A GUIDE TO THE OLD STONE BLAST FURNACES
IN WESTERN PENNSYLVANIA

Myron B. Sharp and William H. Thomas

PART II

BUTLER COUNTY

Bruin Furnace (Dudley Furnace)
The site was located, or at least the general area in which this furnace was located. A large field, almost completely covered with slag to a depth of several feet, shows that a furnace did operate at this place over a long period of time. If the early practice of disposing of slag downstream from the stack was followed, it would place the furnace against the hillside where the present road is located. The area has had various commercial ventures over the years, and the road probably was relocated long ago.

To reach this site, go north through the town of Bruin on Pa. 268. When the road jogs east then north, continue east on blacktop T-688 past the Bruin Lumber Company and across the railroad tracks and a bridge over Bear Creek. Park at the east end of the bridge. In the field north of the road quantities of slag, especially along the creek bank, will be seen. We believe that the furnace was located along the hillside under or at the edge of the present road, but no trace of it remains. A Mr. Kelly of Bruin worked at an oil well at this location close to fifty years ago, and he says that no portion of the stack was there at that time.

T-688 is the same road that runs past Bear Creek Furnace, about two miles away in Armstrong County.

Hickory Furnace
Was built in 1836 by Joseph P. Swearingen. After a few years it was sold by the sheriff to William Stewart and C. C. Sullivan who rebuilt it in 1846.

To reach this furnace, drive north from Butler on Pa. 8 to the bridge over Slippery Rock Creek. Just past the north end of the bridge, turn right on L.R. 10064. Follow this road for about ½ of a mile to the railroad crossing. Park here, walk west along the railroad tracks and
cross bridge over Slippery Rock Creek. About 100 feet west of the end of the bridge turn north into the woods for about 100 feet to the bottom of a small hill. Here are the mound remaining from the furnace, the millrace coming in from upstream and the tailrace leading back to the creek. Between the stack and the creek are several large piles of slag. Very little of the stone remains. It was used in projects built in this area at later dates.

**Kensington Furnace**

Was built by Church, Carothers and Crawford in 1846. It was a charcoal furnace and produced about six tons of pig iron a day. Various dates are given for its abandonment, as 1852, 1853, 1859 and 1862.

To reach this site, follow Pa. 268 north from Parker toward Emlenton. Do not cross the bridge but continue up the hill on Pa. 38 south. At the top of the hill turn sharply left on a dirt road, T-309. A large white house stands on a high bank at this intersection. Follow this road, which becomes T-540 when it enters Butler County, about $\frac{3}{4}$ of a mile to where it divides. Continue on the right fork about 100 feet. Look along the hillside to the right, and you will see the mound of stone and rubble at the base of the hill. This and some slag are all that remain of Kensington Furnace. There is a large salamander across the road.

**Maple Furnace**

Built in 1844 by George and James Bovard, it was blown out in 1865. An 1895 history of Butler County states that "a house . . . stands on the site of Maple Furnace," but the house now is gone and the area has been stripped for coal. Lots of slag is visible along Little Bear Creek, below the stripped area.

To reach this site, follow L.R. 10081 for 2.4 miles from the northern limits of the town of Bruin northwest to the village of Eldorado or Glenora as it was formerly called. In Eldorado L.R. 10081 turns sharply left and a blacktop road, T-729, runs to the right. There are two ways to go from here. The first is to proceed straight ahead on a dirt lane to the Goertz farm, about $\frac{3}{4}$ of a mile. Obtain permission to cross their farm, then proceed north on a lane starting at the barn. At the end of the lane, park and walk down a cleared gas line right of way. Almost at the bottom of the hill, go right on cross road to the creek, over the bridge and to the left. In about 100
yards you will be at the gas line right of way again on the north side of the creek.

The second way to reach this place is to turn right at Eldorado on T-729 and follow it to the bottom of the hill. When the road turns right, turn to the left and park in an old lane. Walk down this lane to the creek and cross it. (The bridge is out, so this proceeding may be difficult.) After crossing the creek, go straight on the old lane along the creek for 1½ to 1¾ miles. Pass bridge mentioned before to the gas line right of way. Upstream from the gas line are large amounts of slag. Much more was hauled away in recent years. Above this slag dump is a mound of dirt and in back of that is a ditch that could have been a millrace. This ditch continues downstream on the downstream side of the pipe line clearing. Farther down, a road was cut through the hillside, and there is an exposed bank of reddish brown dirt with charcoal slag mixed through it. Across the bridge and downstream is a field of slag. On the hillside above are several mounds of dirt and stone that possibly could be the remains of the furnace whose exact location still is a mystery.

