

MODEL-IT

ENGINEERING SET

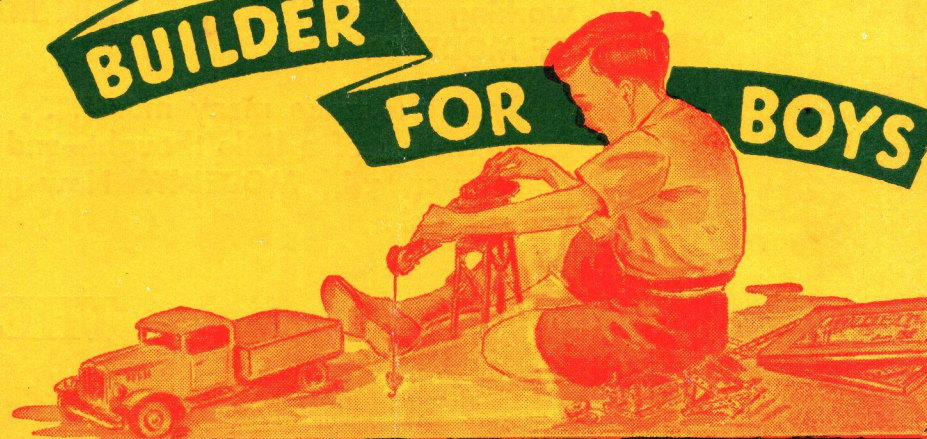
REG.

THE MARVEL

BUILDER

FOR

BOYS



BOOK OF INSTRUCTIONS AND ILLUSTRATED MODELS
BY THE MODEL-IT MAN

Did You Know This, Young Man?

MODEL-IT has become the first choice of every boy "who wants to build something." And there are mighty few boys in whom this instinct is not inherited.

MODEL-IT not only gratifies your impulse to build, in miniature, the objects you see about you daily . . . it teaches you to observe . . . encourages you to invent.

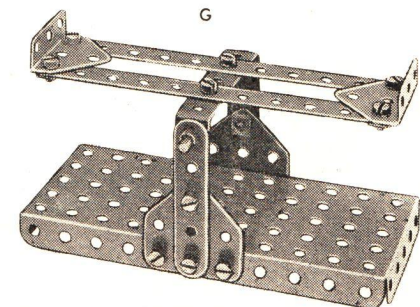
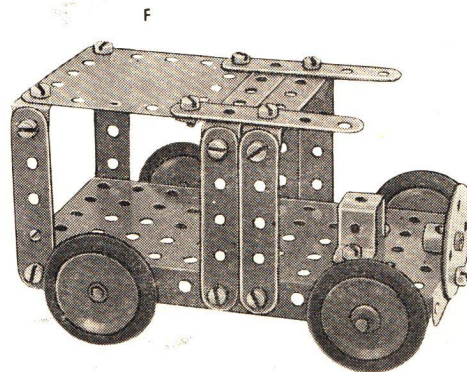
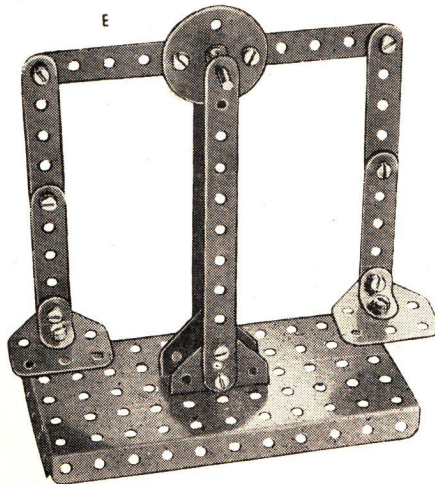
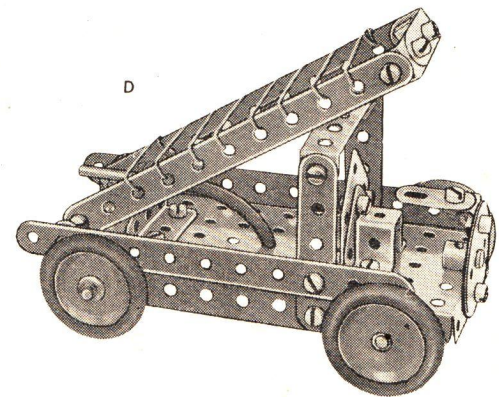
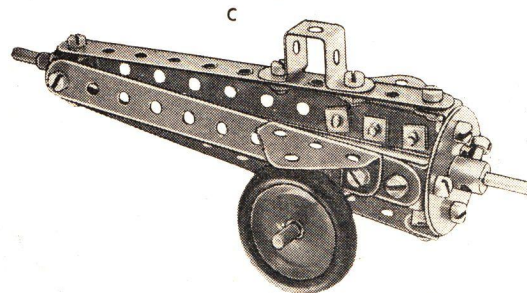
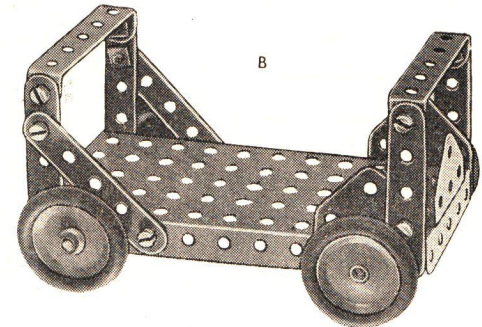
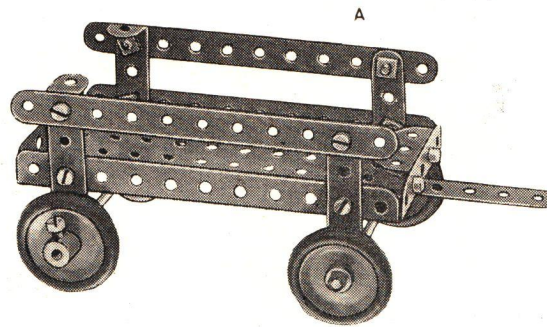
MODEL-IT will be your favourite present because of the wide variety of models you can make from its wealth of parts and accessories. In the following pages you will find working models WHICH CAN BE MADE FROM THIS SET OF MODEL-IT.

But you can make many more . . . hundreds more! It's just a matter of a little thought—and then a lot of happy hours spent with MODEL-IT. Now go to it, my boy—and best of luck.

THE MODEL-IT MAN

MODELS
on this page
made with all
Model-it Sets

- A — FARM CART
- B — RAILWAY PLATFORM TRUCK
- C — ROCKET SHIP
- D — FIRE ENGINE LADDER
- E — BALANCE SCALES
- F — DELIVERY VAN
- G — SEE-SAW



MODELS
on this page
made with all
Model-it Sets

A—PIGEON LOFT

B—ROADSTER

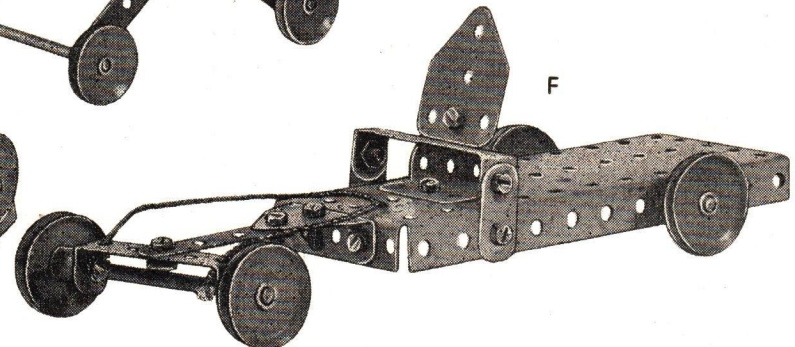
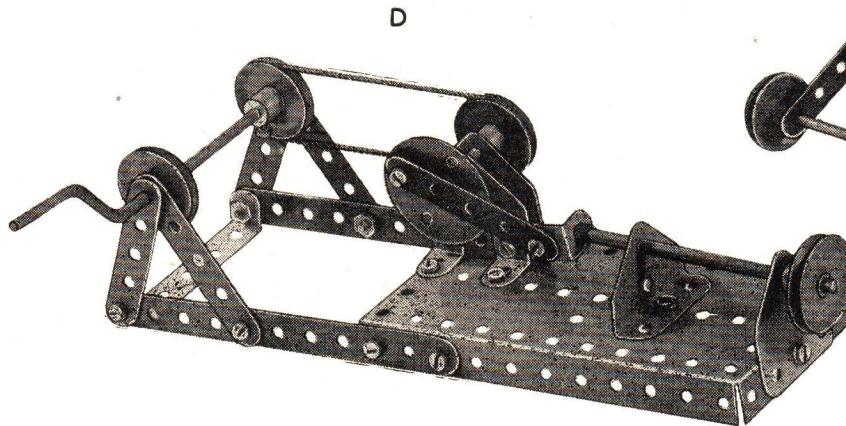
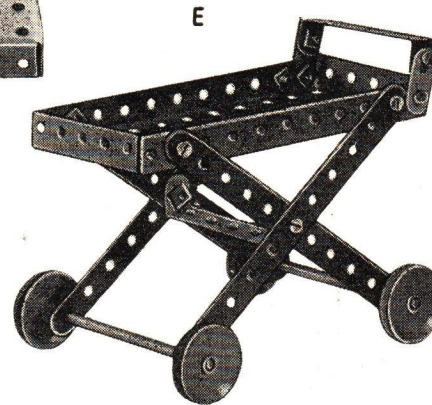
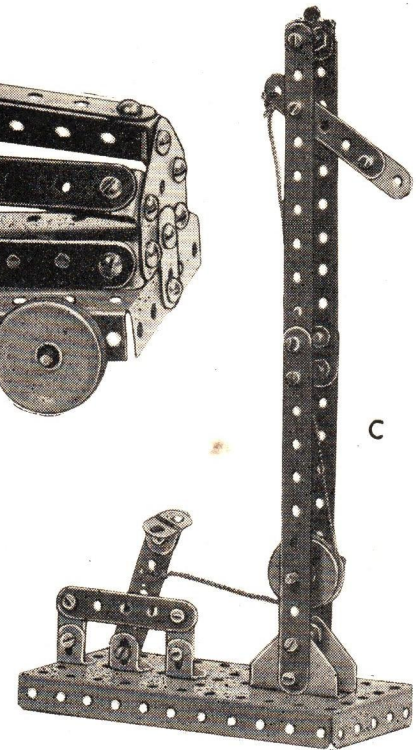
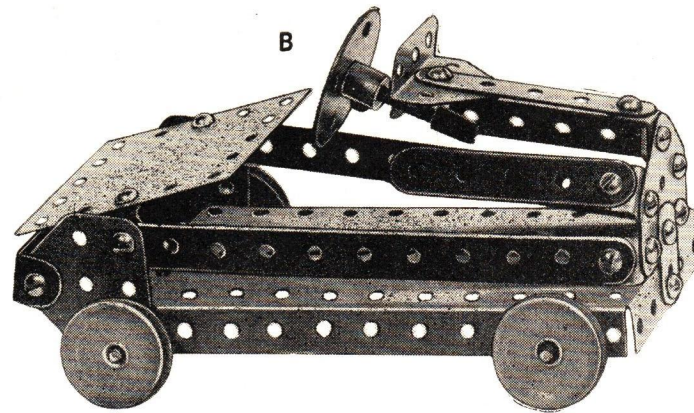
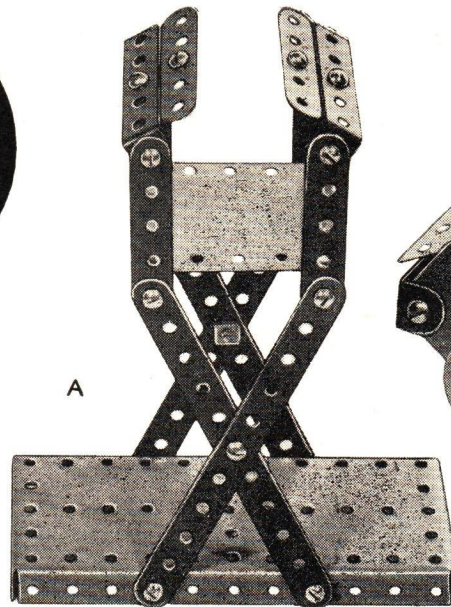
C—HOME SIGNAL

