

# Museum OF Printing

# the Galley

Volume 32 • Issue 4 • Winter 2011

DEDICATED TO PRESERVING THE PAST OF PRINTING AND ALL OF ITS RELATED CRAFTS

## Latest News

The Museum of Printing is now officially a library in the eyes of Library of Congress. Museum librarian Brian Frykenberg has been entering all books into a searchable database which can be accessed on the Museum's website.

The Museum has a MARC Organization Code which can be found by searching the database at <http://www.loc.gov/marc/organizations/org-search.php>. MARC organization codes are assigned for use in Machine-Readable Cataloging (MARC) records in fields 003 (Control Number Identifier), 040 (Cataloging Source), and 852 (Location). These MARC fields require a code to identify whose control number is in the record, who created/input the cataloging information, and who holds a copy of the item described in the bibliographic record.

Each organization code assigned is unique whether it is recorded using all uppercase letters, all lowercase letters, or a combination, as may be exemplified in your code(s). Each new code and information about the organization it represents will

be published in the next edition of "MARC Code List for Organizations." This information will be available online at <http://www.loc.gov/marc/organizations/>

Last year we introduced a line of holiday cards based on old type, old engravings, and Anna Hogan woodcuts. Starting November 1st we will offer these unique cards. They can be purchased individually or in sets of six. They come with matching envelopes. The insides are blank so that you can create special manual Twitter-like messaging using handwriting. Ted Leigh did all the printing. If you would like to help him, please let us know.



### Museum Artifacts

This is the nameplate from our 1870s George Sanborn & Sons cutter. These cutters were common in printshops then and in letterpress shops now. We use ours on a regular basis. These manual machines will last forever with proper care. One proviso: use a chain and lock to restrict use so that the lever and blade will not move by accident. There were no safety devices on 19th Century letterpress equipment.

*We are always happy to host groups of youngsters and introduce them to printing. They each get to set their name in wood or metal type and then print it. To some it is old technology, but to kids it is a magical experience.*



## Museum Happenings

### Continuing Exhibition

The Glory of Chinese Printing  
Hogan and Fowler Woodcuts  
Botanical Prints

Thursday, October 27  
Lecture, 6pm-7:30pm  
Strange Typographic Tales

### November 1

Beautiful letterpress cards  
on sale  
with matching envelopes  
Individual or in sets

Thursday, November 3  
Lecture, 6pm-7:30pm  
Who was Lord Stanhope?

Thursday, November 17  
Lecture, 6pm-7:30pm  
Printing Industry Trends

Thursday, December 1  
Lecture, 6pm-7:30pm  
A Short History of Type

Saturday, December 3  
Workshop 10am-4pm  
Basic letterpress printing

*[museumofprinting.org](http://museumofprinting.org) for details  
Lectures are free for members,  
\$20 for all others*

# The Victorian Internet

Over the centuries, we have tried to find ways to move information quickly over large distances. Messengers, horses, and trains were not fast enough, since they required days in most cases. Mr. Reuters established a news service using relays of carrier pigeons. Napoleon used large canvas sheets with short messages viewed through a telescope and then repeated in relays. He applied this method during the Egyptian campaign and used square serif letters—today most of these fonts have names like Memphis, Cairo, and Karnak—from which the classic typewriter font *Courier* (a carrier of messages) was derived.

Tom Standage's book *The Victorian Internet* tells the story of the invention and development of the telegraph. In the 1830s the first systems that harnessed electricity (using batteries) were applied in France and Britain. In the 1840s Samuel F. B. Morse developed the U.S. system (and the code) that wired America. It was the equivalent of today's Internet. Within 30 years most of the world was connected by wire. The transatlantic cable was a remarkable technological achievement for the time, and the Victorian equivalent of sending mankind to the moon.

