

(143)—Syphon Wick Lubricator

(Philip E. Moston, Wolverhampton)

In model building, as in real engineering practice, the lubrication of bearings, etc., is a very important matter if wear and tear is to be reduced to an absolute minimum and a machine made to operate by the least possible expenditure of power. A means whereby a constant supply of oil may be delivered to the working parts of a model is much to be preferred to the occasional use of an oil can. In practice there are many systems of lubrication in use, but perhaps the simplest and most adaptable to Meccano models is the "syphon wick" system, in which the oil flows to the bearings along "wicks" or "worsted."

Fig. 143 shows lubricators of this type applied to a two-bearing crankshaft. The illustration clearly indicates the general layout of the system and it should enable any reader to instal a complete lubrication system in a model.

The crankshaft is journalled in Double Arm Cranks bolted to Flat Trunnions that, in turn, are bolted to $2\frac{1}{2}$ " Triangular Plates. A second Double Arm Crank 1 is secured at right angles by means of $\frac{1}{2} \times \frac{1}{2}$ " Angle Brackets to each of the first-mentioned Cranks. A Chimney Adaptor 2, attached to one end of the Double Arm Crank 1, forms a neat oil cup. A length of worsted should now be threaded through a length of Spring Cord 3 and its upper end dipped into the oil cup and the lower end inserted in the set-screw hole of the Double Arm Crank that forms the bearing of the crankshaft. The Spring Cord, besides forming a

convenient means to lead the oil-conveying worsted wherever it is needed, gives a neat appearance to the whole system (in the example illustrated it is held in position by the set-screw of the Crank 1).

It should be noted that the device will only function satisfactorily when the oil cup is above the level of, and not below, the parts requiring lubrication. The great advantage of the device is that it will supply oil to the working parts of a model

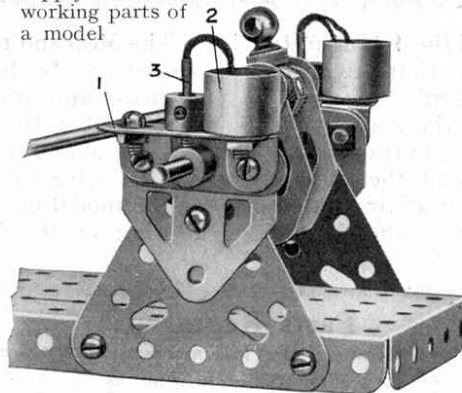


Fig. 143

continuously until the oil in the cups is exhausted. The amount of oil delivered is regulated by varying the number of strands of worsted; for example, two strands will supply oil at a greater rate than one.

(144)—Weight-lifting Device

(Seavax Framoze Desai, Navsari, India)

The interesting device shown in Fig. 144 represents a lift employed in up-to-date garages for hoisting cars a few feet from the floor, thus enabling the mechanics to make adjustments to the chassis without lying on their backs in all sorts of uncomfortable positions underneath the car.

Four $5\frac{1}{2}$ " Strips 1 are attached pivotally by lock-nutted bolts to the two $12\frac{1}{2}$ " Angle Girders that form the base and also to the carrier 2, which receives the car. The carrier is built up from two pairs of $12\frac{1}{2}$ " Angle Girders spaced apart by $2\frac{1}{2}$ " Strips.

The Crank Handle 3 carries a $\frac{1}{2}$ " Pinion that meshes with a 57-teeth Gear Wheel on the Rod 4, and a length of cord, wound on the latter, is attached to the end of the carrier, so that by turning the handle the carrier may be raised or lowered.

An effective brake for the Rod 4 is provided by a Coupling 6, in one of the end lateral bores of which the Rod runs freely. The Coupling is secured to the upright Strip by means of a $\frac{3}{8}$ " Bolt, which passes through a hole in the Strip and thence into the upper lateral bore of the Coupling. A Threaded Pin, with a 1" fast Pulley 7 attached, is inserted in the lower tapped hole of the Coupling so that when the Pulley is turned in the requisite direction the end of the Threaded Pin nips the Rod 4.

In order to return the carrier to the normal position a length of Spring Cord is attached to one end of the base and to a 3" Rod carried by the $5\frac{1}{2}$ " Strips 5; these latter Strips are attached pivotally by lock-nutted bolts to the Strips 1.

