January 2007

Inventions

Welcome to the 5th issue of the Central Illinois Teaching with Primary Sources Newsletter, a collaborative project between the An Adventure of the American Mind / Teaching with Primary Sources Programs at Southern Illinois University Edwardsville and Eastern Illinois University.

Inventions and Inventors are the focus of the February 2007 issue. The Spotlight on Central Illinois looks at the inventions created in Illinois.

The Topic Collections provide primary sources on inventions and inventors from images to film. We have designated an area with lesson plans and activities to use in your classroom. Each lesson plan indicates the grade level it was created for. Teachers know the ability level of their students, so you may choose a part of a lesson or to elaborate as you see fit.

We want to hear from you! Please share your comments and ideas!

Learning with Lincoln Institute—Summer 2007

We are thrilled to announce a new program! The SIUE and EIU programs are each facilitating a Learning with Lincoln Institute in anticipation of the Bicentennial Celebration of the birth of President Abraham Lincoln.

Educators are invited to apply to be part of this special project. Educators from all disciplines and grade levels who have participated in TPS/AAM programs or are experienced working with the Library of Congress resources are encouraged to participate.

During the Learning with Lincoln Institute a select group of educators representing a variety of grade levels and disciplines will collaborate and develop teaching materials. With the underlying theme of President Abraham Lincoln, educators will attend two full and one half day workshops focusing on pedagogy, best practices and interdisciplinary instruction.

In addition, small excursions and/or guest speakers will facilitate discussion on content integration. The objective of the learning experiences incorporating digitized primary sources from the collections of the Library of Congress. The institute will conclude with an event at the Abraham Lincoln Presidential Library and Museum that will be attended by participants of both programs, will feature a unique tour, special guests and lunch.

Participating teachers will create an exemplary learning experience that will be shared with the Library of Congress Education Outreach Division and will receive other incentives. Only ten participants will be selected for this program from each partner to ensure the highest quality learning experiences.

Learn about program details at the website of the program you previously worked with.

SIUE information is available at http://www.siue.edu/education/aam/institute.htm
EIU information can be found at http://www.eiu.edu/~eiutps/lwli

Applications must be received by February 12, 2007.
Spotlight on Central Illinois

Connecting locally to past inventors and inventions throughout the central IL area...

Is the MP3 player you got for Christmas already obsolete? It seems there is a constant stream of new ideas and products that are presented to us daily. Do we ever stop and wonder who came up with the idea for that new fangled device we must have (and why wasn’t it us)? Many of the items that we use or see every day to make our lives easier were created by inventors in Illinois, some which might surprise you.

With farming being a major industry in Illinois it is no wonder that many inventions were created here to help maintain the family farm. One of the first Illinoisans to receive a patent was Harvey Crown, his patent was for an improved plow. Drive down nearly any road in Illinois in spring or fall and you will probably see some John Deere equipment in the field. John Deere was a blacksmith from Grand Detour, he revolutionized farming with his steel plows. In 1908, Caterpillar of Peoria, (formally the Stanley Holt Company) manufactured the first gasoline tractor. Joseph Glidden of DeKalb created barbed wire. By 1887 there were 173,000 tons of wire were being produced each year.

Many inventions found around the home were developed in Illinois. Alva J. Fisher of Chicago patented the first electric washing machine the "Thor". In 1880 the Elcelsior Stove & Manufacturing Company in Quincy manufactured cook stoves that were nickel-plated and could burn either wood or coal more efficiently. Tuscola was where the first radio station in Illinois began broadcasting.

At 3:30 when the kids get home from school one of the first things they want is a snack. One of the more popular snacks was invented right here in Illinois, the Twinkie. Jimmy Dewar from Chicago created the short cake snack to boost sales when the strawberry season was over. The name Twinkies came to Jimmy while walking past a Twinkle Toe Shoe Factory.

Abraham Lincoln was the only future U.S. President issued a patent. His invention was for a device that was used to buoy vessels over shoals in shallow rivers. If you do a search for patents in the Library of Congress American Memory many items show results that pertain to Abraham Lincoln. Some of these items contain information about the Presidents invention.

“African-American newspapers [like the Cleveland Gazette] covered local, national, and world news.” Read an article about a talented African American inventor, Robert Winn, who had a business in St. Louis Missouri.


Learn about Alexander Graham Bell’s lecture given to students at Illinois College, in Jacksonville, Illinois on radiophony.


