THE CHARCOAL IRON FURNACE AT SHADY SIDE STATION IN PITTSBURGH

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NOT MUCH has been written about the Anshutz Furnace at Pittsburgh; although there has been frequent mention of it in the form of a few paragraphs in histories and in articles in newspapers and magazines, there is such a similarity in these paragraphs as to suggest that practically all the information came from one original source. The story seems to have been copied by one writer after another often almost word for word. Several errors in this story that have been passed along in this way tend to confirm this theory. There are, however, certain facts that are well authenticated. George Ludwig Anshutz did build a furnace for smelting iron ore at a point a short distance east of Shadyside Station; iron was produced and castings were made from the iron; and the furnace was in operation about 1794. This iron and these castings were the first to be made in the city that is today known the world over as the "Iron City."

A preliminary study of George Ludwig Anshutz’ background in Alsace is interesting in that it reveals where he received his experience in the making of iron. His father before him was connected with the iron business, and George Anshutz, himself, was born in Neunkirchen in the famous iron district of the Saar Valley. Later the family moved into Alsace where the father was connected with the extensive ironworks of Lord Dietrich. These works were located in three towns a few miles

1 Read at a meeting of the Historical Society of Western Pennsylvania on October 28, 1936. Mr. Adams, a lifelong resident of Pittsburgh and a descendant of George Anshutz, builder of the furnace here discussed, was himself formerly engaged in the iron foundry business. Ed.
apart in northern Alsace—Zinsweiler, Niederbronn, and Jägerthal. This district was on the border of the Saar Valley and was practically the only iron district in Alsace. When George Ludwig Anshutz left for America, at the age of about thirty-five, he had reached the position of assistant superintendent of Lord Dietrich’s mines. He carried with him the following letter of recommendation:

We, John von Dietrich, Peer in the Holy Roman Empire, Count of Steinthal, Sovereign of the City of Reichshofen, District of Niederbronn and sundry towns: Knight and Secretary of the Royal Military Order of Merit, Honorary Mayor of the City of Strasburg, hereby declare and certify that the holder of this document, Mr. Anshutz, during the last ten years has been employed as assistant manager in the Iron-mines of our domain at Zinnsweiler, that at all times he conducted the not inconsiderable affairs entrusted to him with great zeal, industry and fidelity—in a manner expected from an honest individual—to our absolute satisfaction.

It had been our hope to retain him in our employ, but inasmuch as he hopes to improve his fortune in America, may the Almighty bless his enterprise. We shall ever hold him in esteem.

Strasburg, April 27, 1791
Peer Johannes von Dietrich
Count of Steinthal

The date on which George Ludwig Anshutz came to Pittsburgh is not definitely known. The dates of his leaving Europe and of his arrival in Philadelphia, however, have been verified. The original bill for his transportation down the Rhine from Utrecht to shipboard at Amsterdam is in existence. This bill is dated January 1, 1791, and contains several interesting details. The time of his arrival in Philadelphia is easily determined because, by law, ship captains were required to report the names of all German immigrants landing there. The complete list of these immigrants covering the years 1727 to 1808 has recently been published and shows that George Anshutz arrived in Philadelphia on September 12, 1791, in the ship “Fair American.” He and his family, consisting of his wife, an

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2 From the original letter as translated from the German by Dr. John F. L. Raschen, professor of modern languages in the University of Pittsburgh.

3 Ralph B. Strassburger, Pennsylvania German Pioneers, 3:45 (Norristown, Pa., 1934).
Alsatian, born Katherina Elizabeth Gerber; three sons, George, Jr., ten years old, Christian, eight years old, and Jacob, one year old; and two daughters, Elizabeth, five, and Dorothea, three, were about three months on their voyage across the Atlantic. In general such journeys were not easy for the older people, however fascinating the life on shipboard might be to the children, for all passengers were required to furnish their own food and bedding.

Why George Anshutz came into the western country, three hundred miles from the seaboard, to start a furnace has always been a mystery. There were very good reasons for his leaving Alsace. The whole country there was in a state of turmoil in the years just preceding the French Revolution. Business was practically at a standstill; the young men were being constantly sent off to war; and there seemed little prospect of a happy, quiet life for many years to come. It is probable that some members of the family were already in America, although of this there is no verification. There is, however, a record of an earlier Anshutz furnace, making iron from bog ore, in New Jersey, near the present Cape May.

