

## Chapter One:

# Molding a Legacy 1828-1890

Before the Civil War, American manufacturing was performed for the most part by small family firms using handicraft technology to produce goods primarily for local markets.<sup>1</sup> By 1900, mechanization, rapidly advancing technology, new sources of power, improved transportation, and new organizational ideas had transformed a nation of farmers into an industrial giant dominated by large enterprises producing for international markets. The image of a single craftsman working with hand tools to shape each earthenware jug was beginning to change as companies recognized the need for mass production and new kinds of clay products. Ohio's pottery industry underwent the same changes that occurred in nearly every other industry in America.<sup>2</sup>

Summit County's clay products industry was born in 1828, when a man named Fisk<sup>3</sup> discovered clay beds in Springfield Township (in an area later known as Mogadore--then part of Portage County). In those days, most manufacturing occurred near supplies of raw materials and accordingly, Fisk purchased the land and set up shop with his partner Smith. Fisk and Smith "threw" utilitarian pottery on crude "kick-wheels" and "fired" the pieces in heaps of burning charcoal.<sup>4</sup> The pottery was sold as fast as they could produce it and their fledgling business thrived.

Fisk and Smith took on a helper in 1830, "a boy named Edwin H. Merrill," who had learned the trade from his father Abijah in Painesville.<sup>5</sup> Merrill not only learned fast, he took control, buying out Fisk and Smith in 1833. Meanwhile, the success of Fisk and Smith had not gone unnoticed. Solomon Purdy had opened a pottery business in Mogadore the same year and others soon followed. These early potteries

"manufactured jugs, milk pans, crocks, flower pots, meat tubs, bottles, jars, jelly-cups, and

bowls for farm house-keeping. The manufacturer himself often retailed his own ware. After a winter of production (Akron was isolated in the cold months; the canal boats were frozen into the ice), the potter loaded his wares on a canal boat, and set off through the state, swapping his products for grain or live stock in the stringent days when currency was scarce."<sup>6</sup>

As the potter became more successful, he hired other skilled potters to work in his shop. Within a few years, a profusion of new potteries glutted the local market, and owners began to look for buyers outside of Summit County.

In 1841, eight shops in and around Mogadore formed an association that reached markets as far away as Detroit and lower Canada.<sup>7</sup> These eight potteries shipped their ware via the Ohio and Erie Canal and the Pennsylvania and Ohio Canal.<sup>8</sup> But Edwin Merrill realized that the location in Mogadore was not near enough to the canals, so in 1847 he and his brother Calvin moved their company to Middlebury (now east Akron). The Merrills "invented a machine for molding clay pipes, and soon the manufacture of stoneware beer and ink bottles was added to the activities."<sup>9</sup>

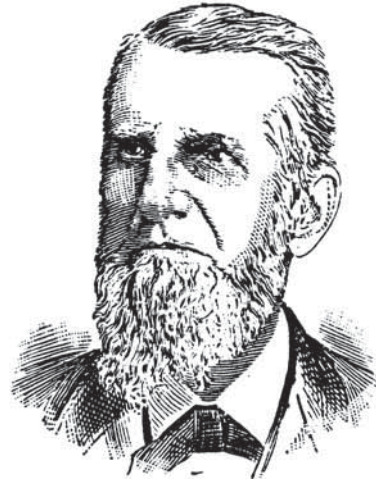
The potters of this era were traditional "practical potters," skilled in every step of the trade. The potter usually dug and prepared the clay, "threw" or "pressed" the ware, applied decoration and glazing, and fired the finished piece.<sup>10</sup> A skilled practical potter hired his own assistants, which he paid from the fixed price the owner paid him per piece (or if he owned the business himself, the price he could command per piece). The helpers did all the repetitive, unskilled tasks, but always under the direct supervi-

sion of the potter. This "helper system" was introduced by the English immigrants who dominated the trade.<sup>11</sup>

Local potteries continued to expand through the 1840s, hiring more workers and steadily increasing production. Practical potters became the managers of their expanding companies. Their customary tasks were divided among a new generation of potters, called "operative potters." Operative potters were trained in only one part of the trade, such as mold-maker, presser, thrower, or kilnman. But "though operative potters continued to function as independent craftsman and maintained the helper system, they did not possess the status or complete skills of the old practical potters."<sup>12</sup> This dilution of the traditional skills of the artisan was felt in many trades as American industry began to emphasize "mass production." By the 1850s, there were twelve potteries in Mogadore, producing more than a half a million dollars worth of manufactured stoneware per year.<sup>13</sup>