E—TRAYMOBILE

D—HORIZONTAL
STEAM ENGINE

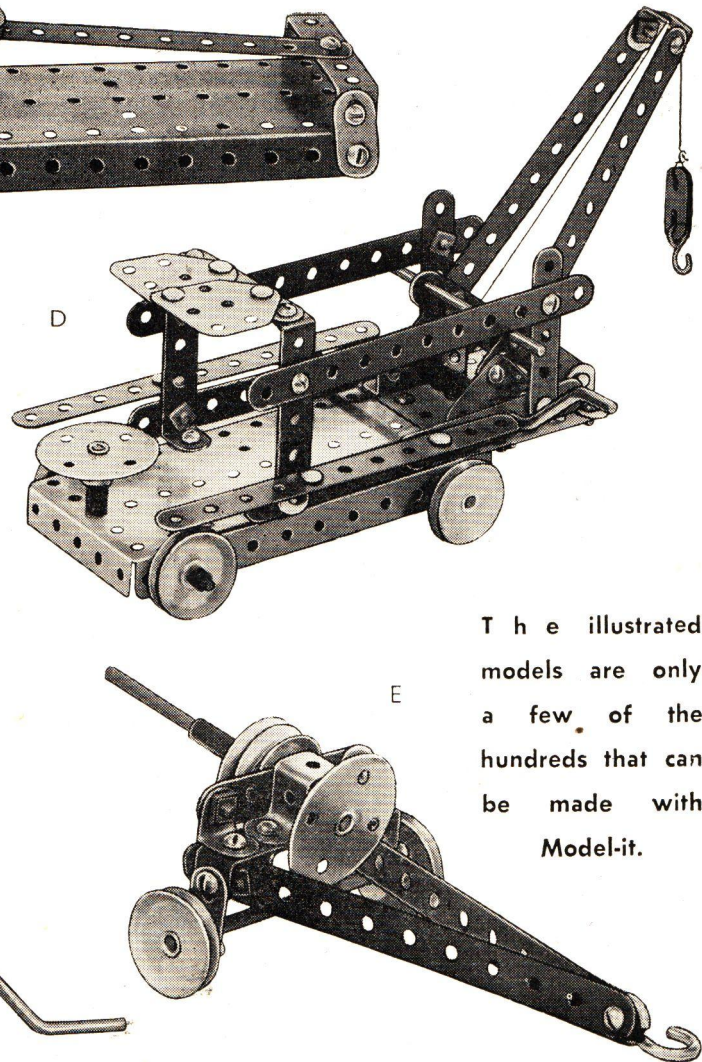
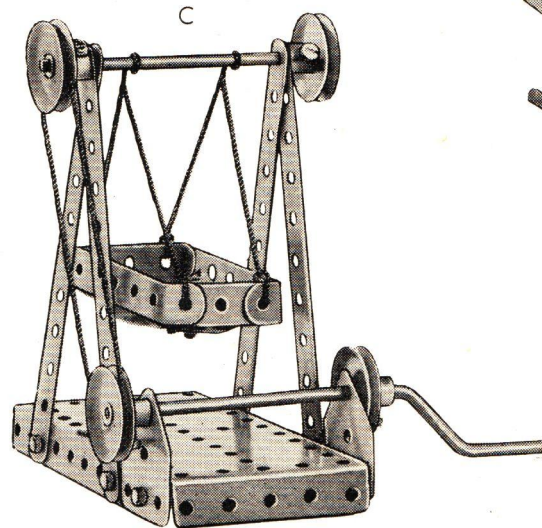
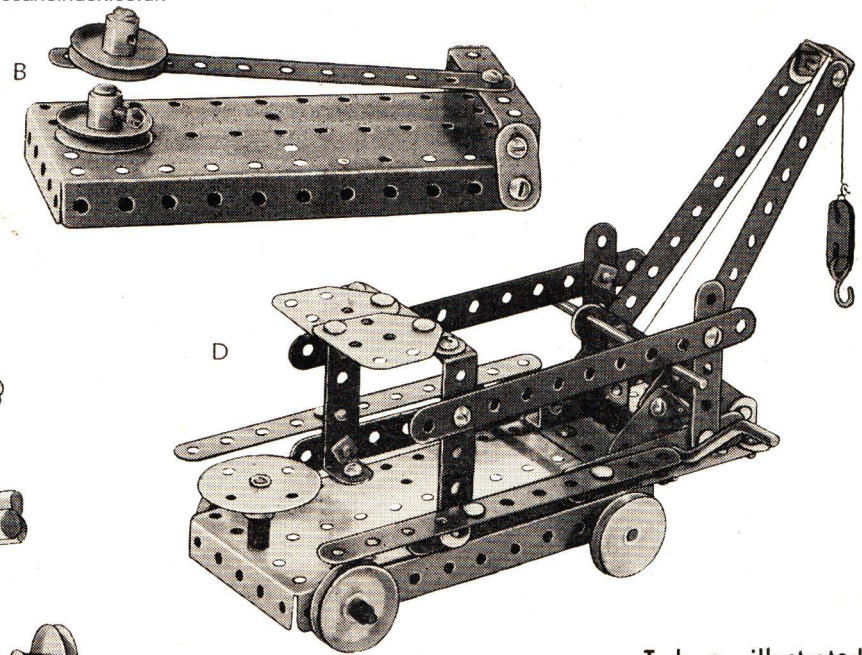
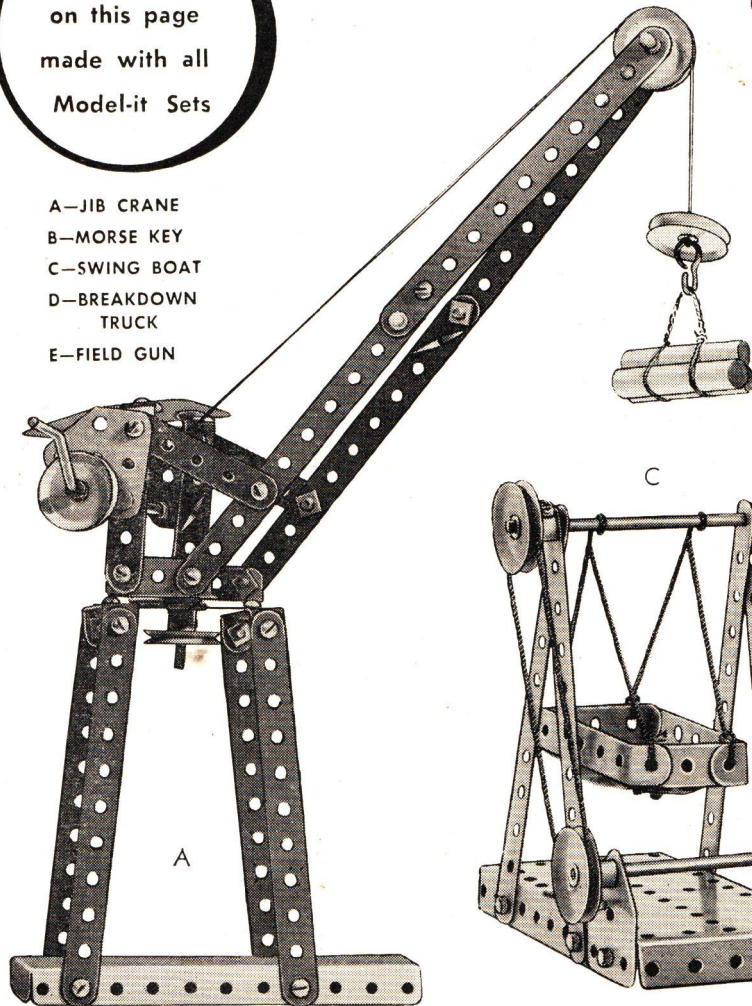
F—BILLY CART

• Cut rubber tube $\frac{1}{8}$ "
long, slip on axles to
position wheels.

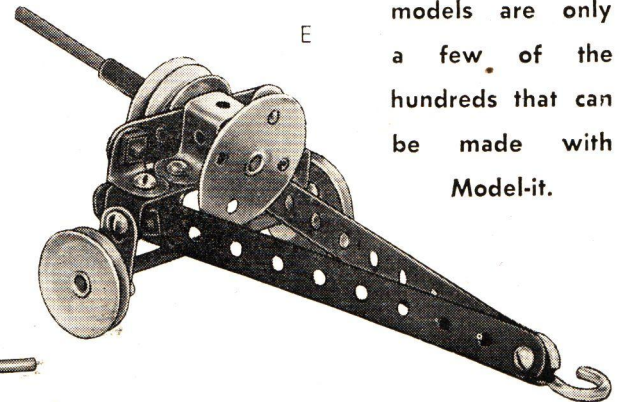


MODELS
on this page
made with all
Model-it Sets

- A—JIB CRANE
- B—MORSE KEY
- C—SWING BOAT
- D—BREAKDOWN TRUCK
- E—FIELD GUN



E
The illustrated
models are only
a few of the
hundreds that can
be made with
Model-it.