Items for Spotlight on Central Illinois were provided by Illinois History Teacher Volume 6: 3 1999
**Topic Connections (cont)**

**Emile Berliner Early Recording Industry 1870-1956**
http://memory.loc.gov/ammem/berlhtml/berlhome.html

Emile Berliner an immigrant and a largely self-educated man, was responsible for the development of the microphone and the flat recording disc and gramophone player. Although the focus of this online collection is on the gramophone and its recordings, it includes much evidence of Berliner's other interests, such as information on his businesses, his crusades for the pasteurization of milk and other public-health issues, his philanthropy, his musical composition, and even his poetry. The collection comprises correspondence, articles, lectures, speeches, scrapbooks, photographs, catalogs, clippings, experiment notes, and rare sound recordings.

**Special Presentations**

**Daquerrotype Photographs 1839-1864**
http://memory.loc.gov/ammem/daghtml/daghome.html

There are more than 725 daguerreotypes in the Prints & Photographs Division. The majority of the images are portraits, but the collection does include early architectural views, outdoor scenes, and copies of works of art. 385 of the daguerreotypes are credited to Mathew Brady's studio. Brady, who today is mainly remembered for the work produced by his studio during the Civil War, opened his first daguerreotype studio in New York City in 1844. The Library has the largest collection of Brady studio daguerreotypes in existence.

**Special Presentations**

**Edison Companies Film and Sound Recording**
http://memory.loc.gov/ammem/edhtml/edhome.html

Prolific inventor Thomas Alva Edison (1847-1931) has had a profound impact on modern life. In his lifetime, the "Wizard of Menlo Park" patented 1,093 inventions, including the phonograph, the kinetograph (a motion picture camera), and the kinetoscope (a motion picture viewer). Edison managed to become not only a renowned inventor, but also a prominent manufacturer and businessman through the merchandising of his inventions. The collections in the Library of Congress's Motion Picture, Broadcasting and Recorded Sound Division features 341 motion pictures, 81 disc sound recordings, and other related materials, such as photographs and original magazine articles.

**Special Presentations**
- Motion Pictures http://memory.loc.gov/ammem/edhtml/edmvm.html
- Edison Biography http://memory.loc.gov/ammem/edhtml/edbiohm.html
- Sound Recording http://memory.loc.gov/ammem/edhtml/edsndhm.html

**Samuel F.B. Morse Papers 1793-1919**
http://memory.loc.gov/ammem/sfbmhtml/sfbmhome.html

The Morse Papers consist primarily of correspondence but also include diaries, scrapbooks, clippings, printed matter, maps, drawings, and other miscellaneous materials. These manuscripts span the years 1793 to 1944, but the bulk of the papers dates from 1807 to 1872. They document Morse's life as artist and inventor and highlight his development of the electromagnetic telegraph, his career as a portrait painter, and his interest in the nativist movement.

**Special Presentations:**
- Collection Highlights http://memory.loc.gov/ammem/sfbmhtml/sfbmhighlights01.html
- Time Line http://memory.loc.gov/ammem/sfbmhtml/timeline01.html
- Family Tree http://memory.loc.gov/ammem/sfbmhtml/sfbmtree01.html

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Carpet Cleaner run by a gasoline engine in Kearney, Nebraska

**Inventor:** Solomon D. Butcher

**Date:** c.1907

**Prairie Settlement: Nebraska Photographs and Family Letters 1862-1912**
**Topic Connections (cont)**

**Nineteenth Century Periodicals**
http://memory.loc.gov/ammem/ndlcpoop/moahtml/schnhome.html
Articles in these periodicals provide additional perspectives on themes and personalities featured in other American Memory collections. For example, read about the invention of the telephone, John Muir and the conservation movement, the Spanish-American War, reconstruction, daguerreotypes, and the Central Pacific Railroad. Find short stories, poems, and serialized novels by well-known authors and articles by political figures.

**Special Presentations**

**Historical Background and Essays on the Periodical Garden and Forest Collection**
http://www.loc.gov/preserv/prd/gardfor/essays/essaysongf.html

The Wright Brothers 1881-1952
http://memory.loc.gov/ammem/wrighthtml/wrighthome.html
The Wright Papers consist primarily of correspondence but also include diaries and note-books, scrapbooks, printed matter, drawings, and other miscellaneous materials. The manuscripts span the years 1809 through 1979, but the bulk of the papers dates from 1900 to 1948. They document the lives of Wilbur and Orville Wright as well as their development of and flight of the first powered machine. The Wrights’ letters to Octave Chanute in the Chanute Papers are also included in this online collection. Chanute, a civil engineer and aviation pioneer, was the Wrights' mentor and friend. These letters give a first-person account of their problems and progress in inventing the airplane.

