

BILDICO

makes models that work

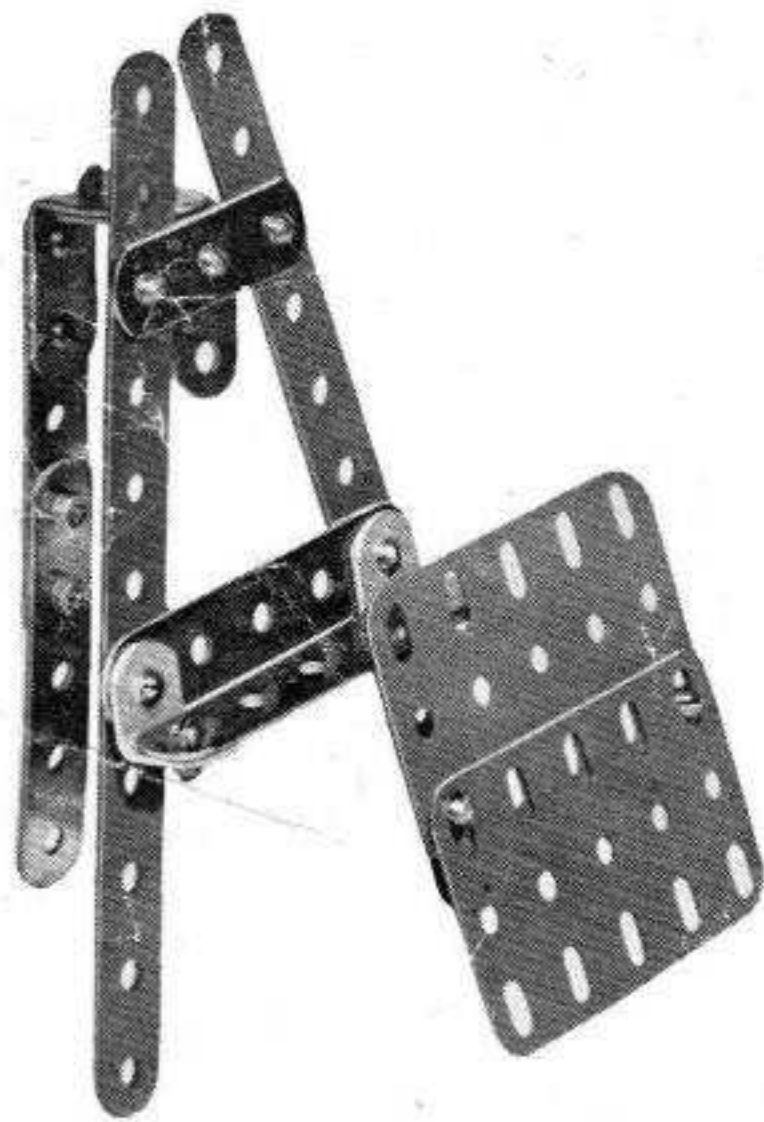


THIS SET
builds all models
illustrated in
this manual

BILDICO MODELS TO MAKE

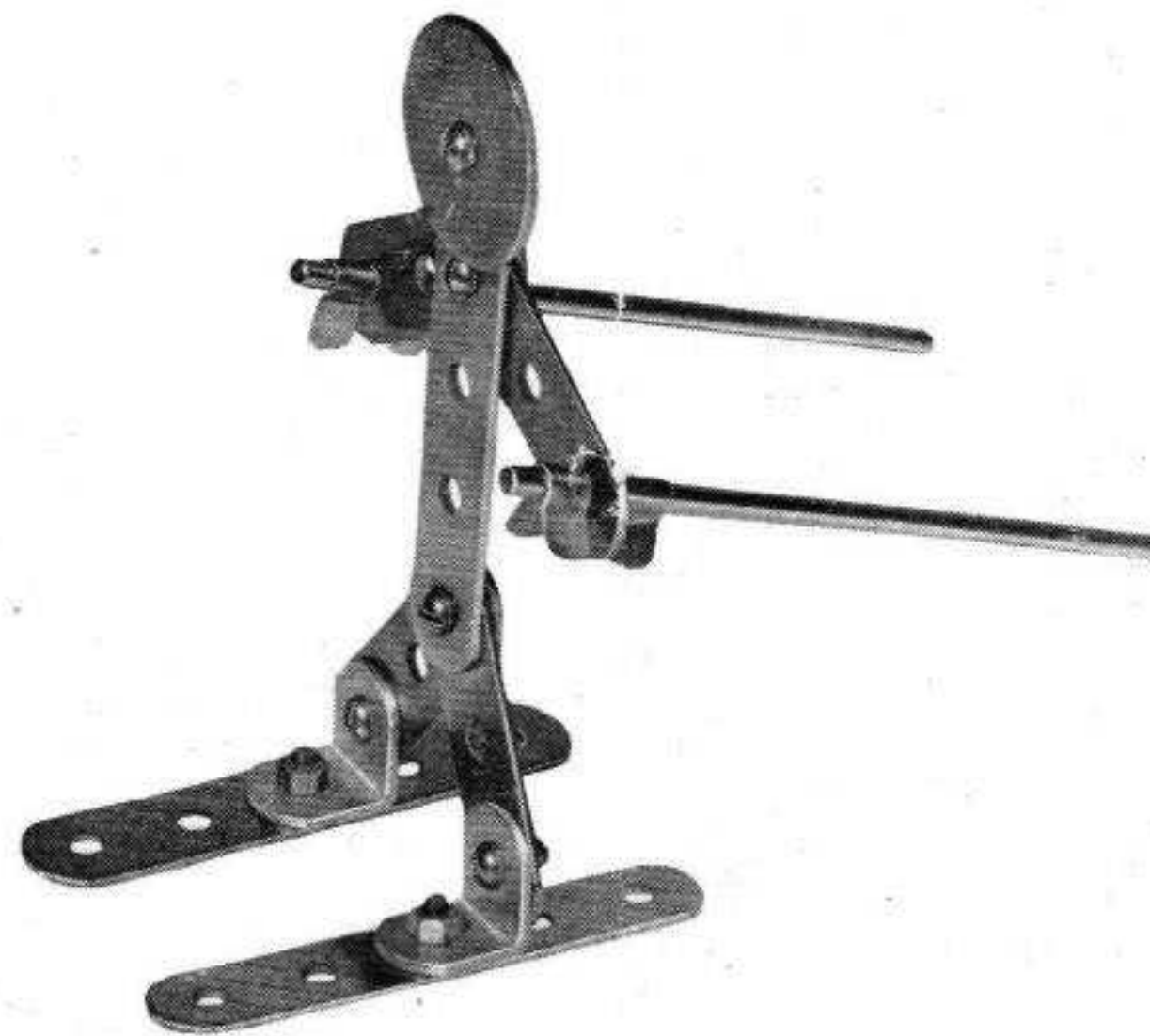
Every boy—and girl—will want to start this fascinating hobby. Real models—and models that work. It's marvellous what you can create with your BILDICO set. In this book you will find suggestions to start on—every one can be made from the parts in this set, with the aid of the screwdriver and spanner provided.

Start with the simple models first until you have mastered the method of building with BILDICO. Then try the harder models—and then—design models out of your own heads. You will find heaps of other wonderful things that can be made, all from this one BILDICO set.



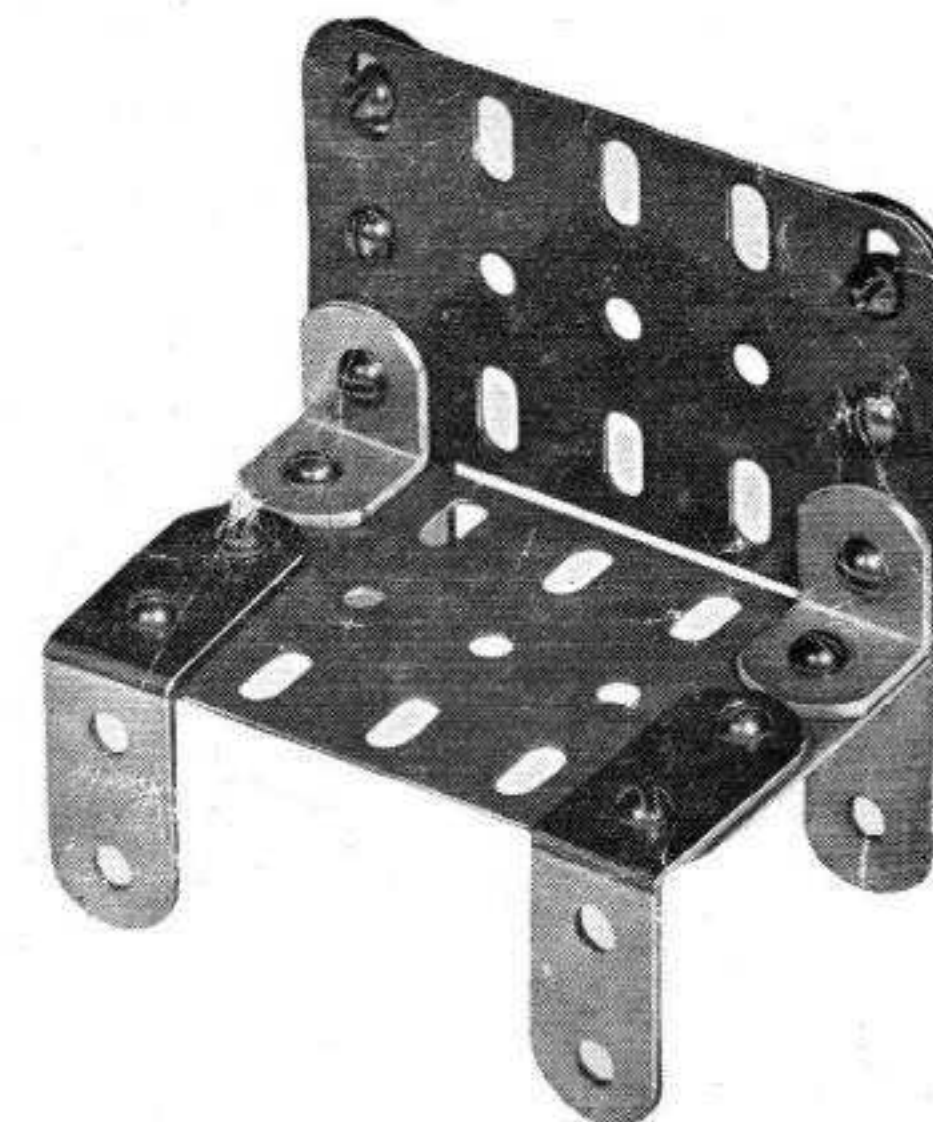
BLACKBOARD AND EASEL

2 of number 3	2 of number 8
4 " " 4	2 " " 9
1 " " 5	15 " " 14
2 " " 6	15 " " 17



BILDIE THE SKIER

3 of number 4	7 of number 14
4 " " 5	7 " " 17
2 " " 9	4 " " 18
1 " " 13	2 " " 19



GARDEN SEAT

2 of number 4	2 of number 9
2 " " 6	12 " " 14
2 " " 8	12 " " 17

Start with these three easy models

And now try **BILDICO Pushers**

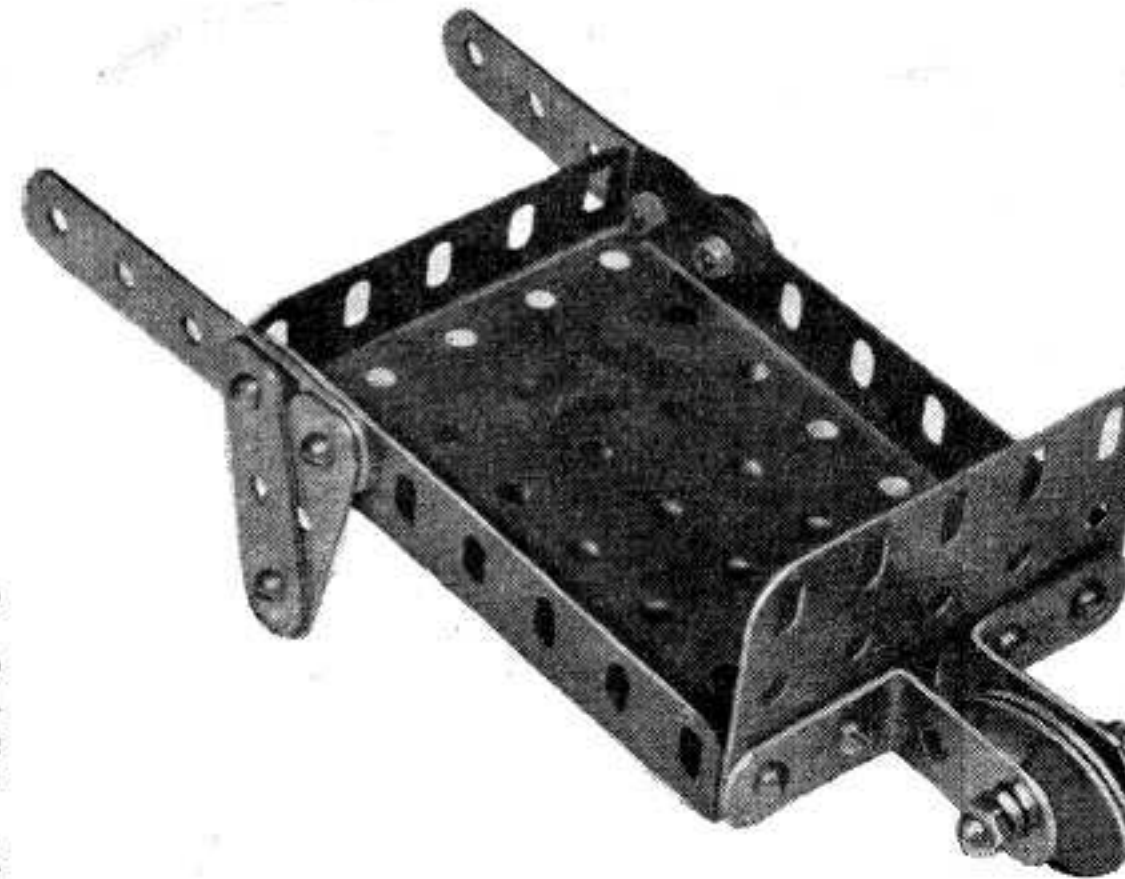
WHEELBARROW

The picture shows how you use 2 Disc wheels to make the wheel. By using extra nuts the Disc wheels are held in position and will turn round without undoing the nuts. LOCKNUTTING is putting 2 nuts together so that they cannot move. In this model 2 nuts are also placed on either side of the wheels, and 2 at each end, making 8 in all.

