THE FILSON CLUB
HISTORY QUARTERLY

Vol. 9 LOUISVILLE, KENTUCKY, OCTOBER, 1935 No. 4

OLD MILLSTONES OF KENTUCKY

BY WILLIAM S. WEBB

University of Kentucky, Lexington

The same force which drove the early settlers of Kentucky to leave their homes in Virginia and the Carolinas and to venture into a new country—to lay the foundations of our commonwealth amidst the dangers and hardships of frontier life—made them ever ready to meet and to solve the new problems they met in the new country. The conditions of life in the early settlements developed men's initiative, and their ingenuity was often taxed to find ways and means of procuring the necessities of life. In no way was their resourcefulness and inventive genius better illustrated than in the development of mills as aids in producing food, clothing, and other necessary articles.

In the earliest days corn was the chief grain used by the settlers. They parched the grain and ate it without further preparation. Soon, however, a method of making the corn more palatable was devised. The end of a log was set on end and hollowed out and parched corn was placed in the hole and, with the aid of a long wooden pestle, was ground into meal. This meal was used to make bread.

The grinding of corn without first parching it began only when some settlers brought small hand-millstones from Virginia. These stones, which were usually about sixteen inches in diameter and only a few inches thick, were cut from hard limestone. They were so small that some weighed as little as thirty pounds, and could be easily transported on horseback. When set in the end of a vertical log, and turned by hand, they made very good mills for grinding grain. Many such millstones were brought to

Kentucky from the "old settlements" in the colonies, and many others were cut from native stone by the settlers themselves.

These small mills were very useful, but were limited in their output. At best, one hand-mill could serve only one family or a very small community. The meal produced by such a mill was coarse and uneven, but was much appreciated by the people of that day. As the population grew, these small hand-mills became inadequate and were replaced in rapidly growing communities by larger mills—"power mills," as they were called. In the less densely settled parts of Kentucky, however, the hand-mill persisted. Particularly in the mountain section, where communication was difficult and the population scanty, the small hand-mill has remained and can be found in use at present in some of the remote communities. Within the last two years I have seen hand-mills in operation in Wolfe and Powell counties, and I might add that I soon acquired a taste for the flavor of bread made from the coarse meal of these small mills.

With the rapid development of agriculture in the more fertile regions of Kentucky mills for grinding grain by means of horse power, slave labor or water power were developed. Usually such mills were hand-made affairs, the stones being cut from native limestone or native conglomerate and were designed to serve a single farm or a very localized group. Prior to the War Between the States, every large and well-regulated farm was a self-contained community in which the slave labor was divided into groups, each of which performed some function necessary to the life of the whole group. Thus, in large establishments, certain slaves were kept constantly at the mill. These old mills were crude affairs, being made of two flat stones some three feet in diameter. The top stone, which was designed to rotate over the lower, had either four or six oblique holes in its outer edge in which hand spikes could be placed. By walking in a circle and pushing on the inserted spikes, slaves supplied the power to grind the grain.

The early settlers saw in the numerous small rivers and the creeks another means by which to drive the power mills. The creeks, although not large, had a fairly regular flow and, at numerous places, a considerable natural fall. As the population increased, the water-driven power mills became more and more necessary. Their growth followed the growth of the population

of the State until the comparatively recent development of steam and electric power, when they were gradually supplanted by the roller mills.

These water mills, which have now almost entirely disappeared, played a considerable part in the early history of Kentucky. The contribution of the mills to the life of the community consisted not only in the preparation of grain by a more economical and efficient method but also in the exercising of an influence upon community development with which they were associated. Among other things, the mills played a considerable part in the location of the roads. In the early days roads were few and bridges non-existent; creeks and rivers were, in many cases, a considerable barrier to travel; and natural fords were few and often dangerous. The mills were located at a place where a dam could be built. These dams served several purposes: they were so constructed as to raise the level of the stream in order that the necessary "fall" could be obtained; and they also stored water in flood time, thereby guaranteeing the uninterrupted operation of the mill and a more even flow of the stream.