In the 1780’s, iron ore was discovered in western Pennsylvania, and this seemed to have an effect somewhat similar to the discovery of gold in California in 1849. There seems to have been a sort of “iron rush” to western Pennsylvania, for in the ten years or so following, many small furnaces were established in this district. Whether George Anshutz came from Alsace with the deliberate purpose of coming to Pittsburgh or whether he made his decision after his arrival in Philadelphia is not known. It is interesting to note in this connection that even in those early days, people seemed to have a vision of what America might become and realized the strategic position that Pittsburgh occupied in regard to the development of business in the West.

Practically nothing is known as to where George Anshutz spent his time between 1791, when he arrived in Philadelphia, and 1793, the year in which, probably, the furnace was built in Pittsburgh. No doubt a good part of that time was spent in Pittsburgh in preparation for the building of the furnace. He may even have visited other furnaces, including the
Jacob's Creek Furnace, for he was facing conditions very different from the well-established iron furnace practice in Alsace. Also, although he spoke both French and German, he had the additional handicap of having to use a new language.

As a source of information about the Anshutz Furnace in Pittsburgh, the local newspaper of the time, the *Pittsburgh Gazette*, is almost a total disappointment. The newspapers in those days did not print much, if any, local news. Everyone knew as much about what was going on locally as did the editor. The community, shut off from the world, asked principally of the local paper that it furnish news from Philadelphia, New York, and the East. Much space was given to foreign news, as many people had not been long away from the old country and were concerned about what was going on in their old homes. Even family tradition does not tell much about the "Shadyside Furnace," as it is usually called now. This circumstance is due, no doubt, to the fact that George Ludwig Anshutz' greater success in his later ventures made the early furnace seem insignificant.

There are, however, two books containing material on the Anshutz Furnace by authorities who, no doubt, got their information from original sources. One is James M. Swank's *History of the Manufacture of Iron in All Ages* and the other is George H. Thurston's *Allegheny County's Hundred Years*. The authors of these works probably knew people who had seen the furnace in operation. Mr. Swank obtained most of his information from a letter written by George Anshutz Berry, a prominent banker and business man of Pittsburgh, and the letter appears in Mr. Swank's history with the following introduction:

"We have received from Mr. George A. Berry, president of the Citizens' National Bank, of Pittsburgh, and a grandson of George Anshutz, the following interesting reminiscences of Mr. Anshutz's pioneer iron enterprise at Shady Side. His letter containing these reminiscences is dated at Pittsburgh, May 8, 1891. We give his statement in its entirety."

I am now on the verge of entering my 74th year, and I have a very clear recollection of things fifty and even sixty years ago. I often heard my grand-
father speak of the furnace, as well as my uncles and aunts, all brothers and sisters of my mother, some of whom have lived to within the last fifteen years. Mrs. Rahm, my mother's oldest sister, who was born on February 17, 1788, and died on July 31, 1878, was four years old when the furnace was built. She had a very clear recollection of it and told me many circumstances connected with it. I have a family Bible which has been in our family for over seventy years and in which my mother's birth, on December 27, 1793, is recorded, and I had it from her as well as from all the family that she was born at the furnace referred to above.

In my younger days I heard many of the older residents of the east end of the city speak of seeing the old stack. Major William B. Negley, one of our oldest and best-known citizens, told me to-day that, when he first built on the site now occupied by the mansion of M. K. Moorhead, Esq., he took down part of the old stack, and going through the cinder pile found several relics of the business, such as a shovel, pick, etc. John A. Renshaw, Esq., who also built on part of the property, told me he could locate the spot occupied by the furnace as well as the tail-race which carried the water from the furnace. On several occasions I talked with the late William M. Lyon on this subject. He mentioned several things in connection with the furnace, among others that after my grandfather abandoned it it was used by Anthony Beelen as a foundry. The family of the late Jonas Roup had in use until a recent period pots, skillets, etc., made at the furnace.

The late Judge James Veech was considered authority on all matters of the olden time. He came here from Fayette county, and I think wrote a history of the county. In a long newspaper article now before me, in which he endeavors to establish the fact that the first blast furnace west of the Allegheny mountains was built in Fayette and not in Allegheny county, he says, speaking of my grandfather's furnace: "My researches on the subject put the abortive enterprise at least two years later." [That is, 1792 instead of 1790.] "The facts on this subject which I am about to state are made out mostly from records consulted and from original papers." He thus admits the existence of the furnace but is a little doubtful of dates. Of course if the furnace was built, of which there is no doubt, it was put in blast, but for how long I have no positive knowledge. However this may be I always heard that ore was not found in sufficient quantity in the neighborhood of the furnace, and that the supply for awhile was brought down the Allegheny river, but this being too expensive the enterprise was abandoned.

