

## **CHAPTER VI**

### **Mills (“Down by the Old Mill Stream”)**

Though nearly every one of us has heard the song, “Down by the Old Mill Stream,” sung by a barbershop quartet, we tend to forget its true significance. The facts are that in our early days every stream worth the name had as its hub of activity the old mills erected along its banks.

When Tell Taylor, of Vanlue, Ohio, wrote the words and music back in the 1930s, he captured in song the essence of an era. His musical treasure continues to be a joy to the present and a monument to the past.

Perhaps the words of the second verse, and the chorus, best sum up the sentiments and nostalgia of his composition:

The old mill wheel is silent and has fallen down,  
The old oak tree has withered and lies there on the ground,  
While you and I are sweethearts, the same as days of yore,  
Although we’ve been together forty years or more.

Down by the old millstream, where I first met you,  
With your eyes of blue, dressed in gingham too.  
It was there I knew that you loved me true;  
You were sixteen, my village queen,  
Down by the old millstream.

This is a story of some of the mills that helped to provide for and build the fabric of the manor of Springettsbury, from its early roots. It is not intended to be all encompassing and describe every mill that had any impact upon the growth of the township. Rather, it is designed to give you a solid cross-section of the local mills, along with the background and flavor of the era in which they flourished.

In his “History of York County,” Gibson notes that the “Indian Title” to Springettsbury Manor came from a compact between William Penn and the five nations; most especially the Conestogas, Shawnees and Ganawese. Four years after William Penn had died in England, his heirs commissioned the survey of the manor, which was named in honor of Springett Penn, favorite grandson of William Penn, and of Penn’s first wife, whose maiden name was Springett.

By 1739, Springettsbury Manor was encompassed by Hellam Township, but by 1822, Spring Garden Township was formed out of Hellam Township, and by April 20, 1891, Springettsbury Township was carved out of Spring Garden Township.

The rapid growth of Springettsbury Manor’s population, and its very productive and fertile land, came in no small measure from the many mills located on creeks within its boundaries and others close nearby. Those mills were employed to saw logs for housing, make woolens for clothing, grind grain for food, make gunpowder, even distill the potent whiskey that the early settlers favored.

Prior to the construction of mills, locals had to grind grain themselves in a “pioneer mill” – the Indian-style hollowed log or stump used as a mortar – or ferry it across the Susquehanna to be ground.

One popular “pioneer mill” was the large mortar ground out of a huge rock, located near Harmony Grove Church, and probably made initially by the Shawnees who had inhabited the area.

“Spangler’s Annual” states that the first white man’s mill in York County was built on Kreutz Creek in 1735. That date proved to be a bit premature, however, since it was not until the following year (1736), while York County was still a part of Lancaster County, that Thomas Penn had deeded Martin Schultz 200 acres in Springettsbury Manor, and that first flour, distillery and grist mill was erected by Schultz, along the local creek bank. Known as Willow Grove Mill, its wood overshot wheel served many owners throughout the years. The overshot wheel introduced waterpower at the top of the wheel and was far more efficient than earlier models (the current, flutter, or undershot models) that introduced water at the bottom.

The names of some interim owners of the Schultz Mill were Weltzhoffer, Hershey, Heistand, Fauth, and Sprenkle, up until 1942, when the mill closed.

It was reopened in 1972 as Mackley’s Mill, a tavern located on Hellam’s Broad Street. Phil Mackley’s remodeled mill attracts many for its fine cuisine, not to mention its unique heritage, and the house has been made into a bed and breakfast.

As Springettsbury Township celebrates its first hundred years, it is hard for us to imagine how things were in those early days. We need to realize that the early settlers were dependent upon themselves for nearly every necessity because of the lack of trails. Every small community needed its own mills for flour, grain, lumber, flax, resin, distillery, tannery and much more. They were usually erected along streams, and the beaten paths to the mills later became roads. Mill settlements often expanded into towns. The miller wore many hats: buyer, seller, price-setter, confidant and banker applied with equal ease to his job description.

