

🂥 Smithsonian Affiliate

Winter 2017 - Vol. 46 No. 4

**SAVE THE DATE** 

**Holidays at Hagley** November 24 to January 1

**Twilight Tours** December 12-13, 19-20, 26-27 **Invention Convention** 

January 13, 14, 15

Invention Convention



# From The Executive Director

#### **Executive Director David Cole**

*Cover: A young visitor tinkers with a toy truck at Hagley's* 2017 Invention Convention.

Back: The Birkenhead Mills waterwheel.

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Where do inventions come from? This is a question we at Hagley ask often as we design and present exhibitions, educational programs, and events that tell stories and share insights about innovation—past and present. Whether we are presenting a chapter in DuPont's innovation story in our historic Powder Yards, featuring an exhibition of nineteenth-century

patent models, or making corporate histories accessible on our Library's web pages, we tend to link important commercial innovations to the fertile minds that created them. Behind every great invention lies a great inventor.

But successful inventors do not live in vacuums; while celebrated creators have typically done their formal

work in laboratories, studios, machine shops, or garages, they have often drawn inspiration from the world around them. History tells us that inventors are keen observers of the natural environment who marvel at, and seek to understand, the designs and processes that living things evolve in response to the challenges they face.

Some of the greatest exemplars of this process of natural necessity begetting innovation are our friends in the insect world.

Hagley Magazine is published quarterly by Hagley Museum and Library, a 501(c)(3) nonprofit organization. Address: P. O. Box 3630, Wilmington, DE 19807-0630 (302) 658-2400 • www.hagley.org Simply put, "bugs" have a knack for coming up with ingenious solutions to surviving, and thriving, in an ever-changing environment. With this in mind, we are dedicating Hagley's 2018 Invention Convention to the wonderful, and sometimes wacky, inventions that humans have created when inspired by the examples of dragonflies, wasps, and house flies.

Successful inventors do not live in vacuums; they draw inspiration from the world around them.

> Invention Convention is always an engaging, fast-paced, and highly entertaining chance to break out of the mid-winter doldrums and get our creative juices flowing. This year, we hope that participants, while having a lot of fun, will be encouraged to take a second look at their natural surroundings when they feel the urge to innovate. Please join us on January 13-15 when we'll let the bugs create the buzz at one of our signature events.

Hagley Magazine welcomes your feedback. Contact us at askhagley@hagley.org.



## COVER STORY



Photos by Ashley Schroeder

Young visitors at Hagley's

Invention Convention.



Hagley thanks Agilent Technologies, presenting sponsor for the 2018 Invention Convention.

**The Inventiveness of Insects** 

What do house flies, wasps, hawk moths, and dragonflies have in common? They are the muses of drone technology by helping engineers build them smaller, more durable, and more maneuverable. Look closely at a butterfly wing and marvel at how its structure informs high-tech computer screens. Want to survive in the desert? Look no further than the desert beetle, whose strategy to collect water informed a device that could provide enough water per day for survival of humans. Have trouble hearing? Thank locusts and crickets for some of the latest innovations in hearing aid technology.

Invention Convention, presented by Agilent Technologies, will explore the wonderful world of insects. Learn how the ingenious design and capabilities of insects inspire innovations and inventions that improve people's lives. Get a taste of crickets, admire the artistry of maggots, and be amazed at how insects help detectives solve mysteries.

On each day of the event, visitors can enjoy a science show, investigate the "insides" of an electronic gadget at the Tinkering Tables, and express their creative side in the Create-an-Invention area. To celebrate a job well done, a Hagley "patent" will be issued for every invention.

Families could easily come all three days of Invention Convention and experience something different each day.

Invention Convention will be held January 13, 14, and 15, 2018, from 10 a.m. to 4 p.m. each day in Hagley's Soda House and Library. Use the Buck Road entrance, GPS 298 Buck Road East, Wilmington, DE. Admission is adults <sup>\$</sup>8, children 4-14 <sup>\$</sup>6, children under 4 and Hagley members free.



Photo by Jackie Kane

#### Entertaining in Eleutherian Mills

November 24 to January 1 10 a.m. to 4 p.m.

Closed Thanksgiving Day and Christmas Day.

Adults: <sup>\$</sup>14, Children 6–14: <sup>\$</sup>5, Free for children 5 and under and Hagley Members.

The Dining Room in the Eleutherian Mills residence, decorated for the holidays.

# **Entertaining in Eleutherian Mills**

For many people, the holidays evoke special times of gathering with family and friends. These get-togethers focus on good cheer, traditional foods, and gifts for the child in all of us.