Marion Furnace

This furnace was built in 1848 or 1850 in Marion Township by Robert Breedon and James Kerr. Blown out in 1862, it was a cold blast charcoal furnace producing about 18 tons of iron a week.

To reach this furnace go to Harrisville on Pa. 8. Turn east on Pa. 338 for 3.3 miles to a bridge over a creek. Then turn left at the east end of the bridge to L.R. 10073. Go north on this road for about ¾ mile. Park and go into the woods on the left about 100 feet. Go down the slope to the creek. The furnace sets on the east bank. Part of the stack is standing, showing at least one opening. There are remains of a long dam and several roads as well as a millrace through the valley. The stack is a short distance below the dam.

Mt. Etna Furnace

Was built on Slippery Rock Creek in 1822 by Dr. John Thompson with Samuel Kerr as foreman. After six years it was sold by the sheriff to David McJunkin who carried on until 1835 when W. S. Bingham rented and operated it until 1838. It next was leased by Ephriam Rose and Robert McGowan who ran it until 1841. It later was moved to Pittsburgh, and the town of Etna was named for it.

The original furnace was located at Daughertys Mills on Pa. 78,
south of Slippery Rock Borough. We were told that it was at the north end of the bridge over the creek and that the old bridge had been built over part of the furnace yard, but this was wrong. The furnace was on the south side of Slippery Rock Creek and about 150 feet west of the road.

To reach this site, follow Pa. 8 north from Butler to Pa. 78 which bears to the left toward Slippery Rock. Follow Pa. 78 for 2 1/4 miles to the bridge over the creek. Park at the south end of the bridge and go downstream (west) along the creek for 150 to 200 feet. Turn south, away from the creek, and go to the base of the hill. Here are large piles of slag, the millrace and the ruins of the stack. The stack now is only a pile of rubble and stone, but the race can be traced from near the road at the creek to the furnace. A large brick house near the furnace may have been the ironmaster’s house.

**Winfield Furnace**

Was built in 1847 by William Speer near the mouth of Rough Run in Winfield Township. It was blown out in 1864. Originally 20 feet square and 33 feet high, it used charcoal and produced about 40 tons of iron a week. Sold to the Winfield Coal Company in 1856, it was purchased by William Stewart of Hickory Furnace fame, but he closed it down in 1864. Powered by water at the start, it later was converted to steam. The iron produced was shipped to Freeport by wagon and from there to Pittsburgh by boat.

To reach this furnace, follow U.S. 422 east 8.2 miles from its intersection with Pa. 68 northeast of Butler. Turn south on L.R. 10036 4.1 miles, then left on L.R. 10034 which brings you into West Winfield. Continue through the town and cross the railroad tracks. Turn left into a limestone company storage yard. The stack is close to the bank on the left, several hundred feet from where you enter the yard. About four or five feet of the lower part of the furnace have been covered by limestone, but the remaining part of the structure is in excellent condition.

**Cambria County**

**Ashland Furnace**

Joseph A. Conrad and Hugh McNeal built this furnace on Clearfield Creek in 1847. It was abandoned in 1851.

To reach the site go to Cresson on U.S. 22. Turn north on Pa.
Above: Marion Furnace, Butler County
Below: Winfield Furnace, Butler County
Left: Eliza Furnace, Cambria County
Right: Buchanan Furnace, Clarion County
53 and follow through Gallitzin to Ashville. In Ashville turn west on Pa. 36, cross the bridge at the edge of town and park. Go south along the west bank of the creek 75 to 100 yards, then west to the high bank above the bottom land. On the bank you will see a stone retaining wall and below it a depression in the ground. In this depression there is a large salamander or a piece of the hearth. All of the stone of the furnace has been removed. The land between the furnace and the creek and almost to the highway is covered with slag.

Apparently this furnace did fairly well in its short span of life. One account says the operators made 6300 tons of iron before they shut down. The iron was hauled by wagon to the head of No. 6 Incline on the Portage Railroad and from there by rail to Pittsburgh or other markets.

In 1851 a George Crane took possession of the furnace and tried to make iron by using cord wood and raw "stone" coal, but the attempt was unsuccessful.

**Bens Creek Furnace**

Built in 1846 by George S. King and Company, this was a hot blast charcoal furnace, which is remembered with the Mill Creek Furnace as Cambria Iron Company facilities.

The route to the site is south from Johnstown on U.S. 219 4 miles from its junction with Pa. 56. Turn left on Pa. 53. Within 200 feet turn right on a township road. The site is on the right about 300 feet from Pa. 53. It is about 30 feet south of the Bens Creek Water Company office and next to a hill.

