Easy Model-Building

Spanner's Special Section for Juniors

Aircraft Carrier and Aeroplane Roundabout

FOR the benefit of new readers, of whom there is usually a large number at this time of the year, it should be mentioned that the models we illustrate and describe in the "Easy Model-Building" Section each month are specially designed to interest those who have only small Outfits or limited experience in the use of Meccano parts. All the models dealt with are described in detail and will be found quite easy to build.

The Aircraft Carrier shown in Fig. 1 can be built from Outfit No. 1. For each side of the hull you will require two 2½″ and two 5½″ Strips, joined together to provide made-up strips 7″ in length. These strips should be bent slightly as shown and connected together by Fishplates held by bolts 1 and by another Fishplate 2. One of the bolts 1 on each side secures also an Angle Bracket, and a Flat Trunnion bolted to the Angle Bracket is used to connect the sides of the hull together.

To make the flight deck bolt together two 5½″×1½″ Flexible Plates and attach them to one side of the hull and to the stern by means of Angle Brackets. Use the bolts that fix the Plates to the Angle Brackets at the stern to support also a Trunnion 3, which fills in the stern of the model. Fix a Flat Trunnion and a 2½″ Stepped Curved Strip to the front ends of the Flexible Plates.

The superstructure is made by bolting two 2½×½″ Double Angle Strips 4 together through their lugs, using one of the bolts to attach them to a ½″ Reversed Angle Bracket 5 fixed to the flight deck. Two Angle Brackets are bolted to the free lug of the Reversed Angle Bracket. To make the support for the mast fix a Fishplate to an Angle Bracket and bolt the assembly to one of the Double Angle Strips 4. Use a 3½″ Rod for the mast, passing it through the Fishplate and a hole in the flight deck, with Spring Clips to hold it in place. For the funnel fix two 1″ Pulleys on a 2″ Rod, pass the Rod through a hole in the flight deck and fasten it in place with a Spring Clip.

A list of the parts required to build this model is given at the end of this article.

You should begin building the fascinating working model Aeroplane Roundabout shown in Figs. 2 and 3 by making the base. All the parts required to build the model will be found in Outfit No. 3. Bolt two 5½″×2½″ and two 2½″×2½″ Flexible Plates to the sides of a 5½″×2½″ Flanged Plate, and connect the lower corners of the Flexible Plates with 2½″×½″ Double Angle Strips.

Fasten four Angle Brackets to the Flanged Plate as shown and use each one to support a 5½″ Strip. You must bolt together the upper ends of the two Strips on each side, and connect them to the Strips on the other side by a Double Bracket 1, using the same bolts to support 2½″ Strips 2. The Strips 2 are braced to the 5½″ Strips by two 2½″ Stepped Curved Strips on each side, and a Double Bracket 3 is bolted between the upper ends of the Strips 2. Take care to arrange the bolts that pass through the Strips 2 with their heads on the inside.

The arms that support the aeroplane are formed by a 12½″ Strip with a Bush Wheel bolted centrally to it. You must fix the Bush Wheel on the upper end of a 4″ Rod

