Southern European immigrants did not have a voice in . . . periodicals," such as Atlantic Monthly, Harper's Magazine, and so forth (pp. 117-18). The book also suffers from a number of factual errors. The author claims that G.E. "pioneered" radio broadcasting (p. 26) while making no mention of its Pittsburgh-based rival, Westinghouse Electric, or of its first station, KDKA.

Still, the book is not without value. It contributes significantly to our understanding of the efforts of one company to project a variety of different, sometimes contradictory, impressions of itself. This was done in an age when such efforts were largely novel and sometimes ineffectual. That such efforts became standard practice in American industry is a measure of their early successes.

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Early in her work, Ms. Philip dramatically states ". . . Fulton excited controversy. The perplexing contradictions of his character were, however, a source as well as a manifestation of his creative genius" (p. 2). This is the main thread of this excellent volume — the innumerable controversies into which Fulton thrust himself or in which he found himself involved and the almost unending contradictions that marked this "extraordinarily variegated life."

Born in Lancaster County in 1765, Fulton nevertheless spent almost one-half of his life abroad. Apprenticed as a silversmith, he was more interested in miniature painting and hairworking. He was not personally threatened by the Revolution but aware of the war's impact. He sought ways to reduce the effects of all war, and, therefore, he was more devoted to his submarine than to his steamboat. He knew the advantages that could come by having friends in high places, yet he disagreed, argued, and often "fell out" with these powerful colleagues. He married into the New York Livingston family and fathered four children, yet he was more comfortable with Joel and Ruth Barlow
during the last twenty-five years of his life. A patriotic American, Fulton didn’t hesitate to offer his ideas and devices to England or France. Perhaps the greatest contradiction of all, and for this he must be ranked as great in early United States history, he recognized that his inventions were the product of incremental development — “a new arrangement transmits a new idea to the world” — rather than the effort of a tinkerer or the result of some nationalistic ingenuity (p. 47).

Fulton went to England in 1786 as an art student, meeting there the patriarch of young American artists, Benjamin West. He took instruction, received commissions, and exhibited at the Royal Academy, but he remained “a doggedly persistent painter” (p. 21). By the early 1790s, however, he was involved with designing canals, locks, and steamboats, always thinking about national systems of transport. He saw possibilities for personal wealth and fame, and skillfully argued his position in meticulous treatises decorated with precise drawings. Long before the modern entrepreneur, Fulton believed that the success of any project depended on planning which required design, construction, operation, and finance to be treated as interrelated elements. But he found no patrons.

Fulton went to France where he sought support for his ideas. Here, he introduced his submarine which he believed “would provide a cheap, efficient, and sure means of eradicating not only maritime conflicts but all war” (p. 73). Bonaparte wasn’t interested in the Nautilus so Fulton went back to his steamboat. Upon his meeting Robert R. Livingston, who held that famous monopoly of steam navigation on the Hudson and earlier had hired John Stevens to build a steamboat, each recognized that the other could be valuable; a contract was signed on October 10, 1802. Fulton wisely focused his work on finding “a propelling method that would have maximum thrusting capability and minimum resistance and match it with a hull that would also minimize resistance” (p. 125). The keys were proportions and velocities.

The final decade of Fulton’s life was spent in America. His battles with his “enemies,” his success with Steamboat (now known as Clermont), and his work on submarines and torpedoes made him nationally famous and potentially wealthy. However, there was more work to do — patents to be granted and confirmed, other monopolies (the Ohio, the Mississippi) sought and defended, companies organized and carefully managed, reports written for public consumption, and competitors, litigation, and disasters overcome. These took their toll
on Fulton. His work, rather than his family, was his life’s center. He made more enemies (Benjamin Latrobe, the Livingston family, for instance), and he committed perjury. Yet he continued to invent — the steam frigate is a representative example. The author is not sure whether Fulton was a “visionary laboring for the benefit of humanity or merely ‘an adventurer’ serving his own ambitions.” One must agree with her suggestion that Fulton attempted more than he could accomplish and that he overreached himself, but even more that his “... ability to do so ... was the essence of his genius and the foundation of his lasting fame” (p. 353).

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