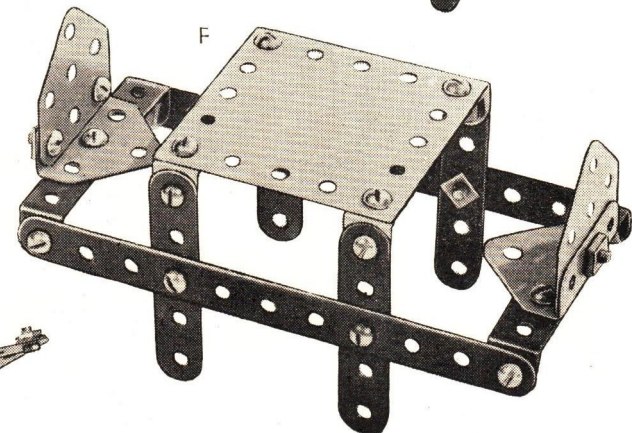
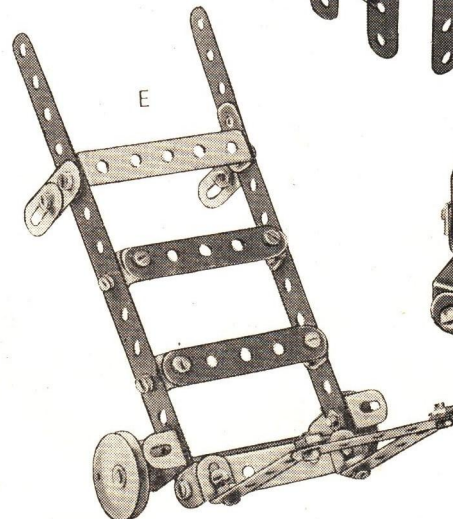
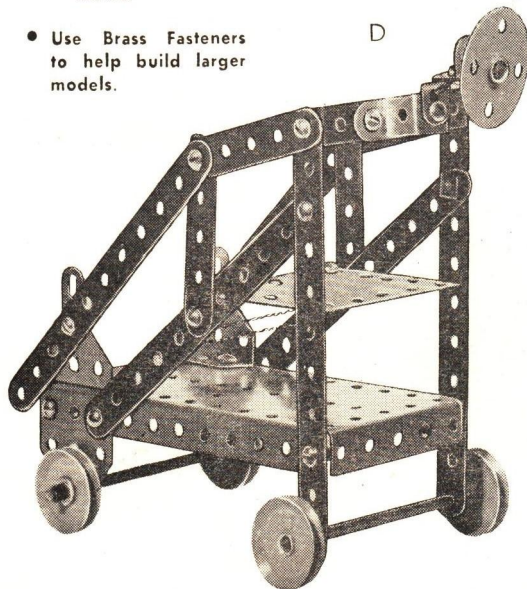
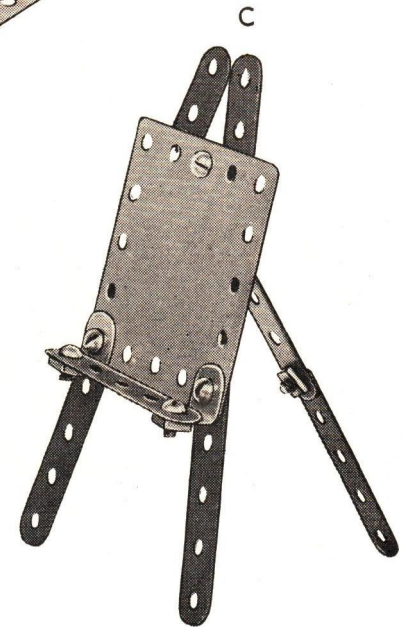
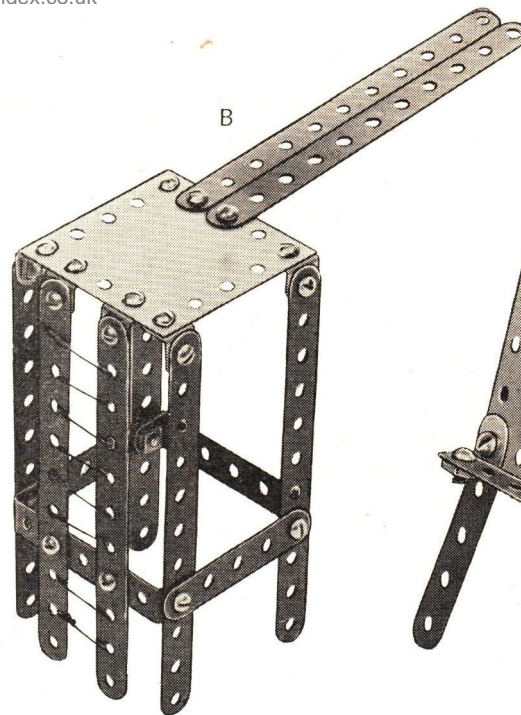
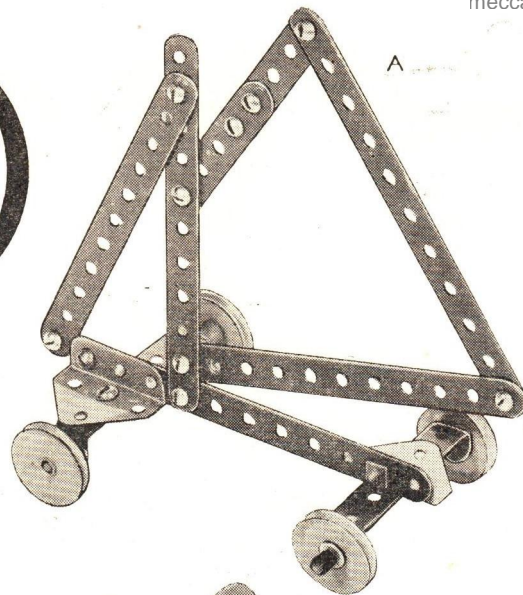


MODELS

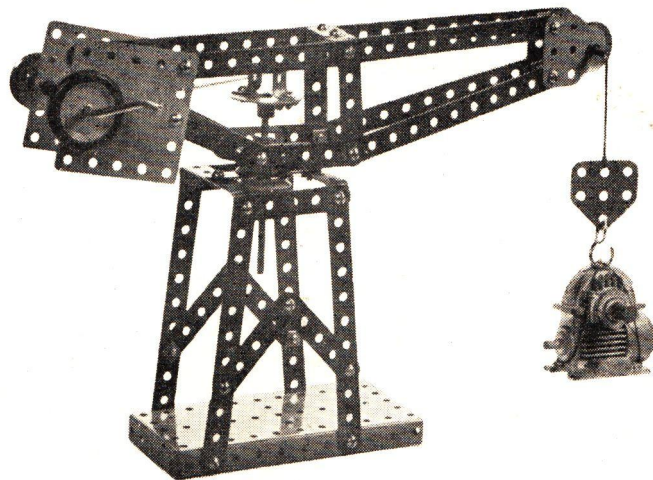
on this page
made with all
Model-it Sets

- A—LAND YACHT
- B—DIVING TOWER
- C—BLACKBOARD
- D—STUDIO MOBILE
SPOTLIGHT
- E—PORTER'S BARROW
- F—PICNIC TABLE AND
SEATS

• Use Brass Fasteners
to help build larger
models.

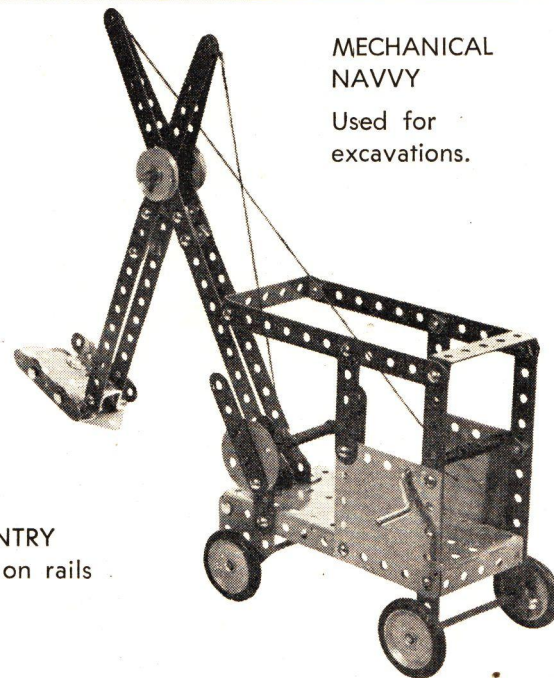


MODELS ON THIS PAGE MADE WITH JUNIOR, SENIOR, MASTER AND DE LUXE MODEL-IT SETS



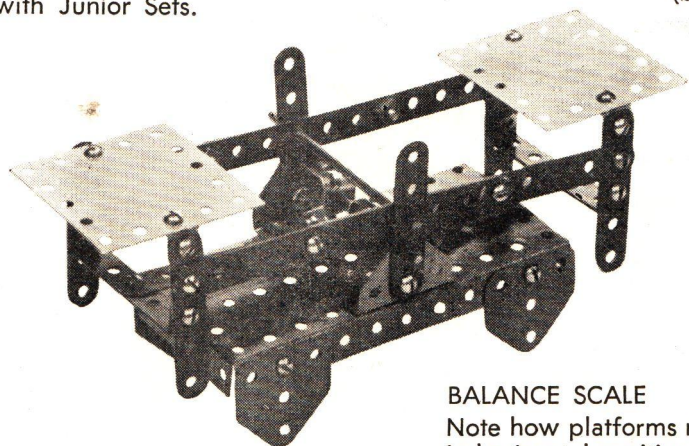
HAMMER HEAD CRANE
An excellent Model made
with Junior Sets.

Model-it,
the
Engineering
Trainer.
Try to
improve
your
engineering
knowledge
from
Models
you build.

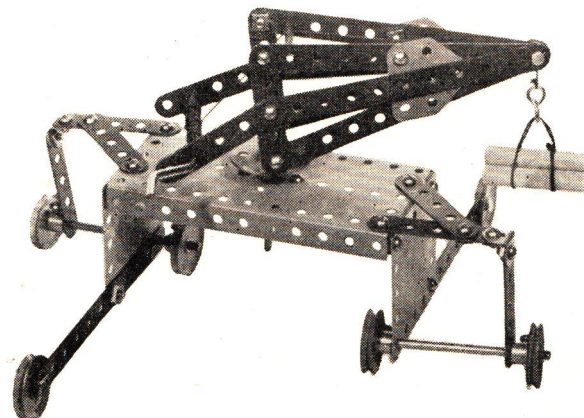


**MECHANICAL
NAVY**
Used for
excavations.

**OVERHEAD GANTRY
CRANE—Travels on rails**
(below)



BALANCE SCALE
Note how platforms remain
in horizontal position when
in use.

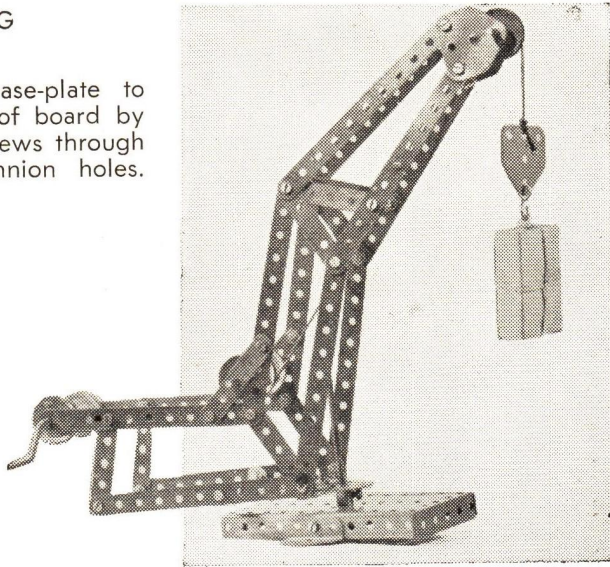


Double Bent Strips can be used for lining up Axles when in vertical position.

MODELS ON THIS PAGE MADE WITH JUNIOR, SENIOR, MASTER AND DE LUXE MODEL-IT SETS

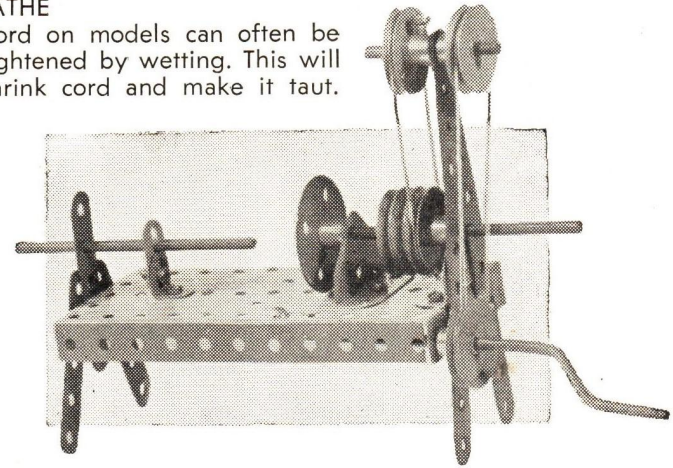
FLOATING
CRANE

fasten base-plate to
a piece of board by
using screws through
side trunnion holes.



LATHE

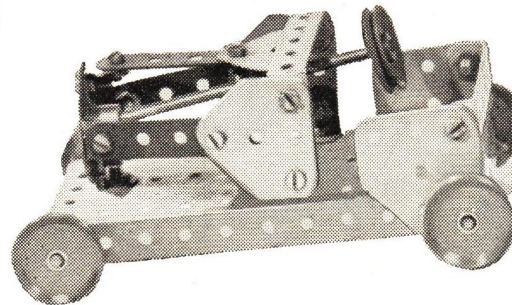
Cord on models can often be
tightened by wetting. This will
shrink cord and make it taut.



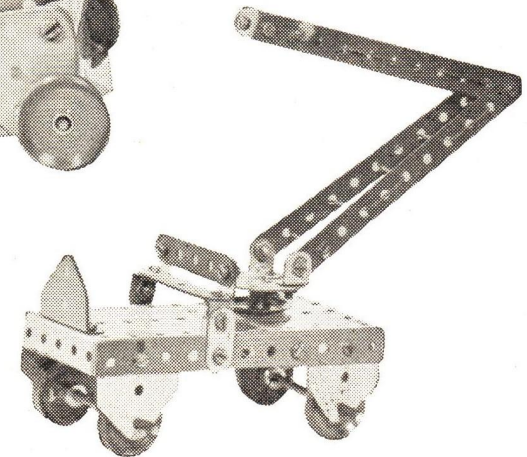
SEARCHLIGHT



SPORTS CAR
(left)



MOBILE FIRE
ESCAPE (right)

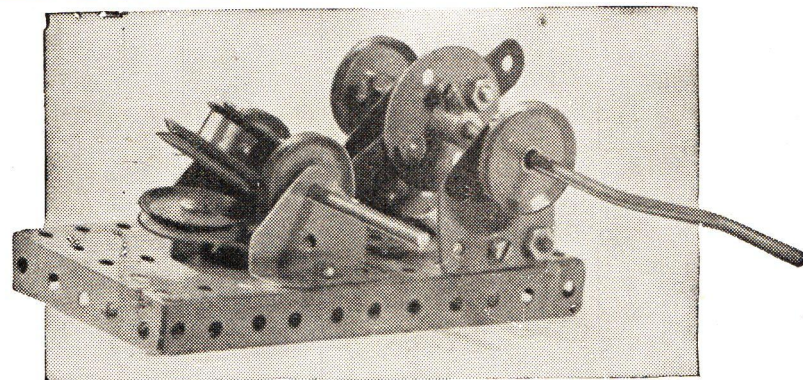


Use Brass Fasteners to help build larger Models.

