

MECCANO MAGAZINE

TO HELP MECCANO BOYS TO HAVE MORE FUN THAN OTHER BOYS

This
is
John



John the Genius

An unusual boy! Though practically blind from birth, John learned to build complicated models with Meccano, solely by touch!

You, boys, with good eyes who have never entered a Meccano Competition can get a lot of good out of the story below.

Bill the Conqueror

Received his first set of Meccano when he was two years old—when too young even to put the nuts on the bolts! Kept trying, however, and came out on top; thus beginning a plucky career, in the course of which he afterwards won the name of Bill the Conqueror. Read the story.



Two New Members of the "Hall of Fame"

A Story of Pep, Pluck and Persistence about Two Meccano Boys told by the EDITOR

John the Genius

Beethoven, whose compositions have stirred the hearts of countless thousands, never heard his most famous symphonies. These he composed entirely by sight, having been deprived of the sense of hearing early in his career. A boy who, tho' practically blind, builds Meccano models entirely by the sense of touch, surely shares some of the genius of a master. So we have called young Wild "John the Genius".

John was born with an eye trouble which, in spite of operations, has left him practically blind. He is 14 years old and studies from books written in Braille, the "raised dot" system. But John didn't like to be idle, so he borrowed one of his brothers 5 Meccano outfits, and tried to build models by touch, or "feel".

His first real working model was a small derrick. Then he made others, each an improvement over the other. His evident joy prompted his grandmother to present him with a fine No. 5 outfit, with electric motor.

Now John was delighted, and built many advanced models; his fingers being his only guide. He recently built a big double leaf Bascule Bridge, operated by two electric motors. This model won a prize in the last Meccano Contest and is a dandy.

We sincerely congratulate John on his pluck and persistence in the face of difficulty. We hope for his complete recovery, and when that comes—all other Meccano boys watch out!

BILL THE CONQUEROR

Bill got his first Meccano outfit when he was two years old. He was such a tiny youngster that he couldn't even screw the nuts on the bolts. Bill was so persistent, even when a baby, that he wouldn't give up; so, as soon as he could manage a wrench and screwdriver, he called on the chauffeur for help, and began building models, many of which would have done credit to a much older boy.

Bill is a conqueror in more ways than one. He sells the Saturday Evening Post, Ladies Home Journal and Country Gentleman. Always looking out for more trade, Bill more than doubled his sales by a unique house-to-house selling campaign. The Sales Manager was so impressed with this that he wrote a feature story for the front page of "Our Boys", the magazine they send to all their selling agents. He named him "Bill the Conqueror", and told all about the conquering fight Bill so successfully waged.

But then, after all, every Meccano boy should become a conqueror. By building the many Meccano models he finds out for himself about engineering and mechanical laws; and, in so doing, overcomes the same problems that confront our engineers. As a result, every model he completes aids him in acquiring a degree of "Sticktuitiveness" which surely brings success in after years.

IF YOUR NAME

is incorrectly spelled, or your address wrong on the wrapper in which this Magazine reached you, please notify our Mailing Department promptly, giving your correct name and address.

This is Bill

The Inventors' Competition Is Open to All

Do not forget the Inventors' Competition. This is a contest for the improvement of models in the Manual of Instructions by the use of the new Meccano parts.

Valuable prizes are offered, the first prize being a No. 6 Meccano outfit, valued at \$40.00. The contest closes March 1st, 1921, so you still have time to enter if you have not yet done so.

See a copy of the last issue of the Meccano Magazine, containing the rules, list of parts to be used, and prizes offered.

All entries and inquiries should be addressed,

Inventors' Competition,

Meccano Company, Inc.

71 West 23rd Street

New York City



Subscriptions Are Now Due

In order to receive the Magazine regularly Meccano boys should remit 12 cents in stamps. This entitles the subscriber to every issue for a whole year. No receipt sent unless we receive a stamped addressed post-card. Subscriptions are now due.

Send Yours Today!

EDITORIAL

The Meccano \$1,000 Competition

The \$1,000 Competition which ended on March 31st, 1920 was a great success. Both, the number and quality of the entries set a high record. Boys from all parts of the world were among the competitors. It is an honor to win in such company. If you have not had a copy of the List of Prize Winners and are interested, write in for one.