The parallel lifting mechanism employed in this model is of particular interest, for it may be used in many other models. Its principle is well illustrated by the parallel rule—a familiar instrument to those who are interested in mechanical drawing.

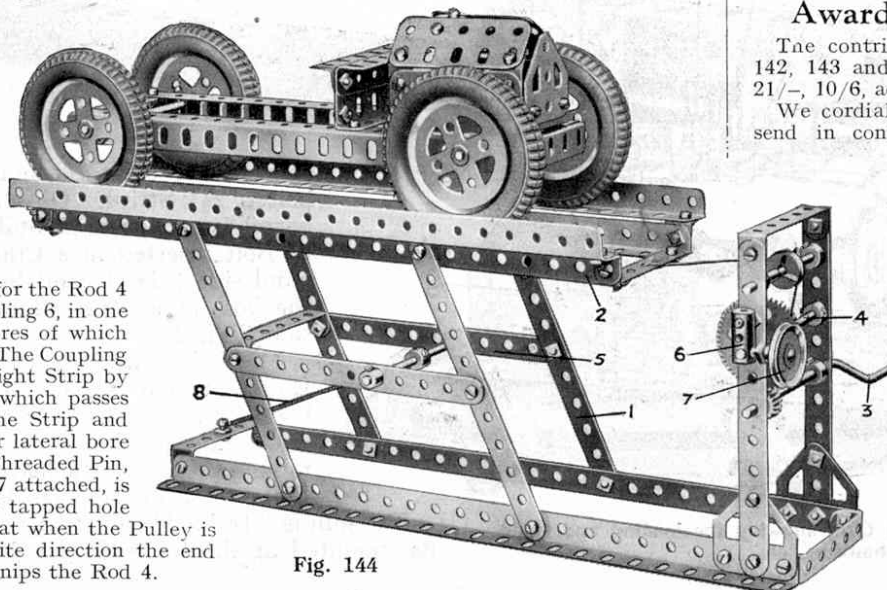


Fig. 144

SUGGESTIONS VOTING COMPETITION

Which Were the Best?

"M.M." readers can have little idea of the difficulties that beset "Spanner's" task of choosing three or four contributions for publication in the "Suggestions Section" each month. Some of the numerous ideas that pour in every day are so good that it is impossible to decide which should receive the greater prominence. Therefore, to help him in his future selections, and in order to ascertain whether Meccano boys have made really good use of those suggestions that have been published during the past year, the Suggestions Voting Competition is announced.

Competitors are asked to write down the four suggestions that they consider the best published during the twelve months January-December, 1928. It is only necessary for the voter to write on a post card the numbers of the four suggestions, in their order of merit. There are thirty-seven suggestions concerned in the Competition, for the first suggestion in the January, 1928, "M.M." was No. 108.

Entries will be divided into two Sections, Section A for competitors residing in the British Isles, and Section B for competitors residing Overseas.

Every vote received in Section A will be recorded so that the suggestions may be classified in their order of popularity. The voter whose entry is then found to coincide most nearly with the result so obtained will be presented with a cheque for one guinea, while the voter who is next nearest to the general consensus of opinion will be awarded a cheque for half a guinea. Twelve other voters who are "runners-up" will receive consolation prizes.

The same method will be adopted with the entries in Section B, and a duplicate set of prizes will be awarded to successful overseas boys.

A contributor who sent in a suggestion that is voted best in one of the Sections will receive a cheque for half-a-guinea and the three contributors whose suggestions are voted to be the next best in order will receive special Certificates of Merit. Post cards must be addressed to "Suggestions Voting" Competition, Meccano Ltd., Binns Road, Liverpool. The closing date for Section A is 31st January, 1929, and for Section B, 30th March, 1929.

Awards for Suggestions

The contributors of Suggestions Nos. 142, 143 and 144 will receive cheques for 21/-, 10/6, and 7/6 respectively.

We cordially invite all Meccano boys to send in contributions for this section.

Envelopes should be addressed to "Spanner," c/o Meccano Ltd., Old Swan, Liverpool.

Correction

In connection with Suggestion No. M.27 in the October, 1928, "Suggestions Section," we regret that we omitted to mention D. Clark, of Bedford, who worked in conjunction with J. Anderson in devising a Bowden Wire brake control with the aid of Meccano Spring Cord. These two competitors, together with B. Adams, will receive special awards for their work.