**(Old) Cambria Furnace**

Was built on Laurel Run in 1841 by David Stewart, John K. and William L. Shryock and rebuilt in 1854.

Follow U.S. 22 to Pa. 403, 1½ miles east of Armagh. Turn south through Cramer (see Baker Furnace, Indiana County) approximately 5 miles to L.R. 11020. Turn left and proceed for 0.9 mile. Just before reaching a bridge over Laurel Run there is a small auto repair shop on the left. Ruins of the old furnace are back of an old barn near the repair shop only 50 or 60 feet from the road. One can see slag on the ground between the road and the hill.

**Cambria Furnaces**

Four furnaces were built on the Johnstown Flats, ¼ mile north of the
railroad station, and north of the Cambria Rolling Mills. Each of them had a 13 foot bosh and was 48 feet high. No. 1 and No. 2 were built in 1854, No. 3 in 1856 and No. 4 in 1857 but never was finished. One engine furnished blast for all three of the completed furnaces.

The Johnstown baseball park now occupies this site.

Eliza Furnace (Ritter Furnace)
Built in 1846 or 1847 by Ritter and Irvin. It was abandoned in 1848, according to the Iron Manufacturers' Guide (1859).

This furnace is one of the best preserved in Western Pennsylvania. According to a report in a Johnstown paper of February 8, 1963, the stack was purchased by the Cambria County Historical Society and will be preserved as a monument to the men of the early iron industry in Cambria County.

To reach the location go east from Armagh on U.S. 22 3.2 miles from its junction with Pa. 56. Turn north on Spur 4849, which becomes L.R. 32021 after 1.3 miles. Continue on this road for about 3.5 miles to a bridge over Blacklick Creek. Cross the bridge and you will see the furnace on your left next to the hill and close to the creek.

One interesting thing about this furnace is the iron heat exchanger which still is in position on top of the stack. The waste heat was used to heat the blast which was blown through this exchanger before entering the furnace.

Mill Creek Furnace
This furnace was built in 1845 by John Bell and Company on Mill Creek, as a cold blast charcoal furnace. In 1856 it was rebuilt and converted to steam power and probably hot blast.

The site is 5 miles west from Johnstown on Pa. 271 (from its junction with U.S. 219). When Pa. 271 crosses a stream (Mill Creek), turn left on a narrow blacktop road west of the creek. Go down this road to where it forks and there is a gate straight ahead. Park here, look over the edge of the hill and you will see the furnace ruins below. The furnace is only a 10-to-12-foot mound of stone and rubble, but part of a stone lined race and several stone retaining walls can be seen.

Mt. Vernon Furnace (Johnstown Furnace)
Built in 1846 by Peter Livingood and Company, it was later owned by Linton and Galbreath. The First Christian Church of Johnstown on Vine Street now stands on the site.
Beaver Furnace

This furnace was built by Leonard Sample on Deer Creek in 1835. It was abandoned in 1854. In 1850 it was owned by Miller and Lang. It was a cold blast furnace with one tuyere and the blast was powered by a steam engine. It had a 9 foot bosh. Maximum production was 1210 tons in one year.

To reach this site follow Pa. 68 north through Sligo to Pa. 854. Follow Pa. 854 until it crosses the Clarion River. At the north end of the bridge turn right to L.R. 16034. Follow this road for approximately 1 1/2 miles. Turn left on T-422 and go about 3/4 mile to where it crosses Deer Creek. Cross the bridge and park. About 100 feet up the creek from the bridge is a large slag bank. Between this spot and the road is a large pile of stone, some of which is cut stone. The furnace probably was closer to the hill. The road, according to an old map, originally was between the furnace and the creek. In widening the road the furnace probably was pushed over and the road was relocated closer to the hill.

The slag pile contains green slag, indicating that a high manganese ore was used.

Black Fox Furnace

Built in 1844 on Black Fox Run, this was a hot blast charcoal furnace 30 feet high with a 9 foot bosh. It was powered by steam. Adams and Yernon were the owners in 1850.

The site may be visited by proceeding west from Callensburg on Pa. 368 to West Freedom, about 3 1/2 miles. Turn south on L.R. 16015 for 2.4 miles to L.R. 16086 to the left. Follow this route about 1 3/4 miles. The furnace was on the level spot just above the road, on the right, and below a lane going up the hill. Across the road toward the creek is a large cinder or slag dump. Much of it has been hauled away for use on the local roads. This is the only place where we have seen "popcorn" slag. There is much of it in the cinder pile.