New Competitions

It is great fun to measure your ability against other fellows. Be a good sportsman—if the other fellow is better than you take it in good part and try again. We are going to have new competitions. In addition to the big Competition there will be others at intervals. One that is now running is the Meccano Inventors "B" Competition. Read about this on page 1 of this issue.

New Parts

We have very great pleasure in announcing to our boy friends the introduction of new Meccano parts. These are now ready for delivery; the locomotive buffer, the hexagonal coupling, the train coupling; the flat and triangular plates and many more just as interesting. Each and all are dandy. Write in for our price list and descriptive circular.

Clubs

As soon as the summer camps break up there will be a great many new Meccano Clubs formed. This is going to be a big Meccano season, crowds of new boys will possess outfits for the first time and will appreciate the good fellowship of a local Meccano Club. If there is no Club in your district, get busy and form one. Write in to us for counsel and help.

Indoor Time Now

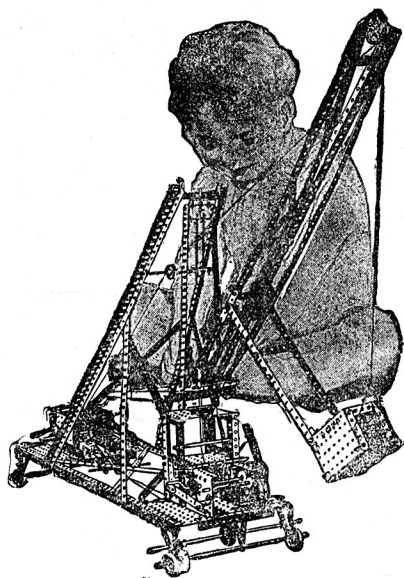
Outdoor sports have often been spoiled this year by reason of the unsettled weather. Indoor pastime is independent of weather. Its success depends more on forethought and planning. Meccano boys get more fun out of the indoor time than other boys and their fun can be increased by planning ahead. Plan building Contests with your friends. This will pass many a pleasant evening. Teamwork on a big model is also great fun. And do not forget to try your skill on copying the interesting engineering structures near your home. Other good ideas will occur to the boy who thinks and plans ahead.

More Fun

The new competition will increase your fun this season. The harder you work for it the more you will enjoy it. The more you interest yourself in it, the keener will be the sport. The Editor wants every reader to help to spread the good news of this big Meccano Contest.

Boys! Get busy and boost it hard and then write in and say just what you have done to make it known and insure its success. The Editor will be glad to hear from you.

The Editor



We have made the new Competition more interesting than ever. There will be a larger number of prizes to be competed for and the Contest will be arranged in sections, so that all competitors will compete only with their equals. There will be \$1250 in prizes divided between the three sections. This will give everyone a good chance.

The Meccano Prize Contests have been running for several years and have been a great success. We have had many, many thousands of different models sent in by boys from all over the world. When a boy enters the Meccano Prize Contest he measures his ability against the best boy-brains in the world. It is therefore a great honor to win in such good company.

THE NEW RULES

Read them carefully, for there are several new requirements. All competitors will be listed under one of the three following sections. Section A, those under 10 years of age on May 1st, 1921. Section B, those over 10 and under 14 years old on May 1st, 1921. Section C, all those over 14 years old on May 1st, 1921.

THE PRIZES

Separate prizes will be awarded in all three sections, as follows:

| | | |
|-----------------------|-------|--------|
| Section A—First Prize | | \$ 60. |
| Second " | | 40. |
| Third " | | 20. |
| Section B—First Prize | | 75. |
| Second " | | 50. |
| Third " | | 30. |
| Section C—First Prize | | 100. |
| Second " | | 75. |
| Third " | | 50. |

And Meccano Outfits to the value of \$750.

Anyone is entitled to enter this contest. No restrictions are put on age or sex; and no fees of any kind are required.

