

479 CLYMER, GEORGE E.

Printers' Joiner

Alexandria

Printer's Joiner in Alexandria (1801-14).

George Clymer is a celebrated figure in the development of iron-framed printing-presses in the early nineteenth century. Yet his association with the Virginia print trade was one as an itinerant joiner who occasionally built and repaired wood-framed presses in Alexandria between 1801 and 1814. Such work gave him a grasp of the mechanics of printing, as then practiced, which he applied to his new Columbian Press from 1813 onward.

Clymer was the son of a Swiss-immigrant farmer who came to Bucks County, Pennsylvania, before 1776. His obituaries report that he served in the Revolutionary War, with his father, although those British accounts may confuse his immediate family with that of Philadelphian George Clymer, a signer of the Declaration of Independence and member of the Continental Congress. Those accounts stress Clymer's well-known mechanical aptitudes, exposed at an early age by his development of a plow that "was infinitely superior to those then in use" in the fields of eastern Pennsylvania. Clymer evidently pursued such interests as an adjunct to his trade as a carpenter and cabinet maker. They also report that he taught in a school at the Durham Furnace, near modern-day Doylestown, owned by Judge Richard Backhouse from 1779 to 1791; that purported association is supported by the fact that Clymer married Backhouse's daughter Margaret after her father died in 1793; that association is also the reported source of his familiarity with the casting of iron parts that was a key to his later work as a press-manufacturer.

Sometime before 1797, Clymer moved to Philadelphia, where he soon added the construction and repair of printing presses to his craft repertoire. Such employments were apparently part of a life-long interest with mechanical devices, leading some memorialists to label him, anachronistically, as a mechanical engineer. About 1800, Clymer began tinkering with levers as a means of increasing the strength and efficiency of human labor. Those efforts were evidently inspired by the Newcomen Engine, the steam-powered, lever-action pump invented in 1712 by Englishman Thomas Newcomen; accordingly, Clymer's first successful application of the principle came with a man-powered pump that was employed to drain the cofferdams used in building "the first permanent bridge across the Schuylkill," for which he received an American patent in December 1801; later, while in England, he adapted that design for use on ships, receiving a British patent for that device in 1818.

Yet Clymer would find greater success and profit in simplifying the multiple lever-design of the first iron-frame printing-press developed by Charles Mahon, 3rd Earl Stanhope, in 1800. The Stanhope Press was best suited for printing books, a staple of the British print-trade, while printers in America required presses of greater versatility and speed, especially those who published newspapers on the largest sheets of paper available. Because Clymer worked with such printers in Alexandria, Baltimore, and Philadelphia after 1800, he was able to design and build a single-lever press capable of producing more impressions per hour than the wood-frame screw-presses then generally in use. The key to its efficiency was its iron parts, elements that could be easily balanced in a frame that did not flex when the press was pulled, creating clearer impressions with less force at a greater speed.

Remarkably, Clymer found it difficult to market his innovative press in the United States, despite naming the device "Columbian" and adorning its counter-weight with a large spread-eagle design. Several nineteenth-century histories of printing indicate that the inordinate weight of the press proved a problem in having the machine delivered by way the rudimentary roads of the American interior, making locally-made wooden-frames outfitted with imported metal parts the most cost-

effective choice. Indeed, the most widely-sold press of this era was the wood-framed Ramage Press, also built in Philadelphia by the Scottish-born Adam Ramage, who began building presses at about the same time that Clymer did in 1800. However, it may also be that the introduction his Columbian Press was ill-timed and politically fraught. Clymer began offering his press for sale in Philadelphia in early 1813, almost one year into the War of 1812 – suggesting that he was selling an American alternative to the English Stanhope at a time when currency was dear and importation unreliable. But the initial testimonials offered in its favor were published in Federalist newspapers, reflecting its sale to the offices printing those pro-British, anti-war journals. Indeed, a Washington correspondent of Philadelphia's *Democratic Press*, the city's ardently anti-Federalist daily, noted the correlation and wrote that Clymer was just building Stanhope presses, so was attempting to injure American innovators with an imitation of an English design from which he alone unpatriotically profited. He refuted this assertion in the pages of the equally partisan *Philadelphia Gazette* of Samuel Relf, who continued to promote Clymer's press for the ensuing four years. Still, there were Republican buyers for his press, such as the competing *Aurora General Advertiser*, whose printers began using a Columbian press in April 1814, clearly showing that Clymer's political friends were not his only patrons. Yet the builder sold fewer than 20 machines in the four years that followed its introduction, a quantity that was easily overshadowed by the number of cheaper Ramage presses (about 1,850) that were sold between 1800 and 1824.

By the spring of 1817, Clymer had decided that Europe generally, and England specifically, embodied a more receptive market for his pricey (\$400) state-of-the-art press. He left Philadelphia in late May of that year with a press that he intended to present to the Russian czar, Alexander I, in an apparent effort to obtain from him a monopoly for its manufacture. While such a license was not granted him, Clymer did receive a 6000 ruble prize from the czar that helped fund its manufacturing in London; he later received a like prize of 100 gold ducats from the King of the Netherlands, William I. These honors, in combination with testimonials from his American purchasers, allowed Clymer to begin manufacturing his press in London after he had obtained a patent from the British government in November 1817, less than six months after his arrival in England. That patent gave him a fourteen-year-long monopoly on his design, and he reportedly engaged R. W. [Richard Whitaker] Cope as a partner in the venture; Cope evidently learned well from Clymer, as he designed and patented his own iron-frame press in 1820 – the Albion Press – which he constructed and improved over the ensuing thirty years in conjunction with one John Hopkinson. As a result, the British print trade was dominated by machines produced by either Clymer or Cope through the 1820s and 1830s.

Clymer continued manufacturing his lever-action press in London until his death in August 1834. He had taken on Samuel Dixon as a new partner in mid-1830, just before his exclusive patent expired; Dixon continued the business until the close of the Great International Exhibition of 1851. The addition of Dixon seems to have been a consequence of Clymer's advancing age in combination with the loss of his son-in-law, Alexander Renfrew Shaw, as his silent partner, more than the looming end of his patent; he had left Philadelphia at the advanced age of 63, possibly in the company of Shaw and his wife, Clymer's daughter Isabella, or at the suggestion of Shaw's family, who left America for England just before the War of 1812 began; Alexander and Isabella returned to Philadelphia in 1830, bringing the long business relationship between Clymer and Shaw to an end, and so inducing the builder to take on Dixon in his son-in-law's former role.

The innovative design developed by Clymer dominated the world of printing until the introduction of the roller press in the 1850s. That primacy made the American-born inventor a well-known figure internationally. But by the time of his death, Clymer had become a footnote in the print trade of his native land, leaving European chroniclers to provide the details his life, often inaccurately.

Personal Data

Born: In 1754 Bucks County, Pennsylvania.
Married: ca. 1800 Margaret Backhouse in Bucks County, Penn.
Died: Aug. 27 1834 London, England.
Children: Several children, though only three daughters survived to adulthood; their youngest daughter, Isabella, married his partner & apprentice Alexander Renfrew Shaw.

Sources: MEDSA # 6621, 6622, 17357; Timperley, *Dictionary of Printers and Printing*; Moran, *Printing Presses: History and Development*; notices in various Philadelphia newspapers, 1800-1824.