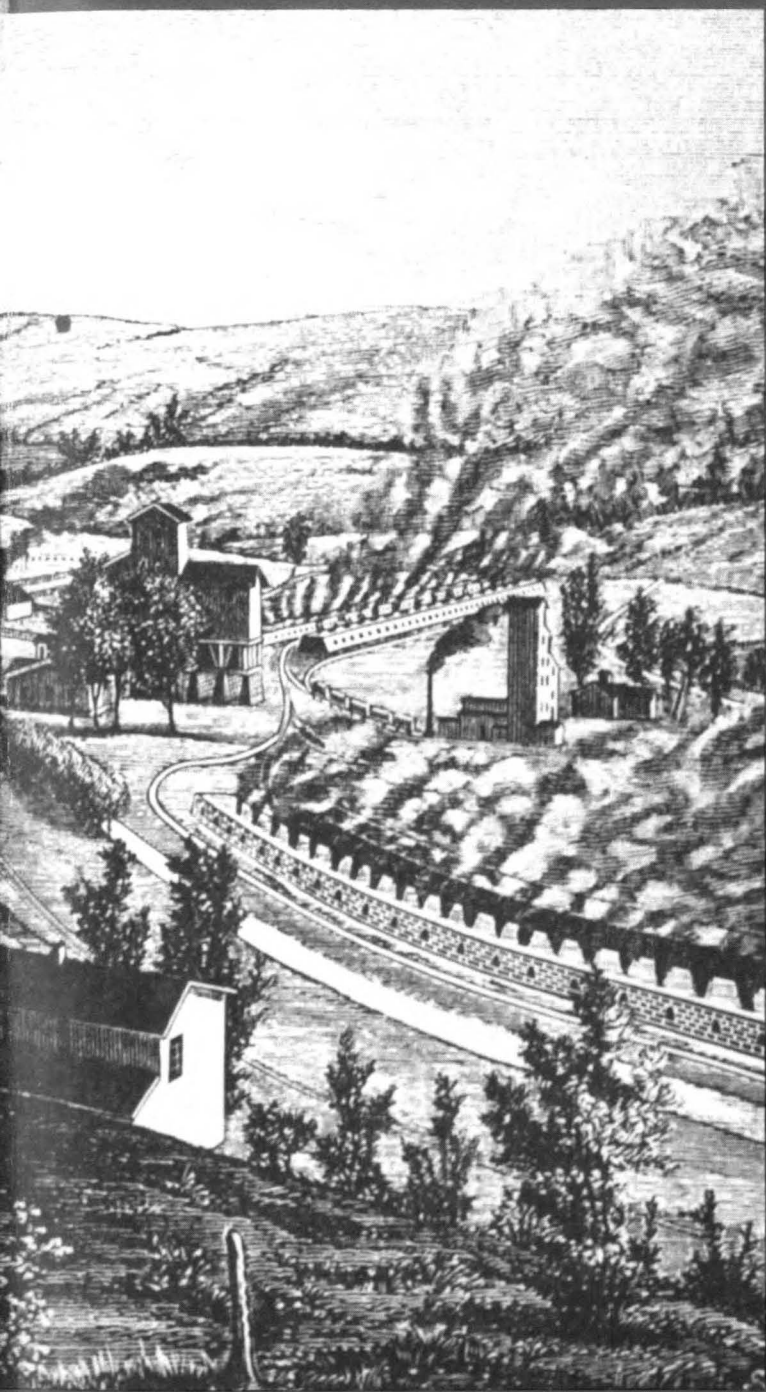


Shown in 1881, the year after the first was founded, Leisenring and West Leisenring in Fayette County, Pa., were named after the eastern Pennsylvania coal family that financed the complex. Coke was made there by burning soft coal from the region's enormous reserves in more than 1,000 "beehive" ovens, which later were vital in the coking empire of Henry Clay Frick.



'Like the Midnight Sun' — the Leisenring Venture in the Connellsville Coke Region, 1880-1889

by Kenneth Warren

THE GROWTH OF the area around Connellsville, Pa., referred to as the "Coke District" produced one of the most spectacular of all the specialised sub-regional economies in the United States. In the last decades of the nineteenth century, on the strength of generally strong demand for the coke essential to the surging iron and steel industry, the area forged its way to world industrial leadership.