A competitor may enter any number of models, made of any number or make of parts. Entries must be either sketches or photographs. Get the best photo or sketch you can. These need not be your own work. Where necessary for a clear understanding of the model, a description should accompany the entry. Each entry should be accompanied by an entry blank, and must also bear the competitor's name and address. No photograph, sketch or description will be returned, and we cannot be held responsible in case of any entry miscarrying. Be sure to properly seal and address your entry.

IMPORTANT NOTICE

Meccano Prize Contest 1920 - 1921

More Interesting than Ever

New Rules More Prizes Easy Conditions

\$1250. in Prizes

Open To Everyone

If it is considered necessary, winners of prizes will be called upon to furnish proof that they have complied with the conditions.

All copyright privileges of photographs, sketches or models will be the property of the Meccano Company, Inc.

The judge of the contest will be Mr. Hornby, the inventor of Meccano, and his decisions will be final.

Prizes will be awarded on the basis of ingenuity, originality and correct engineering principles. No preference will be given to large or elaborate models. Small models, well made and scientifically correct, have as much chance to win a prize as larger models.

The contest will close on April 15th, 1921 for entries from the United States, and on May 31st for foreign entries. The result of the Competition will be announced on June 30th or as soon after as possible. No correspondence can be entered into concerning the result of the Competition. A specially printed list of prize winners will be sent on request to any competitor or to any address.

Entry blanks may be obtained at the local Meccano dealer in your town. If you cannot obtain a blank, advise us, giving your and your dealer's name and address. Blanks will be forwarded you immediately.

DON'T send in the actual model.
DON'T wait until the last week to send in your entry. Get started at once.
DON'T be discouraged because you didn't win a prize in the last contest. Try again.
DON'T think you must construct large, complicated models.

DON'T merely improve on models already published. Be original, try to *invent*, not *copy*.

DON'T ask to have your entry returned.

DON'T write us about the results of the contest.

DON'T forget that the contest is open to all.

First send for an entry blank. It is important to have the latest copy of the rules on account of the changes. The new entry blank cancels all previous ones. The next point is to start work at once. Think out your idea and build your model. Then live with it day by day. See where it can be improved. Get your friends to criticize it, so that by the time you are ready to send in its picture, you will have made it as perfect as possible.

Now go to it with a will. If you won a prize in a former contest, try to win another. If you have not yet won a prize, work hard to get one this time. Here's wishing each one of you the best of success.

MY ADVENTURES IN MECCANOLAND

BY "SPANNER"

(continued)

I GOT UP tired and a bit hazy, but I landed down safely to breakfast after a little effort to fasten my front collar button with a screw driver, which I had taken upstairs with me. I was thinking of the Transporter Bridge again at breakfast, when I noticed Mrs. Curtis looking very oddly at me, and I suddenly realized that I had dropped the contrate wheel into my coffee, and was stirring it. I blushed and commenced to apologize for my preoccupation, when I saw her face assume an expression of dismay as she caught sight of Curtis, who was counting the currants in his cake to find the right place to bite it off. The equidistant-hole-bug had certainly got him.

After breakfast the boys pretended to show us where we had gone wrong in fixing up the bridge, and made some adjustments; but I don't think they made any improvements, because it worked perfectly any way. We played with it all kinds of ways for hours, and I don't believe it has been taken to pieces yet, because the boys wrote me a little time back to say that the Transporter was still going strong.

That first model was a great success, and the rest of my visit was spent in building others. I was badly bitten with the engineering bug, and since then I have been busy giving Meccano Outfits to my boy pals and getting them started on this great mind training, brain building game. I have seen my listless and moody boys converted into bright, happy and clever fellows solely through this hobby that I feel I want to pass on the good news to other boys through the Meccano Magazine.

When you get your Outfit, don't bother with the parts just at first, but take a careful look through the Manual of Instructions which you will find at the top of the box. This is a masterpiece, and I often wonder how many thousands of hours it took to complete, and how many clever brains were responsible for its amazing contents. A celebrated judge has called it "the key to a wonderful box of treasures", and I don't know of a better way of describing it.

