

TWELVE BLOCKS:

A Study of One Segment of Pittsburgh's South Side,
1880-1915

JOSEPHINE McILVAIN

METAL and glass have been dominant forces in the social and economic growth of Pittsburgh's South Side in the late nineteenth and early twentieth centuries, and the rapid expansion of these industries was made possible in large part by the immigrants of many nations. The history of Pittsburgh's industrial development and the men who controlled it has been generally well documented, but few attempts have been made to describe the workers who struggled to earn the dignity of economic security. While a corporation may leave records of financial dealings and productivity, little data have survived to describe the lives of the men, women, and children who made such productivity possible. This study attempts to use some of the public records which do exist to examine population changes in a small part of Pittsburgh's South Side between 1880 and 1915.

This thirty-five-year period saw the decline of the iron and glass industries, with their emphasis on skilled workers (assisted by young boys and women) and the rise of the steel industry, which demanded masses of unskilled workers. To examine what effects such a change may have had on the population of Pittsburgh, families living in a twelve-block area of the old Twenty-sixth Ward (now the Fifteenth Ward) were first identified in the 1880 manuscript census, then traced through the Pittsburgh city directories of 1889 and 1915, the property tax assessment records for the latter two years, and a city plat map of 1901.

This area was not intended to be a representative sampling of the general population of the city as a whole, or even of the South Side; the twelve blocks included were simply the result of a narrowing process used in order to reduce the population studied to a manageable number. The methodology, however, can be considered representative, since public records formed the basis of the conclusions reached and they can be employed in similar studies of other areas of the city.

Pittsburgh in 1880 was a growing industrial city. Layers of soot

Josephine McIlvain earned a B.S. in education at the University of Pittsburgh and an M.A. in history from Carnegie-Mellon University. She presently teaches at Reizenstein Middle School in Pittsburgh.—Editor

from its factories coated the homes of its 156,389 people. On the south side of the Monongahela River, at the base of the hills which rise abruptly a half mile from the river's edge, lay almost two miles of heavily populated manufacturing districts — the boroughs of South Pittsburgh, Birmingham, East Birmingham, and Ormsby, all of which had been annexed by the city in 1873. Here the 1880 census taker found "countless manufactories for iron, steel, and glass. The noise of their machinery never ceases, and dense volumes of smoke incessantly rise from their chimneys."¹ The South Side had been an industrial area since the early nineteenth century, and by 1837 it contained nine glass factories, seven ironworks, a foundry, and a white lead factory, all employing some 900 men and producing goods worth \$2,500,000.²

The area has roots deep in Pittsburgh's past. John Ormsby, an Irishman who had come to Western Pennsylvania with Brigadier General John Forbes, had received this land as a grant for his services in building Fort Pitt. His son-in-law, Nathaniel Bedford, laid out the town of Birmingham in 1811. In 1849, neighboring East Birmingham was incorporated as a borough. Here Ormsby's grandchildren occupied mansions with gardens stretching down to the river, only a few blocks from the foundries and glasshouses and the small homes of their workers. Eventually those mansions gave way to the expanding industries of the area, and today only the street names — Sidney, Wharton, Josephine, Sarah — offer a reminder of East Birmingham's founding family.³

The area chosen for this study lies between Eighteenth and Twentieth streets, from the Monongahela River to East Carson Street. A curve of the river broadens the valley here, at the site of East Birmingham, and Carson, Sidney, and Wharton streets were widened accordingly, with narrow alleys added between them. Small, neat houses lined both streets and alleys, fronting squarely on the sidewalk; they were rectangular, two-story boxes exhibiting to the public eye a door and two long, narrow front windows. The 1880 census referred to such structures as examples of good housing for workers. Behind those doors lived generations of glassblowers, puddlers, laborers, and their wives, widows, and children. Nearby were the fac-

1 U.S., Census, *Tenth Census of the United States, 1880*, 22 vols. (Washington, 1883), 18: 863.

2 Leland D. Baldwin, *Pittsburgh: The Story of a City* (Pittsburgh, 1937), 247.

3 *Ibid.*, 246.

tories and stores in which they worked, and the churches and taverns where they spent leisure time.

The first and most detailed picture of the area appears in the 1880 manuscript schedule census. Jarrett, Duvall, and Plank, enumerators, recorded the inhabitants of each dwelling, their ages, places of birth, literacy, and employment or lack of it. In the 286 houses of these twelve blocks lived 1,777 people — 902 men and women and 875 children. Forty-four percent of the adults but less than 3 percent of their children were foreign born, indicating that these immigrants were well settled by 1880. Almost 60 percent of them had come from some part of the German Empire,⁴ although German immigrants made up only one-third of the total population of Pittsburgh at this time.⁵ In this part of the Twenty-sixth Ward were 238 Germans, 64 Irish, 69 English, Welsh, and Scotch, and a few French and Swiss.⁶ One-fourth of the first-generation Americans were of German descent, making this area one of the predominantly German sections of the city.

Some of these workers had in all probability come to the area with specific skills. A group of ten Welsh iron puddlers undoubtedly found jobs easily, for the works of the Oliver Wire Company had expanded from Tenth to Seventeenth streets on the South Side, while a few blocks to the east Jones and Laughlin produced bar, hoop, and sheet iron. The majority of immigrant workers, however, settled here simply because unskilled work was available. Four sand and gravel companies and several nearby sawmills and iron foundries along the riverbank needed strong backs and arms to do the heavy work done by machines today.