At the Eleutherian Mills Residence, rooms are elaborately decorated, set up with food and drink and eagerly awaiting the arrival of guests. Discover how the du Pont family celebrated the holidays with decorations, gifts, Christmas trees, and New Year's Day visiting at Hagley from Friday, November 24, to Monday, Jan. 1.

You will see the parlor all decked out and ready for a New Year's calling, the morning room set up for an afternoon tea as Louise du Pont Crowninshield (the Residence's last private owner) might have served it, the dining room with its beautifully elaborate Twelfth-Night Dessert party, and drinks in the smoking room.

The upper floor focuses on earlier du Ponts, with a Victorian suite of rooms depicting toys and gifts in the parlor and a tabletop Christmas tree in the library with lots of toys and games.

The bedrooms host displays of earlier New Year's Day gifts and a doll's tea party. On the lower level, kitchen staff members have just completed their holiday baking, and the terrace room is just finishing up hosting a family luncheon.

Come to Hagley and experience the holidays in early twentieth-century style!



## **Twilight Tours for the Holidays**

For generations, the holidays at Hagley have been when friends and family gather, creating new traditions and memories. Hagley's Twilight Tours are an exceptional opportunity for members and guests to experience the du Pont Residence by the warm winter glow of twilight. This year there will be a focus on entertaining.

Start your holidays on Tuesday, December 12, at Hagley's holiday preview night. Begin at the Visitor Center with refreshments followed by a ride through the lit powder yards to Eleutherian Mills. From the bus stop, guests can visit the barn and enjoy carols from 4:30 to 6:30 p.m. performed by a local choir. Guests may visit the du Pont family home at their own pace and take the return bus to the Visitor Center. The last bus departs for the Visitor Center at 8 p.m. For the remainder of the month, on each Tuesday and Wednesday evening (December 13, 19, 20, 26, 27), traditional guided tours will be held. Admission is <sup>\$</sup>10 and free for members. Tours are on the half-hour beginning at 4:30 p.m. with the last tour leaving the Visitor Center at 7 p.m. For all evenings, reservations are required and can be made online or by calling (302) 658-2400, ext. 261.

The Hagley Store will be open until 8:30 p.m. on Twilight Tour evenings. Visitors are recommended to make reservations early, since twilight tours tend to sell out quickly.

#### **Twilight Tours**

December 12 - Preview Night December 13, 19, 20, 26, 27 Reservations required, visit www.hagley.org or call (302) 658-2400, ext. 261

Admission <sup>\$</sup>10, free for members

The parlor in Eleutherian Mills, decorated and lit for twilight tours.

## HAPPENING AT HAGLEY





#### Golden Pheasants Committee

Anne & Phil Annone Roniece & Henry du Pont Tracy & Brian Fuchs Robin & Jeffrey Kusumi Anne & David Lyons, Jr. Megan & A.J. McCrery IV Mark Talley

## *Top: Jewelry in the silent auction by Out of the Box.*

Bottom: Game dinner place settings. Right: Bird Cage patent model by Andrew Law Smith, 1878

# **Game Dinner: Hagley Patent Models**

Join Hagley Executive Director David Cole, as he discusses the future of Hagley's patent model collection at the Golden Pheasants Game Dinner on Saturday, January 27, at the Hagley Soda House. Beginning next year, Hagley will unveil a new exhibition showcasing this unique collection both here at Hagley as well as internationally.

Catered by the Wilmington Club and featuring a five-course dinner, the evening opens with an array of sumptuous gameinspired hors d'oeuvres and open bar. Dinner courses, also featuring choice game items, are paired with wines selected and described by Alain Blanchon. Topping off the dinner is the signature Hagley Cannonball dessert. Cocktails begin at 6 p.m., during which guests can participate in a silent auction and raffle. Several exciting additions available for bids include a private behind the scenes tour of Hagley's patent model collection with David Cole, a beachfront condo vacation in Clearwater, Florida, and a home security system. Returning favorites include a carbide cannon, a case of French wines, and a Pennsylvania Railroad train set.

Dinner tickets are <sup>\$</sup>150 for members and <sup>\$</sup>185 for nonmember guests. Guests must be 21 or over to attend. Invitations will be mailed to Golden Pheasants members in mid-December. Call early to reserve your tickets, as reservations for this event fill quickly. Contact Kim Kelleher in the membership office to reserve a table or for more information, (302) 658-2400, ext. 235. Bad weather date is Sunday, January 28.



Photos by Ashley Schroeder

# **Winter Family Fun**

Instead of hibernating indoors this winter, why not try something new? Brave the cold weather and bring your family and friends to Hagley for activities that are fun for all ages.

