

**FOR IMMEDIATE RELEASE**

## **BENJAMIN FRANKLIN PRINTING BLOCKS DISCOVERED**

### ***Early American Printing Innovations Designed to Deter Counterfeiters Identified by Library Company of Philadelphia Researchers***

Philadelphia, Pennsylvania – December 12, 2014 – Three extremely rare 18th-century type-metal blocks on deposit with the Library Company of Philadelphia have been identified as the instruments used to print colonial currency in Delaware and beyond. Furthermore, the blocks were the output of Benjamin Franklin's printing office and represent a technological innovation—perhaps Franklin's only real invention of a technical advance in printing—only now fully understood for the first time.

Among the most intriguing of all early American graphics are the delicate images of leaves used as a counterfeit deterrent on paper money printed by Franklin and his successors from 1737 to 1785. Experts believed they were made by pressing a leaf into plaster and making a mold of the impression that could then be used to cast printing blocks from type metal. This was guesswork, however, as the process was highly secret, and none of the blocks was known to have survived—until now. It is very rare to find examples of early American metal type, as it was normally melted down when it wore out. Type-metal blocks used to print pictures and ornaments are even rarer.

The Delaware County Institute of Science (DCIS) in Media, PA, recently found what appeared to be one of the leaf blocks used to print currency in their collection, along with two metal ornament blocks and some pieces of paper money. They showed them to Jessica Linker, a current Library Company fellow, who suggested that the blocks be shown to Library Company Librarian James Green, the nation's foremost expert on Benjamin Franklin's job-printing work.

Using some very high resolution digital photography, and matching the blocks to currency in the collections of Winterthur and the American Antiquarian Society, as well as that from DCIS, Linker and Green determined that all the blocks were—in fact—cast, making possible some of their more intricate devices, such as variable surface height so that some low-relief areas print as gray—rather than the firm black of the higher relief elements and the white of recessed areas—and cross-hatching scored into the lead after casting.

All these variously complicated techniques were meant to further deter counterfeiters, on the assumption that printers trained in the normal way would not have known how to replicate them. They were effective precisely because they were made in unconventional ways. Given the date of currency printed with the leaf block, issued by the province of Delaware in 1760, this particular block was almost certainly cast not by Franklin but by his successor David Hall. Nonetheless, these blocks may be the earliest surviving pieces of type metal cast from molds made in America.

The Delaware County Institute of Science has graciously agreed to place these materials on long-term deposit at the Library Company, and we anticipate that more investigation will yield more discoveries.

#### **The Library Company of Philadelphia**

Founded in 1731 by Benjamin Franklin, The Library Company of Philadelphia is an independent research library specializing in American history and culture from the 17th through the 19th centuries. The Library Company is America's oldest cultural institution and served as the Library of Congress from the

Revolutionary War to 1800. It was the largest public library in America until the Civil War and includes the extensive personal libraries of such prominent early American bibliophiles as James Logan. Open to the public free of charge, the Library Company houses an extensive collection of rare books, manuscripts, broadsides, ephemera, prints, photographs, and works of art, and one of the world's largest holdings of early American imprints. Particular strengths of the collection include economic history, women's history, African American history, history of medicine, history of philanthropy, and visual culture. The Library Company promotes access to these collections through fellowships, exhibitions, programs, and online resources. To find out more, please visit [www.librarycompany.org](http://www.librarycompany.org).

