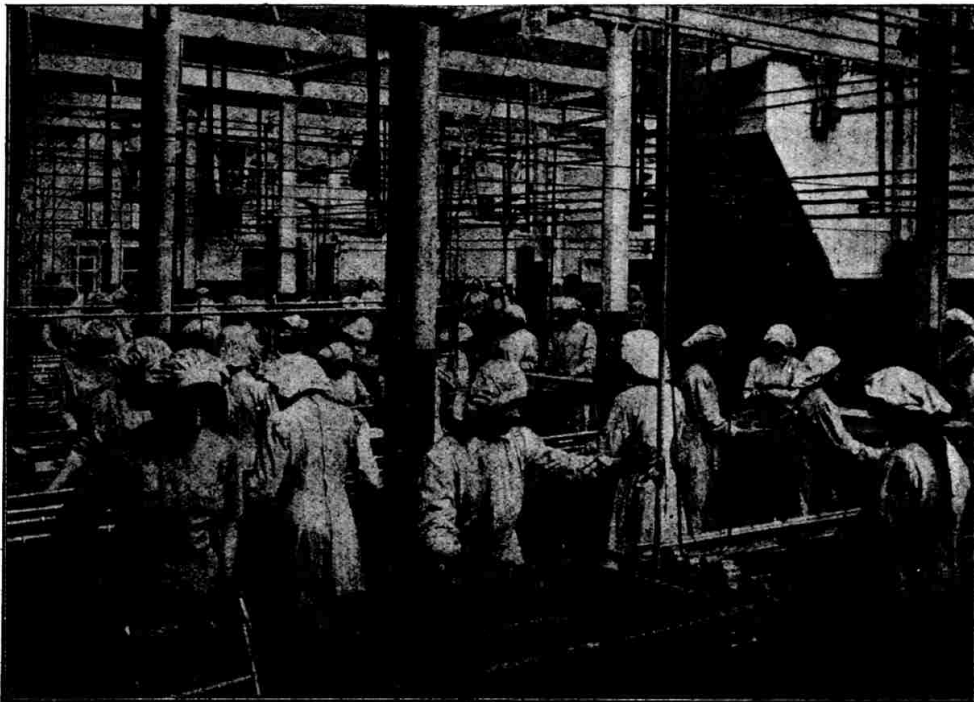


# MECCANO MAGAZINE

TO HELP MECCANO BOYS TO HAVE MORE FUN THAN OTHER BOYS



Meccano Factory : Electro-Plating Department

## A BIGGER MECCANO MAGAZINE.

This is the last occasion in which the *Meccano Magazine* will appear in its present form. Commencing with the next issue, the size will be 11in. by 8½in., and it will be enlarged to eight pages, and this will give us some greatly needed space to deal with the ever-increasing number of topics in which Meccano boys are interested. We should like to increase its size still further, and to bring it out more frequently, but the paper scarcity is so intense that these improvements must be left for the future.

We are quite sure that the *Meccano Magazine* in its new form will receive a great welcome from Meccano boys. It will be handier to read, will contain more matter, and will enable us to deal better with the excellent novelties which are always being introduced. Owing to greatly increased cost of production, the subscription to the new *Meccano Magazine* will be increased to 1d. per copy. A remittance of 6d. will ensure the next six numbers being received promptly, and a remittance of 1s. the next 12. We shall keep faith with old subscribers by sending them the Magazine regularly at the old rate, until their old subscriptions are exhausted, but all renewals must be on the new basis.

In order to make the *Meccano Magazine* more easily obtainable, we have now decided to sell it through our regular Meccano dealers, and the cost will be 1d. per issue. We shall publish the Magazine more regularly in future,

but we are unable to say just how often yet, as this will depend upon the paper situation. We look forward, however, to the time when we shall be able to let you have the *Meccano Magazine* at least monthly, and we shall strive all the while to make it the best and most popular boys' paper in the kingdom.

## New Essay Competitions

Each Essay Competition which we have run in the past has brought crowds of entries, and our readers evidently like this form of competition. We should have run more of them but they have been crowded out by other good things. However, here are three new ones which we think will be popular. The first two are for members of the Meccano Guild only, and we hope that every member will show his interest and enthusiasm for the movement by entering.

*Essay Competition No. 1.*—How each member can best help the movement and further its objects.

*Essay Competition No. 2.*—The best syllabus for the meetings of a Meccano Club during the summer months.

A first prize of a "B" Inventor's Outfit will be awarded in both the above competitions, and there will be additional prizes to members sending in essays which display special merit.

The third Essay Competition is open to all Meccano users and the subject is "Which is the more enjoyable, building a Meccano model or playing with it, and why?" The first prize is a No. 2 Meccano outfit, with other prizes for essays of special merit.

The closing date for all three competitions is August 31st, 1920. Write on one side of the paper only, about 500 words. Give your name, address and age on the back of each sheet. Address the envelope "Meccano Limited, Essay Competition, Binns Road, Liverpool."

## The Life Story of Meccano

By FRANK HORNBY.

(Continued.)

When the parts come from the barrelling department, they may be said to be clean, but not chemically clean. In order to prepare them for plating they are first placed in a chemical solution which thoroughly cleanses them from every impurity, after which they are given three distinct washings through running water. After this point they must not again be touched by hand, otherwise the plating would not have proper effect on them.

The process of nickel-plating Meccano parts is an exceedingly delicate one. They are placed in very large vats containing solutions composed of various chemicals and the preparation of these chemicals requires very great skill and technical knowledge. Impure chemicals or wrong proportions would cause the whole plating process to go wrong and great damage and loss of time and materials would follow. An old solution often works better than a new one, and the workers always prefer to work with what they term a "ripe" solution. Round the inside of the vats are suspended anodes composed of pure nickel, and when a powerful electric current is driven through the solution the nickel is drawn from the anodes and deposited on the steel parts.

Each strip or other Meccano part is suspended singly on specially designed frames, and in order to secure a good durable coat of nickel, they are kept in the solution for a period of more than two hours. At the end of that time, the parts are carefully washed to remove any traces of the solution, and thoroughly dried in heated sawdust. In order to plate the millions of Meccano parts required in the year, scores of huge vats are required, and very powerful dynamos. The Meccano plating plant is one of the largest of its type in the world, and is the admiration of all visitors to the Meccano Works.

The copper rod alone, which is employed to convey the current to the plating vats, runs into miles in length and many thousands of pounds in value. Our water consumption in this department is enormous, running into several thousands of gallons per day.

The wheels and other brass parts of Meccano require special treatment in order to ensure that even and bright finish which makes them so attractive. They are thoroughly cleansed in several acid baths of varying strengths, and after being washed and dried, they are lacquered in order that they may retain their bright finish.

I would like to take you boys through our big machine department, in order that you might see the wonderful machines which automatically produce such small parts as bolts, couplings, bosses, grub screws, worm wheels, &c., and to have you look at the gear and pinion cutting machines which make our accurate gear wheels, contrate wheels, &c.

(To be continued.)