Recent immigrants found their way into unskilled jobs on the South Side. The low wages, long hours, and high unemployment rate of these unskilled laborers made living close to the factories highly desirable, despite the crowded conditions and smoky surroundings. The daily fare of the Carson Street passenger railway (five cents) would have been beyond the means of most workers in this area, about 60 percent of whom were unskilled German, Irish, British, and French

4 The changing boundaries of Germany and France, combined with the census taker Duvall's erratic spelling, created a problem in determining whether some birthplaces were French or German. Duvall's "Elsas," for example, was assumed to be Alsace, but Birom, Byrom, or Byram remained a mystery. In general, these places have been counted as German.

5 U.S., *Tenth Census, 1880*, 1: 538, Table 16.

6 The only Eastern Europeans found in this area, Gustav and Matilda Gundlah, ran a "candey store" according to Duvall. Both were born in Poland, and although Gustav was forty-one in 1880, his three children were aged eight, four, and two, and had been born in Pennsylvania.

immigrant laborers. Of the first-generation Americans, 70 percent were glassworkers. About 12 percent of both immigrants and first-generation men worked in the iron industry, many of them in nail and tack factories, possibly including the one on nearby Merriman Way. A higher percentage of skilled jobs went to second- and third-generation Americans. Fifty-five percent were glassworkers, 25 percent ironworkers, and only 19 percent laborers.⁷ These figures indicate the role of the glass industry, dominant on the South Side at that time, in helping to provide the upward mobility sought by the immigrants.

The importance of the glass industry is further revealed by the city directory for 1879-1880, which listed some thirty glass companies on the South Side — four within the twelve blocks studied. Of the 583 working men, women, and boys in the area in 1880, the largest single group, 169, were glassworkers. Glass had emerged as one of the early industries of Pittsburgh because the city had access to large sand and limestone deposits and possessed plentiful coal to provide the necessary fuel. General James O'Hara and Major Isaac Craig established Pittsburgh's first glass factory in 1797, across the Monongahela River from the Point. By 1837, nine glasshouses were located on the South Side, and, despite setbacks during the 1873 depression, the industry remained a vital part of the South Side economy.⁸ Firms such as Adams and Ripley, specializing in German flint glass, so-called because of the large amounts of lead it contained, turned out goblets, molasses cans, lamp chimneys, and fruit jars. The Doyle Glass Company produced French flint glass, advertising "special attention to annealed sun chimneys."⁹

Among the developments which strengthened the city's glass industry in the 1880s were the pioneering efforts of Philip Arbogast,¹⁰ whose ability to press "a blank including the neck of a bottle" helped make possible the development of the bottle-blowing machine.¹¹ Arbogast had earlier built a furnace for the Pittsburgh firm of Challinor and Taylor which was the largest ever constructed. His

7 U.S., Tenth Census, 1880, Manuscript Schedule for Ward 26, Pittsburgh, Pa., 1880.

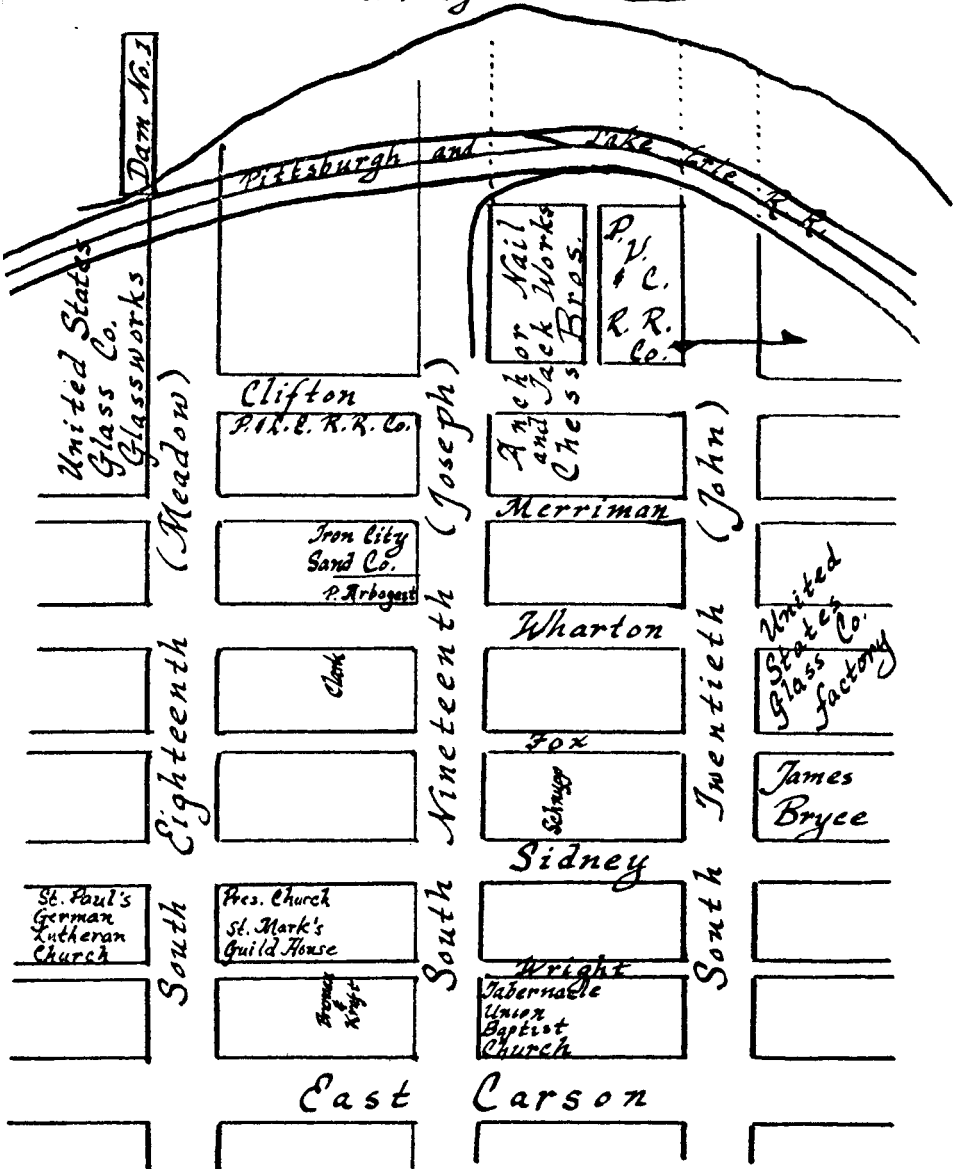
8 Frank C. Harper, *Pittsburgh of Today: Its Resources and People*, 5 vols. (New York, 1931-1932), 2: 602.

