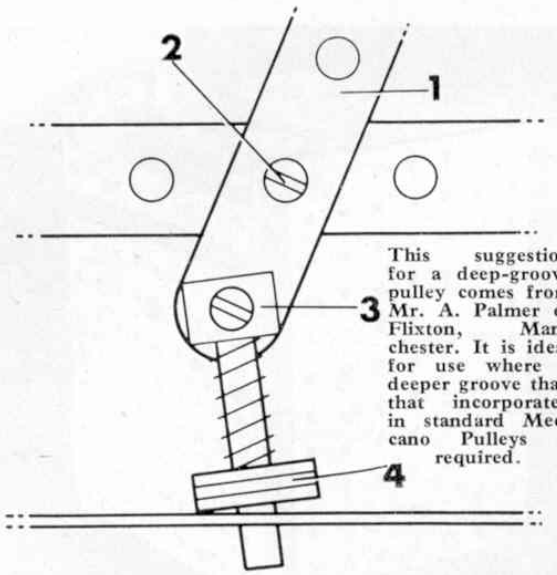


This suggestion for a deep-groove pulley comes from Mr. A. Palmer of Flixton, Manchester. It is ideal for use where a deeper groove than that incorporated in standard Meccano Pulleys is required.

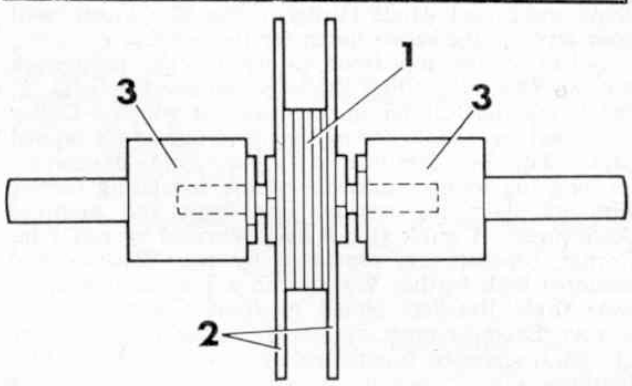
a Compression Spring followed by three Washers 4, after which the Rod is inserted into a hole in a Strip or other suitable part that is fixed in relation to the above-mentioned mounting.

Using the method described the lever has only two steady positions—one way or the other—but the sprung action of the Rod certainly holds the lever firmly in the chosen position. Incidentally, Mr. Atkinson explains in a footnote that "This arrangement gives movement of about 1 in. at the second hole above the pivot point (of Strip 1)—enough for most gear changes! It follows, of course, that the linkage actuating the gear-change would be coupled to this hole.

Deep-groove pulley

We come now to an item supplied by Mr. A. Palmer of Flixton, Manchester. Regular builders, especially of advanced models, will have found that there are occasions when standard Meccano Pulleys are inadequate, because the depth of the groove is not sufficient for the job on hand. Mr. Palmer has devised a built-up deep-groove pulley, illustrated in Fig. 4, to overcome the problem. Depending on the width required, five or more $\frac{3}{4}$ in. Washers 1 are trapped between two 6 or 8-hole Wheel Discs 2 held by Nuts in the centre of a 1 in. Screwed Rod. An Adaptor for Screwed Rod 3 (Part No. 173a) is mounted on each end of the Rod, being locked in positions by a Nut—that's all!

PARTS REQUIRED		
2—24a	5—38d	2—173a
4—37a	1—82	

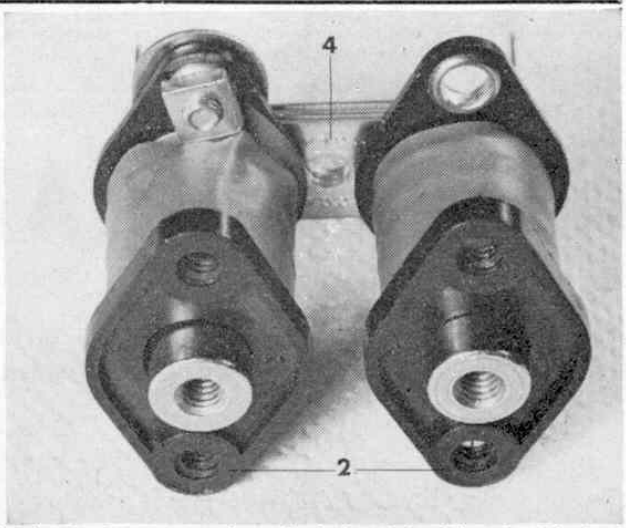


Electromagnetic grab

Turning from mechanics to electrics, we have a compact electromagnetic grab (Fig. 5) designed by Timothy Ward of Horfield, Bristol. It is intended, he tells me, "for use with smaller cranes where a pulley block is either unnecessary or too difficult to fit in." Mr. Ward is quite correct as far as he goes, but I would like to go even further and say that the grab would make a first-class and perhaps more interesting substitute for a hook even in cranes where hooks would normally be fitted.

To build the grab, two Fishplates 1 are bolted one each to the S terminals of two Cylindrical Coils 2. Fixed to the top of the Fishplates by $\frac{3}{4}$ in. Bolts are a $1\frac{1}{2} \times \frac{1}{2}$ in. Double Angle Strip 3 and three $1\frac{1}{2}$ in. Strips 4, while the same Bolts fix three Washers and a 1 in. Core below each Fishplate. The hoist Cord of the model is tied to the lugs of Double Angle Strip 3 while the leads from the power-source are connected to the terminals of the Coils. The grab can be operated from a power source of anywhere between $4\frac{1}{2}$ and 15 volts A.C. or D.C.

PARTS REQUIRED		
3—6a	2—37b	2—111
2—10	6—38	2—522
2—37a	1—48	2—528



A simple electromagnetic grab designed by Timothy Ward of Horfield, Bristol for use with small crane models. It uses two Cylindrical Coils from the Elektrikit for the electro-magnets.