

THE CARROUSEL COURIER Jr.

HERSCHELL CARROUSEL FACTORY MUSEUM NEWSLETTER

just for kids



check out the blog for directions on how to make your own soup can phone!

[HISTORIC] GIRL POWER!

BY MR. IAN SEPPALA

Did you know that the Wurlitzer Company was a large employer of women?

Women not only worked in offices, but the entire Perforation Department was run by women. These women ran the 12 perforators and made all of the rolls for Wurlitzer player pianos, and band organs. Additionally, the Wurlitzer Company employed over 2,000 people at the North Tonawanda plant alone. The hard work of these women (and men) are what allow us to enjoy Wurlitzer musical instruments today.



WHAT'S INSIDE

The Mighty
Wurlitzer - 2

Carrousel STEM - 4

Tootie-Frootie Float
Recipe - 5

Puzzles & Games- 6





IMAGE VIA THEWURLITZERBUILDING.COM

THE MIGHTY WURLITZER CO.

BY MR. IAN SEPPALA

The Wurlitzer company was started by Rudolph Wurlitzer in Cincinnati, Ohio in 1872. Rudolph had three sons: Howard, Rudolph, and Farny. They would join their father in running the company. The company began building musical instruments in Ohio. They made instruments like violins out of wood. Later they bought factories in other places, including North Tonawanda, New York.

Farny Wurlitzer ran the North Tonawanda plant. They began to build band organs in North Tonawanda. These organs were built in different sizes. The band organs can have horns, pipes, bells, chimes, drums and cymbals. Wurlitzer band organs became the most popular organs in America. The band organs played music in skating rinks, amusement parks, and carnivals all over Canada and America.

Wurlitzer band organs are run on a special system called pneumatics (new-mat-icks). Pneumatic systems use air to make things work. The band organ's motor helps pump air into the system. This air helps the organ read the notes, and play the instruments like horns!

How do the band organs know which notes to play? They use rolls! Band organ rolls run on a system called binary code. Binary code is in technology all around us, including computers. In binary code a command is either on or off. The rolls work the same way! Each music note has its own spot on the roll. If there is a hole, then the note plays. If there is no hole, the note doesn't play. Neat right?

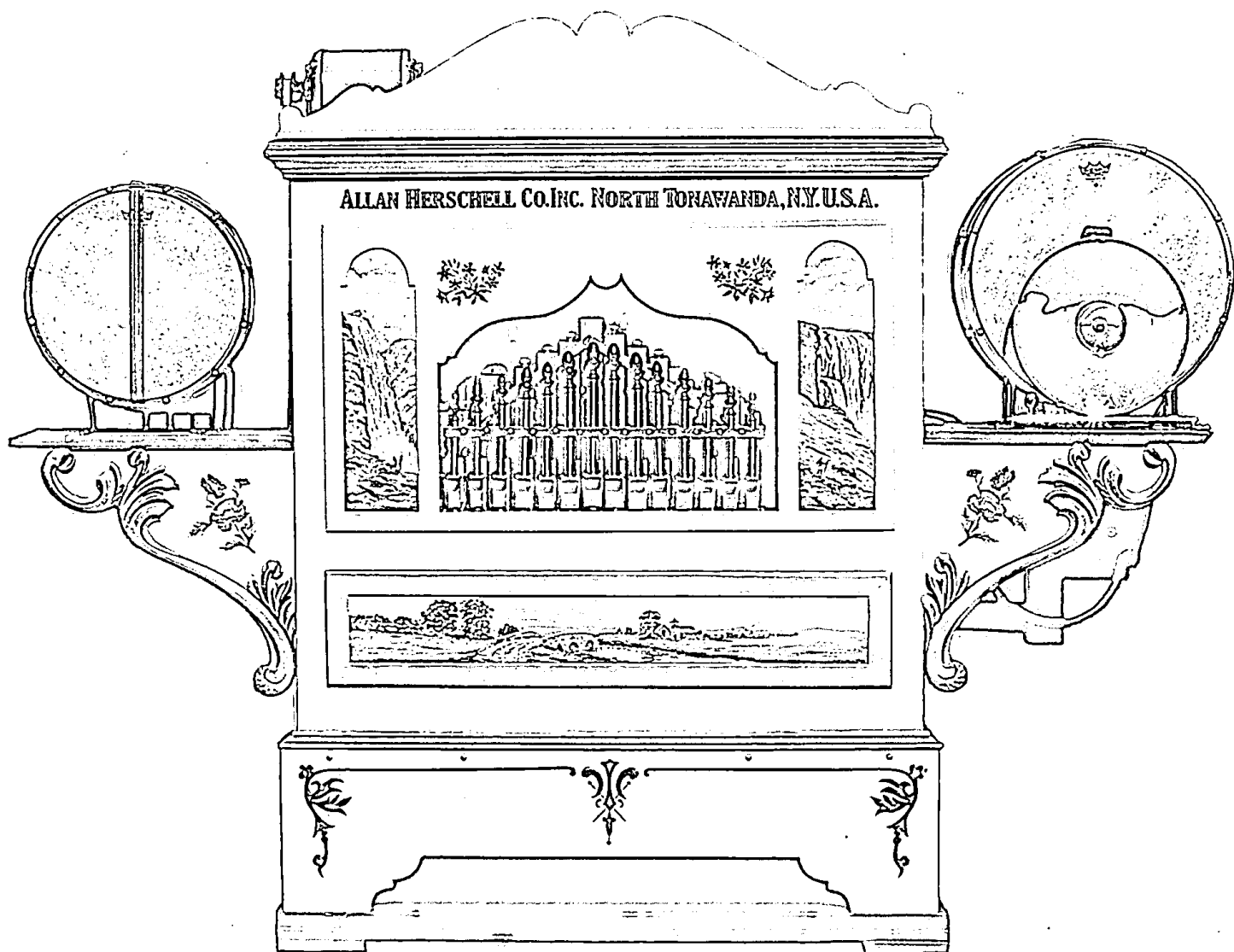
The special machine that creates the rolls is called a perforator. The Herschell Carrousel Museum has the only working Wurlitzer perforator in the whole world, and home to over 10 Wurlitzer and non-Wurlitzer band organs and player pianos.