When a dam was constructed, a natural ford was created below the dam; and because of the storage of the water in the millpond the stream rarely rose to a dangerous flood stage in the ford below the dam. For this reason, when the mill was established the entire community literally "beat a path to the mill door" from all directions. Trails through the woods became roads, roads became pikes and pikes finally became highways. A trail first made by persons "going to the mill" came to be used by those who desired to cross the stream at the ford, and soon the old mill was on a thoroughfare which, incidentally, was named for the first mill or the first miller.[1]

Although the mill race, the mill dam and the mill wheel are very interesting, our subject permits a discussion of only the millstones themselves. The study of the various kinds and types of stones, the places from which each came and the various uses to which they were put after they arrived, is indeed fascinating.

In the very early mills, the chief necessity—the millstone—was, in most instances, brought from England. Home manu-

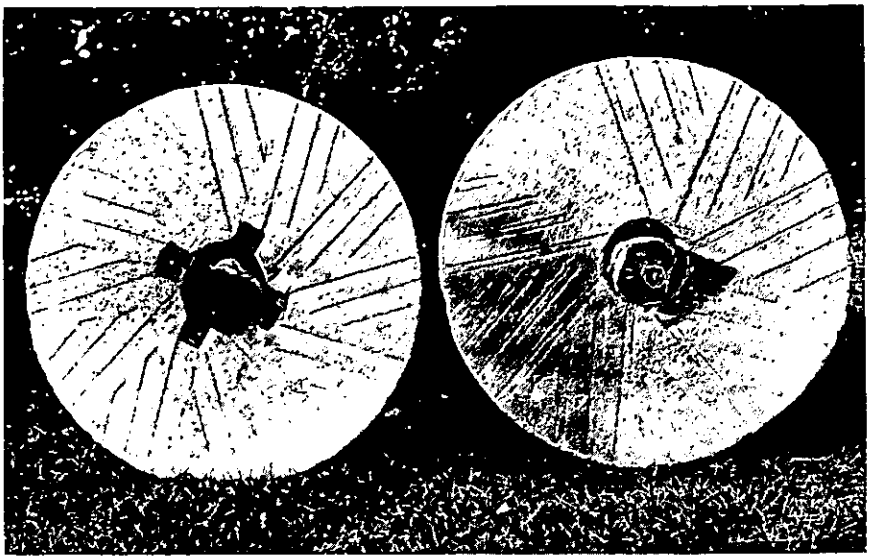
[1]Filson's map of Kentucky, published in 1784, shows the location of seven mills: Grant's, Kirkindol's, McConnel's, Morgan's, Myres', Patterson's, and Wilkinson's mills; it also shows three streams named Mill Creek.

facture of millstones began about the year 1800, but even then the only ones made in this country were the smaller stones and the large but crudely cut buhrs. For fine sets of English buhrs the settlers placed an order with a trading firm in Tidewater, Virginia. These were brought over by British boats as ballast and deposited in the Tidewater port. From there the stones were transported across the mountains to the mills of Kentucky by ox teams.

