

THE HERITAGE NEWS

Jefferson County Historical Society, Jefferson County, Missouri
 Rebecca Gagnon, President
 Dave Hallemann, Betty Olson, contributing editors

J.C.H.S. REPORT

Issue 29 December 2002

Books available from
 the Society.

Jefferson County Post Offices	\$7
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Index to the 1876 Atlas	\$15
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Reprint of the 1876 Atlas	\$15
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Jefferson County's Country Schools	\$29.95 \$29.95 \$29.95
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1907 Jefferson County Directory Directory	\$10
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Index to the 1898 Atlas	\$15
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Shipping & Handling- each additional book	\$3 \$1
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- SEND YOUR
- ORDERS TO:
- Jefferson County
- Historical Society
- % Betty Olson
- 712 South Main Street
- De Soto, MO 63020
- Membership in the Society is \$10.00 per year- includes 4 issues of the newsletter.
- Items of county history welcomed.

Currently the Society has several projects underway:

Reprinting of the "Glass Rays" the newspaper of the Pittsburgh Glass Company in Crystal City.

Jerry McKee and Sharon Uding are working on this project and have located a complete set of these papers which included articles about the county's history, stories about people who worked at the glass plant and numerous other items. There are also a number of pictures in these papers which will be of interest to those doing family histories.

Becky Gagnon is working on getting the 1898 Jefferson County Atlas into a format that we can reprint.

David Hallemann continues to work on locating and indexing old cemeteries. His latest information is about St. John Chrysostom Parish Church Cemetery (Russian Orthodox).

"This new cemetery surveyed in 2002, is behind the onion top church 1/2 mile south of new 30 on Old Gravois Road. There are six graves as follows:

Eva Xenakes December 1894-June 1994.

Nistor Balta 1903-1993

Markn Markovich Dec. 7, 1953-Nov. 26, 1998

Sergey M. Ivanyan, Feb. 23, 1930-Mar. 25, 2000

1 unnamed new grave and 1 unnamed older grave.

Francois Valle and His World, Upper Louisiana Before Louis and Clark by Carl J. Eckberg

This recent publication by the University of Missouri Press is a biography of Francois Valle (1716-1783). The book focuses on Upper Louisiana long before Lewis and Clark arrived to begin their exploration

of the upper Missouri River. I found it very interesting in its description of family life, cultural and economic conditions and the settlement of the west bank of the Mississippi River.

While it deals basically with Ste. Genevieve there are still many family names mentioned in this book that are very familiar to Jefferson

County residents. Genealogists take note! It also has a section on Missouri's original Black families with family history and family lines.

Eckberg uses primary sources for his material and there are numerous footnotes to lead you to other resources if you so desire. Betty Olson

LEAD MINING IN JEFFERSON COUNTY

By Henry C. Thompson, The St. Francois County Historian
(Articles are from 1970 issues of *The Jefferson Republic Newspaper*, De Soto, MO, Lewis Roop Publisher)

It is usual to start the history of lead mining with the stories about Renault and Cadillac, but this is an outline of mining in Jefferson County. It is more likely that Cadillac traversed the ground that is now within the boundaries of this county but his expedition was only exploratory. Renault is certain to have been on Jefferson county soil many times but he left no import on our history.

It was on that bright day in 1798 when the local citizens of St. Louis were startled by seeing a valiant band of Americans riding into town, headed by a man on horseback wearing a brilliant red cap, that the mining history of this county was born. It was thus that Moses Austin made his appearance west of the Mississippi River. The natives thought surely that this must be a great man who could support such a retinue.

Austin was to play a great part in the development of this county, and the entire district surrounding it. In that cavalcade were relatives and skilled miners that he brought with him from Virginia, Moses Bates, Martin Ruggles and James Bryan were in the party as well as others who helped develop mining in Jefferson County. We will let Austin go on to Potosi just now and return to him later.

Perhaps there was some scattering gathering of surface ore in this county but there is no record of any

mining before 1800. About 1800, Gray's mine, which was about one-and-a-half miles south of Frument and McKane's Diggings on Dry Creek were opened and mined some lead ore, although Austin's extensive report to the government, written in 1804, does not mention these diggings. They were not working in 1819, but were reopened in 1820 and operated as late as 1856.

During 1824 and 25 several important discoveries were made in Jefferson County. There is probably a definite reason why this happened. After the War of 1812, thousands of settlers poured into these counties of eastern Missouri. Land values rose and the land was developed readily into a prosperous territory. Finally, in 1819 the bubble burst, and many men who had invested their fortunes in land, found themselves with plenty of ground but no funds to live on.

