Rockhill Iron and Coal Company Towns
(Towns of Robertsdale and Woodvale)
Robertsdale
Huntingdon County
Pennsylvania

HABS No. PA-5553

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
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Part I
INTRODUCTION

Between 1880 and 1930, America witnessed the dramatic expansion of its coal mining industry. The success of this industry, like its glass- and iron-manufacturing counterparts, was dependent upon a large workforce, and consequently upon the establishment of mining camps or villages in the often-isolated coal regions. For the coal companies, these settlements were more than a necessity—they were a means of attracting and establishing control over the labor supply. Thus, the genre of the coal company town was established—a paternalistic governing of entire towns by private companies, which has been viewed by some scholars as "a great anomaly in the midst of a free country." Since these towns were financed, built and operated by a company for its workers, the village layout and architecture embody many of the company’s aspirations for the endeavor and its attitudes toward employees. While physical aspects of coal-company towns varied from region to region, within a particular geographic region such as southwestern Pennsylvania, most were strikingly similar to one another.

The coal-company towns of Robertsdale and Woodvale, in Huntingdon County, Pennsylvania, are located on the eastern slope of Broad Top Mountain, which was a fertile coal field in the mid-nineteenth century (Fig. 1.1-2). The two villages were established by the Rockhill Iron and Coal Company in 1873 and 1891 to house a large population of company employees and their families. The company maintained control of the villages until the mines closed and the company holdings were divested in 1956.

Methodology

This documentation project by the Historic American Buildings Survey (HABS), concerns itself primarily with how miners lived in Robertsdale and Woodvale, by looking at the miners’ dwellings and placing them within the larger context of the coal-mining industry in Pennsylvania. One of the most interesting findings of this study is the close correlation of data collected in the Robertsdale-Woodvale community with data collected in studies of other coal-company towns; Robertsdale and Woodvale are excellent examples of typical Pennsylvania coal-company towns.

There are few archival sources for information on the Rockhill Iron and Coal Company, and even fewer sources of information for the villages of Robertsdale and Woodvale. The majority of information compiled in this study is based on field surveys, historic photographs, historic maps, tax and census records, and interviews with local residents. Other sources, such
as city directories, county histories, and newspapers provided bits of data for specific years, but since the villages were small and isolated, and were perhaps seen as secondary to the coal-mining operations and the railroad, little about them was ever recorded.

Unfortunately, perhaps the best primary source of information about the coal-mining community—the company records—was unavailable for this study. The Kovalchick Salvage Company, present owners of the remains of the Rockhill Coal Company and the East Broad Top Railroad, did not grant permission to research in company archives. Thus, much of the information on the coal company in this report is based on the book *East Broad Top*, written by Lee Rainey and Frank Kyper. The book chronicles the history of the East Broad Top Railroad and the Rockhill Iron and Coal Company, and makes references to company records, to which they apparently had access.

Because archival materials were lacking, the primary sources of information for this study proved to be the residents and the extant architecture. While time constraints did not permit undertaking a major oral history project, some informal interviews were conducted during the summer, and a number of chance encounters and interviews with homeowners met in the course of documentation provided much of the information contained in this report. Questionnaires containing questions about family background, personal recollections, and reflections on the history of the Robertsdale-Woodvale community, and opinions about the changes that have occurred there since the mines closed in 1956, were sent to about fifty former and present residents. Ten of these questionnaires were returned, and a number of the individuals expressed an interest in being interviewed. Although time did not permit follow-up interviews, the questionnaires are included in the fieldnotes, as they contain some interesting personal insights and anecdotes, and might provide the basis for a future oral history project. Most of the historical information provided by residents was confirmed in interviews with other residents, or documented with historic photographs, maps and county records.

Fieldwork unearthed a significant body of data about life in a coal-company town and consisted of architectural surveys of the community; the compilation of maps showing the villages as they presently exist; extensive photodocumentation of the historic dwellings, significant structures, and streetscapes; and the examination and classification of miners’ dwellings, recorded with measured sketch plans. The maps and sketch plans are based upon structures and sites as they currently exist, modified (in some cases) by information provided by homeowners, historic maps and photographs, and comparisons of similar structures with one another.

It is hoped that this report, along with the plans of the dwellings, field maps, and photodocumentation of the villages—including copies of historic photographs—will serve as a permanent record of the company towns of the Rockhill Iron and Coal Company, and that this information might provide the basis for further research or preservation efforts in the Robertsdale-Woodvale community.
Part II
COAL MINING ON BROAD TOP MOUNTAIN

The counties of Bedford, Huntingdon, and Fulton lie in the Allegheny Mountains, approximately halfway between Philadelphia and Pittsburgh. The region is dominated by Broad Top Mountain, which covers a more than eighty-square-mile area that at one time was rich in iron ore, timber and coal. On geographic maps of Pennsylvania, Broad Top Mountain appears as an isolated semi-bituminous coal field midway between the anthracite, or hard coal, and the bituminous, or soft coal, regions to the east and the bituminous, or soft coal, regions to the west (Fig. 2.1). This coal field was initially documented by the First Geographic Survey of Pennsylvania in the 1830s, although several early pioneers in the Broad Top region mined coal there prior to that time.

One of these pioneer coal miners was William Houck who, according to county deeds, died in 1853 after owning land near present-day Robertsdale for more than twenty-five years. His 143-acre parcel contained "a saw mill in good running order and a dwelling house with an excellent coal bank in working order." However, Houck’s mine, along with most of the other early mines on Broad Top, operated for only a short time because there was no efficient means of transporting the coal from the isolated mountain region to an urban area where it could be marketed.

Prior to the 1860s, the Broad Top region was essentially nothing more than a wilderness, sparsely populated by the small farms of a few pioneers. One writer in 1856 described Broad Top as:

a poor, barren, almost inaccessible mountain, inhabited by a hardy race of pioneers who supported themselves by raising Buckwheat and manufacturing Hickory Brooms. . . . To get to it was difficult, owing to the roads leading thereto being so hard to travel.

Transporting coal from this region proved even more difficult, and included such conveyances as horse-drawn wagons, sleds, and "arks," flat-bottomed boats that could be floated down the Juniata River during times of high water. It was certain that coal could not be mined in the Broad Top region with any hope of long-term success until new methods of transportation could be found.