Where have you seen band organs before?
Let us know using #HCFM on social media.



WURLITZER 105 BAND ORGAN

COLOR YOUR OWN WURLITZER 105 BAND ORGAN



Don't forget to share it with us!

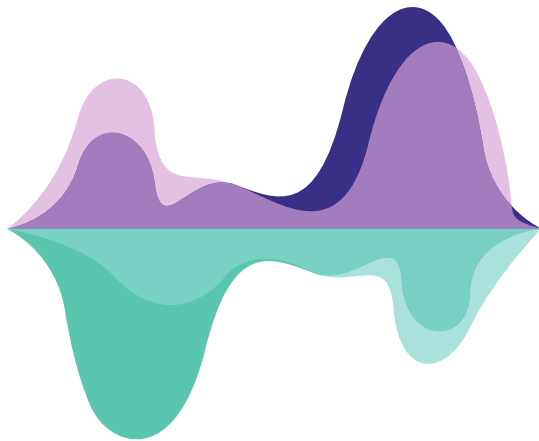
Have an adult take a picture of your band organ and share it with us on social media using **#HCFM**

SEEING SOUND & VIBRATIONS

BY MS. JENNA CURRAN

Begin by tearing off a sheet of cling wrap large enough to generously cover your bowl. When stretching the cling wrap over the mouth of the bowl be sure to get the wrap as tight and smooth as possible.

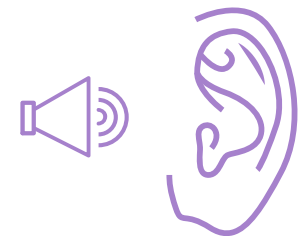
Once you have secured the cling wrap tightly over the lid of the bowl, gently add your rice or sprinkles to the center of the cling wrap. Now you are ready to begin! Tap the sides of the bowl with a fingernail or using the pads of your fingertips play the top of the cling wrapped bowl like a drum. See how the sprinkles or rice begin to dance with your music? Next try get your lips very close to the cling wrap (without touching!) and hum your favorite song.



THE SCIENCE

If you have ever played, or watch someone play a string instrument you may have seen the strings vibrate. Or maybe you have plucked a rubber band before and noticed the same thing. Try knocking on a table, or wall. You heard the knock didn't you? But you didn't see the vibrations this time. Sometimes vibrations can't be seen. Vibrations can cause sound, just like sound can cause vibrations as you have just proven with your sprinkles or rice.

