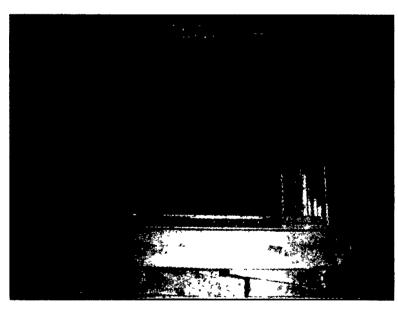
Lancaster Fareing **Intiques Genter**



Richard Aldorasi presses several sheets of the wet linen paper at his mobile demonstration unit.

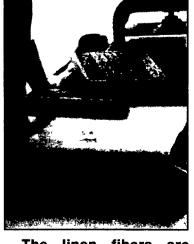


On the steel letterpress, type is locked in by blocks. Each letter was hand set using a printing stick.

All photos by Andy Andrews, editor



The title page for "Martyrs Mirror" at the demonstration at the Ephrata Cloister.



The linen fibers are "beaten to a pulp" — the origin of the phrase — to make paper in Colonial times.

Cloister Visitors Learn Early Bookmaking Was Done By Hand

ANDY ANDREWS

Editor

EPHRATA (Lancaster Co.) — For years, if you wanted to read the good words, putting out books was an arduous and involved process.

But even before there were the "good words," the material to make paper had to be literally "beaten to a pulp."

Often it was the linen material that early colonists could dredge up, rip to shreds, and beat up into little fibers to make paper.

The books we take for granted every time we shop at a Borders or Barnes and Noble bookstore today — printing tasks that have gone computerized and completely automated — were actually all done by hand hundreds of years ago.

And the most popular place to do it, at least up until the Revolutionary War, was the Ephrata Cloister.

Demonstrations of early book arts at the Cloister recently focused on one of the nation's earliest publishing centers. The demonstrations, "Paper, Ink, Quill, and Press," brought a few hundred visitors to the Cloister to look at what book publishing was like 250 years ago.

At that time, according to Toni Collins, historic site administrator, "Ephrata's members were in the midst of producing the largest book published in the American colonies, and everyone plays some role in the work." The 1,500-page book, "Martyrs Mirror," tells the story of early Christian and Anabaptist martyrs from the time of Christ until 1660.

A complete book, with a layer of protective acetate at the Ephrata Cloister site, is bound with handmade linen paper and sewn together and wrapped with handmade tanned leather. The text was printed in 1748. At the Cloister display was a "common press," made of wood, with a double-pull platen, used to produce copies of the book.

Demonstrator Dave Martin, a retired Garden Spot High School industrial arts teacher, also showed an early all-iron press, a Ramage Press from Philadelphia dating back to the 1830s. He printed up a replica copy of a letter written by a soldier in the Revolutionary War. The letter expressed the soldier's appreciation for medical care he received at the Cloister Hospital in 1777.

The press also printed sale bills, deed certificates, baptismal documents, and other records. Ephrata Cloister, founded in

Ephrata Cloister, founded in 1732, was a protestant monastic community of celibate Brothers and Sisters supported by a married congregation who lived near-by. Members, mostly German immigrants, sought spiritual goals rather than earthly rewards. They chose Saturday as their main day of worship.

Members were housed in German-style buildings. Their celibate life included strict discipline and self-denial. They were known around the world for their self-composed music, Germanic

calligraphy called Frakturschriften (meaning "broken letter"), and printing.

Demonstrator David Martin noted that during the years before the Revolutionary War, "the printing was done on a 'need-to-be' basis in the colonies," he said. Though the "Martyrs Mirror" was printed, the pages were stored and bound only when copies were ordered.

It was probably "the largest book printed in Colonial America," said Martin. The edition was translated from the Dutch to



Dave Martin assembles type onto a printing stick.

German also at the Cloister.

After the ink dried, the papers were bunched in "signatures" and tied together with linen by hand. The ties were wrapped through a piece of wood covered by tanned leather, all produced at the Cloister.

Early traditions of printing mass-produced text began with the Gutenberg Bible, fashioned using methods borrowed from wine presses. The wine press led to some of the (as then modernday) use of letter press. Individual pieces of type, or lettering, were put together by hand on a "printing stick."

The printing trade craftsman during the period leading up to and beyond the Revolutionary War in the late 18th century could set the type "pretty fast" by hand, noted Martin. They memorized the position of each individual letter in the case, "like keys on a typewriter," he said. "It was a skill you learned like any skill, such as typing."

The letters were mounted by wooden wedges and locked in a case. Paper was placed on a platen and, by hand, pressed into the case. Out came the printed page, which was literally hung up to dry.

dry.
"Two guys could do about 2-3 copies (of the page) a minute," said Martin. The oil-based ink, made along with the paper at the Cloister, could also be printed on the back of the pages.

The paper was made up of pulped, pressed, and dried linen fiber. The ink was made up of linseed oil and lamp black. Flax-seed was pressed to yield the oil. The lamp black was the black soot from lamps.

From the printing industry emerged individuals who created type down through the years, borrowing styles. One such "font" maker was William Caslon, whose font, Caslon, remains a legitimate type from England.

The basic procedures used to set type were handed down from those years until a few decades ago, when "computers changed the printing industry," noted Martin. It's the same product, though this time it "just became mechanized."

These days, however, some hand-setting of type continues. All of the Queen of England's speeches are still set letterpress by hand.

Early book art also examined how paper was produced. Richard Aldorasi, of Philadelphia Handmade Paper Company, Morton, provided a mobile, hands-on living history of papermaking during Colonial times.

Aldorasi noted that paper was made by cloth for hundreds of years, from 105 until 1850. Settlers would collect rags, tear and beat them to a pulp, and, using water, remold the fibers into paper sheets.

The paper was 100 percent

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Gabrielle Brunner, 9, with her father, Steve, tries her own hand with a quill pen during the Ephrata Cloister demonstration.