If you enjoy the trivia of the game show “Jeopardy,” you should know that the answer is “flour milling.” And the question is: “What kind of private business enterprise has continually operated longest in America?” (Not shipping, mining, printing, farming, transportation or communications, or many other major occupations that readily comes to mind, but “flour milling!”...according to the experts on such matters.

In the history of America’s mills, the one-man gristmill at Linchester, on Maryland’s eastern shore, is the oldest established and longest running business of its kind on record. Built in 1681 on Hunting Creek, from native materials, it was grinding corn before William Penn founded Philadelphia. And to illustrate how independent these millers were, and old “New York Times” story reports that the former owner, who worked there over 65 years of his life, refused to countenance any interference by the government into his business. He repelled an agent of the Office of Price Administration by hurling a scoopful of flour into his face...and was never again bothered for detailed reports of the mill’s production.

Brigadier General James Ewing owned a grist, chop and saw mill, built 1790 along Kreutz Creek. An overshot wooden wheel powered its machinery. The mill serviced the community until its new owner, and then Wrightsville Power and Light Company dismantled it in 1925. Other interim owners were Strickler, Phelps and Dodge.

Ad a Brigadier General of the Pennsylvania Militia, James Ewing was a hero of two wars, and commanded under George Washington at the Battle of Trenton. Vice-President of this Commonwealth in 1782, he served several terms in the State Legislature. His guardian was James Wright of Wright’s Ferry, with whom he resided until he reached his majority and marched away at age 19 with General Braddock’s Army, to launch a distinguished career.

The owner of thousands of acres of land, some in Lebanon County, some on Sugar Creek near the mouth of the Ohio, and that local land on which his mill stood, General Ewing was a wealthy and prominent Springettsbury resident. Benjamin Franklin signed his 1776 commission. A strong, though unsuccessful, advocate of locating this nation's capitol at Wright's Ferry, along the Susquehanna, Ewing's public life and local mill played important roles in the development of this community.

Those of the readers of this centennial publication who have traced their family tree back to its pioneer roots already know this, but for those who haven't, it's interesting to observe that in practically every township family whose heirs lived hereabouts in those early days, you'll find someone who was either a miller or closely involved in the milling trade.

The story goes that when Martin Weigle began construction in 1738 of his mill along the Little Conewago, near the present York-Dover Road, he spied a party of Indians watching him from the bushes. Pulling a regular "Huck Finn" stunt on them, Weigle took a long swig of hard cider from his jug and began to sing and dance as he dug the millrace. Soon the curious Indians wanted to "play" too, so he gave them all a drink, and in that one day the playful Indians dug the entire mill race!

The Locust Grove Mill, built 1740 by Henry Leiphart, was both a gristmill and distillery, and altogether a popular and thriving place. Its vertical, tubular wooden overshot wheel saw many owners; among them were Mate, Stouffer, Liephart Rudy and Hursh. The mill was finally retired when it became the first floor of a private residence along Kreutz Creek.

Gehley's woolen factor mill, built 1780 along the same creek manufactured yarn, blankets and carpets. Constructed by Daniel H. Gehley, it was operated by Dan and then John Gehley. It, too, ended up as a private residence in Windsor Township.

The water wheel, which was the key cog in the operation of water mills, underwent gradual transition and improvement to increase its efficiency in an era becoming more and more dependent upon it for results. The "current" and then the "flutter" wheels were followed by the "undershot." Some of the buckets were shaped like troughs to hold water better and long, rather than the previously popular flat paddles.

"High-breast wheels," where the water was introduced at elevations above the shaft centerline, proved more efficient than the undershot, where water came in at the bottom. But of all the early wheels, the wooden overshot, where water was introduced at the top, proved most effective, being up to 75% efficient. With a diameter slightly less than the height of the fall, this type was used for higher heads of 15 to 20 feet or more. An 18 foot overshot wheel could hold in its 4-foot-wide buckets, on just one side, a ton and a half of water; and when the floodgate was open it could generate a steady 40 horsepower.

Superseded by steel wheels giving up to 90% efficiency with their curved buckets, wooden overshots were gradually replaced once Hanover's "Fitz Water Wheel Co." introduced the steel version after 1840.