9 George H. Thurston, comp., *Directory of Pittsburgh and Allegheny Cities, 1869-70* (Pittsburgh, 1869).

10 The 1889 city directory lists Arbogast, his widow, and two sons, both glassworkers, living at 46 Nineteenth Street, a two-story brick house with mansard addition, valued at \$1,500, which they rented from John Hoffman, Jr.

11 Harper, *Pittsburgh of Today*, 2: 608.

Monongahela River



adapted from Plat Map, 1901
J.M.

furnaces were well known for the purity of the molten glass they produced.¹² Arbogast also improved the method of fueling the "glory hole," where glass was reheated for fire polishing, thus eliminating discoloration. This method was introduced by the Pittsburgh firm of Bryce, Walker.¹³

Some of the factory owners demonstrated considerable upward mobility. The Bryce family had successfully manufactured glass in this area since Bryce, McKee and Company began making tableware in 1850, and the firm had continued under several different names. James Bryce had come to America from Scotland as a child and had been apprenticed at the age of ten to the Pittsburgh glassmaking firm of Bakewell, Page and Bakewell. Bryce became a skilled glassworker, and the company he organized in 1850 was composed of glass men who knew their trade well. The firm included at various times his brother, their four sons, and a grandson.¹⁴ The Bryce Brothers' glasshouse at Sidney and Twentieth on the South Side, now a warehouse, still displays large, gracefully curved windows which once must have been the family's pride.

Young glassworkers, as frequently utilized in 1880 as they had been during Bryce's childhood, suffered from a high degree of unemployment. Fifty-one of the area glassworkers were between eleven and seventeen years of age. Only three boys in this age group were listed by the census as apprentices, but all hoped to learn the skills which might enable them to earn good wages as adults. Most boys performed indispensable small jobs such as "carrying-in" and "cleaning-off," earning between fifty and sixty cents a day. High unemployment rates, even among the more skilled workers, indicated that the glasshouse boys must have been doing more than their share of the family breadwinning. Of working boys seventeen and under, 11 percent were out of work between one and three months; 15 percent between four and six months. But young men between the ages of eighteen and twenty-nine were laid off at the rate of 14 percent for one to three months, 30 percent for four to six months, and 7 percent for more than six months. By comparison, workers over thirty reported an even higher rate of unemployment, with 30 percent not working between one and three months and 28 percent out of work between

12 Rhea Mansfield Knittle, *Early American Glass* (New York, 1927), 347.

13 Lowell Innes, *Pittsburgh Glass 1797-1891; A History and Guide for Collectors* (Boston, 1976), 45.

14 Knittle, *Early American Glass*, 325.

four and six months.¹⁵ Only six glassworkers in the area were over fifty years old. As one employer stated in his census return, "when a man reaches 55 years of age he seems to lose his skill as a workman and has to take a subordinate place."¹⁶ Seasonal unemployment also plagued glassworkers, as glasshouses commonly closed during the heat of July and August.

Strikes also accounted for part of this high degree of unemployment. In 1879, glassworkers struck in protest against new machinery which they feared might cost them their jobs. In February, the *National Labor Tribune* reported a strike of the Glassworkers Union against Adams and Company, Ripley and Company, and McKee and Company. Management brought in scabs, but they were not too successful in breaking the strike. The next month some of the young workers struck Atterbury and Company over wage reductions, and a week later the *Tribune* reported demonstrations by flint-glass workers, who had been on strike "for some time" against factories still working.¹⁷

Wages in the glass industry varied from \$8.11 a day for the manager, to forty-two cents for a boy working as a "sticker-up." Averages conveyed little meaning, since skilled workers were paid by the piece, and others by the day. Remarks from the O'Hara Glass Company indicated dissatisfaction with the existing wage system:

Glass-house men are paid by the piece, and could have the opportunity of making extra earnings, but, owing to the limitations put by the union upon the number of pieces to be made, they do not avail themselves of this opportunity. From 20 to 25 percent more wages could be made were it not for this limitation . . . Presses and molds have steadily improved. The introduction of blowers and many small tools in the working of the glass has enabled the workmen to do better work, and, if they would, to do more work. All these improvements have resulted only in making the work of the men easier and not in increasing the output.¹⁸

No census taker asked the glassworkers for their side of the story, but it seems unlikely that so many boys would have been put to work for such low wages had the extra money not been needed by South Side families.

