

## Matthew Edel Blacksmith Shop History



The Matthew Edel Blacksmith Shop historic site was donated to the State Historical Society of Iowa in 1986, by descendants of Matthew Edel. At the time of Matthew's death in 1940, he and his son, Louis, were operating the Edel blacksmith shop along with the adjoining automobile repair shop. Louis maintained the blacksmith shop much as his father left it. Because of Louis, the shop survived World War II scrap metal drives; because of the watchful people of Haverhill, the shop was never ransacked or vandalized when it sat unattended; and because Matthew's heirs cooperated, they were able to donate the site and collection intact to the State Historical Society. The shop's relatively untouched

condition was one reason for it being listed on the National Register of Historic Places in 1983, and becoming a state-owned historic site in 1986. Unlike most blacksmith shops still surviving in Iowa, the Edel Blacksmith Shop is not a reconstruction.

### The Town of Haverhill

Haverhill was once a thriving market town. In its heyday, the church, school, post office, grain elevator, grocery, lumber company, bank, and blacksmith shop/automobile garage drew people to Haverhill to live, worship, and conduct business.

By the time of the 1990 Census, the population had dwindled to 144. Nevertheless, much remains of the past life of this typical small Iowa town: visitors will see the Immaculate Conception Catholic Church, together with its adjacent cemetery, reminders that at one time nearly all of Haverhill's residents were German Catholics. The Welp Lumber and Coal Company's buildings are intact on the south side of town near the abandoned Milwaukee Railroad right of way.

Today, there are only a few businesses remaining in Haverhill, the grain elevator (now loading trucks, not railroad cars), and a new post office. There are some new houses on the edges of town. Haverhill has become a bedroom community, with working residents finding jobs elsewhere. Students attend Marshalltown schools.

### The Site

The Edel Blacksmith Shop historic site includes the entire half block west of the alley. The site is bounded on the south by First Street, on the west by Third Avenue, on the north by Second Street. The buildings on the site include the Edel blacksmith shop/automobile repair garage, house, summer kitchen, and outhouse. The City of Haverhill and the State Historical Society share use of the shelter house located on the northwest corner.

## **Blacksmith Shop**

In the 1880s Matthew Edel established his business in what is now the eastern half of the building. Modifying an existing building for his purposes, Matthew used the first story as a shop and the second story for storage (originally the building was one and one-half stories with the attic serving as the family's living space until they managed to build a separate house). Today, the blacksmith shop contains most of the tools and equipment left by Matthew at the time of his death in 1940.

## **Automobile Repair Garage**

During World War I, Matthew and his son, Louis, built an addition on the west side of the blacksmith shop. Downstairs they operated the Edel Garage, which provided automotive repairs until 1978. Above, they built an apartment used by the family. Today, the garage addition stands empty. The State Historical Society plans to install exhibits in the repair garage focusing on the transition from a horse powered technology to a motor-driven technology which the Edels exemplify.

## **House**

The Edels built their family home in early 1890s, later adding a kitchen on the north side. The house is typical of late 19th, early 20th-century houses. The house was built using standard balloon framing or platform framing techniques. It is sided with four-inch beveled lap siding. Inside the L-shaped structure there are five rooms on the first floor (parlor, dining room, bedroom, kitchen, and pantry) and four rooms (two used as bedrooms and two for large storage closets) on the second floor. In the basement there are storage shelves and bins for canned goods and garden produce plus a cellar for wine and beer.

Under the parlor is a storm cellar which also served as a gathering place for men folk. The basement can be reached either via an internal or external stair. They heated the house with parlor and cook stoves. They added electricity after 1912, but never had indoor plumbing. In 1987, the State Historical Society took steps to preserve the house by re-roofing it, rebuilding the foundation under the kitchen, and rebuilding the porch. The house is not open to the public at this time.

