

# SPRING 2019 MAGAZINE





FEBRUARY 9 - VICTORINE'S VALENTINE'S DAY

MARCH 7 - AUTHOR TALK BY HASIA A. DINER

**APRIL 27 · HAGLEY'S MAKERFEST** 

### FROM EXECUTIVE DIRECTOR DAVID COLE



n May 3, 2018, Hagley's Soda House played host to a special presentation: a conversation with Emmy Awardwinning journalist and producer Alexandra Dean and a screening of her documentary film Bombshell: The Hedy Lamarr Story. The Hagley Library audience that evening was treated to an extraordinary narrative; Dean's film traces the remarkable career path of a woman who took Hollywood by storm in the 1930s and 40s, as one of that era's most glamorous and celebrated film stars. As her Hollywood star faded, Lamarr quietly applied her prodigious intellectual capacities and boundless determination to her true passion: inventing a secure radio guidance system for Allied torpedoes during World War II, along the way laying the foundation for subsequent advances in Bluetooth and Wi-Fi technologies. Sadly, Lamarr's achievements as a brilliant inventor went largely unrecognized during her lifetime.

Over the past year, the Hedy Lamarr story has been on my mind as Hagley Museum curators have

been steadily cataloging and interpreting the Hagley Patent Model Collection. This collection of more than 5,000 "artifacts of invention" contains eighty patent models submitted for patent protection by women inventors in the 1800s. In a story that follows, we introduce the inspiring experience of one inventor, Mary Carpenter, who had to fight her male business partners in court to secure patents to her inventions in her own name. Carpenter's story was all-toocommon in the nineteenth and twentieth centuries; Hagley's collections, ranging from our patent models, to the Amram Collection of Women Inventors, to archival materials in our Library, document numerous, heretofore underrecognized achievements of women who made landmark contributions to innovation in the United States.

# Stay tuned for more "bombshell" stories in the years to come!

As we dig deeper into our collections, we will be uncovering more tales like Mary Carpenter's, and we plan to share them in lectures, in traveling exhibitions, and in the patent model-focused "Nation of Inventors Gallery" that will open at Hagley in a couple of years. These presentations will help us provide more complete, balanced, and enriching accounts of America's evolution as a land of inventors and entrepreneurs. Please stay tuned for more "bombshell" stories in the years to come!

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# The Inspiration of Makers

inspires and supports curiosity and creativity, encouraging people to materialize their ideas. It pulls together folks from a vast array of careers, skills and ages, helping one another make things with their own hands.

Hagley's MakerFest is a gathering of the local Maker community, providing a venue for showing what they do and sharing what they know. Join these Makers (for reduced admission this year!) at the Soda House and participate in handson activities, view engaging demonstrations, and taste craft "potent potables." You will walk away informed and energized, ready to take on that next project.

## SATURDAY, APRIL 27 11 A.M. TO 4 P.M.

USE BUCK ROAD ENTRANCE ADULTS \$5 • HAGLEY MEMBERS AND YOUTH 6-18 \$3 KIDS UNDER 6 FREE

### Spring Author Talks Highlight Entrepreneurs

the History of Business, Technology, and Society focus on a philanthropic leader of Sears and the growth of alternative businesses in the 1960s and '70s.

Julius Rosenwald (1862–1932) rose from modest means as the son of a peddler to meteoric success as the inspired leader of Sears, Roebuck & Co. Less well known is his deep commitment to philanthropic projects that benefited Jewish and African American causes, as he would not permit his name to be attached to buildings or organizations that he helped to finance.

In a March 7 talk, Hasia Diner will tell Rosenwald's remarkable story. She is the Paul and Sylvia Steinberg professor of

American Jewish history at New York University and twotime winner of the National Jewish Book Award. She will
explain Rosenwald's deep belief in the importance of
giving in the present to make an impact on the future,
and his encouragement of beneficiaries to become
partners in community institutions and projects.
Diner's talk, "Julius Rosenwald: From Sears Executive
to Passionate Philanthropist," is based upon her 2017

biography, Julius Rosenwald: Repairing the World.

From fair trade coffee and organic foods to "shop small" and "buy local" campaigns, the notion of ethical consumption has pervaded many aspects of Americans' daily lives. In a May 9 talk, University of Baltimore professor Joshua Clark Davis will uncover the roots of these changes among the head shops, African American bookstores, feminist businesses, and organic grocers and other alternative businesses that emerged in the 1960s and 1970s.

