

The roof is constructed as shown in Fig. 1. It consists of  $12\frac{1}{2}'' \times 2\frac{1}{2}''$  Strip Plates extended by Flexible Plates of various sizes, the whole being strengthened with Angle Girders. This assembly is extended at each side by  $12\frac{1}{2}''$  Strips and Angle Girders bolted to Formed Slotted Strips, and is then fixed to the window sashes of the upper deck.

Parts required to build the model Omnibus: 4 of No. 1; 18 of No. 2; 6 of No. 3; 2 of No. 4; 11 of No. 5; 3 of No. 6a; 8 of No. 8; 7 of No. 10; 1 of No. 11; 12 of No. 12; 2 of No. 12c; 1 of No. 13; 1 of No. 14; 1 of No. 15; 1 of No. 15a; 1 of No. 16; 2 of No. 20a; 1 of No. 20b; 1 of No. 22; 1 of No. 23; 1 of No. 23a; 1 of No. 24; 1 of No. 26; 1 of No. 32; 4 of No. 35; 150 of No. 37; 10 of No. 37a; 24 of No. 38; 1 of No. 45; 1 of No. 46; 2 of No. 48; 7 of No. 48a; 2 of No. 48b; 2 of No. 51; 1 of No. 52; 3 of No. 53; 2 of No. 54a; 4 of No. 59; 2 of No. 90; 4 of No. 90a; 2 of No. 111; 2 of No. 111a; 6 of No. 111c; 1 of No. 125; 2 of No. 126; 1 of No. 126a; 2 of No. 142a; 1 of No. 147b; 1 of No. 186; 4 of No. 187; 4 of No. 188; 5 of No. 189; 6 of No. 190; 2 of No. 191; 4 of No. 192; 2 of No. 193; 2 of No. 195; 2 of No. 197; 1 of No. 198; 1 of No. 199; 2 of No. 200; 1 of No. 214; 8 of No. 215; 2 of No. 217a; 2 of No. 217b; 1 E120 Electric Motor.

The simple model scales shown in Fig. 3 will indicate the weight of light articles placed on the pan, by the movement of an arm across a graduated scale. The model is constructed by attaching two Trunnions to a  $5\frac{1}{2}'' \times 3\frac{1}{2}''$  Flanged Plate that forms the base. Two  $5\frac{1}{2}''$  Strips are fixed to the Trunnions, and their end holes provide bearings for a 2" Rod, to which is attached a beam formed from two  $5\frac{1}{2}''$  Strips. These are mounted on the Rod between two 1" Pulleys, and the scale pan, consisting of two Trunnions bolted together to form a square, is suspended from their right-hand ends by lengths of Cord.

Two  $2\frac{1}{2}'' \times \frac{1}{2}''$  Double Angle Strips, lengthened by two  $2\frac{1}{2}''$  Strips and Flat

Brackets, are bolted to the other end of the beam. A  $\frac{3}{8}''$  Bolt fixed to the lower ends of the Double Angle Strips provides a pointer for the scale. The latter consists of a piece of paper gummed to one of two  $2\frac{1}{2}''$  Cranked Curved Strips, which are attached to the base by two  $\frac{1}{2}'' \times \frac{1}{2}''$  Angle Brackets and spaced at their outer ends by a  $\frac{3}{8}''$  Bolt and nuts. The scale is calibrated by placing small articles of

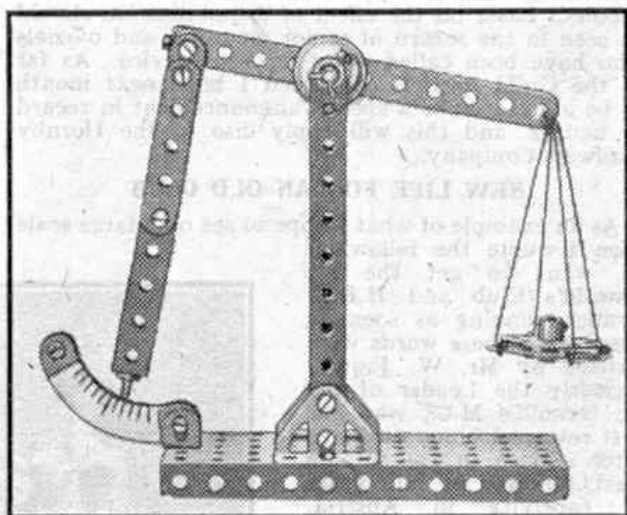


Fig. 3. These simple scales can be used to weigh light articles.

known weight on the pan and then marking the position taken up by the pointer for each weight.

If it is desired to weigh heavier articles, a few Strips or a 50 Gramme Weight should be bolted to the lower ends of the Double Angle Strips.

Parts required to build model Scales: 4 of No. 2; 2 of No. 5; 4 of No. 10; 4 of No. 12; 1 of No. 17; 8 of No. 22; 4 of No. 35; 22 of No. 37a; 18 of No. 37b; 2 of No. 38; 2 of No. 48a; 1 of No. 52; 2 of No. 90a; 2 of No. 111c; 2 of No. 126; 2 of No. 126a.

## Prizes for Model-Builders

In the September "M.M." we announced details of an important model-building contest for which Meccano models of any type or size may be submitted. This competition is still open and therefore we are repeating the main details governing entries for the benefit of readers who did not see the original announcement.

Models of any kind, large and small, are suitable for entry in the Contest. The model itself is not required, all that should be sent being a photograph or drawing, with any notes required to explain special constructional features. Each photograph or drawing must bear the competitor's name, address and age, and the entry should be forwarded to "Autumn Model-

*Building Contest, Meccano Limited, Binns Road, Liverpool 13.*"

Entries will be divided into two sections, A for competitors of all ages living in the British Isles, B, for competitors of all ages living Overseas. Section A will close on 31st October, but Section B will remain open for entries until 31st December.

The following prizes will be awarded in each Section of the Contest to the builders of the most interesting models received: First, £2/2/-. Second and Third Prizes will consist respectively of £1/1/- and 10/6. There will be also five further prizes of 5/-.

All prize-winners will be notified as soon as possible after the closing date.