First read what is said of Meccano on pages 2 and 3. That will give you a new line on the hobby and show you what an important and manly game it is. On pages 4 and 5 you will find illustrations of all the parts which make the system, with the correct engineering name for each one. You will have to refer to these pages a great deal later, and you will soon know all the names by heart.

Then turn to pages 6 and 7. Here are shown very clearly 14 different kinds of trucks. Didn't know there were so many kinds, did you? They all have their uses, in warehouses, in engineering shops, and railroad platforms. Now make one or two of them up with the parts of your Outfit, and see what a neat, handy, smooth-running toy each one is.

At the side of each illustrated model you will notice that there has been printed a list of the parts which are required to make it. Before beginning to build, take out just the exact number of parts you will need, and lay the remainder of your Outfit on one side.

(Continued on page 4)

SIDELIGHTS FROM THE \$1000. CONTEST

When a boy enters the competition it is a good thing, if he hopes to receive a prize, to enclose his address. Some boys omit to give the name of their city, or of their street location—Bill Smith, Cincinnati, is hardly enough address, having regard to the number of Smiths such a city would have.



"Write legibly", is an old rule which is still good, for if the judges cannot read what you write, there isn't much chance of their understanding the good points of your model. A short, simple description of the entry, what it is, and what it will do, will get the best attention of the judge. Don't make it too long. One boy used up twenty sheets of paper and then wrote us that he could not finish all he had to say about his model, because of the scarcity of paper. Some boys have the knack of getting the judge's attention. A simple little illustration will show what is meant.



The model of a hay wagon was sent in. It was just an ordinary little wagon such as we have had sent in by the hundreds. But this boy loaded it up with hay, and made it look so attractive in his picture, that it was put with the most interesting models. It only lost out in the very final judging.

Send all particulars at one time. The contestant who wrote, "if you think I will win a prize, tell me, and I will make a good picture of my model", can hardly expect to have much chance. When you enter a competition, try hard. Don't feel, like the boy who wrote in, "I don't want a prize, I am only sending in my model for the good of the other fellows".

Send in the best picture you can and, if the picture is not good, describe it in words. Hundreds of pictures sent could only be understood by the ones who sent them. Some were taken by gas light; some of the prints were not even finished. There is no need to spend a lot of money over the illustrations, but it is necessary to let the judge know the best points of your model.

Write on one side of the paper only. We opened up one entry, which looked like an announcement of a sale. It advertised farm machinery, etc., by auction, and free lunch at noon, and it was only by accident that we saw the other side had a model sketched on it.

Some of the names given to models were very distinctive. One was called, "My Passage over the Valley"; another, "The Old Oaken Bucket". The name is not everything for the boy who called his model "Hope" did not win, nor did another whose pet was "Bulldozer." All the models were not pretty. There was one of a gallows. They were not all made out of Meccano for one boy said he made his out of his head. The judges, however, did not expect the "gin derrick" to have anything to do with Prohibition.

There was some humor in the contest too.



A picture of the model from below was entitled, "A Worm's Eyeview", a parody on Bird's Eyeview.

Models which work and do something are most appreciated. A glass cutter that won't cut lacks interest. The model of the iron man was frankly an inspiration from the movie "Automaton" which in turn was probably an inspiration of the parallel from the play, "La Poupee". The boy developed this into a kind of walking mechanical doll. It took us quite a while to consider what an electric questioner was.

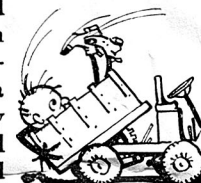


We have plenty of old friends in the competition. I am not referring to boys who win time after time, they were there, but there were also the new models which we have seen hundreds of times; aeroplanes by the thousand. The judges must have turned dizzy looking at them and merry-go-rounds were as merry as ever. They certainly continue to go round in the competition.

An entry of a hay-stacker was cartooned with funny men and horses and a boy's picture of a swing was made gay with a crayoned sketch of a parrot. Akin to this was the model of a flagpole which was completed by sketching in a flag to make it a little



"Here's a new model I have invented for the competition". This is a frequent wording on the entry blank and sometimes it is such an old friend that we recognize it at once. It is a new invention to the boy perhaps and if he found it out himself, well and good. It was a new discovery. Sometimes this does happen—one boy was building a model automobile, and while doing so thought of a new steering device. It was not new but the fact that he had thought this out for himself was indeed good. There were quite a number of auto dumping trucks; one even in description was warranted, "to dump itself".