Through shared ownership, limited growth, and

democratic workplaces, these activist entrepreneurs sought to create a different kind of business that upheld their values. At one time, thousands of these enterprises operated across the United States—but only a handful survive today, even as they influenced the way many mainstream businesses now operate. This talk, "The Rise and Fall of Activist Entrepreneurs: How the 1960s Changed Business," is based on his 2017 book From Head Shops to Whole Foods: The Rise and Fall of Activist Entrepreneurs.

Author Talks take place in the Hagley Soda House auditorium, beginning at 7 p.m. RSVPs encouraged, walk-ins welcome. Please RSVP to Augusta Noah, anoah@Hagley.org or call (302) 658-2400, ext. 243.

JULIUS ROSENWALD, 1927 HASIA DINER JOSHUA CI ARK DAVIS

### **AUTHOR TALKS**

MARCH 7 • 7 P.M. - HASIA DINER MAY 9 • 7 P.M. - JOSHUA CLARK DAVIS USE BUCK ROAD ENTRANCE RSVP ENCOURAGED

MARICHKA UDUD

# Writers in the Round

**BIT OF NASHVILLE IS COMING TO DELAWARE** with a concert by singer-songwriters. Hagley presents "Writers in the Round" on Thursday, March 28, at 5:30 p.m. in the Soda House auditorium. This concert presents four local songwriters

who will showcase their original music and engage with the audience on the creative process of songwriting. This show is produced by The Acoustic Jam, a music showcase provider, and is modeled after Nashville, Tennessee's, Bluebird Café, which has earned global acclaim for its devotion to songwriters and the craft of songwriting.

The songwriters will prepare six original, performance-ready pieces in an intimate setting. They will join their fellow writers and perform their pieces acoustically on a rotating basis. There will be conversation between the writers regarding how the song came about, including anecdotes from the process.

The performers are John Blunts, Paul Donovan, Aaron Nathans and Laura Kuhne.

The doors to the Soda House auditorium will open at 5:30 p.m. with light refreshments and beer and wine. Each guest will receive one complimentary drink ticket with admissions, and additional drink tickets can be purchased at the event. There will be an intermission during which drinks and light refreshments will continue. To purchase tickets, visit www.hagley.org or contact the membership office weekdays at (302) 658-2400, ext. 235. You must be 21+ to attend.

## THURSDAY, MARCH 28 5:30 P.M. RECEPTION • 6 P.M. SHOW

USE BUCK ROAD ENTRANCE \$10 HAGLEY MEMBERS, \$15 NONMEMBERS





### A Run Along the Brandywine's Most Beautiful Mile

**ACE UP YOUR SNEAKERS** and put on your headband for the second annual Hagley 5K Along the Brandywine. The run/walk will be held on Sunday, April 28. Check-in will start at 7:30 a.m., with the 5K beginning at 8:30 a.m. The course starts near the barn on the upper property and takes participants through the Hagley property, past the mills and back to the du Pont residence. Whether you want to race through the course or take a more leisurely stroll, all are welcome to participate in the 5K.

Visit www.hagley.org/5k2019 to register. Team registrations are accepted this year. Proceeds from the 5K will go to the Hagley Scholarship Fund, which enables underserved students to participate in field trips to Hagley. For every \$7.50 raised, one student gets to enjoy one of the outstanding school programs offered on site.

The first Hagley 5K was held last April with 102 runners and walkers participating. It raised \$1,300 for the Hagley Scholarship Fund, which enabled 173 students to visit Hagley. The 5K was

conceived and organized by teen volunteers in Hagley's Youth Leadership Program. Following the success of the inaugural run/walk, it was decided to make the 5K an annual event to support Hagley's scholarship program.

### SUNDAY, APRIL 28 CHECK-IN 7:30 A.M.

REGISTER AT HAGLEY.ORG/5K2019 \$20 BEFORE APRIL 7, \$25 AFTER USE BUCK ROAD ENTRANCE



he new Blooms & Booms Happy Hour celebrates spring and shows how Hagley appreciates members. Members will hear the boom of a cannon firing, tour the E. I du Pont garden and enjoy blues, country, folk, pop and rock from The Acoustic Jam Band. There will be light refreshments and complimentary wine, beer, and a signature spring cocktail, Lavender Lemon Drop Martini. Each quest will receive one complimentary drink ticket with admissions, and additional drinks can be purchased at the event. This is a Hagley-membersonly event for 21+. Admission is free; advance registration is required. To make your reservation, contact the membership office weekdays at (302) 658-2400, ext. 235, or email kkelleher@hagley.org.