MODELS ON THIS PAGE MADE WITH JUNIOR, SENIOR, MASTER AND DE LUXE MODEL-IT SETS



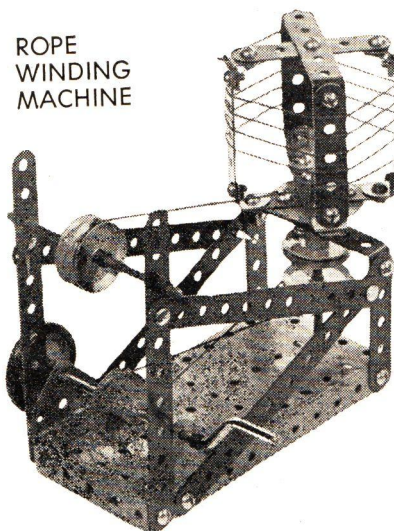
RAILWAY BRIDGE



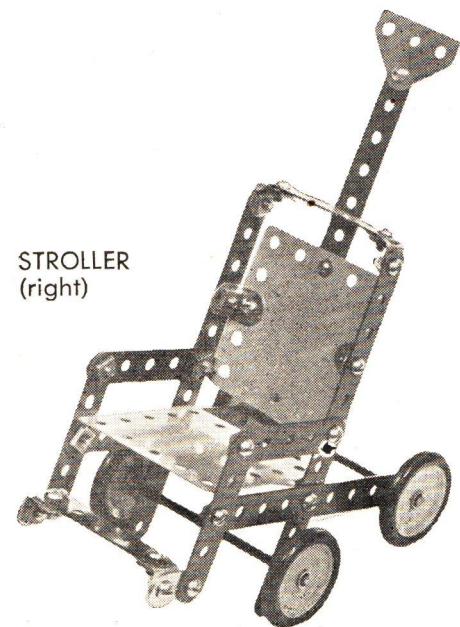
MECHANICAL TRIP
HAMMER (above)



AIRCRAFT
GANGWAY



ROPE
WINDING
MACHINE



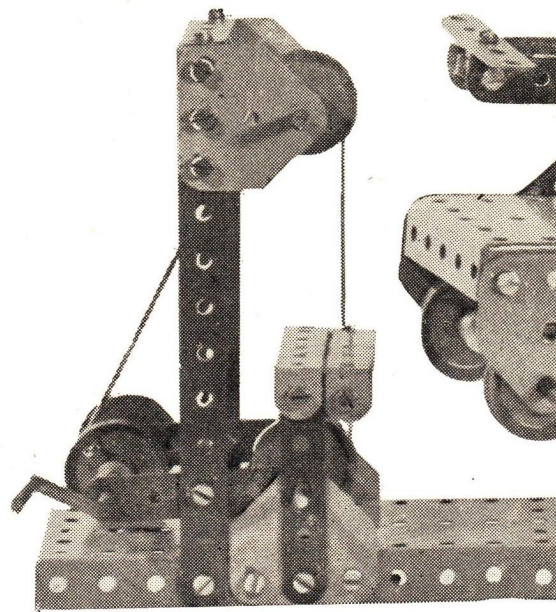
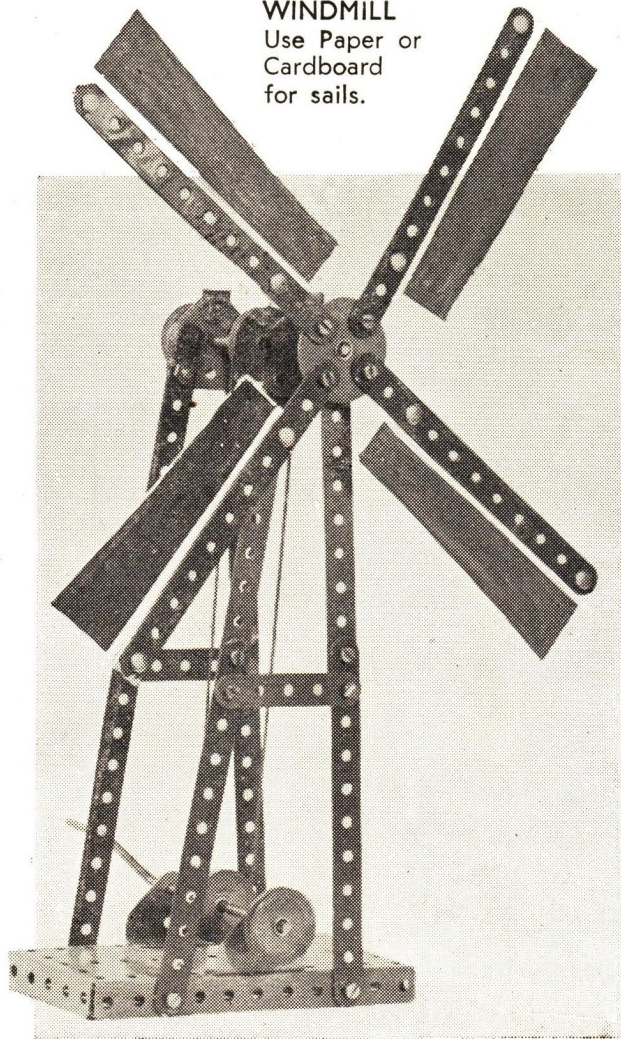
STROLLER
(right)

Enjoy the fun of designing your own Models.

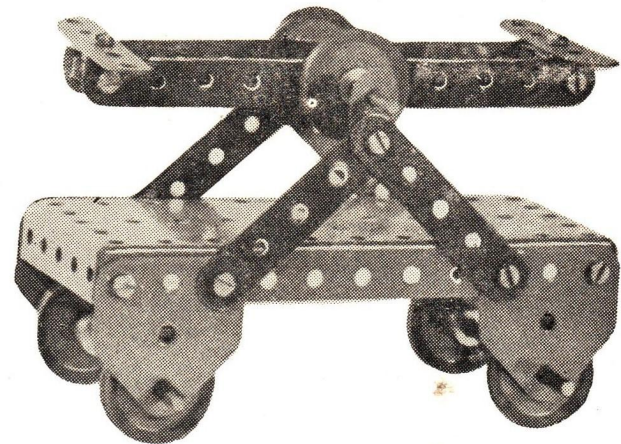
MODELS ON THIS PAGE MADE WITH JUNIOR, SENIOR, MASTER AND DE LUXE MODEL-IT SETS

WINDMILL

Use Paper or Cardboard for sails.



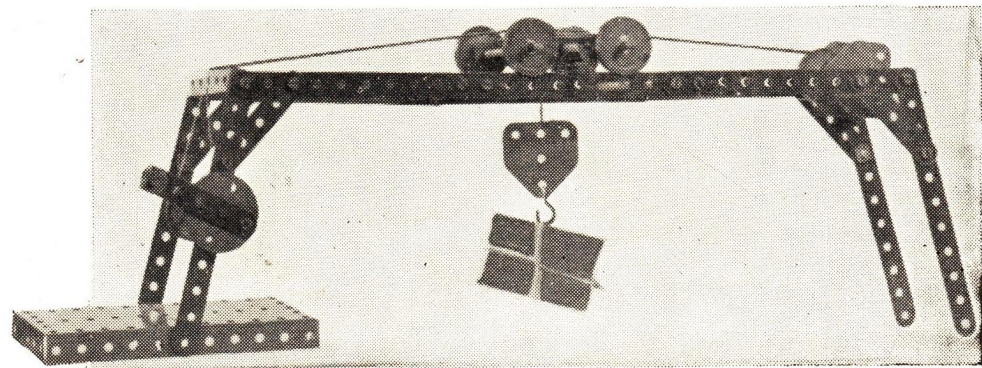
PROFILE SAW



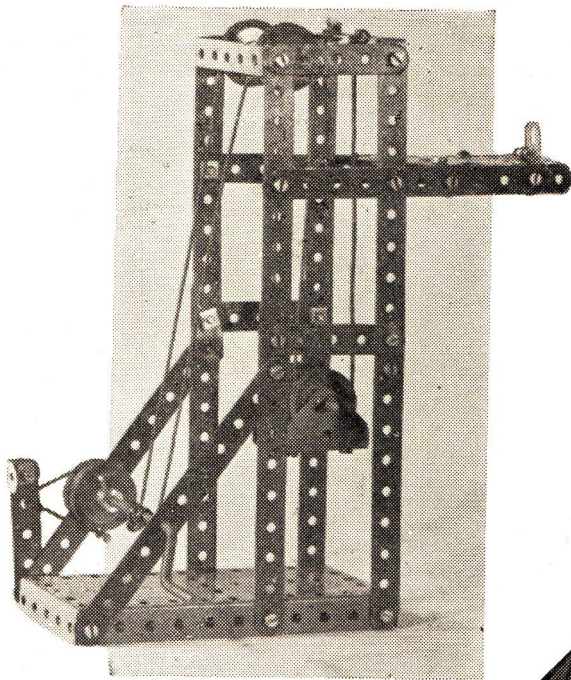
SHEFFIELD TROLLEY

Railway repair men use these hand-powered trolleys for quick and cheap transport.

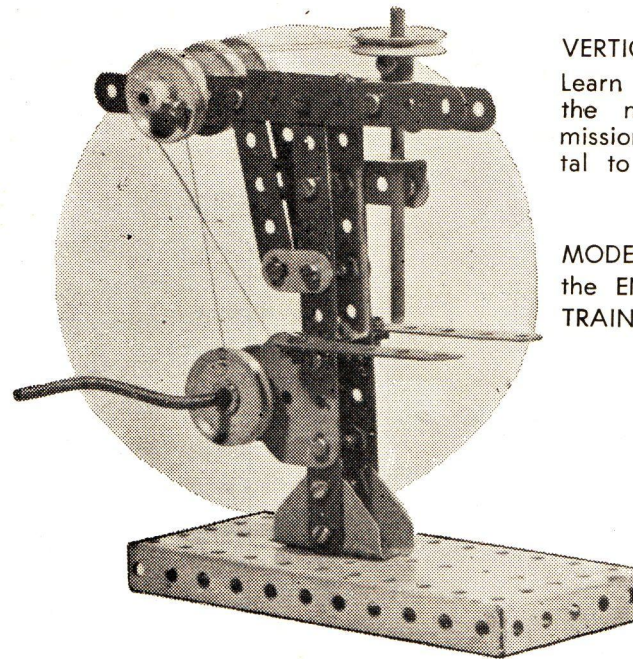
GANTRY CRANE (below)



Use Rubber Tubing cut into lengths as required to position Axles and Wheels without Set Screws.

