

Among the Model-Builders

By "Spanner"

A Simple Flexible Coupling

Mr. J. F. Sharp, Huddersfield, contributes a suggestion for a simple flexible coupling unit for joining two shafts that should be of interest to advanced model builders. His idea is shown in the device illustrated in Fig. 1.

Two $\frac{1}{2}$ " \times $\frac{1}{2}$ " Angle Brackets 1 are bolted through their slotted holes by Bolts 2, each carrying two Washers, to a Gear Wheel 3 on the driving shaft.

A 1" diam. Rubber Ring 4 is squeezed in and located between Bolts 2 and the Angle Brackets 1 by means of nuts and bolts 5. This forms the flexible link. A Bush Wheel 6 on the driven shaft is fitted with two $\frac{1}{2}$ " Bolts 7, each Bolt carrying a loose Washer 8.

The Rubber Ring is looped around these Bolts so that the driven shaft is flexibly connected to the driving shaft.

Mr. Sharp used this device in connection

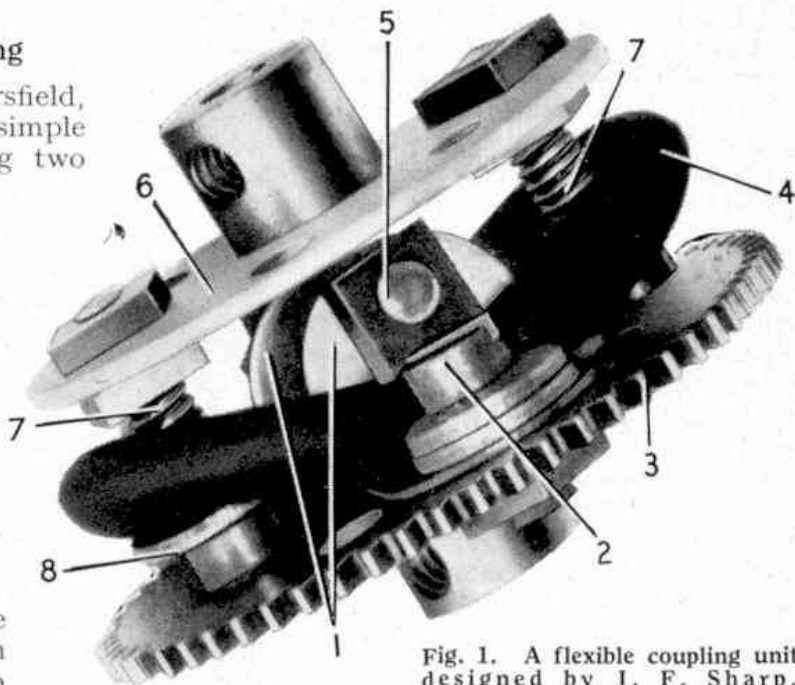


Fig. 1. A flexible coupling unit designed by J. F. Sharp, Huddersfield.

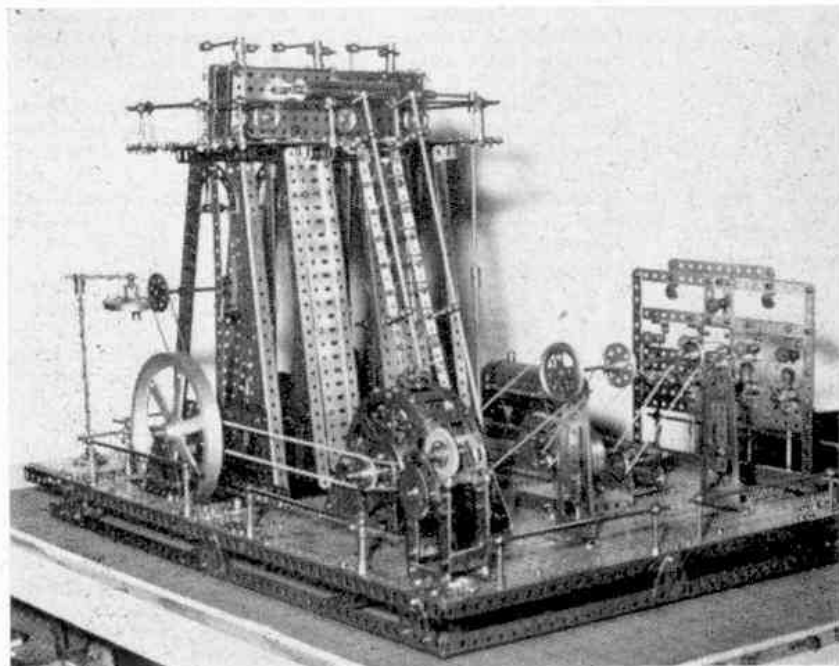
with a very ingenious automatic transmission mechanism that will be illustrated and described in these pages in due course.

Novel "Step-up" or "Step-down" Driving Gear

With the novel arrangement shown in Fig. 2 it is possible to obtain a "step-up" or "step-down" driving ratio of exactly 1 : 2 or 2 : 1. It is a version of a mechanism that was submitted by T. V. Vollenhoven, Eindhoven, Holland, as an entry for the "Meccano Mechanisms" Competition organised in the *Meccano Magazine* last year.

The mechanism is very simple to build but quite tricky to adjust correctly, and its construction should provide an interesting hour or so for those with the parts available to assemble it.

The general construction of the mechanism is shown quite well in the illustration



This is an attractive model of a special type of water pumping plant designed for raising excess water and discharging into irrigation canals. The model was built by Geom. Pietro Borsetto, Piove di Sacco, Padova, Italy.