While the glass industry was at its peak in 1880, iron and steel enterprises had only begun their rapid growth. Along the south bank

15 U.S., Tenth Census, 1880, Manuscript Schedule for Ward 26.

16 U.S., *Tenth Census, 1880, Statistics of Wages. Flint Glass, Gillinder & Sons, Philadelphia, Pa.*

17 *National Labor Tribune*, Feb. 8, Mar. 29, 1879.

18 U.S., *Tenth Census, 1880*, 20: 85. (Report of O'Hara Glass Co., Pittsburgh).

of the Monongahela stretched two major works, Oliver Wire and Jones and Laughlin. Both companies dated back to Civil War days, originating as ironworks. After the introduction of the Bessemer process in 1875 in Pittsburgh, the city's iron industry followed Andrew Carnegie's lead, and gradually steel became its major product. In 1880, however, iron was still the industry's basic product.¹⁹

In that year, 15,623 workers city wide turned out iron and steel valued at \$35,490,634.²⁰ Much of this was iron, wrought by puddling, the process in which the strength and skill of one man stirred a molten mass of iron until the impurities could be drawn off as slag, and the iron itself worked into three balls, each weighing close to 200 pounds. Each ball was then drawn out of the furnace and into a "squeezer," eliminating "the slag which flows down like the glowing lava running out of a volcano," as one puddler put it.²¹ The product of Oliver Wire, for instance, went from furnace to rolling mill to hardware plant, and ended as hinges, bolts, screws, rivets, anvils, and other finished products. This company had 102 puddling furnaces and foundries, as well as bar and plate mills, located from Tenth to Fifteenth streets, between Muriel Street and the Monongahela River.²² Jones and Laughlin had at least seventy-five furnaces turning out metal for rails, beams, plates, and bars.²³

Workers under consideration in this study lived between these great iron and steel manufacturers. Of fifty-three ironworkers living there in 1880, no fewer than thirty-five were puddlers. Assisted by two helpers, each of these men worked a furnace, measuring its contents by sight. The puddler's skill determined the quality of the wrought iron, and each heat, from pig iron to finished bloom, took about an hour and a half, with five heats considered a normal day's work.²⁴

Wages and hours cited for the iron and steel industries in the 1880 census indicate that most employees worked long hours with little reward. A skilled worker spent twelve hours a day, six days a week at a blast furnace for an average \$1.64 a day. At a crucible steel mill a man did considerably better, working a fifty-four-hour week for \$3.16 a day as a skilled worker, or \$1.34 as a laborer. An innovation in steel production had been introduced at the Edgar Thomson

19 Harper, *Pittsburgh of Today*, 2: 575.

20 U.S., *Tenth Census, 1880*, 2: 426, Table 6.

21 James J. Davis, *The Iron Puddler* (Indianapolis, 1922), 110-12.

22 Henry Oliver Evans, *Iron Pioneer* (New York, 1942), 41.

23 Harper, *Pittsburgh of Today*, 2: 574.

24 Davis, *The Iron Puddler*, 112.

Works when three eight-hour shifts replaced the old twelve-hours-on, twelve-hours-off system. The superintendent reported what workers had known all along: "In increasing the output of these works I soon discovered that it was entirely out of the question to expect human flesh and blood to labor incessantly for 12 hours . . ." Nevertheless, most iron- and steelworkers in Pittsburgh worked (on the average) a sixty-four-hour week, and with most mills operating for ten months, these individuals took home yearly earnings of about \$830.00.²⁵

Unemployment statistics for the neighborhood's ironworkers and laborers were remarkably similar to those for glassworkers. There was little work for boys, however. Jobs in iron mills called for the strength of men, and only one boy under seventeen worked in the industry. Forty percent of workers aged eighteen to twenty-nine worked full time, while 27 percent were unemployed between one and three months, and another 27 percent between four and six months. As with the glass industry, older workers had a much higher rate of unemployment, with 40 percent of men between thirty and forty-nine years of age out of work from four to six months, while only 33 percent worked full time. Only three workers were over fifty, and all were unemployed for four months or more. Work was scarce for the twenty-three nailers, tack tenders, nail feeders, and packers of all ages. Sixty-five percent of these workers were unemployed for four months or more. Laborers, though, fared somewhat better. Nearly half of them worked full time, and while 15 percent were unemployed from one to three months, 26 percent were out of work between four and six months.²⁶

The effects of the panic and depression of 1873, combined with the mechanization characteristic of steel production, had idled 23 percent of the iron puddling furnaces on the South Side, while others produced only half of the prepanic amount. The *National Labor Tribune* accused manufacturers of paying twenty cents a line to papers for printing stories about their business difficulties, a charge denied by the manufacturers. At the same time, rolled-iron production decreased by 2.24 percent, but steel production rose from 23,915 tons to 107,148 tons in 1877, thus giving a clear indication of future trends in employment for South Side workers.²⁷

Although iron and glass accounted for the employment of the majority of workers in this twelve-block area, other residents provided

²⁵ U.S., *Tenth Census*, 1880, 2: 149.

²⁶ U.S., *Tenth Census*, 1880, Manuscript Schedule for Ward 26.