1 of number	1	2 of number	13
2 "	"	4	10 "
4 "	"	5	1 "
2 "	"	8	18 "

BUILDERS NOTE :

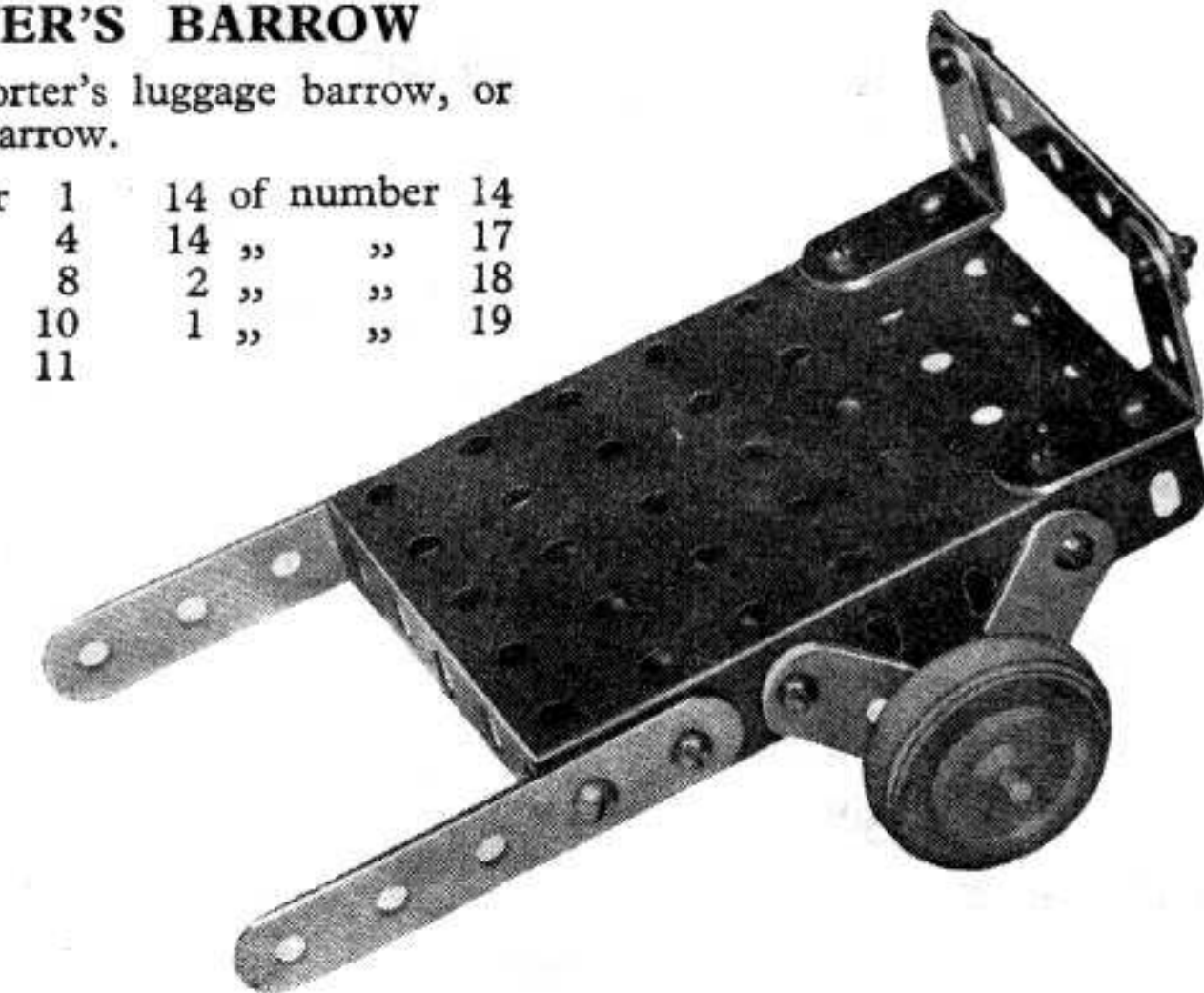
If Spring Clips have a tendency to "slip" on the Axle Rods and Crank Handles, this can be overcome by inserting a small piece of paper between the Clip and the Rods. Clips that are tight or "strong" can be pressed on with screwdriver blade. Spring Clips can also be used to hold tight the end of twine to Crank Handles or Axles. Trap the twine between Clips and Rod.



PORTER'S BARROW

Model of porter's luggage barrow, or street fruit barrow.

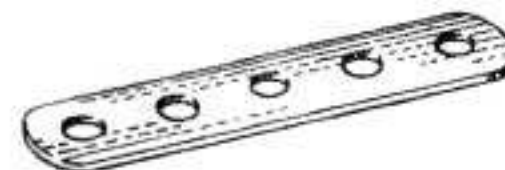
1 of number	1	14 of number	14
3 "	"	4	14 "
2 "	"	8	2 "
2 "	"	10	1 "
2 "	"	11	



LIST OF BILDICO PARTS

Quantity	Description	Ref. No.
1	Baseplate	1
2	21 hole Steel strip	2
6	11 " " "	3
6	5 " " "	4
6	3 " " "	5
2	5 " Flat girder plate	6
4	3 " " "	7
4	4 " Brackets	8
2	2 " " "	9
2	5 " Angles	10
4	Balloon Wheels	11
2	Pulley Wheels	12
2	Disc Wheels	13
30	1/4" Bolts	14
2	1/2" Bolts	15
12	1" Bolts	16
48	Nuts	17
4	Spring Clips	18
2	Axles	19
1	Crank handle	20
2	Hooks	21
1	Screwdriver	22
1	Spanner	23
1	Twine	24
Total number of parts		147

ILLUSTRATED KEY TO MAIN BILDICO PARTS



3 HOLE STRIP	Ref. No. 5
*5 " " "	4
11 " " "	3
21 " " "	2



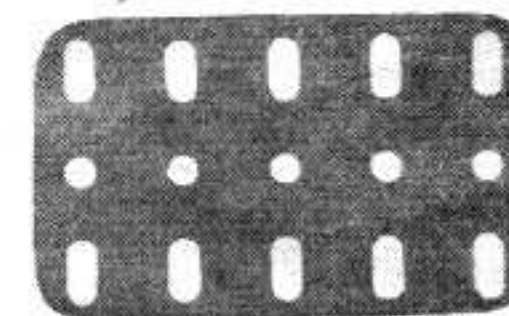
*2 HOLE BRACKET	Ref. No. 9
4 " " "	8



5 HOLE ANGLE Ref. No. 10

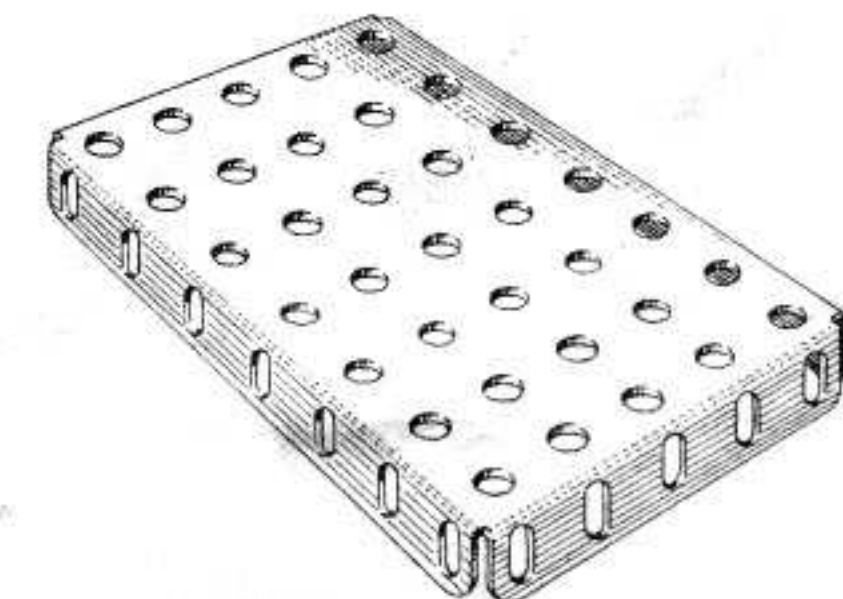


METAL PULLEY WHEEL Ref. No. 12



3 HOLE FLAT GIRDER PLATE	Ref. No. 7
*5 " " " " "	6

* Shows part illustrated



BASE PLATE Ref. No. 1

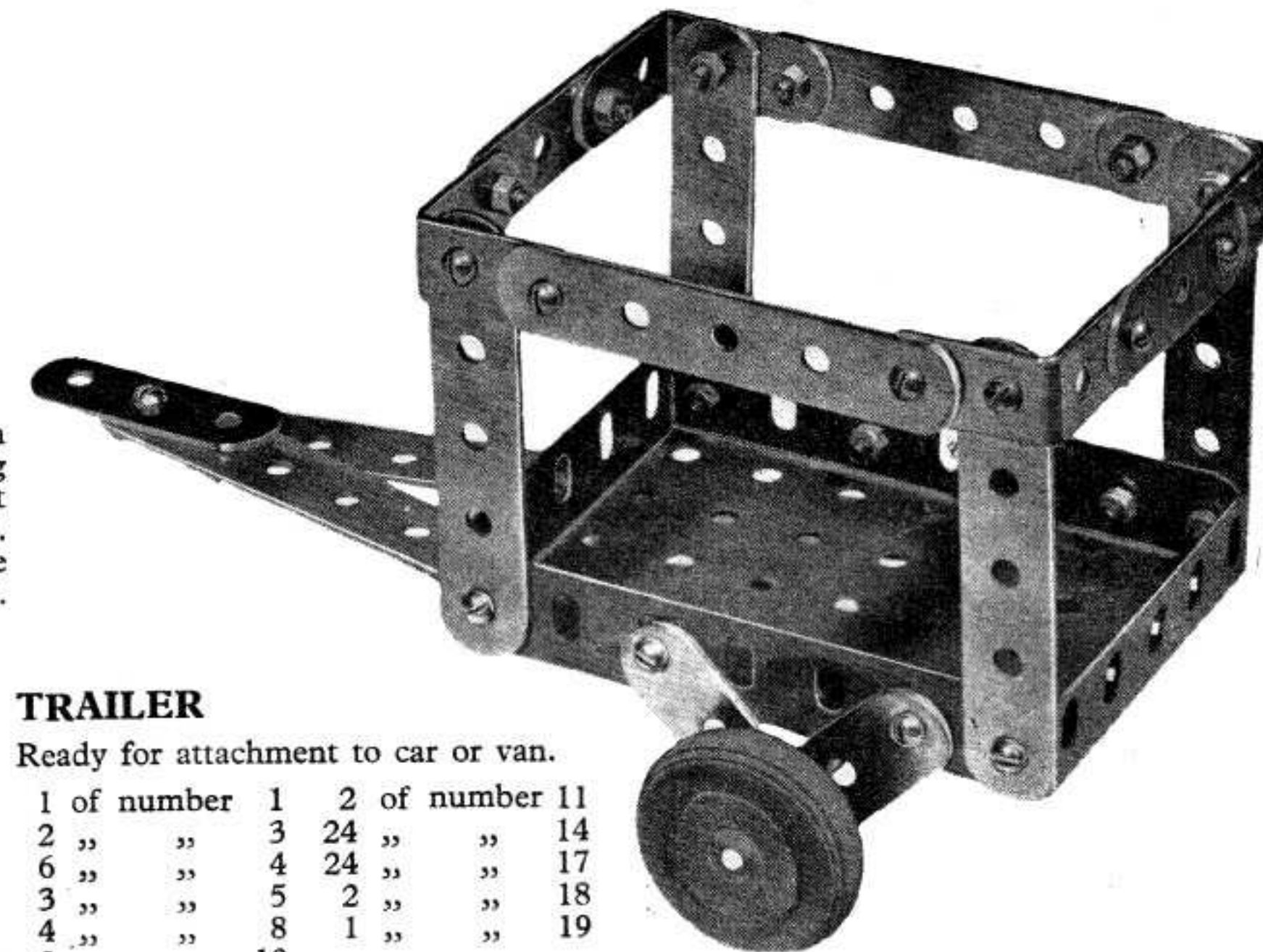
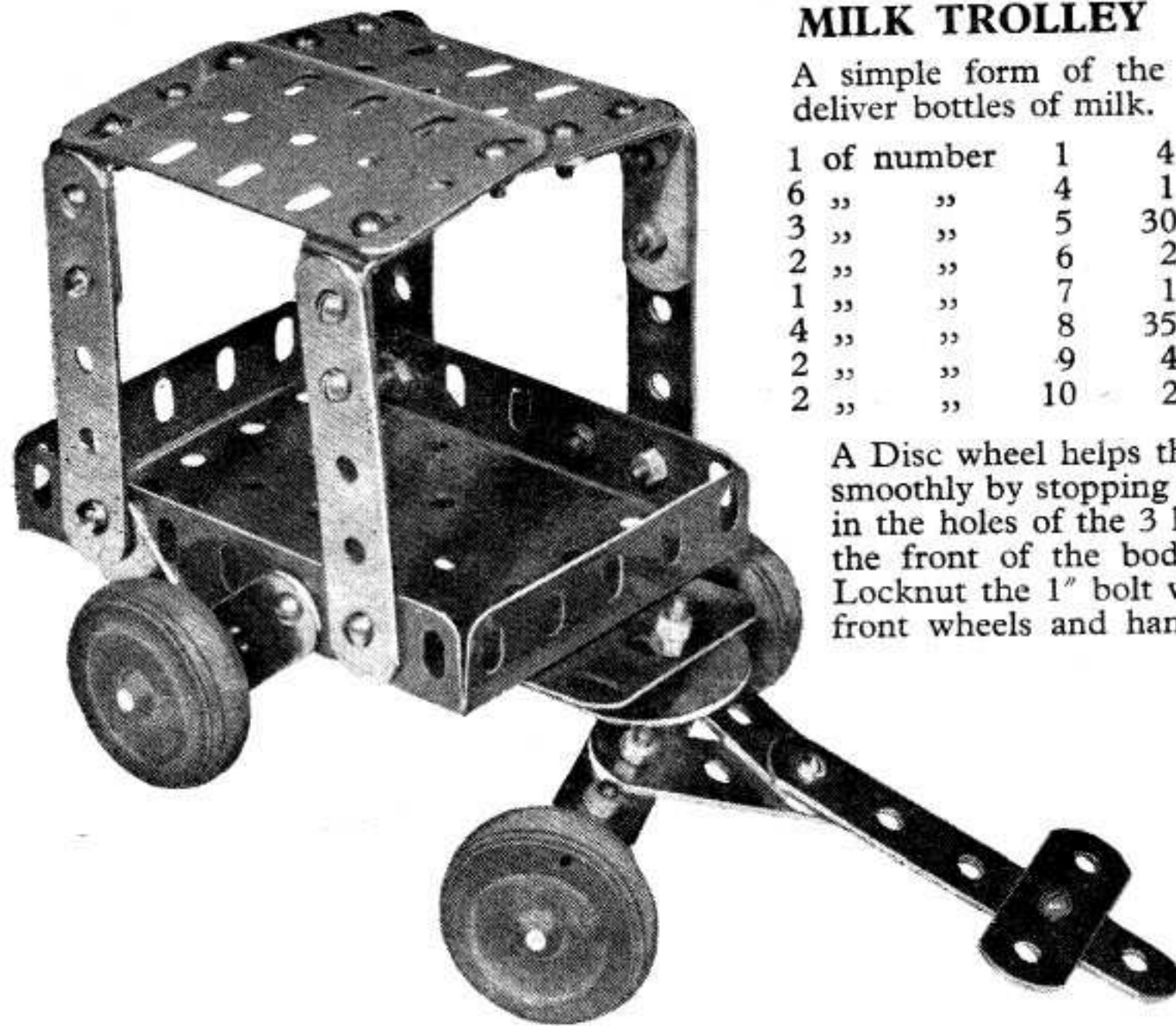
TRAILERS and TRACTOR