My grandfather next turns up at Westmoreland furnace, as will be seen from an advertisement in the Pittsburgh Gazette, as follows: "Westmoreland Furnace.—For sale at said furnace, about 3 miles from Fort Ligonier, near the State Road, stoves and a fine assortment of the best castings, at the most reasonable prices. Geo. Anshutz, Manager. August 7th, 1795."
I think that the above information will satisfy you that George Anshutz built the first furnace that was built in Allegheny county, and that it was in operation about the years 1792 to 1794.

Geo. Anshutz Berry

The furnace was located in the hollow a hundred yards or so east of the present Shadyside Station. In 1792-94 this must have been far out in the woods, and one wonders why the furnace was not built near the city. The reason generally given is that what ore was present was to be found at this point, but there are two other probable reasons for the location: the need of water power (steam was not then in use), and the need of much timber for the making of charcoal. Both were fundamental necessities for the iron furnaces of that day. The stream running through this hollow, the Two-Mile Run, was undoubtedly the largest one near the city. Certainly it was the first large one up the Allegheny River, into which it flowed at about the present Thirty-sixth Street. At that time, this stream drained practically all of what is now Shadyside and a large part of the East Liberty Valley. William G. Johnston, writing about the horseback parties that he attended as a young man, mentions this stream: "A favorite route was up the Allegheny. Crossing the canal bridge on Penn Street, our course was along the always dusty highway, passing through what were then known as Bayardstown and Croghansville... and onward we went, passing the toll-gate, and over the rude but strongly built bridge spanning Two-Mile Run, then a beautiful stream with pebbly bottom and mossy banks."

Practically all iron was then smelted by the use of charcoal. Many bushels of charcoal were needed for each ton of iron produced, and a furnace producing only a few tons per week would use up the timber of a

4 James M. Swank, *History of the Manufacture of Iron in All Ages*, 225 (second edition, Philadelphia, 1892). The Berry letter, as there published, was reprinted, with minor changes in wording and style, in John N. Boucher, *A Century and a Half of Pittsburg and Her People*, 2:13 (New York, 1908). According to Miss Louisa Miller of Blairsville, who is a descendant of George Anshutz through his daughter, Dorothea, who married Martin Rahm, the date of Mrs. Rahm's death was July 3, 1878, and not July 31 as stated in the Swank and Boucher versions of the Berry letter.

considerable area of land. This meant that furnaces must be located where large wooded acreage could be had. The deeds for the property for the Anshutz Furnace showed that the owners had over 286 acres. The size and location of the property, in view of the way in which this part of the city has developed, is most interesting. In outlining roughly its bounds the names of the streets as they are today are given, although at that time none of the streets, with the exception of Forbes Street, existed.

The most northerly point of the property was on what is now Aiken Avenue about midway between Center Avenue and the Aiken Avenue Bridge. From there the line ran westerly to the corner of Ellsworth Avenue and Neville Street, thence to Forbes Street, called in the deed, "The Great Road." It went along Forbes Street to Beeler Street, where it turned and continued along Forbes Street almost to the upper entrance of Schenley Park; from there it ran to Wilkins Avenue, which it followed down to the line of Aiken Avenue. It contained practically all of Shadyside and in addition a large portion of Squirrel Hill, including all of the present Murdoch Farms district.

The following account from the *Pittsburgh Commercial Gazette* of July 29, 1886, gives further information about this early furnace and its founder:

Tradition locates the first Pittsburgh iron-works on the banks of the little stream known as Two Mile run, near Shadyside station. Here, on the spot now marked by a crooked sycamore tree near a little bridge that crosses the run to the grounds of Mr. M. K. Moorhead, a blast furnace was built some time between 1792 and 1794, by Mr. George Anschutz, an Alsatian, who after some experience as a furnace manager near Strassburg, came to this country in 1789 when about 36 years of age. He first engaged in iron-making in New Jersey, but some time in 1792 or early in 1793 crossed the mountains to Pittsburgh and built the Shadyside furnace. He was led to locate the furnace at this place from a belief that a supply of iron ore could be obtained in its immediate vicinity. In this he was disappointed and the expense of bringing the ore from a distance was so great that the furnace, after being run for a short time, was abandoned.

