

# Home Manufacturing

... To his Philadelphia friend James Ronaldson he wrote later in 1812:

We shall in all events derive permanent benefit from the war, by it's giving time for the permanent establishment of our manufactures, to which the high duties you mention, will contribute, while they also enrich our treasury. We always manufactured a great deal in this state in the household way. But this was on the old Spinning wheel. The introduction of machines into our families is becoming common. Those of 6. spindles suit the smaller families. I have 36. spindles going myself & shall soon add 18. more. My son in law has 40. We find the old Jenny far preferable to the newer & less simple contrivances. In a year or two more, household manufactures will be so universally established in this state, that the British commerce in coarse goods will be compleatly extirpated, & never more will be of much value to them.<sup>26</sup>

With Dr. William Thornton in the patent office in Washington he was more frank: There must be a better way of making cloth. Shortly before leaving the Presidency he had given permission to two Boston men to import a machine which spun cotton, wool, and flax "equally." Jefferson understood that the spinning Jenny, while an improvement on the old spinning wheel because it had multiple spindles, had its limitations too. The question was how to make the Jenny better for home manufacturing. He thought he might have found an inventor who had done so, the New Yorker Oliver Barrett, Jr. He therefore wrote Thornton early in 1812, "I have seen in the hand of a friend an advertisement of a machine much simpler than the jenny, & which will do about 6. times the work of a spinning wheel. It's price, 15. Dollars shews there cannot be much work about it. This promises to be exactly what we want. But does it answer what is announced of it? . . . If we could but have a simple carding machine we should be fixed."<sup>27</sup> Then follows a succession of questions proposing different methods to make one. The tinkerer is once again attempting to solve his own problems.

The spinning machine was sent by Thornton and arrived by July of 1812. Despite its supposed simplicity, no one at Monticello could figure out the mechanism, which functioned as the common roving jack. Indeed, asked Jefferson of Thornton: What was a common roving jack? Another machine, the creation of Ebenezer Herrick of Massachusetts, was delivered the following year. As Jefferson explained to Robert Livingston, "Yet I have thought it a duty to my neighbors to take on myself the risk of disappointment. If the machines answer, a service will be rendered them; if they do not I only lose a few dollars."<sup>28</sup> Three years later Jefferson was corresponding with still another inventor of a spinning machine, but nothing appears to have come of the query.<sup>29</sup> ...

To Thornton in 1814 Jefferson concluded "that after trying several spinning machines I have settled down with the ancient Jenny, because it's simplicity is such that we can make it and repair it ourselves."<sup>30</sup> This proved to be the bottom line.

But Alrichs had also mentioned working on an improved carding machine. Would Jefferson buy one? Hand carding was a time-consuming job, and the carders could not keep up with the spinners. Alrichs' device arrived (with a bill for \$97). As luck would have it, it did not perform properly. Alrichs provided an explanation as to the reasons why. As nothing more is mentioned about the carding machine, the difficulty was apparently resolved. During this period Jefferson ordered another wool carding machine for someone else. ...

Jefferson looked at new looms as well. He had started out with the common loom, then in 1811 he added a loom with a flying shuttle. Not entirely satisfied, in 1814 he described the improved loom of Janes as the most beautiful machine he had ever seen. Jefferson was denied this invention, as were most Virginians, because the man who had bought the patent rights for Virginia sales was too greedy. The machine did not sell as well as it did in other states where the price was lower. Jefferson suggested to Thornton that, of the 40,000 looms in Virginia, a quarter would be exchanged for the Janes model if only the price was commensurate to that charged elsewhere. One man's avarice thus denied a large number of people a machine crucial to their economic improvement; this was not Jefferson's way.

He noted the existence of another new loom soon thereafter, but concluded that his home manufacturing venture was too small an operation to warrant buying one. Now in his 70s, although interested in developments, he no doubt judged it better to stay with what he had, looms with flying shuttles. Jefferson admitted that they did not perform the marvels ascribed to them, but he thought they doubled the output of the common loom. He must have been interested, however, when in 1815 Thornton wrote to say he had seen a model which prepared cotton for spinning without carding—a very simple machine, according to the doctor. To show its merits he enclosed a sample of cloth made on it.

The problems involving cloth-making machines, their high price and or their suitability to the talents of his workers, must have been ever on Jefferson's mind. He expressed the dilemma he faced to his Poplar Forest overseer, Jeremiah Goodman in 1812: "I hope the spinning and weaving has got well underway.

The ability of girls and older women to work the devices for making cloth was critical, for men could not be spared. Jefferson leaves a record of one failure: "Of Sally we can make nothing at all. I never saw so hopeless a subject. She seems neither to have the inclination nor the understanding to learn. She is now weaving one yard a day, with the flying shuttle and of such stuff as will not be worth giving to children."<sup>32</sup>

In 1811 Jefferson had done his best, engaging the services of William Maclure, a North Carolina weaver who agreed to teaching others the art. Maclure also made several spinning Jennies and a loom with a flying shuttle for the training program. Suitable housing, subsistence, and work areas were provided for Maclure and his pupils. By 1814 the instructor's task satisfactorily completed, his employer wrote a letter of recommendation for him.

Fine cloth suitable for Jefferson and his immediate family would continue to be made off the plantation. He had great expectations that his Merino sheep would supply the raw material, but their wool output was insufficient. In 1812 he wrote his Delaware friend, E. I. Dupont, "I shall shear this year, 3. fleeces only of imported Merinos, their wool of 1st. quality, and 15. of half blood. I have understood you are concerned in a manufactory of cloth, and will receive one's wool, have it spun, wove & dyed for the equivalent in the wool. I should be very glad to get mine into so good hands. Will you be so kind as to inform me more particularly on this subject."<sup>33</sup>