**Special Presentations:**

**Collection Highlights**
http://memory.loc.gov/ammem/wrighthtml/wrighthigh.html

**Time Line**
http://memory.loc.gov/ammem/wrighthtml/wrighttime.html

**Photography and the Wright Brothers**
http://memory.loc.gov/ammem/wrighthtml/wrightphot.html

**The Belief that Flight is Possible to Man**
http://memory.loc.gov/ammem/wrighthtml/wrightchan.html

**Wright Family Tree**
http://memory.loc.gov/ammem/wrighthtml/wrightfamt.html

**Federal Writers Project 1836-1940**
http://memory.loc.gov/ammem/wpaintro/wpahome.html
The holdings from the Federal Writers’ Project span the years 1889-1942 and cover a wide range of topics and subprojects. Altogether, the holdings number approximately 300,000 items and consist of correspondence, memo-randa, field reports, notes, graphs, charts, preliminary and corrected drafts of essays, oral testimony, folklore, miscellaneous administrative and miscellaneous other material. The documents consist of drafts and revisions, varying in form from narrative to dialogue to report to case history.

**Special Presentations:**

**Voices from the Thirties: An Introduction to the WPA Life Histories Collections**
http://memory.loc.gov/ammem/wpaintro/exhome.html

**The African American Experience in Ohio 1850-1920**
http://memory.loc.gov/ammem/award97/ohshtml/aaehome.html
The textual materials for this collection have been drawn from many sources in the Ohio Historical Society's collections. From the manuscript collections come personal papers of prominent individuals, association records, a plantation account book, ex-slave narratives, and documents relating to the freeing of individual slaves. Over 15,000 articles about African Americans and issues affecting them have been selected from eleven Ohio newspapers. Also included are over 200 articles from the African Methodist Episcopal Church Review and other materials published by the church.

**Special Presentations:**

**A Selection of Favorites**
http://memory.loc.gov/ammem/award97/ohshtml/aaesop.html

**Words and Deeds in American History**
http://memory.loc.gov/ammem/mchtml/corhome.html
In honor of the Manuscript Division's centennial, its staff has selected for online display approximately ninety representative documents spanning from the fifteenth century to the mid-twentieth century.
Included are the papers of presidents, cabinet ministers, members of Congress, Supreme Court justices, military officers and diplomats, reformers and political activists, artists and writers, scientists and inventors, and other prominent Americans whose lives reflect our country's evolution.

**Special Presentations:**
- **Collecting, Preserving, and Researching History** [http://memory.loc.gov/ammem/mcchtml/special.html](http://memory.loc.gov/ammem/mcchtml/special.html)
- **Century of Lawmaking** [http://memory.loc.gov/ammem/ahtml/amlawhome.html](http://memory.loc.gov/ammem/ahtml/amlawhome.html)

Beginning with the Continental Congress in 1774, America's national legislative bodies have kept records of their proceedings. The records of the Continental Congress, the Constitutional Convention, and the United States Congress make up a rich documentary history of the construction of the nation and the development of the federal government and its role in the national life. These documents record American history in the words of those who built our government.

**Special Presentations:**
- **The Making of the U.S. Constitution** [http://memory.loc.gov/ammem/ahtml/ac001lawpres.html](http://memory.loc.gov/ammem/ahtml/ac001lawpres.html)
- **Time Line** [http://memory.loc.gov/ammem/ahtml/lwtl.html](http://memory.loc.gov/ammem/ahtml/lwtl.html)

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**Special Presentations:**
- **Inventions** [http://memory.loc.gov/ammem/bellhtml/bellinvent.html](http://memory.loc.gov/ammem/bellhtml/bellinvent.html)
- **Family Tree** [http://memory.loc.gov/ammem/bellhtml/belltree.html](http://memory.loc.gov/ammem/bellhtml/belltree.html)

On March 10, 1876 the words "Mr Watson, come here I want you" were allegedly the first from Alexander Graham Bell that were heard over his new invention the telephone. This digitized selection, made up of 4,696 items (equaling about 51,500 images), consists of correspondence, journals, scientific notebooks, and other documents that best represent Alexander Graham Bell's personal life and work with the telephone, the deaf, aeronautics, marine engineering, and other areas of scientific research.