It was not until construction of the Pennsylvania Railroad was assured in the late 1840s that it seemed feasible to build a railroad spur from the mountain to the larger railroad network. Several railroads were granted charters, but the first one successfully constructed was the Huntingdon and Broad Top Mountain Railroad and Coal Company, chartered in 1852 and authorized to lay tracks from Huntingdon to the coal fields on the west side of Broad Top Mountain. Between 1853 and 1855, the road was completed and trains began hauling coal from a number of mines on Broad Top in February 1856. The effect on the Broad Top Mountain coal trade was instantaneous, as the Huntingdon Journal reported that August, "there is no end to the demand for Broad Top coal. Although hundreds of tons are brought in daily, yet the demand is greater than can be supplied." Within a decade, the amount of coal transported over the Huntingdon and Broad Top Mountain Railroad increased from 42,000 tons to 265,720 tons annually.
The east side of Broad Top Mountain, however, was unaffected by construction of the Huntingdon and Broad Top Mountain Railroad, and a group of citizens proposed the formation of the East Broad Top Railroad and Coal Company, to service that side of the mountain (Fig. 2.2). The General Assembly of Pennsylvania granted a charter on April 16, 1856, "for the purpose of mining coal, and for transacting the usual business of companies engaged in mining, transporting and selling coal, and the other products of coal lands." The company was also authorized "to connect their railroad with the Pennsylvania railroad . . . and the Pennsylvania Canal at Mount Union." It would be more than fifteen years, however, before financing was secured and the railroad would become a reality.

**Rockhill Iron and Coal Company**

In 1835, the Pennsylvania state legislature authorized the First Pennsylvania Geological Survey to investigate the state's mineral resources. The survey identified and documented the extensive beds of coal on Broad Top Mountain, and members of the Philadelphia business community followed the survey's annual reports with great interest. By the time it was published in 1855, many of these financiers had purchased, or were investigating the possibility of purchasing, tracts of this valuable coal land. Between 1862 and 1866, Algernon and Edward Roberts, Richard D. Wood, Ario Pardee, and J. Gillingham Fell purchased about 8,000 acres on Broad Top Mountain, including the tract of coal land that previously belonged to William Houck. All members of the Philadelphia business community, these men had prior dealings in railroads and the coal and iron industries. Most Broad Top settlers found the offers too good to pass up and, as J. Simpson Africa recorded in 1883, "when mining land rose in price, they sold their farms and removed elsewhere."

Meanwhile, in 1867 coal and iron baron Percival Dewees purchased an old iron furnace at Rockhill, halfway between Broad Top and Mount Union. Dewees saw the potential of using Broad Top coal to fuel his furnace, and in 1871 convinced the Roberts brothers to purchase a half-interest in the Rockhill furnace. Realizing a railroad line was critical to the success of their interrelated enterprises, these men employed the old East Broad Top Railroad charter as a key component in their plans.

On March 21, 1872, the Rockhill Iron and Coal Company was incorporated by Act No. 1085 of the General Assembly, "for the purpose of mining and selling coal, iron ores and other minerals, and smelting or otherwise manufacturing the same and selling the products of their manufacture." The corporation was also given the authority "to subscribe to the capital stock or bonds of the East Broad Top Railroad and Coal Company, to an amount not exceeding $100,000." It was Rockhill's purchase of a controlling share of East Broad Top stock that finally brought the 1856 charter to life.

Construction of the railroad began at Mount Union in September 1872. By the time the tracks reached Broad Top Mountain in fall 1874, a small village named after members of the Roberts family was already developing around the company's first colliery, the old William Houck mine.
Development of Robertsdale

In 1873, the major stockholders of the Rockhill Iron and Coal Company had conveyed large portions of their Broad Top Mountain land holdings to the company; the company subsequently commenced mining coal and erecting a number of dwellings and other structures around the mine. An 1873 map of Carbon Township shows only two properties at the southern terminus of the East Broad Top Railroad, one belonging to "Roberts," the other to "S.M.," Samuel McClain, a farmer and long-time area resident. County tax records indicate that between 1873 and 1874, the company erected four houses and a stable for mules and horses. By the following year, a second mine had been opened, and the company had constructed a total of twenty-seven dwellings, a store, stable, blacksmith and carpenter's shop, two shanties, a railroad office and an engine house. When the East Broad Top Railroad formally opened on November 4, 1875, the Huntingdon Journal reported at length of the Rockhill Iron and Coal's operation at Robertsdale:

At this point are the coal mines of the Company, and with the determination to develop them in the most liberal manner the improvements of the company have been upon a proportionate scale—the houses for the workmen, the store for their supplies, and the station accommodations for their benefit, are all of the very best character, and an examination of the mines showed that the property will warrant this outlay. Three seams of an exceedingly good quality of bituminous coal have already been discovered . . . and others will be speedily added. None of the coal has yet been shipped to market, but judging from that lying at the mine we believe that it will take excellent rank . . . The company has already seventy-five cars for its transportation, and this number of course can be easily augmented as an increasing trade will warrant. There is plenty of timber and an abundance of good water convenient, so that there is every probability of a speedy and permanent increase in the size of the settlement.

By 1876, a third mine had been opened and the population had grown to 479; the company had constructed a total of forty-two double houses. A newspaper account in January of that year stated:

At Robertsdale the company has three mines, and are now shipping to market over 400 tons of coal daily. They have a coal-washer, crusher, coke-pits, and store located here, and employ about 300 hands at this time.

Data compiled mainly from county tax assessments indicates that the Rockhill Iron and Coal Company settlement on Broad Top Mountain developed over an extended period, and the majority of growth occurred in several distinct phases that coincide with the expansion of the company's mining efforts. The initial period of growth occurred in the decade between 1873 and 1883 when the company opened four mines and established the village of Robertsdale. The population increased dramatically, from a few individuals in 1873, to 479 in 1876, and 694 in 1880; the number of dwellings increased likewise, from four, to twenty-seven, and fifty-seven, respectively.