²⁷ *National Labor Tribune*, Apr. 26, 1879.

services as barbers, clerks, and shoemakers, while bakers, grocers, merchants, cigar makers, and liquor agents furnished the necessities and luxuries of life. These occupations apparently offered more stability, for among them there was little unemployment. Five of this group, which totaled forty-eight men, indicated one to three months unemployment; only four showed four to six months out of work. The ten saloonkeepers, liquor dealers, and bartenders worked full time.²⁸

Many of these individuals lived on Carson Street, where sixty-one buildings — solid two- and three-story brick structures — provided homes for merchants and workers above the street-level stores. Many of these were the more prosperous members of the community, including four doctors and several barbers, tailors, merchants, and saloonkeepers. Most of the lots on Carson Street extended 120 feet to Wright Alley, providing ample space for a stable or large yard. That there were seventeen servants employed here also indicated prosperity; only thirteen other servants were employed on all the other streets in the area. Carson also was the most heavily populated street, with 5.67 people per house, although Fox Alley was more crowded, with 6.47 people per house. The city-wide average was 6.44.²⁹

Despite the financial hardships evident in the area, slightly more than one-third of the boys (twenty-six) between ages thirteen and sixteen, and most of the girls, were in school. The sons of skilled workers (glassblowers, puddlers, carpenters, and others) worked as often as those of nonskilled workers (laborers, drivers). Only five boys whose fathers held unskilled jobs were in school, and not surprisingly, where the head of the family was a widow, no boys of this age were able to remain in school. In contrast, twelve out of fifteen fathers whose jobs were in the professional or service categories sent their sons to school. Thus, the opportunity for these boys to improve their chances for upward mobility through better education was highest when their fathers were living and held jobs in the professional and service categories.

Fathers who held skilled jobs frequently took their sons to the factory with them to assure them skilled jobs later on, although only four young men, all over age sixteen, were actually listed as apprentices. The boys whose fathers were unskilled, or dead, worked their twelve-hour days in the glasshouses to put food on the family

28 U.S., Tenth Census, 1880, Manuscript Schedule for Ward 26.

29 U.S., *Tenth Census, 1880*, vol. 1, Table 25.

table. After the turn of the century, there was active agitation for child labor laws. A bill pending in 1905 provided that no child under fourteen would be employed, and no girls under sixteen permitted to work in cigar factories, or boys under sixteen to do night work. Since, according to reporter Helen Grimes, one boy had the value of thirty men to an employer, hundreds of boys, some as young as nine, were employed in South Side glasshouses.³⁰ Even after passage of the law, in 1909, child labor in glass factories continued, and the child's wages were still an important part of the family income. Real child labor reform had to await the time when the father's wages alone could support his family.

To help make ends meet, two families commonly lived together in the South Side. This study assumed that the family listed first by the census taker would rent or own the house, in turn leasing part of it to the second family, an arrangement with obvious economic advantages. There was no apparent pattern to such sharing. For example, in the brick house at 1818 Wright lived an old mulatto couple, Peter and Mary Brennen, aged eighty-three and sixty-eight respectively, born, probably as slaves, in Virginia and Maryland. They were both unable to write, and no occupation or disability was listed for either. With them lived John and Dolly Kraft, a middle-aged German couple, also not able to write, and their four children.

Fifty-two widows lived in the area in 1880. It may be assumed that they did not possess independent means of support, for the general picture of employment described above would necessarily preclude any great savings. Even by 1915, the record of "money at interest, including mortgages, judgments, bonds, notes, stocks, etc." was not as high for the Fifteenth Ward as for others in the city for which a similar value of salaries was reported. Salaries in the Fifteenth Ward totaled \$1,766,200, and savings, \$893,830. Of seven wards where total salaries were closest to that level none reported less than \$1,000,000, and the Twenty-second Ward had more than \$12,000,000 at interest. Mortgages may have accounted for some of this difference, but the level of savings was undoubtedly lower in the study area.³¹

Just four of the widows took in boarders. The rest relied principally on the support of their children, who commonly delayed estab-

³⁰ U.S., Tenth Census, 1880, Manuscript Schedule for Ward 26; unidentified newspaper in scrapbook of the Civic Club of Allegheny County, Mar. 11, 1905.

³¹ Commonwealth of Pennsylvania, Department of Internal Affairs, *Annual Report of the Secretary of Internal Affairs For the Year Ending November 30, 1915* (Harrisburg, 1916).

lishing their own households to provide for their mothers and younger children in the family. Examples can be found on any street. At 1913 Sidney lived Mary Schnupp, a widow of fifty-six. She owned her house, no doubt partly due to the efforts of her three sons, who were all glassblowers in their early twenties. Susan Smith of 1815 Merri-man was a mulatto woman, aged fifty-four, suffering from heart disease. Keeping house with her was twenty-seven-year-old Louisa, while three sons, ages eighteen to twenty-two, worked as laborers. "Carline" [*sic*] Daibler, a widow at thirty-one, supported herself as a "taylor" [*sic*]. She boarded on Carson Street with a carpenter's family whose eighteen-year-old daughter was a dressmaker. Another example was in the next block. There lived Arthur McSwiggan, age thirty-eight, supporting his seventy-four-year-old mother and Molly Kennedy, her granddaughter of fifteen. The family of Elizabeth Reuttger, age forty-six, appeared to be entirely supported by her son, John, a laborer of fifteen. Three younger children were in school, while the youngest (Ernest, age four) and the oldest (Mary, age twenty-one) remained "at home." Perhaps certain occupations, such as taking in washing, did not merit mention by the census taker, for all women were listed as "keeping house," or "at home," with the exception of seamstresses, tack and glass packers, and teachers.

To gain a perspective on those who indicated some degree of illiteracy in the 1880 census, records of twenty-eight people living on Nineteenth Street were analyzed. Illiterates could be found on every street except Carson, but Nineteenth Street had more than any other because of its higher population. Thirteen individuals were unable to write; fifteen could not read or write. With the exception of a Pennsylvania-born girl of fifteen working as a servant, and an Irish boy of fourteen in school, all were over age thirty, although only three were over fifty. A large percentage were immigrants. Twenty-three had been born outside the United States: ten came from Ireland, another ten from Germany and Prussia, and three immigrated from England and Wales. The remaining five had been born in Pennsylvania.