Hagley's popular Science Saturdays continue through winter. On December 9, visitors can "Tune Into Science" and explore sound. Create your own musical instrument and see the physical effects of sound waves.

Hagley's very popular Invention Convention returns on January 13, 14, and 15. Enjoy three full days of science fun and exploration!

On January 27, explore the science of compression, tension, and inertia at "Trophy Triathlon."

At Victorine's Valentine's Day on February 10, visitors can sample gingerbread hearts and warm up with hot cocoa topped with whipped cream, chocolate morsels, and other tasty treats. Design your own valentine and use tissue paper flowers to add a secret message. Create your own candy bar wrapper to complete a very sweet day!

February's Science Saturdays invite visitors to discover Archimedes and Pascal as they learn about density at "Ferry Impressive!" on February 17 and fluid mechanics at "Pump it Up!" on February 24.

On March 10, join Hagley for "Chemistry for the Curious," a Science Saturday that explores the chemistry of common kitchen ingredients, condiments, and food. Did you know that something familiar but unexpected in your kitchen can power a clock? It's not in the battery drawer.

#### **Science Saturdays**

1 to 4 p.m. December 9 - Tune Into Science January 27 - Trophy Triathlon February 17 - Ferry Impressive! February 24 - Pump it Up! March 10 - Chemistry for the Curious

#### **Invention Convention**

January 13, 14, 15 10 a.m. to 4 p.m.

#### Victorine's Valentine's Day

February 10 11 a.m. to 4 p.m. Visitors to Hagley's Car Show can enjoy more than 500 antique vehicles. Photo by Kerry Harrison

# **Hagley Thanks Its 2017 Corporate Partners**

Hagley preserves and shares the stories of American enterprise. Corporate Partners help Hagley use these stories to inspire innovation and educate tomorrow's entrepreneurs.



**PRESENTERS** 

Invention Convention presented by Agilent Technologies

## **TRAILBLAZERS** Ashby & Geddes





SEIBERLICH



Bike & Hike presented by Dogfish Head Craft Brewery

Jiffy Lube of Delaware

Alderman Automotive Machine Cover & Rossiter, PA

Advanced Networking, Inc. Atlantic Landscape Company Artisans' Bank Concord Mall/Allied Properties Gerber Masonry

# GLENMEDE

Founded on ideals. Built on ideas.

> Hagley Car Show presented by Glenmede

> > EXPLORERS KDI Office Technology

DISCOVERERS Lyons Companies Microsoft

## GROUNDBREAKERS

Joe Feeney State Farm Agency Last Chance Garage Mercer Health & Benefits LLC PNC Bank Royal Pest Solutions



Fireworks at Hagley presented by M&T Bank and Wilmington Trust

Patterson-Schwartz Real Estate

Nickle Electrical Companies Sheridan Auto Group

Service Unlimited, Inc. Shadetree Automotive, Inc. Tri-State Carpet, Inc. Weymouth, Swayze & Corroon Insurance, Inc.

Hagley Car Si





Photos by Kerry Harrison Photography

# **Glenmede Supports Hagley's Mission**

Founded in 1956, Glenmede is an independent investment and wealth management firm established to serve as the fiduciary and investment manager for the Pew family's charitable trusts. "Private ownership allows Glenmede to take a long-term view when managing our business and supports our organizational commitment to provide stability for our clients and employees," said Dominique DuMouchel, Business Development Director for Glenmede's Wilmington office.

With an office in downtown Wilmington, Glenmede serves individuals, families, endowments, foundations and institutions locally and nationally. While remaining focused on providing highly personalized service, Glenmede oversees <sup>s</sup>38 billion in assets under management, and provides access to wide-ranging asset classes and sophisticated planning and advice.

Glenmede began its partnership with Hagley many years ago when the firm's original incorporating documents became part of Hagley's collections. Throughout the years they have maintained this close working relationship, as both former and current Glenmede employees have served as active Hagley committee and Board members. Most recently, Glenmede served as presenting sponsor of the 2017 Hagley Car Show and we look forward to future opportunities for our organizations to partner.

DuMouchel continued, "Glenmede and the employees of the Wilmington office are proud to support Hagley's mission, from the company's programming for museum visitors to its world-class research library. Hagley and the du Pont family share a long history of community involvement that particularly resonates with Glenmede. We recognize and appreciate the important work taking place at Hagley, and we are honored to partner with this great organization." Hagley thanks Glenmede, the presenting sponsor of Hagley's 2017 Car Show.

GLENMEDE

Founded on ideals. Built on ideas.