Buchanan Furnace

This is the best preserved furnace in Clarion County. It was built in 1844 and was blown out for good in 1858. A cold blast charcoal furnace with 2 tuyeres and a 9 foot bosh, its maximum production was 1200 tons a year. In 1850 the operators were Plummer and Creary.
To reach this furnace, go north from Callensburg on Pa. 378. About 500 feet after crossing the Clarion River, turn left into a private lane. (Get permission from owner.) Go about 500 feet on this lane, and you will see the furnace on the right next to the hill. It is in the open and plainly visible from the lane but is hidden from the highway by the curve of the hill.

**Catfish Furnace**
This steam powered cold blast charcoal furnace was built in 1846 at the mouth of Catfish Run in Madison Township. It was permanently shut down some time after 1856. Miller and Sons owned it in 1850.

To reach the location, follow Pa. 68 east from East Brady for 5.3 miles to L.R. 16061 to the left to the bottom of the hill. Where the road turns right, paralleling the Allegheny River, the furnace stood to the right against the hillside and near the creek. This area has been used for coal storage for many years and no trace of the old stack or race remains today. We did find some charcoal slag on the creek bank and in the field across the road from the furnace site. (See Sarah Furnace.)

**Clarion Furnace**
Was built on Toby Creek about ½ mile from the Clarion River in 1828 and was abandoned in 1852. It was the first furnace constructed in Clarion County. Christian Meyers was the builder and his agent, Henry Bear, was an expert ironmaster. The stack was 32 feet high with an 8 foot bosh. All other furnaces in the county were patterned after the Clarion Furnace. It was a cold blast, water powered charcoal furnace with one tuyere.

To see the ruins, for nothing remains except a few stones and a small amount of slag, take Pa. 966 north from Clarion. About ¼ mile north of the Clarion River a dirt road goes to the left down the hill. Follow this road to the bridge over Toby Creek. The furnace was about 100 feet upstream on the west side between the creek and the road.

**Clinton Furnace**
This steam powered, cold blast furnace was built on Hemlock Creek in 1841 and was operated about 15 years. In 1850 it was owned by Horner and Eaton and in 1859 by S. F. Plumer of Franklin.

To reach the location drive east from Oil City on U.S. 62 2½ miles to Pa. 157 to the right. Follow Pa. 157 through Coal Hill to
Venus, a distance of about 12 miles. In Venus take T-591 north and east approximately 1½ miles to where another township road, T-590, crosses near a bridge over Hemlock Creek. The furnace ruins are against the hillside about 200 feet to the right. Large quantities of slag are everywhere, testifying to the activity of this furnace during its operation.

Another furnace, Hemlock, is close by and worth seeing.

**Corsica Furnace (Mt. Pleasant Furnace)**

Built in 1849 by G. W. Corbett, Solomon Cyphert and George Reynolds in Clarion Township, northwest of Corsica.

This furnace was torn down during the summer or fall of 1961. When we visited it in October of that year, our guide, Merle Oberlin of Clarion, was surprised to find that a strip mining operation had pushed it over, although at the time it had not been removed or covered up. The salamander was there, on edge; also a piece of pig iron composed of three pigs still together. These were near several long pieces of 12" or 14" cast iron pipe which probably were part of the blast piping.

The route to this site runs west from Corsica about 1½ miles on U.S. 322. Turn north on T-560 for about ¾ mile. T-560 runs into T-566. Land and roads there all have been changed due to stripping operations. The furnace was located about 100 feet north of the house and barn which you will see at this point.

In 1850 this furnace was owned by Brown, Phillips and Company.

**Deer Creek Furnace**

Erected in 1844 on Deer Creek at the Pike crossing just west of Shippenville, this plant was sold by the sheriff in 1850 and went out of blast in 1851. It was owned by James Hasson. Maximum production was 900 tons a year. A cold blast furnace with one tuyere, its blast was powered by water.

To reach the site go west from Shippenville on U.S. 322 to where the old highway bears to the right. Follow this old road about 200 feet. On the left side is the old town dump and across the dump is the new road. The site is under the dump and the new road. No trace of the plant remains. On the hillside to the right can be seen piles of iron ore. This was evidently a storage area.

Roy D. Hartzell, who lives near by, said that the stack had been torn down years ago. He does not remember ever seeing it.
EAGLE FURNACE

Built in 1846 on Canoe Creek, about a mile from the Clarion River, by Curll, Kribbs and Company, it was a cold blast charcoal furnace with one tuyere and an 8 foot bosh. In 1850 it was owned by Reynolds and Kribbs. It went out of blast in 1858.