The Civil War accelerated the process of industrialization, as factories geared up for war production. The era brought rapid expansion and prosperity to Ohio's pottery industry for two reasons. First, high protective tariffs on foreign pottery expanded domestic markets, and second, there was increased public demand for china and ornamental ware. Ohio's 130 potteries employed more than 650 workers during the war years.<sup>14</sup>

"Advances in technology, mechanization and the factory system...transformed production processes and working environments...[but] also generated further job specialization and skill dilution...[potteries] consisted of a collection of 'departments,' each performing a particular phase of pottery-making. Production still depended heavily on manual labor."<sup>15</sup>



Edwin H. Merrill was just a boy when he moved to Springfield to work in the area's first pottery. He had learned the trade from his father while growing up in Painesville, Ohio.  
The University of Akron Archives

In 1861, Edwin H. Merrill and his son, Henry E. Merrill established the Akron Pottery, a new stoneware factory at South Main and State Streets in Akron.<sup>16</sup> The Merrills continued to produce a wide variety of stoneware items made not only by traditional methods, but using some of the newest machine molding processes. The company steadily grew in the post war period as markets expanded, technology rapidly evolved, and the railroads spread in all directions over the nation.

The 1870s were a tumultuous time for America, including a deep economic depression, the birth of the labor movement, and the gathering momentum of industrial power. The changes in the pottery industry that had begun in the previous two decades accelerated even in the difficult years after the "panic of 1873." The industry was transformed by new labor-saving devices like pug mills for clay preparation, steam-driven machinery, jiggers, lathes, and other machines.<sup>16</sup> Operative potters lost still



By the end of the century, operative potters still performed the skilled hand work like applying handles, spouts, and other utilitarian and decorative operations. This c.1880 photograph was taken at the Whitmore, Robinsons & Company pottery. **The Akron Porcelain & Plastics Co.**

more independence as their work was divided into as many as twelve separate tasks employing only semi-skilled workers.

In Akron, "Moulded ware was produced in such quantities that the individually formed, glazed and decorated salt glazed and slip glazed stoneware all but ceased production."<sup>17</sup> Division of tasks had reduced every step of production--clay preparation, forming, glazing, firing, and finishing, to an early version of the "assembly line" Henry Ford would make an exact science more than thirty years into the future. The techniques made possible mass production of ware in faster times and in bigger quantities at less

cost. Standard shape, size, glaze, and finish were also made possible by more precise machine tooling.

Another hugely successful venture in the Akron area was the production of stick matches by O.C. Barber's Diamond Match Company, maker of one-fifth of the matches made in the United States by 1880. Match companies of the time usually included a clay pipe in each package as a premium. The Akron Pottery Company concentrated on this market, but received some lively competition from new local competitors--H.A. Ayers & Company, Hopkins & Robinson Manufacturing, T.H. Fenton, Curtis Fenton, Baker & McMillen, and the Barber Match Company,

**AKRON POTTERY,**  
**❖ E. H. MERRILL & CO. ❖**  
 MANUFACTURERS OF  
**❖ STONEWARE SPECIALTIES, ❖**

**STONEWARE,  
 LEAD CORRODING POTS,  
 STEW PANS.**

**MILK PANS. JELLY CUPS,  
 BEER AND INK BOTTLES,  
 TOBACCO PIPES. &C.**

which itself began making clay pipes.

As industrialization affected production it also changed the composition of the work force in pottery factories. More and more of the workers were women and children.

"Many were wives and daughters of operative potters, who used them as helpers in order to supplement family incomes. But, more commonly, they were hired by plant owners themselves, generally to handle menial and routine tasks like brushing, smoothing, and finishing pieces."<sup>18</sup>

The women worked for lower wages than the men (even at the same tasks), but nevertheless developed skills in the jobs they were allowed to perform.