MILK TROLLEY

A simple form of the trolley used to deliver bottles of milk.

1 of number	1	4 of number	11
6 "	4	1 "	13
3 "	5	30 "	14
2 "	6	2 "	15
1 "	7	1 "	16
4 "	8	35 "	17
2 "	9	4 "	18
2 "	10	2 "	19

A Disc wheel helps the handle to turn smoothly by stopping the nuts catching in the holes of the 3 hole flat girder at the front of the body of the trolley. Locknut the 1" bolt which secures the front wheels and handle to the body.



TRAILER

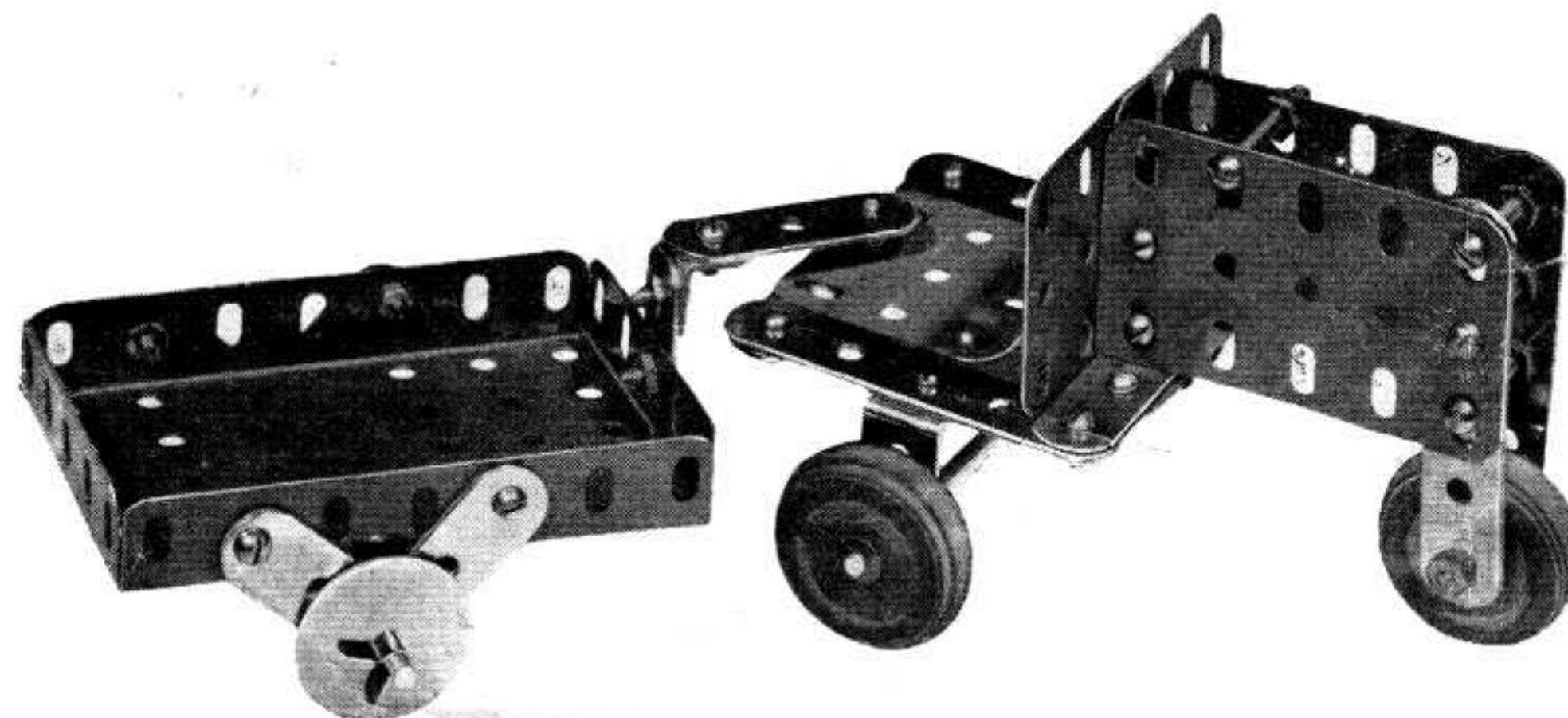
Ready for attachment to car or van.

1 of number	1	2 of number	11
2 "	3	24 "	14
6 "	4	24 "	17
3 "	5	2 "	18
4 "	8	1 "	19
2 "	10		

TRACTOR and TRAILER

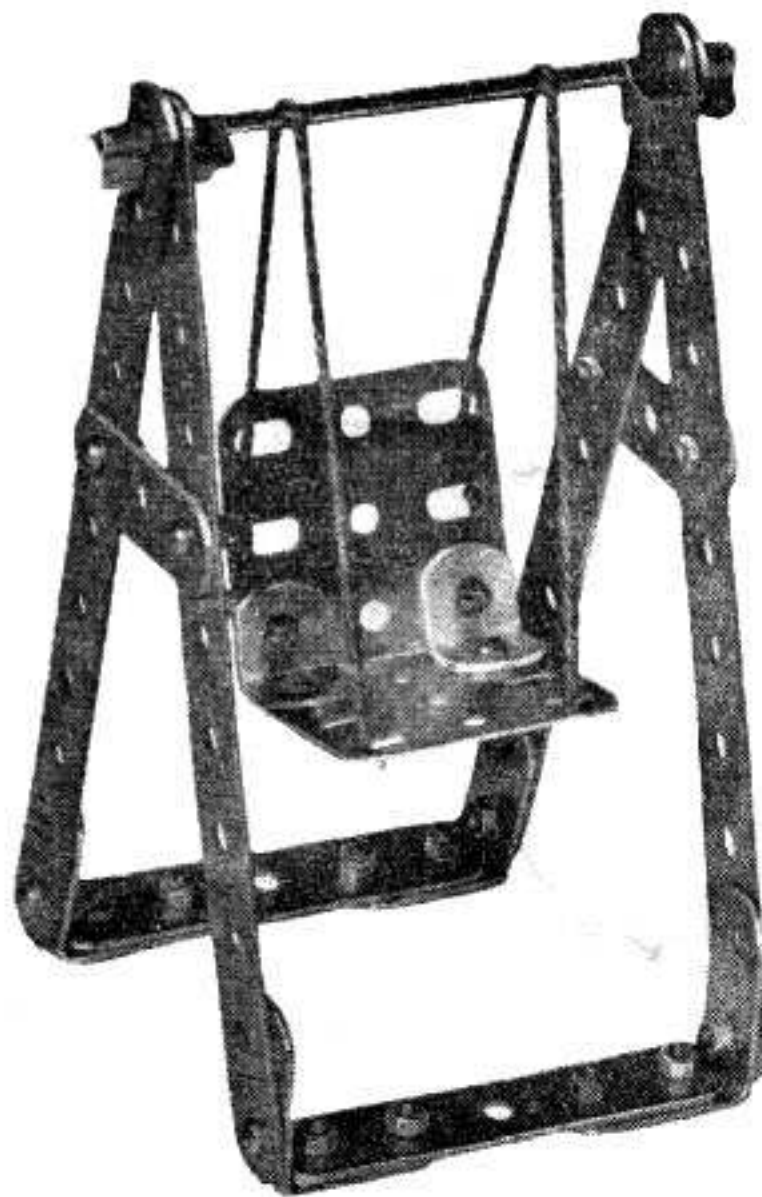
The tractor is made in 3 parts - platform - guard and bonnet. Build the platform first, with the 2-4 hole brackets to take the back wheels. The guard is 2-3 hole flat girders bolted together and held to the platform by a 2 hole bracket which goes into the bonnet. The bonnet is made by bolting together 2-5 hole flat girders with 4 1" bolts, using 3 nuts on each to get the plates the right distance apart. Put the 2-4 hole brackets on the inside of the plates, and it is the brackets which hold the front on to the platform. Add wheels, and the tractor is ready after screwing a 1/2" bolt on the back to pull along the trailer. Copy the picture to make the trailer.

1 of number	1
6 "	4
2 "	5
2 "	6
4 "	7
4 "	8
2 "	9
2 "	10
3 "	11
2 "	13
26 "	14
1 "	15
4 "	16
41 "	17
4 "	18
2 "	19



Try making bigger trailers for the Tractor yourself

Swing, Scales and See-Saw, etc.



SWING

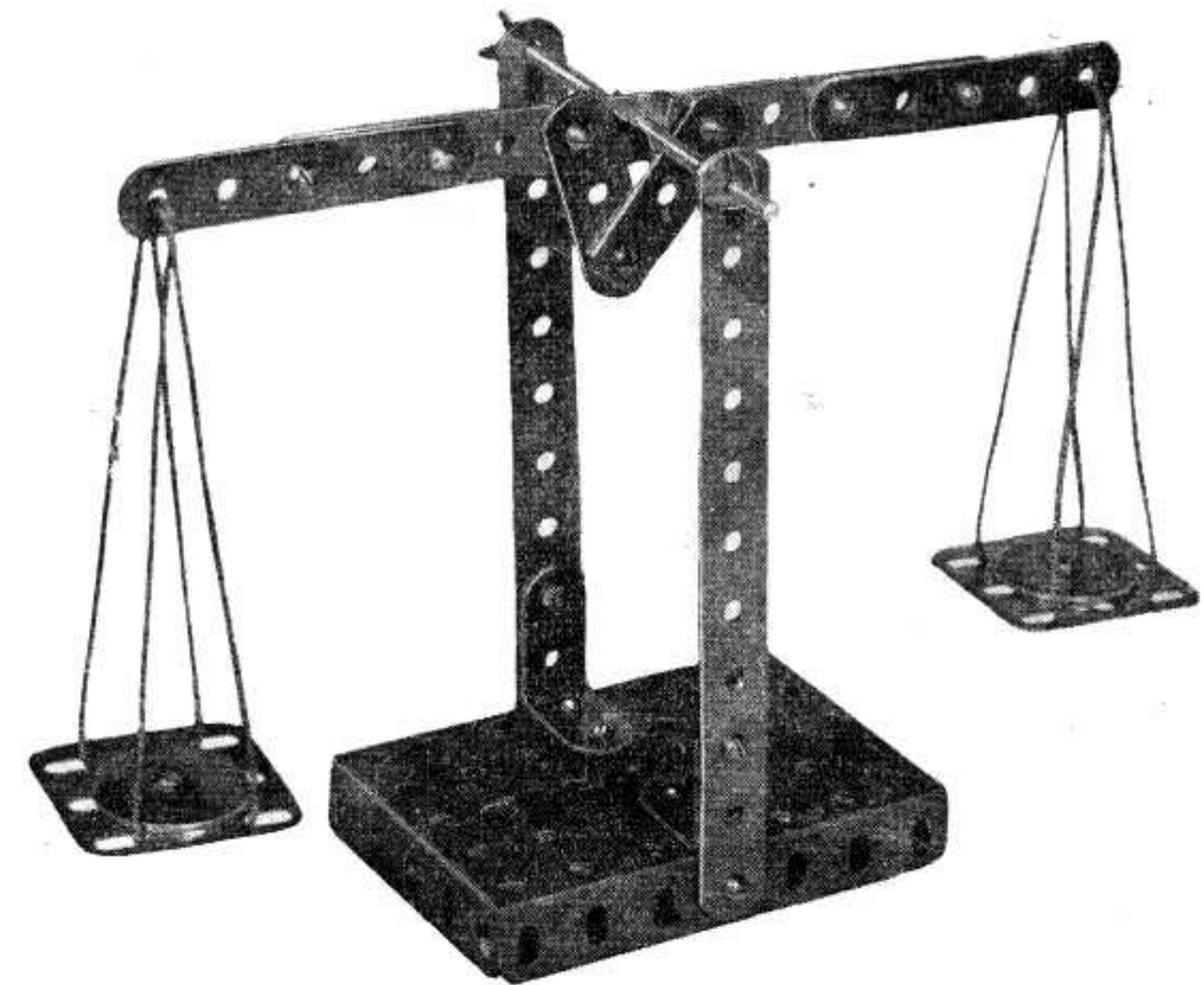
4	of	number	3
2	"	"	4
2	"	"	5
2	"	"	7
4	"	"	8
2	"	"	9
20	"	"	14
20	"	"	17
4	"	"	18
1	"	"	19

Take 2 pieces of cord—each about 8 inches long, and tie the first piece behind the seat, thread the other into position carefully, check that the swing is level before tying a reef knot.