## INNOVATION AT HAGLEY





Photos by Ashley Schroeder

Visitors to Hagley's Science Saturdays, Maker Fest, and Invention Convention become engaged in activities that allow them to explore science principles, create inventions, and become innovators.



## **Supporting Innovation at Hagley**

Hagley Museum and Library, home to the DuPont powder yards and special collections in the histories of commerce, technology, and invention, offers a unique set of resources and experiences to visitors. Hagley's people and programs help to nurture a culture of creativity and innovation—one that encourages people of all ages, and representing diverse backgrounds and interests, to think like innovators.

As members and friends of Hagley, you received a letter a few weeks ago from David Cole, Hagley's executive director, regarding the Hagley Annual Fund. Contributions of all sizes enable Hagley to continue to offer successful STEM programming and expand the array. In April, Hagley held its first Maker Fest, which featured Makers and inventors from across the Delaware Valley showcasing innovative technologies to an audience of nearly 1,000 visitors. Science Saturdays continue to be a hit with children as they discover solutions to science and engineering challenges at programs such as "Hip Optics," "May the Water Force be with You," "Magnetic Attraction," and "Explosions!"

Donations also support Hagley's worldrenowned research library. The Hagley Digital Archives underwent a makeover this past year, easing access to collections. Please visit www. hagley.org/library for more information and to explore the collections. The library is open daily from 8:30 a.m. to 4:30 p.m., as well as the second Saturday of every month.

Together, your contributions to Hagley are what make all of this possible. Please consider making a contribution this year to allow Hagley to continue this important work. Questions? Please contact Andrew Engel, aengel@hagley. org or call (302) 658-2400, ext. 329.

## COLLECTIONS



## **Sarnoff Collection Fully Available**

After three years of processing, preserving, and cataloging, the David Sarnoff Library collection is now fully accessible, including 700 digital images in the Hagley Digital Archives. This personal collection of Sarnoff, the longtime leader of the Radio Corporation of America, details the company's innovations, rise, and fall.

In December 2013, Hagley Library was awarded a <sup>\$</sup>291,500 grant by the Council on Library and Information Resources to process and make accessible the collections of the David Sarnoff Library. Employing two project archivists, a number of graduate assistants, and interns from the University of Delaware, and occupying a large portion of its library staff, Hagley completed the project in May. Hagley's innovative approach made individual collections available to researchers as work progressed, rather than the more typical approach of releasing all material only at the project's conclusion. When RCA was formed in 1919, Sarnoff steadily raised his visibility as a shrewd negotiator and strategist, leveraging these talents to become president of the company in 1930. Over the next four decades, Sarnoff led RCA to become one of the most important American technology companies in the twentieth century, introducing FM radio, color television, and a host of technologies in communications and computing.

Sarnoff was inspired by the Roosevelt and Truman presidential libraries to open a library in the David Sarnoff Research Center in Princeton, New Jersey, to house his private papers and focus on his contributions in communications and electronics. The collection opened in 1967 and grew by acquiring papers of former RCA executives, scientists, and engineers. The Sarnoff Corporation closed the library in 2009. *Left: Detail from Victrola advertisement, 1925.* 

*Top: Interior of a television mobile unit, 1930.* 

Bottom: Television remote control (1958-1959).

## COLLECTIONS



*Top:* Mr. Edison's Dilemma *Bottom:* How Meat Moves to Market

*Right:* The Story of Salt: Necessity of Life

## **Bam! Free Enterprise Saves the Day!**

The Published Collections Department of Hagley Library is making a concerted effort to build upon its collection of a fun but largely neglected type of business publication: the promotional comic book.

A wide variety of such publications was produced. The golden age of comics began with the introduction of Superman in 1938. The business world took note of the resulting popularity of comic books and recognized an educational opportunity afforded by this new medium. Following World War II, publishers such as General Comics and Custom Comics worked for hire and produced promotional comic books for corporate clients, such as General Electric, Remington Arms, and the United States Steel. Working illustrators, such as Bill Bunce, often were employed to bring these corporate messages to life. The resulting publications were designed to tell thrilling stories about the marvels of American industries, such as *How Meat Moves to Market*, by Swift & Company, or *The Story of Salt: Necessity of Life*, by Leslie Salt; biographical comics were produced about famous inventors, such as Thomas Edison and George Westinghouse; or grander still, comics were produced for the likes of the National Association of Manufacturers that touted the wonders of life in America brought about by free enterprise.

These promotional comic books could hardly compete with the superheroes of Marvel or DC, so they were often distributed for free with the hope of influencing the next generation of young American consumers. Were they successful? It's hard to tell. But they are fascinating to read in hindsight, so stop by Hagley Library and prepare to be entertained.



