# 1876 NORLO'S FAIR Weekend

# NATIONAL MUSEUM OF INDUSTRIAL HISTORY

JUNE 10 & 11

# All Day Programming

#### **Tin-Can Communication** Museum Plaza

While cell phones are part of our everyday lives, that wasn't the case in 1876. At the Centennial, Alexander Graham Bell unveiled his newest invention- the telephone! Join us to learn more about early communication and make your own tin-can telephone.

#### Be a Centennial Exhibitor Museum Plaza

At the 1876 World's Fair there were thousands of inventions and discoveries on display. Join the excitement by becoming an exhibitor! You get to decide what you would show off at the world's fair, create your own exhibitor's pass, and explore the fair to gather stamps from each of the activities to fill your pass!

#### Metal Melting for Kids Museum Plaza

Join us for this hands-on, kid-friendly demonstration where participants get to learn about tin casting and create a product!

#### Women's Pavilion Display Barnette Education Center

Although women raised the majority of money used to build the main exhibition hall at the 1876 World's Fair, the all-male Centennial Board denied them exhibit space inside. Undeterred, the small group of women raised more money to build a Woman's Pavilion. Completely run by women, it showcased the domestic arts and female scientific and industrial achievements. Learn why the display became of one the Fair's most popular destinations!

#### Velocipede Rail Car Demo (10am-1pm) Foundry Park

See a replica hand and foot powered rail car, known as a Velocipede, running on a short section of temporary track! These vehicles were developed in the 1870s and remained popular until the internal combustion engine made them largely obsolete. This particular machine was inspired by a three-wheel design built by the Sheffield Velocipede Car Company. Built and demonstrated by Bill McCarthy of Restoration Millwork in Riegelsville, PA.

#### **Operating Replica of an 1876 Gas Engine (Sat. Only)** *Museum Plaza*

Join Rough & Tumble Historical Engineers Society as they operate a replica of a Schleicher Bros. Otto & Langen atmospheric gas engine, very similar to the type exhibited and operated at the 1876 Centennial Exposition. The primitive design relies on atmospheric pressure, gravity, and the vacuum created within the cylinder to turn a rack and pinion drive via a piston moving in a vertical cylinder. This replica engine was built by Bill Hazzard of King of Prussia, PA.

#### Printing Press Demo Barnette Education Center

Watch our print experts explain the process of print-making on our 1830's Acorn Press, and then you'll have the opportunity to make your own print on our 1876 Daughaday Press!



# **Saturday Programming**

# 10:15

#### Riveting Demo (Weather permitting) Foundry Park

How were both the Main Exhibition Building at the Centennial and the Museum held together? With rivets! Join us to see how rivets are brought up to a yellow heat and driven with pneumatic tools.

# 10:30

#### **Ribbon Loom Demo Silk Gallery**

Punch-card controlled Jacquard looms were present at the Fair, weaving small souvenirs for visitors to purchase. We will take a look at the Jacquard process on our early 20th century ribbon loom!

# 11:00

#### Victorian Parlor Games Barnette Education Center

Join Victorian-era re-enactors for some old-fashioned fun! In a time before technology, parlor games were excellent entertainment for dinner parties and social events. Put on your thinking cap and get ready for some 19th century amusement!

#### 11:30

#### **Corliss Demo** Machinery Hall

Our massive 115-ton Corliss steam engine has been mechanically restored to its former glory and repainted its original color. Join us as we operate the engine and learn more about this fascinating piece of industrial history from the museum's historian.

#### Baxter Portable Steam Engine Demo Machinery Hall

One of the most fascinating and controversial exhibits of the Fair was housed in a small brick addition to the Women's Pavilion. The Baxter Portable Steam Engine powered the building's machines, including looms and a printing press. It rose to fame when visitors saw that it was operated by a female engineer, Emma Allison. See a nearly identical engine being run in our Machinery Hall on compressed air.

# 12:00

#### Meet & Greet with President Grant Machinery Hall

Travel back in time and have a conversation with the 18th President of the United States, Ulysses S. Grant! Hear about his life experiences, from his time in the Civil War to his presidency, and what it was like to live during the 19th Century.

# 12:30

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#### 1:15

#### Antebellum Marine Band Machinery Hall

The 1876 World's Fair Weekend will feature live music by the Antebellum Marine Band, which presents the US Marine Band of the 1800's, its look and its music, with a full woodwind section to compliment the brass.

## 2:30

#### **Corliss Demo with President Grant Machinery Hall**

The 18th President of the United States, Ulysses S. Grant, opened the 1876 World's Fair with great fanfare. After music, and a speech, he led the crowds to Machinery Hall, where he and Emperor Dom Pedro of Brazil turned on the mighty Corliss Engine, an engineering marvel. Join us as we re-enact this historical moment in the 21st Century.

#### Baxter Portable Steam Engine Demo Machinery Hall

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# Sunday Programming

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# **1876: The Inventors Republic, lecture by Dr. John Smith** *Barnette Education Center*

At the time of the Centennial our American patent system was one of the few institutions not limited to white men, which prompted a number of black and women inventors to apply for patents.

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## **Exhibitors**

**Bethlehem Public Library** 

**Moravian Historical Society** 

**South Bethlehem Historical Society** 

**Sigal Museum** 

Historic Bethlehem Museums & Sites (Sat. Only)

Rough and Tumble Engineers Historical Association (Sat. Only)

Thank you to our Sponsors!

# Hank and Joanne Barnette