# THURSDAY, MAY 2 5 TO 8 P.M.

USE BUCK ROAD ENTRANCE ELEUTHERIAN MILLS TERRACE • FREE ADMISSION HAGLEY MEMBERS ONLY



**AGLEY HAS ACQUIRED** a large research collection documenting the airline industry in the twentieth century. Compiled over 35 years by collector and historian Roger Bentley, it includes photographs, slides, trade catalogs, publications, and advertising material from more than 10,000 airline companies from around the world.

Capital Airlines, based out of Washington, D.C., until it merged with United in 1961, is among the better represented companies in the collection. Bentley was employed by Capital prior to becoming an independent business owner in Maryland. His brief time working at Capital sparked his lifelong interest in documenting the airline industry with a focus in the designs and branding on airplanes (hence 45,000 slides of various aircraft).

The collection documents the early development of the air passenger industry that grew in the 1930s with many regional companies that evolved into the national network that now dominates air travel. Bentley donated a collection that also contains archival material from the large mid-century companies like Pan American and Eastern Airlines. The volume of material for each company depends on its size and lifespan: some airlines include multiple boxes of documents, while others have just a single folder.

Library staff will begin to process the collection in 2019 and will allow limited access to researchers while it is being processed. For more information, email research@hagley.org.







PHOTOGRAPH OF A CAPITAL AIRLINE DC-3 (CA. 1950) PROMOTIONAL PHOTOGRAPH OF AN AIR HOSTESS FROM THE PENNSYLVANIA CENTRAL AIRLINE (CA. 1948) PROMOTIONAL MATERIAL AND TIMETABLES FOR PENNSYLVANIA AIRLINES (CA. 1935)

### Women Inventors in the Nineteenth Century





MARY CARPENTER'S 1876 PATENT MODEL FOR A STRAW SEWING MACHINE MARY HILDRETH'S 1875 PATENT MODEL FOR AN IMPROVEMENT IN SAD-IRON HOLDERS s THE UNPACKING AND CATALOGING of our patent model collection continues, we're learning more about innovation in the nineteenth century. One statistic that we've discovered is that during the nineteenth century, less than 1 percent of all United States inventions were patented by women. This holds true in the Hagley collection of more than five thousand patent models—only eighty were submitted by women with their patent applications.

Through our research, the stories of who these women were and how they came to invent are starting to emerge. Mary Carpenter is one of the women represented in the Hagley collection who successfully fought a patent infringement case. The daughter of a New York lawyer, she received her first patent for a fluting machine when she was twenty-one. She went on to receive seventeen patents between 1861 and 1905. In 1885, she began to patent under her newly married name, Mary P. C. Hooper.

Carpenter was most known for her 1876 straw sewing machine invention used to sew ladies' straw hats. Her improvement was sewing hats with the right side out, which prevented damage. Unfortunately, her two male partners in the Carpenter Straw Sewing Machine Company went behind her back and patented her invention in their names. She fought back and won the patent infringement case against them. In 1878, she traveled to England, where she also patented her straw sewing machine and made money by selling the manufacturing rights to it there.

Inventions by women in the Hagley collection date between 1863 and 1899. Not surprisingly, most of their inventions were laundry-related, with a focus on ironing patents. Their inventions are also represented in food preparation, medical devices, fire safety, and transportation.

Please visit www.hagley.org/pmlisting to see more about women inventors represented in the Hagley collections.

### DuPont Company Advertising Now Viewable Online

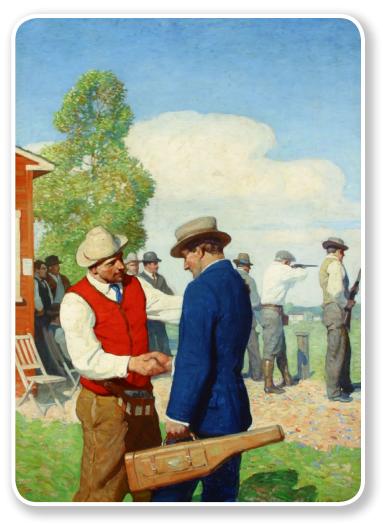
to create paintings for advertising its products from the late 1890s into the 1930s. The DuPont Museum Collection, which Hagley received in 1954, included approximately seventy advertising paintings.