## **The Genesis of Hagley's Patent Models**

Hagley began collecting patent models in 1961 with the donation of 800 by New Yorker E. Tunnicliff Fox. Models have since come to Hagley from a variety of sources, including individuals and museums. Currently the collection totals more than 5,000 models.

In 1968, the Margaret Woodbury Strong Museum of Fascination was founded in Rochester, New York. Over time the museum changed its focus and was renamed. With a new emphasis on toys, dolls, and the history and exploration of play, The Strong parted with its patent models, and Hagley acquired ten.

The models at Hagley include an artificial leather machine, scissors, a sad-iron heater, a dust pan, a lamp-burner, a carpenter's square and two doorknobs. Of special importance to Hagley is an Improvement in Drying and Glazing Gunpowder patent model invented by John Smith of Kingston, New York. "What drew me to this collection was finding a model related to gunpowder manufacturing, which we are always seeking," said Museum Curator Debra Hughes. Smith's invention was patented, after his death, on February 7, 1864, by his two executors. His patent focuses on applying heat to the barrel in which gunpowder is being glazed.

A mustard filler was designed for Gulden's Spicy Mustard, and the company, founded by Charles Gulden in the 1860s, makes America's oldest brand of mustard. The patent model for a mustard filler was patented by his father, Jacob Gulden on July 4, 1882. According to the patent, this machine was made for filling many mustard bottles at the same time.

Check out the patent model collection online at www.hagley.org.

Patent models from left to right: Machine for Making Artificial Leather by J. Ireguritha, 1880; Sad-Iron Heater by Adrian Hitt, Robert R. Logan, and John Egginton, 1876; Mustard Filler by J. Gulden, 1882; and Dust-Pan by L. F. Wheaton, 1868.

Inset: Improvement in Drying and Glazing Gunpowder by John Smith, 1865.

### **C O L L E C T I O N S**

SITE OF

STATORATION IN 1985



Top: Hagley Museum entrance sign, 1955.

Bottom: Tyler McConnell bridge construction, 1952

Right: Female night shift workers at the DuPont Company Brandywine Mills, 1918.

# Photos of Life, Work on the Brandywine

The Audiovisual and Digital Initiatives Department recently added two collections to the Hagley Digital Archives of approximately 1,500 photographs that document the DuPont Company powder yards and surrounding area along the Brandywine from 1890 to 1960.

The powder yard images depict DuPont powder manufacturing facilities along the Brandywine during their last decades of operation and include several images of damage caused by the explosions that occurred in the yards.

The later content in the collection includes images showing preservation efforts and archeological excavations conducted during the site's transition to a museum. The collection also has photographs of the Eleutherian Mills Residence and garden during the tenure of its last resident, Louise du Pont Crowninshield, as well as photographs showing the development of the DuPont **Experimental Station.** 

The collections offer a glimpse into the once-thriving villages that surrounded the powder yards. These communities, with names like Henry Clay, Squirrel Run, and Wagoner's Row, dispersed after the powder yards closed in 1921.

View DuPont Company Brandywine powder yards and neighboring worker communities' photographs at http://digital. hagley.org/brandywinephotos1. View Brandywine Valley oral history interviewees' photographs at http://digital.hagley.org/ brandywinephotos2.

These digitization projects are part of the library's sustained effort to digitize and put online material related to the history of the DuPont Company Powder Yards and the surrounding industrial community.



# **Researcher Profile: Jennifer Greenhill**

In September, Hagley welcomed Dr. Jennifer Greenhill as the first recipient of its new postdoctoral fellowships, funded by a grant from the National Endowment for the Humanities. Greenhill is an associate professor of art history at the University of Southern California. Her first book, *Playing It Straight: Art and Humor in the Gilded Age* (University of California Press, 2012), used paintings, sculpture, and architectural projects to look at the use of humor in the late nineteenth century by artists such as Winslow Homer.

At Hagley, she is researching a second book, *The Commercial Imagination: American Illustration and the Materialities of the Market*, *1890-1930*. Her project focuses on commercial illustrators and their relationship to the emerging advertising industry, especially how they developed a visual vocabulary in dialogue with the increasingly sophisticated methods used to sell goods to consumers. Greenhill will draw on her experience as an art historian to understand the techniques employed in mass-circulation magazines and trade publications by this first generation of commercial illustrators who were actively involved in the advertising industry. Hagley's extensive collections will provide an invaluable source for her research, ranging from the advertising materials held in the du Pont de Nemours collections to the automobile trade catalogues donated to Hagley by the estate of Z. Taylor Vinson. She will be in residence at Hagley through May. Jennifer Greenhill



*Groups that volunteer in Hagley's gardens help create a more beautiful experience for visitors.* 

# **The Joys of Volunteering in Groups**

Hagley welcomes groups who want to volunteer. Here's what members of a group from Farmers Insurance thought of gardening at Hagley:

Ian MacKenzie: "Great opportunity to take part in preserving an important part of Delaware's history and the history of the DuPont family and company."