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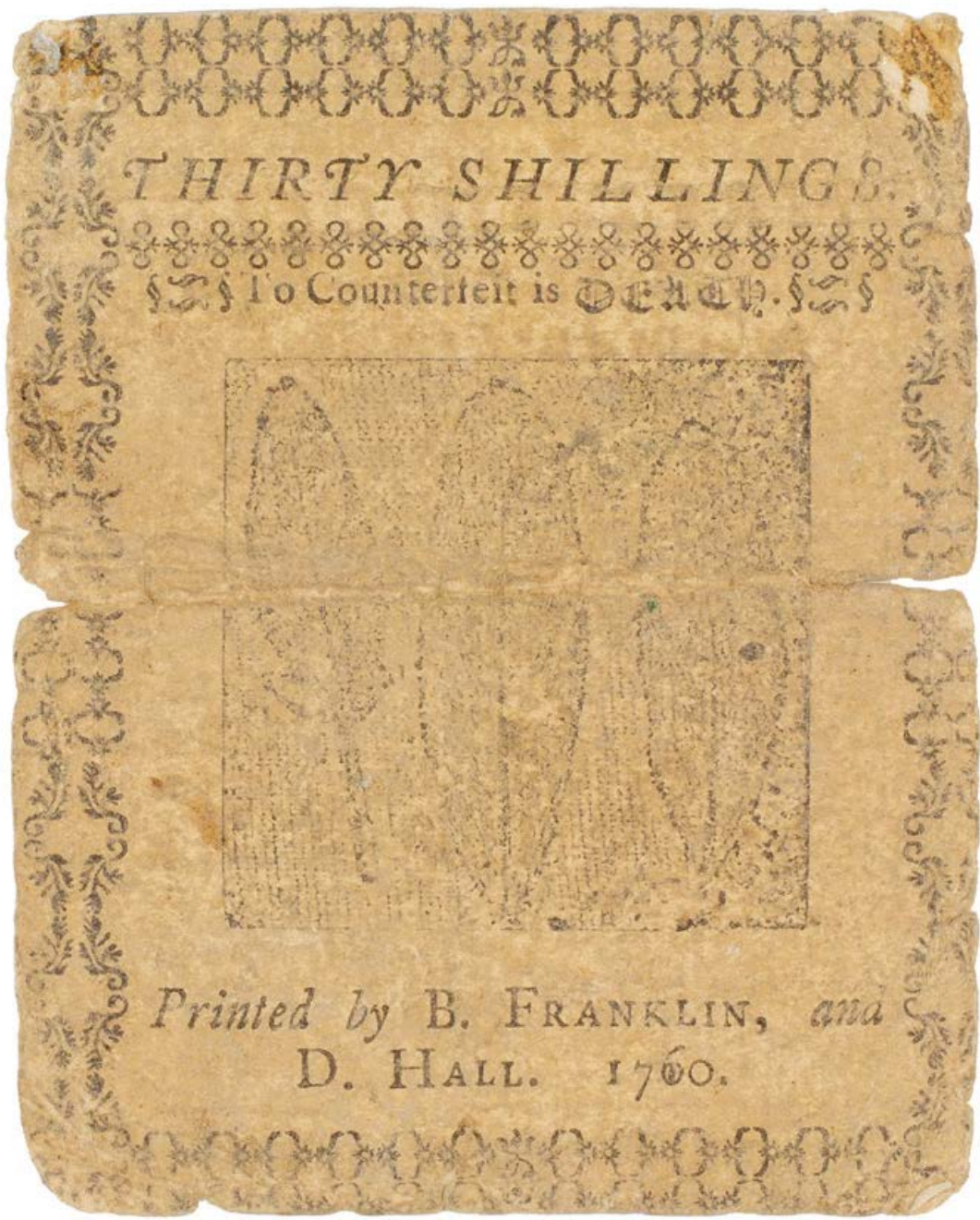
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Leaf block used to print paper money by Franklin and Hall.



Thirty shilling note issued by the Province of Delaware (Philadelphia: Franklin and Hall, 1760). Courtesy of the American Antiquarian Society.



Close-up view of the cross hatching on low relief areas of the type metal block used to print the 1769 10 shilling note for the Province of Delaware.



Detail of 10 shilling note issued by the Province of Delaware (Philadelphia: Franklin and Hall, 1759. Courtesy, The Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera, 65x625-32a.