

# A Grand New £200 Prize Contest

## First Prize £50 in Cash

MORE THAN 150 PRIZES IN CASH AND MECCANO OUTFITS, Etc.

The 1916-17 Meccano Prize Competition has now come to a close, and has proved a tremendous success, more than 25 per cent. more Meccano boys having taken part in it than in any previous competition. The interest which boys take in these contests is enormous, and we are immediately commencing another one, on the same lines as the last. Prizes in cash and in outfits to the value of over £200 will be awarded, and this time we have decided to increase the prizes by making an award to the inventor of every model which the judges consider will be interesting to other Meccano users. So get to work at once, boys, and send in photos or drawings of that new model which you have taken so much pleasure in inventing, and building, and playing with. If the prizes total £500 in value we shall be all the more pleased. Get an entry form from your dealer, or send to us for one.

There are no restrictions or entrance fees; any Meccano boy can compete, and you are just as likely to win a prize with a No. 0 outfit as with a No. 6. This competition will close on March 1st, 1918.

### A New Meccano Scientific Competition

The Meccano system of interchangeable standard parts besides being an admirable system of mechanical toy construction also lends itself to the construction of many models for use in demonstrating scientific principles. The models at present used for this purpose are very expensive and, further, a full set of models would only comprise a single-unit model for demonstrating each particular principle. As a consequence, it is usual in science classes to have the class split up into pairs of students, each pair on a different piece of apparatus. This necessarily reduces the efficiency of the teaching, inasmuch as the teacher has to distribute his attention over many different and separate lessons taking place all within the one class. Anything like collective laboratory teaching is therefore out of the question. With the same standard interchangeable Meccano parts, very many pieces of apparatus suitable for demonstrating different principles may be constructed, and, therefore, with a good outfit of Meccano parts a class may be provided with a number of identical scientific apparatus models all made for demonstrating the one feature, and, further, these models by being built up by the students themselves develop the constructional capacity of the student, and then, after such models have been utilised for a particular demonstration, the apparatus may be dismantled and the same parts used to rebuild other apparatus for demonstrating other features. Collective teaching is thus quite possible.

The Meccano parts being made of metal and accurately to gauge, respond quite readily to the construction of even the most sensitive apparatus.

With a view to developing this side of the Meccano business, we are organising a Prize Competition for models particularly directed to this application of Meccano. We feel convinced that there are many bright Meccano boys who are students in technical and other classes and to whom this aspect of Meccano will readily appeal. We invite our scientific young friends to enter for this competition. Prizes will be awarded for the best models suitable for scientific demonstration, and also for suggestions of suitable parts not already in the Meccano outfits which would be helpful in building such scientific models. Competitors will, of course, remember that the cardinal rule making for success in this competition will be simplicity in the construction of the model, any over-elaboration in construction in a model designed to demonstrate scientific principles being, of course, quite out of place. The rules governing our ordinary competition will also obtain in this case, the decision of the Meccano scientific experts being final. Competitors should send clear sketches, or photographs of their models, together with any experimental data arrived at in using the apparatus.

We offer the following list of suggestions for model apparatus as being typical of the kind to which competitors should direct their attention. The list is not to be taken as exclusive, but is offered merely by way of example:—

- Model showing construction of braced girder work.
- Model of quick return motion for a lathe or slotting machine.
- Model of crank and connecting rod.
- Apparatus illustrating the principle of a centrifugal governor.
- Model of Hooke's or universal coupling for driving shafts not in line.
- Apparatus illustrating the orders of pulleys.
- Apparatus for determining the efficiency of pulley systems.
- Model of wheel and axle.
- Apparatus for showing the efficiency of spur gear trains and worm wheel drives.

- Apparatus for illustrating the principles of the lever.
- The triangle of forces.
- Apparatus for showing the thrust and tension in the jib and tie rod of a crane.
- Apparatus for determining the stress in a roof truss and for determining the forces acting at the cross-head of an engine.
- Apparatus for demonstrating the principles of the inclined plane.

The prizes will be as follows:—

1st Prize .. One No. 5 Meccano outfit in wood cabinet.

2nd Prize .. One No. 4 Meccano outfit.

3rd Prize .. One No. 3 Meccano outfit.

There will be additional prizes consisting of No. 1 and No. 2 outfits, &c. Entries must reach us by December 31st, 1917, and must be marked "Scientific Competition." No entry form is necessary. There are no entry fees, or restrictions of any kind in this competition.

### The New Meccano Manual of Instructions



Have you secured your copy of this fine new Manual yet? No Meccano boy should be without it. It means happy evenings the entire winter through. If you were to commence now to make the 326 fine models which it contains, it would take you years to get through them. It establishes the superiority of Meccano once and for all, and it puts every other toy in the shade. It contains a large number of prize-winning models in the last two Meccano competitions, the work of boys, who have shown most extraordinary genius. It trebles the value of any outfit purchased last year or earlier. Get your copy at once from your regular dealer, or from us if you have any difficulty. Price 1s. 3d. or 1s. 6d. post free.

### INSIST ON MECCANO

Meccano is a system of parts, each one representing a correct engineering element, such as would be used by skilled engineers in actual work. There are no parts like them; they are patented and cannot be imitated, and without them you cannot build correctly.

WARNING.—To be genuine your outfit must bear the trade mark "Meccano." If it does not, you will get a worthless imitation and will be disappointed.

### How to get the Meccano Magazine Regularly

Under the new Government regulations we are unable to send the "Meccano Magazine" to any one except those who directly apply to us for it. If, therefore, you wish to become a reader of the M.M. it will be necessary for you to forward to us a request for it to be sent to you regularly, accompanied by 2d. in stamps for postage on the next four issues.



A splendid model; stands about 6 feet high. Can be fitted with lifts, operated by the Meccano Electric Motor.

### The Meccano Eiffel Tower

#### It Can Be Done

Somebody said that it couldn't be done; But he, with a chuckle, replied— That "maybe it couldn't," but he would be one Who wouldn't say so till he'd tried. So he buckled right in with a trace of a grin On his face. If he worried, he hid it. He started to sing as he tackled the thing That couldn't be done, and he did it.

Somebody scoffed: "Oh, you'll never do that— At least, no one ever has done it." But he took off his coat and he took off his hat, And the first thing he knew he'd begun it. With the lift of his chin and a bit of a grin, If any doubt rose he forbid it; He started to sing as he tackled the thing That couldn't be done, and he did it.

There are thousands to tell you it cannot be done, There are thousands to prophesy failure; There are thousands to point out to you one by one The dangers that wait to assail you. But just buckle right in with a bit of a grin, Then take off your coat and go to it; Just start in to sing as you tackle the thing That cannot be done, and you'll do it.

#### GIVING HIM A PLAYMATE.

Aunt: Tommy! How cruel! Why did you cut the poor worm in two?

Tommy: He seemed so lonely.