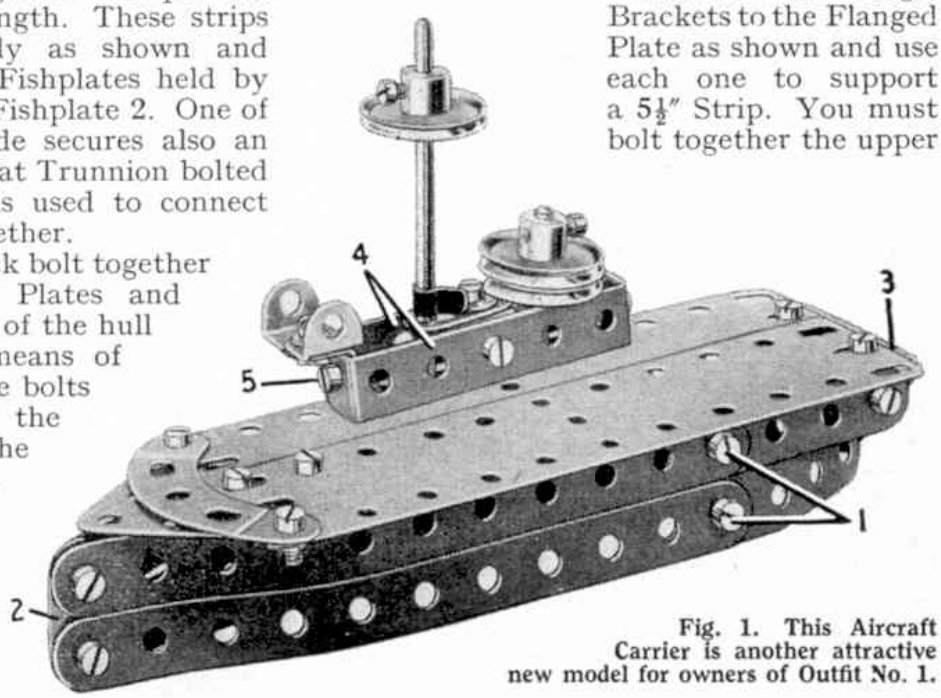

Fig. 1. This Aircraft Carrier is another attractive new model for owners of Outfit No. 1.

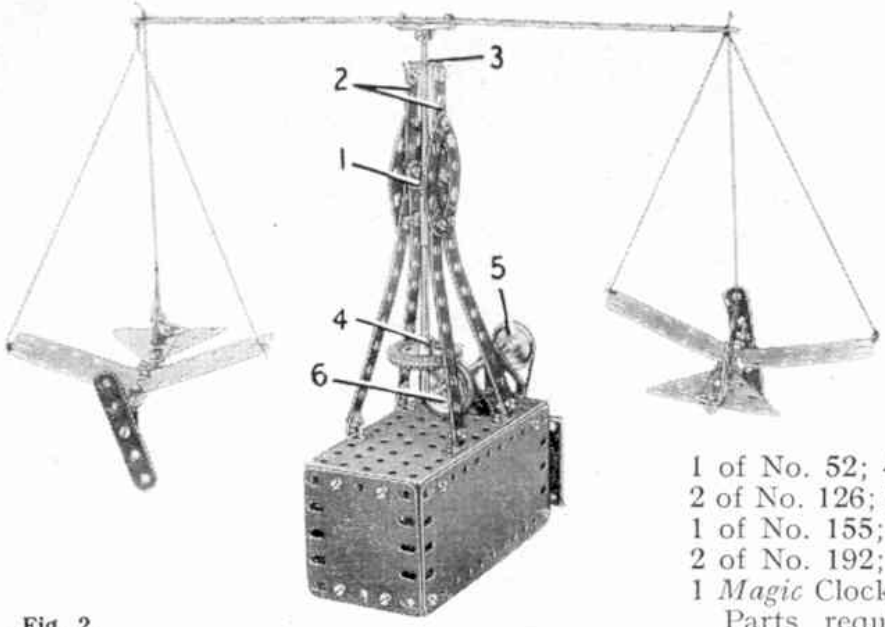

Fig. 2.
A fascinating model Aeroplane Roundabout of the type to be seen in some pleasure fairs. The model can be built from parts in Outfit No. 3.

mounted in the Double Brackets 1 and 3, and extend this Rod with a 3½″ Rod joined to it by a Rod Connector. Fix a 1″ Pulley 4 on the 3½″ Rod and fit it with a Motor Tyre.

If you have a *Magic* Clockwork Motor available you can make good use of it to drive this model. You should bolt the Motor to one end of the base and connect its pulley by a Driving Band to a 1″ Pulley 5 on a 4″ Rod. Mount the Rod in Trunnions bolted to the Flanged Plate and use Spring Clips to hold it in place. To complete the drive fix a 1″ Pulley 6 on the 4″ Rod and fit a Rubber Ring to it. Position the Pulley 6 so that the Tyre on Pulley 4 bears against the Rubber Ring. If you do not own a *Magic* Motor you should replace the 4″ Rod with a Crank Handle, so that you can operate the model by hand.

