100

received JAN 2 5 1983

For NPS use only

date entered

United States Department of the Interior National Park Service

National Register of Historic Places Inventory—Nomination Form

See instructions in How to Complete National Register Forms Type all entries—complete applicable sections

1. Name

historic Matt	thew Edel Blacksmith	i Shop and	House		
and/or common					
2. Loca	ation			· · · · · · · · · · · · · · · · · · ·	
street & number	not for publication				
city, town Ha	averhill		vicinity of		
state Iowa	cod	e 19	county	Marshall	code 127
3. Clas	sification				
Category district _X building(s) structure site object	Ownership public _X_ private both Public Acquisition in process _X_ being considered	Status occupied unoccupied work in progress Accessible yes: restricted yes: unrestricted no		Present Use agriculture commercial educational entertainment government industrial military	museum park private residence religious scientific transportation _X_ other: Storage
4. Own	er of Prope	rty			
name Louis street & number	Edel Estate (Jay a 526 North Minnesc		Murphy)		
	rton		vicinity of	state	Illinois 61550
5. Loca	ation of Leg	al Des	scriptio	n	
courthouse, regi	stry of deeds, etc. Mar	shall Cou	nty Recorde	r's Office	
street & number		shall Cou			
city, town	Mar	shalltown		state	Iowa
6. Rep	resentation	in Ex	isting S	Surveys	
title None			has this prop	erty been determined e	ligible?yes _Xno
date №/A				federal sta	te county local
depository for su	urvey records N/A				
city, town N	/A			state	

7. Description

Condition excellent deteriorated good ruins fair unexposed	Check one unaltered X altered	Check one original site moved date
--	-------------------------------------	--

Describe the present and original (if known) physical appearance

The Matthew Edel Blacksmith Shop and Residence, located in the tiny village of Haverhill in southeastern Marshall County, consists of a completely equipped blacksmith shop dating from the early 1880's; a garage addition to it built in 1915; a two-story house constructed in the early 1890's; and a summer kitchen of the same vintage as the house. Viewed collectively with their equipment and furnishings, they offer an authentic slice of Iowa small town life in the 19th and early 20th centuries.

The blacksmith shop and garage, which front an unpaved street at the southern edge of the complex, is an irregularly shaped l_2^1 -story edifice sheathed in brown wood shingles and capped with a combination of gable and flat roofs covered with asbestos shingles. When Matthew Edel purchased the property in the early 1880's there was only a small wood frame house here. He quickly converted it into a blacksmith shop and made a number of additions and alterations to it over the years. The edifice took on its present configuration in 1915 when the west end of the building was added for an automotive garage facility operated by his son Louis. Far more significant than the exterior, however, is the interior and what follows is taken directly from a report written by Jan and Laura Murphy, Charles Hettrick, William Kauffman, and Douglas Franks:

Shop Layout:

Every kind of work was done in this shop. General forging and horseshoeing were performed in the front half on a prepared clay floor while general woodworking and wagon work were performed in the rear half on a wooden floor. Plow grinding was done under the stairway. Manufacturing of garden hoses, de-horners, wedge-makers, etc., seems to have been concentrated in the woodworking area. The attic was used to store wagon parts and inventory of the manufactured products. The floor plan shows the relative positions of the various areas.

Line Shaft:

Although line-shafts were the normal means of powering tools at the turn of the century, the Edel line-shaft and drives have some truly unusual features. To better appreciate these features, we will trace the line-shaft from beginning to end. A 7 horsepower Waterloo single cylinder, watercooled, gasoline engine in a leanto at the rear of the building powers the line-shaft. The large bow saw hanging in the stairwell is all that remains of a reciprocating saw that was located outside the engine room for cutting firewood.