It was during this panic of 1819 that Moses Austin lost his fortune and he and his son Stephen went to Texas. Men who had bought land in Jefferson County were forced to turn to grubbing a living out of their land. Moses Austin's collapse at Potosi had thrown many of these men out of work that they were best fitted for. Mining was what they knew most about and farming next.

While plowing this land, some of them found pieces of galena scattered in the soil and digging a short ways down they discovered fairly good lead. Along with their farming they found that they could augment their income by gathering this galena. This was true over most of Jefferson County south of the Meramec River. There were several distinct areas that proved richer in mineral than the

rest. The three areas that developed during the period of 1824-1828 were the Sandy mines group, the Plattin Creek group and the Valle Mines group, which we will continue to outline in the next article.

PRIMITIVE METHODS OF EARLY MINING

Before we get into this mining business too deeply, let's take a look at the primitive methods used in those early days of Jefferson County's existence. The then known deposits of lead lay entirely in the heavy red clay that was deposited on the limestone.

A pick and shovel were the only tools used for removing the earth. Our miners, having determined the spot where they thought they might make a "strike," laid out a square of about eight feet and commenced digging. An expert hand could pitch his earth from a depth of ten, twelve, or even fifteen feet. Beyond this depth a common windlass and bucket were placed over the center of the pit and the digging continued by drawing up the earth and ores, if any were found, much in the manner used in sinking a well.

Usually, if ore was to be found, the miner was notified of his approach to it by small, detached lumps imbedded in the soil he was digging. Sometimes lumps of ore on the surface determined for him where to dig. There were many ways in which an experienced miner thought he could anticipate the existence of ore. The peculiar appearances in the texture of the spar, or sometimes the changes in the color of the earth and gravel would encourage him to dig in a certain locality. If these signs failed him

he usually abandoned his pit and started another in a more favorable appearing location. In general, a miner could depend upon luck just as well as he could on "signs" to find the ore he wanted.

If our miner was prospecting on "public lands" and made a good discovery of ore, he was entitled by custom to stake out his claim for twenty-five feet in all directions and no other miner could sink his shaft closer than this. Of course, if he were mining on his own land as most of the mining in this county was done, no one had the right to mine there excepting the owner.

THE SANDY MINES

The Sandy Mines group was west of Crystal City and five miles northeast of Hillsboro and in Township 41 North, Range 5 East. The area was first discovered in 1824 and in 1826 produced 450 tons of ore. Barite as well as galena mixed with some zinc ore was found in most of the mines that we will describe in Jefferson County.

The Sandy area consisted of the Sandy, Gopher and Herculeum diggings. Gopher and Herculeum mines didn't produce much ore, but in 1856 we find a report that together they produced sixty tons of ore.

The Sandy mine itself was a good ore body and produced well. From 1830 to 1849 this diggings averaged 167 tons of ore per year. In 1856 it was sold and a company was formed to prepare it for larger operations. The Sandy mine boasted a shaft 115 feet deep.

THE PLATTIN CREEK MINES

Too few personalities can be described by us regarding these early lead miners; so we must take time here and now to describe one of the most colorful characters of those early days. This was Peter McCormick, who opened a farm on the Platin in 1802. In 1818 he was an active Methodist and took a great interest in education. He was looked to for guidance by many of the settlers.

He was a true backwoodsman, with little book learning, but made up for it in common sense. John Mason Peck reports that once McCormick enlisted some of his friends in Herculaneum to "send me a *rare* teacher, none of those whiskey-drinking Irishmen, such as ye got into our settlement last year, or sure as I'm a Methodist we'll lynch him."

This canny Irish Methodist in 1824 or 1825 discovered ore on his land, which was a little way south of the present town of Platin in the Northwest Corner of Section 7, Township 39, Range 6 East. Mining was carried out at intervals up to 1875. During the 1890's work was resumed for a short period, but Platin was never a large producer.

The **Yankee Diggings** were in Section 6 and about a mile above the McCormick mines. A shaft was dug about 70 feet from which a moderate amount of ore was obtained.

Howe's Diggings in Section 3 and 4 near the north line, five miles southeast of Rush Tower and about three miles northeast of the Yankee diggings was started later in 1840, but only produced 100 tons of ore from that time until 1856, all from shallow pits.

THE VALLE MINES GROUP

One Joseph Schutz, presumably a Dutchman, is given credit for first discovering ore in this large area about 1824. Valles Mines is by far the greatest known mineralized area in Jefferson County, although part of it lies south of the border in St. Francois County. The shafts and pits that make up this large group of mines lie in the Northeast Sections of Township 38 North, Range 4 East and extend into the Northeast Sections of Township 28 North, Range 5 East.

