Smith and Winchester, Part 1

By Jamie Eves • February 9, 2020

Connecticut as a Maker State: The Smith and Winchester Company of South Windham, Part I

A package arrived in the mail recently, containing a historical treasure: a copy of *A Century of Pioneering in the Paper Industry*. Published in 1928, it is a short, illustrated history of the Smith and Winchester Manufacturing Company of South Windham, CT, published by the company itself. The book was a gift from Pat Abbe, whose family had once been involved with the Company. Unfortunately, Smith and Winchester, founded in 1828, closed later in the 20th century. Like so many Connecticut manufacturers, it fell victim to globalization, unable to compete with larger, overseas corporations that hired cheap labor. Yet, for a hundred years, Connecticut was a pioneer in manufacturing paper, a history worth remembering. Typically, it begins with the invention of new technology in Europe, the transplantation of that technology to Connecticut, the application of Yankee ingenuity and Connecticut waterpower, and proximity to New York and Boston markets. Here are some excerpts from the book.

"The greatest discovery in the history of paper making … was in 1799, at the mill of St. Leger Didot at Essonnes, France, that an ingeniuous workman, Nicolas Louis Robert, made the first successful attempt to produce paper in an endless web, instead of making it a sheet at a time."

"Messrs. Henry & Sealy Fourdrinier, wealthy stationers and paper manufacturers of London, purchased the patents of the machine, and it was because of their improvements and extensive manufacture (the first machine was made in 1804) that this type of machine has come to bear their name."

“The first Fourdrinier to come to America was imported in December, 1827, by one Joseph Pickering. It was to be set up the next month in his shops at North Windham, Conn., under the direction of George Spafford of South Windham, know throughout the countryside as a machinist ‘of great mechanical insight.'”

“George Spafford arrived at the Pickering Mills. The tedious task of making necessary changes in the shop’s layout was at last complete. Then came the fascinating work of setting up the new machine and putting it into operation. And, for Spafford, this great machine from across the sea was a revelation — putting it into action was an adventure.”

“It was with regret that Spafford left the Pickering Mills.”

“And as he drove slowly back to Windham through the winter’s night, looking up at the clear stars through the black umbrage of the drooping Connecticut elms, he was pondering the things he had seen, and wondering.”

“‘It is a wonderful machine, this Fourdrinier,’ thought Spafford. ‘It is certain to supersede the inadequate paper-making process now in use. yet few people will import these machines. The distance is too great. The business arrangements are too difficult to establish.'”

“‘But if a similar machine — a better machine, were made in America….'”

“Thought was turned into action. Spafford, with an experienced paper-mill builder, James Phelps, formed the firm of Phelps & Spafford to build, in America, an improved Fourdrinier machine. Associated with them, and in charge of their working force, was Charles Smith, a boy of nineteen, whose mechanical talent and executive ability had already marked him for leadership in the great task which was to be undertaken.”

“There was, in South Windham, a considerable stream of water, falling rapidly over the ledges of a rocky glen. Near this stream a site was selected, and an old building, originally a country schoolhouse, was moved from its foundation to a position below a small dam erected to conserve the flow of the stream. Here was installed a single crude power lathe which, with hand tools, formed the total of the shop’s equipment.”

“And here, in secrecy, beneath the flickering light of fish-oil lamps, the first Fourdrinier in America was designed and built. Measurements of parts were made with simple calipers. Drawings, made on smoothed pine boards, were pland away, as soon as the pattern was complete, that there might be room on the same board for the next drawing.”

“Cold rolled steel was unknown. Every shaft had to be forged and turned on the lathe.”

“Castings formed a momentous problem. The nearest foundry of any size was at Stafford, some twenty miles away, and there the patterns were cast and then hauled, by ox team, back to South Windham.”

“But ingenuity triumphed over obstacles, and the completed machine proved an excellent performer, a vast improvement over the original Fourdrinier. It was sold to Amos D. Hunnard and put into successful operation in May, 1829, at his mill at Norwich Falls, Conn., a plant famous as the first paper mill in Connecticut, founded in Colonial days by the distinguished Christopher Leffingwell.”

For how this small operation evolved into the successful Smith and Winchester Company, see the next installment of the Mill Museum’s blog.