The economic success of those who indicated some degree of illiteracy is hard to evaluate. Only three of the thirteen men worked as laborers, and one of these owned his own home — a frame house valued at \$1,200 in 1888. Three others also owned their houses by 1888, a flint-glass blower, a grocer, and a blacksmith. Three men also worked as puddlers, reporting three to six months unemployment. Judged by these data, partial illiteracy, while never an advantage, did

not appear to be an insurmountable handicap. Total illiteracy in men, on the other hand, was linked with a higher rate of unemployment. The efforts made in education in this area are evident in the fact that no native-born children are listed in the census as even partially illiterate. Although these children might not remain in school long, they could and did receive the rudiments of education.

The 1880 census revealed a picture of hard-working immigrants buying what property they could and raising a new generation, or moving on to try their luck elsewhere. The census records conveyed in the clearest sense important aspects of the lives of these people, but they do have limitations. Urban areas such as this one, with a constant influx of workers to supply growing industries, were never static. To examine the changes which took place in the years before World War I, a comparison was made of the city directories of 1889 and 1915 and the Pittsburgh property tax assessment records for the same years. These records showed much the same predominantly Germanic population, slowly being augmented by the arrival of Eastern European immigrants. The few remaining open spaces had been built up by 1889, and workers were crowded into every available room. This overcrowding, however, had eased by 1915, reflecting the opening of nearby suburbs and improved transportation, and the area resumed its 1880 characteristic of small homes, owned by workers who labored in nearby factories and stores.

The population had increased by 1889, and there were 838 listings for the neighborhood in the directory for that year. (About 635 of the 1880 population would have been listed, since the directory included only adult men and widows.) Ninety-nine of the women were widows, for the population was growing older. The most striking change in the employment pattern since 1880 was the increase of laborers from 111 to 287. These men were scattered throughout the area, but were concentrated especially on Eighteenth, Nineteenth, and Twentieth streets, where their numbers had multiplied from 31 in 1880 to 196 in 1889. These same streets evinced a similar jump in the number of boarders from 23 to 200. (Other streets showed an increase in boarders from thirty-four in 1880 to ninety-five in 1889.) The study assumed the presence of boarders where there were men listed with different names at the same address, although some of these were probably relatives. Even allowing for a large margin of error, the figures show a striking increase.

New housing had been built on all streets except Carson, and the

286 dwellings of 1880 had risen to 325 in 1889, if house numbers listed in the census are compared with properties in the tax assessment records of 1889. Consulting the city directory, however, uncovers a strange pattern. On Eighteenth, Nineteenth, and Twentieth streets, forty-one house numbers appear which cannot be located either in the tax records (where one must proceed at times by intuition, because the street numbers were not included and property descriptions were often identical) or on a 1901 plat map.

None of the records available proved adequate in explaining this discrepancy. If names of fictitious voters can be taken from tombstones, they also could have been taken from falsified directory listings. However, it is more probable that these people lived in dormitories or rooms above the factories which the plat map shows in those areas. Today, the old glassworks building on Eighteenth Street evidences a row of bricked-up openings on the third floor which could have been doors and windows. Furthermore, the railroad which owned property on Twentieth Street may well have boarded workers there as well as in the houses it owned a block away.³² Although seven widows were included with the inhabitants of these "nonexistent" houses, the majority of the men were laborers, among them several carpenters, drivers, and one cook. Companies could have rented unused building space to accommodate growing numbers of workers, or the directory itself may have been in error. This problem illustrates some of the difficulty in dealing with these sources. Although the tax records may be assumed to be accurate, the directory may or may not be correct. Forty-one "missing" houses are relatively easy to spot, but other errors in this type of data can easily go unnoticed.

The glass industry continued its decline in this period. The number of glassworkers had dropped from 169 in 1880 to 104 in 1889, and by 1915, only 3 glassworkers lived in the area. The number of ironworkers also decreased slightly from fifty-three in 1880 to forty-nine in 1889, but fell to only four in 1915. Numbers of laborers steadily increased from 104 to 287, then dropped to 275 in 1915 as the overall population of the area decreased. These figures reflect significant changes in the industries of the area. In 1891, the United States Glass Company had been formed, which took over the two largest factories in the area, Bryce Brothers and King, Son and Company at Eighteenth and Merriman, as well as a number of others in

³² I have discounted the possibility that these numbers represented a "business address," since the directory in other cases specified "bus." and listed a different home address.

the city. The creation of the large trust marked the end of most family-owned glass companies on the South Side.³³ About this time the glass industry was also undergoing changes in production methods. Natural gas, introduced as a fuel in 1870, was piped under its own pressure from nearby Murrysville for use in glassworks in 1883.³⁴ After George Westinghouse organized the Philadelphia Company in 1884, glassmakers began to use the new fuel extensively, since it yielded a better "metal," as glass in fusion was called. The clay pots in which glass was melted gained an additional life of two months beyond the four normally expected when more corrosive coal was used.³⁵ At the same time, new production methods were adopted which produced a better quality glass while requiring less fuel. Natural gas in Western Pennsylvania, however, was not present in the amounts needed to keep pace with its increased use. Glass factories, therefore, were eventually moved out of the city to be closer to newly discovered gas fields in the midwest.³⁶

Although the glass industry did not entirely abandon the South Side, its decreasing importance was reflected in the reduction of glassworkers over succeeding years. Many workers remained in the same job, but the industry could transfer plants and personnel on a scale not feasible for the smaller companies of the 1880s.