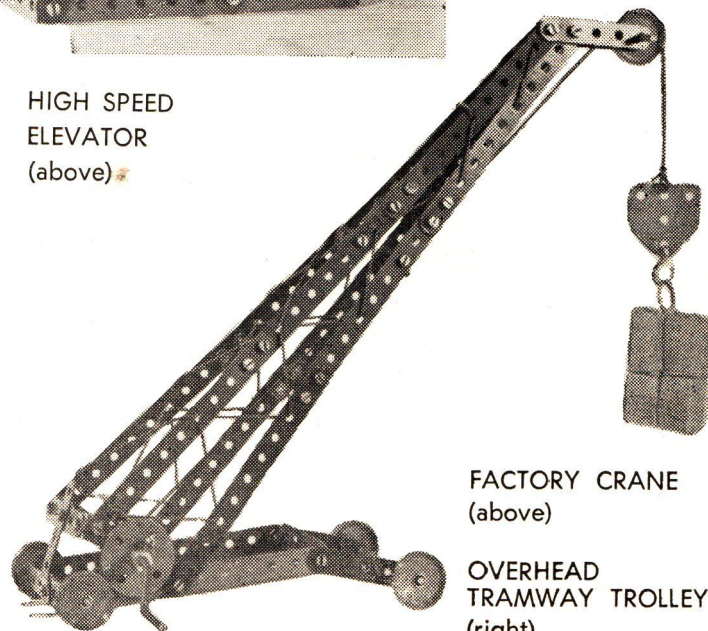


HIGH SPEED
ELEVATOR
(above)



VERTICAL DRILL
Learn from this Model
the method of trans-
mission from a horizon-
tal to a vertical drive.

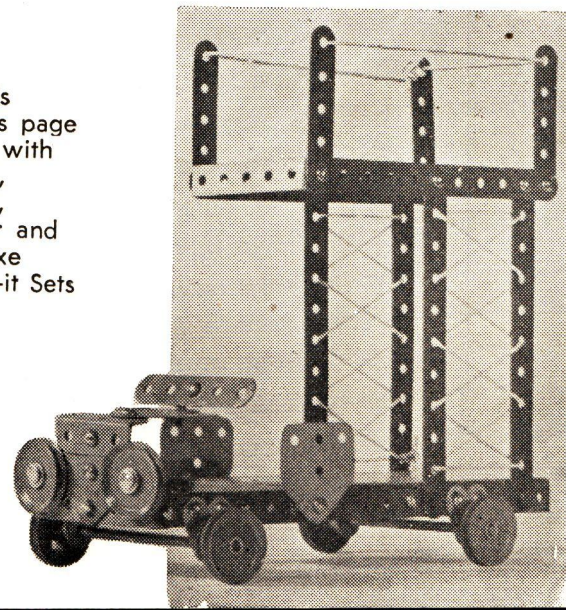
MODEL-IT—
the ENGINEERING
TRAINER



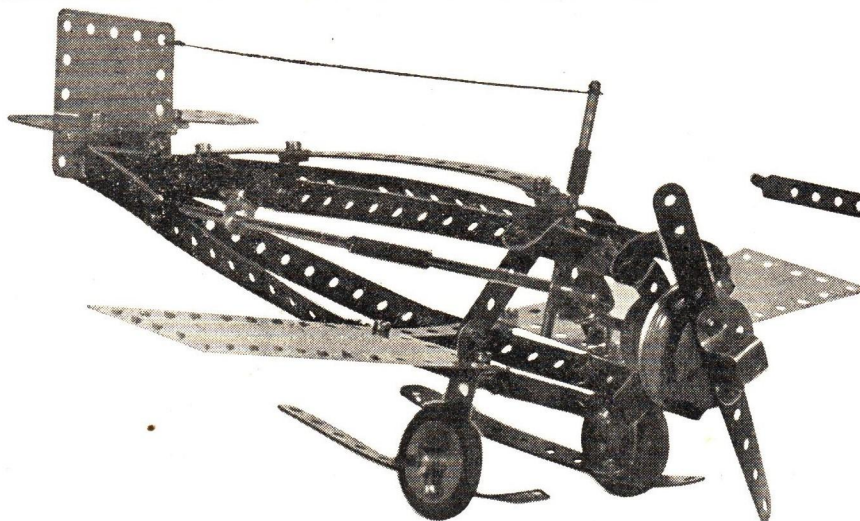
FACTORY CRANE
(above)

OVERHEAD
TRAMWAY TROLLEY
(right)

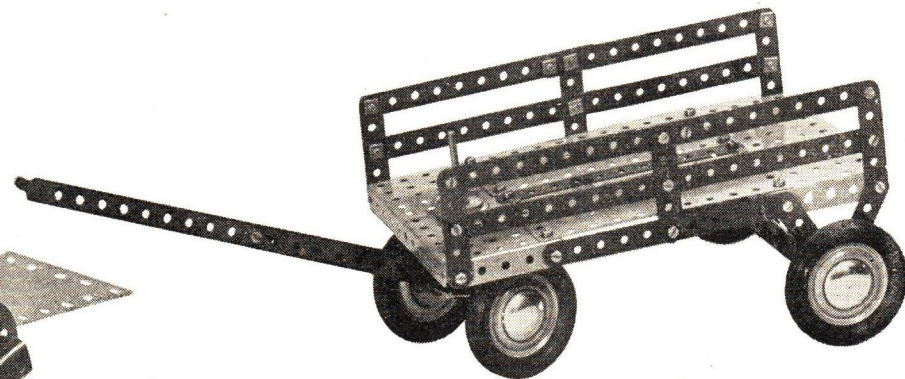
Models
on this page
made with
Junior,
Senior,
Master and
De Luxe
Model-it Sets



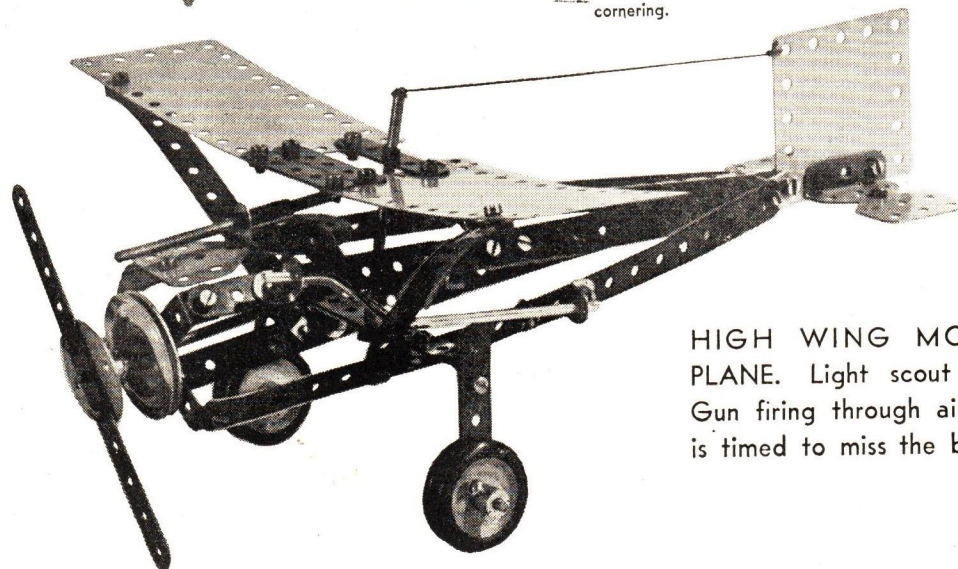
MODELS ON THIS PAGE MADE WITH SENIOR, MASTER AND DE LUXE MODEL-IT SETS



LOW WING MONOPLANE (above). This type of aircraft design is usually used for high speed sports aircraft and Air Force fighter planes. This model is fitted with floats and wheels, and is therefore amphibious.



TROLLEY (above). Place a $1\frac{1}{2}$ " Double Angle Strip inside a $2\frac{1}{2}$ " Double Angle Strip and bolt together. Two $3\frac{1}{2}$ " axles can then be entered from each side and positioned with rubber tubing. This makes an axle sufficiently long for the back wheels. Note the wheels can turn separately to allow cornering.

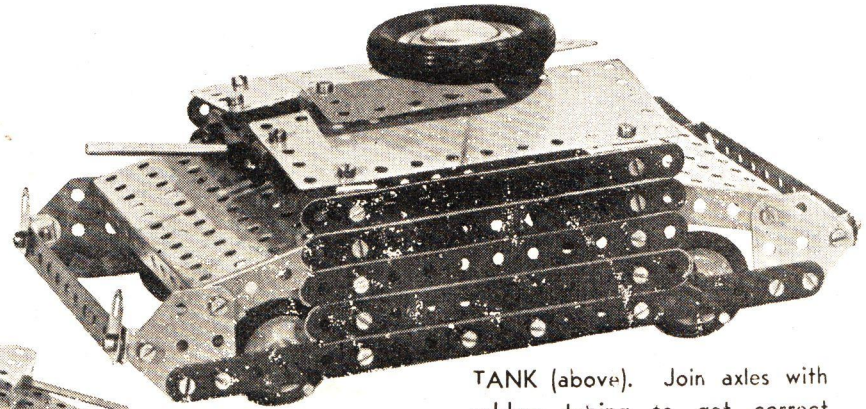
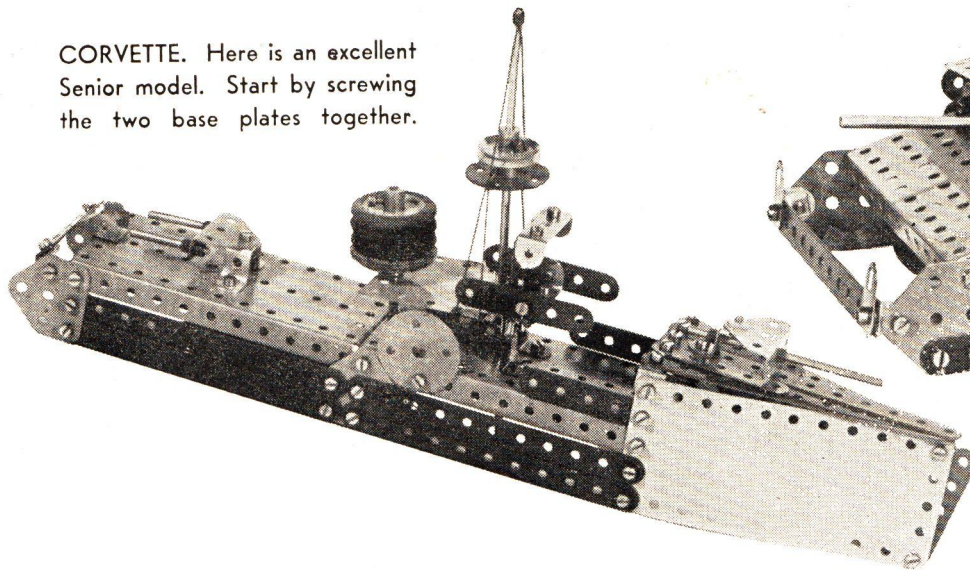


HIGH WING MONOPLANE. Light scout type. Gun firing through airscrew is timed to miss the blades.

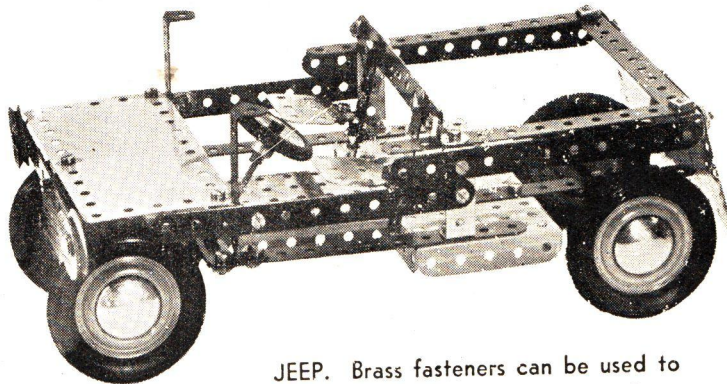
Improve your set by additional Model-it parts.

