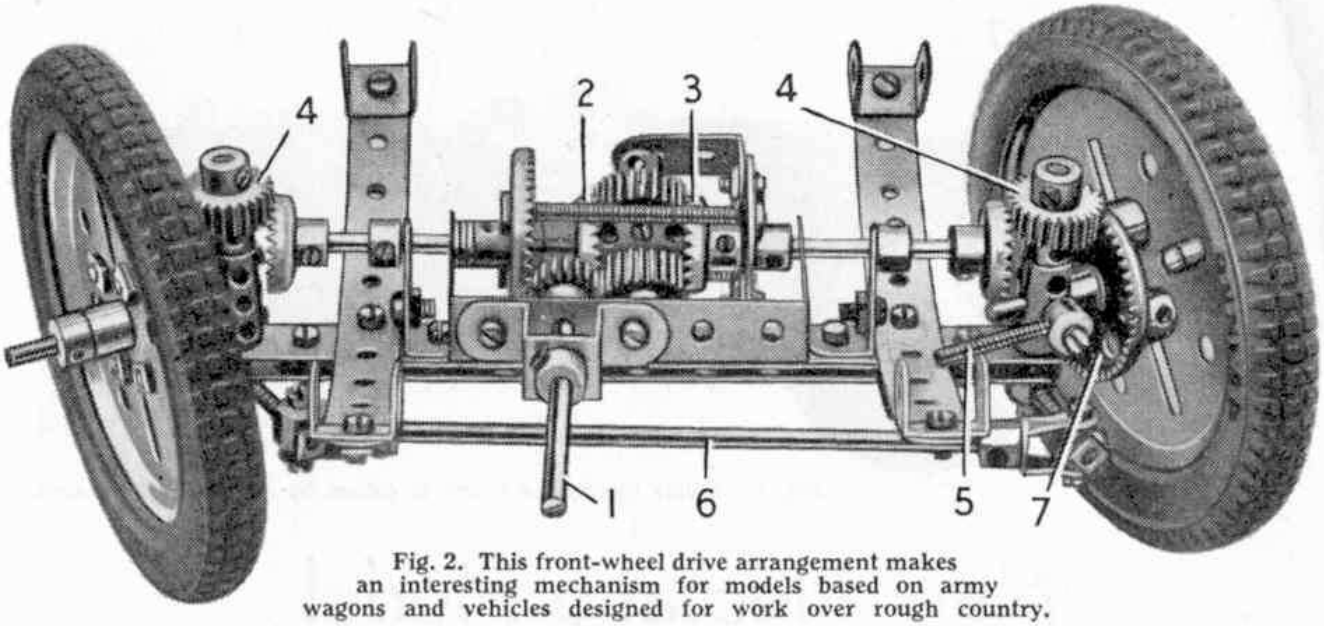

Fig. 2. This front-wheel drive arrangement makes an interesting mechanism for models based on army wagons and vehicles designed for work over rough country.

lower Rod is supported in the end holes of the front axle and is also kept in position by a Collar. A 1½″ Contrate 7, spaced from each road wheel by Collars on ½″ Bolts, is driven by the Pinion 4. A 1″ Screwed Rod threaded into the Collar on each of the lower 1″ Rods is provided with a Swivel Bearing. The Swivel Bearings are connected by a Rod 6. Another 1″ Screwed Rod 5 is fixed in a Collar attached by a ⅜″ Bolt to one of the Couplings. This Screwed Rod is connected by suitable links to the steering gear.

The driving shaft to the differential is a Rod 1 supported in a Double Bent Strip and a 2½″ × 1″ Double Angle Strip. A ½″ Pinion on Rod 1 drives a 1½″ Contrate that is connected to a Bush Wheel by 2″ Screwed Rods. Two 1″ × ½″ Angle Brackets are bolted to the Bush Wheel, and in them is mounted a 1½″ Rod fitted at its centre with a Coupling. Two ¾″ Pinions are free to turn on the 1½″ Rod.

The differential half shafts are supported in 1″ × ½″ Angle Brackets bolted to the front axle, and are passed through the 1½″ Contrate and the Bush Wheel into the centre Coupling of the differential. The ¾″ Contrates 2 and 3 on the half shafts are meshed with the ¾″ Pinions.

A ¾″ Contrate fixed to the outer end of each half shaft is arranged so that it drives one of the Pinions 4.

Non-Slip Built-Up Pulley

Master J. Basham, Romford, tells me that he has found the simple built-up pulley shown in Fig. 3 useful for operating the traversing Cord of simple hammerhead cranes as it prevents cord slip. The pulley is very simple and consists of two 1″ fixed Pulleys fitted with Motor Tyres and pressed tightly one on each side of a 1″ loose Pulley fitted with a Rubber Ring.

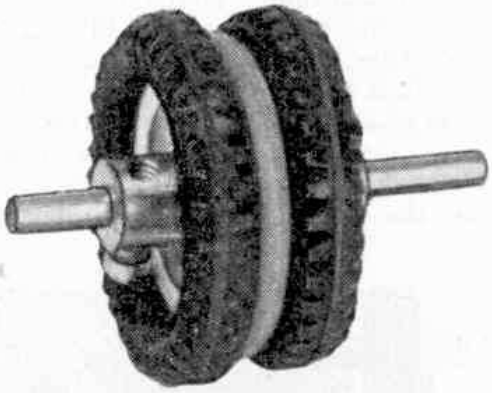

Fig. 3. Master J. Basham, Romford, is the designer of this non-slip pulley arrangement for operating the traversing Cords of model cranes.

"SIMPLICITY" MODEL-BUILDING CONTEST

Here is a contest in which owners of even the smallest Meccano Outfits can compete on level terms with those more fortunate possessors of the largest sets, and we hope that every Meccano boy who reads this announcement will decide to send in an entry. Prizes will be awarded to model-builders who succeed in constructing the most ingenious and realistic models from the *smallest number of parts*. A competitor may choose any subject he likes for his model, and the more unusual and interesting this is the better the chance of winning a prize, provided that the model is kept quite simple.

When the model is completed the competitor should obtain either a photograph or a good drawing of it. He should then write his age, name and address on the back of the illustration and send it to "*Simplicity Model-Building Contest, Meccano Ltd., Binns Road, Liverpool 13.*" The actual model must not be sent.

The competition will be divided into two Sections: A, for readers under 14 years of age, and B, for readers over 14 years of age. The closing date is July 31st next.

The Prizes to be awarded in each Section are as follows. First, Cheque for £3/3/–. Second, Cheque for £2/2/–. Third, Cheque for £1/1/–. There will be also Ten Prizes each of 10/– and Ten Prizes each of 5/–.