

# Practical MicroFactory Handmade Carnival And Day of Inventing for the Rube Goldberg Competition Demonstration At the LA MakerFaire



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<https://www.makersvilleservices.org> Projects

## **Welcome**

Thank you for being a part of today's activities. As a participant in this booth, you are testing the training curriculum for an apprenticeship program we are co-developing with the Long Beach - Qingdao Association (A Long Beach Sister City).

## **The purpose of today's activities**

- Demonstrate and Evolve how we support the Rube Goldberg competition with the Makersville projects: Practical MicroFactory, Hand-Made Carnival and Day of Inventing for the Rube Goldberg Competition Prep.
- Gather Parents and Schools interested in preparing teams for the Rube Goldberg Competition 2024.
- Create video content that we can use for grant reporting and as promotion for the next, similar event. Here is a video recap of our last event. Please subscribe to our YouTube channel, Makersville.



## Practical MicroFactory

In our factory, we are making prizes that can be won through the playing of games in our handmade carnival. We invite you to join us in our factory.

You can make:

- Buttons with the Rube Goldberg Machine Contest logo
- Backpack Bunnies with the RGMC logo
- Bigger bunnies with no logo
- You can also [learn to sew and](#) make bunny parts if you don't have time to make a whole bunny.
- Simple machines/items with simple machines that use cardboard that can be used in the Handmade Carnival for the Day of Inventing for the Rube Goldberg Competition Demonstration Area. (please use your phone to research how you can do this. There are six simple machines. Lever, wedge, pulley, wheels and axles, screw, inclined plane.)

In our event we are also preparing for an event on June 4th at City Hall in Long Beach. That event is called "Sister Cities brings the world to Long Beach". I invite you to come to that event but do realize that it is a Tuesday. If you can not make that event, you can view the recap video on our Makersville YouTube Channel.

For your help in our factory, we will give you tickets and invite you to play games in our Handmade Carnival. If you make an

entire bigger bunny with no logo all on your own, you have earned your bunny. Logo bunnies are prizes for playing the carnival games.

# Handmade Carnival for the Day of Inventing and Rube Goldberg Competition Demonstration.

Now that you have helped us to make prizes, we invite you to play in our handmade Carnival. You can play games and win tickets for the prizes you or others at the event have made. Prizes will be awarded as long as they are available.

## Carnival Games and Activities at the Day of Inventing

Rube Goldberg was an artist, an engineer and inventor with a very specific style of engineering drawings.

Look at the books/materials to familiarize yourself with his works. Watch two videos of Rube Goldberg machines. I have included QR codes to two videos here.

Suggested Videos of Rube Goldberg Machines:

OK Go : This Too shall pass

<https://www.youtube.com/watch?v=qybUFnY7Y8w>

Joseph's Human Car Wash

<https://www.youtube.com/watch?v=ISX9fOSJ0KI>



Zach Umperovitch's Zach's Contraptions (Rube Goldberg National Competition Host)

<https://www.youtube.com/watch?v=kxhgxyPExI0>



There are 7 games in this carnival Play as many of them as you wish for as long as you wish.

Game #1 Lever	Use a lever to lift or lower something, or to trigger an action.
Game #2 Wedge	Use a wedge to initiate an action
Game #3 Pulley	Lift something heavy with a pulley
Game #4 Wheels and axles	Use wheels and axles to trigger an action
Game #5 Screw	Use a screw to move items from one place to another.
Game #6 inclined plane	Pull something up an inclined plane
Game #7 Combine	Put as many of these together as you can
Game #8 Play	Work on making a contraption in the open materials area.
Game #9 Outside forces	Consider how you might use outside forces in your contraption. (fan, hair dryer, etc.)
Game #10 LEGO area	We are pleased to be supported today by the Long Beach LEGO User Group. Please visit their area.

**Claim Your Prize** Up to 5 games, you win a button, else a bunny. While supplies last.

## Who was Rube Goldberg?



Photo of Rube Goldberg from Library of Congress collection, originally taken by National Photo Company