But little is known regarding the furnace. The date of its erection is usually given as 1792, but it is doubtful if it was built as early as this. It certainly was in blast in 1794, during the Whisky Rebellion, its fire lighting up the camp of the insurgents and, if local history is to be believed, made plain the paths to
the chicken roosts of the vicinity. Mr. A. Garrison states that his impression, derived from those who, at the date he came to Pittsburgh (1826), were familiar with the history of the furnace, is that the furnace made but one blast. It is possible that it made a short one on the local ore which was very soon exhausted and was then blown out until a supply could be procured from a distance, from the Kiskiminetas, Mr. Garrison states. If this supposition is correct, this was the 1794 blast. It appears from a record in the family Bible of Mr. George Anschutz, its builder, that he was at Pittsburgh in 1793 and from an advertisement in the Pittsburgh Gazette in August, 1795, that he was then managing the Westmoreland Furnace, "three miles from Fort Ligonier, near the State road." These are the only dates that I have been able to fix. The most probable date of the building of the furnace is late in 1793. There is a tradition that after the abandonment by Mr. Anschutz it was again put in blast by Mr. Antony Beelen, but this probably is incorrect. Mr. Beelen was the clerk at the time it was operated by Mr. Anschutz.

THE PRODUCTS

The furnace, though few details of its construction and methods have been preserved, probably differed but little from the typical blast furnace of the close of the last century. It was a stone stack, possibly 25 or 30 feet high and 5 or 6 feet in the boshes; the fuel, charcoal; the blast, cold and blown through one tuyere; the bellows, either the old leather one or the newer wooden cylinder or "tub;" the power furnished by the water of the little run, on whose banks it was built, that has long since ceased to do useful work, driven from its labors by coal and steam. Probably one and one-half to two tons of iron were produced daily and this was made into castings such as stoves, grates, pots, kettles, and-irons and similar articles. There were no forges near to use the iron, had it been run into pigs, nor was there, until later, a demand for machinery and similar castings. The blasts were short, the summer heat and low water causing a stoppage during the summer months, and cutting wood and coaling occupying a portion of the winter.

The ruins of this furnace were visible for many years. Indeed, it is less than ten years since the last of its buildings, an old log store-house, was torn down. In the construction of the Pennsylvania railroad, about 1850, a portion of its cinder-bank was exposed, and, by a little search, its cinder can still be found near the old site.

For nearly three score and ten years—to be accurate, sixty-five years—after the abandonment of the Shadyside furnace, there was no blast furnace in operation within the limits of Allegheny county, and this, notwithstanding there had been a most remarkable development in other branches of the iron industry, requiring large amounts of pig iron. The causes of this inactivity in the blast-furnace industry at Pittsburgh was probably the lack of ore and the almost universal use of charcoal as fuel in iron-making in Western Pennsylvania. Pittsburgh had no ore and but little wood for charcoal.
One item that has been seldom mentioned in the references to the furnace is that it was owned by a partnership. It is generally spoken of as the "Anshutz Furnace," and there is but little doubt that George Anshutz was the only practical furnace man in the concern. There were two other men associated with him, however—William Amberson, for whom Amberson Avenue is named, and Francis Beelen, former minister to the United States from the Austrian Netherlands, now Belgium. Francis, Baron De Belen Bartholf, and his son, Anthony, remained permanently in America and engaged in various business enterprises. For such purposes the baron used the name of Francis Beelen. He settled in the eastern part of Pennsylvania but he had real-estate interests in western Pennsylvania in and near Pittsburgh and sent his son Anthony there to manage his affairs. The blanket "power-of-attorney" to the son to make all real-estate transactions for him is on record at the courthouse in Pittsburgh. It is probable that Francis Beelen himself was never in Pittsburgh for any considerable period of time but was represented in the firm by his son, Anthony.

Both Mr. Amberson and Mr. Anthony Beelen played active and important parts in the early business life of the city. Advertisements in the Pittsburgh Gazette show that Anthony was later a partner of Ebenezer Denny in several enterprises, and about 1815 he was the owner of a foundry in Pittsburgh. The property on which the furnace was built belonged to Mr. Amberson, who sold a one-third interest in it to each of his partners. It is probable that Mr. Amberson did not take part in the actual running of the furnace. Mr. Anthony Beelen acted as clerk at the furnace. In the deed of sale of the property, Mr. Amberson is listed as "of Pittsburgh," while Mr. Anshutz and Mr. Beelen are listed as "of Pitt-township," where the furnace was located and which was not a part of Pittsburgh at that time.