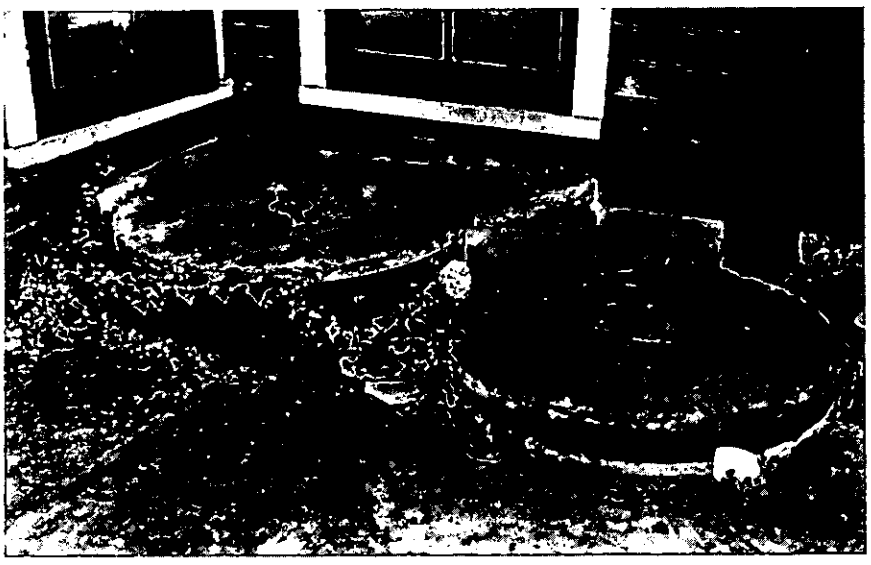
Two English millstones are here shown in illustration 1. They were used, beginning about 1792, for grinding grain on Slate Creek at the Old Bourbon Furnace, some two miles east of Owingsville, in Bath County. These English stones were made from pebble conglomerate, cut to form, and then faced and grooved with mallet and chisel by skilled millwrights. The two stones here shown illustrate the two common forms of groove patterns which were used in stones thirty-six inches in diameter and larger. In one form the circle was divided into twelve sectors of 30°, and each sector was cut with three grooves. In the other form the circle was divided into nine sectors of 40° each, and four grooves were cut on each sector. The top stone of this type of buhr was usually mounted in a horizontal position in a fixed framework of heavy logs. The grain was fed through the central hole to the lower stone, which was mounted by shackles on a vertical shaft and rotated by bevel gears connected to the source of power—the millwheel. The lower stone, when in operation, was raised by the miller until it rubbed against the upper stone and ground the grain.

Until 1810 almost all millstones used in this country were of English manufacture. From 1800 to 1810, however, relations between the United States and Great Britain became increasingly strained and by about 1810 trade between the two countries had practically ceased. This break in the trade relations between the two countries, combined with another factor, changed the type of millstone generally employed by the people of Kentucky. About 1810 corn began to be replaced as a source of bread by small grains—wheat, rye, and barley.

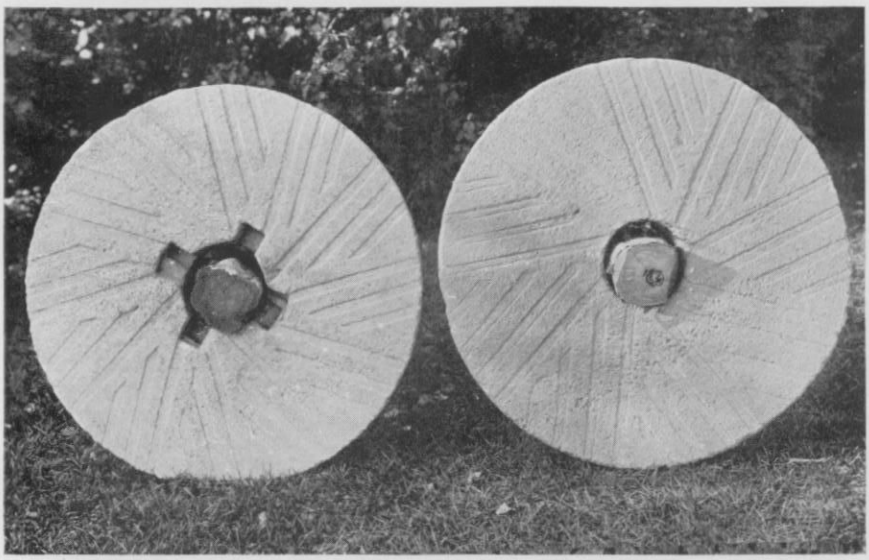
An increasing demand for large amounts of "fine flour" brought about the necessity of finding a source of supply for better millstones. The crudely made stones of home manufacture could not supply the need, but the demand seems to have



