



1st Quarter 2019

THE MELTMINDER

A PUBLICATION BY BENTON FOUNDRY, INC.

Web Site: <http://www.bentonfoundry.com>

Benton Foundry Then & Now



1978 & Forty-One Years Later



Historical Sites

Scranton Iron Furnaces

Located near the Steamtown National Historic Site, the Scranton Iron Furnaces represent the early iron industry in the United States. The four massive stone blast furnaces are the remnants of a once extensive plant operated by the Lackawanna Iron & Steel Company. Started in 1840 as Scranton, Grant & Company, the firm had the largest iron production capacity in the United States by 1865. By 1880 it poured 125,000 tons of pig iron, which was converted in its rolling mill and foundry into T-rails and other end products. In 1902, the company dismantled the plant and moved it to Lackawanna, New York to be closer to the high-grade iron ores coming out of the Mesabi Range.

The Scranton Iron Furnaces educate the public about the site of the Lackawanna Iron and Coal Company and its impact

upon the nation's industrial revolution demonstrating the relevance of industrial history in our lives. The Scranton Iron Furnaces are administered by the Pennsylvania Historical and Museum Commission and are actively supported by the Anthracite Heritage Museum and Iron Furnaces Associates which is a non-profit community based organization. It was added to the National Register of Historic Places in 1991, as the Lackawanna Iron and Coal Company Furnace. www.anthracitemuseum.org & Wikipedia



Cornwall Iron Furnace

Cornwall Iron Furnace, Cornwall, PA (Lebanon County) is part of a National Historic Landmark District, America's most complete charcoal fueled Ironmaking complex. A site of "Transcendent Significance" - as described by Robert Vogel of the Smithsonian Institution. "With the exception of a mere handful of similar preservations in Sweden, Germany and possibly a few in eastern Europe is there a 19th century iron furnace complex with the degree of historical integrity to be found." Cornwall Furnace is indeed a unique survivor of the early American Iron Industry. Originally built by Peter Grubb in 1742, the furnace underwent extensive renovations in 1856-57 under its subsequent owners, the Coleman family, and closed in 1883. It is the mid-19th century ironmaking complex which survives today. At Cornwall, furnace, blast equipment and related buildings still stand as



they did over a century ago. Here visitors can explore the rambling Gothic Revival buildings where cannons, stoves and pig iron were cast, and where men labored day and night to satisfy the furnace's appetite for charcoal, limestone and iron ore.

Cornwall Iron Furnace is part of a National Historic Landmark District by the U.S. Department of the Interior, National Park Service. It has also been designated a National Historic Mechanical Engineering Landmark by the American Society of Mechanical Engineers, citing Cornwall Furnace as "the only one of America's hundreds of 19th century charcoal fueled blast furnaces to survive fully intact."

Why Do We Yawn?

Is there a purpose to a yawn? I know it means you're sleepy, but is the body trying to accomplish something by the act of yawning?

People yawn when they're tired, but also when they wake from a night's sleep. We yawn when we're bored, but also when we're anxious, or hungry, or about to start a new activity. Yawning is contagious - we often start yawning the minute someone near us starts.

"There are so many triggers. People who sky-dive say they tend to yawn before jumping. Police officers say they yawn before they enter a difficult situation," said Adrian Guggisberg, a professor of clinical neuroscience at the University of Geneva.

Reading about yawning makes people yawn. You are probably yawning right now.

The physiological purpose of a yawn remains a mystery. "The



real answer so far is we don't really know why we yawn," Dr. Guggisberg said. "No physiological effect of yawning has been observed so far, and that's why we speculate. It's possible yawning doesn't really have a physiological effect."

Until about 30 years ago, scientists explained yawning as a way for the body to

take in a large amount of air in order to increase oxygen levels in the blood in response to oxygen deprivation. The oxygenation hypothesis was discarded after being disproved by a series of experiments published in 1987.

One current theory is that yawning is a brain cooling mechanism "that functions to promote arousal and alertness," according to Andrew Gallup, an assistant professor of psychology at the State University of New York Polytechnic Institute in Utica, who has published studies on the topic. Yawning consists of a deep inhalation of air accompanied by a powerful stretching of the jaw, followed by a shorter expiration of air and rapid closing of the jaw.

"Collectively, these patterns of behavior increase blood flow to the skull, which can have a number of effects, one of which is cerebral cooling," Dr. Gallup said. "When our body temperature is warmer, we feel more tired and sleepy, and it could be that evening yawns are triggered to try to antagonize sleep onset, so we yawn at night in an attempt to maintain some state of arousal or alertness."

Sleep triggers a steep reduction in brain and body temperature, he said, so it is also possible "we yawn to just further facilitate the change from waking to sleeping."