To see this furnace follow Pa. 368 0.1 mile east from where it crosses Pa. 378 in Callensburg. Turn left on L.R. 16030 and proceed for 1.5 miles, then turn north (left) on L.R. 16029. Follow this road about 3 miles, crossing the Clarion River at Canoe Ripple, and then, about ¾ mile farther on, turn east on T-385. Proceed about ¾ mile to the bridge over Canoe Creek. The furnace is about 100 feet to the right of the road and near the top of the hill, about 200 feet before reaching the creek. It is in excellent condition and visible from the road when about halfway down the hill.

ELK FURNACE (SOAPFAT FURNACE)

This furnace was built in 1842 on Deer Creek about ¾ mile above Deer Creek Furnace. In 1850 it was owned by W. B. Fetzer. It was a cold blast, one tuyere furnace with a 7½ foot bosh and was powered by water. It went out of blast in 1855.

To view the ruins go west from Shippensville on U.S. 322 to T-410 to the north. This is about 0.2 mile west of the Deer Creek Furnace site. Follow T-410 about ¾ mile to a cleared strip through the forest. A pipe line goes through the woods at this place. Follow this clearing downhill about halfway to the creek. Turn left into the woods about 100 feet. The old furnace is now merely a big pile of stones, overgrown with weeds and brush. There is much slag around.

HELEN FURNACE

Erected in 1845 and out of blast in 1857. The original name of this furnace was “Highland Furnace” in honor of Alexander McNaughton, a Scotsman who owned the farm upon which the furnace was built. This was pronounced “Hieland” and was later corrupted to “Helen.” It was a cold blast, two tuyere furnace, powered by steam. In 1850 it was owned by W. S. Packer and Company.

To reach this location go north from Clarion on Pa. 966 to the village of Helen Furnace. Turn west on L.R. 16090, which is just south of the village. About 0.1 mile from the above intersection you will see the stack on the left about 100 feet from the road. The inner stack is in good condition. The outer stones have fallen down. Some-
one, several years ago, piled some of the stones to form a round stack. It is a poor imitation of a furnace.

Hemlock Furnace
This furnace was built on Hemlock Creek in 1845. It was a cold blast, water powered furnace. In 1850 it was owned by Moore and Seymour. It went out of blast in 1865.

This furnace is very interesting. The front half has been removed in such a way that it looks as if it had been cut through vertically by a huge knife. You can see the entire inner wall of the stack, bosh and hearth.

To reach the site, proceed east from Oil City on U.S. 62 for 2½ miles to where Pa. 157 turns off to the right. Follow Pa. 157 through Coal Hill to Venus, a distance of about 12 miles. In Venus turn left on T-593. Follow this road for a little more than 1 mile. When the road divides, T-593 going to the left over a bridge and T-586 curving to the right, you will see the furnace next to the hillside to the right.

Jefferson Furnace (Quaking Asp Furnace)
Built in 1838 on Beaver Creek by Plummer and Company, this was a cold blast furnace, powered by water at first but later by steam. It was blown out in 1858.

To inspect the ruins, follow Pa. 338 east from Foxburg in Richland Township to Wentlings Corners in Beaver Township; turn northeast on L.R. 16073 ¾ to ¾ mile, then bear left on T-391. The road crosses a railroad track at Jefferson Station. About halfway between the railroad and the bridge beyond, over Beaver Creek, is the site of the old furnace on the left side of the road. Leave the road and go around back of a small hill. A pile of stones and some slag are all that remain.

Licking Furnace
This cold blast charcoal furnace was built in 1845 on Licking Run in Washington Township. It was a water powered, one tuyere furnace with a 7½ foot bosh. In 1850 it was owned by Sigworth and Fetzer. It was blown out in 1856.

To reach this site, proceed north on Pa. 66 through Fryburg to Lickingville. Turn right on Pa. 36 and drive east 1½ miles. Immediately after crossing Licking Creek, turn right on the old highway and go back toward the creek to where a dirt road, T-602, turns to the left. Follow this for about ½ mile. The road ends at this point with
another road, T-562, going to the right and across a bridge over Licking Creek. At the intersection of T-602 and T-562 the furnace ruins are straight ahead, down a small bank. Only a little pile of stones remains, but acres of slag show that this furnace must have been busy during its comparatively short history.

**Limestone Furnace**

Built in 1845 on Piney Creek in Limestone Township. It was a cold blast charcoal furnace with one tuyere and powered by water. The owner was J. B. Lyons.

Quite a portion of this furnace remains, but it is covered with trees and brush. Only the top of one of the exterior walls is visible. The stream (the old millrace) goes underground at the furnace. Evidently it had or has found a channel through the stones.