**Special Presentations**
- **Collection Highlights** [http://memory.loc.gov/ammem/bellhtml/bellspl.html](http://memory.loc.gov/ammem/bellhtml/bellspl.html)
- **Time Line** [http://memory.loc.gov/ammem/bellhtml/belltimest.html](http://memory.loc.gov/ammem/bellhtml/belltimest.html)
- **Inventor and Scientist** [http://memory.loc.gov/ammem/bellhtml/bellinvent.html](http://memory.loc.gov/ammem/bellhtml/bellinvent.html)
- **The Telephone and Multiple Telegraph** [http://memory.loc.gov/ammem/bellhtml/belltelph.html](http://memory.loc.gov/ammem/bellhtml/belltelph.html)

This online collection consists of images of urban life captured on glass plate negatives between 1902 and 1933 by photographers employed by the Chicago Daily News, one of Chicago's leading newspapers. The approximately 55,000 images relate to an enormous variety of topics, but most of the photographs were taken in the same geographic area: Chicago, Illinois, or nearby towns, parks, or athletic fields. Probably only twenty percent of the images in this collection actually were published in the newspaper. Thus many images are available to the public for the first time as part of American Memory.

**Special Presentations:**
- **Topics to Explore** [http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnsp.html](http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnsp.html)
- **Photographs from the Chicago Daily News 1902-1933** [http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html](http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html)

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Lesson Plans, Presentations and Activities

Lesson Plans:
Thank you Mr. Edison Grade 7-12
http://memory.loc.gov/learn/lessons/99/edison/intro.html
Artifact Road Show Grade 3-5
http://memory.loc.gov/learn/lessons/99/road/intro.html

Activities & Presentations: Webcast
Engineering in the Andes Mountains
America's Library (Elementary)
Meet Amazing People: Scientist and Inventors
http://www.americaslibrary.gov/cgi-bin/page.cgi/aa/scientists

Activities:
What in the world is that?
http://memory.loc.gov/ammem/ndlpedu/features/science/flash.html

Exhibits:
Benjamin Franklin in his own Words
http://www.loc.gov/exhibits/treasures/franklin-home.html
The Dream of Flight
http://www.loc.gov/exhibits/treasures/wb-home.html
The Work of Charles and Ray Eames
http://www.loc.gov/exhibits/eames/
Learning Page Community Center:
From Fantasy to Flight
http://memory.loc.gov/learn/community/cc_flight.php
Science and Invention
http://memory.loc.gov/learn/community/cc_science.php

Wise Guides:
Why, He is listening to his Masters
Voice
http://www.loc.gov/wiseguide/gramophone.html
Go Fly A Kite
http://www.loc.gov/wiseguide/mar03/kite.html
First in Flight
http://www.loc.gov/wiseguide/sept06/flight.html
Mr. Watson Come Here
http://www.loc.gov/wiseguide/aug06/bell.html
He had the Write Stuff
http://www.loc.gov/wiseguide/feb06/write.html
A Sneeze of Historic Proportions
http://www.loc.gov/wiseguide/may05/sneeze.html

More on the Web:
The Edison Papers
http://edison.rutgers.edu/
The Invention Factory
A Science Odyssey
http://www.pbs.org/wgbh/aso/
Department of Energy
http://www.science.doe.gov/Sub/complishments/Decades_Discovery/decades.htm
Partners of the Heart (PBS)
http://www.pbs.org/wgbh/amex/partners/
Benjamin Franklin (PBS)
http://www.pbs.org/benfranklin/
Galileo's Battle for the Heavens (PBS)
http://www.pbs.org/wgbh/nova/galileo/
The Wright Brothers the Invention of the Aerial Age
http://www.nasm.si.edu/wrightbrothers/

Preparing, Protecting and Preserving Family Treasures
http://www.loc.gov/preserv/familytreasures/
This website provides simple instructions, as well as links to more comprehensive information for “Preparing, Protecting, Preserving” many types of family treasures.

What’s New at LOC.GOV?
Using this information, you will have the means to prepare ahead of time, to protect everyday, and if need be to . preserve your family treasures after a disaster. Proper care, handling and storage of your treasures will help to ensure that they are available for generations to come.

User Tip
"A search in the American Memory collections yields web pages which are assembled "on the fly" in response to your particular request. Frequently, "temp/" appears as part of the URL shown in the Address/Location window of the page. This is frustrating for users who carefully bookmark their "finds" because a temporary page cannot be called up at a later date. With just a bit more work, however, you CAN get a permanent URL through the process outlined below.” We also suggest teachers to print the bibliographic page for their records since information within a bibliographic page will locate an item quickly. Find the URL: Search for the item within the American Memory collections. At the bibliographic (item) record screen, go to the View menu.
User Tip (cont.)

