 3	4
2	
1_2^1	0
_	
03	
-	T
	Twheels 114. Wheels 14. Twheels 14. Twheels 14. To Wheels 14. To Wheels 14. To Wheel 14. To W



0000000 59 000 64 58 antoonipatadaalajaataalaataalaataala "THE TOY FOR THE BOY" 57 monning 63 3500 monument 68 0 0 0 66 00

The parts illustrated on this page are entirely new and are only included in the 1915 American Model Builder outfits.

PRICE LIST OF SEPARATE PARTS

					1
No. 1. 11/2" Pulley Wheels	10c Each	No. 37.	1½" Sprocket		
No. 2. 1" " " " "	10e "	No. 38.	Chain, 4 ft. Length	"	10e \ "
No. 3. ½" " " " "	05c "	No. 39.	Angle Brackets		10c Doz.
No. 4. 11/2" Flanged Wheels"	15c "	No. 40.	Propeller Blades		15c Pair
No. 5. 11/2" Bush Wheels"	15c "	No. 41.	Ratchet Pawls		10c Each
No. 6. 11/2" Gear Wheels	15c "	No. 42.	Spanner and Screw Driver	(05c " .
No. 7. 1½" Crown Gears	20c "	No. 43.	Large Screw Driver	:	10e "
No. 8. 3/4" " " " " "	15e "	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"	15e "	No. 47.	Blue Cord, 15 ft	" 2	1/2c "
No. 12. Collars and Set Screws.	05e "	No. 49.	Green Cord, 80 ft		05e "
No. 13. 2" Axles, rounded ends"	21/se "	No. 50.	Eye Pieces		
V., 14 91/# " " " " "	21/se "	No. 51.	Eccentric Wheels		15c "
No. 15. 41/9" " " "		No. 52.	Oscillating Rack	"	15e "
No. 15. 4½" " " — " Drilled"	05e "	No. 53.	Hooks	" 2	1/2c "
No. 16, 5" Axles, rounded ends-	0=0 "	No. 54.	8" Axle Rod, rounded ends.		05c "
Drilled	096	No. 55.	Knurled Screw Driver		10e "
No. 17. 6" Axles, rounded ends "	0.00	No. 56.	Washer	"	10c Doz.
No. 18. 11½" " " " " " "	05c "	No. 57.	21/9" Angle Strips		15c 1/2 Doz.
No. 19. 41/2" Cranks, rounded ends -	05c "	No. 58.	31/2" " "		15c ½ "
Drilled	Voc	No. 59.	51/2" " "	44	20e ½ ···
No. 20. 51/2" Cranks, rounded ends— Drilled	05e " .	No. 60.	Hanger Strip	"	05c Each
No. 21. 61/2" Cranks, rounded ends—		No. 61.	1/2" Wood Screws	"	05c Doz.
Drilled	05c "	No. 62.	Shaft Connector		10c Each
No. 22. 2" Perforated Strips "	10c 1/2 Doz.	No. 63.	12" Rule		10e "
No. 23. 2½" " " " " " "	10c ½ "	No. 64.	Engine Crank		05e "
No. 24. 3" " " " " "	10e ½ "	No. 65.	Car Wheel		05e "
No. 25. 3½" " " " "	10e ½ "	No. 66.	Truck Frames	. 2	2½c "
No. 26. 5½" " " " "	15e ½ "	No. 67.	"T" Strips	. 2	2½e "
No. 27, 12½" " " " "	25e ½ "	No. 68.	Bolster Plates	. 2	21/20 "
No. 28. Single Bent Strips "	05c Each	No. 69.	Auto Wheels		
No. 29. Large Bent Strips"	05e "	No. 70.	3½" Flat Plate		05c "
No. 30. Double Bent Strips"	05e "	No. 71.	51/2" " "		05e "
No. 31. Large Rectangular Plates"	10c "	No. 72.	Obtuse Angle		10c Doz.
No. 32. Small Rectangular Plates "	10c "	No. 73.	2¼" Gear Wheel		20e Each
No. 33. Sector Plates"	10c "	No. 77.	Instruction Book No. 1		10e "
No. 34. 5½" Angle Girders	20c ½ Doz.	No. 78.	Complete Manual of Instruc-		
No. 35. 12½" " " " "	25c ½ "		tion	**	25e "
No. 36, 1" Sprocket	15c Each	No. 79.	Set Screws	••	10c Doz.
					1000

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.

Price List Of Outfits

REGULAR OUTFITS

No. 0	American Model Builder Outfitw	ill l	build	105	Model	s\$.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 including No. 100 Motor		**	309	"	5.00
No. 5	American Model Builder Outfit " " 150 " '	"	"	334	"	7.50
No. 6	American Model Builder Outfit " " 150 " '	"	"	349	"	(Packed in Heavy Cardboard Box) 12.50
No. 6	No. 150 Motor	"	"	349	"	(Packed in a Quartered Oak) 15.00
No. 7	American Model Builder Presentation Outfit (Including No. 150 Motor)	"	"	365	"	(Packed in a Mahogany Box) 25.00

ACCESSORY OUTFITS

No. 01/2 American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 0 Outfit into a No. 1 Outfit)	.50
No. 11/2 American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 1 Outfit into a No. 2 Outfit)	1.00
No. 2½ American Model Builder Accessory Outfit	(Containing Sufficient Parts to Convert a No. 2 Outfit into a No. 3 Outfit)	1.00
No. 3½ American Model Builder Accessory Outfit	(No. 100 Motor included in this Outfit)	2.00
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 Accessory Outfit added to a No. 1 will convert a No. 1 into a No. 2½ will convert a No. 2 into a No. 3, and so on.

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. ACCESSORY OUTFITS—No. 0½, 10c; No. 1½, 15c; No. 2½, 25c; No. 4½, 25c; No. 5½, 35c; No. 6½, 75c.

Remittance should be made by N. Y. DRAFT, POST OFFICE or EXPRESS MONEY ORDER. BE SURE TO ADD THE NECESSARY AMOUNT for free delivery, as otherwise shipment will be made by Express Collect.