In 1870 there were about 550 "beehive" coke ovens in the area (the domed, brick beehive being the industry standard); 20 years later the number of ovens was 16,000. In only a few more years Connellsville would be unchallenged as the world's leading coke district. A majority of the laborers were recent immigrants, but most of the capital and enterprise came from local or regional sources. However, in one instance, notable because it was the largest single venture in the district and also because its operations spanned years of critical changes in the industry, the initiative came from outside the region. This was the mining and coke oven enterprise operated by members or friends of the Leisenring family, and whose fortunes had been made in another major energy producing district — the anthracite coal fields of Pennsylvania almost 250 miles to the east.

Westward movement was a leading economic theme in nineteenth century America. This westward flow was due in part to different rates of growth among regional industries, but there was also a great deal of transfer from east to west of entrepreneurship, capital, managerial talent, and skilled and unskilled labor. In iron and steel making, for instance, the industry grew more rapidly in the trans-Appalachian region than in the East.

Expansion of existing plants and the formation of new companies were both concentrated in the West, but there were important cases of transplanted enterprises. Sometimes a whole business moved; in other instances, western branch plants became more important than their eastern parents. Examples are New England wire or fastenings companies, whose midwestern subsidiaries

Kenneth Warren has lectured in the field of industrial history at the University of Oxford and is now an emeritus fellow of Jesus College, Oxford, England. He is the author of a book and numerous articles on the American steel industry. His study of Henry Clay Frick's business career, *Triumphant Capitalism: Henry Clay Frick and the Industrial Transformation of America*, will be published in 1995 by the University of Pittsburgh Press. The author acknowledges with thanks the help of Susan Hengel, head of the Imprints Department of the Hagley Museum and Library, Wilmington, Del. The author is currently researching the development of the Connellsville Coke Region and he wishes to request that any reader with original or secondary source material contact him at Jesus College, Oxford, England.





In stark contrast to the idealized drawing on the previous page is daily reality at Leisenring. Homes near the ovens were for workers; managers running the site for Edward Leisenring, above, lived on the rolling hills further from the smoke.

became their main operations. Another is Abram Hewitt. By the late 1860s the eminent eastern ironmaster had realized his operations would grow and profit more if moved west from Trenton, N.J., and therefore closer to new markets and increasingly more efficient suppliers. He failed to make the move, and paid the price with plants that gradually became unprofitable. At the end of the 1890s, desperately struggling to survive in the keenly fought rail trade, the directors of Lackawanna Steel of Scranton moved to Buffalo, which had better access to western ores and markets.¹ In oil and gas there were even greater shifts early in the twentieth century. Mostly the movement brought success and permanency. In the instance considered here the plant would survive but not under Leisenring ownership.

Anthracite coal mining began to be important in eastern Pennsylvania in the 1820s. It then grew rapidly along with its Atlantic Coast industrial and residential markets. After 1839 a further boost was derived from the establishment of the nation's first iron industry using mineral fuel in smelting. By 1870 the value of anthracite production centered in this relatively small area of eastern Pennsylvania was only slightly less than the value of the nation's mines producing the softer and more common bituminous coal. In certain respects, however, conditions would soon become less favorable for anthracite mining. There were serious strikes and other widely publicized labor troubles in the mid-1870s, which caused supplies to tighten. Many eastern ironworks had to bring in coke (made from bituminous coal) for fuel. In 1875, for instance, coke from the Connellsville region was railed 385 miles to New Jersey blast furnaces, where it was mixed with three times its weight in anthracite. To Harrisburg the freight charge on this coke was \$3.50 per ton; in the Lehigh Valley the delivered price was \$6.50 per ton.² The necessities of the times were balanced by compensating advantages. Ironmasters found that coke improved the quality of their iron. Moreover, because it burned more rapidly than anthracite, they could drive the furnaces harder and thereby increase output.

In the East over the next few years, as iron production also drifted west of the Alleghenies, ironmasters increasingly switched to coke to increase productivity. In only five years between 1873 and 1878, anthracite lost its overwhelming supremacy as a smelting fuel; by the end of the period, coke and soft coal had edged ahead of anthracite.³ On the mixed charges made popular during times of lean production of anthracite, full information was first published in 1883, when the tonnage smelted with anthracite and coke was nearly even with that made with anthracite alone. The next year was one of recession in the iron trade generally; in these difficult conditions the competitiveness of mixed charges was proved beyond doubt. Output of anthracite fell sharply: furnaces mixing anthracite and coke went up by more than 45 percent. There had already been an important response to the changing situation in furnace fuels, a condition that the Leisenring enterprise in eastern Pennsylvania most likely recognized.