In this group and area we find not only the Valle mines proper, but the old Perry, Bisch, Tarpley, Garatee, Corn Stalk and many other smaller working.

Large quantities of lead and zinc were shipped from the Valle mines from the start. When we say "large quantities" we only speak comparatively; 100 tons per year was supposed to be large in those days, and was, if we consider the mining methods when everything was done by manpower.

The **Rozier** interests that owned Valle Mines shipped about 200 tons of lead a year from 1862 to 1891 and this was stepped up to 550 tons in 1892. About 2000 tons of zinc ore was shipped, on the average from 1870 to 1892. The large deposit of zinc ore in these mines was quite remarkable, for not a very high percentage of zinc is found in the ores in St. Francois County.

The **Perry Mine** was discovered in 1834. By 1859 eight shafts had been sunk, with the deepest being 165 feet. 479 tons of ore were produced from

1855 to 1859. This mine was located in the east half of the Northeast Quarter of Section 18.

The **Garatee** mines were about one-and-a-half miles northwest of the railway tunnel and were near the Southeast Corner of Section 1, Township 38 North, Range 4 East. Several shafts were sunk, one being 135 feet deep. Fair ore was mined here.

The **Bisch** mine was discovered in 1825 and was located in the west half of the Northeast Quarter of Section 18. Ten shafts were sunk, one of them to 105 feet.

The **Corn Stalk** diggings were "mostly shallow pits," about half-a-mile northwest of Valle Mines Post office in the Northwest Quarter of Section 5, Township 38, Range 4 East. About 14 pits had been sunk in an area of less than 15 acres, one of which was as deep as 30 feet. This area was soon mined out.

The **Tarpley Mines** were discovered in 1834 and were in the Northwest Quarter of Section 11, Township 38 North, Range 4 East. The deepest shaft here was 180 feet. From 1881 to 1856 the Tarpley mines produced 450 tons of ore.

The **Valle Mines** group have been in nearly continuous operation since that early day in 1824 when our Dutch friend, Schutz, put his shovel to work in the good dirt of Jefferson County and washed out the lead he found. The Jefferson Republic recounted recently how Valle Mines has taken on new life and is again operating. Perhaps there is a very definite future ahead of these

mines, possibly as great or greater than its past.

The **Posten & Tyler** mines were about a mile south of the Tarpley and the Bogy mine about half a mile east of that. There is no record of the ore they produced. They were small diggings.

THE MAMMOTH-FRUMET GROUP

Before we bore you to extinction, let us describe the other large group of mines, which lay along Big River below the Missouri Pacific Railway crossing. They were on the north side of the river and extended about ten miles from the railway.

Lee's Diggings, discovered in 1836 in the Northwest Quarter of Section 12, Township 39, Range 3 East, were worked at different times for a great many years. Much of the ore was dug from shallow pits and one shaft was sunk to 80 feet. This mine was producing ore as late as 1893.

The **Mammoth Mine** was opened in 1843 a mile north of Lee's Diggings in the Northwest Corner of the Northwest Quarter of Section 12, about six miles southwest of De Soto. In 1850 several shafts were sunk to about 80 feet, but little or no mining has been done here since the early 1870's.

The **Frumet Mine** was a very large operation. A great deal of money was wasted here by poor mining methods and premature building. The ambitious undertaking extended over large parts of Sections 28, 33 and 34, Township 40 North, Range 3 East, including about one thousand acres. At

the zinc mine the ore was taken out of an open cut. It consisted mostly of galena, but some zinc blend was found. The Sopia cut was about a mile north of the zinc mine, with the excavation in the side of a hill. A few hundred feet northeast of this cut the Frumet shaft was sunk to 140 feet. While a small amount of galena was found, there was no extensive ore body as had been expected.

The **Cazin Cut** and tunnel was a very large excavation on the top of a hill overlooking Big River. No persistent vein or ore body was found here either, and the open cut was abandoned and small tunnels were run from the face of the cut. Five shafts were sunk about thirty feet deep at the Edging lead, about six miles north of the Mammoth Mine and a vein of lead was taken out which was from one to four inches thick.

About 1874 the **Frumet Mines** were producing four tons of lead ore per day and a large volume of zinc ore. They had one Flintshire and one cupola furnace in operation that year.