Tom Bruetsch: "Working in a profession that involves a lot of mental activity I was happy to get out of the office for a while and do some physical work. I like having the opportunity to give back to the community and be of service."

Sunil Shrestha: "A chance to step outside from my daily work life and get directly involved with nature. Opportunity to give back to community by preserving this historical place. A very welcoming staff provided us with all of the materials and support to make our volunteer work enjoyable."

Lisa Cummins: "I care about our Delaware history and heritage, and Hagley makes volunteering and being a part of it so easy. My company, Farmers Insurance, encourages employees to volunteer and engage in meaningful community service, and the wonderful staff at Hagley made our adventures into gardening a very positive experience. Who knew that we had such green thumbs? Volunteering as a group gives us a sense of accomplishing a collective goal, and Hagley provides ample opportunities to do so. We enjoyed it so much that everyone in our group signed up for subsequent events."

To learn more about group volunteering, contact Volunteer Manager Angela Williamson, awilliamson@hagley.org, (302) 658-2400, ext. 257.

#### FUN FACTS – "HOLIDAYS AT HAGLEY"

At **"Holidays at Hagley"** you can see the du Pont family home decorated for the holidays.

#### Some fascinating facts about Christmas:

- The Germans made the first artificial Christmas trees out of dyed goose feathers.
- Each year more than 1.6 billion Christmas cards are sent in the U.S. alone.
- According to the Guinness world records, the tallest Christmas tree ever cut was a 221-foot Douglas fir that was displayed in 1950 at the Northgate Shopping Center in Seattle, Washington.
- Christmas trees have been sold in the U.S. since 1850.
- The traditional three colors of Christmas are green, red, and gold. Green has long been a symbol of life and rebirth; red symbolizes the blood of Christ, and gold represents light as well as wealth and royalty.
- In North America, children put stockings out at Christmas time. Their Dutch counterparts use shoes.
- Artificial Christmas trees have outsold real ones since 1991.

#### **WORD SEARCH - INVENTION CONVENTION - INSECTS**

At **Invention Convention presented by Agilent Technologies** on January 13, 14, and 15, visitors are invited to learn all about our six-legged friends.

Find the insect-related words in the grid below.

WORD LIST	Α	Е	Ρ	F	U	С	F	۷	Е	В	F	Е	0	К	С	В	Ρ	Н	А	Ζ	R	Н	В	С	К
ABDOMEN	0	Ρ	0	L	۷	А	М	J	S	0	Q	Х	Х	Т	Е	Н	Т	S	W	М	С	L	Ζ	М	F
ANT	V	J	U	Y	Ν	Т	J	Ν	U	S	Е	0	Х	Е	Ι	0	К	Х	Х	R	D	А	U	В	В
BEE	G	А	U	Ρ	М	Е	R	S	G	М	L	S	Т	М	М	U	Е	L	А	Ρ	S	R	D	Ν	S
BEETLE	0	J	Ζ	Н	Е	S	L	Ρ	Ν	Ζ	В	К	W	Q	Ν	А	Q	Ν	F	W	0	۷	В	Е	Т
BUG	R	Е	Ρ	Ρ	0	Н	F	А	Е	L	Ι	Е	Ι	Т	Е	Y	0	S	Т	R	Т	А	Ν	F	J
ENTOMOLOGY	Α	0	۷	S	0	F	Y	F	۷	۷	L	L	Е	Α	Ρ	М	Ζ	Ν	0	М	0	Т	Ν	Н	J
EXOSKELETON Fly	Ρ	Ι	L	0	С	U	S	Т	R	Ζ	0	Е	Q	Т	Ν	R	С	Κ	К	М	0	S	Е	С	Н
GNAT	Ι	К	R	W	С	U	۷	0	S	Ρ	J	Т	С	Ι	L	W	J	U	М	М	G	D	М	Ζ	Ρ
LARVA	Т	А	Ν	G	W	R	А	Q	Т	Е	S	0	В	U	G	Е	Х	L	0	F	Ρ	Ν	0	Ζ	0
LEAFHOPPER	Х	Х	А	۷	Ζ	С	D	Н	Ν	۷	Е	Ν	0	S	Н	Ρ	А	L	0	L	Ι	Q	D	Ν	Е
LOCUST	S	Е	D	В	Н	Y	W	А	R	0	Ζ	А	Т	А	G	F	0	R	В	Ζ	L	Х	В	Α	J
MONARCH	S	А	С	D	Q	W	В	В	Т	Н	R	Х	L	۷	Ν	G	Ν	Y	Т	U	F	К	А	W	F
MOSQUITO MOTH	V	Н	Ν	0	Н	0	S	G	R	Ι	۷	Ρ	S	Ζ	Y	Т	0	W	0	Т	۷	Ζ	А	М	J
PUPA	В	R	W	Ν	С	J	0	F	D	Ν	۷	S	S	Х	J	А	Ζ	Ρ	Х	Q	S	Y	R	Ι	Α
ROACH	Н	А	G	Ι	Н	Ρ	Y	Ι	Q	Ζ	W	А	J	Y	R	Y	С	Н	Н	0	F	К	Α	М	L
WASP	R	Η	R	Е	В	V	Ι	R	J	S	К	W	Е	Т	Α	G	V	Ρ	Η	Ι	С	J	Q	Q	Η