1. A pair of English millstones from the Old Bourbon Furnace, on Slate Creek, two miles east of Owingsville, Bath County



2. A pair of French millstones, now used as a door step at the home of Mr. and Mrs. Higgins Lewis, Fayette County



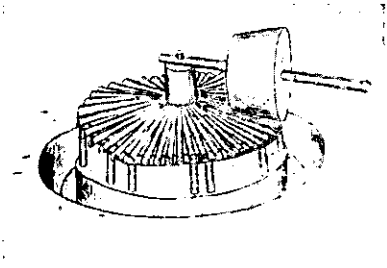
1. A pair of English millstones from the Old Bourbon Furnace, on Slate Creek, two miles east of Owingsville, Bath County

2. A pair of French millstones, now used as a door step at the home of Mr. and Mrs. Higgins Lewis, Fayette County

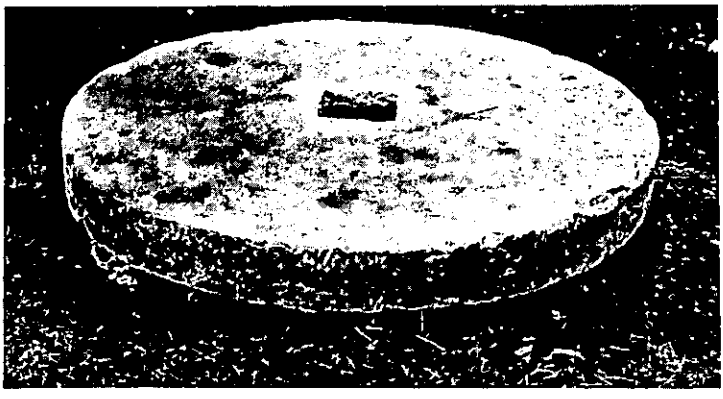
3. Flax millstones from Gilbert Creek, near Lawrenceburg, Anderson County. It produced lint for the New Orleans market about 1800

6. Snuff mill now on the Edward Sims farm, Bourbon County. As here shown, the outer stone rests on top of the inverted inner stone

4. Hemp millstone, from Scott County



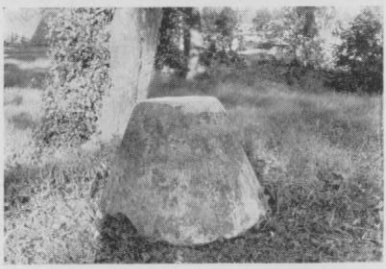
5. Sketch of a horsepower hemp mill



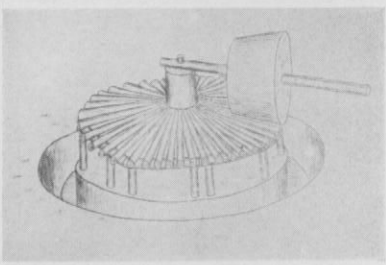
7. Powder millstone recently unearthed on the site of the Old Neil McCoy Powder Mill, Lexington. It ground powder used in the War of 1812

3. Flax millstones from Gilbert Creek, near Lawrenceburg, Anderson County. It produced lint for the New Orleans market about 1800

6. Snuff mill now on the Edward Sims farm, Bourbon County. As here shown, the outer stone rests on top of the inverted inner stone



4. Hemp millstone, from Scott County



5. Sketch of a horsepower hemp mill

7. Powder millstone recently unearthed on the site of the Old Neil McCoy Powder Mill, Lexington. It ground powder used in the War of 1812

8. Old millstones from the Weisenberger Mill, in Scott County near Midway, were used in the construction of this stone fence. It is just across the road from the old mill, at the home of the present miller who is a lineal descendant of the first miller at this site