## **Summer Kitchen**

Between the blacksmith shop and the house stands the summer kitchen which was used for cooking and canning during the hot summer months, keeping the house cooler. The summer kitchen was either on the property when Matthew purchased it in 1882, or was constructed when the house was built in the early 1890s. On the east side of the summer kitchen is a large coal storage bin. In 1987, the State Historical Society took steps to preserve the summer kitchen by installing a new wood foundation and floor as well as reroofing it with cedar shingles.

## **Cisterns**

Rainwater was gathered on the roofs of most of the buildings and then directed from gutters and downspouts into underground cisterns located to the south of the house and west of the shop/garage. In 1987, the State Historical Society filled these cisterns with sand and capped them with wood platforms and the original pumps.

## **Outhouse**

There were never any indoor toilets on the Edel site. The outhouse survives at the end of the walk on the west side of the site. It's a "two-holer."

## **Shelter House**

The Shelter House was built on State Historical Society of Iowa property by the City of Haverhill in 1986. The State Historical Society of Iowa uses the shelter house rest room facilities which are open to all visitors to the site. The shelter house is used for city business and is rented to individuals and groups.

## **Subsistence Garden**

No longer readily apparent on the site, the Edel family was able to grow much of its food. Family members tell of huge gardens to the north of the buildings. The produce from the gardens and grapevines was canned and bottled and stored in the basement cellars.

## **Edel Family: Germany to Iowa**

### **Germany**

Matthew Edel was born in 1856 in or near Stuttgart in the southern part of what is now Germany. Matthew emigrated to the United State with his family in 1869. They settled in Effingham in central Illinois.

The date of emigration makes some difference to our understanding of how Matthew trained to be a blacksmith. Since the family emigrated in the late 1869, Matthew, aged twelve years old, probably wouldn't have completed an apprenticeship in Germany.

In Germany, at that time, blacksmiths were trained under the craft or guild system, normally lasting from three to seven years. The crafts were quite specialized, each craft having its own guild. During an apprenticeship, the apprentice learned from a master while working for room and board. After the apprenticeship, the apprentice was certified as a journeyman and could work for wages under the master. Only with the master's approval he could move on to begin his own business. German-trained blacksmiths were highly skilled specialists, often with artistic skills. Whether Matthew was trained under that system is not known. Once in the United States, whatever training he had come with, Edel would work in a new way. In the United States the blacksmith was less specialized, more practical than artistic, taking on a variety of related tasks – an American blacksmith could be a wagon-maker, wheelwright, and terrier. This produced an innovative mind set, someone disposed to "tinker." Matthew Edel's career clearly exemplified the American way.

## Illinois

The Edel family lived in Effingham in the 1870s and 80s, when wheat was still the staple crop. Because planting and harvesting the crop was very labor intensive, inventors were building new machines to cut labor costs. Fortunes were being made and lost in the rush to mechanize agriculture. One machine needed in grain harvesting was a binder, used to bundle the crop. In 1880, Matthew invented and patented a wire-binder grain harvester. He was financially backed by his fellow citizens in Effingham. The timing for this invention proved to be disastrous, coming at the same time as the Harvester and TwineBinder successfully marketed by the Deering Marsh in 1880. Matthew's wire-binder was never successful, so he gave it up and moved to Iowa City in 1881 or early 1882.

## Iowa: Establishing a Family

In Iowa City Matthew met Mary Hoffman, his future bride. Also in Iowa City, Matthew purchased a half-block of property in Haverhill, platted in 1882, from an agent working for the Milwaukee Railroad.

The lots had been improved with a one and one-half-story building and possibly a summer kitchen. In February of 1883, Matthew moved to Haverhill, setting up shop in the downstairs of the building, using the upstairs as living quarters. After Matthew married Mary Hoffman in April the same year, she also moved to Haverhill, where they lived above the shop for several years until they moved into their new home. Matthew and Mary had eight children: Joseph (1885-1945), Anton (1887-1959), Mary (1889 -1977), John (1891-1961), Martin (1895-1916), Albert (1896-1949), Louis (1899-1978), and Leo (1902-1996).