Find the URL: Search for the item within the American Memory collections. At the bibliographic (item) record screen, go to the View menu on the web browser menu bar, then select Page Source (or Document Source or Source, depending on your browser). A new browser window will open showing the HTML formatting tags for the page you received from your search. Scroll to the bottom of this new window. You will see: <!-- The following URL will result in display of this document --> and on the next line a long URL enclosed in <!-- and -->. Example: <!-- http://lcweb2.loc.gov/cgi-bin/query/r?ammem/vv:@field(NUMBER+@band(cph+3c16995)) -->

Copy the URL: Highlight and copy the complete URL, including final parentheses (but not <!-- or -->). Example: http://lcweb2.loc.gov/cgi-bin/query/r?ammem/vv:@field(NUMBER+@band(cph+3c16995)) Close the window displaying the HTML formatting tags.

Check the URL: Paste the URL in your browser's Address/Location window, as you would any other URL. To test the URL, press the Enter or Return key on your keyboard. If the browser brings up the correct item, you now have the permanent URL!

Bookmark the page: With the tested URL in the Address/Location window of the browser, you can now bookmark the web page. Simply go to the Bookmarks/Favorites menu on the web browser menu bar, then select Add Bookmark/Add to Favorites.

http://memory.loc.gov/learn/start/tech/link.html

Image Sources (Collection & Image Title)

Library of Congress
Wanted-An Idea
James B. Carter
African Methodist Episcopal Church Review

Library of Congress
Bared Wire Fence
Jones, Suzi, photographer
Ranching Culture in Northern Nevada 1945-1982

Library of Congress
Drawing by Alexander Graham Bell 1876
The Alexander Graham Bell Family Papers

Library of Congress
Scrapbook Excerpt
Emile Berliner and the Birth of the Recording Industry

Library of Congress
Nipper

Library of Congress
Automobile Parade/Thomas A. Edison Inc.
Early Motion Pictures 1897-1920

Library of Congress
Garden and Forest, Vol. 10, Issue 514
The Nineteenth-Century in Print: Periodicals

Library of Congress
General Correspondence
The Abraham Lincoln Papers at the LOC

Library of Congress
Ribbon map of the [Fa]ther of Waters.
CREATED/PUBLISHED
St. Louis, Mo.: Coloney & Fairchild, 1866 (St. Louis, Mo.: [M]oeller, 3rd & Olive Sts.)
NOTES
Shows distances, landings, and names of some landowners. "This patent is for the 'IDEA' ... July 1866, Myron Coloney, Sidney B. Fairchild, inventors & patenieses [sic]."
"Coloney & Fairchild's patent ribbon maps.
Designed for a traveller aboard a steamship.
Collection: Maps
Image Sources (Collection & Image Title)

Library of Congress
First Flight, 120 Feet in 12 Seconds, 10:35 am, Kitty Hawk, NC
The Wilbur and Orville Wright Papers

Library of Congress
Adams Family Portrait with Man, Woman and Baby Girl
Daguerrotype Portraits and Views 1839-1864

Library of Congress
Ribbon Map of (Fa)ther of Water
Map Collections

Library of Congress
“You and Your Laundry” by Mrs. Christine Frederick The Hurley Machine Co. c.1922
Prosperity and Thrift: The Coolidge Era and the Consumer Economy 1921-1929

Library of Congress
You and Your Lundry
Prosperity and Thrift: The Coolidge Era and the Consumer Economy 1921-1929

Library of Congress
Inventor Thomas A. Edison, Sitting Half-Length Portrait
Photographs from the Chicago Daily News 1902-1933

Library of Congress
Southern Customs
American Life Histories: Manuscripts from the Federal Writers’ Project, 1936-1940

Library of Congress
Lee De Forest’s schematic diagrams and scientific notes on hotel stationery, ca. 1915.
(Lee De Forest Papers)
Words and Deeds in American History

Library of Congress
Telegraph 1869-1944
The Samuel F.B. Morse Papers at the LOC

Library of Congress
The Good Sport/Thomas A. Edison
Copyright: Thomas A. Edison, Inc.; 18Apr18; LP12317
Early Motion Pictures 1897-1920

Library of Congress
Carpet Cleaner run by a gasoline engine
ca. 1907

Library of Congress
Prairie Settlements:Nebraska Photographs and Family Letters 1862-1912
[Emile Berliner feeding his grandson Robert Frank]
Ca. 1919
Emile Berliner and the Birth of the Recording Industry

Library of Congress
Up in a Balloon
America Singing Nineteenth Century Song Sheets

Library of Congress
Ferris wheel. A carnival was in Vale, Oregon, on the Fourth of July.
America from the Great Depression to WWII: Photographs from the FSA-OWI 1935—1945