Dietz or Bair Mill, built 1750 by Ulrich Strickler, along Kreutz Creek, was for Springettsbury farmers a grist, flour and saw mill. Some of its interim owners were John, Henry, Jacob and William Strickler, and George and Calvin Dietz. Its aged wood overshot wheel and Woodrow W. Bair, its last owner, last ran its two wolf turbines.

Miller's Mill, built 1790 by Henry Tyson, south of East Prospect Road, near Yorkanna, was one of the farthest downstream of the Kreutz Creek Mills. Rebuilt in 1826, it burned down in 1903 and was again rebuilt the following year. According to the record, eels were a problem for both the Smith overshot wheel and the Fitz steel one. This combination

mill sawed lumber, ground flour, and was also a gristmill. Interim owners were C. Stoner, H. Shrantz, M. & A. Miller; with the last owner being Henry A. Miller.

Three turbines powered Sprenkle Lower Mill, built 1800 along Kreutz Creek by Jacob Strickler. A combination flour, cider, and sawmill, it was also owned by, among others: Joe Strickler, Sr., A. & S. Sprenkle, and Elwood Sprenkle, prior to its demolition in 1932.

When the industrial revolution changed manufacturing from hand to machine work, it was powered mostly by water mills. They are as much a part of history as the pony express or the covered wagon. These mills crushed apples; made the country's first iron, ground snuff, rolled hemp, made paper, and a host of other necessities of life.

The milling industry of Springettsbury Manor began in the colonial days, and the story of these old mills is the story of a great industry. In fact, "milling" was the number one enterprise in the entire county. With vast timber reserves and minerals in plentiful supply, the inhabitants needed all the laborsaving machinery they could assemble. Every brook, stream and creek became a source of power to turn grindstones, saw timber and spin wool. The old mills are our link to a past when life was simpler and its pleasures less frenetic. The question is not, "Of what importance are these old mills, when men today blast off in rockets to the moon?" The question is, "How would we ever have survived to enter the twentieth century without the labor saving industry of the mills?"

Despite the adversity of fire, flood and normal breakdowns, our courageous forefathers showed the ingenuity and skill to build here a solid, thriving township, by using their heads instead of their muscles wherever and whenever possible.

Millers of German, English and Scotch-Irish heritage embraced the Judaeo-Christian work ethic and strove to produce superior products in abundance, as they positioned the community to enjoy increased growth and prosperity. Known hereabouts as the "Pennsylvania Dutch," most of the early millers in Springettsbury Manor were German. They developed a colorful dialect, making comments like: "Carry a toot (paper bag)," "Outen (turn out) the light," "Take a snooze (nap)," etc. Many of their quaint idioms pepper the local vernacular to this day.

Nearby "Hellam Furnace & Forge" was originally called Bennett's Furnace. James Smith, signer of the Declaration of Independence and local lawyer, was its owner. It catered to the demand for metal goods, which was quite strong after the war, making possible the export of tools, kitchen kettles, skillets and knives, all of which were sold in great numbers.

Sultzbaugh Tannery, built 1800 by Henry Sultzbaugh, was kept within that family until its ultimate demolition. A tannery and harness mill, it was variously owned by Henry, Fred, John, Milton and Lydia Sultzbaugh, and was located on Canoe Run. Its waterwheel was of the wood overshot type.

John Landis built Jake Mosser's Mill 1810. Interim owners of this grist, corn and meal mill were Peter Latchaw; George and Tom Maish; and J. and G. Mosser; with the last owner, Orville Maish, tearing it down in 1923. Its 113 years of operation of Kreutz Creek finally combined, with the elements, to render it unsafe shortly after our township was three decades old.

Greybill Clover Mill, built 1840 by John Dietz, used a wood overshot wheel and was exclusively a clover mill, on Kreutz Creek, near Hellam. Various owners by John, then Elmer Dietz, and finally David Greybill, it ultimately fell down from disrepair and rot.

William Mundis Mill, built 1855 by Tobias Crumbling, was also owned and run by J. Stoner, George Sprenkle, and finally by David Barley. This wood overshot grist, chop and saw mill was lost in a Kreutz Creek flood and never rebuilt.

