New Outfit Models

Suggestions for Large and Small Outfits

TONE of the four fine models we are describing this Month requires an Outfit larger than Outfit No. 6 for its construction. They include a neat lathe built with Outfit No. 4, and driven by a Magic Motor, a grabbing crane

constructed from Outfit No. 2, and a horizontal steam engine that can be built from the contents of Outfit No. 3. The fourth model is a fine reproduction of a Westland "Lysander" monoplane. This requires an Outfit No. 6 for its construction.

The model of the Westland "Lysander" aeroplane shown in Fig. 1 is particularly interesting as it demonstrates the value of Flexible Plates in reproducing the

streamlined fuselage of a modern high-performance machine. The aeroplane on which the model is based was illustrated in the "M.M." for January 1937.

It is best to begin construction with the fuselage. Two $5\frac{1}{2}$ " × $2\frac{1}{2}$ " Flexible Plates 2 are first curved as shown and one corner of each is bolted in the seventh hole from one end of

a $12\frac{1}{2}$ " Strip 1. The Plates are extended forward on each side by a $4\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plate, the lower corners of which are bolted to a $5\frac{1}{2}'' \times 2\frac{1}{2}''$ Flexible Plate 3. The forward end of the fuselage, just behind the engine, is completed by bolting a cylinder formed from two $5\frac{1}{2}$ " $\times 1\frac{1}{2}$ " Flexible Plates to the $4\frac{1}{2}$ " $\times 2\frac{1}{2}$ " and $5\frac{1}{2}$ " $\times 2\frac{1}{2}$ " Flexible Plates to the ible Plates. The cylinder is strengthened internally by three Formed Slotted Strips held by Bolt 4. The tail of the fuselage is sloped forward to the rear cockpit with two $1\frac{11}{16}$ " radius Curved Plates, and the sides of the cockpits are edged round as shown.

The engine cowling is made from two $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates bolted together to form a cylinder, and is attached to the fuselage by three 3/8 Bolts, two of which are indicated at 5. Each bolt carries four washers on its shank. The engine is represented by a 3" Pulley and a Road Wheel fastened on a 2" Rod, the Pulley

being held in place by four bolts that engage in its groove. The tail-plane consists of the halves of a Hinged Flat Plate, overlapped three holes and fitted at each end with a

Semi-Circular Plate, 3" Strips being used to give it a tapered outline. The fin is built up in the manner shown, and together with the tail-plane is bolted to Strip 1.

The characteristic shape of the wings of the actual

machine is reproduced as closely as possible in the model. Each wing consists of a $12\frac{1}{2}$ × $2\frac{1}{2}$ Strip Plate strengthened at each edge by a 12½" Strip. The leading and trailing edges each consist of three 51/2" Strips, and are joined at the tip by a 21" Cranked Curved Strip. The trailing edge is supported by a 13" Strip and a $2\frac{1}{2}'' \times \frac{5}{4}''$ Double Angle Strip. The two wings are joined together by

Fig. 1. A model of a Westland "Lysander" monoplane constructed with the parts of Outfit No. 6. The cockpits are fitted with windscreens made from transparent celluloid. overlapping their leading and trailing edges by three holes. They are supported from the front of the fuselage by two $2\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strips, which are joined at their upper ends by a $1\frac{1}{2}'' \times \frac{1}{2}''$ Double Angle Strip. Their trailing edges are connected to the fuselage by 21" Strips.

Parts required to build the model Westland "Lysander": 5 of No. 1; 12 of No. 2; 3 of No. 10; 2 of No. 4; 9 of No. 5; 2 of No. 6a; 2 of No. 10; 2 of No. 11; 9 of No. 12; 2 of No. 12a; 3 of No. 12c; 2 of No. 15; 1 of No. 15b; 4 of No. 16; 1 of No. 17; 3 of No. 18b; 1 of No. 18b; 2 of No. 22; 1 of No. 23; 1 of No. 23a; 1 of No. 24; 2 of No. 35; 102 of No. 40; 1 of No. 44; 1 of No. 48; 6 of No. 48; 2 of No. 40; 1 of No. 14b; 1 of No. 11b; 5 of No. 11b; 2 of No. 155a; 1 of No. 18b; 1 of No. 11b; 2 of No. 155a; 1 of No. 18b; 2 of No. 18b; 4 of No. 189; 1 of No. 190; 2 of No. 199; 2 of No. 200; 2 of No. 217; 1 of No. 199; 2 of No. 214; 4 of No. 215; 4 of No. 217a.

Fig. 2. This simple swivelling grabbing crane is a good example of a working model that can be built from the contents of Outfit No. 2.

The second model to be described is the miniature grabbing crane shown in Fig. 2. The base of this consists of a $5\frac{1}{3}'' \times 2\frac{1}{3}''$ Flanged Plate 1, which is mounted on 1" Pulleys fitted with Rubber Rings. The superstructure is built by bolting two $5\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates side by side, and then fixing two Double Angle Strips to them. One of the Double

Angle Strips provides support for the jib, and the other carries the $2\frac{1}{2}$ × $2\frac{1}{2}$ Flexible Plates that form the sides of the cab. These Plates are further supported at the rear by Angle Brackets, and similar parts are used to hold the back of the cab in position. The roof is a 1 11 radius Curved Plate, and is attached to the sides of the cab by Angle Brackets.

The Crank Handle is journalled in two $2\frac{1}{2}'' \times 1\frac{1}{2}''$ Flexible Plates supported from the floor by Trunnions. The Bolts