The cling wrap in your experiment works just like an eardrum! Sensing the vibrations from the sound, turning them into signals for our brains. This allows us to hear. Just like the cling wrap, our eardrums are very sensitive. This is why we should always be cautious not place things in our ears and protect them with noise canceling headphones when we are in extremely loud situations.

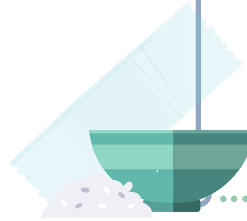


DIFFICULTY LEVEL: EASY

TIME: 15 MINUTES

MATERIALS:

- CLING WRAP
- LARGE BOWL
- 1/2 TBSP OF SPRINKLES OR UNCOOKED RICE



OBSERVATION QUESTIONS

What are you seeing?

Does changing how loud you hum, or how hard you tap change the movement of the sprinkles or rice?

Have you seeing something like this happen elsewhere?

Does the sprinkles or rice ever form patterns on the cling wrap?

BONUS STEM ACTIVITY

Learn how to make a can phone like on the cover of this issue by visiting WWW.CARROUSELMUSEUM.COM/CARROUSELCOURIERJR



TOOTIE- FRUITIE FLOAT

- Sliced assorted fruit
- Ginger ale
- 1 Scoop sherbet (single flavor or rainbow)

Fill a 2/3 a glass with assorted sliced fresh fruit, such as kiwi, banana, oranges, blueberries, blackberries, cherry, strawberries, or any of your favorites!

Pour in chilled ginger ale just to the top of the fruit

Top with one scoop of your favorite sherbet and enjoy!



**what did the left eye say to
the right eye?**

ANSWER
Between us, something
smells!

BOREDOM BUSTERS

#HCFM
to share your
boredom busters!



Feeling like you are running out of things to do? IMPOSSIBLE! Being home so much can be tough, so here are a few ideas to turn your home into your adventure!

- Camp inside - 'set up camp' for the night somewhere that isn't your bedroom. Share spooky stories and make some camp snacks.
- Have a themed dinner night - Like Tina Fey's family who had an airplane meal complete with inflight instructions, dressing up as stewardesses, and trays. Maybe try a Disney movie themed, I always loved the food in the "The Princess and the Frog."
- Create a scavenger hunt
- Make a list of what you would take on your own adventure, then watch an adventure themed movie. See if you can find all of your adventure items in the movie
- Invite family and friends to a picnic over the internet. Video chat with a group using a service like ZOOM and eat on a picnic blanket in your own livingrooms



**TODDLER STORYTIME
APRIL 3RD @ 12:30PM**

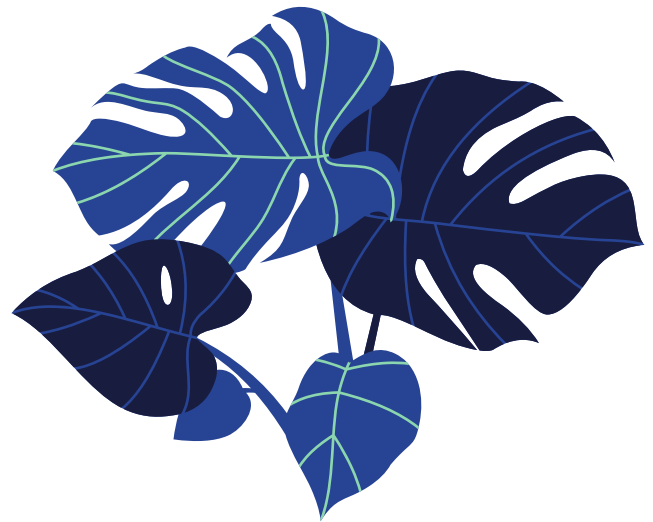
Join us **live** on our **facebook page** (facebook.com/herschellmuseum) for our first Toddler Storytime of the season. We will be reading "Go Get'em Tiger" by Moyle sisters.