The route to the scene is to go north from Limestone on Pa. 66 for about ½ mile, then turn east on T-490 for about ¾ mile. As the road crosses the stream, the furnace is on the left side of the road about 100 feet north of the bridge and just south of the intersection with L.R. 16014.

**Lucinda Furnace**

Lucinda Furnace was built in 1833 on Paint Creek. It was a hot blast charcoal furnace with a 7'10" bosh and 30 feet high. In 1843 it was purchased from its original owners by James Buchanan, afterwards President of the United States, and John Reynolds of Cornwall, Lebanon County. At the same time they purchased 4,351 acres of land in Knox Township for $20,500. Buchanan visited the furnace in June 1843. The furnace was abandoned in 1858 because of low prices and scarcity of timber.

To reach the furnace site, turn west from Pa. 68 to L.R. 16050 in the village of Lucinda. Follow it for about 1.3 miles. The ruins of the old stack are on the right side of the road and only about 20 feet from it. A sign beside the furnace tells its story. Only part of the structure remains. Most of it was removed when the road was widened several years ago.

**Madison Furnace**

This furnace, built in 1836 on Piney Creek about 2 miles from the Clarion River, was a steam powered cold blast furnace with a 9 foot bosh and was 32 feet high. It was abandoned in 1873 in consequence of
the panic of that year. In 1850 it had been owned by Lyon, Shorb and Company.

To see the site follow Pa. 68 north through Sligo to its junction with Pa. 854. Turn north on Pa. 854 and follow it to the Clarion River. Cross the bridge over Piney Creek, then turn right on T-420, which runs between this bridge and the bridge over the Clarion River. A little more than a mile out this road is a bridge on a road to the right, crossing back over Piney Creek. The furnace was located on the right side of this road at the far end of the bridge and against the hillside. A large slag dump is downstream along the creek. The hillside, which was the charging bench, has ore and charcoal on it. Nothing remains of the stack but a few stones.

Martha Furnace (Polk Furnace)
Built in 1845 about 1¼ miles south of Reidsburg on Pa. 68, this was built as a successor to the Clarion Furnace, where ore and timber were becoming scarce. It was built by Christian Meyers. Later it was sold to Lyon, Shorb and Company, but they never put it in blast. Timber had become scarce in that area, too, and the stack was dismantled in 1856. At first this furnace was called “Polk” Furnace after President James Knox Polk but later, when Meyers developed a dislike for him because of the repeal of an 1842 tariff, he changed the name to “Martha.”

To reach this furnace go to Reidsburg, then south on Pa. 68 for 1¼ miles. The furnace is on the right side of the road (west) just south of a house and slightly behind it. T-484 goes to the right just past the house. Not much remains of the furnace except a few rows of cut stone.

Mary Ann Furnace
This furnace was built in 1844 on Paint Creek and was abandoned in 1851.

To reach the site go east from Pa. 66 in Shippensville on U.S. 322 about ¾ mile. The ruins are visible on the north side of the road almost at the bottom of the hill and about 200 feet before reaching the bridge over Paint Creek. They are about 30 feet from the road. Part of the stack remains. A large cinder pile is across the creek and south of the road.
MONROE FURNACE
This cold blast charcoal furnace was built in 1845 on Piney Creek and was abandoned in 1882.

The location is on L.R. 16025 about 1 1/2 miles east of Reidsburg, which is at the junction of Pa. 68 and Pa. 839 in Monroe Township. It is on the north side of the road and below it, about halfway to the creek. The road goes over what probably was the charging bench. Nothing remains of the stack. The stones are scattered over a wide area. One of the most interesting things about this furnace is the stone arch which is still standing, in a swampy place, likely part of the wheel pit.

PIKE FURNACE
Was built in 1845 and abandoned in 1868. It originally was built as a cold blast furnace but after a short time it was changed to hot blast, charcoal and steam.

To reach this site follow L.R. 16003 south for 3.3 miles from its junction with Pa. 68 in Rimersburg to Lawsonham. Park and walk northeast along the railroad track. Between 1/2 and 3/4 mile along this track you will see some houses at the top of a steep bank to the left. The ruins of the stack are between the track and the bank. When the railroad was built the fill covered about half of the furnace, so that only about six or eight feet of the top now show. The track curves to the right just before you get to the ruins and to the left just past them. A forge stood across the track near the creek at one time, but no trace of it remains.

PROSPECT FURNACE
This furnace was built in 1845 on Cherry Run about a mile south of Callensburg. It was a steam powered cold blast furnace with an 8 foot bosh and 30 feet high.