The focus of the early paintings was on hunting and trapshooting to promote DuPont's gunpowder. Prominent artists hired include N. C. Wyeth, Edmund Osthaus, Gustav Muss-Arnolt, Lynn Bogue Hunt, Carl Rungius, Herbert Stitt, C. Everett Johnson, Worth Brehm, and Stanley Arthurs. Wyeth's 1911-1915 *How Are You Old Man? Glad to See You* features a trapshooting scene. Osthaus, a Toledo, Ohio, artist who specialized in hunting dogs, created twenty paintings for DuPont. His series of thirteen National Field Trial Championship winners from 1896 to 1910 was reproduced on calendars, lithographs, post cards, and envelope covers.

Paintings were also created for the cover of *DuPont Magazine*. Starting on January 1, 1918, twenty-one paintings from Hagley's collection were on the *DuPont Magazine* cover from 1918 to 1928, with nine from 1919. These paintings represent products but also world events. *Zero Hour* by Stitt in 1918, depicts a troop of World War I American soldiers. It appeared on the December 1918 cover to commemorate the end of the war.

Paintings were also made for print advertising in magazines, such as C. B. Freeman's painting of a woman in a car for a Duco car paint, which appeared in *The Saturday Evening Post*.

Visit www.hagley.org/dupontadvertising to see more examples of DuPont advertising artwork.



HOW ARE YOU OLD MAN? GLAD TO SEE YOU -N.C. WYETH (1882-1945); 1911-1915



harles and Dorothy Campbell have been married for 63 years. They met at the NYU College of Dentistry that Charles attended, where Dorothy was secretary to the dean of admissions. ("That's how I got in," joked Charles.) In 1960, Charles opened a dental practice in New Castle, Delaware, and retired in 1991. Charles and Dorothy walk at Hagley almost daily. The couple's warmth and wonderful sense of humor made for a very enjoyable interview.

### How long have you been Hagley members?

"Forever. We joined Hagley shortly after they started their membership program."

### Do you remember the year?

"No, that's what happens when you become this far advanced in age."

# If you don't mind my asking, how old are you? "I'm 90 and my wife is 89."

### Do you have a personal connection to Hagley?

"Sort of. One of the men who stood at the Hagley Gates, who checked to make sure people didn't have anything metal on them that could spark an explosion—had a daughter, and his daughter was a patient at my dental practice."

# How would you describe Hagley to someone visiting the area?

"Hagley is the most beautiful museum of all of them in this area. Hagley is beautiful now, even when the millrace is drained. Hey, do you know if the bottom of the millrace is paved, lined with rock, or just earth?"

### I think it's just earth.

"Have they considered dredging it? I bet they would find a lot of interesting things."

# I imagine they would! What is your favorite thing to do here?

"We love walking at Hagley. We visit Winterthur and Longwood sometimes, but we come to Hagley almost every day. When we first visited, we would walk from the Visitor Center to the gates by the steam engine and back, and then turn around and

do it again. Now, though, we walk from the Visitor Center to the Millwright Shop and stop to take a break on a bench before we walk back."

# You mentioned that you did research at Hagley. What were you researching?

"I was researching my family history. I didn't find much that I didn't already know, but I did find items that verified certain dates I was looking up. The reading room in the library is a disaster, though."

### It's a disaster? Why is it a disaster?

"It's so beautiful that it's distracting! Between the scenery and the gorgeous windows, I couldn't get any work done!"

# "We come to Hagley almost every day."

### What is your favorite thing to see at Hagley?

"There are many things. I really like the dioramas in the Machine Shop. I knew the person who made them, Wilford Fletcher. Wilford was really good at making them. Oh, and the little models—you know, the ones for establishing copyright?

### The patent models?

"They're fantastic! We've had conversations with (Hagley Guide) Cheryl Nathan about which ones we want to take home with us!"

# Do you have any traditions that you associate with Hagley?

"We always come to the Christmas show to see the displays. That brings in the holidays for us."

# Do you have any thoughts about the future of Hagley?

"Keep it up. It's wonderful to come to a place where everyone knows us."