SCALES

1	of	number	1
3	"	"	3
2	"	"	4
2	"	"	5
2	"	"	7
2	"	"	8
2	"	"	13
17	"	"	14
17	"	"	17
4	"	"	18
1	"	"	19

2 spring clips hold the beam of the scales in position. The pans are held by a long piece of cord shown in the picture and before making the second knot be certain that the beam is level and both pans the same height from the ground. This is a simple set of scales, and you can make bigger ones yourself.



SWIVEL CHAIR

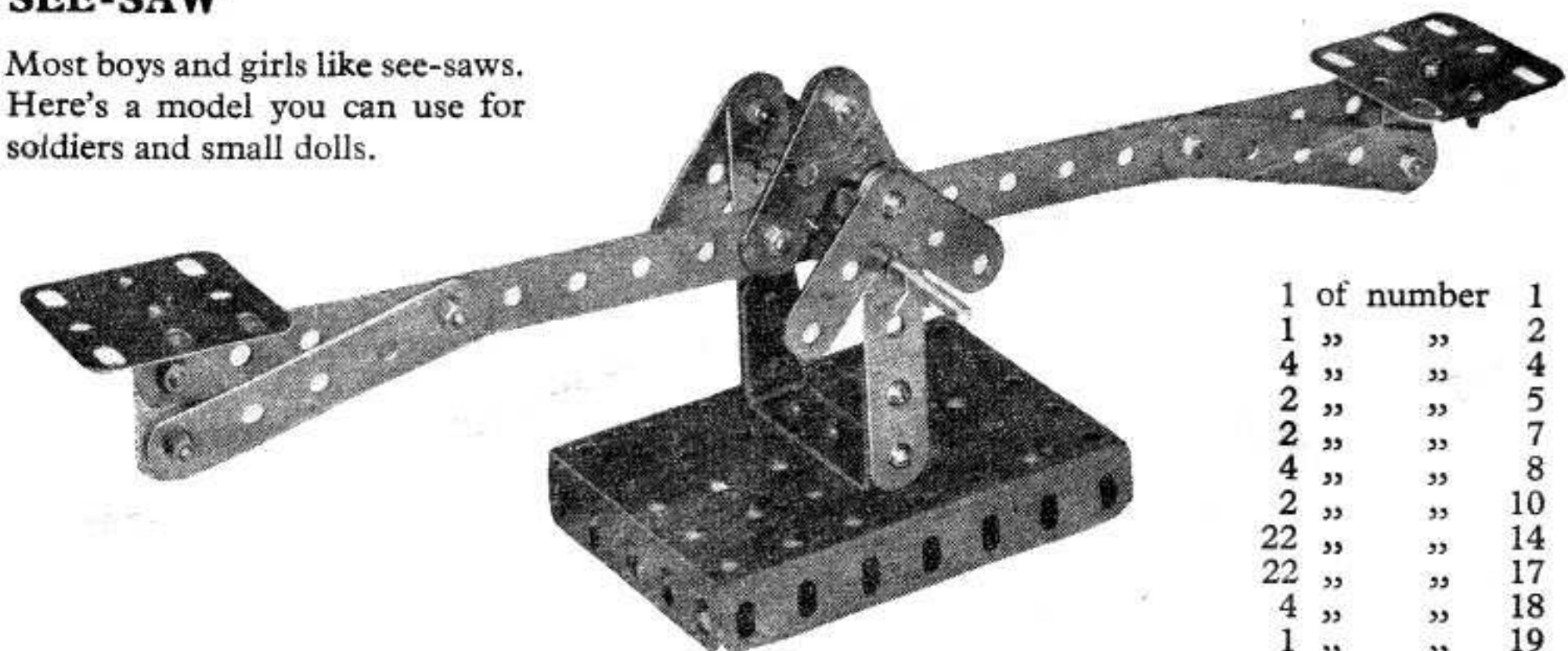
2	of	number	5
3	"	"	7
3	"	"	8
2	"	"	9
12	"	"	14
1	"	"	16
17	"	"	17

When you fix the chair to the base you need a 1" bolt, with 3 nuts above the base, and 2 nuts below which act as locknuts. You can easily build a desk to go with this Swivel Chair.



SEE-SAW

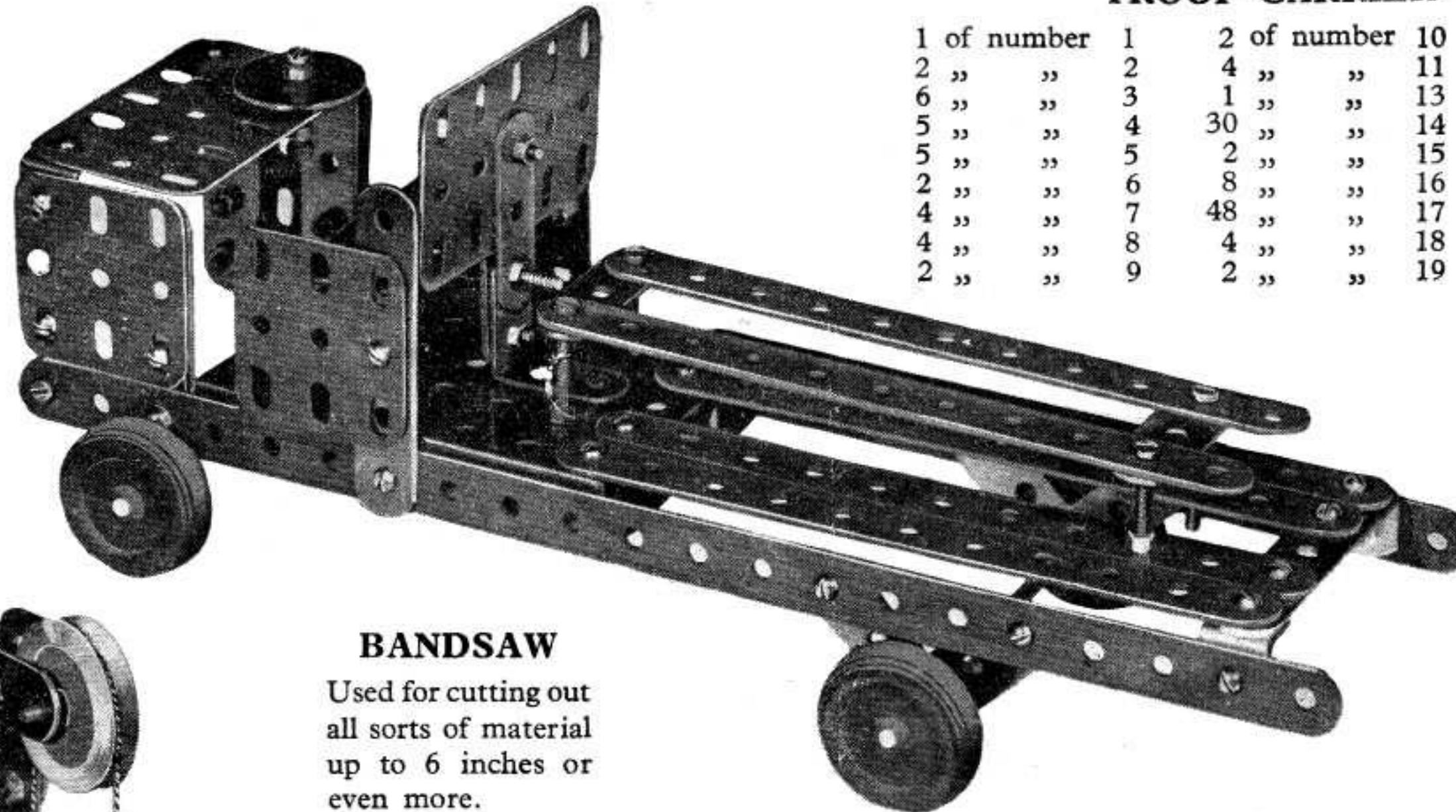
Most boys and girls like see-saws. Here's a model you can use for soldiers and small dolls.



1	of	number	1
1	"	"	2
4	"	"	4
2	"	"	5
2	"	"	7
4	"	"	8
2	"	"	10
22	"	"	14
22	"	"	17
4	"	"	18
1	"	"	19

Make these — then try your own ideas

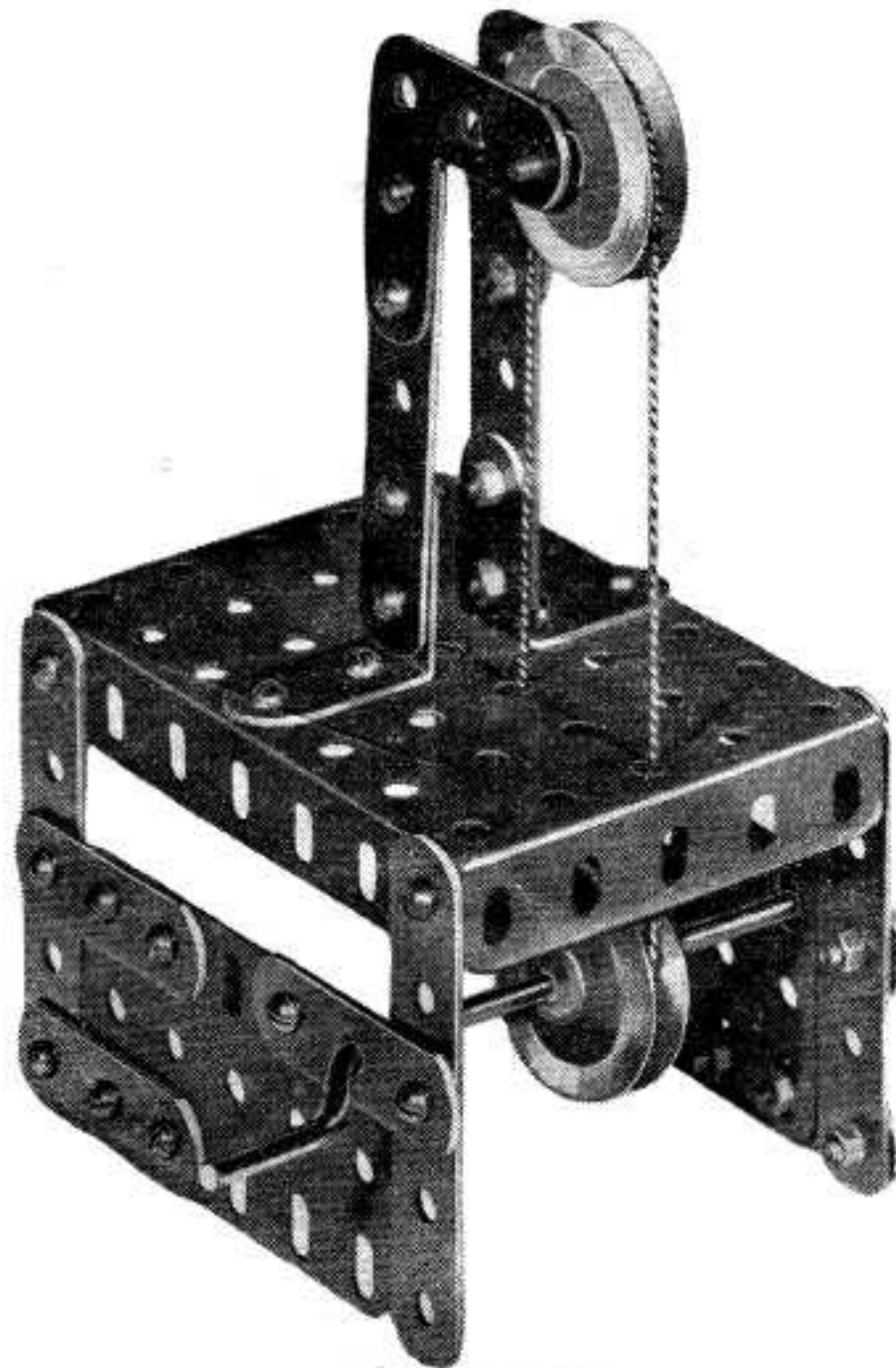
Some Working Models



TROOP CARRIER—REMOVABLE SEAT

1 of number	1	2 of number	10
2 " "	2	4 " "	11
6 " "	3	1 " "	13
5 " "	4	30 " "	14
5 " "	5	2 " "	15
2 " "	6	8 " "	16
4 " "	7	48 " "	17
4 " "	8	4 " "	18
2 " "	9	2 " "	19

The 2 bearers for the front axle are made with 1-3 hole strip on the passenger's side, and 1-5 hole strip on the driver's side. The back seat is made of 2-11 hole strips held by 2-3 hole strips. By using 1" bolts and additional nuts, the seat can be lifted off. It is held in position by the second nut—work out correct position so that the seat is level.



BANDSAW

Used for cutting out all sorts of material up to 6 inches or even more.