The fuselage of each aeroplane is a 5½″ Strip and the wings are formed by a 5½″ × 1½″ Flexible Plate bolted to the Strip. For the tail unit use two 2½″ × 1½″ Triangular Flexible Plates bolted to the 5½″ Strip, and a Flat Trunnion attached to an Angle Bracket. To complete each aeroplane lock-nut a 2½″ Strip to an Angle Bracket, and bolt the latter part to the front of the fuselage. The aeroplanes are suspended from the rotating arms by Cord as shown.

You should take care to see that the Driving Band from the Motor pulley to the Pulley 5 is not too tight, otherwise the model may not work satisfactorily. A spot of light machine oil on the bearings of the Motor will help in smooth running.

Parts required to build the Aeroplane Roundabout: 1 of No. 1; 6 of No. 2; 4 of No. 5; 2 of No. 11; 8 of No. 12; 2 of No. 15b; 1 of No. 16; 3 of No. 22; 1 of No. 24; 2 of No. 35; 56 of No. 37a; 50 of No. 37b; 8 of No. 38; 1 of No. 40; 2 of No. 48a; 1 of No. 52; 4 of No. 90a; 4 of No. 111c; 2 of No. 126; 2 of No. 126a; 1 of No. 142c; 1 of No. 155; 2 of No. 189; 2 of No. 190; 2 of No. 192; 1 of No. 213; 4 of No. 221; 1 *Magic* Clockwork Motor.

Parts required to build the Aircraft Carrier: 4 of No. 2; 4 of No. 5; 4 of No. 10; 8 of No. 12; 1 of No. 16; 1 of No. 17; 3 of No. 22; 3 of No. 35; 23 of No. 37a; 21 of No. 37b; 2 of No. 38; 2 of No. 48a; 1 of No. 90a; 2 of No. 111c; 1 of No. 125; 1 of No. 126; 2 of No. 126a; 2 of No. 189.

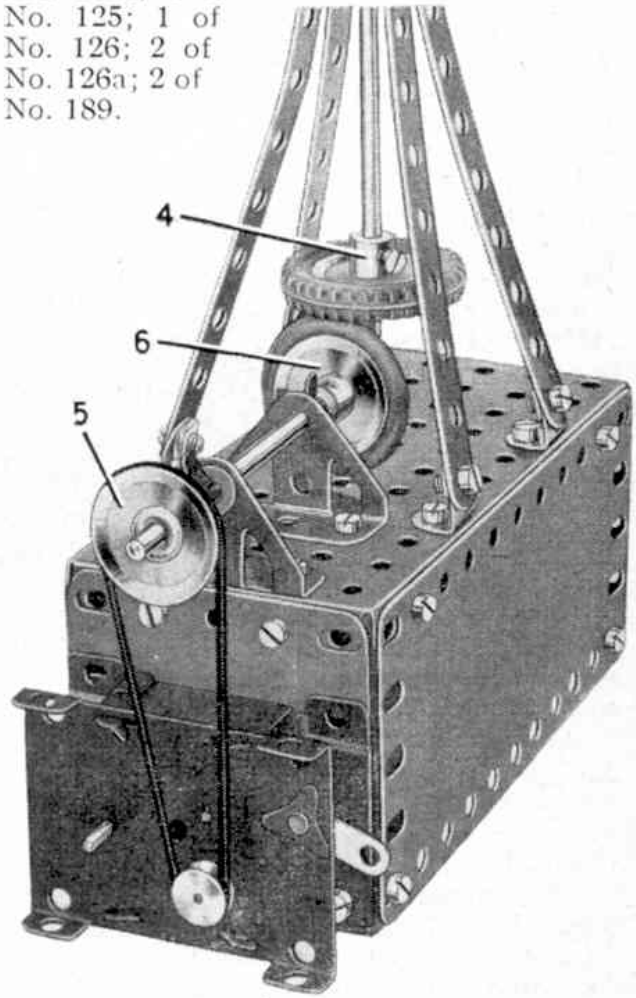

Fig. 3. A close-up of the friction drive arrangement to the centre spindle of the Aeroplane Roundabout.