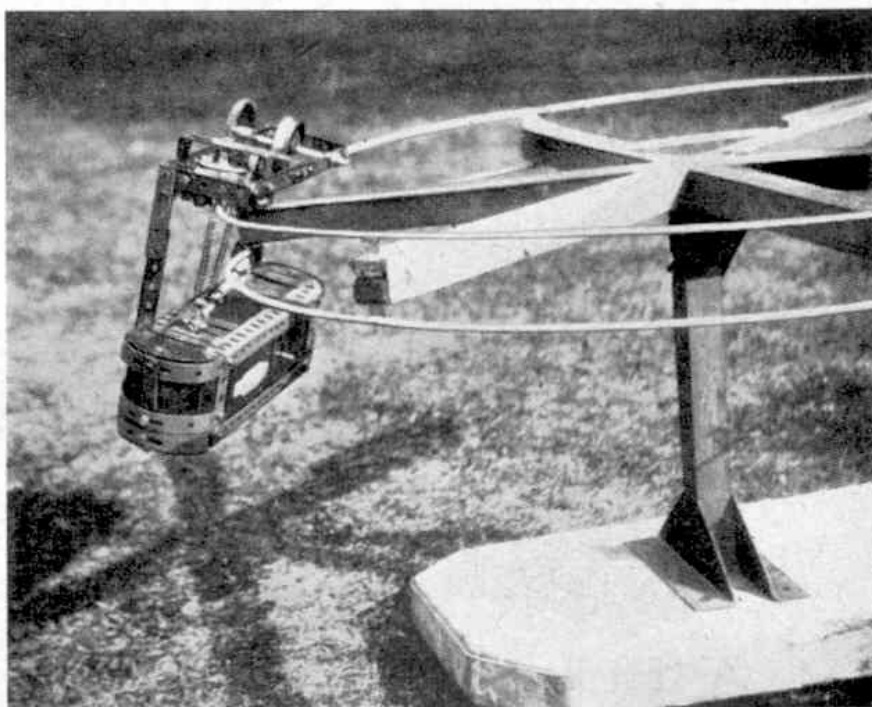


Among the Model- Builders

By "Spanner"

A Monorail Car System

From Mr. A. K. M. Bristow, Sutton Valence, I have received photographs of a model mono-railway that, in conjunction with a school-friend, T. O. R. Shaw, he built and exhibited at the Sutton Valence School Speech Day last year. Part of the mono-railway is seen in the illustration at the top of this page, where the car is shown rounding the bend at one end of the track. The car is powered by an E20R(S) Electric Motor, which drives the single driving wheel, and a rotating single front wheel, the only other means of support, is used to guide the car around the sharp curves of the track. The car is 10½ in. long, and attains a speed of over 3 ft. per sec. The track is made of galvanised iron wire and is supported by wooden supports, with a copper pick-up wire to complete the electrical circuit.



Part of an attractive Mono-railway built by Messrs. A. K. M. Bristow and T. O. R. Shaw, Sutton Valence.

Bearing for Small Cranes

One of the many different ways in which ball bearings can be built for use in model cranes is shown in Fig. 1. In this example, the lower 3" Pulley 1 is fixed to the top of the tower or in the case of a mobile crane the chassis of the model, and this in the illustration is represented by the Flanged Plate. The same bolts fix also a Wheel Flange, not shown in the picture. The Wheel Flange is placed centrally on top of the Pulley. Then ⅜" Balls are placed in the space between the flange of the Wheel Flange and the rim of the Pulley 1. A Rod is gripped in the boss of the fixed Pulley and on it a second 3" Pulley 2 is mounted. This latter part, which is used to support the cab, is held in place by a Collar fixed above it on the Rod.

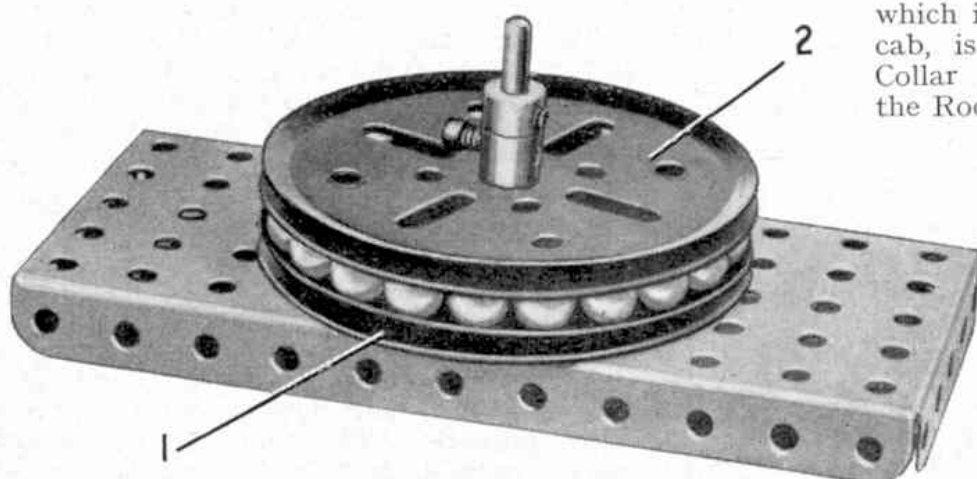


Fig. 1. A small bearing of a type that can be used to support the swivelling cab of a crane, or other similar structure.

Safety Device for Cranes

In actual practice most cranes are fitted with devices to warn the driver when the load being lifted exceeds that for which the crane is designed. The safe load for a jib crane varies with