**Want to participate in our
craft after? You will need:**

- 1 sheet of green paper
- 1 sheet of orange paper
- scissors
- glue stick
- black marker

WORD SEARCH

EROLLAJHCL
 INPYOVEEES
 BANDORGANC
 GSOUNDARJI
 IKFUMUSIC
 VFEARDRUMN
 WURLITZER
 XLMTISFORE
 ZVIBRATION
 DZUNOTEAKC



- | | |
|------------|-----------|
| BAND ORGAN | EARDRUM |
| MUSIC | VIBRATION |
| NOTE | SCIENCE |
| HEAR | WURLITZER |
| SOUND | ROLL |

MATH-STERY

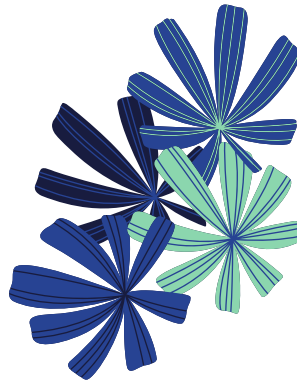
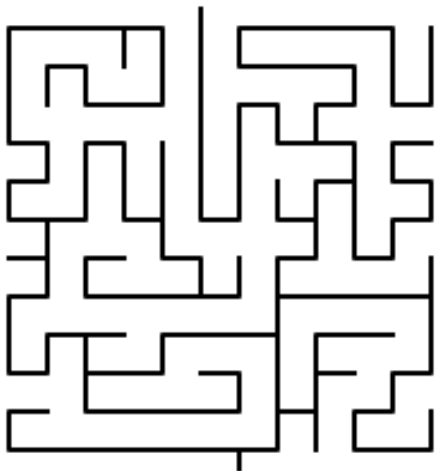
	X		-		58
+		+		+	
	+		+		9
+		-		-	
	+		X		49
10		7		0	

Try to fill in the missing numbers.

Use the numbers 1 through 9 to complete the equations.

Each number is only used once.
 Each row is a math equation.
 Each column is a math equation.
 Remember that multiplication and division are performed before addition and subtraction.

MAZE



ANSWERS TO VOL I ISS I PUZZLES

OTQARDORGEQJXEGYPOBFDJGTHNYOLO
 EOHLSYPMZTMEZEWGPITYTGGDUCRLXVD
 NSZKNUBWDAZEEOOYLBKJYGGSTARGAZFB
 XHMJFLSSYSXNAYGBWIZZNVZNMHDPLP
 UNYGAHNSYFAAATVLKMKZKIMIFNZTJ
 KECOWFEMUSRGPRACUEJAAPITGIRMKU
 PORVZGIVWVEBVDVAORENAYORVYKV
 RBBSZGOQWKARWENYRRLZAIIZTOOKT
 OQYJCLGEOFEIRCTZQUCBXYFHWKJA
 CLAOXHMWJUEMXUJTTUPLXGIGQTHBO
 TPRTECAHUNNFJKGXSAMNHOFYRCF
 SODFCYPTMEXPPJATOLRVECEAMELDZFTJ
 ASZABDNAGNEJDSWTMDHINCFEABIVD
 CTINUUERGIBVUJJDWJEMTFKOYNOJHJZ
 MRJJEUSUJJGFJMEFYSMNGEFVRNCMER
 MJELTLKBPJGUABNEWVDZBRTSBBQBE
 JCRYWMIFFHCAHRSJUGJYHNMQWGYRI
 MNGEYHSGSGUSSBOREIGLBPZAVQAJAG
 UTRACRPTHORTFTPOLRYSIAFKFHN
 WXPOIJPFANXWIMHOGAAYSTITYYWNQIS
 HVSMSRSLATEZAMAGORSEPOWEUSRLMO
 IKBMUWRIYINNGOQTGSJEAUIQTEOOW
 XQOGJMUZMIHYPCGFQBAJVDZPVAJOKU
 ZIAXKEGSQFDSAGWMDIBOYJREZPCRLFN
 ZSZFBDIFZSDAASNWXGDOCYHTRBWMX
 XHQVYFHCXPHXBWVLEZRFPSVZXWPLUF
 GSJIGALROAPARKPOLDBGDDORUQWTTZG
 JMKOROBVIZQOEWMKDNKWBXFYFJUGW
 JZYQWKISWCSEORVHSMTGZPPVZYCYOO
 FIDTWBOWHUCBWWVVHNUDAVYQFPUVIXI



WORD JUMBLE

- GIRAFFE
- PIG
- DOG
- ROOSTER