There were several other mines in this county which we will record here by name. Each produced around fifty tones of ore during its life. The **Nashville Mine** was discovered in 1827, and up to it's closing in 1856 produced fifty tons of ore. The **Frizzel Mine**, discovered in 1842, produced fifty tons. The **Daly Mine**, the **Robinson Mine** and many more small diggings are on record, but are small.

I wish I could give the data on the **Hazel Run** group, owned and operated by a Jefferson County man, but these mines lie entirely in St. Francois County.

It was at one of these properties that Moses Austin died and lay buried for ten years before his body was removed to Potosi.

LEAD SMELTING IN JEFFERSON COUNTY

Lead was the earliest metal smelted in Missouri, probably on account of its ease of reduction to the metallic form. The log furnace was the earliest method used to reduce lead ore but was an extremely wasteful process. Schoolcraft gives a detailed and valuable description of the kind of log furnace in use as early as 1720, but after Moses Austin introduced the ask furnace, the use of the log furnace declined.

The log furnace was in use for many years, due to its simplicity of operation and construction. In this log furnace, the ore was piled on a stack of logs and as it melted the lead ran down into a small hole at the side of the furnace, from where it was scooped up and placed in moulds.

We will not attempt to describe the technicalities of the various types of furnaces in use of the hundred and fifty years of lead production in this area. The use of the term "reverbratory furnace," referred to in early times as having been brought to Missouri by Austin, is not correct. Austin's method was the ash furnace, which was used for some time, but was gradually succeeded by more efficient equipment.

The "Scotch Hearth" furnace was introduced into this area by 1836, but had been in use somewhat earlier. It gradually was replaced by the "Air" or "Drummond" furnace. This type came

into use about 1860 and by 1875 there were several in use.

The Flintshire furnace was in use later and in 1870 one was built at the Frumet mine. It was considered quite successful and was operated for several years.

The "Cupelo" or stack furnace came into use during the years prior to 1890 and, with various modifications and improvements is the type used today.

Typical of the development of lead smelting is the record at Valle Mines. The log and ash furnace were used until about 1850 when the Scotch Hearth began operation. The slag from this furnace contained forty-five to fifty percent of the lead and this slag was shipped to the St. Joseph Lead Company smelter in Herculaneum.

This later company had erected a modern and efficient smelter at Herculaneum, where most of the metal was extracted from the ores. Gradually all mines abandoned their individual smelting plants and all of the ore was shipped to Herculaneum or St. Louis, after having been concentrated locally. (Editor's note: the St. Joseph Lead Company recently announced plans for expansion of the smelter at Herculaneum.)

THE SHOT TOWERS AT HERCULANEUM

Lead had not come into such universal use in the early days as it has attained today and a large part of it was used as shot. We earlier told you that Moses Austin and Colonel Hammond

laid out the town of Herculaneum in 1808.

In 1809 John N. Macklot erected a shot tower on the bluffs at Rocky Place below the town, and this is conceded to be the "first in the west." In 1810, Austin erected the second shot tower, and in 1814 Christian Wilt and John Honey had a shot tower near the place known as Illinois Station. Most all of the bullets fired in this area during the War of 1812 were produced from the first two shot towers mentioned above.

CONCLUSION

A great many men took part in mining the ore that we have described, but unfortunately very little is known about who they were. Moses Austin, Moses Bates, Col. Hammond and James Bryan figured prominently in those early days. No large corporations were in existence to have outstanding figures at their head, so we will have to conclude that outside of those mentions, and including Peter McCormick the miners were landowners, paid laborers and slaves.

Perhaps some of those who read this will have memories of men who worked the pits and shafts. The editor of this paper and the author of this article would be glad to have records or data about these persons. Send them in and give us the essential facts. We will use the material, if possible, in later articles.

(No further articles were found in later issues of this newspaper.)

INTERNET INFORMATION:

Jefferson County, Missouri <http://www.jeffcomo.org/> Provides you with information about the County, officials, etc. Check out JOIN-in also. (Jefferson County On-line Network)

Jefferson County Genealogy

Rootsweb: <http://www.rootsweb.com/~mojeffer>

Letters from America: A series of letters from an English immigrant to this area. He is writing to his family back in England about his experiences here. He refers to Hale, Blackwell, De Soto, Herculaneum, Vineland, etc.

<http://www.wokingham.ndo.co.uk/usletters/>

Letter 15 refers to a Christmas spent at Blackwell. The letters from the Vineland area refer to the Blackwells of Blackwell, MO. Letter 13 mentions the name of a Lanham family from De Soto.

Jefferson County Library: <http://jefcolib.mo.us>

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