## The first tele-conference

In the 1880s, employees of the American Telegraph Company between Boston, Massachusetts and Calais, Maine held a meeting by telegraph after hours. Hundreds of operators in 33 offices along the 700 mile line participated. Each speaker tapped out their words in Morse code so that all offices on the line received the remarks at the same moment "thus annihilating space and time" and bringing the different parties together as though they were in the same room, although separated by hundreds of miles. After passing various resolutions, the employees adjourned the meeting after about an hour. In Britain *Punch* magazine suggested that holding parliamentary proceedings by telegraph might restrain some of the more verbose speakers in the house.

## The first chat rooms

A young operator in the 1880s recalled that many a telegraph romance that began over the wire resulted in marriage. Ella Cheever Thayer's 1879 novel *Wired* built its plot around an on-line courtship. A young lady telegrapher was wooed over the wire.

Bored telegraph operators tapped out jokes and small talk along their lines and their progeny were probably the first to send useless e-mails. It is also interesting that charlatans spliced lines, intercepted communications, and sent fake messages. Hacking was thus born.

## The first news site

On that fateful day that Morse demonstrated the telegraph to skeptical members of Congress linking Baltimore and Washington, DC, the second message after Morse's "What hath God wrought?" was

"Have you any news?" Publisher James Gordon Bennett thought that the telegraph would put newspapers out of business. The only role for printed publications, he said, would be to comment on the news and provide analysis. However, the telegraph was a very efficient means of delivering news to newspaper offices, but not to large numbers of readers; although some entrepreneurs thought about home telegraphy.

It is ironic that one of the first tests of fiber optic cable was long the same stretch of railroad tracks and today we have re-wired America along highways and railroad tracks, following the thin slivers of telegraph wire that first linked this nation. Also, to show how connected they were, many newspapers incorporated the word "telegraph" into their names as they signed up with Associated Press and other "wire" news services.

## The first e-mail addresses

In Europe, where one organization usually ran the postal and telegraph services, companies and individuals could reserve a special word as their telegraphic address, which was easier to remember and transmit than a full mailing address. Telegraphic addresses were assigned on a first-come, first-served basis, and a book in the main telegraph office of every town listed them alphabetically with the actual postal delivery address. By 1889, more than 35,000 telegraphic addresses had been registered. An annual charge was payable for each one. These were early precursors to e-mail addresses, or even urls. Someday e-mail will be linked to the physical address.

## Links to printing

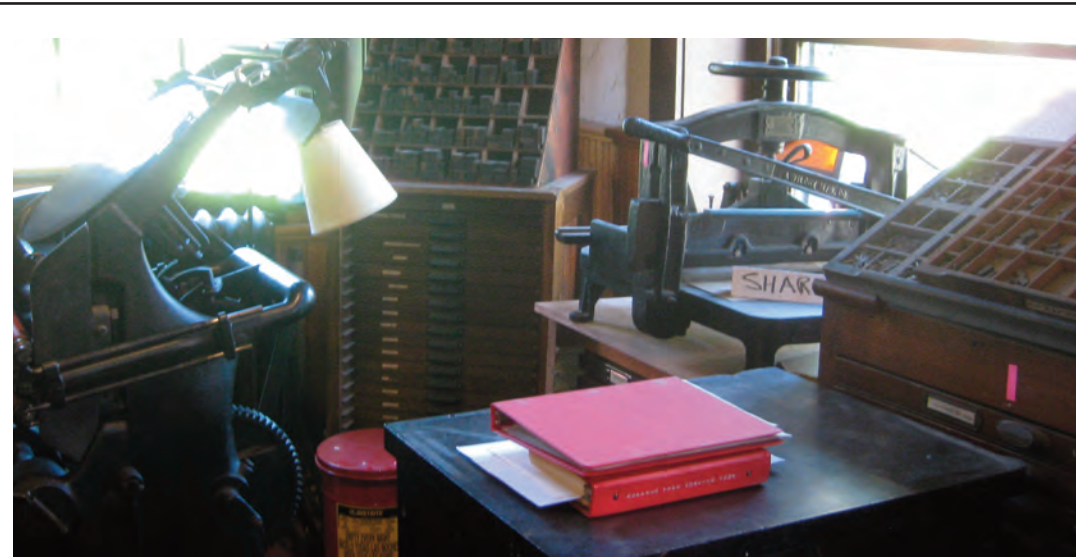
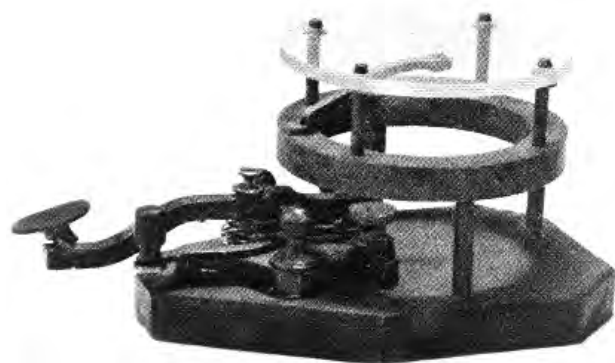
Christopher Latham Sholes of Wisconsin was the 52nd person to invent the typewriter, but the only one to call it that. He demonstrated the principle with a telegrapher's key with the letter w cut from some hand type. He used a new miracle material invented so that telegraphers could make multiple copies easily: carbon paper.

