

Now in its 139th year, the Howard Brush company has long been a part of America's textile history. Since its founding in 1866, Howard Brush has manufactured carding cloth, the long, narrow strips of backing embedded with 40,000 to 80,000 wire teeth per square foot that are used in drum- and handcarders. While much of the company's production has focused on cloth for the large multidrum carding machines used in industry, cards for grooming sheep and handcards for spinners are also part of the company's product line.

Behind the Scenes:



PHOTO COURTESY OF HOWARD BRUSH

At Howard Brush Company

BY CAROL HUEBSCHER RHOADES

Until the twentieth century, when methods for extruding synthetic fibers were developed, industrial cloth-making relied solely on spinning fibers that had to be aligned by carders. Because teeth wear down during use, carding cloth must be replaced regularly. While the industry has consolidated due to foreign influence over the past half-century, fiber-processing mills still need carding cloth for their machinery.

Howard Brush company started as a family business, run by three brothers, Charles, John, and Albert Howard, in Worcester, Massachusetts. The youngest, Albert, trained in making carding cloth and soon became a partner in Howard, Farnsworth & Co. When Mr. Farnsworth retired, John Howard entered the firm

and the name was changed to Howard Brothers. The company incorporated as Howard Brothers Manufacturing Company in 1888 and later formed joint partnerships with many associated businesses.



For example, the Warren Belting company invested in Howard Brothers and also supplied it with leather for backing the carding cloth.

In the early days of the carding cloth industry, the pricking of holes for the wire teeth and the placement of the teeth were done by hand. Eventually this work could be done by machine, and the Howard brothers invested in a dozen card-clothing machines. Over the years, the company expanded, moving into larger buildings and establishing plants in North Carolina and Georgia. By the 1920s, the manufacturing process was even more automated, and the wires could be punched through backing at a rapid-fire pace.

Throughout his long career, Albert

Howard worked at making improvements in the manufacture of carding cloth. Following his 1916 death, the company continued to set industry standards. Its Tufferizing Process, developed in the 1940s, cut and formed the wires with great precision. These evenly tempered and strong wires were set into the Tuffer Patented Foundation that overcame the problems associated with leather backing. Unlike leather, the new Tuffer carding cloth was resistant to the oil used in the carding process and exhibited flexibility without stretching and a constant tensile strength. While these factors are most important in industry, they also contribute to making handcarding smooth and easy.

In the 1960s, the Howard Brush plant was moved from Worcester to Auburn, Massachusetts. In the mid 1980s it sold to a series of outside investors who thought they could save the company and U.S. jobs; however, they did not succeed and the company continued to falter until 1998 when Bob Bennett, the owner of Stratosphere, Inc., a company that manufactures technical brushes used in the textile industry, heard of the auction of the building and equipment. He intervened to save the wonderful nineteenth-century equipment and modified it to modern safety specifications to showcase the ingenuity of American engineering and to continue producing items needed by the fiber arts community.

Now based in Woonsocket, Rhode Island, today's company still maintains



Bob Bennett, head of Howard Brush, stands with one of the refurbished nineteenth-century carding cloth machines still used by the company today.

the high-quality standards set by the Howard brothers. The goal of the company is to use the salvaged machinery to make museum-quality reproduction handcards, carding tools for the contemporary fiber arts, and carding cloth for industry. The company also makes brushes for cattle and sheep, and has recently introduced an extensive line of brushes and combs for grooming cats and dogs, plus a rug rake for cleaning pet hair out of carpets. Each of these tools is made to meet specific requirements, such as rough initial combing and combing fine wool and coarse wool sheep. The company has designed a flick carder to clean hand- and drumcarders, and it produces rug hooking strips, used for suspending tapestries and other wall hangings in four

styles for different kinds of cloth.

The handcards made by Howard Brush come in three sizes with a choice of five wire densities from 54 to 190 teeth per inch (t.p.i.). The 54 t.p.i. cards work well for coarse wools and the 190 t.p.i. cards are suitable for cotton. If the carding teeth wear out, Howard Brush offers a repair and rejuvenation service. Carding cloth for drumcarders is available in several widths, with the same range of tooth densities as for the handcards. And just to keep them on their toes and to increase their range of equipment, Howard Brush is now developing its own drumcarder, a fitting addition to their line.

CAROL RHOADES, *a.k.a. the carding queen, lives, cards, and spins in Austin, Texas.*

Howard Brush Handcards

Current Retail Price: \$45-\$55 depending on size and density of teeth.

Sizes: Mini, 4½" overall with 3½" wire field; Student, 7" overall with 6" wire field; Standard, 9" overall with 7½" wire field.

Features: Very gently curved back; ergonomically designed handles firmly and smoothly set into body of card.

Wire densities: Choice of 54, 72, 90, 120, or 190 t.p.i. Note that it is possible in some instances for Howard Brush to set the machines to meet individual needs.

Weight: Mini Cards, 10 oz.; Student Cards, 1 lb.; Standard Cards, 1½ lbs.

Material: Select woods.

For more information about Howard Brush or to find a distributor near you, contact the company at Howard Brush, PO Box 1400, 581 N. Main Street, Woonsocket, RI 02895; (800) 556-7710; fax (401) 766-9385; info@howardbrush.com; www.howardbrush.com.