AGLEY THANKS AGILENT TECHNOLOGIES as a long-time
Presenting Sponsor of Hagley's Invention Convention. This
year's convention focused on "Living in Space." Visitors
learned outer space survival skills—what to wear, what to
eat and drink, and how to keep fit in microgravity. The convention also
offered hands-on activities and fun facts about space travel.

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# Pardon Our Progress!

changes near the Visitor Center as Hagley prepares to open a patent model exhibition gallery in 2020. The most obvious change is that the Hagley Store building is closed for inventory and refreshing. Shoppers can enjoy a variety of merchandise (souvenirs) in the Visitor Center lobby, in the Belin House Café beginning March 9, and in the redesigned store when it reopens April 1.

The Belin House Café on Workers' Hill is now under the direction of Janssen's Market, an iconic Greenville store known for its exceptional products and quality. The Belin House Café will be open 11 a.m. to 3 p.m. daily beginning March 9, with a menu that varies each day but includes soup, chili, sandwiches, salads, and desserts.

The Visitor Center, now in the 1814 cotton spinning mill known as Henry Clay Mill, will close in 2020 to begin its transformation to the Nation of Inventors Gallery.

Updates will be posted to www.hagley.org.

# Five Things (among many more) You Can Enjoy While Hagley Makes Improvements:

Have you seen the new "Water Works!" exhibition just down the road from the quarry?

2 Enjoy prop mills

**Enjoy a stroll** on the lower property—walk among the giant mills along the Brandywine.

Come to a Science Saturday and discover a solution to a science challenge!



**Enjoy a sweet treat** and make a Victorian valentine at Victorine's Valentine's Day on February 9.

Celebrate the Maker movement at Hagley's MakerFest on April 27.





### 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.

#### February 7 – Thursday – 7 p.m. Research Seminar: Jessica K. Burch

Attendees are encouraged to read Burch's paper, "A New Deal for Direct Sales: How Direct Sales Firms Helped Create Modern Non-Employment, 1910-1935" Free, reply requested, contact anoah@hagley.org. Held in the Library Copeland Room, use Hagley's Buck Road entrance.

### February 9 – 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.

### March 7 – Thursday – 7 p.m. Author Talk – "Julius Rosenwald: From Sears Executive to Passionate Philanthropist"

In this talk, Hasia Diner will tell
Rosenwald's remarkable story, showing
the connections between his Jewish
consciousness and his involvement with
African Americans. Free, reply requested,
contact anoah@hagley.org. Held in the Soda
House, use Hagley's Buck Road entrance.

April 4 – Thursday – 7 p.m. Research Seminar: Jennifer Black

Attendees are encouraged to read Black's paper, "Policing Fakes: Early Trademark Regulation in the U.S." Free, reply requested, contact anoah@hagley.org. Held in the Library Copeland Room, use Hagley's Buck Road entrance.

### April 25 — Thursday — 6:30 p.m. Research Seminar: Regina Lee Blaszczyk

Attendees are encouraged to read Blaszczyk's paper, "The Synthetics Revolution and the Senses" Free, reply requested, contact anoah@hagley. org. Held in the Library Copeland Room, use Hagley's Buck Road entrance.

SAVE THE DATES! HAGLEY'S 2019 FIREWORKS WILL BE HELD JUNE 14 & 21, 2019.

### April 27 – Saturday 11 a.m. to 4 p.m. MakerFest

Enjoy a family-friendly festival of invention, creativity, and resourcefulness, and a celebration of the Maker movement.
This event features demonstrations from area makers showcasing craftsmanship and technology in a wide variety of pursuits, from 3-D printing and robotics to fiber arts and woodworking. Admission is \$5 for Adults, \$3 for Hagley Members and Youth 6-18. Free for children under 6. Visit www.hagley.org to purchase tickets. Use Hagley's Buck Road entrance.

KERRY HARRISON

#### April 28 – Sunday – Race starts at 8:30 a.m. Hagley's 5K Along the Brandywine

Join us for our second annual 5K run/walk to benefit Hagley's Scholarship Fund. Participants can run or walk along the beautiful Brandywine through Hagley's 235-acre property. Proceeds from the run will support field trip scholarships for area schools. The run is coordinated by

high school volunteers who are part of Hagley's Youth Leadership Program. Registration fee is \$20 on or before April 7 and \$25 after. Participants can register the day of the run/walk. Use

Library/Soda House entrance. Visit www.hagley.org/5k2019 to register.