Different circumstances explain the area's decrease in ironworkers. By the turn of the century, the demand shifted to steel rather than iron for rails and structural products. Efficient blast furnaces had largely replaced the ancient puddling furnaces, although some of these were still in operation on the South Side in 1900. Steel mills used relatively little skilled labor, relying instead on machinery and masses of unskilled workers, many of whom were recent immigrants from Eastern Europe. In 1907, 60 percent of the steelworkers in the Pittsburgh region were unskilled.³⁷ Because of the early emphasis on iron and steel, the South Side factories now operated obsolescent facilities, while more modern works were built elsewhere. At the Clinton furnace, men still shoveled in iron ore, coke, and limestone, and puddlers continued to tend their old furnaces at Jones and Laughlin.³⁸ Although the old mills were neglected, since it was uneconomic for the company to install safety devices and more modern equipment, they

33 Harper, *Pittsburgh of Today*, 2: 609.

34 *Ibid.*

35 Knittle, *Early American Glass*, 334.

36 Harper, *Pittsburgh of Today*, 2: 609.

37 John A. Fitch, *The Steel Workers* (New York, 1910), 4.

38 *Ibid.*, 29, 35.

retained one advantage for the laborers which those at the new mills did not enjoy: a puddler on the South Side still worked five heats, or about eight hours daily. A modern mill, however, ran continuously, and its workers averaged twelve hours work a day.³⁹

Wages in both old and new mills had not kept pace with the cost of living after 1880. The Pittsburgh Survey in 1907 estimated that a 22 percent increase would be needed to keep up with rising prices, but United States Steel workers had received only a 15 percent increase, while at Jones and Laughlin the increment amounted to just 7 percent. Skilled workers' wages had actually decreased over the past fifteen years — as much as 33 percent for rollers. The survey further noted: "there has been a consistent policy on the part of the management, not only to cut rates so that with the increased production the earnings of the tonnage workers should not go up to exorbitant figures, but to cut the rates for the highly skilled men still further, so that the earnings for these positions should be brought down to a figure nearer the common average."⁴⁰ The day laborers who had earned fourteen cents an hour in 1892 received only a cent more at Jones and Laughlin in 1907, although food costs were higher and rents had risen as much as 100 percent.⁴¹

By 1915, the population of the neighborhood had declined, for the city directory listed only 635 names. Modern occupations also appeared, including five stenographers, three elevator operators, two telephone operators, and a motion picture operator. Other jobs were new to the area; among them were a detective, a manicurist, a bowling alley proprietor, and five undertakers. The number of widows again fell, now to forty-seven. As skilled workers died or moved away, the number of white-collar workers increased: nineteen salesmen, or agents, forty-seven clerks, sixty-nine shopkeepers. Because of the area's proximity to steel mills and other industries using large numbers of unskilled laborers (the Iron City Sand Company, for example), a high concentration of workers — 275 in 1915 — continued to be found in the area. Many of them were single men living in boardinghouses, and some gave a widow or struggling family the extra income needed to make ends meet. Laborers at the lowest end of the pay scale found it difficult to buy their homes. In 1889, only thirteen of them had succeeded in home purchases, and in 1915 that number

39 *Ibid.*, 176.

40 *Ibid.*, 157.

41 *Ibid.*, 151.

had increased by just four.⁴²

Home ownership still contributed greatly to the stability of the twelve-block area population. Of the 286 houses in 1880, ninety-four held the same families in 1889, or the tax records at least listed them as home owners. Seventy-six of these families remained in the same house until 1901, twenty-three until 1915. Included in these figures are those properties owned by heirs of the people living in 1880, in cases where the city directory lists family members still living there in 1889 and 1915. One such family was that of John Clark, a mulatto living with his wife and three daughters. In 1880, he had been a blacksmith, but by 1889 he had become a "night soiler," and owned two houses and a large stable, keeping from eight to sixteen horses at a time. The family lived in the brick and frame house at 1816 Wharton Street, while renting the frame house at 1809 Wharton to a middle-aged German couple in 1880 and to Mrs. Anna Koester in 1915. By then Clark had died, and the property had passed to his youngest daughter, married and named Emma Jane Lewis. Another family which remained in the area during this period was that of the Reverend Peter Brand, minister at St. Paul's Evangelical Lutheran Church at Eighteenth and Sidney. The seven Brand children provided a record of previous assignments, for while Brand and his wife had both been born in German states (Hesse and Prussia), the children were born in Michigan, New York, and Washington, D. C. Pittsburgh was the final call for the family, however, and at the age of seventy-five Brand still served his congregation in 1915. These two families illustrate the general character of the area, in which families tended to stay on when they were affluent enough to purchase homes.

Further evidence of stability comes from the 1901 plat map, showing that 26 percent of the homes were owned by families who had lived there since 1880.⁴³ Over half of these families consisted of German immigrants, well established in a community where so many of their countrymen already resided. Their median age had fallen between forty and forty-nine in 1880, for home ownership involved years of saving and job stability in skilled professions. Of a total of seventy-seven families included in this group, thirty-six contained workers (counting both fathers and sons) who held skilled jobs; only ten were laborers. Another twenty-eight were merchants or factory managers. Half of these families included adult children whose earnings

42 Property Tax Assessment Records, City of Pittsburgh, 1889, 1915.

43 *Plat Book of Pittsburgh, Pa.* (Philadelphia, 1901), vol. 4.

helped to make ownership possible, and of sixteen widows in the group, thirteen were supported by their children.