Matthew and Mary had seven sons. Martin died from a farm accident in 1916; Joseph became a farmer in the Haverhill area; Anton worked in the Edel Garage before becoming a farmer near Zearing; John and Leo worked for the Milwaukee Railroad in Marshalltown; Louis starting working in the Edel Blacksmith Shop/Garage, but later moved to work in Waterloo; and Albert worked as an accountant in Los Angeles.

Louis was the son most involved with the blacksmith shop. Louis's only daughter, Laura, married Jay Murphy and they lived in Morton, Illinois.

Mary, the Edels' only daughter, married in John Ryan, a local merchant, in 1916. They moved into the Edel home because Mary was needed by her father and brothers, John and Leo (after her mother's death in 1915, Mary took on her mother's housekeeping chores). The Ryans left the Edel house in 1923 (their daughter Evelyn was born in 1918). Evelyn married Morris Blum in 1940, they operated the Blum Grocery and Tavern after taking it over from the Ryans in 1960.

## Matthew Edel: Blacksmith, Inventor, Businessman, Artist

When Matthew Edel founded his business in the early 1880s, he was working in a rural economy depending on horsepower. He worked as a farrier, making and fitting horseshoes. The southwest corner of the shop has stalls for holding horses while shoeing. Above, on stiff rods attached to the joists are horseshoes labeled with family names. The northwest corner of the shop was dedicated to woodworking, where Matthew assembled wooden wheels and fit them with iron rims. In the rafters and in the upstairs of the shop are spokes and hubs used to make wheels. A partially assembled wheel is attached to the floor east of the

woodworking bench. Another skill was in repairing and sharpening farm machinery--here Matthew's forge welding skills were important. The tools for all these trades and examples of his work can be seen in all corners of the shop as he left it in 1940. Not readily apparent to the visitor is the fact that the shop was also a small manufacturing business from at least the late 1890s on.

Matthew Edel was an extraordinary small-town blacksmith. He was inventive in the usual sense of creating machines and tools, some of which he patented; he was ingenious in setting up his shop to operate efficiently; he was a businessman who made a living adequate to support his large family, and he was an artist who designed beautiful iron cemetery crosses.

## Inventions

**Wire Grain-Binder:** In 1881, while still in Illinois, Matthew patented a wire grain binder for harvesting grain. His invention, however, was a business failure--a competitive twine grain binder was introduced the same year. This failure ended with Matthew moving to Iowa in 1882. Perhaps this experience made him shy away from inventing, or perhaps he got busy with his new business and family, but it was a long time until he tried again. His later inventions were much less ambitious than the wire grain-binder: they were simpler and cheaper to manufacture in his shop, using scraps from other projects.

**Perfection De-Horning Clipper (1895):** Matthew invented this device to clip off the horns of cattle. The raw material came from scraps left over from wagon wheel rims. The standard rim diameter (36"- 42") required 13 feet of iron which he purchased wholesale in 14 foot lengths, leaving a foot or more scrap. These scraps were fashioned into three sizes of de-horning clippers. Examples of these clippers are located in the central portion of the shop. Matthew created flyers to market the clipper.

**Fence Stretcher (1899):** Matthew invented a fence stretching device used to repair wire farm fences. Examples still exist in the shop, marked "1899" or "PatD 99." The stretcher is three foot wooden handle with an iron claw. Whether Matthew actually filed for a patent is not known.

**Perfection Wedge Cutter (1901):** Sold through the mail for \$3.00, the cutter was for "wagon and carriage makers and repairers." Matthew's illustrated flyer claimed that with no experience a person could make 500 to a 1,000 wedges per hour. For the blades, Matthew used scraps left over from the iron he used for making wagon wheel rims. An example of a wedge cutter and some wedges is located on the workbench in the woodworking section of the shop.

**Nut Pliers (date unknown):** Matthew manufactured these pliers in four sizes. He claimed they would loosen a square shaped nut as well as a wrench: he sold his inventions in Marshalltown out of a workbox fitted with square nuts so customers could test his claim. He also attempted to recruit others to sell the pliers using the workbox he designed. In the forge is a pliers held by a special tong Matthew forged to give shape to the pliers.