Around 1890, the company extended the railroad south of Robertsdale about two miles, opened a new mine, and began developing another small village named Woodvale, after Richard Wood, one of the early partners in the company.
this second period of development, from 1890 to 1900, the company constructed a number of new houses in Robertsdale, as well as at least a dozen miners' dwellings in Woodvale.22

The third and largest period of growth occurred between 1912 and 1925, during which the company opened several new mines at Woodvale and dramatically increased production, particularly during World War I. This meant an increase in the number of miners employed by the company, and a subsequent need for more housing. The 1913 county tax assessment listed forty-two double houses and five single houses at Woodvale, and seventy-six miners' dwellings at Robertsdale. In addition, the company had constructed a hotel and a conductor's house at Robertsdale. By 1921, the community boasted five working collieries, with an extensive inventory of pumps, hoists, fans, compressors, and other machinery and structures around the mines, including a power plant; a post office and a company store in each village; a company office building, hotel, theater, and pool room; four churches and two school houses; two superintendents' houses, a doctor's house, paymaster's house, train depot, engine house and two railroad houses; and more than 200 double, and fifty single, miners' dwellings.23

Development of the community slowed during the 1920s, and virtually ceased by 1930. At the conclusion of World War I, demand for coal plummeted and Pennsylvania coal companies found themselves in competition with newly opened fields in West Virginia for a portion of the shrinking coal market. Additionally, labor strikes forced Rockhill's production down to a marginal level. These two setbacks forced the company into bankruptcy in 1928, but under new management the firm continued to operate.24 Despite the economic hardships, maps of Robertsdale and Woodvale from 1946 (Figs. B.1-2) indicate that the company planned for further growth by surveying and laying out streets and lots in both villages; however, the economic climate prevented these plans from being realized.

Demographics

Although population data exist for the villages of Robertsdale and Woodvale—primarily in county tax records, federal census records, and a few early maps and county histories—it is difficult to interpret and draw any accurate conclusions from the data for several logistical reasons. First, there appear to be a number of inconsistencies in the type of data compiled and the method of its recording from year to year, particularly in tax records. Second, all census and tax-record data was compiled by township, and often this information was not broken down into smaller subdivisions such as villages. Additionally, until 1905, Robertsdale and Woodvale were part of Carbon Township, which contained a number of other boroughs and villages. In 1905, Wood Township was formed out of Carbon Township, and it contained only Robertsdale and Woodvale. Woodvale, however, lies across the boundaries of three counties --Huntingdon, Bedford and Fulton--and within each Woodvale is under the jurisdiction of a different township, each containing a number of other boroughs and villages. Thus, while Wood Township population statistics can be compiled from census and tax records with a fair degree of accuracy, the statistics do not address the Woodvale population residing in Bedford and Fulton counties. Third, while the census contains a wealth of data, the records for 1880 and 1910 proved to be the only useful ones; the 1890 census was destroyed by fire, and the 1900 census was compiled by township, with no village subdivisions. Despite these logistical problems, however, it is possible to identify overall patterns that will serve as the basis for a discussion of population
and ethnicity. (Unless otherwise noted, the following statistics are based on U.S. census records.)

Population
Robertsdale's early and rapid development is reflected in early population statistics. Between 1873 and 1880, the community was transformed from a rural area to a thriving village of more than 650 persons. By 1910, the community of two villages contained a population of more than 1,347 residents. The population of Wood Township, exclusive of the portion of Woodvale in Bedford and Fulton counties, is still the best indicator of the size of the two villages. These statistics indicate that the population continued to grow until about 1940, when it exceeded 1,735. Between 1940 and 1960, the decline and eventual demise of the coal company is reflected in the population, which dropped from 1,735 to 974. During the 1970s, the population stabilized at around 840, and it presently remains at that level.

Households
In 1880, there were approximately 119 households in Robertsdale. By 1910, this number had increased to more than 262. Household size remained fairly constant for those years, ranging from one to thirteen persons, and averaging just over five persons per household. The average household consisted of a married couple with three children, but many also included an extended family member such as a niece, father-in-law, brother, or grandchild. Other families, as many as 15 percent in 1880 and 1910, took in boarders. In most cases, a family would house only one or two boarders—usually young, male mine workers—but some families housed as many as eight. The boarders were typically the same nationality as the head-of-household of the host family.

Boarders
Boarders comprised between 5 percent and 8 percent of the total population in 1880 and 1910. The typical boarder was a 31-year-old, foreign-born male who worked in the mines. In the 1910 census, 55 percent of boarders were single and 45 percent were married, but only two of the latter had their wives with them. In 1880, the age range for boarders was 18 to 55; in 1910, 14 to 76; in both years the majority were in their 20s and 30s. There were only a few women boarders, including a school teacher in 1880 and a seamstress in 1910.

Occupations
The vast majority of men residing in Robertsdale and Woodvale made their living as miners. The 1880 census statistics indicate that 77 percent of the male head-of-household population worked in the mines. By 1910, despite more specialized job assignments and more diverse occupational listings, this figure remained around 80 percent. The majority of the remaining male population was employed as railroad workers, merchants, clerks and farmers, although tax assessments from the 1920-30s also listed the occupations of minister, civil engineer, hotel proprietor, electrician, janitor, barber, saloon keeper, schoolteacher, postmaster, and doctor.

While nearly all males over age 17 worked outside the home, women were generally housewives. At Robertsdale in 1880, for example, of women age 17 or older, only 2 percent were employed in other than domestic positions. Two of these women were unmarried schoolteachers and the third was a dressmaker. The majority of women older than 17--80
percent—gave their occupation as housewife, while the 15 percent representing the single,
divorced or widowed segment of the female population are listed as housekeepers or servants.
These percentages remained fairly consistent through the years. A few women worked outside
the home, keeping house for other families, teaching school, or working in the company store
or post office; occasionally women were self-employed as seamstresses, confectioners, or
milliners, but for the most part they stayed at home and cared for their families.

In the initial settlements, children often worked to help support their families. Boys
between 10 and 15 worked in the mines, while girls the same age worked as servants or
domestics. At Robertsdale in 1880, the employment of children in this age group was as high
as 95 percent. Although child-labor reforms did not begin to occur nationally until 1916, the
Pennsylvania legislature passed laws affecting child labor as early as the 1880s. In 1885, for
instance, the state legislature made it illegal to employ boys younger than 14 in mines, or
younger than 12 in surface jobs, and it raised these limits to 16 and 14, respectively, in 1903.25
Although these laws were difficult to enforce, census statistics for Robertsdale indicate that
obvious changes in child labor had occurred by 1910, at which time the percentage of children
under 16 working had been reduced to 12 percent, and no children under the age of 13 were
employed.