#### **FIND THE MATCH – TUNE INTO SCIENCE**

At **Hagley's Science Saturday** on December 9, you can create a musical instrument that will vibrate to make sound.



Can you tell which two grand pianos below are exactly alike?



AND PROPERS: GRAND PIANO AND FOUR ARE EXACTLY ALIKE.



## EVENTS CALENDAR

Hagley is open daily, year-round, at 10 a.m. and closed Thanksgiving Day and Christmas Day.

The Belin House Organic Café is open daily 11 a.m. to 3 p.m.

For guided tours, research library hours, and event details, visit www.hagley.org.



Photo by Ashley Schroeder

Visitors on Hagley's Twilight Tours experience the Residence decorated and lit for the holidays. Unless otherwise noted, activities listed below are included with admission and free for members and children five and under.

#### Walking Tours – visit www.hagley.org for schedule

Hagley offers weekend walking tours exploring gunpowder production, water power, geology, life in an industrial village, Hagley's gardens, and explosions. Walking tours are included with admission, reservations requested at (302) 658-2400, ext. 261.

#### Science Saturdays – visit www.hagley.org for schedule

Experiment and innovate with Hagley's series of science activities. Visitors use their creativity to make scientific discoveries.

#### November 10 – Friday – 8 a.m. to 6 p.m.

Fall Conference: "Hidden Capitalism: Beyond, Below, and Outside the Visible Market" Held in the Library Copeland Room. Registration required, contact Carol Lockman at clockman@hagley.org or (302) 658-2400, ext. 243

#### November 10, 11, & 12 – Hagley Store Members Sales Days

For three days, Hagley members receive 20 percent off their purchases and free gift wrapping for purchases of <sup>\$</sup>25 or more. The Hagley Store is open from 10 a.m. to 4:30 p.m.

#### November 10 – Friday – 10 a.m. to 4 p.m. Veterans Day

Admission is free for military veterans. Admission is always free for current military personnel and their families.

#### November 16 – Thursday – 6:30 p.m. Research Seminar: Marcus Allen

Attendees are encouraged to read Allen's paper "The Black Saver Paradigm: Understanding Black Capitalism in Nineteenth Century Baltimore," which may be obtained by contacting Carol Lockman at clockman@hagley.org. Library Copeland Room, use Hagley's Buck Road East entrance.

#### November 24, 25, & 26 • 10 a.m. to 4 p.m. Thanksgiving weekend

Bring your family and out-of-town guests to enjoy holiday decorations in the Eleutherian Mills Residence. Visit Workers' Hill to sample ginger snaps and mulled cider in the Gibbons House and write with a quill pen in the Sunday School. Included with admission, free for members.

#### November 24, 2017 – January 1, 2018 "Holidays at Hagley" Exhibition

The 1803 du Pont family ancestral home, Eleutherian Mills, will feature holiday decorations and interpretation on holiday entertaining. Dried flowers, greenery, fruits, and other natural materials create a beautiful holiday ambiance accentuated by soft lights and Christmas music. Closed December 25.

#### December 7 – Thursday – 7 p.m. Author Talk: "Fraud: An American History from Barnum to Madoff"

In his talk, Edward J. Balleisen will trace the history of fraud in America—and the evolving efforts to combat it—from the age of P. T. Barnum through the eras of Charles Ponzi and Bernie Madoff. Those planning to attend should contact Carol Lockman at clockman@hagley.org or (302) 658-2400, ext. 243. Held in the Soda House, use Hagley's Buck Road East entrance.