By 1840, when waterwheels were in use nationwide to power American industry, Samuel Fitz, of nearby Hanover, began Fitz Water Wheel Company. His son developed the steel water wheel and his grandson was still carrying on the business in 1956, when most water wheel companies were folding, as they bowed to the competition of electrical power.

Many Fitz wheels ended up in use here, equipping new mills, or to replace or refurbish older ones using the non-turbine type wheel. An enjoyable "Saturday Evening Post" article of September, 1955, entitled "There'll Always Be Water Wheels," quoted Fitz as saying: "If you want to see what small batches of raindrops are doing for farmers, with little cost or care, visit the Pennsylvania Germans."

While some people tout the modern stylishness of atomic power, there's a lot to be said for the old, outmoded raindrop, too. Both tiny, the atom and the raindrop nonetheless are forces of nature, and very powerful. But when the raindrop falls, it's easier to understand and cope with than when the atom bursts. (After TMI, folks around here certainly won't waste time arguing that point!) And the water wheel is far easier and cheaper to build than cyclotrons!

Simple, practical and inexpensive to build and operate, many of our early water wheels paid for themselves in their first few years of operation. Quietly and efficiently, these wheels produced horsepower from waterpower and ran mills that spearheaded the economy.

The Powder Mill, built 1870 by T.E. Brainerd Co. along Tyler Run, milled gunpowder. Last owned by Rockdale Powder Company, it was advertised by that corporation (incorporated 1901, with capital of \$175,000), as "the only independent powder and dynamite company in the United States." The mill was ultimately torn down.

When Grant H. Voaden retired as engineer from the former S. Morgan Smith Co., his consuming interest was mills. His neat and voluminous notes and photographs, given to the Historical Society of York County, indicate that some 350 mills once operated along our county waterways.

Voaden's interest was job related, since S. Morgan Smith Co. built many of the turbines used in the later model water wheels. The mills simply followed the westward march of settlers from the banks of the Susquehanna. As previously noted, some of their specialty milling included such things as gunpowder, cider, clover, tools, bark and shingles.

Grant began compiling his data about mills around the time our township was a half-century old, centering his research on the mills situated along Kreutz Creek in eastern York County, and on those along the Codorus, from the Susquehanna River to York.

He talked with millers, checked county deed books; old mill records, family histories, newspapers and magazines, and conducted hundreds of personal interviews in compiling his database. How fortunate for us that, since this area was the first portion of the country settled, Grant concentrated his efforts here. His fascinating memorandums and description combined with other research references by yours truly, provided quite valuable source material for this portion of our centennial publication.

Additionally, the expertise and friendly cooperation of the Ladies of the York County Historical Society, in obtaining the broad spectrum of reference materials from their large files, was invaluable.

When S. Morgan Smith entered the water wheel business in 1877, his first turbine was "the success," then the "improved success" and the "new success" were marketed, until in 1889, when he obtained the rights to manufacture the "McCormick Turbine," with its high speed efficiency of 89 percent. Thus the best steel turbine water wheel of its day was being locally sold as Springettsbury Township was incorporated in 1891.

Naturally, the initial S. Morgan Smith turbine sales were made to mills in York County. Bentzel's Mill is the first recorded client, with two waterwheels for its Little Conewago Creek operation, at the total cost of \$300. And because there existed mills for practically every type of manufacturing, it was a profitable business for Smith to become involved with at multiple levels. Soon his company sold such mill equipment as: gate hoists, gears, rack bars, pulleys, mountings, bearings, roller mills, corn crushers, separators, sifters, dusters, polishers, elevator cups and millstones.

Giant, heavy millstones were cut from the mountains and from shelving rock by the skills of stonecutters. Sandstone containing small pebbles was the preferred kind of stone. Rocks were carefully selected because if they contained large pebbles embedded in them, pebbles that could work loose in the milling process, they had to be rejected.