There was a direct connection between property values and job categories in the area in 1915. The laborers' homes were valued at less than \$2,000 each, while the median value of skilled workers' homes was between \$2,000 and \$3,000. For merchants' homes, the median lay between \$6,000 and \$7,000, because these buildings, many on Carson Street, also included the stores themselves. Of the total number of houses counted, two-thirds had values less than \$3,000.⁴⁴ By 1915, one-third of these properties had been sold, but the remainder were still owned by members of the original families, and the tax records marked only seven nonresident owners, thus indicating how little the residential character of the neighborhood had changed over the years. Home ownership clearly represented a goal achieved through family cooperation and saving.

Like the population, property values demonstrated considerable stability over the years. The valuation for houses and land ranged from \$500 to \$12,000 in 1889. Following a reassessment that year, tax increases of \$200 to \$300 were generally made. As one might expect, Carson Street, with its larger houses and lots, showed valuations far exceeding that of any other street; just six properties were valued under \$3,500, and the median was \$6,500, with twenty properties worth over \$8,500. In contrast, few properties on the other streets were valued at over \$3,500, with \$5,400 the maximum. The alleys contained the cheapest properties; almost two-thirds of those on Fox and half of those on Merriman were valued under \$1,000. On Wright the figures were slightly higher, but \$3,000 was still the maximum amount, and fourteen of the street's eighteen properties were worth \$1,500 or less. On Sidney and Wharton streets, valuations ran from \$1,000 to \$5,000, but almost two-thirds (fifty-eight out of eighty-nine) were worth between \$1,000 and \$2,500. On Eighteenth, Nineteenth, and Twentieth streets, valuations ranged from \$1,000 to \$5,400, both extremes being found on Eighteenth Street. The majority, however, lay between \$1,000 and \$2,500.⁴⁵

A comparison of values in 1915 shows only a slight increase in valuation, so that fewer properties were worth under \$1,000. The majority of both streets and alleys continued to be valued at between \$1,000 and \$2,500, and once more Carson Street was the exception. The median value of property on that thoroughfare remained at \$6,500,

⁴⁴ Property Tax Assessment Records, City of Pittsburgh, 1884.

⁴⁵ *Ibid.*, 1915.

but only six properties were worth over \$8,500.⁴⁶ Thus, while the value of less expensive properties held or slightly increased, those of the most expensive houses and lots had declined; properties under \$8,000 showed an increase, while those over \$8,000 on Carson decreased from nineteen in 1889 to twelve in 1915.

Population characteristics changed between 1880 and 1915, largely due to the greatly increased number of Eastern European immigrants on the South Side. These workers, usually listed on tax records as "skilled laborers,"⁴⁷ gradually began to buy their own homes, by 1915 owning 12 percent of the houses in the area. Following the same pattern as the Germans and English who had come nearly forty years before, the Eastern Europeans purchased the cheapest houses through careful savings. Few of these dwellings had values over \$2,000, and over half were located on Fox, Wharton, and Merriman, the streets closest to the factories and railroads along the river. Although forty-two houses were sold to these immigrants, they did not represent forty-two striving families, for twelve of the dwellings had been bought by three men as rental properties. Throughout the area, however, nonresident owners were still outnumbered by families who took pride in owning their own homes,⁴⁸ thus ensuring continued stability among both recent immigrants and older residents.

The actual living conditions in the district in 1915 are difficult to gauge, but evidence points to generally poor standards in other parts of the South Side. Owen Lovejoy of the National Child Labor Commission connected "undesirable labor surroundings" with the "enormous rents exacted in Pittsburgh."⁴⁹ *Plumbing News* of June 1913, describing housing conditions of the South Side, cited \$15.00 a month as rent for three or four rooms on an alley. The notorious "foreign boarding house" still crowded men into rooms a dozen at a time, each renting part of a bed, and in other houses whole families lived in a single room. A city doctor laid the blame for unsanitary conditions on overcrowding, which was eased only by a general decline in population.⁵⁰

These conditions did not seem to prevail in the area of study in

⁴⁶ *Ibid.*

⁴⁷ This terminology was used by the city in taxing occupations. A skilled laborer was taxed on \$150.00, the value of his occupation. An exact definition of the term, however, could not be located.

⁴⁸ Property Tax Assessment Records, City of Pittsburgh, 1915.

⁴⁹ Unidentified newspaper clipping in scrapbook of the Civic Club of Allegheny County, Mar. 11, 1905.

⁵⁰ *The Plumbing News* 16 (June 1913).

1915, although they seem to have been present in other sections of the South Side. Instead, the "nonexistent" addresses of 1889 were gone, and the number of boarders was down to 178. Home ownership changed, but remained high, and the Germanic population still predominated. The 1910 census still indicated that German-speaking immigrants were the largest group of foreign-born whites, not only in the Fifteenth Ward, but throughout the city.

This brief study, admittedly, leaves many loose ends. Workers cannot be easily traced, and the housing and employment patterns of an area can always be distorted by inadequate data. But from the pages of city directories, the manuscript census, and property tax records, a picture can be discerned of a small area populated chiefly by hard-working immigrants who used their skills to buy their own homes and to stabilize the economics of their lives. Most did not achieve these goals, but those who did held tenaciously to the results of their efforts — a small house, fronting squarely on a broad street or narrow alley in a neighborhood bordered by factories and stores. Public records, such as those used in this study, thus can be used to round out the historical picture by giving a glimpse of those men, women, and children whose labor made Pittsburgh's industrial growth a reality.