So far it has proved impossible to deduce with certainty the prime motivation for the Leisenrings' venture. The family had immigrated from Germany to White Haven in the lower Lehigh River Valley in the middle years of the eighteenth century. A

grandson moved upriver to Mauch Chunk in about 1830, and from 1835 to 1838, one of the Leisenring clan, a great grandson of the original immigrants, was working on the extension of the Lehigh Canal northward to White Haven. John Leisenring, who had been born in Philadelphia in 1819, then entered the anthracite coal business at Summit Hill in the early 1840s. He became chief engineer and general manager of the Lehigh Coal and Navigation Co., and engineered the Lehigh and Susquehanna Railroad, which provided a rail connection across the whole width of the anthracite fields.

Eventually John Leisenring amassed a fortune from his various eastern enterprises and especially from the coal mined in areas tributary to the Lehigh Valley. During the 1870s he began to recognise the limitations of the anthracite fields and the opportunities which lay elsewhere. His contact with leading eastern ironmasters such as David Thomas and his sons made him realise that anthracite would be progressively ousted by coke as a furnace fuel. Leisenring responded by setting in train a careful survey of the coke districts of the Appalachian plateau. Associated with him in this enterprise were other eastern capitalists, including representatives of coal mining and shipping, and of the iron trade.

In southwestern Pennsylvania they were helped by the man who must be regarded as the joint initiator of their enterprise. Edward Hyndman was of Scotch-Irish descent and was born in Mauch Chunk in 1844. He became a civil engineer engaged in the construction and operation of railroads. From 1869 he was superintendent of the Lehigh and Susquehanna Railroad, with whose construction John Leisenring had been involved. Three years later he left his office to become in turn chief engineer and superintendent of the Pittsburgh and Connellsville Railroad. These positions provided him with exceptional opportunities to assess the coke and other trades of this district at a crucial stage of their development.

Hyndman was enterprising in buying up industrial property in the Coke Region during the depression years of the mid-1870s, and later, when Abraham O. Tinstman, who had been involved in Connellsville coke for 20 years, fell into financial difficulties, he took about 3,500 acres of prime coal land off his hands. He acquired 4,500 acres immediately next to this from other parties. Having amassed this large holding, Hyndman seems to have been the one who took the initiative in organising the Connellsville Coke and Iron Co. in January 1880. John Leisenring was president, and other of Hyndman's eastern anthracite friends became associated. He resigned from his railroad superintendency and was appointed general manager. The capital of the new company was over \$1 million. Their coal lay in one large block more or less equidistant from the two outcrops of the narrow basin of the prime coking seam — no more than 4 miles apart — and midway between the Youghiogheny River and Redstone Creek. A proposed railroad from Brownsville to Vance Mill and New Haven was to bisect it. Clearly this was a prime mineral property, and yet was affordably priced at about \$125 an acre.⁴

Connellsville Coke and Iron embarked on a purposeful development program. Within eight weeks of organisation, sinking of two shafts began, one at each end of the property. The

machinery installed was said to be similar to that used in large-scale eastern mining. Batteries of beehive ovens were built at each place, 4 1/2 miles apart, and Leisenring and West Leisenring were established as company towns for mine and oven labor. There was even a suggestion that ironworks were planned, though nothing materialised in that direction. Leisenring No. 1 shaft was completed and coke was made at the associated ovens in April 1881. By 1882 two hundred ovens were at work and 200 more were being built. Leisenring No. 2 mine and coke plant opened in 1883. By Spring 1886 each location had 500 ovens. During April that year another 500 acres of coal were purchased; two years later coal was struck in a new shaft there. Most ambitious expansion schemes were written up in the technical press, extending to 2,500 ovens and perhaps "eventually" to 5,000.⁵

For a variety of reasons achievements were less dramatic. Demand for coke fluctuated with the uncertainties of the iron trade, on whose prosperity, in contrast with anthracite, it was almost wholly dependent. Production increased, but capacity went up still more rapidly and this meant an unending struggle to secure good prices. During the depression years 1875 to 1877 the annual output of Connellsville coke averaged 769,000 tons. During the first half of 1878 it rose to an annual rate of almost 1.08 million tons. In 1880, as Connellsville Coke and Iron started No. 1 shaft and its first ovens, shipments were more than double that level. Coke shipments increased by more than 60 percent during the next three years, but the average price per ton fell 36 percent, so that gross revenue during this period of soaring production ended only 2.55 percent ahead of the 1880 level. Iron production during 1883 was the second best on record, and coke production was the highest ever, yet the year, noted a trade review, was one "of exceptional depression."⁶