MODELS ON THIS PAGE MADE WITH SENIOR, MASTER AND DE LUXE MODEL-IT SETS

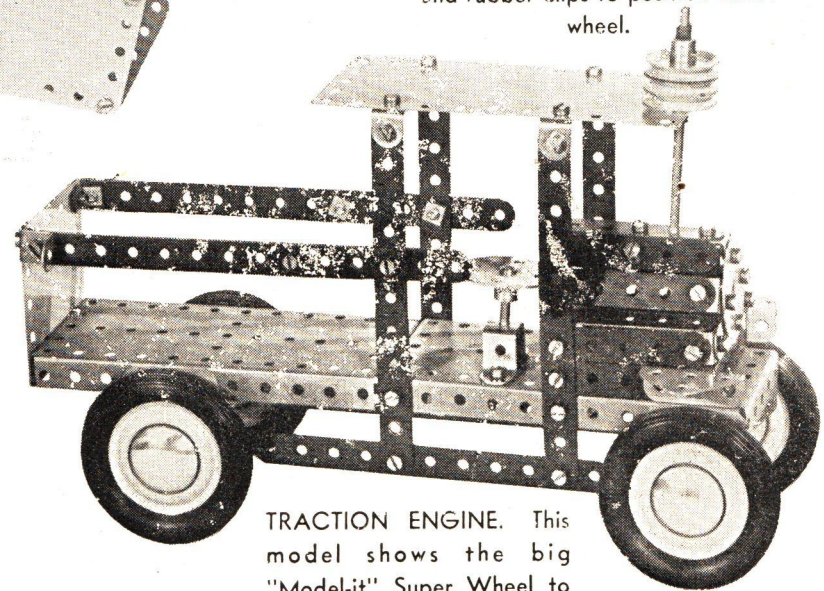
CORVETTE. Here is an excellent Senior model. Start by screwing the two base plates together.



TANK (above). Join axles with rubber tubing to get correct length for axles. Use short axle and rubber clips to position turret wheel.



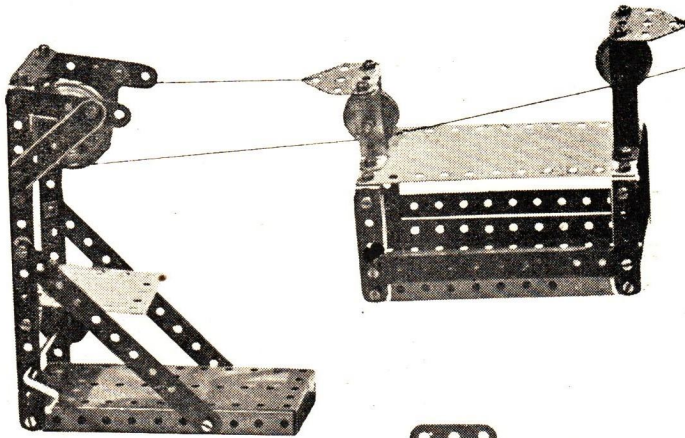
JEEP. Brass fasteners can be used to fix the headlamps in position. Brass fasteners help to build larger models.



TRACTION ENGINE. This model shows the big "Model-it" Super Wheel to advantage.

 MODELS ON THIS PAGE MADE WITH SENIOR, MASTER AND DE LUXE MODEL-IT SETS

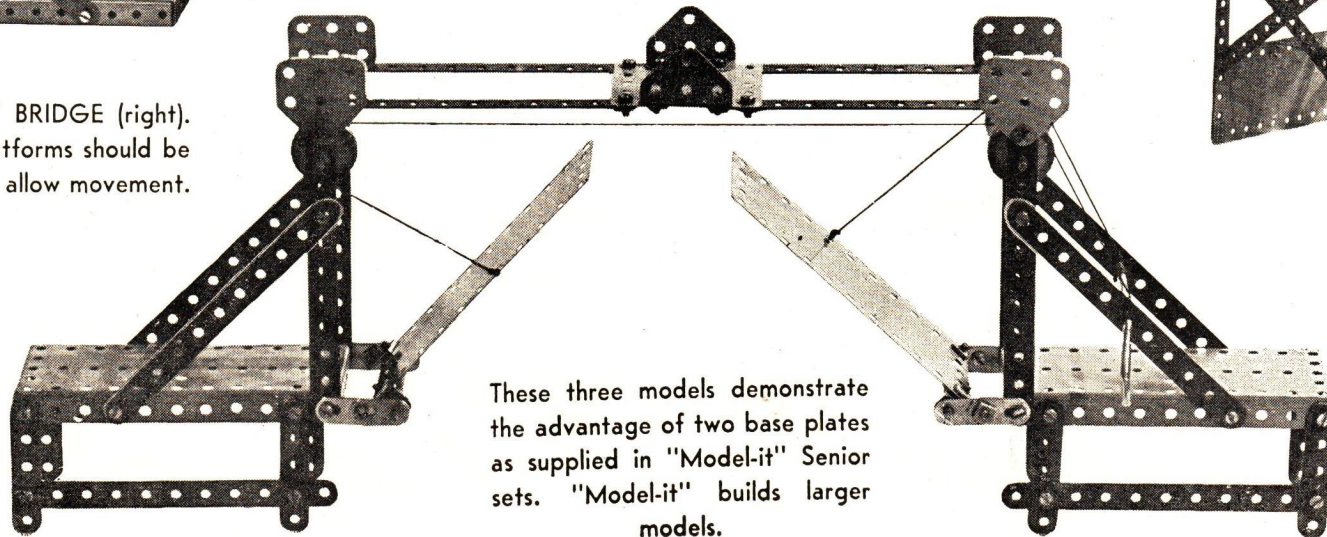
AERIAL RAILWAY. The top pulley wheel can be fixed to a wall at any distance from the base winder.



RADAR EQUIPMENT (right). In this model friction is used to drive from horizontal crank handle shaft to the vertical 8" driven shaft. Press the crank handle gently towards the big tyre.



DRAW BRIDGE (right). The platforms should be free to allow movement.



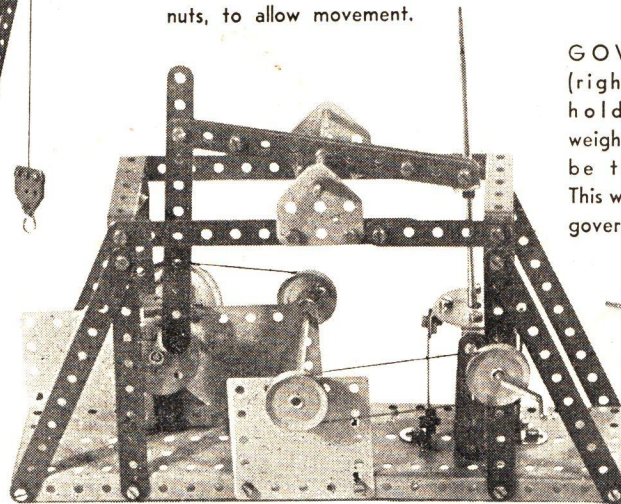
These three models demonstrate the advantage of two base plates as supplied in "Model-it" Senior sets. "Model-it" builds larger models.

MODELS ON THIS PAGE MADE WITH SENIOR, MASTER AND DE LUXE MODEL-IT SETS

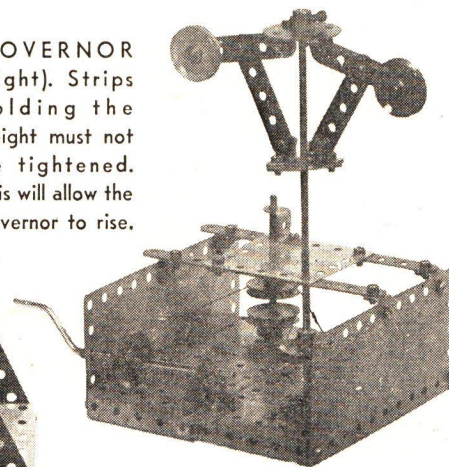
GIB CRANE. Use the two levers to swing the gib to left and right.



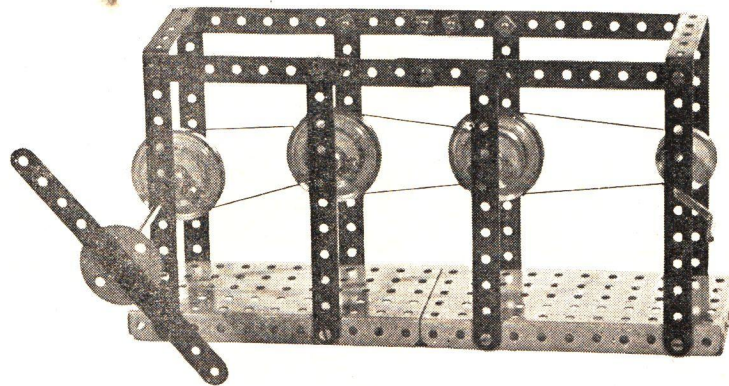
BEAM ENGINE. Do not tighten actuating strip nuts, to allow movement.



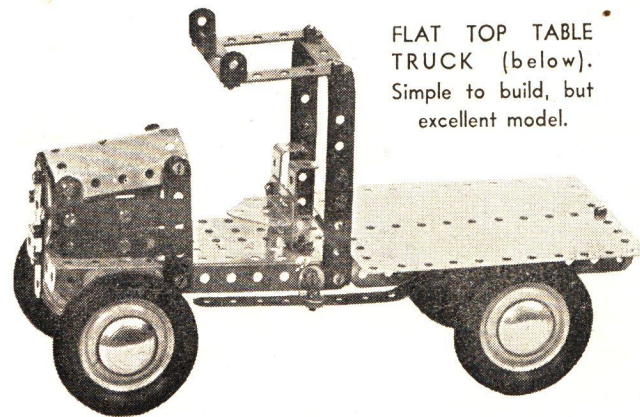
GOVERNOR (right). Strips holding the weight must not be tightened. This will allow the governor to rise.



SEVEN TO ONE REDUCTION DRIVE (below). Every seven turns of the crank will turn the driven strip once.



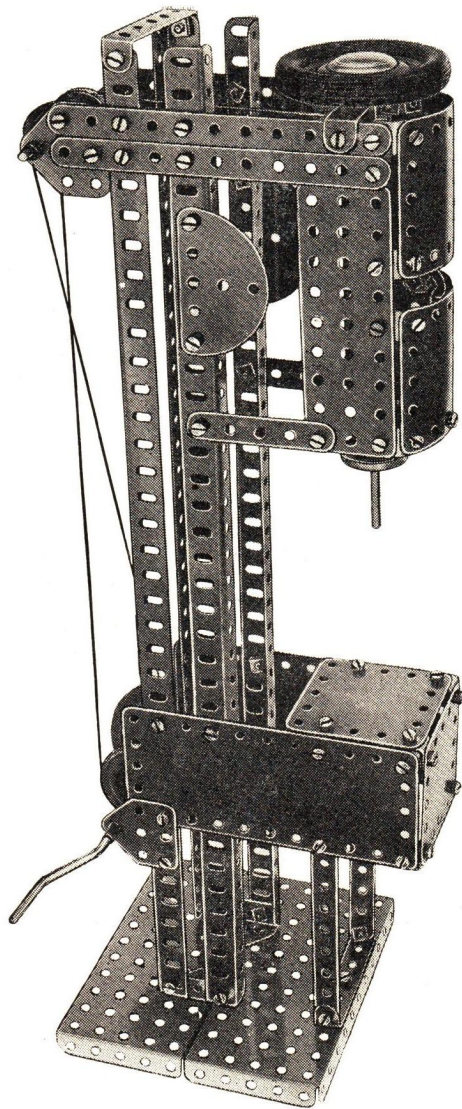
FLAT TOP TABLE TRUCK (below). Simple to build, but excellent model.