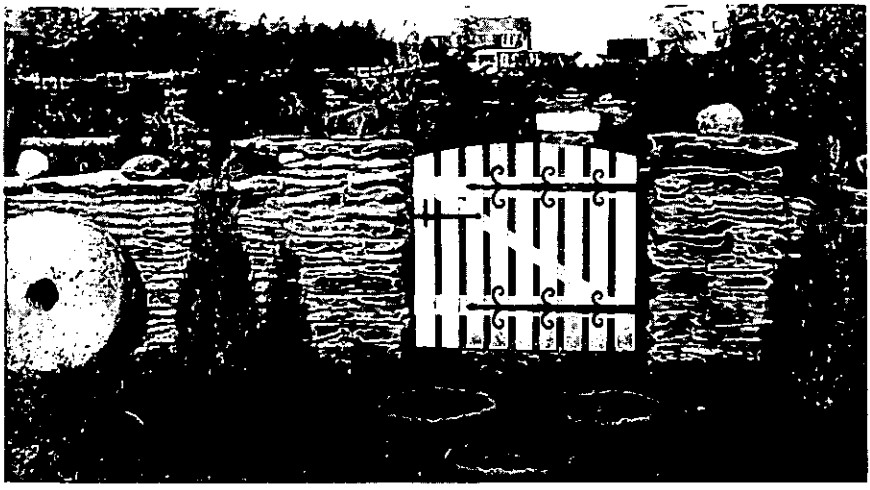
9. Millstone placed on lawn, where it now serves as a rustic seat

10. Millstone, in a garden, suggesting deserved rest after long service

8. Old millstones from the Weisenberger Mill, in Scott County near Midway, were used in the construction of this stone fence. It is just across the road from the old mill, at the home of the present miller who is a lineal descendant of the first miller at this site

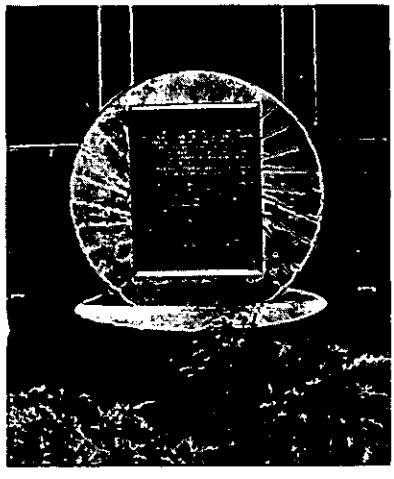
9. Millstone placed on lawn, where it now serves as a rustic seat

10. Millstone, in a garden, suggesting deserved rest after long service

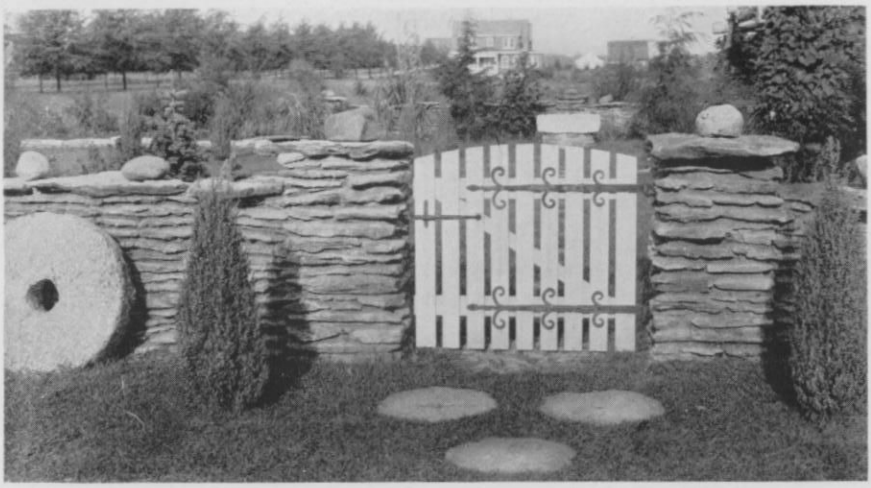


11. Millstones serving as flagstones at the gate of a garden in which a number of other millstones are used for landscape effect