Most of Edison's patents involved making the telegraph print. His first benefactors were financial companies. Eventually the dits and dahs of the Morse code faded away and they became printed letters.

Telegraphy spawned the telephone which built upon the existing wired world. The telephone was able to grow rapidly because there was already a wired infrastructure. The telephone was initially called the "harmonic telegraph" and in the 1930s the newly-formed FCC created the regulated monopoly called AT&T and its dominance created the standardization and infrastructure that allowed the Internet to evolve.

Coded messages became text and text became the spoken word and the spoken word added visual imagery. Today we carry a telegraph/telephone/television in our pockets. We are all in constant and immediate contact.

What hath Man wrought?



We recently took a trip to East Aurora, NY and the home of the Roycrofters. Elbert Hubbard established this wonderful arts and crafts community at the turn of the last Century. He created the content for many books and pamphlets which were sold via mail order all over the world. Many of the buildings have been preserved. There is also a wonderful gift shop.

The Roycrofters' community was self-sufficient. The hides of the animals raised for food became the covers of their books. After Hubbard and his wife died on the *Lusitania* the Roycrofters lost their heart and soul and the community wound down. The print shop on display is a shadow of what it was at its height.



# Who invented the book?

The story of the book is a tale of commoners and kings, of ego and power, and of technology change and competition in the face of monopoly and avarice. Pergamon was once among the largest cities in the world. Few have heard of it. Now it is called Bergama in western Turkey, south of Istanbul and 16 miles from the Aegean Sea. Pergamon became capital of the Attalid dynasty after 280 BC. It was one of two great cities in the ancient world that were formed after Alexander the Great died. The other was Alexandria, in Egypt. The Attalids took their name from King Attalus who reigned until 200 BC. Attalus began an artistic Renaissance in Pergamon and his son, Eumenes, continued it.

Eumenes set out to build the greatest library in the world and outdo the great library in Alexandria. His soldiers were merciless, in of all things, stealing what we call books, but were then scrolls. Book lovers hid what they could and Pergamon scribes forged manuscripts to protect their originals. The library grew to 200,000 volumes. Egypt quit supplying papyrus to Pergamon to retaliate against the theft of its books. But Pergamon had a rich wool industry and plenty of sheep. They had already been writing on sheepskin, or vellum, and called the stuff charta pergamene, which meant "paper of Pergamon." The words charta pergamene evolved into our word parchment.