One thing for sure: yawning is catching. One person's yawn can trigger yawning among an entire group. People who are more empathic are believed to be more easily influenced to yawn by others' yawns; brain imaging studies have shown that when humans watch other people yawn, brain areas known to be involved in social function are activated. Even dogs yawn in response to seeing their owners or even strangers yawn, and contagious yawning has been noted in other animals as well.

The spread of yawning could potentially serve to "promote coordinated arousal among members of the group, synchronizing their mental state, potentially protecting it by alerting it to external threats more rapidly than it would be otherwise," Dr. Gallup said.

*Roni Caryn Rabin
The New York Times*

PASSHE Enrollment Continues to Decline

The Pennsylvania State System of Higher Education (PASSHE) reported in October that its fall undergraduate enrollment among the 14 member universities totaled 98,342 students, a decline of 3,959 students or 3.9% from the previous year.

Based on the current enrollments, all PASSHE member universities except Kutztown University, Millersville University and West Chester University saw enrollment declines. The most notable declines in enrollment oc-



curred at Indiana University, Edinboro University and California University.

This year's decline in PASSHE's fall enrollment represents the eighth consecutive year in which PASSHE's enrollment has dropped. From 2010 to present, PASSHE enrollment has declined from 119,513 students to 98,342 students, which amounts to a reduction of 21,171 or 17.7%.

Based on projections made by the National Center for Education Statistics through 2026-2027, the number of public high school graduates in Pennsylvania is estimated to decline. Given this information, it is unlikely that PASSHE enrollments will rebound to previous levels in the near future.

Health

How to Live a Healthy Life

Living a healthy life means making lifestyle choices that support your physical, mental, spiritual and emotional well-being. Managing your health can be challenging at times; while one facet of your wellness demands more attention than others, you may end up struggling to maintain a good balance in other areas. To be of sound body, mind and spirit, it's important to pay attention to all aspects of health - your mental, emotional and spiritual sides all play a role in your physical welfare and vice versa. A state of optimal well-being means more than just the absence of disease or disorder; it also means having the resources to cope with problems and circumstances beyond your control and recover from difficult or troubling situations. This intersection between health and behavior can help you prevent or at least delay chronic illness and steer you to make better decisions about your well-being.

Psychology Today

Seven Ways to Maximize Good Health

*Susan Dudley, PhD, Isabel Platt, Caroline Halsted & Alex Pew
National Center for Health Research*

Life expectancy in the United States decreased in 2015, the most recent year with complete data, which was the first decline in life expectancy since 1993.

The following are seven simple principles that can make a big difference in helping you maintain your overall health and lowering the probability of developing serious diseases.



Avoid Tobacco and Tobacco Smoke

Pursuing a tobacco-free life means pursuing a healthier life. The message is clear: Don't smoke, and keep away from the second-hand smoke which is produced when those around you smoke tobacco and third-hand smoke, which is the tobacco residue left on clothing or furniture. Also avoid tobacco products such as hookah or chewing tobacco. Although e-cigarettes do not contain tobacco, that doesn't mean they are safe.

Limited Alcohol Consumption

Eat a Healthy Diet

In general, the U.S. Department of Agriculture recommends diets that are **low** in sodium, solid fats, cholesterol, and added sugars, and **high** in nutrient-dense foods including fruits and vegetables, whole grains, low-fat milk products, seafood, lean meats, eggs, beans, nuts and seeds. Avoid unhealthy amounts of sodium, fats and sugar. It is important to monitor the nutrient labels on the foods we buy, and eat **fresh food** rather than processed food as much as possible. To learn more about constructing a healthy diet that is right for you, check out the choosemyplate.gov website and read more about the Department of Agriculture's dietary guidelines.

Control your Weight

More than two-thirds of Americans are overweight and more than one-third qualify as obese, according to the U.S. Centers for Disease Control and Prevention. People who are overweight or obese are more vulnerable to medical problems.

Move Every Day

Adding 30 minutes of moderate-intensity exercise to your daily routine can reduce the risk of heart disease, stroke, colon cancer, diabetes and high blood pressure. Research indicates that exercise helps control weight, contributes to healthy bones, muscles and joints, reduces falls among older adults and helps to relieve arthritis pain. Exercise also reduces symptoms of anxiety and depression and is associated with better sleep.

Everyone can benefit from regular physical exercise, regardless of age and fitness level, it's never too late to start. You don't need to be an athlete, the activity you choose doesn't need to be strenuous. The point is simply to get moving.

Limit your Sun Exposure

Take Advantage of Effective Disease Screening

For further information or information on references, please checkout the National Center for Health Research's website.

www.center4research.org

Congratulations - Employees of the Quarter



Congratulations to **Chris Madl** (above), Benton Foundry's 1st shift Employee of the Quarter. Chris works in our Core Room as a Laempe operator and box changer. He has been employed since 2014. Chris lives in Shickshinny with his wife Susan, and he enjoys hiking and fishing with his sons.