1 of number	1
6 " "	4
6 " "	5
2 " "	6
2 " "	8
2 " "	10
2 " "	12
30 " "	14
2 " "	15
1 " "	16
34 " "	17
1 " "	18
1 " "	20

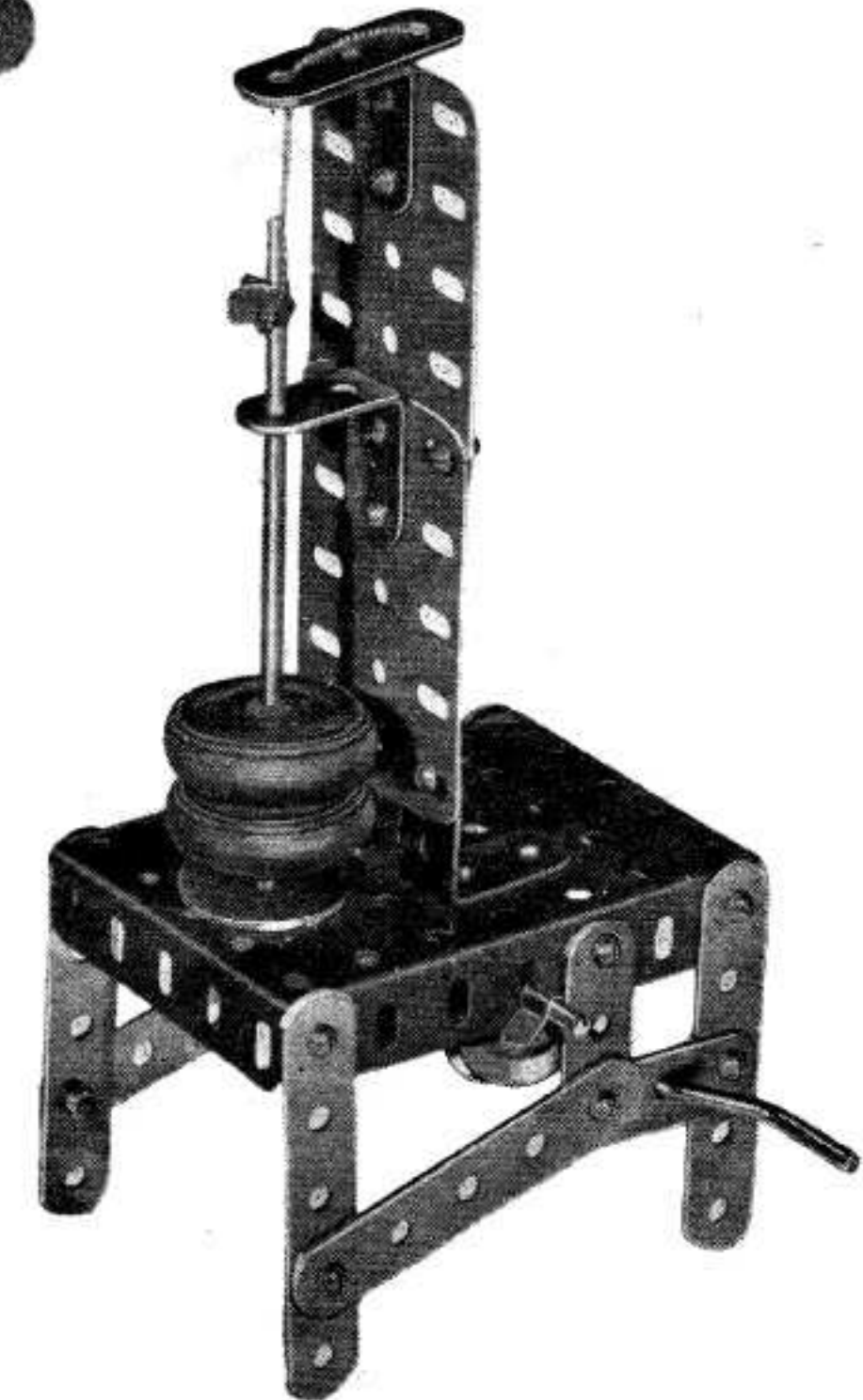
To fix cord tie knot as tight as you can, making it as small as possible so that it won't catch when you turn crank handle.

DROP HAMMER

A model of the giant drop hammers used in steel works.

1 of number	1	1 of number	12
6 " "	4	1 " "	13
1 " "	5	26 " "	14
2 " "	6	26 " "	17
4 " "	8	5 " "	18
2 " "	10	2 " "	19
2 " "	11	1 " "	20

To fix cord, make a slip knot round metal pulley. Thread cord round loose axle through hole up back, through 3 hole strip at top, down front and tie below spring clip on "drop hammer." When the wheels are down the spring clip should be $\frac{1}{4}$ " above the lower 4 hole bracket. In this position see that there is at least half turn of cord round pulley wheel. When the knot is tied, you raise the hammer by half turn of crank handle. Leave go, and the hammer head drops down.

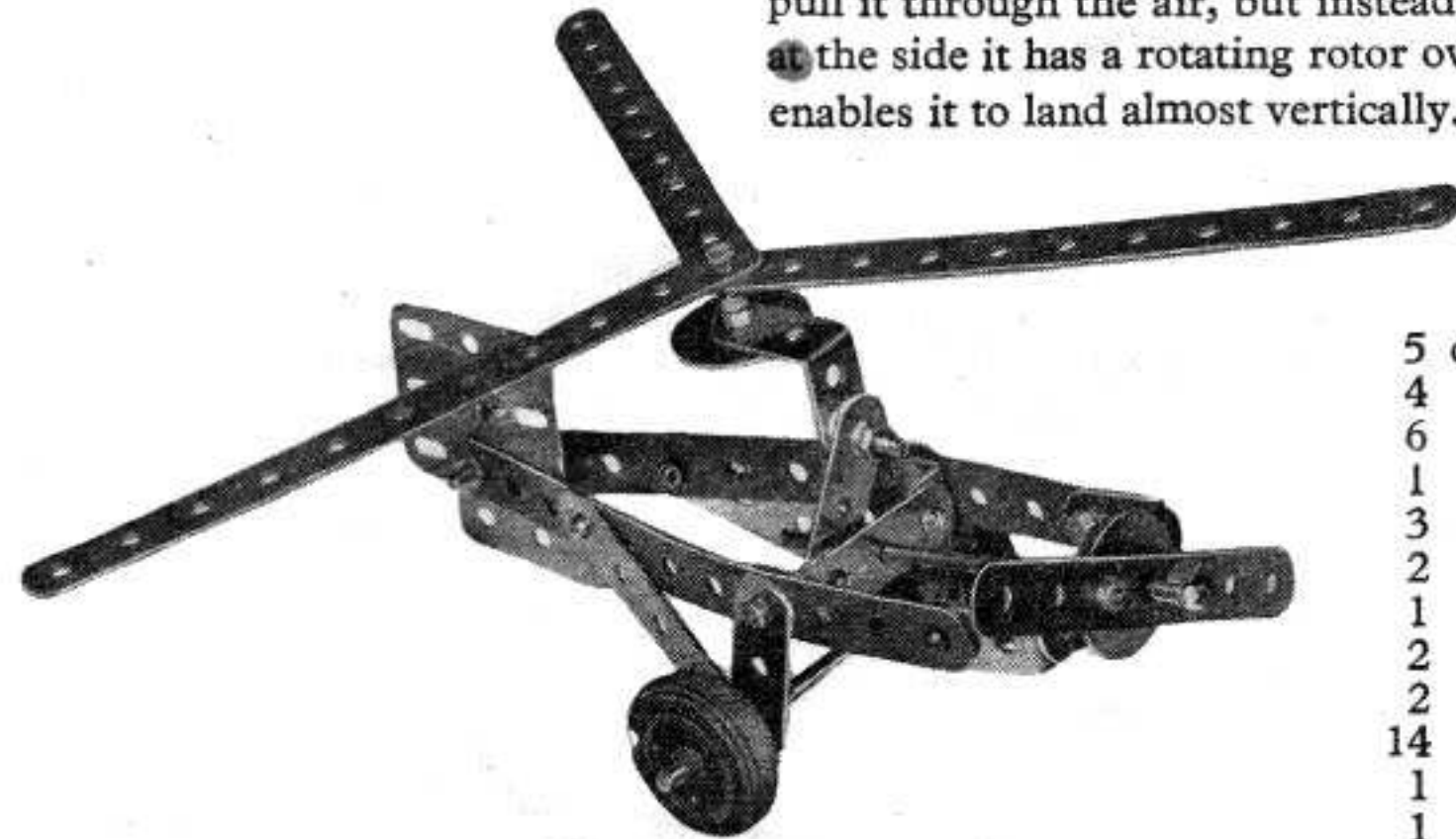


Show your chums how well they work

Three Types of AIRCRAFT

AUTOGYRO

Is like an ordinary aeroplane with a propeller to pull it through the air, but instead of fixed wings at the side it has a rotating rotor overhead. This enables it to land almost vertically.



5 of number	3
4 "	4
6 "	5
1 "	7
3 "	8
2 "	9
1 "	10
2 "	11
2 "	13
14 "	14
1 "	15
1 "	16
21 "	17
4 "	18
2 "	19



HELICOPTER

5 of number	3
6 "	4
6 "	5
3 "	8
2 "	9
1 "	10
3 "	11
2 "	13
13 "	14
2 "	15
5 "	16
29 "	17
6 "	18
2 "	19

HELICOPTER

Has a propeller rotating overhead. On the real thing this rotor enables the plane to rise straight up and hover. By altering the rotor blades it can fly for-

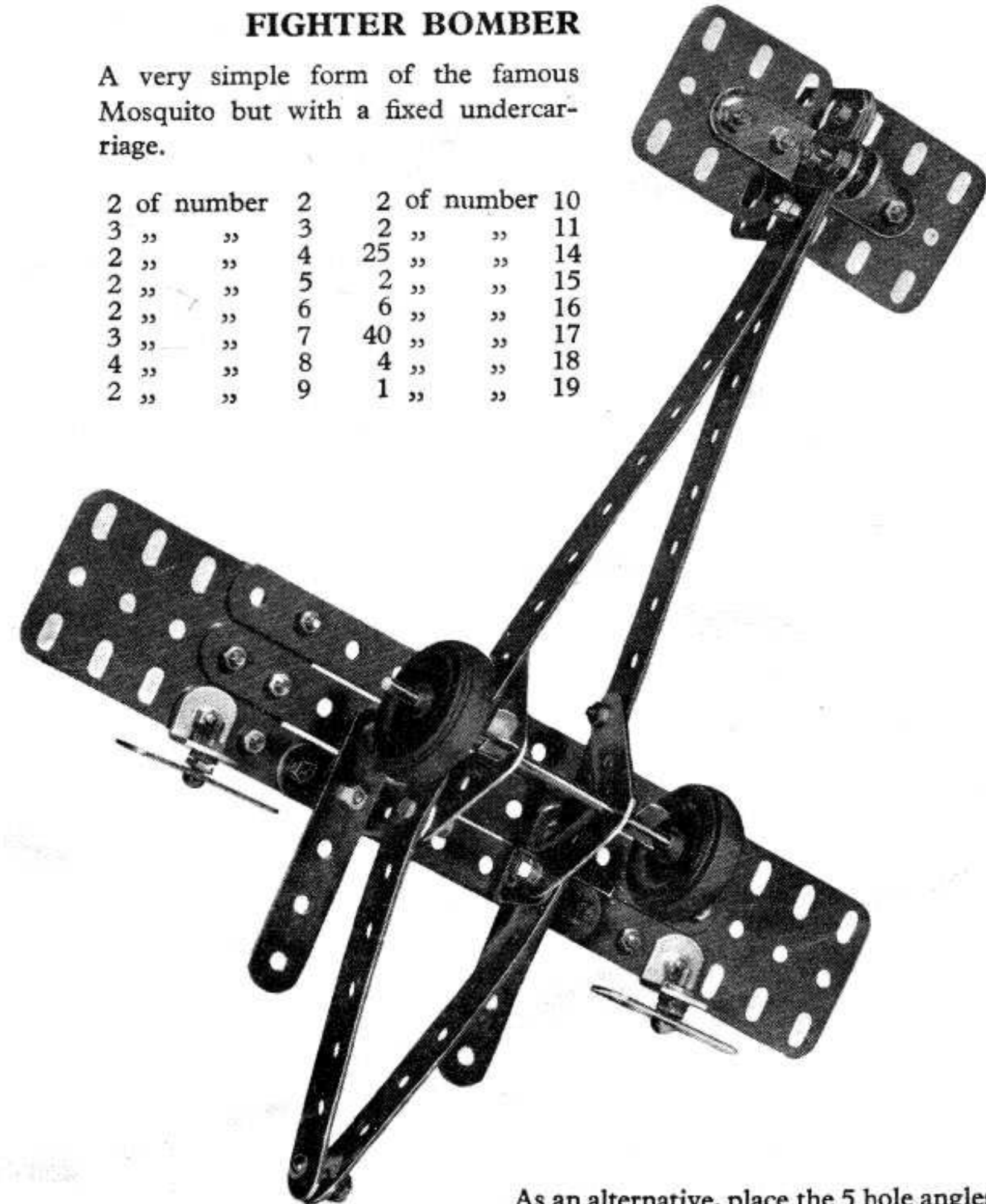
wards or backwards. To stop the plane twisting with the rotor, a small propeller is fitted to the tail.

TWIN ENGINE

FIGHTER BOMBER

A very simple form of the famous Mosquito but with a fixed undercarriage.