Moving towards the front of the building, we come to the grinding area and fine one of the few manufactured items in the shop -- a "pedestal" grinder. It is the homemade pivot system for engaging and disengaging the drive that is so unusual. When not required, the grinder is held in an up position to keep the belt slack. To engage the drive, the unit is lowered under its own weight and latched securely in one of the several positions available, according to belt stretch. Disc blades and rolling cutters for plows were sharpened in addition to flat work.

United States Department of the Interior National Park Service

National Register of Historic Places Inventory—Nomination Form

Continuation sheet DESCRIPTION

Item number 7

date enforced Page One

For NPS use only

received

The grinding jogs are hanging from the rip saw, but the method of attachment is not apparent. Customer sales charts showing prices and number of items sharpened still hang in the area.

The hand-made circular rip saw has a built-in adjustable rip fence and a sawdust catcher beneath the saw. The circular swing saw was used for cut-off work or repetitive cuts with the aid of a stop.

A home-made drill press, also line-shaft driven, is built into the south wall. The bevel gears used in the drive indicate that this drill press may have been made from a binder or similar farm machine. All drill bits are hand-forged spade type, of unusual design. The sizes are marked on the wooded index shelves where they are stored.

In the center of the shop there is a drill press, also home-made, with petal feed and movable table, apparently used for production work. The fixture for drilling spoke holes in wagon hubs was used with this machine.

The large centifugal blower, a Sturtevant #1, apparently supplanted the foot operated bellows in the ceiling. It is still functional but was itself supplanted by the rheostat controlled electric blower now in use.

Last on the line-shaft is the trip hammer, or more correctly, helve hammer. This most interesting item, all home-made, has the wooden beam (helve) pivoted from a wall post, and the crank mounted on a post in the ceiling and connected to the helve through a semi-elliptic spring similar to that used on Kerrihard power hammers. The anvil is a piece of railroad axle with attached wheel as base, and can be moved in and out to offset the hammer and anvil surfaces. A safety lock located under the foot-operated clutch bail prevents accidental operation by bystanders when the line-shaft is running. This is one of the few safety features to be found in the shop. In those days, before OSHA, a workman was expected to watch his own safety.

The Forge and Related Work Area:

The air distribution systems for the forge illustrate more than anything else, the development of the shop, and the evolution of blacksmithing in the United States, generally. The bellows was the first air supply and was mounted in the ceiling so as to be out of the way, and remote from flying pieces of hot iron which could puncture the leathers. Bellows were traditionally operated by a hand lever or hanging rope, but the Edel bellows was operated by a pedal next to a seat cantilevered from the forge. Thus, the bellows could be foot operated from a sitting or standing position. The charred timbers supported the bellows suggest that the bellows exploded at some time. This can be deduced from the horizontal direction of the charring - a normal building fire would have charred the timbers vertically. Such explosions occurred when bellows inhaled flammable flue gasses and flashed back. The check valve in the bellows nozzle was apparently added to prevent a recurrence.



The shop must have been prospering when the lineshaft-driven centrifugal blower was added because of the cost of the blower, engine, and lineshaft components. The spidershaped friction clutch which operated the blower was actuated by a lever attached to the side of the chimney. The two dampers on the discharge side of the blower are mechanically connected so that one closes as the other opens, thereby maintaining approximately constant demand from the blower. One damper controls air flow to the tuyere, the other controls draft-inducing air to the flue. The present air system is an electric blower, mostly home-made, with chimney-mounted rheostat. This system was probably installed in the 1920's.

The forge itself was completely home-made; even the fire-pot and tuyere. The hearth is made from wood and clay. The fire box is rectangular, approximately 8" x 18", and made of heavy gauge steel. The tuyere consists of two pairs of vertical 1" diameter holes in the bottom of the fire-pot with two slidable horizontal rods housed underneath in such a way as to vary the air opening. There is no clinker breaker.

A set of letter and number stamps is neatly arranged along the front of the forge. The chain links of various sizes hanging from pegs on the chimney were slipped over the handles of tongs to lock them in the clamped position. Two drawers are built into the left end of the forge; one of these stores tobacco and other comforts and was secured with a secret latch. Tongs hang on the sides of the 4' x 3' wooden coal box, to the right of the forge.