The site of this furnace may be visited by going west from Callensburg on Pa. 68 for about 1/2 mile to the bridge over Licking Creek, crossing the bridge and turning south on L.R. 16019 for about 3/4 mile to T-368 to the left just past the bridge over Cherry Run. Stop at the first farmhouse on the left. After obtaining permission, go through the yard, down the bank and along the bottom of it to the right for 200 to 250 feet to the furnace site. All that remains is a pile of stones and heaps of slag.
Redbank Furnace (New Redbank Furnace)

Was built in 1859 and was in operation until after 1890. It was built by Thomas McCullough. Alexander Reynolds became a partner, and McCullough was replaced by Moorhead and the firm became Reynolds and Moorhead. This furnace was the successor to Old Redbank Furnace across Redbank Creek in Armstrong County.

The first stack on this Clarion County site was 39 feet high and had an 11 foot bosh, showing the trend to larger furnaces started about this time. The stack later was increased to 64 feet and its equipment was modernized and improved. This was a coke furnace and the coke was made in pits at first but subsequently 40 beehive ovens were built on the charging bench.

Redbank was unusual in that the ore, limestone and coal were brought down from the top of the hill on a tramway. Then the ore, limestone and coke made from the coal were charged into the top of the furnace. The slag was hauled to the Allegheny River, a few hundred yards away, and dumped on the river bank.

Although Redbank Furnace is in Clarion County, the easiest way to reach it is through Armstrong County. Starting at Kittanning, follow L.R. 03068 north to Mosgrove, then go right on L.R. 03078 for 0.7 mile, then left on L.R. 03079 to Templeton. At the northern edge of Templeton turn abruptly left to L.R. 03068. Follow this road for 4.1 miles to Widnoon and the junction with L.R. 03084. Go left on this road 1.5 miles to its junction with L.R. 03083, then right on this road for 3.4 miles to its end at the junction of Redbank Creek and the Allegheny River. Cross over the railroad bridge into Clarion County. Turn right and walk along the tracks paralleling Redbank Creek. Look at the hillside to the left. A hundred yards or so from the bridge you will see a level bench on the hillside. Climb up the hill and you will see the old coke ovens and some building foundations. Go back to the railroad and follow it farther up the creek. When the hill recedes from the railroad, go left into the woods. In this level area are many old house foundations. Although the houses have long since disappeared, there is an outside bake oven still there and in good condition. This was the village of Redbank, where the workmen at the furnace lived.

Richland Furnace

This cold blast charcoal furnace was built in 1846 on a branch of Turkey Run by John Keating of Clarion. Locally it is called “Katen” Furnace, a corruption of Keating.
To reach this furnace follow Pa. 38 north to Eau Claire. Turn right on Pa. 338 and follow it through Foxburg and St. Peters burg to Alum Rock, a distance of about 10 miles. Just past Alum Rock and at the bottom of a long hill, Pa. 338 crosses a creek, then Pa. 378 crosses Pa. 338. Turn left at this intersection to Pa. 378. As soon as you turn left you cross a bridge over the creek. Park at the far end of the bridge. The ruins of the furnace are to the left against the hillside. There is slag between the creek and the furnace. The millrace still can be seen. The furnace is a large pile of stone but recognizable as a furnace.

**St. Charles Furnace (Carrs and/or Leatherwood Furnace)**

Was built in 1834 by John and Samuel Wilson of Strattonville as a cold blast charcoal furnace. In 1857 it was changed to hot blast and at the same time steam power was substituted for water power. In 1846 it was purchased by J. and P. Kerr of Clarion. In 1861 it was leased to Michael McCune, who operated it until 1865, when it went out of blast. This was the only furnace in Clarion County that used raw coal at times.

Starting at New Bethlehem, follow Pa. 861 west to its junction with Pa. 854. Turn right on Pa. 854 for about 200 feet. The stack is to the right and below the road. It is covered and surrounded with heavy brush, so that it is almost impossible to get close to it. Also, the local residents say that there are copperheads in the furnace.

**Sarah Furnace**

Built in 1860 and operated until 1867.

To reach this site, follow Pa. 68 east through East Brady, then 5.3 miles east of East Brady, turn left on L.R. 16061 and follow it to the bottom of the hill. Cross the bridge and continue through the village of Sarah Furnace. When you can see the old coal tipple piers on the hillside to the right, you are at the site of Sarah Furnace. About 100 feet up the hill and to the right of the piers is a pile of large stones that could have been the furnace. Coal and slate from the coal operations of recent years hide any slag.

The road to this furnace goes past the site of Catfish Furnace.

