The WAYZGOOSE GAZETTE of the International Printing Museum, Carson, California

FOUNDED IN 1988 BY DAVID JACOBSON AND ERNEST A. LINDNER, THE PRINTING MUSEUM IS A PUBLIC CHARITY DEDICATED TO EDUCATION AND THE PRESERVATION OF PRINTING HISTORY

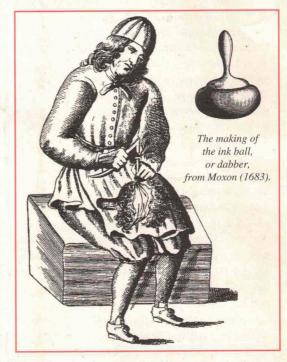
VOLUME 10 NUMBER 2

Linseed Rolls Beyond the Walls— The Tradition of Making Printer's Ink

Celebrated as the inventor of movable type, the printing press and publisher of the most beautiful printed bible, Johann Gutenberg was also the founder of the blackest of the Black Art (as printing was called)—ink making. Of the four main ingredients for typographical printing (the press, the type, the paper and the ink), only paper existed at the advent of Gutenberg's work. For Gutenberg in 1438 to accomplish his objective of "artificial writing", several obstacles needed to be overcome by this persistent inventor. Movable metal type, a functional printing press and a workable printing ink were the product of Gutenberg's creative genius, resulting in the formation of the printing industry in 1450.

Ink is the unsung hero of printing, the one ingredient in the above list which is given the least amount of attention in history. And yet without a proper, oil-based ink Gutenberg's work would have been for naught. The water-based inks of the woodblock printers would not work with his metal type. An examination of one of Gutenberg's Bibles will attest to the level of perfection Gutenberg achieved in his development of printing ink—the viewer will be impressed with high quality of the dense black ink which looks as good today as it did in the 15th century. Gutenberg and his contemporaries were exceptional craftsmen who took great care in each aspect of their craft, including the ink.

Unlike the modern printing industry of today where we have press manufacturers and supply houses such as Kelly Paper, the printer in



Gutenberg's day, and for several hundred years after, was required to assemble all the tools of his trade: he had to construct his press, design and cast his own type, and make his own ink. Papermaking alone existed as an established trade in 1450. Ink making, however, was the last to develop into an commercial industry, sometime in the mid-19th century. Until that point, each printer was generally responsible for the creation of their own inks, an often dangerous and tiresome process undertaken annually.

To Gutenberg's advantage, oil paints had been developed and perfected by artists at the beginning of the 15th century. His task was to adapt this into an ink suitable for printing from metal type. Of course, printing and ink, even movable wooden and clay type, existed in China prior to Gutenberg, but the ink was a water based mixture (like writing ink) suitable for the woodblock printing process of the Chinese. What Gutenberg needed for Western

typographical printing was far different. The earliest indication of the ingredients for printing ink comes from a printer's ledger in 1471: linseed oil, turpentine, pitch, vermilion, varnish and lake (lake was a pigment made from an animal or vegetable dye). Later printer's recipes even include exotic items such as soap, balsam, wax, molasses, bones and the residue inside wine barrels called "lees".

The making of the varnish was one of the most critical parts of the ink making process, and certainly the most dangerous. The linseed oil

was boiled in a large cauldron or kettle which sat on a trivet over a flame. If the printer was not careful and attentive, the boiling oil could spill over the lip of the kettle into the fire, creating a stream of liquid fire. One of the worst fires in London in 1820 was caused by a printer making his varnish.

Most shops would make their ink on an annual basis, filling barrels with black ink to be used throughout the year. The day chosen to make the ink often became a Wayzgoose day, or a printer's celebration, involving the Master Printer, his employees, and customers. One German printer in the late 19th century recalled such an ink making Wayzgoose:

"It was made on a still, sunny day before the city gate, far from the damp air of the shop. The fire crackled under the kettle, throwing fantastic lights on the city wall. The festive mood was heightened by the oil-scented warm rolls which had been fried in the varnish, with which that ever-thirsty race of men who wield the balls (the leather-covered dabbers used to apply ink to type), downed a heart-warming shot of schnapps, which they did naturally, only to counteract the effects of the fatty oil on the stomach."

Regarding those warm linseed rolls, known in German as "abgerkroschte" rolls and considered a great delicacy when eaten with some salt, this writer recalled their consump-

tion during his apprenticeship days:

"Twice a year the other printer in town went out before the city gate, and the "abgekroschte" rolls were eaten. A limited number of these rolls were given to us, as friendly competitors; when the master printer had enough, the remains were offered to us apprentices whose diffidence before these cold and unappetizing morsels was overcome by their usual hunger...I can still recall quite vividly the corner of the city wall which had been blackened by the fire under the pot."

During the boiling process, the oil

would be stirred occasionally with a long iron rod. To check the temperature of oil and to help remove impurities such as grease, an apple, onion or piece of bread would be place on the end of a sharp stick and stuck into the kettle. The temperature could be gauged by the rate at which the froth formed on the surface.

Besides the constant threat of causing a fire, the general odor of boiling the linseed oil and other "secret ingredients" in the printer's ink, caused the making of ink to be an undesirable activity within the city walls. One French ink maker in 1732 who constantly annoved his neighbors even faced a police edit preventing him from making objectionable smells near dwelling places!