Don't spend the prize money before you get it, is good advice. One model was built by two boys. They agreed among themselves to join, and wrote us "send on an outfit for one half of the prize and money for the other". They lost out on merit.

Speaking of addresses, some boys do things very orderly. One evidently expected a visit from his landlord for he enclosed a type-written card, "you will be notified of any change of address".

Finally, there is no doubt from the letters received that our Meccano boys get a tremendous lot of pleasure from the competition, and they do not hesitate to tell us so. The building of the models is itself a pleasure. The prospect of a prize adds zest. The overcoming of difficulties, the finding out of new things makes the boy feel good. There is profit and there is pleasure in this great Meccano Competition.

MECCANO



OUR MAIL BAG

The Editor has a little talk in this column with his Meccano boys. Whether he has space to reply to them all here or not, he is always glad to hear from them. He receives hundreds of letters each day and only those which deal with matters which are likely to interest other Meccano boys can be dealt with here.

Correspondents will help the Editor if they will write on one side of the paper only.

S. C. S. Amherst, Wis. Every dealer should keep a supply of competition entry blanks. Meccano boys can help in this by urging their dealer to have them on hand.

Harry R. Wickline, Senior Engineer, Hinton, W. Va. Note from your letter that the boys were envious of your Senior Engineers badge. I hope it will inspire the others to strive to win the same honor.

Charles Vandersluis, Brainerd, Minn. You tell us you have been building with Meccano for 7 years, and you are just 13 years old. You have a good record and I wish you many more years of Meccano fun.

W. H. Bernheim, San Francisco, Cal. You find it hard to wait and build 6 months for the Engineer degree—but we want you to have all the fun of working for it, and the joy of expectation.

Francis Cole, Fresno, Cal., has lost his Meccano Manual, he feels as if he had lost an old friend—he will certainly be able to get another copy from his local dealer for 35 cents, and be happy once more.

Lawrence Rogers, Providence, R. I. H. That means nearly 50 different toys have had some fun.

Gray Endsley, Talent, Pa. If you cannot draw, get someone to take a photograph of your model.

George Golberg, Newark, N. J. We received your rhymes. You have made a start, try again, it will go better the next time.

Rhymes were also received from Thomas F. Williams, Ridgway, Pa., Lawrence Harley, Amherst, N. S., Canada, and C. H. Franceor, Green Bay, Wis. I regret that space does not admit of printing these at present.

Harold Mill, Cranford, N. J. I am glad you are deriving such great pleasure and benefit from your Meccano. Have you seen the interesting new parts listed on the last column on this page?

E. W. Kimbark, Evanston, Ill. Glad you like your prize. Try again and get others to do the same.

Alvin Wendland, Millbank, S. D. We read from your postcard that the fire engine you built runs with its motor across the floor. We quite agree with you when you say that every boy should have a Meccano motor.

Edward Henry, Jackson, Tenn. In reference to the entry blanks see replies above.

Stewart Lee Smith, Baltimore, Md. Delighted to hear you find the new parts so interesting. Tell your friends about them.

Joe Mogus, Lisle, Ill., wants us to make sure of his getting prize money, as he needs shoes. We can keep Meccano boys in fun but not in shoes.

Edw. H. Prager, New York City. You certainly showed that you had real pluck and perseverance in sticking to that crane, until you had it perfected. Sorry you did not get it done in time for the contest. Why not enter it in the new Competition.

Albert Shumaker, Indianapolis, Ind., is a lively Meccano booster. He knows that Meccano is the original engineering toy for boys; goodness, how angry he is with those who try to copy Meccano. Thanks for your good wishes, Albert. Write again.