Ethnicity
From the beginning, the population of the coal-mining community at Robertsdale, and later at
Woodvale, was composed of a mix of American-born and foreign-born miners and their families.
In the 1880 and 1910 censuses, the two were approximately balanced. The mix of nationalities
among the foreign population, however, changed noticeably over the years. In 1880, 95 percent
of the foreign-born head-of-household population came from the British Isles. Census records
indicate that a large percentage of these immigrants had been in the country for some time,
since many of them had U.S.-born teenage children. After 1880, immigrants from the European
continent began to arrive and, by 1910, 39 percent of the foreign-born head-of-household
population emigrated from Italy, 34 percent from Austria and Hungary, 10 percent from France,
and 8 percent from Belgium. Many more Eastern European immigrants, particularly Poles and
Slavs, apparently settled in the Robertsdale-Woodvale community prior to World War I. These
statistics, scant as they are, correspond positively with data compiled in 1911 by the U.S.
Immigration Commission. The report indicates that between 1870 and 1910, the Pennsylvania
coal-mining industry developed so rapidly that the local labor supply could not keep up with it,
and therefore "operating forces for the mines had to be secured from sources of supply outside
the State."26 The constant need for employees was supplied by continuous waves of
immigrants—initially miners from the British Isles, followed by unskilled laborers from southern
and eastern Europe.

According to the Immigration Commission, during the decade beginning with 1870, the
greater part of the employees in the bituminous regions of Pennsylvania were

Americans or representatives of the English, Scotch, Welsh, German, and Irish races.
Of the foreigners, many, perhaps the majority, had been in this country for some years
previous to the great expansion of the coal-mining industry. English-speaking miners
continued to immigrate and to find employment in the mines in large numbers until
about the year 1890. Since that year comparatively few immigrants from Germany and
Great Britain have entered the industry. Swedes and other Scandinavians have been constantly employed since the early '80s. The employment of immigrants from southern and eastern Europe began in about 1880. The Slovaks were the first arrivals and immigrated in considerable numbers. The great bulk of all the immigration from southern and eastern Europe, however, has occurred within the past eight or nine years.

The changes in the ethnic composition of the population of the coal-mining community at Robertsdale corresponds with national immigration patterns. According to tax assessments, immigrants continued to arrive through the 1920s, though in decreasing numbers after 1915. Today, the community still boasts a large percentage of first- and second-generation Americans.

Part III
COMPONENTS OF A COMPANY TOWN

In 1854, the Pennsylvania General Assembly passed a law granting permission for joint owners of mineral lands to develop their property. The act stated, in part:

At any time hereafter when any five or more persons, who may be joint owners, tenants in common, or joint tenants of mineral lands within this Commonwealth, may desire to form a company . . . for the purpose of developing and improving such mineral lands, it shall be lawful for any company formed under the provisions of this act to construct railroads in and upon their lands; also to erect dwelling houses and other necessary buildings; also all necessary machinery for raising, moving and preparing all minerals, found in their lands, for market.

The legislation, in effect, gave coal companies permission to build and operate entire towns without the influence of any outside jurisdiction. The employees and their families lived in company houses, purchased provisions at the company store, worshipped and were educated in churches and schools built on company property, and were entertained in the company theater, or in company-sponsored or approved organizations, such as the community band or the company baseball team. Even access to the outside world was regulated, to a great extent, as the company railroad was the community's lifeline, bringing paychecks, mail, and provisions to the villages, as well as providing passenger service in and out of town. Thus, the lifestyle of the miners and their families residing in these communities revolved almost entirely around the enterprise of coal mining.

Village Layout and Infrastructure
The villages of both Robertsdale and Woodvale developed around the mines and the railroad, and were comprised of clusters of identical miners' dwellings on evenly spaced lots, laid out in tight rows along a grid of dirt streets. While at first glance it appears that the village plans are somewhat arbitrary, closer observation reveals layouts that are tailored to the natural topography and features. Whether contrived or not, one resulting benefit is a site plan that might otherwise have been merely a monotonous arrangement of uniform dwellings on a grid-like pattern of streets and lots.
The houses were built on lots approximately 50' across x 100' deep. While these were generous in proportion to the dwellings, in most cases the yards were crowded with privies, wash houses, coal sheds, wood piles, clotheslines, vegetable gardens, and animals such as cows, sheep, pigs and chickens. Wood fences outlined each family's yard space and contained the animals. The yards were further defined by 15' alleys that ran behind the lots, parallel to the streets. These alleys served as fire breaks and allowed access to the rear of the lots to deliver coal and clean out privies.

The village streets were lined with clusters of identical houses--simple in plan and, for the most part, devoid of ornament. The most elaborate architectural details found on any of the company-built dwellings are the turned porch posts on houses inhabited by high-ranking company employees such as the paymaster (HABS No. PA-5551). The unpredictable nature of the coal-mining enterprise, the fact that dwellings represented a large investment on the part of the coal company, and the initial need for rapid construction of employee housing, all dictated that miners' dwellings be erected as economically as possible.

Thus, not only were the dwellings small and plain, they also lacked amenities such as indoor plumbing, insulation, and electricity. Families used privies and hauled water from public hydrants located on each street. Their homes were lit by kerosene lamps until the 1920s, when the company wired each home to receive electricity from its steam-generated electric power plant at Woodvale. Most dwellings were constructed with a central chimney--although double houses built for company officials and foremen had a chimney on each side of the house--and heat was provided by coal- or wood-burning stoves.

Transportation
In 1873, according to a map of Carbon Township, a single road passed through the area that would soon become the village of Robertsdale. It ran north to south through the township, passing east of Broad Top City, and on south to intersect with Great Trough Creek between the terminus of the East Broad Top Railroad and Rockhill No. 1 Mine, and farther south to New Grenada in Fulton County. This remained the only major road through Robertsdale for many years. By 1915, however, several unpaved roads branched off of this main thoroughfare, connecting Robertsdale with Broad Top City and Woodvale. According to local residents, the main road (Route 913) was paved in the mid 1920s, but the company-determined village streets remained unpaved until as late as the 1970s.