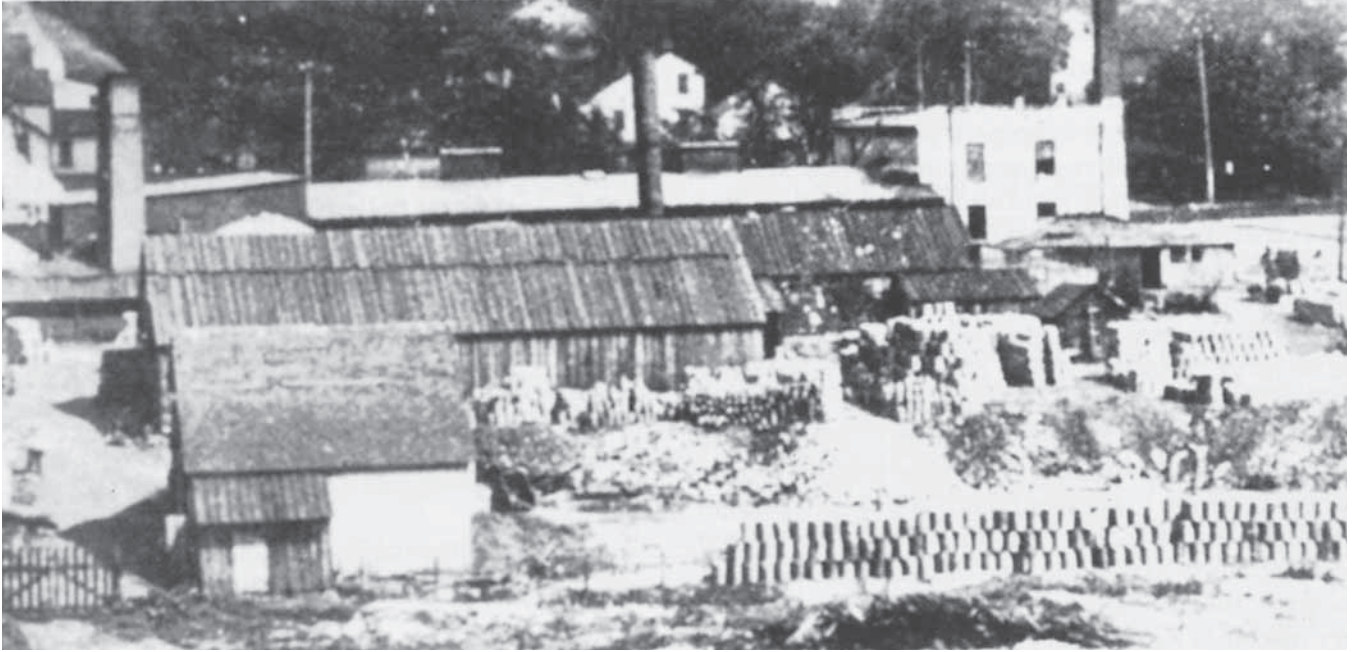
The number of children working in potteries more than doubled in the 1870s. Owners replaced adult workers with children in many semi-skilled and unskilled jobs. Although they were smaller, children often carried an almost unbelievable burden of menial

labor. "In a single workday, youths employed as 'runners' typically covered over fifteen miles while carrying an average of 35,000 pounds of molds and materials between departments."<sup>19</sup>

The increasing numbers of women and children in the pottery factories meant that often whole families worked together, unusual in a time when most factories were becoming more depersonalized. There were chronic health risks, such as "potter's asthma" (from inhaling fine clay dust) and "potter's paralysis" (caused by the lead content in the glazes--pieces were often dipped in the glaze vat by hand). Women and children often worked in the clay preparation and glazing departments, placing them perhaps more at risk for such maladies than the men. The men suffered from their own malaise, alcoholism (women were far less inclined to abuse alcohol, since drinking was more socially unacceptable for them). State inspectors noted that in the potteries there was a high rate of "industrial alcoholism."

In Akron, the disastrous national depression that lasted from 1873 into the latter part of the decade





Companies like Robinson Clay Products survived the fierce competition in the clay products field by diversifying and combining into larger corporations. Many of the smaller firms that manufactured only a few different earthenware products were absorbed into larger entities like the Robinson company. U. of A. Archives

did not particularly affect the pottery trade. By 1881, W.H. Perrin, writing of the "inexhaustible" clay deposits in his History of Summit County, stated that

"There is an almost endless number of potteries in the Township [Springfield] turning out, annually, it is estimated, not far short of one million gallons of manufactured stoneware."<sup>20</sup>

Perrin turned out to be wrong about the "inexhaustible" supply of clay to be mined in the area--clay deposits began to run out as early as the 1880s. In fact, the finer grades of pottery like "Ironstone" could be produced only by importing minerals from other sources to make new mixtures.

The Akron Pottery in downtown Akron took on a new employee in 1880, a young man named

Frederick W. Butler, Sr. The company was incorporated in 1887 as the E.H. Merrill Company, listing among its officers F. W. Butler Sr., and Merrill's son Henry. Frederick Butler and Henry Merrill were keenly aware that new clay products such as marbles, toy dinnerware, sewer pipe, and early electrical porcelain items were beginning to eclipse the traditional utilitarian household ware made since the 1830s. They knew that even as they continued to produce clay pipes, the company needed to diversify to avoid disaster should the pipe business dry up. Their foresight would provide the impetus for a business that would endure for one hundred years.