Long Evenings of Fun With "Meccano-ized" Manual Training

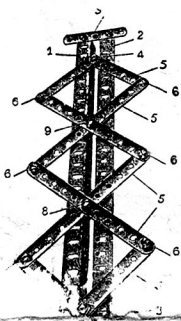
"FIRE!" shouts somebody. Windows go up and heads pop out all along the block like a lot of Punch and Judys. Clang, clang, clang—down the street dashes the fire engine, and the hook-and-ladder. "It's in the top o' the bank building!" shouts one of the kids in the street, "an' it's all full of smoke below", they say. "Whole top-floor's penned in!"

Pell mell down stairs you rush, three steps at a time, and up to the corner. Sure enough, the entire fifteenth floor is cut off by dense clouds of smoke! But, as you look, up—up—up, straight into the air a queer-looking tower is rapidly ascending. At last it reaches the corner window crowded with frantic people, and the brave firemen go up and bring each one down to safety!

That tower is actuated on the principle of the "Lazy Tong", illustrated below.

"LAZY TONG" PRINCIPLE

Just why this construction is called "Lazy Tong", is not easy to explain, unless it is because it may be modified into a pair of pinchers, with which you can pick up articles on the floor, or from a distance, without exerting yourself very much. When used as a fire rescue tower it is certainly busy enough!



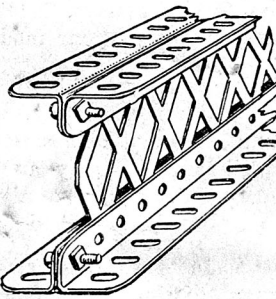
The illustration shows clearly how to make the "Lazy Tong". The bolt at the bottom, No. 7, is stationary; Nos. 3, 9 and 4 run free up and down the slot between the two Angle Girders, Nos. 1 and 4, down into which slot the ends of the bolts extend.

A remarkable thing about it is that bolt No. 9 moves much faster than No. 8, and No. 4 considerably faster than No. 9! You can easily make the "Lazy Tong" with Meccano, and it is good for a raft of fun.

BACKBONE OF THE SKYSCRAPER

Until architects hit upon the idea of an "H" Girder, shown below, office buildings above a certain height were difficult to build safely. It was a problem to form a beam long enough, and still strong enough, to stand the terrific strains.

The secret of the "H" Girder's great strength lies in its shape. It is composed of four angle girders, bolted together, two and two, with a Meccano braced girder linking up the two pairs vertically as in the illustration. Before you bolt it together try the strength of the parts separately. See for instance how flexible the braced girder is. Now bolt them together as in the illustration and again test them out. Your girder is so rigid you cannot bend it at all. Nothing but Meccano could teach you this useful construction so forcefully. That is because Meccano building is true engineering.



(To be continued in our next number)

My Adventures in Meccanoland

(Continued from page 3)

When you have finished the model, you will require no more parts and will have none left over, thus proving that you have made the model correctly.

(To be continued)

New Meccano Parts

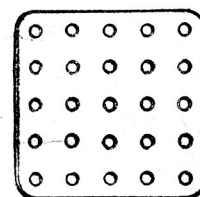
No. OF PART PRICE



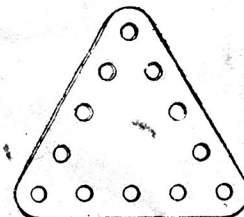
80 Bevel Gears each .55



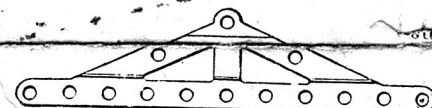
36a Gear Wheels
1 in. - 40 teeth each .65
Special Screwdriver each .50



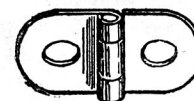
52a Flat Plates 5 1/2 x 3 1/2 each .15
53a " " 4 1/2 x 2 1/2 each .12



76 Triangular Plates 2 1/2 in. each .05



118 Girder Frames each .10



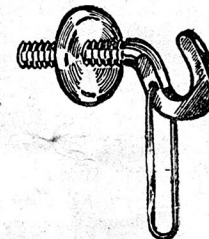
114 Hinges (pair) per pair .20



115 Threaded Pin each .05



120 Buffers each .05



121 Train Couplings each .15



89 Curved Strips 5 in. each .05

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