The railroad provided transportation to and from Robertsdale and Woodvale from 1874 to 1956. The train carried mail, food and provisions for the company store, and hauled coal from the mines on the return trips; passenger service was generally limited to miners commuting from neighboring villages and company officials, as Robertsdale-Woodvale residents had neither the time nor money for travel. A few men owned horses and buggies during the early years, according to tax assessments, but they, too, were probably company officials. By 1919, garages began to appear in tax assessments of Rockhill property, and the number peaked at twenty-two in the early 1920s. A number of these were multiple garages, as indicated on the 1926 map of Robertsdale, which shows three multiple garages on Spring Street, and each one on Lincoln and School streets.
For the most part, mobility was limited by economics—the miners and their families simply could not afford to travel, and in general had little reason to leave town, since the majority of their needs were provided for. With the advent of the automobile, however, mobility took on an increasing importance, and families saved what little money they could to buy a car.

Recreation
Recreation in Robertsdale and Woodvale was typical of that in other coal-company towns. The company sponsored a baseball team, and built a movie theater, band room, and pool hall for workers. The East Broad Top Railroad often ran picnic excursions during summer months. The company also provided building lots or meeting space for various fraternal, religious, and social organizations. In 1891, for example, the company transferred the deed for a 50' x 28' building to the Knights of the Golden Eagle. The lower story contained a library and a hall for public meetings "of an orderly character which shall be subject to the general supervision of the mine superintendent," while the second floor was reserved for meetings of the Knights of the Golden Eagle and "such other beneficial associations of a kindred character as the . . . trustees with the consent of the manager . . . may deem proper and expedient from time to time to admit to participate in said use." The consumption of intoxicating drinks was one activity the company monitored and virtually prohibited on its property; in fact, a clause in stipulating that alcoholic beverages would not be consumed on the premises was included in the transfer of deeds. Despite the company's efforts, however, Robertsdale was not exactly a "dry town." Many old-timers remembered, for example, frequenting Alfred Scellini's saloon on Lincoln Street—on the outskirts of company property—during the 1940s.

Class and Ethnic Divisions
A 1911 report of the U.S. Immigration Commission indicates that class and ethnic divisions were quite common in coal-company towns at the time, and that the two were interrelated. A man's status was dependent upon his job, which in turn was dependent upon his nationality. In the mines there was less segregation of races because it was generally held, "that if any one race makes up a group, or greatly outnumbers all other races in it, the output is lessened, and clannishness and discontent are fostered." Conversely, the commission found that whenever possible members of a particular nationality would live in the same neighborhood. This was true in Robertsdale and Woodvale. According to residents of both villages, the coal company did not openly discriminate against non-English speaking employees, but it is apparent that those employees largely lived in the smaller houses and held lower-paying jobs than Americans or immigrants from English-speaking countries. That neighborhoods formed along class or ethnic lines is evidenced in the nicknames given to sections of the villages. These include: "Africa," "Bedbug Row," "Little Italy," and "Little France" in Robertsdale, and "Hunkie Hill" and "Millionaire Row" in Woodvale. For the most part, longtime residents tend to recall the spirit of unity and togetherness that sustained the community during hard times, yet incidents involving prejudice and favoritism were not uncommon. Residents who lived near Italian neighborhoods, for instance, recall an over-abundance of violence—particularly shootings—in those neighborhoods. One such incident occurred in Woodvale around 1920, when a young American named Harry Everhart was shot by an Italian man, and the coal company evicted the Italians from the village.
Labor Relations

According to old-timers who worked for the coal company, Rockhill treated its workers much the same as any other coal company. While miners' strikes were a regular occurrence, for the most part they coincided with state and national protests, and were over the traditional issues of higher wages, shorter hours, and higher mine-safety standards. Newspapers indicate that strikes were occurring in the Broad Top coal fields as early as the 1880s. The biggest strikes, however, occurred in 1922 and 1927, and lasted for months. Miners at Robertsdale formed the United Mine Workers Association Local No. 1031 in the early twentieth century, and around 1920 were permitted to erect a UMWA Hall behind the hotel in Robertsdale. During the strikes, coal companies would hire private police, known as Coal and Iron Police, to maintain order. Tax records indicate that in 1930 the Rockhill company employed five Coal and Iron Police, which were authorized by the state legislature and gave the coal companies unlimited power (which was often used to evict striking miners from their homes). In Robertsdale, during the 1927 strike, the UMWA built a barracks on Lincoln Street, just outside the village, to house the evicted miners.

Thus, it is apparent that the coal company's provision of housing for its employees was a critical aspect of its enterprise, constituting a means of securing and manipulating the labor force. The construction of detached and semi-detached houses rather than tenements or barracks, for instance, was designed to attract married men—and thereby reduce labor turnover. (The small number of single employees boarded with families until the company—perhaps seeing a way to make more money—erected boarding houses for them.) Amenities such as a movie theater were not simply a manifestation of the company's altruistic nature, but rather were a means of enticing and holding a labor force. Striking miners not only risked losing their jobs, but their homes as well.

SIGNIFICANT INDIVIDUAL STRUCTURES

Company Buildings

Robertsdale East Broad Top Railroad Depot (see HABS No. PA-5556)

Rockhill Iron and Coal Company Office Building (see HABS No. PA-5555)

Commercial Buildings

Rockhill Iron and Coal Company Store, Robertsdale (see HABS No. PA-5554)

Jesse O. McClain Store (see HABS No. PA-5561)

Rockhill Iron and Coal Company Store, Woodvale: Constructed in 1917, the company store at Woodvale was a large, gable roofed, wood-frame structure, at the corner of Railroad and Bedford streets. It burned on November 28, 1937.

Robertsdale Hotel (see HABS No. PA-5563)
Theater (see HABS No. PA-5557)

Institutional Buildings

Robertsdale Post Office: The Robertsdale post office was established in 1875, though during the early years it was not located in an independent structure. Mail was transported via railroad and sorted at the company store. According to tax records, the Robertsdale post office was built ca. 1915 across from the Rockhill Coal and Iron Company office building. Like the nearby office building and train station, this two-story, concrete-block structure was located along Main Street at the center of town. According to residents, in addition to the post office, at various times the building housed a barber shop, shoe shop, company offices, apartments, and a lock-up for drunks and rowdies.