Though animal skins have been treated since paleolithic times, processing skins for writing came long after the invention of papyrus. Early evidence for using skins for writing comes from the 4th dynasty in Egypt, before 2750 BC. This practice was limited to religious and other special purposes (such as the *Book of the Dead*). Though the Assyrians and the Babylonians wrote on clay tablets, they also wrote on parchment, at least from the 6th century BC. In the Hellenistic world, parchment was not known until the first century AD. Pliny quotes Varro that preparation of skins for writing was invented in Pergamon at the beginning of the second century BC and the transition from papyrus to parchment resulted from the Egyptian embargo on papyrus. The transition to parchment took place in Israel as well, and the Jewish sages of the Roman period opined that any mention of the word book in the Bible exclusively referred to a scroll.

Unlike papyrus, an imported product outside Egypt, parchment was more durable. In Egypt, where the low humidity and cheap production of papyrus outweighed these advantages, papyrus remained the writing substance of choice. While papyrus production remained with almost no change for generations, the methods of skin preparation evolved over time, differing slightly from place to place. The skin was taken from edible animals such as sheep, goats, or cows. In order to get a

durable product that is easy to write on, the hair and fat were removed and the skin was smoothed. The usual method involved soaking the hide in water, with calcium or flour (to cause fermentation) and salt added. The addition of tannin produced a chemical reaction that strengthened the product. In the process, some used dates, while others used dog poop. The raw skins were treated which led to a variety of final products.

Parchment was mentioned in 301 BC with reference to Pergamon. Its preparation was without tanning, so that the skin dried while being stretched which made the final product thin and delicate. Ancient preparation techniques were passed on to the Middle Ages but later were abandoned in favor of paper production. The manufactured paper in Europe turned parchment into a purely ceremonial or ritualistic product.

The invention of paper is generally attributed to the Chinese, who made paper using vegetable fibers, tree bark, rags, and other fibrous materials. The art of making paper was kept secret for 500 years and the Japanese acquired it in the 7th century and in 770 produced a block-printed Buddhist prayer paper, of which one million were printed. The papermaking secret followed the caravan routes of central Asia to the market centers at Samarkand, and across the Arab world. In 751 the Arab city of Samarkand was attacked by the Chinese. Among the Chinese prisoners taken were some skilled in the art of papermaking and they were forced to build and operate a paper mill. With an abundant supply of water, flax, and hemp, Samarkand became the papermaking center of the Arab world.

Knowledge of papermaking traveled westward, spreading throughout the Middle East and then west to Europe. The Moorish invasion of Spain, which began in the 8th century, saw the first European paper mill (c.1150) at Jativa in the province of Valencia. Paper mills were built in Italy in 1276, France in 1348, Germany in 1390, and England in 1494. By the 16th century, paper was being manufactured throughout Europe. Paper became a strong competitor to papyrus, vellum, and parchment.

It's harder to roll parchment into a scroll than papyrus. Replacing papyrus led to inventing a whole new kind of storage system when someone thought of cutting parchment into rectangular sheets and sewing them together. Someone invented the book. Both Pergamon and Egypt fell under Roman control and, in 40 BC, Roman soldiers in Egypt burned part of Alexandria's library by accident. Anthony, in his obsessive love for Cleopatra, gave the Pergamon Library to her.

Today you can even have a book printed out in your local bookstore on Xerox and other self-contained printing and binding machines. Pergamon gave birth to the book, the most efficient information storage technology ever known.



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Please pass this form on. Join the Museum of Printing and help preserve the rich history of printing.

The Friends of The Museum of Printing is a non-profit organization dedicated to preserving the past of printing and all of its related crafts. Established in 1978, the Museum occupies the former Textile Museum building in North Andover, Massachusetts, facing the North Andover Town Common. The Museum's collection is one of the most extensive in the world, from presses of all types and sizes, to typesetting from handset wood and metal, to mechanized character and line casting, to photographic composition. The Museum is an all-volunteer organization and is supported by membership dues, donations, and the sale of redundant equipment, as well as book arts materials. Your support helps to preserve the rich history of printing for the future. Thank you.

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**To pay by credit card please visit <http://www.museumofprinting.org/Membership.html>**

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