Connellsville Coke and Iron promoters were disappointed by returns on their immense outlay. In contrast some of their rivals had acquired coal lands and built ovens earlier when costs were lower; other plants were operated by iron companies; or, as with the H.C. Frick Coke Co., and Frick's separately owned South West Coal and Coke Co., rival plants had financial connections with iron, and therefore more assured outlets.

In addition to the general operating difficulties, Connellsville Coke and Iron had to face a series of specific problems. The first was a natural disaster, but may have owed something to the fact that as a newcomer to the region, the management was unused to local mining conditions. A fire damp explosion on 19 February 1884 killed 19 miners, the first accident of this kind and size in the region. Soon afterwards there were crises in the organisation. Hyndman resigned as general manager, though he remained as consulting engineer. He also served as general manager of the Pittsburgh and Western Railroad, but in June 1884, at only 40 years of age, he died. Within two months, the 65-year-old John Leisenring was also dead. The new president was his 39-year-old son, Edward Barnes Leisenring, trained at Philadelphia Polytechnic College. His "superior knowledge" of coal operations had helped him to a fortune first as a worker for the Lehigh Coal and Navigation Co. and then in anthracite on his own account. He was said to possess "...more than ordinary ability, energy, thoroughness and good judgement."⁷

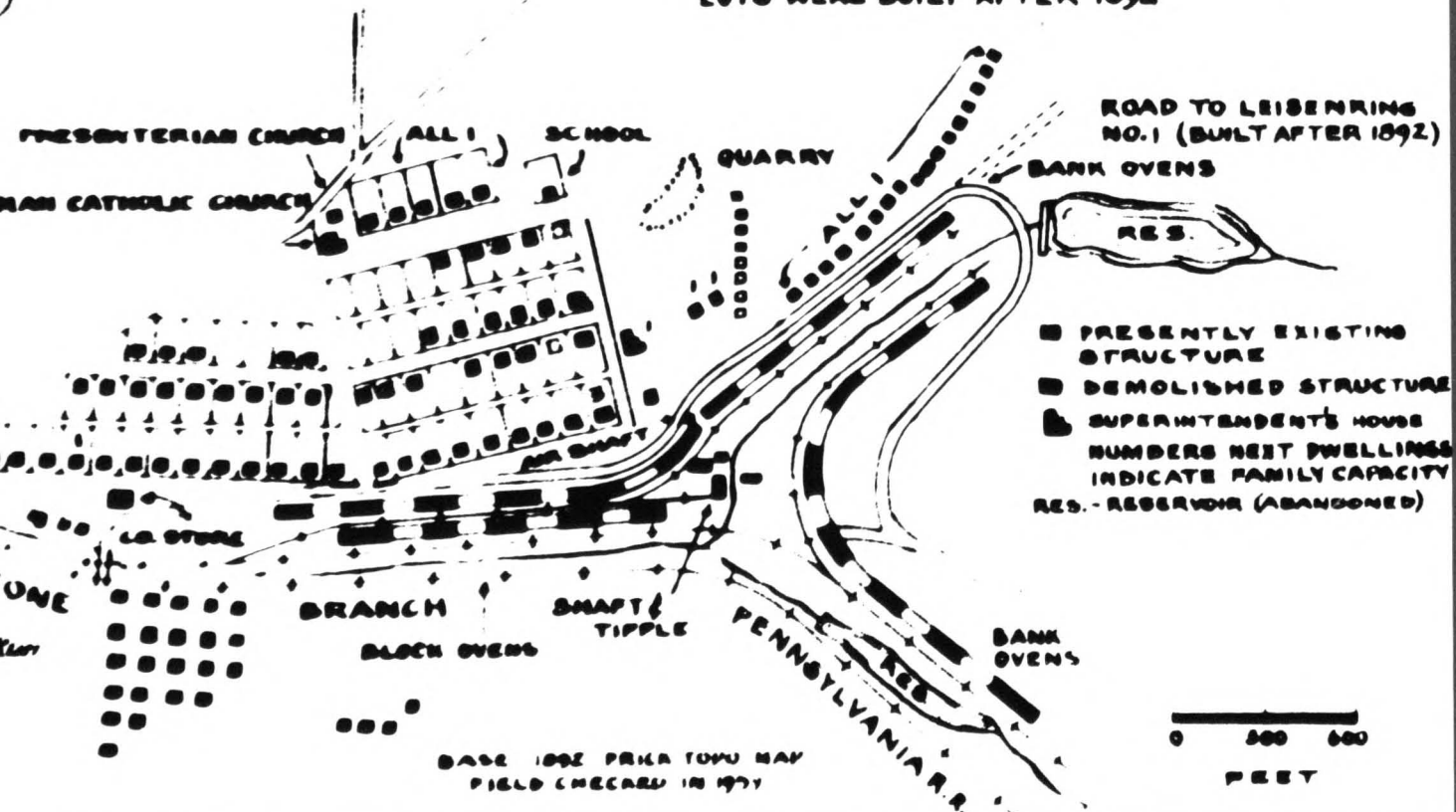


A strong back and a wheelbarrow were essential equipment for coke workers (here at an unidentified site in the Connellsville area, mid-1890s). More skill and experience were required to determine when the coal had cooked long enough in the ovens to become coke. Then it was loaded into rail cars and, typically, carried to river barges for shipment. Coke, limestone, and iron ore are the key ingredients for modern iron production — the first stage in steelmaking.

LEISENRING NO.2

RECTANGULAR SHAPE HILLSIDE SITE

ALL DWELLINGS NOT SITUATED ON DELINEATED
LOTS WERE BUILT AFTER 1892



The most serious problems continued to stem from uncertain demand, persistent over-capacity and difficulty in finding remedies. Ownership in the industry was fragmented, so that efforts to associate the producers to secure better prices, though they promised well, proved difficult to maintain and liable to sudden failure. If prices were too low, operations were unprofitable; when pushed up too much, they encouraged new entrants to the trade, or ironmasters looked to interests in the coke prospects of other areas, such as across the state line into West Virginia or further south along the New River. Another possibility, increasing with the years, was that higher prices would speed the introduction of byproduct ovens, the beehive's key technological foe. Such circumstances made it difficult to maintain reasonably profitable prices. Bigger firms took the lead in the attempt.