A work bench with shelving and drawers continues from the coal box along the south wall. Hammers, wrenches, and every conceivable tool for blacksmithing and horse-shoeing are well kept and neatly arranged, are to be found in this area. The monstrous eight inch post vise must have been a conversation piece even in its time.

Items of interest on the dirt floor include an anvil, large tire shrinker, swage block, and home-made, cut-off shear with a stock of ready-sharpened replaceable blades. A great variety of bolt headers and anvil tools are clustered around the anvil stump, indicating that a lot more was done in the shop than simple repair work.

Wood Shop:

Approximately 20% of the main level is devoted to wagon and general woodworking. Three line-shaft driven wood saws make up the power equipment. A circular rip saw and cut-off saw are combined into an L-shaped bench unit. The cut-off saw is unusual in that it is mounted at the bottom of a swing frame, pivoted from the rafters. When not in use, it is swung up out of the way and latched to the rafters. The band saw, built into the floor and rafters, is cleverly contrived from two custom made wooden wheels, which unlike wagon wheels, have spokes without any offset. This saw is line-shaft driven but it can also be treadled, supposedly so that it can be used for small jobs when the line-shaft is not running. Apparently, there was as much call for woodworking as blacksmithing because the woodshop is replete with every imaginable hand tool - draw-knives for hewing; braces and bits, hand saws, planes, and spoke shaves for general operations; even chisels and gouges for carving. As in the blacksmith shop proper, many of these tools were made on the premises.

United States Department of the Interior National Park Service

National Register of Historic Places Inventory—Nomination Form

Continuation sheet DES

DESCRIPTION

Item number 7

Page THREE

For NPS use only

received

date setered

HOUSE:

The house Matthew Edel erected for his family in the 1890's is located approximately 60 feet north of the shop. This late Victorian edifice is of wood frame construction and is sheathed in white painted wood clapboards. Windows in this two-story building are of the two-over-two wood sash variety and are set in rectangular surrounds. The house is capped with a cross gable roof covered with asbestos shingles and pierced by two interior chimney stacks. Exterior ornamentation is provided by pilastered corner boards, a plain cornice and frieze along the roofline, and the jog-sawed brackets and turned posts of the porch located at the entrance in the southeast ell. The only major alteration tp the house occurred in 1915 when Edel erected a one-story, hip roofed kitchen wing on the north end.

Inside, the house contains nine rooms. On the first floor are a living room, two bedrooms, a pantry, and kitchen while the upper floor contains four bedrooms. The flooring and woodwork appear original, and many of the furnishings here appear to date from Matthew Edel's lifetime. After his death in 1940, family members continued to occupy the house and did so until relatively recently.

SUMMER KITCHEN:

The summer kitchen, sometimes referred to as the wash house, is located approximately 30 feet east of the house. Its vintage is uncertain at this time. It may have been constructed in the 1880's at the same time as the blacksmith shop when it served not only as Edel's place of business but his residence as well. This one-story frame edifice is sheathed in a combination of wood shingles and vertical siding. It is capped with a wood shingle covered gable roof and is pierced by a single interior chimney stack.

Viewed collectively, the buildings that comprise this complex are in fair condition and require increased maintenance in order to prevent serious deterioration. The east wall of the blacksmith shop shows clear signs of deterioration, and other portions of the building have trouble spots. The roof of the summer kitchen is badly deteriorated and must be replaced soon. The most obvious problem of the house is the porch flooring which has practically rotted away, but there are probably other potential problems as well.