Good Job!

Congratulations to **Melanie Bankes** (below), Benton Foundry's 2nd shift Employee of the Quarter. Melanie has been employed at the Foundry since the beginning of 2018. She works in our Core Room as a dipper and core assembler. Melanie also works in core box setup and is currently training as a Laempe operator. Melanie lives in Berwick with her husband, Justin and daughters. Melanie enjoys spending time with her family.



American Funds

Rigorous screening by Morningstar - Morningstar evaluated more than 8,000 funds based on manager ownership, fund results and expense ratios, as well as Morningstar risk, analyst and parent ratings.

Less than half of 1% made the "Terrific" list.

Eight of the underlying funds in American Funds Target Date Retirement Series were recognized on the Morningstar "28 Terrific Funds" list.

Benton Foundry offers FIVE of the eight funds.

New Perspective Fund®
Capital World Growth and Income Fund®
The Investment Company of America®
American Balanced Fund®
Capital Income Builder®

Five Generations

According to genhq.com - The Center of Generational Kinetics lists the following **five generations** who are currently active in America's economy and workforce:

1996 to Present: Gen Z
1977 to 1995: Millennials or Gen Y
1965 to 1976: Generation X
1946 to 1964: Baby Boomers
— to 1945: Traditionalists

Each generation brings its own life stage, communication preferences, priorities and more.

Employee Benefits

Which benefits do employees find most financially beneficial?

Health insurance and 401(k) matches led the pack.

Eighty percent of Americans would rather accept a job with benefits such as health insurance and a retirement plan than take a job without benefits, even if it paid 30% more, according to a new poll conducted in April for the AICPA by Harris Poll. Though respondents valued benefits highly, the majority reported that they were not optimizing their benefits. Almost 90% of the 1,115 employed adults surveyed said they understood all of the benefits their employers offered them. However, less than one-third (28%) said they were very confident they were taking full advantage of those opportunities.

Tracie Miller-Nobles, CPA, a member of the AICPA's National CPA Financial Literacy Commission, described this finding as "concerning."

"Understanding what type of benefits are available, what is the best benefit mix, and how to utilize benefits to the fullest potential can help employees navigate unforeseen circumstances (such as medical emergencies) and adequately prepare for retirement," she said.

More than half of employed people said that health insurance (56%) and a 401(k) match from their employer (56%) were the

benefits that would most help them save money or increase their income. (Respondents could pick up to three answers to this question.)

Other benefits that respondents said would most help them reach their financial goals included:

- Paid Time Off (33%)
- A Pension (31%)
- Flexible Work Hours (21%)
- Working Remotely (15%)
- Student Loan Forgiveness (15%)
- Additional Skills Training (14%)
- Tuition Reimbursement (11%)
- Paid Parental Leave (7%)

The survey also suggested that many employed Americans are overestimating the value of their benefits. Respondents said their benefits made up about 40% of their total compensation, on average, whereas benefits only made up 31.7% of average annual compensation in 2018, according to the U.S. Bureau of Labor Statistics.

Journal of Accountancy
February 2019

Japanese Electric Company Visits Foundry

Benton Foundry and Customized Energy Solutions (CES) hosted a tour and discussion for Tokyo Electric Power Company (TEPCO) and the Mitsubishi Research Institute (MRI). As a matter of introduction, CES assists companies in managing their electrical usage and associated costs. Benton Foundry is a CES customer. TEPCO is one of the largest power utilities in Japan. MRI is a Japanese Think Tank and a division of the Mitsubishi Group. The Japanese cast metals industry historically has not relied on



electricity for melting purposes. They would like to change that. The purpose of the visit was to see an electric induction foundry, see how CES's platform works in the industry and get a better understanding of how industrial electricity is sold in US markets (including the pricing structure and the billing components). As a point of reference, electricity in Japan is roughly seven times more expensive than the rates that Benton Foundry pays.

Good Job

During the week ending 01/19/2019, we broke a weekly production record in terms of iron tapped.

We tapped more iron during the month of January than any other month in our history.

We also tapped more ductile iron during the month of January, than any other month in our history.

Although very much a team effort, **special congratulations** to furnace operators **Matt Smith and Boyd Lore.**

Thank you to melt and maintenance personnel for their efforts replacing the coil in furnace #3.

Thank you to Alan Wertz, Tim Schechterly and everyone involved in the pattern shop and lab relocations.

Good job to all grinding room personnel for getting current.

Ron Steward completed his QA/QC lab training.

Good Job!