**Edel's Garden Weeding and Cultivating Hoe (Pat'd 1924):** Offered mail order for \$1.35 with discounts to volume buyers. Matthew manufactured three sizes of scuffle hoes, using jigs (patterns) around which he bent the hoe blades. On the eastern side of the shop is the table used for assembling the hoes. Also note the special punches for their manufacture.

## **An Innovative Shop**

Like other blacksmiths of his day, Matthew designed and built his own workplace. He also handmade most of his iron working tools.

The shop was powered by a six-horse gasoline engine located in a shed addition on the northeast corner of the shop. The engine turned a line shaft. The engine is a "Sandow Oil Power Lines," manufactured by Sandy McManus, Inc., of Waterloo. Whether this is the original engine installed at the turn of the century is open to conjecture.

The line shaft stretched south along the ceiling from the engine room to the area of the forge. The turning line shaft's power was transferred by pulleys and belts to various tools, including the bellows, drill press, trip hammer, and saws.

The forge is the heart of a blacksmith shop and is located on the east wall beneath a brick chimney. To its right is a tool bench which wraps under the windows. (Compare the 1930 photograph of Matthew standing in front of the forge holding a hammer against the anvil.) The forge is brick, lined with cast iron and clay. To achieve maximum temperatures when burning coal, the forge required bellows to fan the fire. Matthew used a double-action bellows (located above in the rafters) originally powered by foot pumping. Later he used the line shaft to power the bellows, and still later he used an electric squirrel cage fan. The powering of the bellows illustrates the evolution of the shop, showing Matthew's willingness to switch to new technology when it became available.

Aside from specific inventions, Matthew's shop is like a museum of an innovative mind's work. Next to the forge is a trip hammer he fashioned from a railroad car axle. He used wagon wheels to build a band saw. He built a workable but rather dangerous-looking radial arm cutoff saw. Also noteworthy is Matthew's desk with its clever way of opening and keeping track of time spent on jobs.

## **Cemetery Crosses**

Decorative iron crosses commonly grace cemeteries in Germany. Matthew brought that practice with him when emigrating—he could have learned decorative iron working in an apprenticeship in Germany. Except in North Dakota among German-Russians immigrants, the practice is rare in the United States. In the cemetery east of Immaculate Conception Church are several iron markers, including one which Matthew fashioned for himself. In the blacksmith shop, back toward the northwest corner, are some of the iron cemetery crosses made by Matthew. Also, on the workbench, are the same type of crosses made of wood and iron — these lighter, more portable crosses were used on sales calls. Matthew also advertised his crosses, hand-making a series of print blocks for sales brochures.

## **Changing Times: 1915-1978**

Sensing a need to adapt to new times, Matthew constructed an addition to his blacksmith shop in 1915, to expand the business to include automobile repair. The next year Louis attended automobile repair school in Des Moines. From 1915 until Matthew's death in 1940, the business included both the Blacksmithing Shop and Garage. The business even expanded into gasoline and tire sales. Louis continued to operate the business until 1952, when he relocated to work in Waterloo. After Matthew's death Louis

chose to leave the blacksmith shop largely untouched. Although not planned to work out that way, when Louis returned to Haverhill in 1964, and re-opened the auto garage on a part-time basis, he could take local children through the blacksmith shop and give them a tour. In April 1978, Louis auctioned off his automobile repair tools and moved to Arizona where he died a month later.

### **Transition to Historic Site: 1978-1986**

After Louis died, the shop sat undisturbed as the grounds became overgrown. Laura Murphy, Louis Edel's daughter, visited the shop when in town to see her cousin, Evelyn Blum. Laura and her husband Jay took an active role in trying to preserve the blacksmith shop and house. They united the Edel heirs and convinced everyone to give up their shares so that the site could be donated to the State Historical Society of Iowa in 1986.