Very little is known of the short stay of George Anshutz and his family at the Shadyside Furnace, but a picture can be drawn from some of the material evidences that were left by the family. That the Anshutz' brought many things with them from their old home is known from family tradition and some few tangible evidences of articles used in their home
at the furnace. Much that would have been treasured today was destroyed in the great fire of 1845 when the homes of several members of the family were burned.

Miss Louisa Miller of Blairsville has collected and preserved such articles. Among her treasures are a dinner plate, a soup plate, and a soup tureen of pewter with a pattern in the border. These are but reminders of the contents of the great chests brought over the ocean, for at one time, probably at the furnace, a complete dinner set of this pewter was in constant use. In Miss Miller’s collection there are some small carved picture frames, a Chinese game, and other articles brought from Alsace. There are no likenesses of George or his wife. Pictures of them both made in Alsace about the time of their marriage showed the young man in a green hunting costume with a hat decorated with an Alpine feather. Katherina in her picture wore the Alsatian dress with the famed Alsatian bow as the headdress. These paintings were brought with them to America and greatly treasured by one of the sons. In later years two of the young girls of the family went into gales of laughter at these quaint costumes of their grandparents, whereupon their uncle in stern displeasure burned the pictures, saying that no one, even descendants, could make fun of his father and mother. There is also a daguerreotype of this son, Christian Anshutz, who had lived in his childhood at the Shadyside Furnace, which shows strongly marked Alsatian features.

Although the furnace at Shadyside was not a fundamental factor in the development of the later furnaces and iron industries of Pittsburgh, the same is not true of its builder. George Anshutz went away from Pittsburgh in 1795, but the influence and the benefits of his skill as an ironmaster did not leave with him. In this same year, 1795, he was advertising castings in the *Pittsburgh Gazette*. These castings were being made by him as manager of the Westmoreland Furnace at Laughlintown. The stove that stands in the lobby of the Western Pennsylvania Historical Society building was made at the Westmoreland Furnace and possibly, as it dates from the early days of the furnace, by George Anshutz. He did not remain long at Laughlintown, but removed to the Juniata Valley, where he built, and for about thirty-five years operated, the Huntingdon Fur-
nace. This venture became a big success and was the largest producer of the famous Juniata iron. From the furnaces, forges, and other iron enterprises with which he was connected in the Juniata Valley, Anshutz continued to send pig iron, castings, and other products to Pittsburgh. By 1808 this business in Pittsburgh, handled through a broker, had grown to such volume as to justify the sending of Anshutz’ son, George, Jr., the writer’s great-grandfather, to take care of it, and there was no time thereafter, until he retired in 1832, that the iron of George Anshutz was not on the Pittsburgh market. He spent the balance of his life in Pittsburgh and died in 1837.

In justification of the good judgment of George Anshutz in leaving Pittsburgh, it is interesting to note that for over sixty years after the shutting down of the Anshutz Furnace, there was no iron smelted in Pittsburgh. Later, because of the development of cheap transportation, the ore, fuel, and other materials could be brought to the city profitably. Anshutz’ reasons for leaving Pittsburgh are not definitely known. The principal one undoubtedly was the fact that there was not a sufficient amount of ore in this locality to justify the furnace. For a time ore was brought by boat down the river from the Kiskiminetas Valley, but this obviously was an expensive proposition.

Although George Anshutz when he left Alsace as a young man must have been quite well off financially, there is no doubt that he lost a large part of his resources in the failure of the Shadyside Furnace. There is a family tradition to the effect that a great part of his loss was caused by the soldiers stationed in Pittsburgh in connection with the Whiskey Rebellion. The tradition is that he had a great amount of cordwood cut and stacked ready to be made into charcoal, and the temptation was too great for the soldiers, who took this cut wood to keep warm during the winter. This fact is noted in the writings of George H. Thurston, who, undoubtedly, got the story from the Anshutz family.

The early furnaces became largely self-contained communities, and much has been written of the life that centered around them. There is no doubt that a picture could be drawn from these accounts of the life at the Shadyside Furnace. In addition to the furnace and its accompanying
buildings, there must of necessity have been houses for the owner or iron-master himself as well as for the workmen employed. A store was another necessity. No record has come down to us of the size or building of these houses, but in accordance with the customs of that time, they were undoubtedly made of logs. Much of the life about these early furnaces has been preserved in the company books kept by the bookkeepers, who were always most important factors, but unfortunately there are no books of the Shadyside Furnace in existence.