Measuring up to six and seven feet in diameter, they could weigh many tons apiece. Splitting, rounding and cutting center holes in such stones were hard and exacting labor. The upper stone (the runner) was given a funnel-shaped hole into which the grain was fed; as it worked its way toward the outer edge of the whirling burrstones, it would be ground to flour. The lower stone (bed stone) got a square hole, into which the sham was fitted. Then the stones needed to be grooved, so that the upper stone when grinding against the bedstone, would grind the grain. Small sharp chisels dressed the stone, as one man held the chisel and another struck it with a 10-pound sledgehammer.

Many stones were reinforced with iron bands to ensure them a longer working life, as they were subjected to great pressure and continuous friction over the years. The iron was heated to stretch around the grindstone, and then water was applied to shrink it permanently...like shrinking iron tires onto a wagon wheel.

Wooden rollers moved the huge grindstones to a crane, which then lifted them into wagons drawn by teams of sturdy horses, for transport to the mill sites.

The millstone provides an interesting bridge between the Stone Age and the Atomic Age, as we look more deeply into our roots in Springettsbury.

According to a Gazette and Daily article, published August 12, 1946, Rouse's Woolen Mill, built 1800 by Dr. John Rouse, was still in operation then, and had been operated by descendants of that same family throughout the years. Originally a gristmill, located in Violet Hill along Susquehanna Trail, it was later changed to a carding mill, supplying blankets to General Andrew Jackson in the Cree Indians War, and to the military during the Mexican and Civil Wars. Famed Indian scout Davy Crockett knew its original owner well and stopped here to visit the Rouse Mill, located on property for which their original deed bears the royal seal of England, from the Penns.

Mr. and Mrs. William Rouse, final owners of the mill, devoted their efforts only to custom work and only carded virgin wool, obtained from as far away as California and Canada.

When the Harrisburg-Baltimore expressway right-of-way was being determined, the mill at 1245 South George Street, York, had to make way for progress, and was closed in April of 1957.

A York Dispatch article of October 25, 1948, gives us wonderful insight into Schultz's Mill and Inn at Emigsville, located near the former Five-Mile House along the stagecoach route of that earlier day. Built perhaps as early as 1735, by Jacob Schultz, it boasted a distillery; mill and general store by the time Ludwig Kohr operated it 100 years later.

John Kohr, Ludwig's father, often spoke of his experiences with George Washington at Valley Forge, where he was a soldier-forager, and cooked "snitz und knep" for the troops.

John had volunteered when he was only 13 years old, along with his father, when the call came for troops.

A full meal could be had at the inn for just ten cents! Roast beef or veal was 4 cents, rivel soup was 1 cent, ale 2 cents, and apfel strudel 3 cents. Evening entertainment might include cockfights, wrestling, or an occasional revival meeting.

The trip to the mill was a great adventure for the entire family. Folks congregated at a mill to hear the latest gossip and discuss the weather and politics. While the teenagers took this chance for a little sly flirting, Mom would look over dress materials, sit and knit, and renew old friendships. The little office near the huge weighing scales was usually stocked with candy, tobacco, and other luxuries, and the little kids could generally wheedle a penny from the old man for some treats when he dug down deep to come up with the cash for his own special wants and needs.

But farmers seldom paid cash for the grinding. As they emptied their grain onto the hopper, they expected the miller to catch some for him. So the miller's "toll box" was usually arranged to hold about an eighth of a bushel.

While the women discussed child rearing and favorite recipes, Dad and the older lads would sometimes go fishing, while waiting for the burrstones to grind their corn meal for johnnycakes or Indian puddings and their flour for spatter bread.

If you'd care for the recipe for spatter bread, here it is. First, assemble the following:

- 1-pint corn meal
- 1-pint milk
- 1 pint boiling water
- 1 tablespoon melted butter
- 2 eggs
- 2 teaspoons salt

Next, add salt to corn meal and scald with boiling water. Stir well until smooth. Add milk, melted butter and eggs. Stir well and bake in very hot oven in a greased baking dish for 20 to 25 minutes. Served in baking dish.

Yummy!

Wintertime, of course, saw ice-skating on the millpond and the romances of the young folks, down by the old millstream.

Mills about which the construction dates are uncertain, but which are known to have served this area from the banks of nearby streams, are: Stoner Distillery, on Kreutz Creek. Run by John Stoner, it featured two overshot wooden wheels, two burners, and a small stream turbine. It was a combined gristmill and distillery business.