By the 1890s, the advances in science and technology, transportation, mass production, organizational modes, new sources of power (the steam engine and electricity) had transformed the United

States into a country of urban industrial power. In the pottery industry, precision tooling and die-making, interchangeable parts, and more uniform glazing, shrinking, firing, and standardization of clay mixtures helped the industry to keep pace with the rest of the country.<sup>21</sup> The operative potters initially resisted these changes because they subdivided their duties and chipped away at their status in the workplace. Also, traditionally the operative potters set their own schedules, alternating long periods of sustained, intense work with as many as several days of rest (away from the factory). From the 1870s on, owners repeatedly tried to impose stricter regimentation of the work schedules (to maximize production). At first, the workers simply ignored the new rules, but by 1890 the owners began to make headway. The skilled potters eventually had to increase production enough to keep the company afloat in the face of fierce competition. Ironically, these skilled potters ended up operating the very machines that diminished their handicraft skills.

The traditional pottery trade in Akron rapidly declined because of competition provided by inexpensive mass-produced ware like enameled tin, glass, and finer grades of earthenware. Also, many clay deposits were exhausted and demand for real estate caused owners of failing potteries to sell out. The seven companies making clay pipes in Akron in 1880 had been reduced to only three remaining by 1883--E.H Merrill, Baker & McMillen, and Diamond Match.<sup>22</sup> In 1890, the stage was set for the formation of a new clay pipe company--one that would dominate not only the local market, but by the early twentieth century would be producing 83% of the clay pipes made in the United States--The Akron Smoking Pipe Company.

## Notes for Chapter One

1. "In pre-Civil War America the manufacturing sector was characterized by small family firms, usually employing handicraft technology, which produced primarily for the local market." p.77, Peter George. *The Emergence of Industrial America*, (Albany, New York: State University of New York Press, 1982).
2. "Ohio's pottery industry exemplified the complex and uneven transformations which occurred in nineteenth century workplaces." p.88, Raymond Boryczka and Lorin Lee Cary. *No Strength Without Union: An Illustrated History of Ohio Workers 1803-1980*, (Columbus, Ohio: Ohio Historical Society, 1982)
3. The first names of Fisk and Smith were apparently lost to history--no source gave this information.
4. "Throwing" refers to the art of shaping a piece of pottery on a horizontally spinning wheel called a "kick-wheel," which was powered by the potter's foot. "Firing" refers to the cooking of the pottery in charcoal (later in kilns) heated to high temperatures causing a chemical change of the minerals in the clay producing a remarkably hard final product.
5. Merrill's father and brother Calvin J. Merrill joined him in Springfield later, as related by H. Karl Butler in *A Centennial History of Akron: 1825-1925*. James A. Braden ed. (Akron, Ohio: The Summit County Historical Society, 1925).
6. Braden, p.306.
7. "Immense amounts of the clay are carried to other States, and even to Canada. In fixing a tariff of duties, for Canada, John Bull laid a heavy duty on Stone ware manufactured in the States, but not on clay." p.40,

General Lucius V. Bierce. *Historical Reminiscences of Summit County*, (Akron, Ohio: T. & H.G. Canfield, Publishers, 1854).

8. More than 650,000 lbs. of potter's ware were shipped in 1843-44 according to C. Dean Blair in *The Potters and Potteries of Summit County 1828-1915*, (Akron, Ohio: The Summit County Historical Society, 1965).

9. Braden, p.304. Also, from p.53 of the *Geological Survey of Ohio, Fourth Series, Bulletin 26, Coal Formation Clays of Ohio*, Ohio (Springfield, Ohio: The Kelly-Springfield Company, 1923).

10. The term "pressed" refers to ware formed by pressing or "molding" the clay into a die by means of a manually-powered press.

11. The "Helper System" is explained by Blair in *The Potters and Potteries of Summit County 1828-1915*.

12. Blair, p.90.

13. As related by General Lucius V. Bierce in *Historical Reminiscences of Summit County*. p.140.

14. Boryczka, p.89.

15. Boryczka, p.90.

16. Karl H. Grismer. *Akron and Summit County*, (Akron, Ohio: The Summit County Historical Society, 1952). The Merrills also were partners in Hill, Merrill and Company, probably the first producer of sewer pipe in the United States.