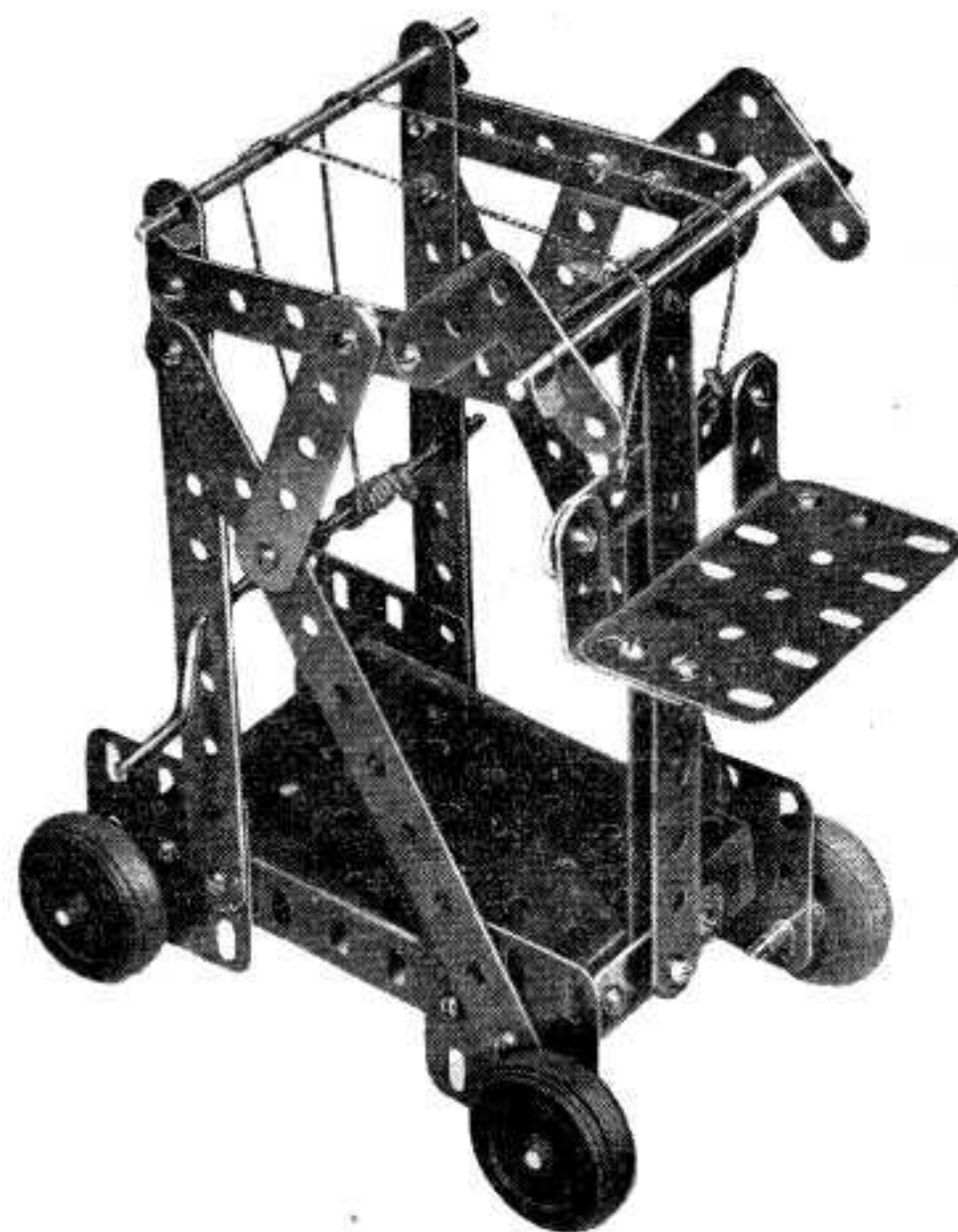
2 of number	2	2 of number	10
3 "	3	2 "	11
2 "	4	25 "	14
2 "	5	2 "	15
2 "	6	6 "	16
3 "	7	40 "	17
4 "	8	4 "	18
2 "	9	1 "	19



As an alternative, place the 5 hole angles on the *outside* of the fuselage and only have the screws at the front. By supporting the wings on the middle strip instead of the front, it would be possible to allow the wheels to be retracted.

Now try to make other models—jets and flying wings

Ideas for Lifting Models

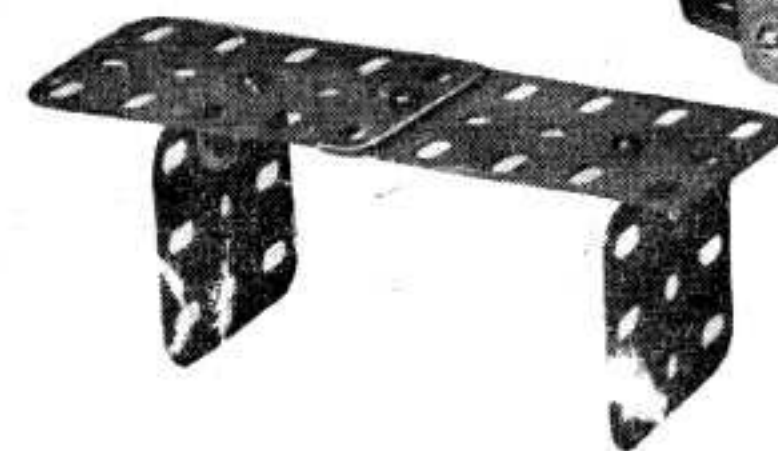


STACKER

A simple model of the stacking machines used in factories for loading and unloading heavy weights from one place to another

1 of number	1	4 of number	11
6 "	3	26 "	14
6 "	4	2 "	15
1 "	5	4 "	16
1 "	6	42 "	17
4 "	7	4 "	18
4 "	8	2 "	19
2 "	10	1 "	20

The correct space between the vertical guide strips is obtained by an extra nut on the $\frac{1}{2}$ " bolts at the top and bottom, besides the 3 hole strip at foot. Cording is similar to Lift Bridge equal tension means the "carrier platform" rises or falls level. The wheels run on 1" bolts with one nut between wheel and frame and locknut on other side.

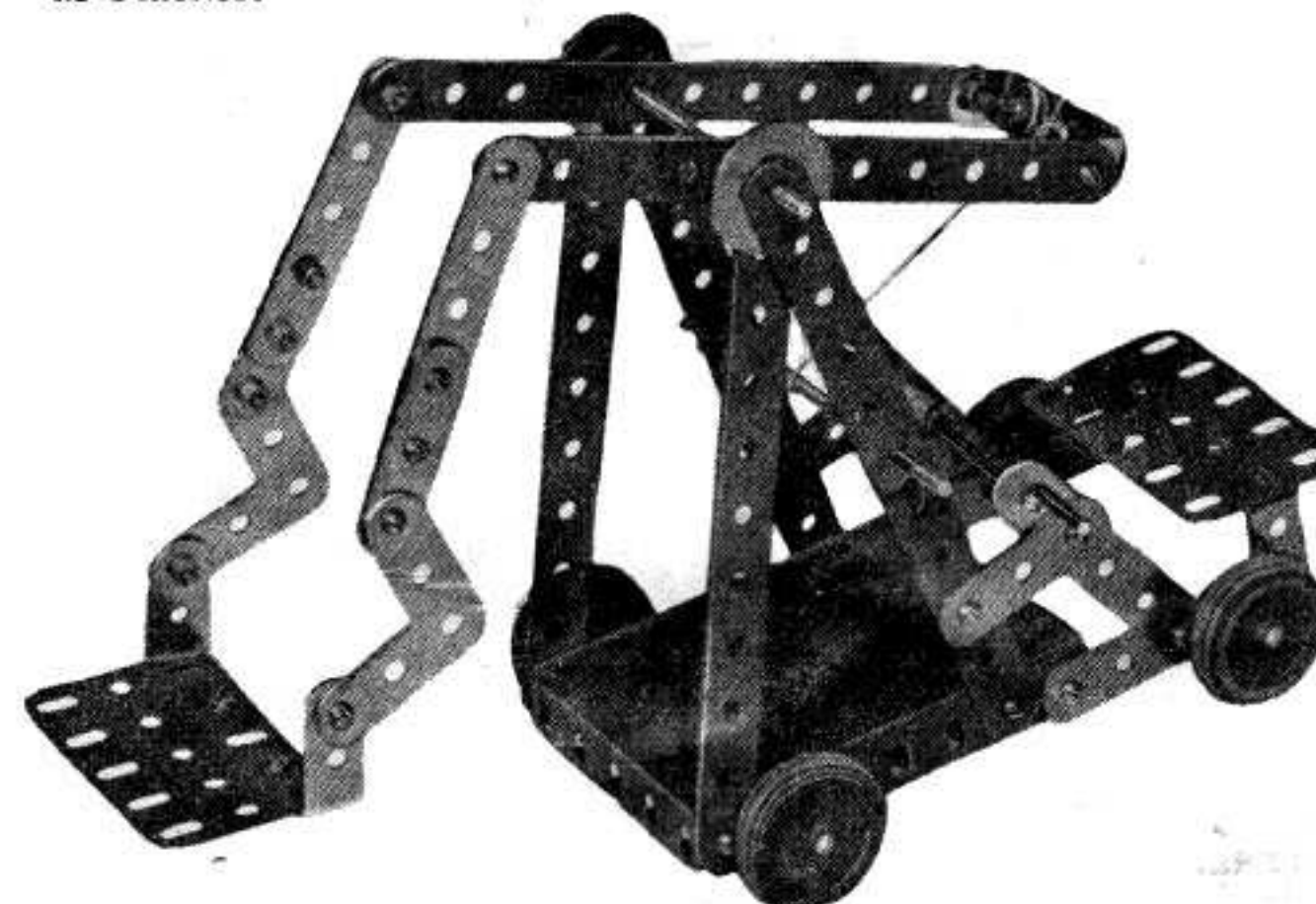


DIGGER

There are now all types of machines for digging trenches and shovelling up earth. This will pick up bricks.

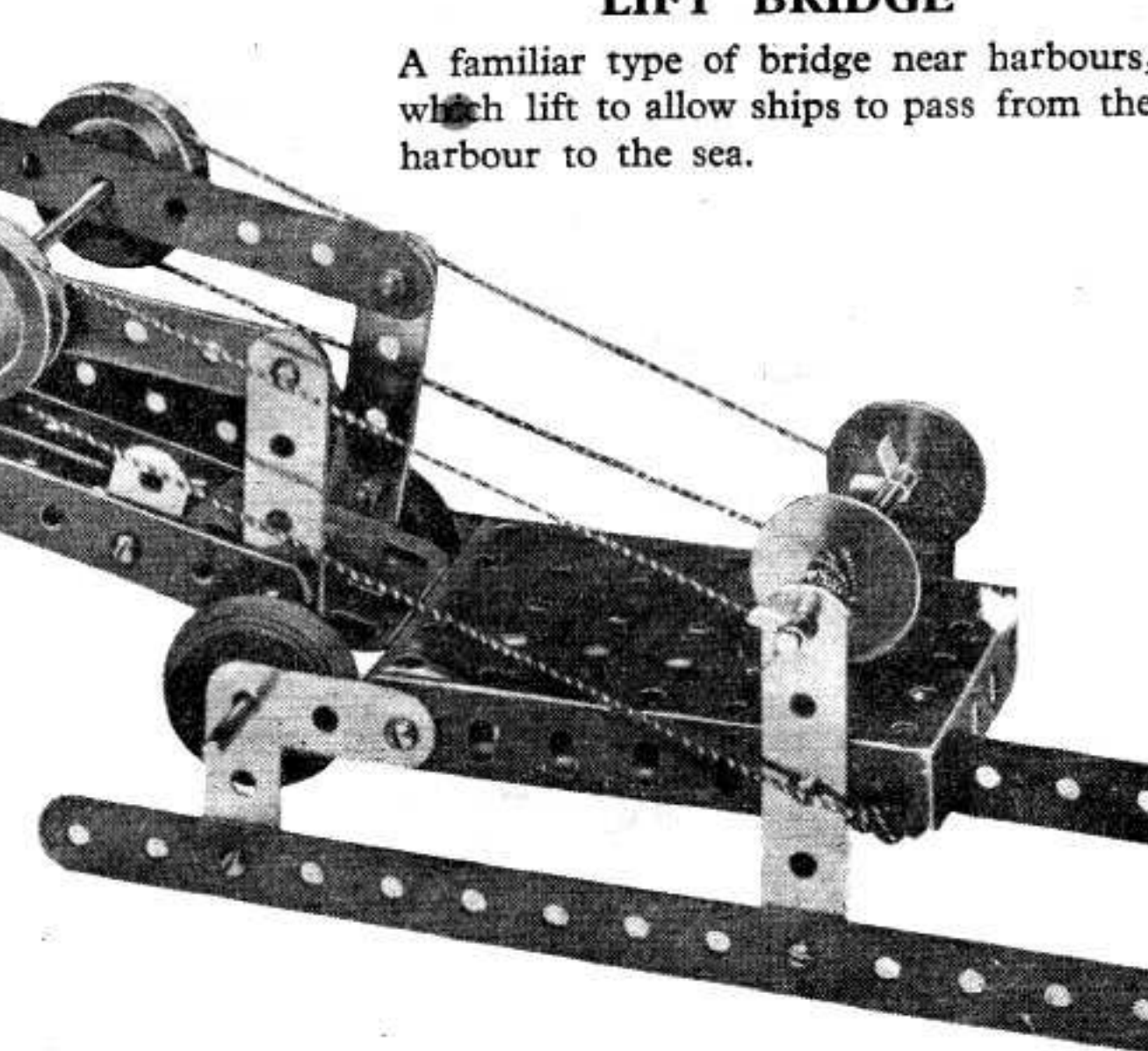
1 of number	1	2 of number	9	4 of number	16
6 "	3	2 "	10	42 "	17
6 "	4	4 "	11	4 "	18
5 "	5	2 "	13	2 "	19
2 "	6	30 "	14	1 "	20
4 "	8				

To cord, tie a slip knot on the crank, make several turns and thread round axle, tying to centre of beam. Wheels as Stacker.



LIFT BRIDGE

A familiar type of bridge near harbours, which lift to allow ships to pass from the harbour to the sea.



1 of number	1	2 of number	11
2 "	2	2 "	12
6 "	3	2 "	13
5 "	4	30 "	14
3 "	5	6 "	16
2 "	6	36 "	17
4 "	7	3 "	18
4 "	8	2 "	19
2 "	9	1 "	20
2 "	10		

Build the bridge base with the crank handle and steel wheels in position. Then the bridge, including axle with pulley wheels. Join the bridge with the second axle, using wheels to hold it firmly in position. Now take 2 pieces of cord, and secure the end of each on the crank with a slip knot, make 5 turns round the crank in the same direction. Take one cord, thread it over the pulley and tie at the corner of the base plate. Repeat with the other cord so that tension is even, and the bridge lifts level. 2-2 hole brackets hold the girder plates together, for continuation bridge.