In 1884 the four largest producers, H.C. Frick and Co., McClure Coke, Schoonmaker and Connellsville Coke and Iron, formed the so-called Coke Syndicate, controlling about half of the ovens in the district. Eighteen other firms with about one-seventh of the ovens were linked in the Connellsville Coke Producers' Association, three independents had a further 9 percent, and the remainder were controlled by companies having their own blast furnaces.

The pooling arrangements succeeded in raising prices as iron production rose, but in conditions which were extremely difficult. A major factor in success was the containment of wages. Efforts in this direction inevitably led to labor troubles. There was a strike in the region early in 1886. As it ended Leisenring workers asked J.K. Taggart, their superintendent, to discharge a man who had stayed at work. When he refused, employees struck again.⁸ The next year the syndicate broke as a result of desertion by the H.C. Frick Coke Co. in a united stand against another strike-backed demand of miners and coke drawers for higher wages. Until then Edward Leisenring had been pleased with the "decided stand" which the syndicate had taken. He was implacably opposed to the aspirations of working men to share in their successes, but believed in a firm rather than violent policy. Leisenring wrote to Frick a few days after Frick had received the first intimation that the Carnegie interests would force him to give way, to ensure supplies of coke for their furnaces, "[W]hile I believe we should have made this fight last winter, when it would have been made shorter, I see nothing else to do but fight out the matter until the men come to terms. There is no other way to prevent the continuous demands and unreasonable and petty strikes which have made the coke business so annoying. The men, flushed with success heretofore, must be whipped, if we want any peace hereafter.... I believe in a 'still fight'; it may take longer but in the end men will be more disgusted with their leaders than if we conducted an aggressive war."⁹

While struggling to contain wages, and hoping for profits despite uncertain and oscillating prices, the companies were pressed by customers for cheaper coke. Late in 1887 Leisenring informed his superintendent that he had seen Robert H. Sayre of the Bethlehem Iron Co., of which he himself was a director. Sayre asked for a cut in the price for coke: "As he jokingly said, he wished me to think over the matter when I said my prayers, and



Typical worker housing, above, at Leisenring. Dozens of coke towns smoldered across Fayette and Westmoreland counties from about 1865 through the early 20th century. Many were self-sufficient industrial units, with a rock quarry or brick factory for building ovens, and a mine underneath to supply coal for the ovens.