Woodvale Post Office (see HABS No. PA-5575)

Robertsdale Schools: According to longtime residents, Robertsdale had its own school building very early in its history—possibly as early as the 1870s. A number of structures were apparently constructed over the years, but there is little or no historical or physical evidence to document their location, appearance or dates of construction. While county tax records from shortly after the turn of the century indicate that the community had at least three schools, the earliest documentation on a specific facility dates to 1908, when the coal company transferred the deed for a parcel of land on "school house hill" to the school district of Wood Township. According to the deed, the township had erected a school building on the site the previous year. Residents say this building burned about 1917, and a new brick building was constructed in its place. Several years later, a second brick school building was constructed adjacent to the first. These two large structures appear on historic maps and in historic photographs from the 1920s.

In 1934, a new high school was constructed on South Main Street next to the theater, as a federal Works Progress Administration project. This large, stone structure served as the high school until 1962, when older students began attending classes at a school in a nearby town, and the elementary students moved to the former high school building. Sometime thereafter, the brick school houses on the hill were torn down; all that remains are the brick steps and retaining wall on North Main Street, and piles of bricks and rubble on the hill. The 1934 building on South Main Street remains in use as the township elementary school.

Woodvale Schools: Woodvale was served by at least two school buildings during the course of its history—a two-story, wood-frame structure at the crest of the hill on School Lane, and a large brick building at the intersection of School Lane and Bedford Street. The former was probably erected ca. 1900, but an exact date of construction is not known. The latter school was constructed south of this site around 1936, and replaced an earlier building. Both appear in aerial photographs and on historic maps from the 1930-40s; neither is extant today.

Churches

As early as 1883, there were four different religious denominations represented in
Robertsdale, "of the Roman Catholic, Methodist Episcopal, Presbyterian, and Church of God denominations. The congregations worshipped in private homes until they could raise enough money to erect a church. As was the case in many company towns, the coal company demonstrated its benevolence toward various social and religious organizations by permitting them to build on small parcels of its property, in all cases reserving the right to mine coal below the surface.

Presbyterian Church: In 1883, the Rockhill Iron and Coal Company conveyed a parcel of land on North Main Street to the Robertsdale Presbyterian congregation. A wood-frame church was constructed that year; it was later shared with the Lutherans, until sometime before 1923, when it is listed in tax records as the Church of God. This structure was razed in the mid 1970s, when a new and larger church was erected north of the village. A 1946 map of Robertsdale indicates that the Church of God parsonage was located in one-half of a double house at 25 N. Main St., directly across from the church.

Robertsdale Methodist Church (see HABS No. PA-5559)

Woodvale Methodist Church (see HABS No. PA-5573)

Saint Paul's Catholic Church: Although a Roman Catholic congregation existed in Robertsdale as early as 1883, it was not until about 1922 that it built a church proper. This wood-frame structure stood on New Grenada Road, east of the village and directly below the Italian cemetery (HABS No. PA-5484-7), which had been established during the influenza epidemic of 1918. Saint Paul's was served by priests from the Immaculate Conception Church at Dudley for many years. In 1970, the church was lifted off its foundation and moved to Dudley, where it is now used as a social hall for the church there. The site on which the church stood is now the location of the Robertsdale, Wood and Broad Top Volunteer Fire Company station.

Saint Michael's Greek Orthodox Church (see HABS Nos. PA-5570 and 5569)

MINERS' HOUSING

In 1925, Robertsdale and Woodvale contained approximately 265 company-built dwellings, though only about 65 percent of these remain standing. Of the 172 extant company-built dwellings, ninety-five are in Robertsdale and seventy-seven in Woodvale; only eight of these have been extensively altered. The majority of the houses—more than 85 percent—were originally built as double (or semi-detached) houses, while the rest were single-family (or detached) houses. All are detached or semi-detached wood-frame, vernacular, with gable or hipped roofs, and four to six rooms in either side. Most featured small porches on the front and small shed-roof additions (often used for kitchens) on the rear. The earlier houses are wood-plank construction without interior framing, and thin wood battens cover the cracks on the exterior. These houses, quick and inexpensive to build, were apparently erected by company employees. Later houses incorporated typical balloon-frame construction techniques, and were covered with clapboard sheathing. According to local tradition some, or all, of these houses were constructed by contractor George H. Gibboney from the town of Everett about
twenty miles to the southwest; but while physical evidence suggests this may have been the case, no written documentation could be found to verify it (see Appendix). The miners' dwellings had no insulation, indoor plumbing or electricity, and they were often overcrowded by large households of up to thirteen persons.

The data compiled on company-built houses in Robertsdale and Woodvale compares favorably with data compiled on workers' houses in other company towns. Foremost among these studies is the 1922 U.S. Coal Commission report, which described the typical coal miner's dwelling.

Three to five rooms constitute the prevailing mine-worker's home on company-controlled properties, though of course there are one- and two-room shanties and houses with six rooms or more. Over two-thirds of the . . . family dwellings were finished on the outside with weather board, usually nailed directly to the frame with no sheathing other than paper, and sometimes not even that. Board and batten—the cheapest type of construction—formed the outside finish of over 25 percent of the dwellings.47

Of the 176 extant miners' dwellings studied, seven distinct types were identified, although it is likely that several additional variations may have existed at one time. The reason for the different house types is unclear, although it is probably safe to suggest that they were built at different times by different builders. In addition, as time went on and job assignments became more specialized, there was an increasing requirement for both larger and smaller houses, befitting the status (and wealth) of employees. The larger dwellings, for example, had six rooms per unit as opposed to the usual four and included the additional amenities of closets and basements.

The typology offered here (Figs. 3.1-12) is based upon historic photographs, field surveys, measurements, and interviews with local residents. The majority of houses were classified based upon the exterior appearance alone, but at least two examples of each type were measured for sketch plans.48 In nearly every case, although the house had been altered, the original floor plan could be ascertained from remains of original fenestration, chimneys, stairwells and building materials. In cases where this evidence had been destroyed, the sketch plans were modified by oral histories and, whenever possible, historic photographs. Because of the survey's time constraints, limited access to some buildings, and the minimal alteration to nearly every house, this typology makes no pretense to absolute accuracy. It is, rather, intended to offer some idea as to the nature of the dwellings provided by the Rockhill Iron and Coal Company for its workers.