**Shippensville Furnace (Blacks Furnace)**

Erected in 1832 at the junction of Deer Creek and Paint Creek about a mile southeast of Shippensville. It went out of blast in 1859.

This site may be found by following T-424 south from Shippens-
ville to the second bridge. Cross this bridge and park. Walk downstream between the stream and the hill but closer to the hill. After about 200 feet you will see the ruins of the furnace close to the hill. Parts of the millrace and tailrace still can be seen. Slag is plentiful over the entire area.

SLIGO FURNACE
This furnace was built in 1845 and operated until 1871, when it was abandoned. Originally a steam powered cold blast furnace, it was changed to hot blast in 1857.

To reach this location, follow Pa. 368 east from Callensburg to Sligo. At the western edge of town the highway crosses a bridge. Just over the bridge and to the left of the road there is a large old frame building that at one time was a grist mill. In back of this building is a tall, square, brick chimney, which was the chimney for the old furnace boiler house. Beside this old mill is a Pennzoil bulk plant. Where their truck loading rack now is was the site of the old furnace. Slag blankets the entire area. The hill, which was the charging bench, still is covered with ore. Mr. Greenawalt, at the bulk plant, said that his grandfather worked at the furnace. He gave us the above information.

TIPPECANOE FURNACE
Black and Maxwell built this furnace in 1844 on Canoe Creek about 1½ miles above Eagle Furnace.

Follow Pa. 338 south from Knox for 2.9 miles from its junction with Pa. 238 in Knox. Turn east on L.R. 16033 and go 1¾ miles to its junction with T-416 to the right. Just before crossing the bridge over Canoe Creek you can see the ruins to the right. A stone pile, millrace and a building foundation are all that remain.

WASHINGTON FURNACE
Built in 1846 and blown out in 1855. It was in good condition until the early 1930's when the WPA took many of the stones for bridge abutments.

To reach this furnace follow Pa. 66 south from Clarion to Mechanicsville, about 4 miles. Turn west on L.R. 16037 1¾ miles. The ruins of the old stack are across a pasture on the left, close to a creek and, as usual, next to a hillside whose level top served as a charging bench. Inquire directions at the farmhouse on the right side of the road, as the furnace is not visible from the road.
Wildcat Furnace (Franklin Furnace)
Frick and Lawson built this furnace in 1843. It later was sold to John L. Miller of Pittsburgh and James M. Freeman of Clarion County. A steam powered cold blast charcoal furnace, it was blown out in 1857 but not abandoned until 1863.

Lee Ramsey, who lives across the road from the old furnace, said that none of the oldtimers ever called it anything but “Wildcat.” The name “Franklin” appears only in the formal histories.

This site may be reached by following Pa. 68 to Rimersburg. Turn south on Pa. 861 about 2 miles. The ruins stand on the west side of the road, just north of the bridge over Wildcat Creek. Only a pile of stones and rubble remain. Slag may be seen in the field across the road and along the creek bank.

Clearfield County

Karthaus Furnace
In 1817 Peter Karthaus built an iron furnace at the mouth of Mosquito Creek, known also as Little Moshannon Creek. Bog ore, brought up the river from Buttermilk Falls in flatboats and canoes, fed this furnace. Karthaus and his partner, Geisenheimer, operated the plant until 1822, making 1000 tons of pig iron. After a long shutdown, the furnace was reactivated in 1837. Between 1837 and 1839 400 tons of iron were made, all of which were taken down the river and part of it was lost in navigation. Obstructions in the river and the long distance from market were difficulties which made iron production unprofitable. In 1839 the furnace was abandoned. The stone stack, with its interior in almost perfect condition, stands at the edge of the public school grounds in the village of Karthaus. It sets below the road as it sweeps around the school yard.

Erie County

Erie Furnaces
The first iron furnace in Erie County was built in 1833 by Hinckley, Jarvis and Company. It was powered by a blind horse walking in a circle, turning the main drive wheel. The ore was bog ore from the Laird Farm near the head of the bay. The firm became Lester, Sennett and Chester and then, through many names and owners, the Germer Stove Company in 1909.
Known as the "Old Furnace" after the new furnace was built, this plant was located on State Street between Eleventh and Tenth streets. It ran along Eleventh Street ¾ of the way to Peach Street.

In 1840 W. H. Johnson withdrew from the "Old Furnace Company" and joined with William and David Himrod and B. B. Vincent and organized what became known as the "New Furnace Company." This concern went across State Street and one block farther uptown to the square between Eleventh and Twelfth streets. The ownership of the company changed many times, and in 1900 it was called the Chicago and Erie Stove Company on the eve of going out of business.

[To be continued]