8. Significance



Specific dates ca. 1880 - present Builder/Architect Matthew Edel

Statement of Significance (in one paragraph)

The Matthew Edel Blacksmith Shop and Residence is one of only a handful of blacksmithing complexes from the heyday of that trade in the United States that is not either a recreation of a historic shop or the remote corner of a shop that managed to survive the evolution into welding, fabrication, and repair. The shop as it appears today looks virtually the same as it did during the days Matthew Edel plied his craft here. Furthermore, the complex serves as a reminder of that era in Iowa before mechanized farming became widespread and when the local blacksmith, who made horseshoes and shoed the horses and made and repaired farm implements and equipment was a vital link in the state's farm economy. The house and kitchen complete a complex that in their relatively unaltered states convey to a remarkable degree a lice of the lifestyle of a skilled craftsman in the late 19th and early 20th century.

Matthew Edel was born in Stuttgart, Germany on June 17, 1856. Little is known about his early life, but is very likely that he had learned the blacksmith's trade in Germany before he and his family emigrated to the United States in 1873. They settled first in Effingham, Illinois, and it was while living here that Matthew began building the prototype for an improved mechanical reaper. With financial backing from neighbors, he successfully finished his machine, but at almost the same time, the McCormick Works introduced a similar and far superior machine. At this juncture, Edel abandoned his project and repaid his backers as best he could.

In the late 1870's Edel moved to Iowa and settled near Iowa City where he met his wife Maria Hoffman. In the early 1880's, he and his family moved to Haverhill where he had a blacksmith shop on the bottom floor of his house. As his blacksmithing business prospered, he expanded his shop and by the early 1890's, his family had moved into the comfortable house he constructed behind the shop.

Besides performing the usual tasks performed by a blacksmith in what was largely a farming community, Edel was something of a tinkerer and inventor who developed products that he wrote advertising brochures for and sold through the mail. He applied for and received patents on several of his inventions like his "Perfection Wedge Cutter: which was patented in 1901. Edel also made three types of dehorning clippers, a type of nut plier, and metal grave markers which were marketed over a wide area. Testimonials from Edel's brochures indicate that his products were sold in Minnesota, Massachusetts, Missouri, Connecticut, Virginia, Illinois and Pennsylvania, as well as Iowa.

Edel continued to operate his blacksmith shop until the late 1930's when he was well into his 70's. After his death in 1940, his son Louis who operated a garage in an addition to the shop kept it intact. Presently the blacksmith shop belongs to Edel's granddaughter who has offered it to the State Historical Department, an acquisition feasibility study is underway. If the property is not acquired by the state of a local historical society, the family may dismantle the shop and move it to Illinois.

9. Major Bibliographical References

MATTHEW EDEL adverse Murphy, Jay and Laur Edel Blacksmith Shop Preservation files.	ra, Charles Hettric	k, William Ka	uffman, and Dou	ıglas Franks, "Matthew
Iranscript of Adrian 10. Geogra			<u>visit to site Ma</u> Historic Preser	
Acreage of nominated prop Quadrangle name <u>Lau</u> UTM References			Quadra	ngle scale <u>1/24,000</u>
A 115 5 013 21210 Zone Easting C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B Zor D F H	e Easting	Image: Northing Image: Imag
Verbal boundary descript Lots 13, 14, 15, 16	_	Four, Town o	of Haverhill, Ic)wa
List all states and coun	ties for properties ove code	rlapping state o county	r county boundarie	code
state N/A	code	county		code
	epared By			
	Christian, Archite of Historic Preserv		ian date August, 1	982
	2th & Grand Avenue		telephone (515	
city or town Des Moine	25 '			50319
	istoric Pres	ervatio		Certification
The evaluated significance	of this property within the			
As the designated State His 665), I hereby nominate this according to the criteria and State Historic Preservation	property for inclusion in procedures set forth by	the National Regis the National Park	ster and certify that it	has been evaluated
title Director, Iowa	State Historical D	epartment	/ date	August 25, 1982
For NPS use only I hereby certify that the Sundary M Keeper of the National	is property is included in CULLAND Register	the National Regi	ster date	3 /11/83
Attest:			date	
Chief of Registration				