Company store, above, c. 1905, after Frick bought the complex; the town, right, in the 1960s, approximately a decade after coke production had ceased, owned by U.S. Steel.

see whether I would not be moved to change the figures. I guess we will hear nothing more about it.”¹⁰ Early in 1888 he commented on a major strike in the anthracite region. It meant more demand for coke, but also made Leisenring discontented with the scale and conditions of their local trade. The Reading company then had 44 collieries idle, but normally shipped an average of 40,000 tons a day, and “do twice as large a business as the entire Connellsville region.... It therefore seems to me very strange that the coke operators should be fighting among themselves continually and not be able to regulate wages and prices so that there is a decent profit in the business.”¹¹

Such comments point to an increasing disenchantment with their Western Pennsylvanian venture, which Leisenring continued to control from his home in Mauch Chunk. Many, though not all, of his wide range of other interests were nearer at hand. In 1887 the family negotiated with farmers in the Lehigh region to extend their anthracite operations. Eventually he was a director of eight anthracite coal companies. He was interested in the slate and lumber business, and had a large holding of Bethlehem Iron Co. stock. Altogether he was partner, president, director or largely interested in some 60 companies and had a fortune of several million dollars. Some of his investments were reckoned to hold alluring prospects. In 1881 his father and Hyndman had leased over 63,000 acres of coking coal and acquired iron ore deposits in southwestern Virginia. They then organized the Virginia Coal and Iron Co. and the Holston Steel and Iron Co. The former acquired control of a partly built railroad from Bristol which extended to the mineral tract. Depression and the death of both men interrupted these plans, but Edward Leisenring was still interested. When the Thomas family spread its investments in iron making from eastern Pennsylvania to mineral deposits in the South, Leisenring became a director and eventually president of their Pioneer Mining and Manufacturing Co. of Birmingham, Ala. In short, much besides coke competed for his attention. With labor troubles, marketing difficulties — made worse by the undercutting tactics of H.C. Frick Coke — and even geological problems at No. 3 shaft, he became so disillusioned that he was willing to withdraw from Connellsville.

Henry Clay Frick, cousin of Abraham Tinstman, from whom the first coal lands had been bought, was waiting in the wings.

Little is known about the contacts between Leisenring and Frick. In business they were rivals, but they had cooperated in the Coke Syndicate. As early as December 1885 Frick offered to lease the Connellsville Coke and Iron properties. At that time, after consulting fellow stockholders, Leisenring replied that “...the property was bought as an investment, has been developed and is in excellent shape in every way to carry and we all believe it will increase in value from year to year.” The only proposition they would entertain would be an outright sale.¹² Three years later, after the 1886 strike, another struggle and the breakup of the syndicate in 1887 and extremely low prices the following year, he was ready to consider new offers. He reported to Taggart in October 1888 that he had seen Frick in Philadelphia and found him “very friendly to us and he and I understand one another perfectly.” He hoped Frick would work with them and become a stock-



holder. Using this as an opportunity to evaluate their properties, Frick obtained permission for Thomas Lynch, his general manager, to look them over. Lynch's report was not unfavourable except about the ovens, which he found badly constructed of very poor bricks. Press reports that a controlling interest had been sold to Frick were "without one iota of truth..." for Leisenring's idea was not that he should control them, but that by acquiring the shares of "some outside small holders ... get [Frick] interested in that way."¹³ Frick was hardly the man to be satisfied by that sort of involvement and refused to be a mere stockholder. Meanwhile Leisenring was feeling the call of the "hundreds of thousands of acres" of cheaper coal lands further south in Virginia, West Virginia, Kentucky and Tennessee.¹⁴ In 1889 Frick offered to buy the Leisenring investments in the Coke Region for \$3 million, a sum roughly equal to their development costs, plus interest. Six months of negotiations followed. In May an offer to pay in bonds was refused. At last, on 21 June, the Frick board was able to approve the purchase. Three weeks later Leisenring informed Taggart that the property should be handed over to Joseph H. Paddock, Frick's representative, on the evening of 31 July. As the next day's *Engineering and Mining Journal* put it, Frick's firm had "gobbled up" Leisenring.¹⁵ Frick was euphoric. On 25 July he informed Carnegie: "Finally closed with Mr. Leisenring at \$3 million and \$25,000 for personal property and coke." Two days later he wrote: "Was all over Leisenring property yesterday and, like the midnight sun, 'it's all there,' and a splendid property it is. It will require the expenditure of considerable money to put it in the excellent condition of the properties of the Frick Coke Company, but we will get it into that condition as soon as possible." Even for Frick this was a major acquisition, increasing company lands by 66 percent and its ovens by 27 percent.¹⁶