### May 9 – Thursday – 7 p.m. Author Talk: "The Rise and Fall of Activist Entrepreneurs: How the 1960s Changed Business"

Historian Joshua Clark Davis will uncover the roots of these movements in the political and social activism of the 1960s and '70s. During this time, head shops, African American bookstores, feminist businesses, and organic grocers brought the work of the New Left, Black Power, feminism, environmentalism, and other movements into the marketplace. This author talk is based

off of Davis's book, From Head Shops to Whole Foods: The Rise and Fall of Activist Entrepreneurs. Free and open to the public. Reservations requested, call (302) 658-2400, ext. 243, or contact anoah@hagley.org. Held in the Soda House Auditorium, use Hagley's Buck Road entrance.

Unless otherwise noted, activities listed are included with admission and free for members and children five and under.



KERRY HARRISON

FANTAIL PHOTOGRAPHY

**AT HAGLEY'S MAKERFEST** on April 27, you can see demonstrations from area makers showcasing craftsmanship and technology in a wide variety of pursuits. Can you find ten differences between the two photos below?





KERRY HARRISON PHOTOGRAPHY

**AT HAGLEY'S SCIENCE SATURDAY, "MAGNETIC ATTRACTION,"** presented by Young Conaway Stargatt & Taylor, LLP, you can build a magnetic toy and tinker with the force of magnetic fields. Find the magnet-related words in the grid below.

WORD LIST	F	X	C	T	F	Н	F	R	T	Y	S	M	Υ	W	J	0	P	Q	C	M	S	S	W	M	R
ALLOY	Α	Н	D	Α	0	L	R	R	F	D	Т	S	Ε	G	R	Α	Н	C	V	0	V	K	0	S	0
AMPERE	S	Α	F	Н	P	R	K	0	N	Ι	В	Ι	Ι	Α	T	R	Q	S	В	X	R	Т	W	В	Т
ATTRACTOR	Т	F	Т	X	W	D	Н	J	N	P	R	T	V	В	Z	M	A	G	N	P	R	W	M	Т	C
CHARGE	М	U	U	N	C	Ε	Α	X	R	0	Z	Ε	٧	Ι	Α	M	P	Е	R	E	N	L	Q	D	Ε
COBALT	W	V	M	D	U	M	L	0	٧	L	D	N	Р	N	Т	K	Т	Α	В	L	W	L	Q	J	V
COMPASS	0	D	S	X	Υ	K	T	Υ	M	Α	0	G	М	U	D	C	Υ	D	Α	W	Z	R	X	В	В
CONDUCTIVITY	S	F	Α	Q	М	C	C	A	0	R	0	Α	M	Н	L	Т	U	N	0	I	L	J	P	U	Q
ELECTROMAGNET	F	W	M	C	Α	0	Н	N	0	R	Ι	M	N	L	X	S	L	D	F	Y	R	Υ	C	0	Е
IRON	J	Н	W	R	M	Ε	T	Z	D	T	L	P	U	Q	M	P	Ι	Α	N	P	Y	P	P	X	N
MAGNETISM	Q	G	Т	P	U	Α	P	0	M	Z	W	A	N	X	V	В	Y	0	В	0	Ε	K	0	L	I
MAGNETITE	Α	Т	Α	Q	L	T	M	G	R	C	C	0	Υ	X	G	L	F	K	N	0	C	L	D	Α	K
METAL	Α	S	R	L	Ι	D	Ε	T	E	N	G	Α	M	0	R	Т	C	Ε	L	E	C	В	0	Ε	0
MOTOR	S	0	0	Υ	В	Ε	Т	Z	T	Т	F	Υ	Z	Α	М	Α	G	N	Ε	Т	Ι	Т	Ε	P	0
POLE REPULSION	Т	Υ	J	J	Ε	P	Α	C	Z	D	M	I	W	F	L	I	P	Υ	W	Q	Н	F	В	D	V
TORQUE	Т	Α	Q	Ι	R	N	L	R	S	I	L	M	U	P	Н	Ι	M	D	В	X	D	D	K	G	J
VECTOR	В	V	0	Z	Υ	Ι	R	В	T	F	L	0	W	F	P	Υ	G	S	R	F	G	M	Н	Z	Ι



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