12. Millstone monument in Montgomery County, on the site of Captain Estill's Defeat in 1782, erected in 1934



13. Millstone monument marking the site of old Leestown on Kentucky River, near Frankfort, erected in 1927



11. Millstones serving as flagstones at the gate of a garden in which a number of other millstones are used for landscape effect

12. Millstone monument in Montgomery County, on the site of Captain Estill's Defeat in 1782, erected in 1934

13. Millstone monument marking the site of old Leestown on Kentucky River, near Frankfort, erected in 1927

been met in Kentucky by importing French millstones, shipped via New Orleans by way of the Mississippi and Ohio rivers. These French buhrs were composite stones made of many pieces of flinty lime, accurately cut and bound together by iron bands shrunk on while the iron was hot. In some cases, however, the bands were put on while cold. When this was done the bands were slipped over the stone sectors, which had been properly arranged, and the whole mass was then tightened into a firm structure by means of lead wedges driven around the bands. These French stones made the fine flour and meal used in the days before the invention of the roller mill.

Many English buhrs and American stones were replaced by French stones prior to the War Between the States. Being held together only by the iron band, these stones, as a rule, have not been able to withstand the forces of time so well as the older, solid English stones. In most cases when the French buhrs have fallen into the creek, or have been left on the bank at the old mill sites, the iron bands have rusted out and the stone has separated into its parts. Much of this French flinty limestone also has cleavage planes which cause the stones to disintegrate badly under the action of frost. Very few of the French stones are now to be seen. Illustration 2 shows one set has been preserved and now forms a very attractive door-step.

Besides the mills developed for grinding grain, the ingenuity of the early settlers was demonstrated by the variety of mills they constructed for other purposes. In pioneer days flax was an important item in the manufacture of clothing. In order that it might be used, the lint had to be separated from the stalk. This "breaking" of the flax was accomplished by the use of a large cylindrical stone which sometimes weighed as much as 3,600 pounds. The flax stone was used to roll on edge, in a circle some twenty feet in diameter. A beam, usually about twenty feet in length, was thrust through the central hole. One end of the beam was attached by a swivel to a vertical post set in the earth, and at the other end of the beam a horse was hitched. The horse walked in a circle around the post, and the stone, which was notched or fluted on the edge to give a better effect, rolled over the flax as it lay on the ground and crushed the stalks. The flax stone here shown in illustration 3 produced lint which about the year 1800 was regularly floated by flatboat to New Orleans.

A somewhat similar method was devised for the breaking of hemp. A stone was cut in the form of the frustrum of a circular cone, as shown in illustration 4. This stone was designed to be rolled by horse power over a sloping "corduroy" platform made of small logs and raised some two feet above the earth. See illustration 5. The slope of the platform was adjusted to the slope of the stone. A trench, some three or four feet deep, was dug around the edge of the platform, allowing the men to stand upright as they placed the hemp on the platform. The heavy stone rolling over the hemp crushed the stalks and made it possible for the men to shake out the lint from the hurds.

In Kentucky the production and the manufacture of tobacco have always been important industries. A century ago a much-used manufactured item was snuff, in which tobacco ground or rubbed to a fine powder was used. A snuff mill was made by cutting a conical hole in a large block of pebble conglomerate; a second stone—a smaller stone—was cut into conical form to fit the hole in the first stone. The inside cone was turned by hand spikes set into its top; this was usually by slave labor. Illustration 6 shows an old snuff mill; the outer stone here rests on top of the inverted inner stone to form a flower vase. The snuff mill stands near the "Old Mill" Club House, on Xalapa Farm, the property of Mr. Edward Sims, in Bourbon County.