A change in ownership did not end the colorful, sometimes tragic history of the Leisenring operations. Labor troubles continued at the site. In the 1891 strike, No. 2 mine shaft was surrounded by a mob day and night. Management responded with vigor, including the serving of about 1,000 notices to vacate company houses. At No. 3, three hundred strikers occupied the hills surrounding the town.¹⁷ In Spring 1894, during another widespread dispute, the superintendent at No. 2 was stoned off the coke yard.

Meantime Edward Leisenring had little enough opportunity to develop his other mineral properties. On 20 September 1894, at

age 49, he died at the German spa of Homburg, the failure of his health being attributed to his "incessant" labors.¹⁸ The material legacy of the Coke Region enterprise of his family and other eastern capitalists remained. Together the three Leisenring operations had been the largest coke producers in the region, with a total of 1,504 ovens. From the end of World War I the Connells-ville coke district was in decline, but the ovens which had been built by the Leisenrings were in use until after the Korean War boom years for steel.¹⁹ Even now the local landscape is marked by the relics of their short but illustrious industrial history. ❁

Notes

¹ K. Warren, *The American Steel Industry 1850 to 1970* (Pittsburgh, 1989), passim.

² V.S. Clark, *History of Manufactures in the United States* (New York, 1929), vol. 2, 251; *Bulletin of the American Iron and Steel Association*, 2 April 1875.

³ In 1879 pig iron production in Pennsylvania for the first time exceeded the level of 1872. In 1872 and 1879 iron production in the Lehigh Valley district was 450,000 and 456,000 tons respectively; in two western districts of the state, Allegheny County and the Shenango River Valley, it totalled 271,000 and 481,000 tons respectively in those same two years. American Iron and Steel Association statistics.

⁴ By comparison, at almost the same time the Missouri Furnace Co. and the Stewart Iron Co. of Sharon bought much smaller blocks near Uniontown for \$200 and \$250 an acre respectively. Notes on the Leisenring group in the Hagley Library (Wilmington, Del.), Accession 1764; *American Manufacturer* 13 Feb. 1880; on J. Leisenring see A. Mathews and A.N. Hungerford, *History of the Counties of Lehigh and Carbon in the Commonwealth of Pennsylvania* (Philadelphia, 1884), 706-708; on E.K. Hyndman see Ellis, *History of Fayette County, Pennsylvania* (1882), 409.

⁵ *American Manufacturer*, 30 July 1886; *Engineering and Mining Journal*, 24 April 1886, 307.

⁶ There were 3,668 ovens in the district at the end of 1877, 7,211 at the close of 1881 and three years later 10,176. *Connellsville Courier*, passim.; J.D. Weeks to H.C. Frick, 14 May 1892; *Engineering and Mining Journal*, 12 Jan. 1884, 19.

⁷ *Engineering and Mining Journal*, 23 April 1884, 150; *Bulletin of the American Iron and Steel Association*, 3 Oct. 1894; similar accounts of the life of E.B. Leisenring are to be found in H. Hall, *America's Successful Men of Affairs* (New York, 1896), II, 494, and E. Spofford, *Encyclopedia of Pennsylvania Biography* (New York, 1928), XVII, 45, 46.

⁸ *Engineering and Mining Journal*, 27 Feb. 1886, 155.

⁹ E.B. Leisenring to H.C. Frick, 19 May 1887.

¹⁰ E.B. Leisenring to J.K. Taggart, 23 Feb. 1887.

¹¹ E.B. Leisenring to J.K. Taggart, 20 Jan. 1888.

¹² E.B. Leisenring to H.C. Frick, 9 Dec. 1885.

¹³ E.B. Leisenring to J.K. Taggart, 8 and 30 Oct. 1888, and 24 Nov. 1888.

¹⁴ E.B. Leisenring to J.K. Taggart, 12 April 1889.