17. Blair, p.6.

18. Boryczka, p.91.

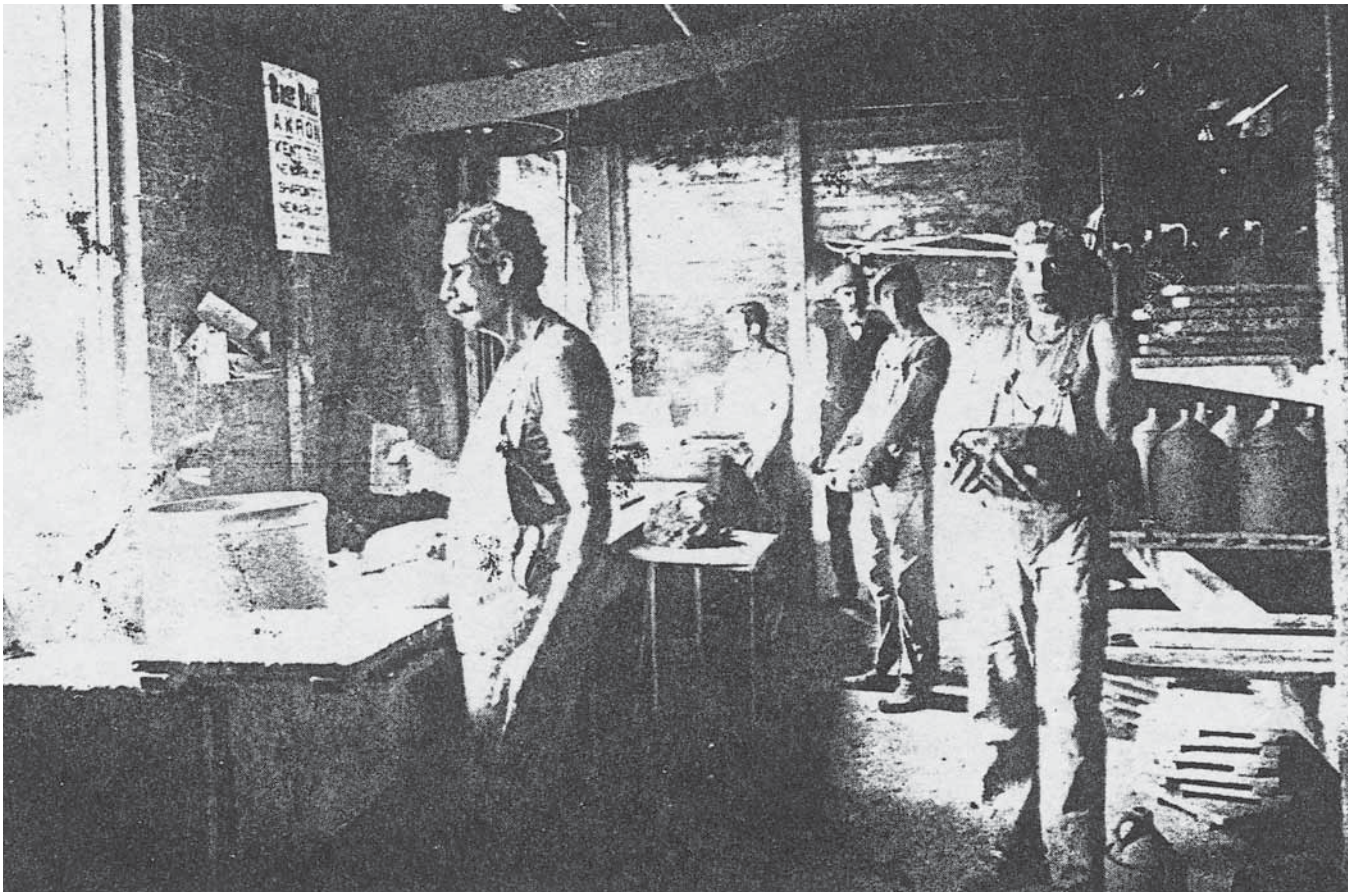
19. Boryczka, p.90.

20. Quoted from W.H. Perrin's *History of Summit County* by Oscar Eugene Olin. *Akron and Environs*, (Chicago: The Lewis Publishing Company, 1917), p.260.

21. David Allen Hounshell talks about the advent of interchangeable parts, precision tooling, precision die-making, and assembly line mass production in his dissertation "From the American System to Mass Production: the Development of Manufacturing Technology in the United States, 1850-1920," (Dissertation, University of Delaware, June 1978).

22. Only these three companies are listed under "Smoking Pipe, Manufacturers" in *The Akron City Directory*, by the Burch Directory Company (Akron, Ohio: The Commercial Printing Company, 1883).





Skilled potters during the nineteenth century constructed most ware by hand, using crude "kick" wheels and molding devices. Helpers brought clay to the potter and carried finished ware to the drying areas and kiln.