Part IV
CONCLUSION

The history of the Rockhill Iron and Coal Company is checkered with periods of prosperity and decline, including strikes over higher wages, shorter hours, and safety conditions in the mines; devastating floods, mine explosions and train wrecks; competition from other coal companies; changes in management in 1920, 1928 and 1938; and the impact of two world wars...
and the Depression. Through it all, the company and the miners persevered. Eventually, however, rising operating costs and the phasing out of coal as the nation's major source of fuel led to the company's demise. In spring 1956, the Rockhill Iron and Coal Company closed its one remaining mine at Woodvale, and the East Broad Top Railroad made its last run to Broad Top Mountain. Within a few months, company stockholders sold all their property to the Kovalchick Salvage Company of Indiana, Pennsylvania, for $500,000.

Closing the mines and abandoning the railroad thrust the Robertsdale-Woodvale community into an immediate and harsh period of economic decline, which was compounded by its relative isolation. Nearly everyone was unemployed. For some older miners, retirement was the answer. Some of the younger men went to work for smaller strip-mining companies in the area. Still others found employment in neighboring communities. Some chose to move away, but many others could not afford—financially or emotionally—to do so. Older residents, in particular, had lifelong ties to the community and lacked the financial resources to move to what would probably be a more costly location. Many of the older residents feel they were betrayed, that the thriving community they devoted their lives to let them down. They willingly talk about the coal-mining years, but more reluctantly about the present.

Yet, there is evidence that the community has survived the demise of the company that built it. In 1948, the Rockhill Iron and Coal Company began selling lots and houses to its employees, and many individuals seized the opportunity to own their own home. Perhaps as many as 90 percent of the houses are owned by their occupants, and pride in this ownership is evident in the form of renovations, additions, modifications, and general individualization of the once-identical houses. Porches, fenestration, exterior sheathing, interior partitions and decor, sheds and garages have all undergone transformation. Families that relied on privies and woodstoves until the 1950-60s now have modern bathrooms, kitchens and furnaces. Although the basic plan and fenestration of most houses remain intact, only a few have undergone such radical changes that the original character is unrecognizable. In Robertsdale, for instance, 17 Spring St. has nearly doubled in size, and 11-12 Hill St. and 1-3 Beech St. have been cut in half vertically. In Woodvale, there are similar examples, but the most drastically altered houses here—2-4 Pine St., 1-3 Bedford St., 2-4 and 22-24 Main St.—were cut in half horizontally.

There seems to be a general consensus that although the community has suffered from a serious economic decline, its appearance has improved. Citing the transition from corporate to private ownership, one resident said, "For a long time, you could tell who owned the houses in this town. If the company owned them, they looked like the devil, but if the people owned them, they'd fix them up."

Although many senior members of the community have given up hope for a renewed prosperity, optimism is creeping in. A number of local organizations, such as the Huntingdon Tourist Promotion Committee, Broad Top Chamber of Commerce, and Friends of East Broad Top, have set priorities aimed at bringing life back to the villages—primarily by stimulating the economy through tourism. Among the various projects these groups propose are the establishment of a miners' museum at Robertsdale, the extension and reopening of the East Broad Top Railroad from Mount Union to Robertsdale, and the restoration of the company square at Robertsdale. Restoration of the railroad depot is currently underway, under the
direction of Friends of East Broad Top.

The villages of Robertsdale and Woodvale are excellent examples of the type of coal company town established in Pennsylvania during the late nineteenth and early twentieth centuries. They exemplify the communities established and controlled by private coal companies in nearly every respect, from architecture to population to the lifestyle of inhabitants.

The Robertsdale-Woodvale community has been fortunate, however, in that it has been sheltered from many of the intrusions of modern development, and thus the physical framework of the community is largely intact—a silent witness to the era of "King Coal." Although the mines have been closed for more than thirty years, and some structures have been removed, boarded up, or fallen into disrepair, the relative isolation of the community has been beneficial from the standpoint of historic preservation—allowing much of the architecture to remain intact and thereby offering a fascinating look at the setting of a typical Pennsylvania coal-company town.

Because this recording project attempted to assess a broad range of historical issues and data in a relatively short period, there remains a great deal of information that could not be dealt with in the context of the study. Should time and funding permit, further projects in the Robertsdale-Woodvale community might include:

1) Elaboration of research and documentation of houses and other structures.
2) HABS documentation of significant structures.
3) An oral history project involving Rockhill miners and their families.
4) Compilation of an archive of historic photographs of the villages, miners, and railroad.
5) HAER documentation of railroad- and mine-related structures.
6) Research in Rockhill company records, should this information be available in the future.

Appendix

GEORGE H. GIBBONEY AND THE COTTAGE PLANING MILL

George Harrison Gibboney may have been the contractor for the company houses in Robertsdale and Woodvale; no documentation was found to support this local tradition. Gibboney was born in 1859 in Saxton, Pa. After completing his education, he worked for a couple of different companies supervising the construction of iron furnaces. He moved to Everett, Pa., in 1894 and took over a small planing mill under the name of Davis Brothers and Company. Gibboney expanded the business into the Cottage Planing Mill, which by the turn of the century had become "the chief industry of the borough, giving employment to about eighty men." An advertisement in the Directory of Bedford County, 1900, listed G. H. Gibboney and J. B. Fluck as operators of the mill and "contractors for all kinds of buildings, and manufacturers and dealers in all kinds of hard and soft wood." A 1906 bird's-eye view of Everett shows the Cottage Planing Mill as an extensive complex. It was apparently well-known and responsible for many of the finest houses in Everett and environs. Gibboney died December 5, 1929, at age 70. In his obituary, he was referred to as "one of Everett's most prominent citizens." After his death, the company was purchased by the Foor family, owners
of the Everett Hardwood Lumber Company, which had been in operation since 1913. The Everett Hardwood Lumber Company, which sells building supplies, is still in business at the original site of the Cottage Planing Mill.

ENDNOTES


8. MacFarlane, 667.


17. *Huntingdon County Tax Assessment for Carbon Township*, 1873-1875.