¹⁵ Minutes of H.C. Frick Coke Co., 21 June 1889; E.B. Leisenring to J.K. Taggart, 18 June and 12 July 1889; *Engineering and Mining Journal*, 13 July 1889, 37.

¹⁶ H.C. Frick to A. Carnegie, 25 and 27 July 1889.

¹⁷ *Bulletin of the American Iron and Steel Association*, 22 April 1891.

¹⁸ *Bulletin of the American Iron and Steel Association*, 3 Oct. 1894.

¹⁹ S.H. Heald, ed., *Fayette County, Pennsylvania, an Inventory of Historic Engineering and Industrial Sites* (Washington, D.C., 1990), passim.

Photograph Credits

Prairie School Architecture in Pittsburgh

- Page 4 Courtesy Northwest Architectural Archives, University of Minnesota
- Page 5 *Western Architect* 19:1 (Jan. 1913), 3.
- Page 6 *The Brickbuilder* 12:9 (Sept. 1903), plate.
- Page 7 Pittsburgh Architectural Club, *Catalog of the Tenth Exhibition* (Pittsburgh, 1915), plate. (Hereafter, PAC)
- Page 8 *Inland Architect and News Record* 44:8 (Aug. 1904), plate.
- Page 9 PAC, *Catalog of the Eighth Exhibition* (Pittsburgh, 1913), plate.
- Page 10 PAC, *Catalog of the Eighth Exhibition*, plate.
- Page 11 *Western Architect* 17:12 (Dec. 1911), plate.
- Page 12 PAC, *Catalog of the Eighth Exhibition*, plate.
- Page 13 PAC, *Catalog of the Ninth Exhibition* (Pittsburgh, 1914), plate.
- Page 14 Historical Society of Western Pennsylvania Archives
- Page 15 PAC, *Catalog of the Fourth Exhibition* (Pittsburgh, 1907), plate.
- Page 16 Carnegie Mellon University Archives
- Page 17 Carnegie Mellon Archives

- Page 18 *Inland Architect and News Record* 50:1 (July 1907), plate.
- Page 19 Top: *Inland Architect and News Record* 50:1 (July 1907), plate; below: *Ausgeführte Bauten und Entwürfte von Frank Lloyd Wright* (Berlin, 1907), plate 56.

Early Planemakers in Pittsburgh: A Professor, a Soldier, a Runaway & Craftsmen All

All photographs by Matt Bulvony Photography, Pittsburgh, except page 25, from the *Pittsburgh Directory*, 1819.

'Like the Midnight Sun' — the Leisenring Venture in the Connellsville Coke Region, 1880-1889

- Page 34 Franklin Ellis, ed., *History of Fayette County, Pennsylvania* (Philadelphia, 1882).
- Page 36 Courtesy Patchwork Voices Project, Coal and Coke Museum, Pennsylvania State University-Fayette, Connellsville, Pa.
- Page 37 Ellis, ed., *History of Fayette County*.
- Page 39-41 Patchwork Voices Project, PSU-Fayette.
- Page 42, 43 Courtesy John K. Gates, *The Beehive Coke Years* (Uniontown: published by author, 1990).



Historical Society
of Western Pennsylvania

Keeping House: Women's Lives in Western Pennsylvania, 1790-1850

by
Virginia K.
Bartlett



Virginia K. Bartlett, former executive at WGBH-TV in Boston, is also the author of Pickles and Pretzels: Pennsylvania's World of Food (University of Pittsburgh Press, 1980). She lives in Hingham, Massachusetts.

Keeping House: Women's Lives in Western Pennsylvania, 1790-1850

tells how the daughters, wives, and mothers who crossed the Allegheny Mountains responded to the hardships they encountered as they established homes for themselves and their families on the frontier and in town. Inspired by hand-written books of recipes and remedies which are now part of the Archives of the Historical Society of Western Pennsylvania, *Keeping House* is richly illustrated with drawings and photographs. Foreword by Jack D. Warren, University of Virginia.

Publication of *Keeping House* was funded by a grant from the H. J. Heinz Company Foundation and copublished by the Historical Society and the University of Pittsburgh Press. 200-page paperback \$19.95.

"A poignant, yet pragmatic, picture of women's lives"—Suzanne Martinson, Pittsburgh Post-Gazette

Available through the Historical Society of Western Pennsylvania. Call Holly Dobkin, (412) 338-9006.

