

with American goods. Societies were founded to encourage consumption of American products and rebellious governments encouraged the development of local industries. The Massachusetts Provincial Council declared in 1774 that it was necessary to develop local manufacturing in order "to render this state as independent of every other state as the nature of our country will admit." The economic difficulties of the period further stimulated efforts to encourage American manufacturing, the most prominent measure being the campaign to buy and wear American-made clothes. David Rittenhouse, whose standing in the American scientific community was second only to Franklin's, declared in 1775 that the importation of English manufactured goods hindered the development of American science. "Luxury and tyranny," he argued, "pretend at first to be the patrons of science and philosophy, but at length fail not effectually to destroy them." Intoxicated with the revolutionary rhetoric that portrayed the conflict as one between a corrupting Old World and the virtuous colonies, Rittenhouse called for severing all ties with Europe.³⁰

The boycotts and nonimportation of British goods during the years of struggle brought with them the realization that the United States ought to become self-sufficient. As early as 1768, America's best-known physician, Benjamin Rush of Philadelphia, associated "encouraging American manufactures" with revenge on the "mother country." A year later he wrote from London in a letter published in the *Philadelphia Journal* on April 6, 1769: "There is but one expedient left whereby we can save our sinking country, and that is by encouraging American manufactures. Unless we do this, we shall be undone forever. There is scarce a necessary article or even a luxury of life but what might be raised and brought to perfection in some of our provinces." Rush recommended inviting "hundred of artificers of every kind . . . to come over from England and settle among us." In 1775 Rush was the honorary speaker at the founding of the United

Company of Philadelphia for Promoting American Manufactures, the first large-scale attempt at cotton manufacturing in America, which within a year of its launching already employed hundreds of workers. The company was founded on illegally appropriated British technology. Christopher Tully and Joseph Hague, immigrant artisans who illicitly made their way to Philadelphia and built the machinery for the company, each received fifteen pounds from the Pennsylvania legislature as a reward for introducing the hitherto restricted English technology. Such enterprises, Rush told his listeners, were necessary to achieve independence because "A People who are entirely dependant upon the foreigners for food or clothes, must always be subject to them."³¹

The end of British rule meant that the economic order that had dominated the North American colonies for over a century was no longer enforced. Independence engendered cultural nationalism with its demand that overthrowing the chains of the British Empire be extended to the spheres of science and technology. One of the benefits of independence, argued activist and future historian of the Revolution David Ramsay in 1778, was that without the restrictions of the metropolis, technology and the arts would "raise their drooping heads" and transform the New World into a technological paradise. Another writer complained that during the colonial period "we were dependent on Great Britain, her policy and laws restrain us as much as possible from manufacturing.—Even the great mr. Pitt, in one of his famous speeches, was against permitting so much as a hob-nail to be made in the colonies." Philadelphia patriot Timothy Matlack, speaking in 1780 before the American Philosophical Society, declared: "*British* Tyranny restrained us from making of Steel, to enrich her Merchants and Manufacturers." The meaning of independence, Matlack continued, was that "we can now make it ourselves as good as theirs." And Hugh Williamson of North Carolina implored his countrymen: "Let us turn our attention to manufactures. . . . instead