Farm Machinery Mill, on Spring Creek. Run by Samuel Lieberknecht and his sons, John and Charles, it was a machine shop whose lathe manufactured farm tools with its wood overshot wheel.

Sebastian Stevens' Mill, a grinding grist and feed mill featuring a turbine unit, along Kreutz Creek. Built by Eli Kindig, Stevens ran it for the mill owner form many years. Its final known owner was John Steinfeldt.

Those three area mills operated in the Hellam area. In addition, the Windsor area had on Kreutz Creek two more mills whose construction dates have eluded discovery in the research materials available. These were: Leber's Tannery, built by John Kauffelt, then later owned by Henry, then Nathaniel and then Charles Leber. The mill was operated exclusively as a tannery.

Reider's Grist Mill, built by Samuel Rider and last owned by his spouse. It doubled as a grist and feed mill.

G. Crumbling Grist Mill and Store, built 1890 by John Kauffman. Its interim owners were Ben Crumbling and his family, and finally Melvin Sechrist.

Waser's Mill, at Stoney Brook, along the north side of the Lincoln Highway, at the bridge over the train tracks. This feed, grain and fertilizer mill also handled coal. The owner/operator, Moses Waser, was born in Springettsbury Township in 1865, but the construction date of the mill is not certain. It is, however, known that prior to building his own mill, Moses leased a building on the south side of that same highway in Stony Brook for milling purposes. Further, his grandfather, John Jacob Waser, was the first German immigrant from the Waser family to come to the new world. Mrs. Rose Hulshart, a member of this centennial committee, informs us that Moses Waser was her great-grand uncle.

Christian Hammacher built a gristmill in 1813 in the village of Stony Brook, Spring Garden Township (now Springettsbury Township). By 1827 Abraham Hiestand, proprietor of the nearby Hiestand Tavern, had purchased the mill. Abraham Hiestand was the first of two relatives to own the structure. In the late nineteenth century, the property was granted to William A. Hiestand, who owned it into the twentieth century. The mill has had numerous owners throughout the years, but the family name of Hiestand has been retained as the owners most notably affiliated with the structure.

Three stories in height and powered by water from a stream known as Stony Brook, it contained a wood overshot wheel and a head foot of approximately twenty feet. Although most commonly used as a gristmill, it has also been documented as being used as a fulling and carding mill in the production of cloth and for grinding hemp, used in cloth and cordage.

Surplus flour was hauled in huge Conestoga wagons to Baltimore until 1832, when the Codorus Canal to the Susquehanna River made shipment via canal barge the more reasonable method. Then in 1840, railroad lines to Baltimore and Philadelphia superseded the canal shipments, being faster, cheaper, and occasioning less spoilage. This allowed the Springettsbury Manor area to expand greatly as a milling center.

At York County's Historical Society, post cards from the 1860s, showing Glatz's Ferry at Accomac, are on display. There manned barges regularly poled produce from the mills, along with horse and wagon passengers, across to the red rose side of the river.

On the Codorus, between Pleasureville and Starview, were a feed, grain and flourmill built by Christian Bixler in 1855, with its overshot wooden wheel. Albert Smyser and John Blessing jointly owned it in its early days, and other interim owners were named Brillinger, Rudy and Mundis. On the property was also a distillery and a small saw mill. In 1945, the mill went "all electric."

While owned by Roy Mundis, the old mill was completely gutted and destroyed by fire on October 9, 1953. Flames leaped 100 feet skyward above the property. A two-hour-long battle ensued, fought by the ten fire departments that ultimately answered the general alarm that was sounded.

According to an article by the Sunday News, published the day after the blaze, Mrs. Barney Mundis, wife of a son of the owner, was unable to report the fire to the fire department promptly, because of a "busy party line!" Mrs. Mundis stated that, despite the fact that she had informed the persons on the line that the mill was on fire, she still was not granted use of the phone in time to summon firefighters and prevent total destruction of their property.

Three newly installed turbines (a Smith, a Burnham, and a Leffel) were ruined in the estimated \$3000,000 fire loss.