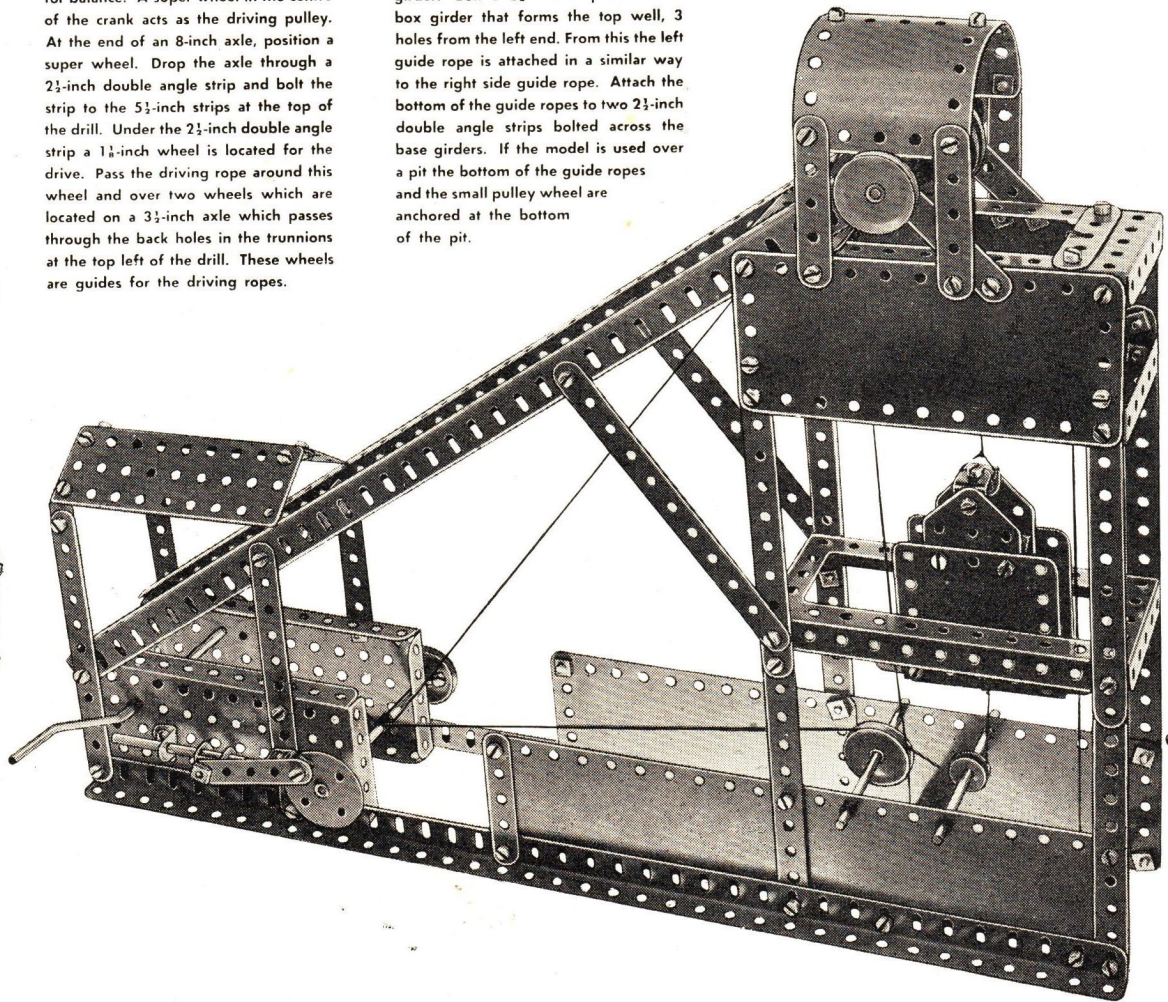
Enjoy the fun of designing your own Models.

ELECTRIC DRILL

Start with two base plates bolted together for the base. To two angle trunnions bolt the 18½-inch angle girders for the uprights. On the other side of the crank handle, position a super wheel for balance. A super wheel in the centre of the crank acts as the driving pulley. At the end of an 8-inch axle, position a super wheel. Drop the axle through a 2½-inch double angle strip and bolt the strip to the 5½-inch strips at the top of the drill. Under the 2½-inch double angle strip a 1½-inch wheel is located for the drive. Pass the driving rope around this wheel and over two wheels which are located on a 3½-inch axle which passes through the back holes in the trunnions at the top left of the drill. These wheels are guides for the driving ropes.

**MINE SHAFT ELEVATOR**

Under the weather shield at the top of the elevator, locate two super wheels with a 3½-inch axle. The axle passes through the top hole of the 2½-inch strip and the top hole of the 18½-inch angle girder. Bolt a 2½-inch strip across the box girder that forms the top well, 3 holes from the left end. From this the left guide rope is attached in a similar way to the right side guide rope. Attach the bottom of the guide ropes to two 2½-inch double angle strips bolted across the base girders. If the model is used over a pit the bottom of the guide ropes and the small pulley wheel are anchored at the bottom of the pit.

**MODELS**

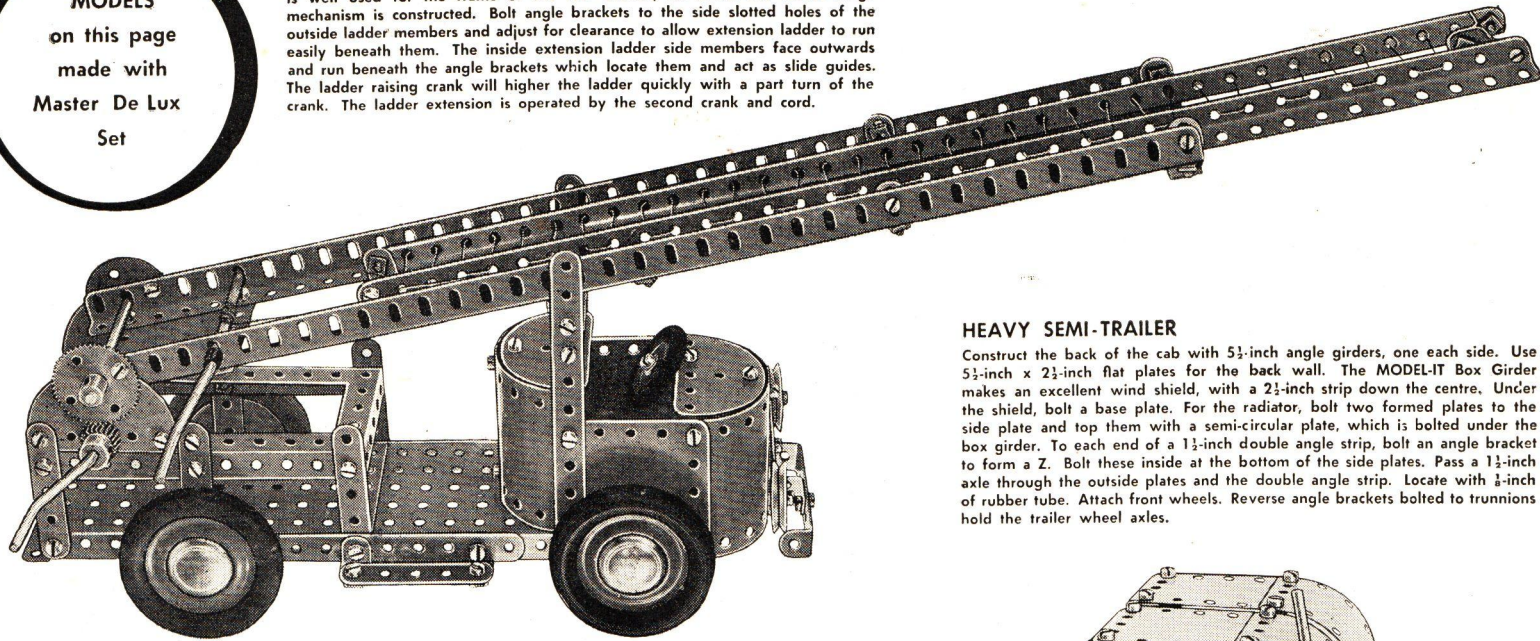
**on this page
made with Master
or Master De Luxe Sets**

MODELS

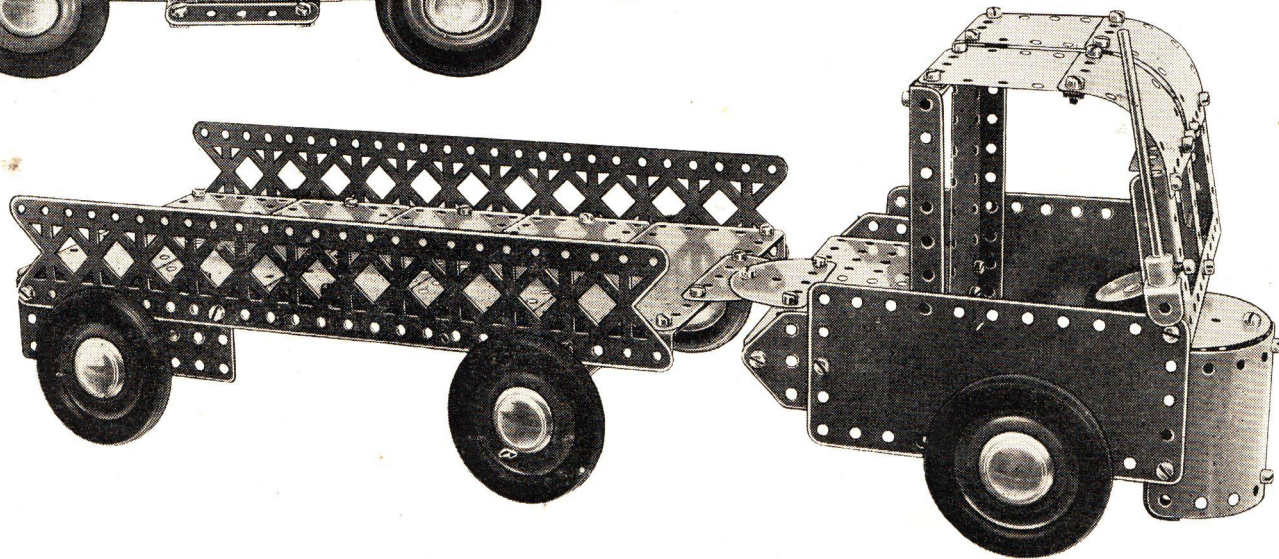
on this page
made with
Master De Lux
Set

AMERICAN EXTENSION FIRE LADDER TRUCK

Bolt two base plates together for the chassis platform. The MODEL-IT Box Girder is well used for the frame of the rear section, on which the ladder hinge mechanism is constructed. Bolt angle brackets to the side slotted holes of the outside ladder members and adjust for clearance to allow extension ladder to run easily beneath them. The inside extension ladder side members face outwards and run beneath the angle brackets which locate them and act as slide guides. The ladder raising crank will higher the ladder quickly with a part turn of the crank. The ladder extension is operated by the second crank and cord.

**HEAVY SEMI-TRAILER**

Construct the back of the cab with $5\frac{1}{2}$ -inch angle girders, one each side. Use $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch flat plates for the back wall. The MODEL-IT Box Girder makes an excellent wind shield, with a $2\frac{1}{2}$ -inch strip down the centre. Under the shield, bolt a base plate. For the radiator, bolt two formed plates to the side plate and top them with a semi-circular plate, which is bolted under the box girder. To each end of a $1\frac{1}{2}$ -inch double angle strip, bolt an angle bracket to form a Z. Bolt these inside at the bottom of the side plates. Pass a $1\frac{1}{2}$ -inch axle through the outside plates and the double angle strip. Locate with $\frac{1}{4}$ -inch of rubber tube. Attach front wheels. Reverse angle brackets bolted to trunnions hold the trailer wheel axles.