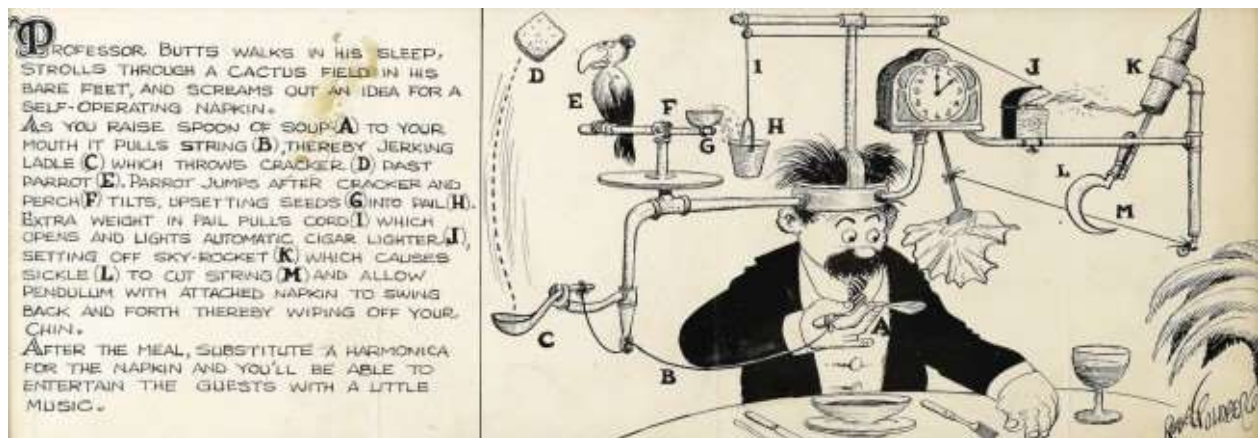
Formally known as Reuben Garrett Lucius Goldberg, Rube Goldberg was an American cartoonist, sculptor, author, engineer, and inventor. He is best known as an artist and specifically for his cartoons of machines that performed simple tasks, in complicated and impractical ways.

He is the inspiration for international competitions known as [Rube Goldberg Machine Contests](#), which challenge participants to create a complicated machine to perform a simple task.

The Rube Goldberg Institute, run by the descendants of Rube Goldberg, annually announces a Rube Goldberg Machine Contest. The task is simple, it is up to the contestants to make it complex. More information on the contest, and a number of related contests, is available on the Rube Goldberg website: <http://rubegoldberg.org>

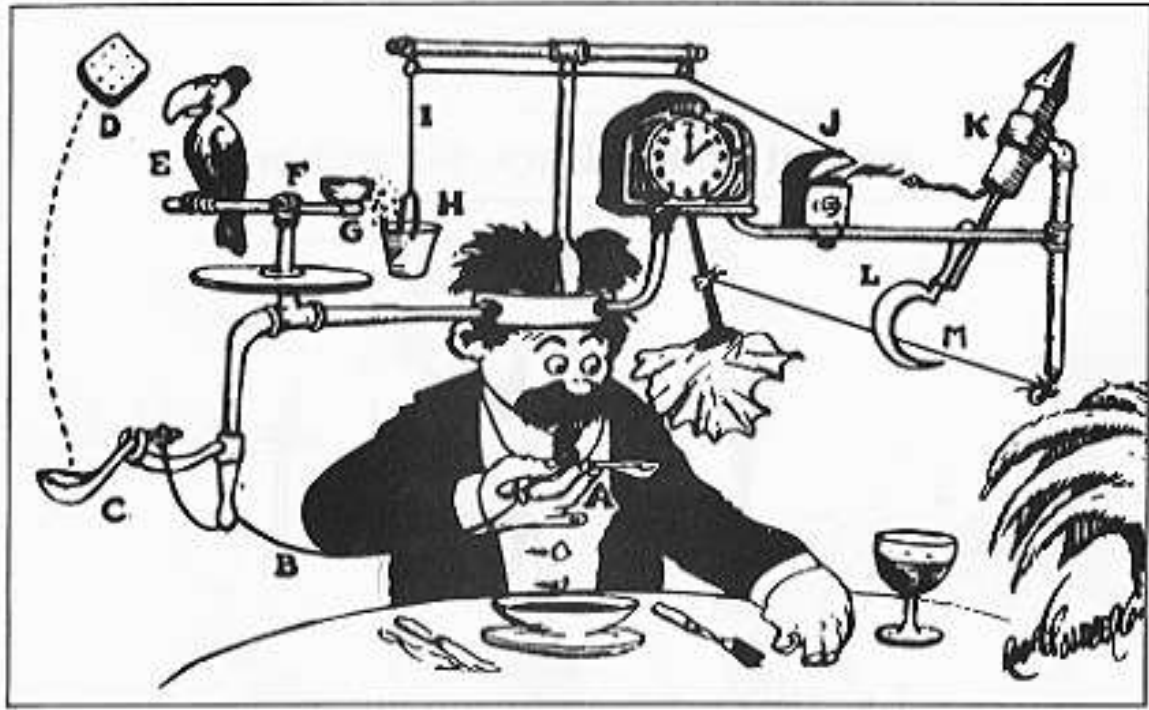
## The Rube Goldberg Machine

Below is an example of the Rube Goldberg style of engineering drawing.