About the time Kentucky was admitted to statehood, Dr. Samuel Brown of Transylvania University discovered that the soil of many caves contained nitrates. This made possible the production of gunpowder, and the powder industry became quite important in Lexington about 1800. In the manufacture of powder it was necessary to grind and pulverize sulphur, carbon and niter—charcoal and saltpeter. A millstone of this type was recently unearthed on the site of the Old Neil McCoy Powder Mill in Lexington, Kentucky. There are records to show that this mill furnished powder in 1808 and in 1812, and that it, with five other mills in Lexington, was the chief source of supply of powder for the Government in the War of 1812, after the British blockaded the Atlantic ports and allowed no powder to enter the country. This stone, a flat disk of limestone some six feet in diameter, was undoubtedly a part of a powder mill which supplied the powder used by General Andrew Jackson in the battle of New Orleans in January, 1815. See illustration 7.

These and perhaps other forms of mills were constructed by the early settlers and did accomplish their various purposes. Many of the old millstones still lie at the mill sites. Many are now covered with earth and with the debris of fallen walls and may never be recovered. Illustration 8 shows how the old stones were used in a fence at the Weisenberger Mill, in Scott County. Some of the old stones have been rescued from obscurity and destruction and placed on lawns, where they make rustic seats (see illustration 9), or mounted on low pedestals, where they serve as table tops. Some have found their way into flower gardens, where they lend a certain charm to their surroundings, seeming to suggest the propriety of rest after long service well performed. (See illustration 10.) Some of the smaller hand-millstones are today used as flagstones in pavements or doorsteps. Illustration 11 shows how three are used as flagstones at a garden gate.

Another recent and fitting use of old millstones is to erect them as markers on historic sites.

In November, 1934, there was unveiled in Montgomery County, by the Colonel George Nicholas Chapter, Daughters of the American Revolution, a monument to the memory of Captain James Estill and the battle fought, in 1782, near Mt. Sterling. This monument consists of two millstones. One is placed flat on a concrete foundation to form a circular base; the other stone is placed on edge, centrally on this base, and permanently secured in position. This upper stone bears on its face a bronze tablet whereon is engraved the record of the event which is commemorated. See illustration 12.[3]

I have seen three other markers mounted in a similar way. One was erected in July, 1931, by the Susannah Hart Shelby Chapter, Daughters of the American Revolution, on the site of old Leestown, about one mile below Frankfort. The town is

[3]The Estill's Defeat monument inscription:

"In honor of and to the memory of Captain James Estill and his gallant men who three-fourths of a mile north west of this spot on March 22nd, A. D. 1782, fought against the Wyandot Indians the battle known as Estill's Defeat.

"Killed in Battle: Captain James Estill, Adam Caperton, John South, Jonathan McMillan, John Colefoot, — McNeely, — Forbes. Wounded: William Irvine, David Cook, James Berry. Boys: Samuel South, Peter Hacket. Others Engaged: Rev. Joseph Proctor, Reuben Proctor, William Cradlebaugh, David Lynch, Henry Boyer, John Jameson, William Crim, Whitson George, Beal Kelly, James Anderson, — Johnson, Benjamin Dunnaway, Lieu. William Miller, Negro 'Monk'.

"Erected by the Colonel George Nicholas Chapter, N.S.D.A.R."

designated on Filson map in 1784. Although shortlived it was an important meeting place for early Kentucky explorers.[3]

Another is on the Louisville and Lexington Road, east of Shelbyville near Old Cross Keys Inn, erected in the spring of 1927 by the Isaac Shelby Chapter, Daughters of the American Revolution, in honor of Tyler Station, settled in 1781 by Robert Tyler and Bland Ballard.[4]