The pigment, or color, of the ink was made from pitch placed in a kettle and ignited. With sheepskins hanging over the kettle on a frame, the pitch was left to burn until it was consumed. The skins were then beaten to release



Kettle used for boiling the varnish used in ink.

the black, carbon powder to the floor. This pigment would then be swept up and ground into a fine powder using a pestle and stone. Imagine the amount of labor and stamina required to manually grind enough pigment for 50 or 100 pounds of ink; this undesirable task would certainly encourage any apprentice or journeyman to find pleasure in abgekroschte rolls and schnapps!

The pigment and varnish, along with any other ingredients, such as cobalt for a drier, would be mixed together into an ink and stored in barrels to be cured for up to a year. A hard skin was prevented from forming on the surface of the ink by pouring a small quantity of water over the top of the ink.

Next to the careful design of the shop's typefaces, the quality of the ink was one of the most critical aspects of the printing process a master printer had to give attention to. Clients would select a printer based on the beauty and legibility of their typefaces (uniquely created at each shop) and on the reputation of a crisp, densely black printed page.

With the advent of the modern printing machines in 1815 by Frederich Koenig (founder of the modern press manufacturer KBA Planeta of Germany), the processes of making ink began to be industrialized. The coarse inks of Gutenberg's day, tediously ground by hand, were unsuitable to the precision cylinder machines of the 19th century. By 1900, the printer who made their own ink was a memory reserved for the old masters in the shops, along with the taste of those abgekroschte rolls. It must be said, however, that printers have never forgotten the taste of schnapps.

History in Motion: A Museum on Wheels Visits 45 Schools in San Francisco Bay Area and Arizona

Benjamin Franklin was close to beginning a franchise in his day with his establishment of up to 45 printing shops throughout the colonies. His interests in these shops and in his co-owners (25% were women!) required Franklin to make regular trips up and down the Eastern seaboard. And though you thought Franklin was resting comfortably in his Philadelphia grave, the perennial doctor is again about his travels, this time along the Western seaboard. And rather than visiting his printing shops, Dr. Franklin is

bringing with him the tool which shaped his life and secured his fortunes—his printing press.

During the last school year, Franklin had the opportunity to talk with up to 4,500 elementary school students at 30 schools in the greater San Francisco Bay Area during one week in October and the first two weeks of May. Franklin also sourceurned into the desert in February and March



to visit another 2,000 students at schools in Phoenix and Tucson.

The "Inventive Dr. Franklin Show" is part of the Printing Museum's traveling educational program known as *History in Motion: A Museum on Wheels*.

History in Motion is a traveling, 12' trailer exhibit, the sides of which open up, unveiling Ben Franklin's working, colonial printing shop. Surrounding the trailer is a series of large, stunning graphics depicting the 5,000 year history of books.

Following the one-hour presen-

tation at the *History in Motion* trailer, including demonstrations of typesetting, printing and bookbinding, Benjamin Franklin visits with the students in their auditorium. There he brings to life his world of inventions and discoveries in science and electricity. From swim fins to bifocals, from the first public lending library to the Constitution, students hear of the many inventions this great

scientist and engineer discovered. Above all, Dr. Franklin aims to ignite young minds with the wonders of science and invention!

History in Motion is designed as a two-hour school assembly which can accommodate up to 150 students. The fee for the program is \$500. The Printing Industries of Northern California generously helps to underwrite the traveling costs for bringing History in Motion to the Bay Area each year; the Arizona Humanities Council also provides a grant for traveling costs.

For the last three years, the Int'l Printing Museum has taken the History in Motion trailer to over 350 schools throughout Southern California and beyond. Other possible cities in future years includes Sacramento, San Diego, Las Vegas and central California.

Because it's on wheels, we are able to take the program to areas which normally cannot access a museum, such as inner city schools, senior retirement communities and distant places such as rural communities or even nearby states. We have been able to greatly increase the number of people who are benefiting from the cultural resources of the Printing Museum.

As the Museum's programs keep expanding into areas beyond Southern California, we need your finacial support to sustain our efforts. Remember, the Int'l Printing Museum is a non-profit public charity dedicated to the preservation of printing history and to education; the Printing Museum is YOUR charity as a member of the printing industry. We have developed excellent educational programs that truly reach students and make an impact on them regarding their history and the importance of printing in their lives. Please consider having your company become one of our annual sponsors with a contribution of \$100 to \$250. We need your help.

And drop us a note or email (printmuseum@earthlink.net) if you want a flyer on *History* in *Motion: Ben Franklin's Colonial Assembly*. Maybe you have a school you want us to visit in your area!

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MISSION STATEMENT OF THE FOUNDATION

The mission of the International Printing Museum
Foundation is to preserve the history of printing and its
related arts through the collection and display of the tools,
machinery and artifacts of the graphic arts, and to use the
collections and resources of the International Printing
Museum for the purpose of education, demonstrating
printing's vital link between the development of
Western civilization and the freedoms we enjoy.

It is the vision of the Foundation to develop and maintain the International Printing Museum as one of the world's most comprehensive collections and displays on the history and technology of printing, and to impact students and visitors throughout Southern California and from across the nation through tours and educational programs.

THE WAYZGOOSE GAZETTE

is issued regularly for the Friends of the International
Printing Museum, founded in 1988 by David Jacobson and
Ernest A. Lindner, featuring the Lindner Collection
of Antique Printing Machinery.

The term "wayzgoose" dates back to the 17th century and refers to a traditional printers' celebration.

Membership into the Friends begins at \$25 annually and goes to support the programs of the Museum. To become a Friend, simply send a check to the Printing Museum. As a public charity, contributions to the Printing Museum are deductible to the extent allowed by law.

The printing of this issue was donated by Richard Sevigny, Chromatic Inc., Lithographers in Glendale (818) 242-5785 The paper was donated in part by Kelly Paper.

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