Col. Philip Albright's mill was built 1791 on the Codorus, near what became the Blaw-Knox Ordnance Plant. The five-story mill built 1863 by Z.K. and Henry Loucks replaced this two-story flourmill. Powered by Smith turbines, its capacity was 250 barrels of flour daily. (A barrel of flour is 196 pounds, so that's 24 ½ tons per day!) Confederate troops once raided all flour from the mill, holding off the millers with bayonets...but at least the mill wasn't put to the torch.

After that incident, until 1889, P.A. & S. Small leased the mill. The Loucks family then took over until 1907. The Loucks' also had a small chop mill on the opposite creek bank, known as Loucks Mill #2, and located on the north side of Route 30 at Loucks Mill exit, looking west toward the sewerage treatment plant. That brick mill, bearing the name "S.W. Hershey, Loucks Mill," was torn down in 1970.

An "Evening Dispatch" newspaper advertisement in York, bearing the date, May 29, 1885, promoted "white loaf, patent process, roller flour" as being the "best flour in the world!"

Small's Spring Garden Mill on Mill Creek, owned by John H. Small, who owned the big farm in Elmwood, was leased to C.B. Landes, and Landes was going into the new roller mill process that he so glowingly described as "far superior to the old stone mill system."

His ad urged readers to "ask the grocer for Elmwood White Loaf Flour," and promised that all orders left with the driver of the mill wagon would be promptly attended to.

But there were big problems afoot, and headed right this way, that by 1920 would almost end flour production in the east, forcing milling installations to either switch to other specialties or to join the pattern of bankruptcies and trustee's sales that saw many mills sold off at successively lower prices at each auction. And it all began with the new roller flour technology that Mr. Landes was using at Small's brand new mill.

The chilled-iron rollers, scored with meshing grooves, that popped open the kernels rather than grinding them to powder, first appeared in the 1870s in the western states. Designed by John Stevens of Wisconsin, in 1872, it rendered the old style installations for grinding wheat obsolete, but it did a lot more than that! It made possible the grinding of previously unmarketable hard, red western spring wheat, which was plentiful and cheap. Now eastern millers, even when using wheat grain grown within sight of their mills, simply could not compete with the advent of whiter looking, low cost western flour that could be packaged and shipped by rail at prices they could not afford to sell at. Their market was flooded and they couldn't even compete in it.

Automobile pioneer, Henry Ford, believed in small creeks for small power, despite the trend moving relentlessly in the direction of having the big power plants supply electricity to replace the horse power of the old mill wheel. As his gift to history, Ford restored and preserved the old Loranger Gristmill at Greenfield Village, in Dearborn, Michigan. He wanted visitors to his "working museum" to see grain ground the old way, and hoped they'd take away some practical ideas from the experience.

At his valve plant in Northville, Michigan, Ford built a mill for stand-by power, which supplied electricity for lights, cleaning and, of course, the phonograph. Henry took a personal enjoyment from the phonograph built by his old friend, Tom Edison, since Ford had been Edison's chief engineer in his early years.

And in this land of the Pennsylvania Dutch, small water wheels, powered by narrow streams and dammed-up ponds, still smoothly and noiselessly crank out the power to provide refrigeration, water livestock and cool milk in the milking shed. At a cost of a drop

or two of oil per month, there's no wonder why the thrifty "plain people" use this practical tool.

To follow the story of milling is to trace its transition from small capacity operations, limited to the amount of waterpower in the stream, to larger enterprises that augmented waterpower with steam. As the steam plants wore out, and electric power became available, a lot of millers began rethinking their priorities.

Hurrying the demise of large-scale water mills in this area, the Daffin Manufacturing Company of Lancaster, PA, began mass production of its "Farm Feedmobile Mills." A Sunday News article, dated May 18, 1958, pointed out that, although these portable feed mills were marketed nationwide, York farms, being plentiful and close-by, were natural and receptive markets for this handy mobile milling machine. And, obviously, having their own little feed mill eliminated the need for farmers to haul out their feed and pay a miller to have it processed.

Factors such as these combined to consign the old millstream and its memories to the realms of "the good old days."