Another is on the same Louisville and Lexington Road, near the outskirts of Versailles, in Woodford County. It was unveiled June 15, 1927, by the General Marquis Calmes Chapter, Daughters of the American Revolution, in honor of General Marquis Calmes, a Kentucky pioneer and Revolutionary soldier who gave Versailles its name.[5]

Mrs. Robert E. Johnston—Juliet Alves Johnston—of Henderson, reports that in 1932 a bronze tablet was placed on the site of the John James Audubon mill, now a small city park on the Ohio River in the town of Henderson. This small park is not to be confused with the large Audubon Memorial State Park that the State is now building near Henderson. The wooden wheels used in the Audubon mill are being preserved by Mr. David Clark, and, in all probability, will eventually find a permanent place when a museum is built in Audubon Park.[6]

[3]The Leestown monument inscription:
"On July 16, 1773, James McAfee, George McAfee, Robert McAfee, James McCoun, Jr., Samuel Adams and Hancock Taylor, following the Buffalo Trace from Big Bone Lick, crossed the Kentucky River at this point, and made the first survey of it. Here, in the summer of 1775, Hancock Lee, Willis Lee, Cyrus McCracken and a few comrades established Leestown, at which place George Rogers Clark lived for a time and expected to make his home. Here Willis Lee was killed by Indians in 1776 and the settlement temporarily scattered, but in 1780 it was flourishing and an important stopping place, both for travelers on the River and for those who followed the Buffalo Trace.
"Erected by Susannah Hart Shelby Chapter, N.S.D.A.R., Frankfort, Kentucky, July 16, 1931."

[4]The Tyler Station monument inscription:
"Tyler Station, one half mile N. E. of Tick Creek, settled in 1781 by Robert Tyler and Bland Ballard. Erected by Isaac Shelby Chapter, Daughters of the American Revolution. 1781. 1927."

[5]The General Marquis Calmes monument inscription:
"Near this spot lived and died General Marquis de la Calmes, a gallant Revolutionary soldier who named this city Versailles. Erected by General Marquis Calmes Chapter Daughters of the American Revolution."

[6]The Audubon Mill marker inscription:
"Saw and Grist Mill erected here by John James Audubon in 1816. Henderson, Kentucky.
"The original stones from the base of Audubon's Mill have been preserved and in 1932 built into this gateway by William T. Barrett, Mayor of Henderson, Kentucky."

Judge Samuel J. Boldrick, of Louisville, informs me that at Loretto Academy, in Marion County, are two millstones, both standing perpendicular on stone foundations and about eight feet apart. They were placed there in April, 1912, Loretto's Centennial. Both were taken from the old mill that was built near Loretto in 1812 and operated until 1853. They serve as a monument to the old Loretto mill and to all other old-time mills.[1]

Probably a number of other millstones have been erected in Kentucky to mark historic spots. I shall be glad to have my attention called to any of them, also to any others that may be of general interest.

The days of the old mills are gone forever. In the complex civilization of our time, great machines of steel grind our grain and accomplish the manifold tasks necessary to supply human needs. These old-time mills long ago fell into disuse. Many of the buildings are in ruins; most of them have disappeared entirely. The old millstones are the only things remaining to remind us of the days when almost every man ate bread made from the same corn or wheat he had raised with his own hand. These old stones speak to us of the days when men and women were driven to devise new means of accomplishing their tasks. They tell of hard labor expended, tasks accomplished and success attained. We do well to preserve them as best we can from loss and destruction. They are a real addition to any lawn or garden; they are appropriate as markers of old historic sites. Let them by their presence teach all of us, who have the eyes to see, that "labor is honorable" and that to be "ground down and worn out" in the service of humanity is true success.

[1]The inscription painted on the two stones at Loretto consist of two couplets. The first was written by Father Edwin Drury and the second by one of the Sisters of Loretto:

"These are the stones that crushed the corn and wheat
To make the bread the Sisters used to eat."

"O silent stones! Did your lips unseal,
What tales of long ago they might reveal."