Knoebels

Save The Date

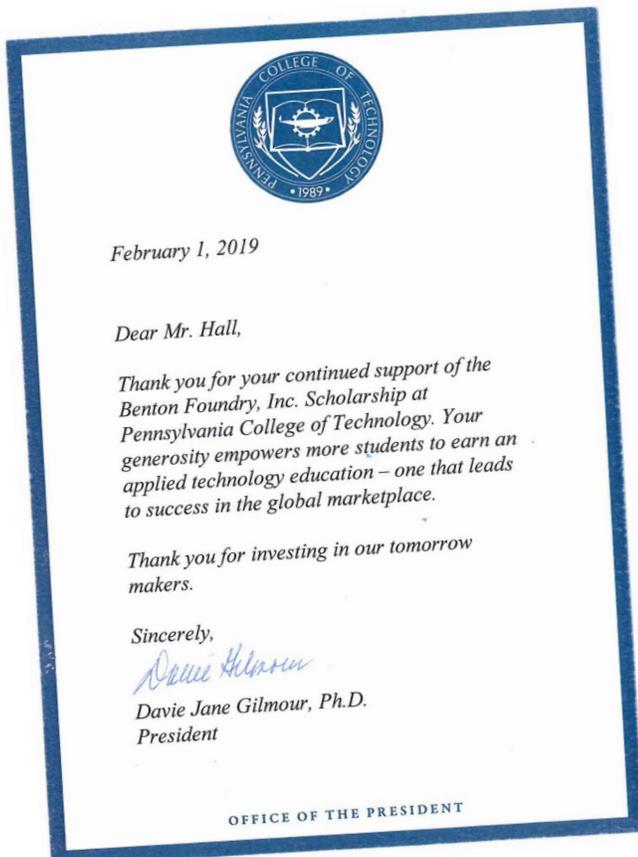


August 10, 2019

One employee's clever snow removal tactic.



Thank You



Tidbit

An entry in the *Guinness Book of Records* lists the **Whitechapel Bell Foundry** as Britain's oldest manufacturing company, having been established in 1570 (during the reign of Queen Elizabeth I) and being in continuous business since that date.

Trivia Question???

What country has the oldest operating university in the world?

Answer will be in 2nd Quarter 2019

Answer from 4th Quarter question:

What heavy metal element was once known as quicksilver?

Mercury

10 Mental Health Apps

Calm
Headspace
Moodnotes
Moodpath
Pacifica
SuperBetter
7 Cups

Happify
Talkspace
Anxiety Relief-
Hypnosis



Birthdays

May

Tim Cross
 Ed Posluszny
 Brian Newhart
 Marshall Straub
 Tyler Johnson
 John Hospodar
 Cheryl Brown
 Bo Boston
 Gary McCoy
 Travis Hayman
 Lynn Miller
 Gary Younkens
 Chad Davis
 Jeff Willard
 Kayla Parks
 Matt Kittle
 John Shipe
 Deb Fagan
 Justin Lloyd
 Steve Farver
 Teresa Puderbaugh
 Dave Emmett

June

Barry Ohl
 Bryan Puderbaugh
 Jeff Souder
 John Gibbs
 Brock Smith
 Glenn Cregar
 Jacqueline Showers
 Nicolas Wilson
 Albert Gildner
 Bob Houser
 Colin Jandrasitz
 Boyd Lore
 Christian Magliocca
 Brent Morphis
 John Harvey
 Caitlen Metzinger
 Deb Martz
 Rickie Moreno-Perez
 Robert Swigart
 Dave Eveland
 Taylor Berkey
 Caroline Mengine

July

Michele Cregar
 Tejay Dennis
 Frank Packer
 Albert Phillips
 Robert Wayda
 Brian Mohr
 Ben Gonzalez
 Frank Conyers
 Don Copeland
 Bobby Campbell
 Elizabeth Strauch
 Theresa Kubasek
 Billy Rogowski
 Aaron Showers
 Shane Evans
 Tim Schechterly
 Bill Ferguson
 Fred Kessler
 Dan Kline
 Andrew Zook
 Kevin Trychta
 Rob Bowman
 James Lechleitner
 Dave McLucas



\$ **Want** \$

\$250.00?

Company Referral Plan

Refer a Potential Employee to Lou
 (Before They Come In)
 If Hired, After
 6 Months of Employment
 You Get \$250.00

\$ \$

Oxymoron

Why does “fat chance” and “slim chance” mean the same thing?

Irony

“The Wisdom Well”

**“Some cause happiness wherever they go;
 others whenever they go.”**

~ Oscar Wilde

The Benton Foundry Newsletter is written for the purpose of keeping employees updated on the events surrounding the happenings at Benton Foundry. The intent is to inform and to a certain degree entertain. The foundry in no fashion wishes to demean or embarrass. If anyone has been offended by this publication, please accept our apology. We will be diligent in an attempt to avoid any situations. We hope you enjoy the newsletter and are happy to hear any recommendations to improve it.