See what others you can make yourself

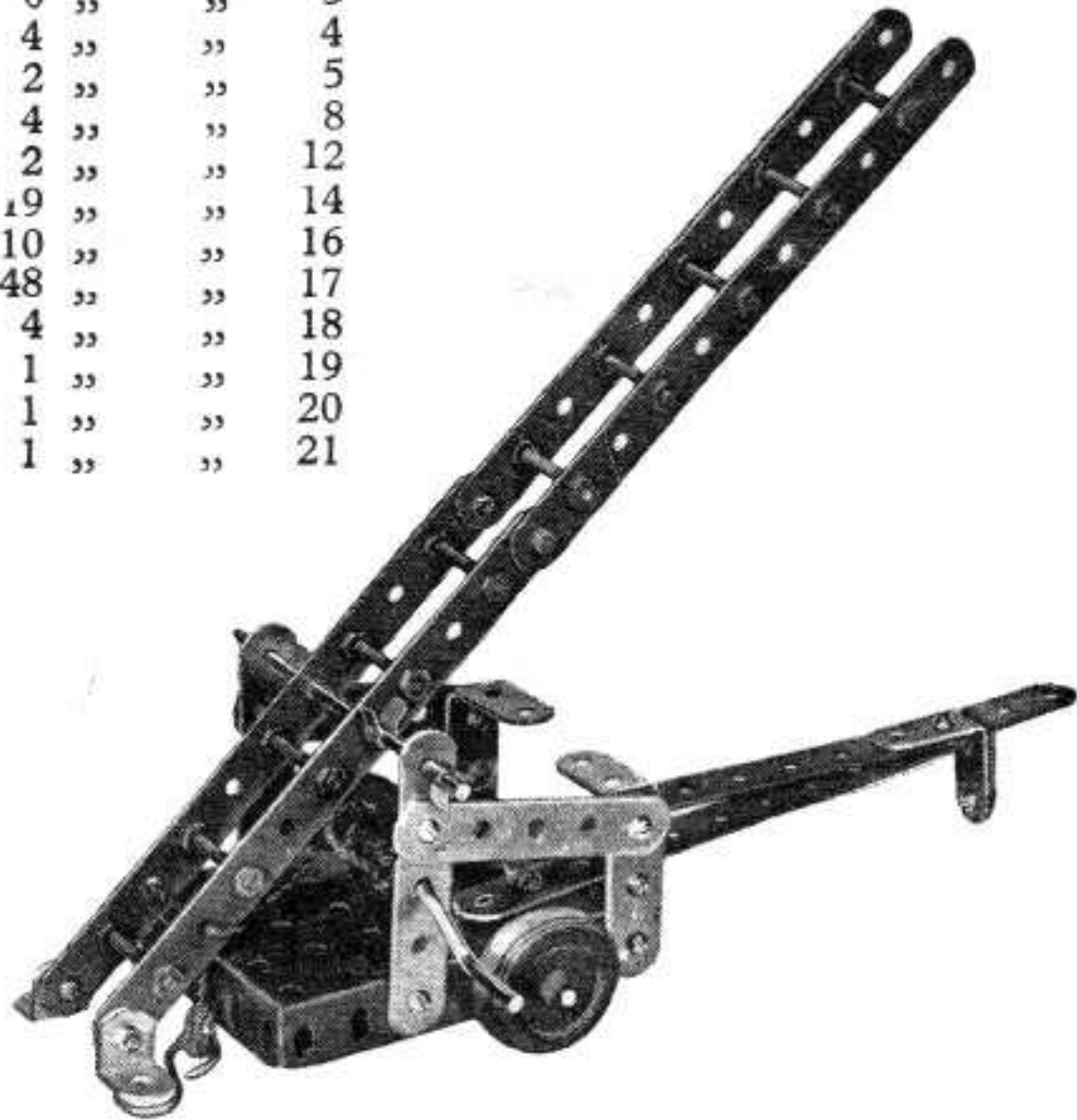
Winders—three suggestions

FIRE TENDER

These are often seen loaded with extension ladders being pulled along by Fire Engines.

The ladder is made by using 1" bolts with 3 nuts on each. Careful adjustment of nuts makes the ladder firm. To fix cord, tie a slip knot on crank, make several turns and then tie on to foot of ladder as in picture. Winding the crank handle will raise the ladder. A hook tied to the back of the base will hold the ladder in position.

1 of number	1
6 "	3
4 "	4
2 "	5
4 "	8
2 "	12
19 "	14
10 "	16
48 "	17
4 "	18
1 "	19
1 "	20
1 "	21

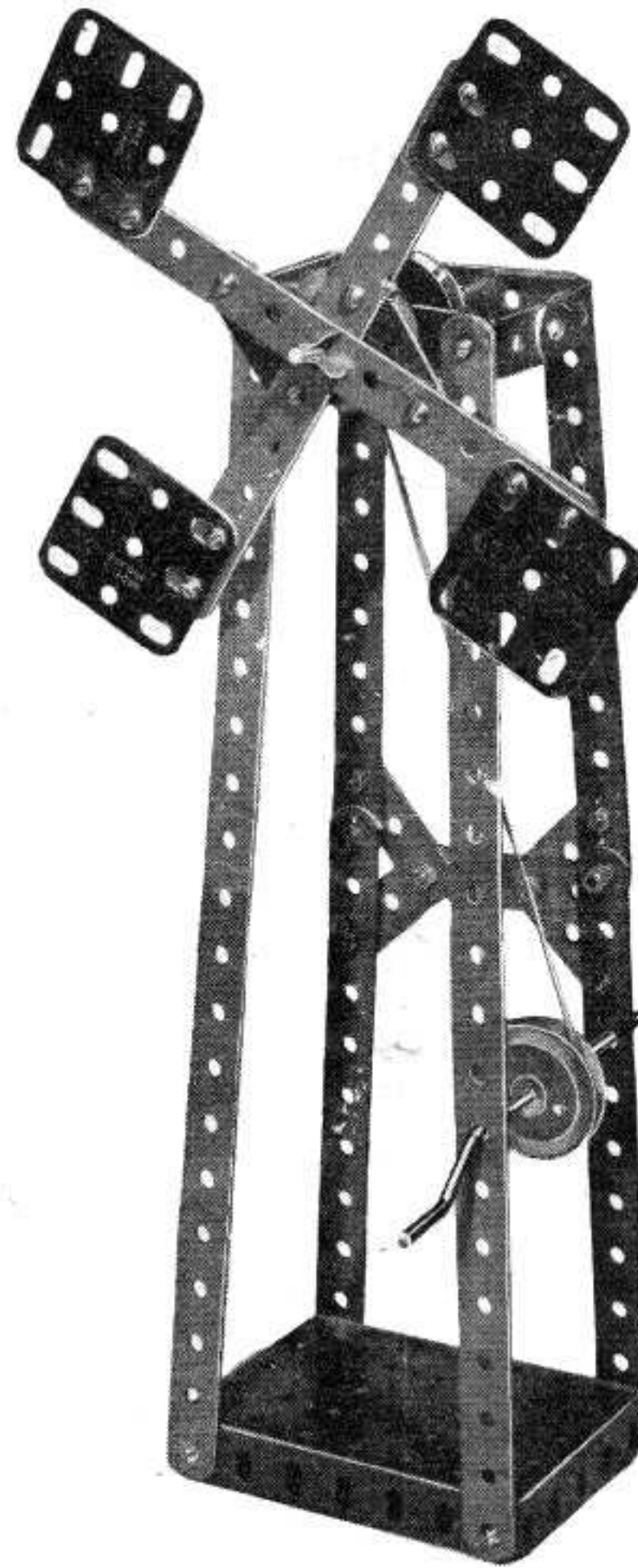


WINDMILL

These can still be seen in the country pumping up water, or grinding corn.

The drive should be either cord tied very tight, or an elastic band. See that the locking screws on the pulley wheels are fast.

1 of number	1	2 of number	10
2 "	2	2 "	12
6 "	3	30 "	14
2 "	4	30 "	17
3 "	5	3 "	18
4 "	7	1 "	19
4 "	8	1 "	20



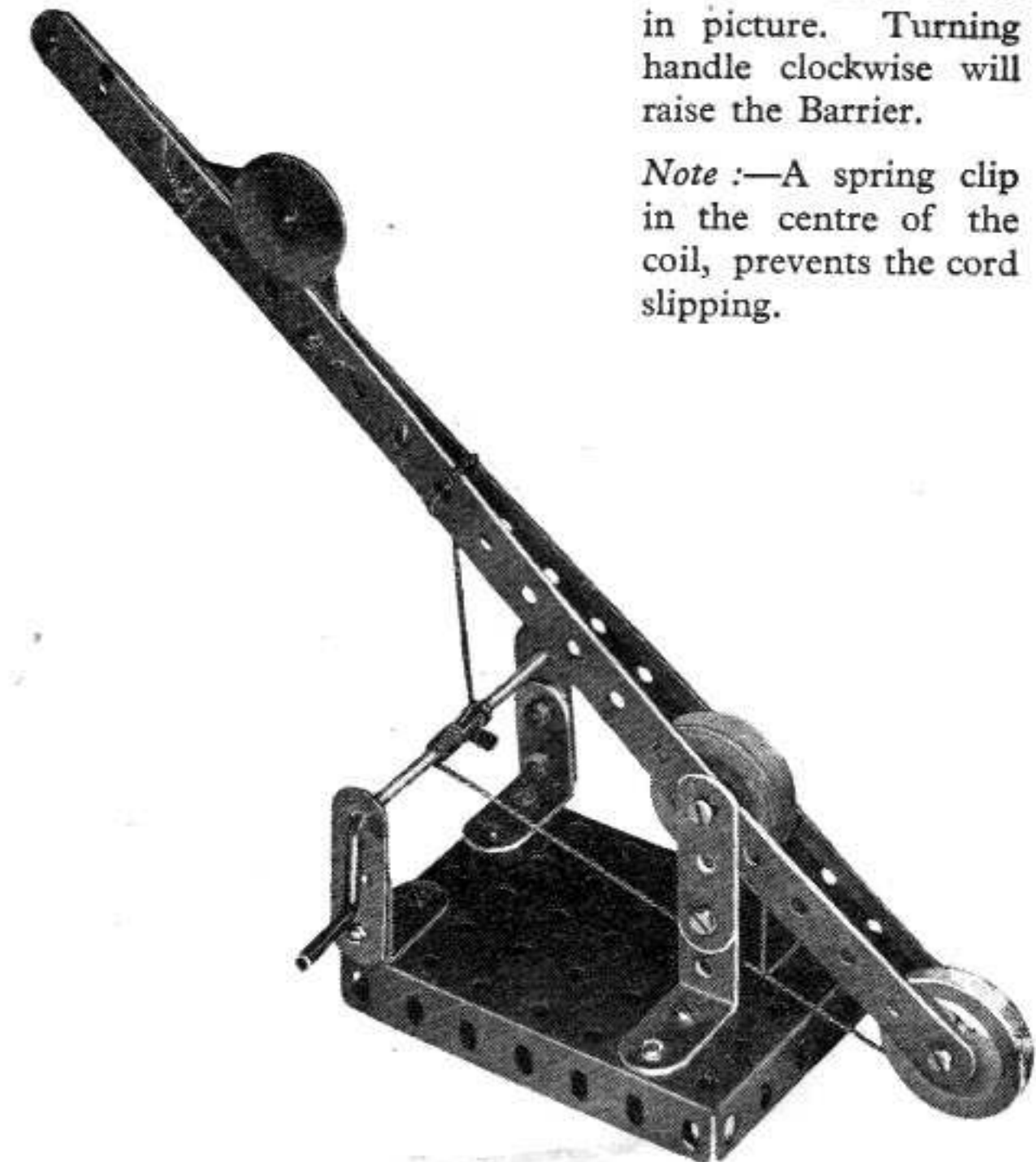
CUSTOMS BARRIER

This is something seen on the Continent, where roads cross the frontier of countries.

1 of number	1	1 of number	13
2 "	2	16 "	14
4 "	5	3 "	16
4 "	8	23 "	17
1 "	10	2 "	18
1 "	11	1 "	20
1 "	12		

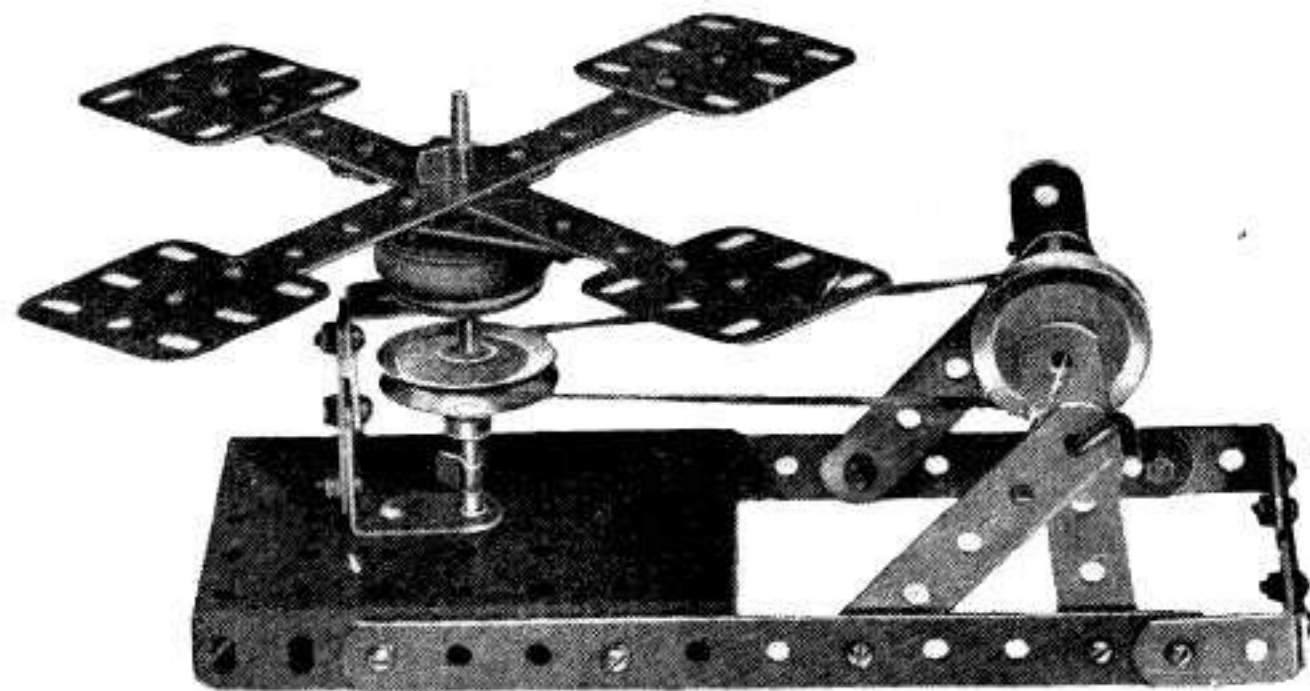
To cord, tie a slip knot round pulley wheel, and when beam is level there should be half turn. Thread under bolt below rubber wheel make about 10 turns (clockwise) of cord and then tie to cross bar as in picture. Turning handle clockwise will raise the Barrier.

Note :—A spring clip in the centre of the coil, prevents the cord slipping.