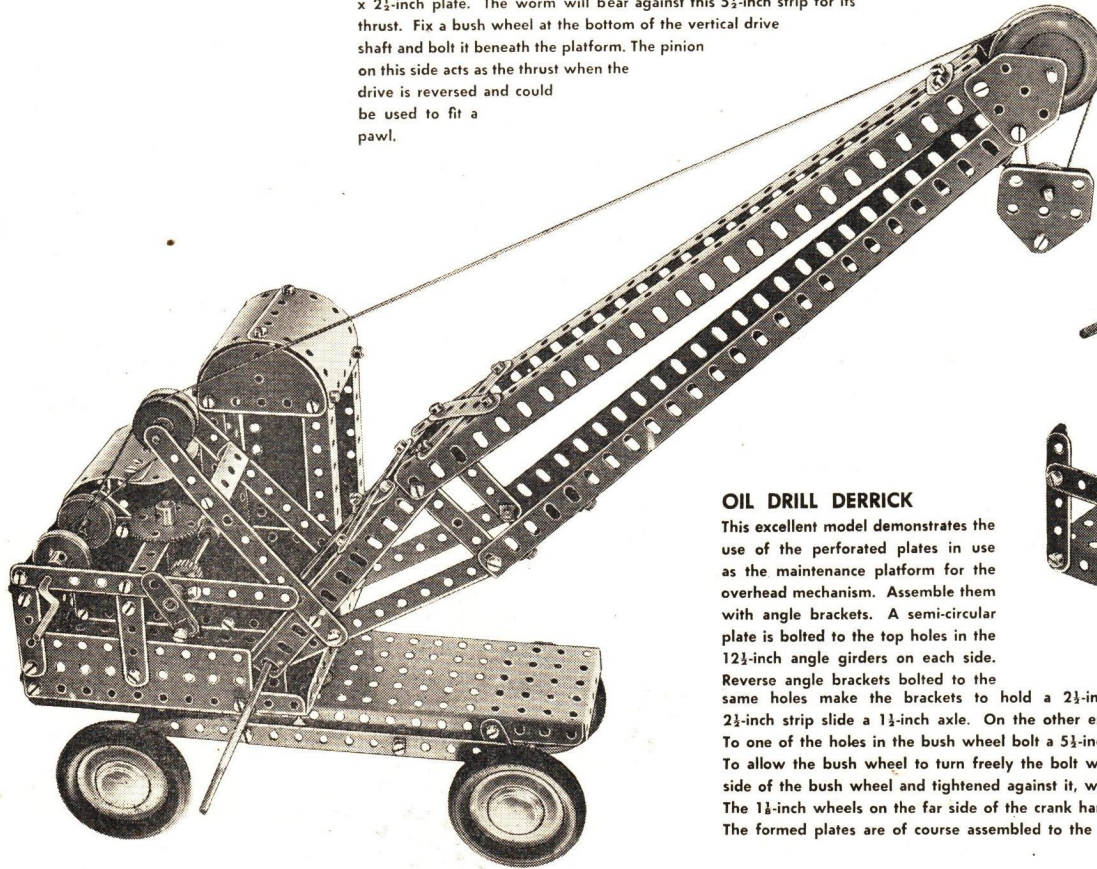


MODELS
on this page
made with
Master De Lux
Set

MOBILE SWIVEL CRANE

Turn a MODEL-IT Box Girder upside down for the floor of the swivelling cab, located at the bottom of the crane arms. Bolt a $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch flat plate inside it for a floor. To the far side flange bolt another $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch plate lengthwise. To the front holes of the vertical plate bolt another box girder face forward and end up to form the front of the driver's cab. $5\frac{1}{2}$ -inch strips form the uprights at the back of cab and a $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch plate fills in the back panel. On the far side a $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch plate is bolted lengthwise to the box girder and covers the bottom half of the far side. To the top hole of this plate at the rear, assemble a $2\frac{1}{2}$ -inch double angle strip. This strip will pick up the $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch plate at the point directly under the far side $1\frac{1}{2}$ -inch wheel on the elevating crank handle. To this $2\frac{1}{2}$ -inch double angle strip the formed plate is bolted to shape the rear cab roof.

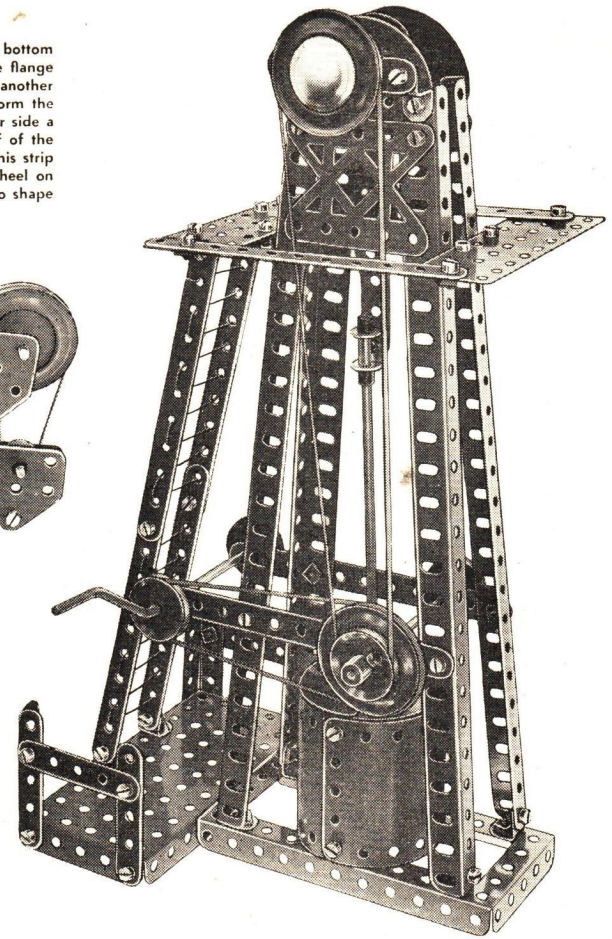
The worm wheel drive shaft is a $3\frac{1}{2}$ -inch axle assembled through a hole in the $5\frac{1}{2}$ -inch strip that forms this side rear upright for the driver's cab, one hole above the $5\frac{1}{2}$ -inch x $2\frac{1}{2}$ -inch plate. The worm will bear against this $5\frac{1}{2}$ -inch strip for its thrust. Fix a bush wheel at the bottom of the vertical drive shaft and bolt it beneath the platform. The pinion on this side acts as the thrust when the drive is reversed and could be used to fit a pawl.

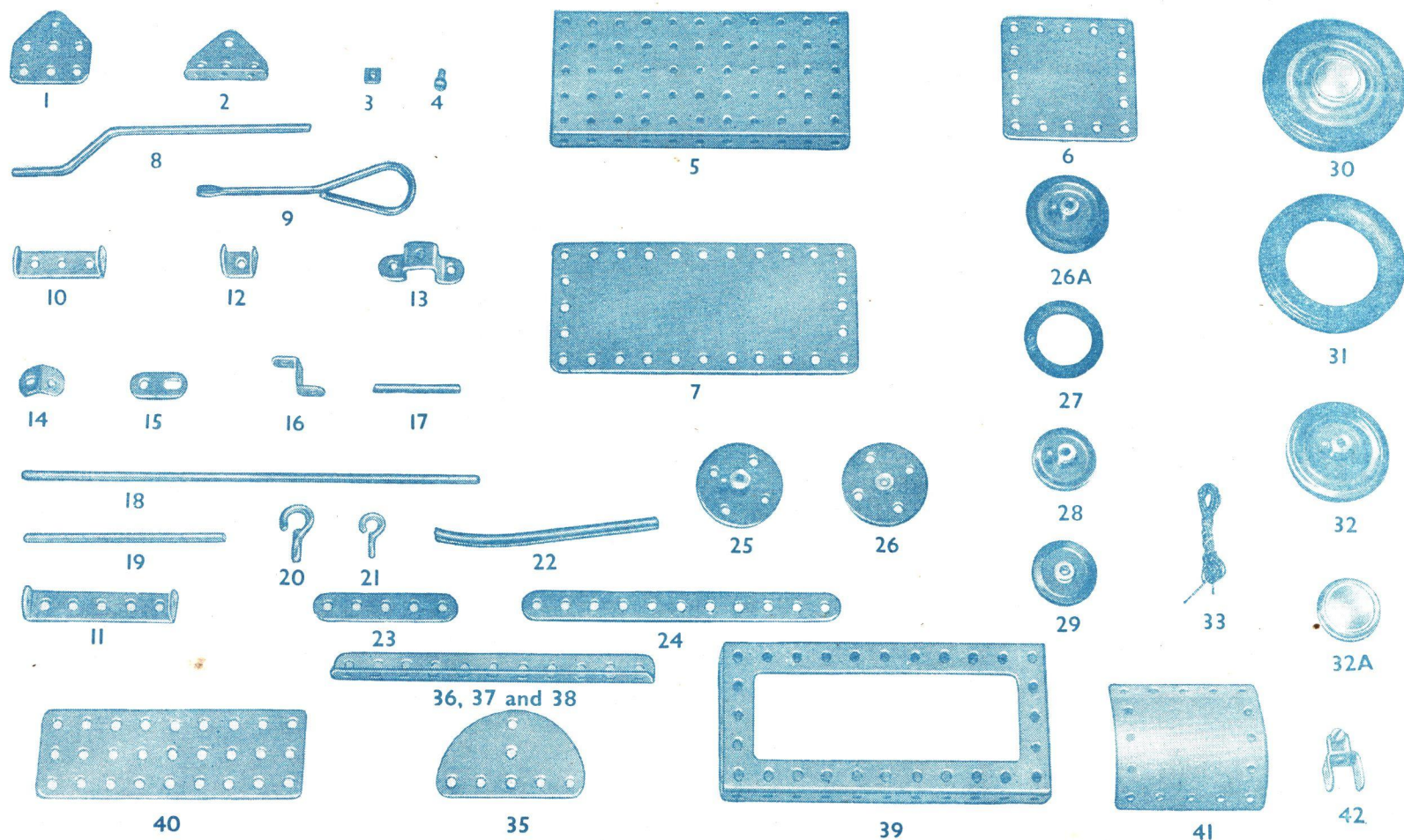


OIL DRILL DERRICK

This excellent model demonstrates the use of the perforated plates in use as the maintenance platform for the overhead mechanism. Assemble them with angle brackets. A semi-circular plate is bolted to the top holes in the $12\frac{1}{2}$ -inch angle girders on each side.

Reverse angle brackets bolted to the same holes make the brackets to hold a $2\frac{1}{2}$ -inch strip assembled horizontally between them. Through this $2\frac{1}{2}$ -inch strip slide a $1\frac{1}{2}$ -inch axle. On the other end of the axle fasten a bush wheel, hub facing the super wheel. To one of the holes in the bush wheel bolt a $5\frac{1}{2}$ -inch strip, the other end of which is assembled to the drilling shaft. To allow the bush wheel to turn freely the bolt which fastens the $5\frac{1}{2}$ -inch strip to it should have a lock nut each side of the bush wheel and tightened against it, with clearance between the head of the bolt and the $5\frac{1}{2}$ -inch strip. The $1\frac{1}{2}$ -inch wheels on the far side of the crank handle and the $3\frac{1}{2}$ -inch axle are for balance and extra driving cord. The formed plates are of course assembled to the bottom box girder with angle brackets mounted inside.





MODEL-IT PART LIST

1—Trunnion.
2—Angle Trunnion.
3—Nut.
4—Screw.
5—Base Plate.
6—2 1/2" x 2 1/2" Flat Plate.
7—2 1/2" x 5 1/2" Flat Plate.
8—Crank Handle.

9—Screwdriver.
10—1 1/2" Double Angle Strip.
11—2 1/2" Double Angle Strip.
12—U-Bracket.
13—Double Bent Strip.
14—Angle Bracket.
15—Flat Bracket.
16—Reversed Angle Bracket.

17—1 1/2" Axle.
18—8" Axle.
19—3 1/2" Axle.
20—Large Hook.
21—Small Hook.
22—Rubber Tubing.
23—2 1/2" Strip.
24—5 1/2" Strip.

25—Bush Wheel for Set Screw.
26—Bush Wheel, free running.
26A—Assembly.
27—Tyre for 1 1/2" Wheel.
28—1 1/2" Wheel, for Set Screw.
29—1 1/2" Wheel, free running.
30—Model-it Super Road Wheel and Tyre.

31—Model-it Large Tyre.
32—Model-it Super Road Wheel.
32A—Hub Cap for Super Road Wheel.
33—Twine.
34—Model-it Instruction Book.
35—Semi-Circular Plate.

36—Angle Girder, 18 1/2".
37—Angle Girder, 12 1/2".
38—Angle Girder, 5 1/2".
39—Box Girder.
40—Perforated Plate.
41—Formed Plate.
42—Big End.

To remove hub cap from road wheel: Push axle through bearing till it touches the hub cap and tap gently. Cut rubber tubing into lengths as required; use to position axles and for axle clips.

MODEL-IT

(Registered)

Lawdex Manufacturing Company

INCORPORATING MODEL-IT MANUFACTURING CO.

SYDNEY

AUSTRALIA

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