#### December 12 – Tuesday – 4:30 to 7 p.m. Twilight Tours Special Preview Night

Enjoy a relaxed evening with self-guided tours of the home and choirs singing carols in the barn. Refreshments served in the Visitor Center. See details for Twilight Tours in the next listing.

#### December 12, 13, 19, 20, 26, & 27 – 4:30 to 7 p.m. Twilight Tours

Enjoy a rare opportunity to see Eleutherian Mills, the first du Pont family home built in America, dressed for the holidays and illuminated with softly glowing lights. Space on tours is limited and reservations are required. Call (302) 658-2400, ext. 261. Tours begin at 4:30 p.m. and depart every half hour until 7. Admission is <sup>5</sup>10 for non-members and free for members

#### January 13, 14, & 15 – 10 a.m. to 4 p.m. Invention Convention presented by Agilent Technologies

This year's Invention Convention invites visitors to explore the wonderful world of insects through engaging, hands-on activities. Adults <sup>\$</sup>8, Children 4-14 <sup>\$</sup>6, children under 4 and Hagley members free.

#### January 18 – Thursday – 6:30 p.m. Research Seminar – Dara Orenstein

Attendees are encouraged to read Orenstein's paper "'Free Ports For Refugees': How the U.S. Turned a Warehouse for Duty-Free Garbanzo Beans into an Internment Camp for European Jews" which may be obtained by contacting Carol Lockman at clockman@hagley.org. Library Copeland Room, use Hagley's Buck Road East entrance.

#### January 27 – Saturday – 6 p.m. Golden Pheasants Game Dinner

This five-course dinner will pair specialty game food with wine selected and described by Alain Blanchon. Members <sup>\$</sup>150, not-yet members <sup>\$</sup>185. Advance reservations only, contact Kim Kelleher at (302) 658-2400, ext. 235.

#### February 10 – Saturday – 11 a.m. to 4 p.m. Victorine's Valentine's Day

Celebrate Valentine's Day by decorating a candy bar wrapper, designing Valentine's Day cards, and nibbling on a fresh-baked gingerbread heart.

#### February 15 – Thursday – 6:30 p.m. Research Seminar – Adam Rome

Attendees are encouraged to read Rome's paper "DuPont and the Limits of Corporate Environmentalism" which may be obtained by contacting Carol Lockman at clockman@hagley.org. Library Copeland Room, use Hagley's Buck Road East entrance.

#### March 15 – Thursday – 7 p.m. Author Talk – "How the Bulldozer Remade Postwar America"

In order to clear space for new suburban tract housing, interstate highways, and urban renewal projects, wrecking companies demolished buildings and earth-moving contractors leveled land at an unprecedented rate and scale. In her talk, Francesca Russello Ammon explores how postwar America came to equate this destruction with progress. Those planning to attend should contact Carol Lockman at clockman@Hagley.org or (302) 658-2400, ext. 243. Held in the Soda House, use Hagley's Buck Road East entrance.

#### I N ТНЕ HAGLEY STORE



# **For The Holiday Season**

## 1) Christmas Cottage Cookbook from the Publishers of Cottage Magazine

Make the most wonderful time of the year even more magical with this 240-page hardcover guide to exceptional cooking and entertaining. Brimming with holiday gift ideas, you'll find more than 150 recipes to celebrate the season, plus creative ideas to decorate your table and home.

Item #6896 - \$39.95

#### Inset - An Artful Christmas by Susan Wasinger

Simple techniques to make an assortment of decorations and gifts for your holiday season. Step-by-step instructions and how-to photos will guide the way.

Item #6644 - \$17.95

2) Holiday Lights Silk Tie by Josh Bach This festive tie made of 100 percent silk is a perfect gift or accessory for your holiday party. Item #66721 - \$46.95

#### 3) Charming Snowman

This snowman with black top hat and black shoes is a wonderful decorative holiday piece that will keep you smiling through the cold winter days.

Item #66000 - \$21.95

Don't miss the Hagley Store Members Sales Days on November 10, 11, and 12! Enjoy a 20 percent discount on most items with free gift wrapping on purchases of \$25 or more!

#### **Hagley Store Information**

Hagley members receive a 10 percent discount at the Hagley Store. Open daily at 10 a.m. Closes thirty minutes after museum closing time. (302) 658-2400, ext. 274



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Help spread the word about Hagley! After you've finished reading this magazine, please share it with a friend or drop it off where others may enjoy it.



Photo by Ashley Schroeder