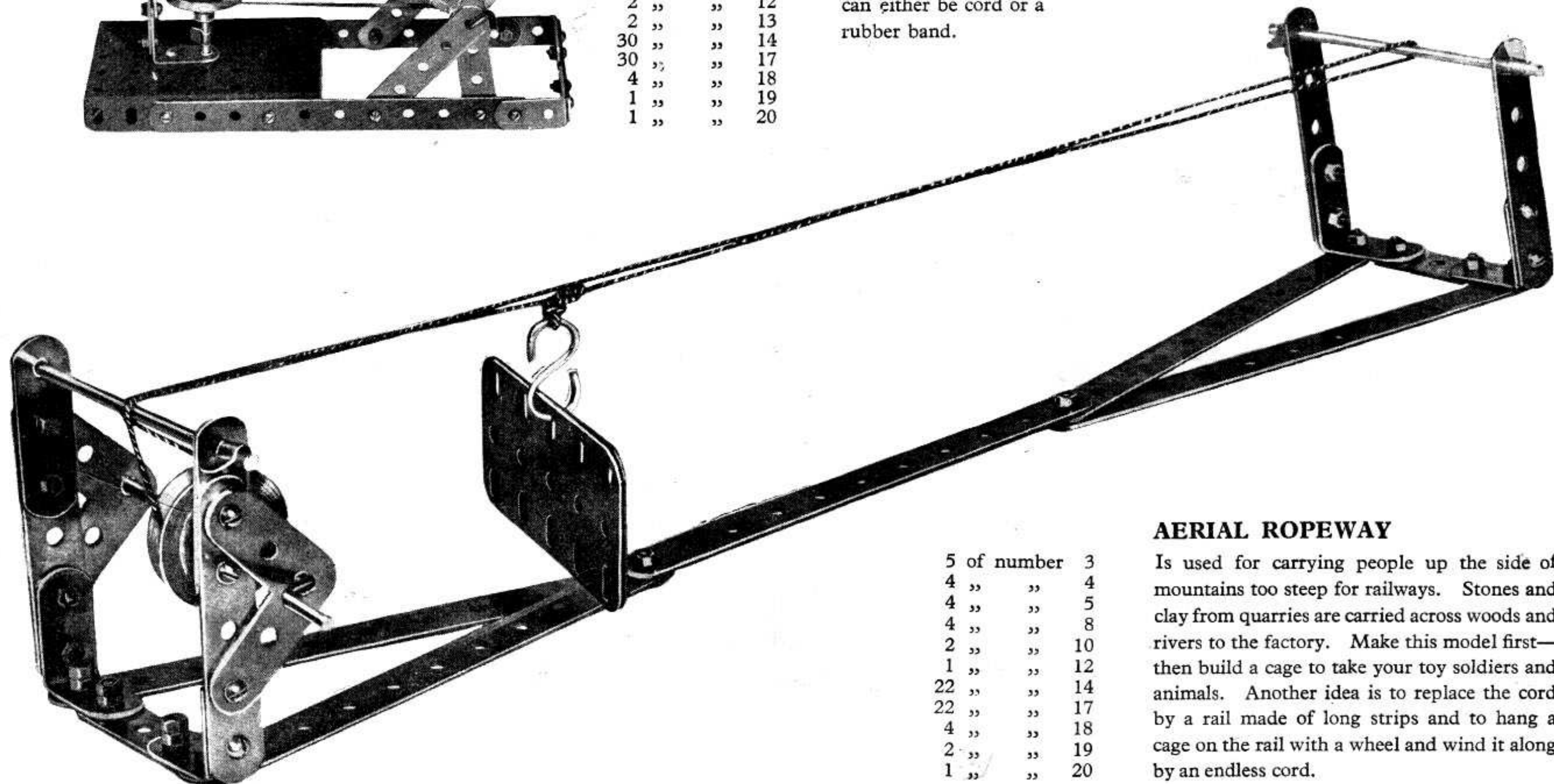
Fun to make and Fun to play with

Roundabout and Aerial Ropeway



ROUNABOUT

1	of	number	1	A popular item at fairs.
4	"	"	3	The two Disc wheels
5	"	"	4	provide smooth rota-
3	"	"	5	tion of the arms of the
4	"	"	7	roundabout. The drive
4	"	"	8	can either be cord or a
1	"	"	11	rubber band.
2	"	"	12	
2	"	"	13	
30	"	"	14	
30	"	"	17	
4	"	"	18	
1	"	"	19	
1	"	"	20	



AERIAL ROPEWAY

5	of	number	3	Is used for carrying people up the side of
4	"	"	4	mountains too steep for railways. Stones and
4	"	"	5	clay from quarries are carried across woods and
4	"	"	8	ivers to the factory. Make this model first—
2	"	"	10	then build a cage to take your toy soldiers and
1	"	"	12	animals. Another idea is to replace the cord
22	"	"	14	by a rail made of long strips and to hang a
22	"	"	17	cage on the rail with a wheel and wind it along
4	"	"	18	by an endless cord.
2	"	"	19	
1	"	"	20	

BILDICO makes models that work

Three Interesting Cranes to start with



DOCKYARD CRANE

A familiar crane in dockyards. With the long fixed arms they can lift large bulky weights.

1 of number	1	2 of number	13
2 "	2	24 "	14
6 "	3	1 "	16
3 "	4	26 "	17
2 "	8	4 "	18
2 "	10	2 "	19
4 "	11	1 "	20
1 "	12	1 "	21

For cording cranes—first tie a slip knot on axle, and then wind on the length required through cross arms over pulley, threading through nuts, disc wheel, finally tying on hook.

DERRICK

Found on all cargo ships, and on all building construction. The derricks employ a different feature to the other cranes illustrated—the jib arm can also move up and down at the same time as the weight is being lifted or lowered. This makes them very useful for working in small spaces.

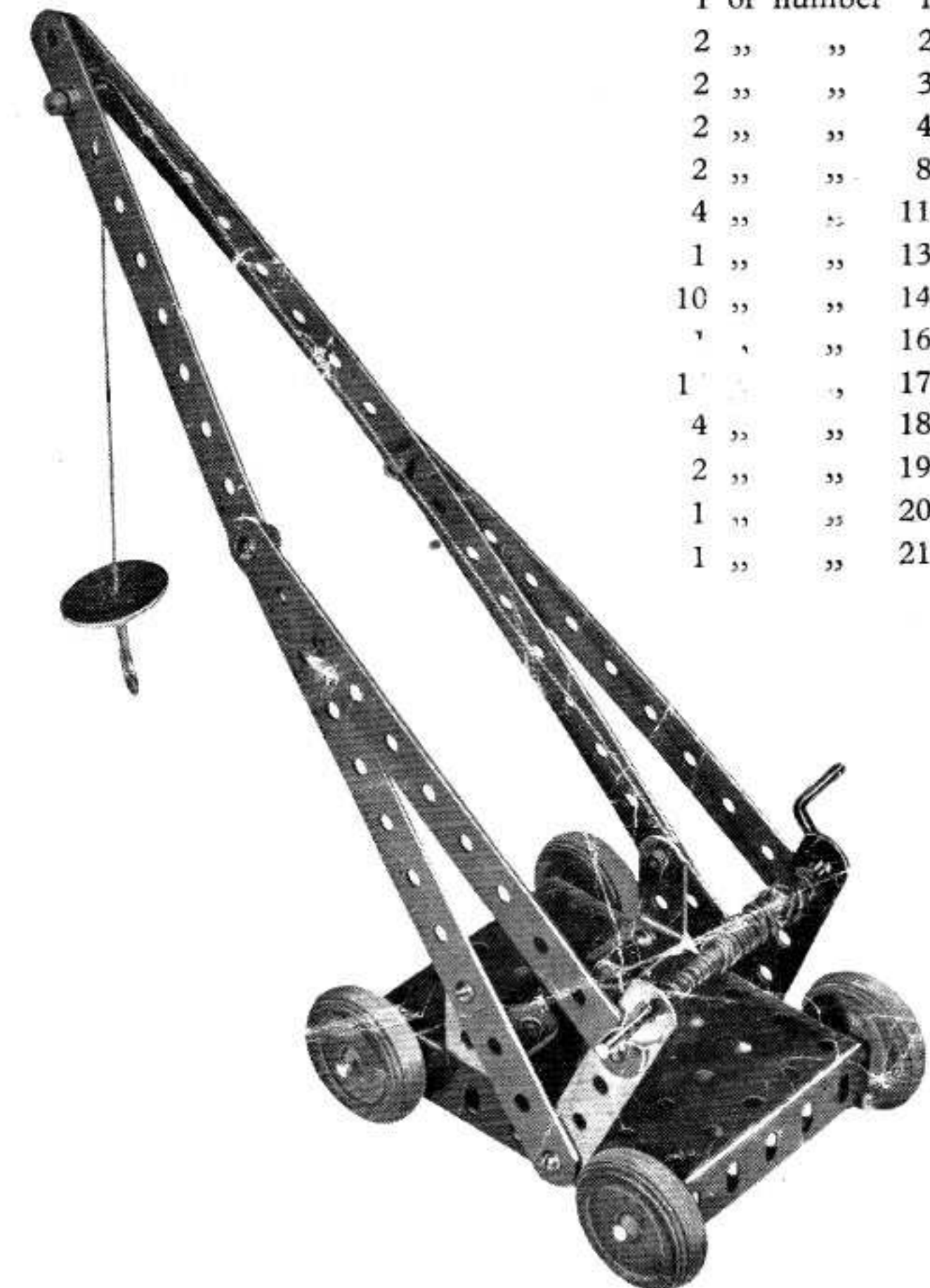
6 of number	3	17 of number	14
3 "	4	2 "	16
1 "	5	26 "	17
4 "	8	2 "	18
2 "	10	1 "	20
1 "	13	1 "	21



RUNABOUT

Seen in station yards, garages and works. A simple form of garage break-down van.

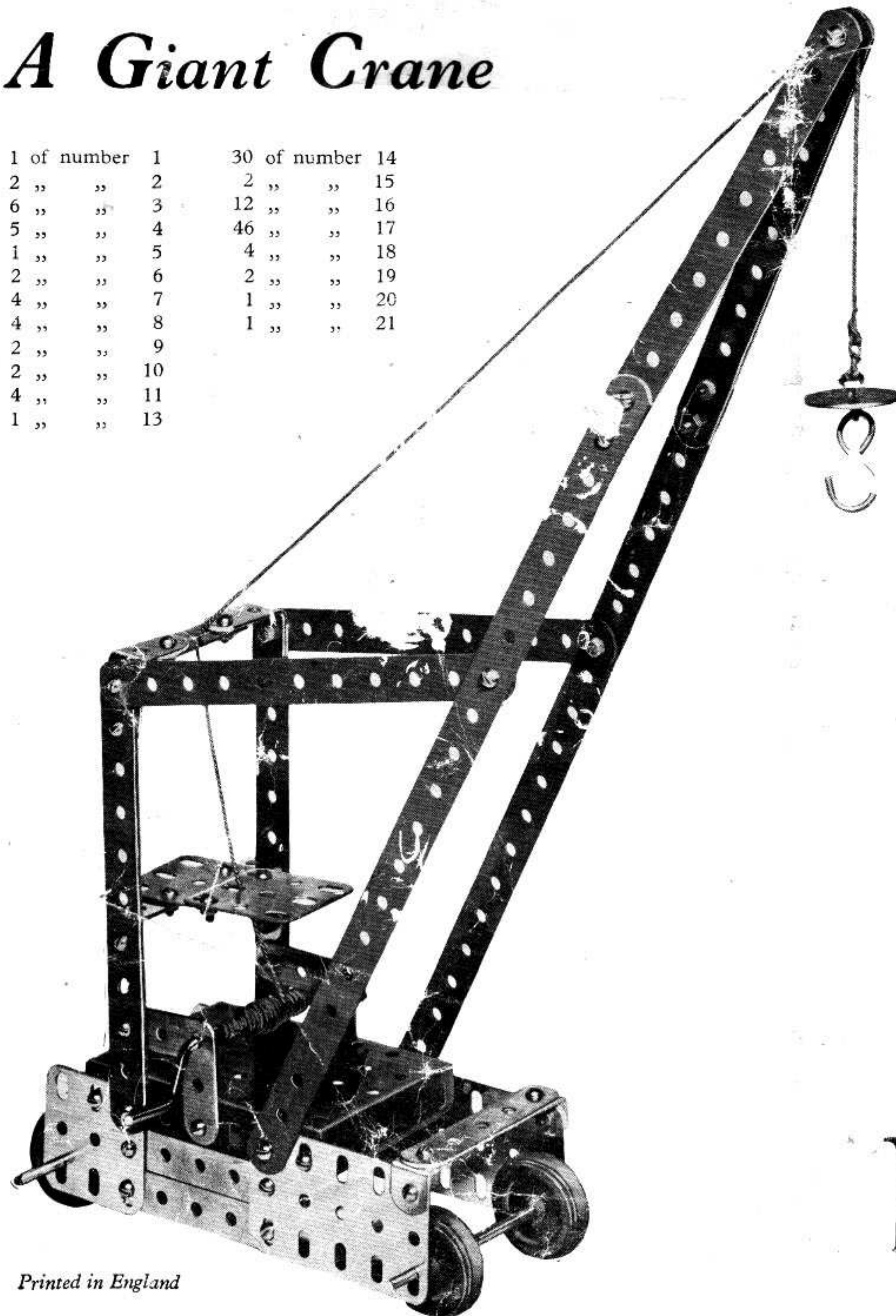
1 of number	1
2 "	2
2 "	3
2 "	4
2 "	8
4 "	11
1 "	13
10 "	14
1 "	16
1 "	17
4 "	18
2 "	19
1 "	20
1 "	21



Make these first and then try to make other Cranes

A Giant Crane

1 of number	1	30 of number	14
2 "	2	2 "	15
6 "	3	12 "	16
5 "	4	46 "	17
1 "	5	4 "	18
2 "	6	2 "	19
4 "	7	1 "	20
4 "	8	1 "	21
2 "	9		
2 "	10		
4 "	11		
1 "	13		



Now build yourself

It is of course impossible to show all the different models which could be built from this single BILDICO set, but from the illustrations of these 30 models you will have already thought of many new and exciting working models that you can make. Try out your own ideas. If you are lucky and can get a second BILDICO you will be amazed at the bigger and better models you can make from your own ideas.

Guarantee—

This BILDICO set has been inspected and tested thoroughly. All metal parts are made from high-grade material and have no sharp edges or corners.

Models that work
BILDICO