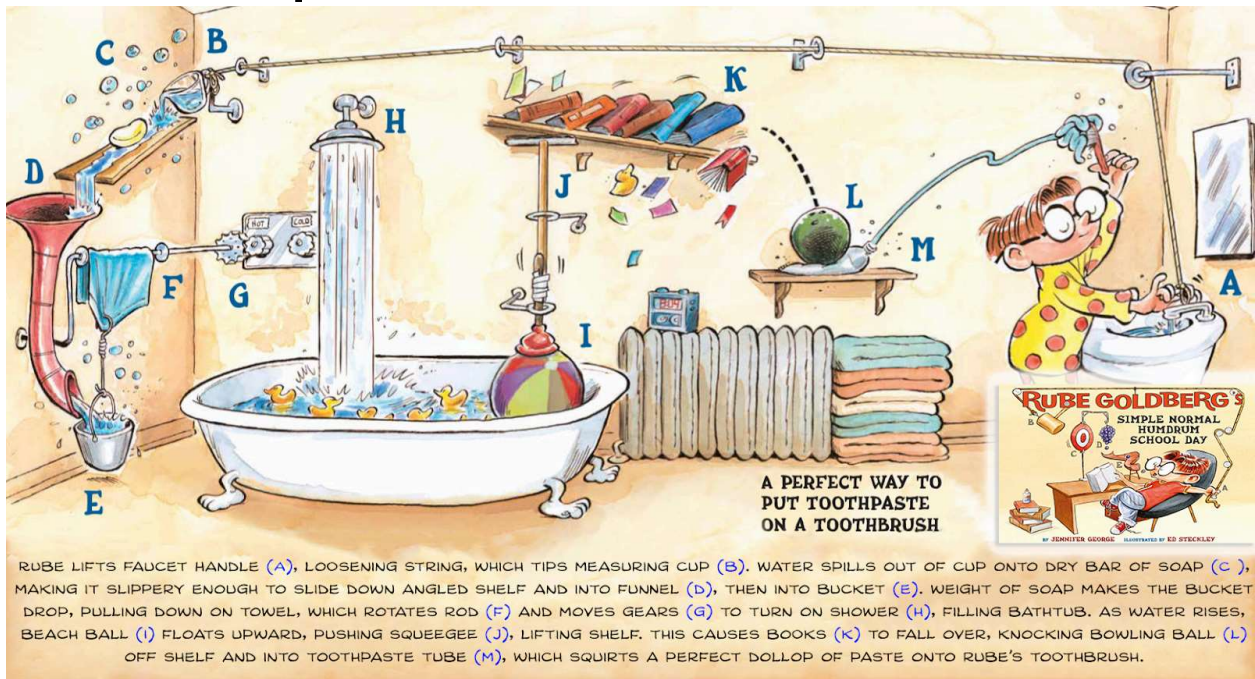




## Self-Operating Napkin



## The 2024 Rube Goldberg Challenge Is Put Toothpaste on a Toothbrush



## Other interesting videos

Taking luck out of the equation



## Do you do Other Events? Can I Help? Learn?

YES! We work with companies, event managers, schools and private parties to develop customized experiences. No funding? We coach you in grantwriting to help you to bring our events to you and you to our competition.

To bring our customized event to you, or to volunteer for, participate in or sponsor our Practical Microfactory project, please contact Squigglemom, Trish Tsoiasue at [Patricia@makersvilleservices.org](mailto:Patricia@makersvilleservices.org) or at 562-225-9589.

Visit us in our studio at Shoreline Village in Long Beach. Tuesdays/Thursdays 3-5 PM at 419 Shoreline Village Drive, Suite Q, Long Beach, CA 90802 (above the Pirate's Cove Gift Shop).



## Where else can I find Makersville?

Event Date	Name	Lead
April 6th 2024	City of STEM/LA Makerfaire/ LA State Historic Park	Trish Rube Goldberg, Practical Microfactory and Handmade Carnival
April 14th 2024	RoboTech Fest / LBCC	Trish, 2x4 Day Onyx and Morgan - Practical Microfactory and Handmade Carnival (paid setting) Rube Goldberg Skills Learning.
What date	Disability Festival	LEGO something.
April 27th 2024	Children's Day / Rec Park	Rube Goldberg, Practical MicroFactory and Handmade Carnival (free setting).Onyx Arts Council Grant.
<b>June 4, 2024</b>	<b>Long Beach Spring Festival / City Hall</b>	<b>Practical Microfactory and Handmade Carnival</b>
June 23 2024	Planning for a Maritime Symposium / LBCC and Studio	Gloria and Morgan (Rube Goldberg) and Onyx (Practical Microfactory/handmade carnival) Trish. Tools for Creative Problem Solving. Arts Council Grant.
<b>July / August 2024</b>	<b>Multi-National Creativity Conference for Educators</b>	<b>Trish and Morgan and Onyx. School Makerfaire, Rube-A-Thon, Practical Micro-Factory and Handmade Carnival</b>