27. Ibid., 21-22.
31. Deed Book Z-5, 188.
32. Immigration Commission, 258.
34. Tax Assessment for Wood Township, 1900.
37. Africa and Son, (1876).
41. Tax Assessment for Wood Township, 1936.
42. Africa, (1883), 231.
43. Deed Book O-3, 530.
44. Tax Assessment for Wood Township, 1922.
46. Statistics compiled from historic maps, county tax assessments and field surveys.
48. Dwelling-type floor plans were based on measurements at the following addresses: Gable-roof Duplex (Type A)--17-19 East St., 22-24 East St, and 7 Church St., Robertsdale and 5-7 Main St. and 10-12 Elm St., Woodvale. Hipped-roof Duplex (Type B)--60-62 S. Main St., Robertsdale and 9-11 School Ln. and 61-63 E. Fulton St., Woodvale. Hipped-roof Duplex (Type Bb)--37-39 N. Main St., Robertsdale. Four-square Duplex (Type C)--58-60 Broad St. and 19-20 Huntingdon Sq., Woodvale. Bungalow (Type D)--19 Spring
St. and 25 Spring St., Robertsdale. 1-house Duplex (Type E)—9-11 Cliff St. and 33-35 Cliff St., Robertsdale. 1-house Duplex (Type Ee)—1-3 Wood St., 75-77 S. Main St., and 107-09 S. Main St., Robertsdale. Gable-roof Cottage (Type F)—2 North St. and 4 North St., Woodvale. Cross-gable Duplex (Type G)—6-8 Ash St., 2-4 Elm St., and 1-3 Pine St., Woodvale.


51. Directory of Bedford County, 1900 (Bedford, Pa.), 94.


54. Lawrence Poor, interview with author, Everett, Pa., August 1989.

SOURCES OF INFORMATION

Newspapers


Huntingdon Globe, Huntingdon, Pa., 1873-1922.

Huntingdon Journal, Huntingdon, Pa., 1873-1916.

The Orbisonia Leader, Orbisonia, Pa., 1876-1881.


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Huntingdon County Tax Assessment Records, 1873-1945, Huntingdon County Courthouse, Huntingdon, Pa.

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U.S. Bureau of the Census. 1900 Census of Huntingdon County, Pennsylvania.


**Historic Photographs**


Huntingdon County Historical Society Collection, Huntingdon, Pennsylvania.

Thomas L. Matthews Collection, Woodvale.

Kenneth Morgan Collection, Robertsdale.


Photographs published in:

- Baughman and Morgan. *The Robertsdale Story*.
- The Broad Top Bulletin.
- Friends of The East Broad Top. *Timber Transfer*.
- Grenard and Kramer. *East Broad Top: To the Mines and Back*.
- Heimburger. *Along the East Broad Top*.
- Rainey and Kyper. *East Broad Top*.

**Maps and Aerial Photographs**


Agricultural Soil Conservation Service. Aerial views of Robertsdale and Woodvale, Pennsylvania. 1938, 1939. (Record group 145, can nos. 608, 2031, 2086; Cartographic and Architectural Branch; National Archives, Washington, D.C.)


Plan of the Village of Robertsdale, November 1946. (Africa Engineering, Huntingdon, Pa.)

Plan of the Village of Woodvale, November 1946. (Africa Engineering, Huntingdon, Pa.)


Smith, A.D.W. Economic and Geologic Map of Pennsylvania, 1893. (Map Room, Penn State Library, State College, Pa.)

Township Road Map: Wood Township, Huntingdon County, 1937.

Tri-County Water Company. Maps of Robertsdale and Woodvale, n.d. (Huntingdon County Planning Office, Huntingdon, Pa.)


Interviews and Personal Contacts

Antionette Cialone, Robertsdale
Grace Crooks, Woodvale
Jon Donaldson, Robertsdale
Mr. and Mrs. Robert Everhart, Woodvale
Mrs. George H. Gibboney, Everett
Mary Beatrice Heister, Robertsdale
Kirby Lockhart, Robertsdale
Thomas Matthews, Woodvale
Leslie C. and Margaret McClain, Robertsdale
Ronald L. Morgan, Robertsdale
Kenneth Morgan, Robertsdale
Jack Moseby, Robertsdale
Mike Mykut, Woodvale
Edward and Katherine Orestuk, Woodvale
Susan Pawuk, Woodvale
Emma Spencer, Saxton
Anna Spencer, Woodvale
Florean Stevenson, Robertsdale
James Territo, Robertsdale
C. Roy Wilburn, Rockhill Furnace

Survey Respondants

Mary Beatrice Heister, Robertsdale
Antionette Cialone, Robertsdale
Victor Lazor, Cassville
Thomas L. Matthews Sr., Woodvale
Leslie C. McClain, Robertsdale
Kenneth Morgan, Robertsdale
Susan Pawuk, Woodvale
Dr. George W. Shaffer, Gaithersburg, MD
Delilah Shaffer, Gaithersburg, MD
Steve Skvarka, Robertsdale

General Sources


St. Michael's Greek Orthodox Church 70th Anniversary, souvenir booklet, Woodvale, Pa., 1977.


PROJECT INFORMATION

This project to document the Rockhill Iron and Coal Company towns of Robertsdale and Woodvale in Huntingdon County, Pennsylvania, was undertaken by the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), Robert Kapsch, chief, at the request of America's Industrial Heritage Project (AIHP). HABS reports on buildings in each town are cataloged under separate numbers. For general views of Robertsdale see HABS No. PA-5484 and for Woodvale see HABS No. PA-5485.

Project historian Lola Bennett completed the research and writing for this project during summer 1989 under the direction of Alison K. Hoagland, senior HABS historian. Bennett's work was published as The Company Towns of the Rockhill Iron and Coal Company: Robertsdale and Woodvale, Pennsylvania (Washington, D.C.: HABS/HAER, National Park Service, 1990). Illustrations in the publication include 35mm photographs taken by Bennett; large-format photographs taken by HAER photographer Jet Lowe; and historic photographs from the collections of Thomas L. Matthews, Kenneth Morgan, Ron Morgan, and the Huntingdon County Historical Society. The publication was compiled and edited by HABS historians Kim E. Wallace and Sara Amy Leach. Contemporary 35mm and historic photographs used in the publication as well as other miscellaneous research materials were transmitted to the AIHP collection at Stapleton Library, Indiana University of Pennsylvania, Indiana, Pa.
Fig. 1.1 Map of the villages of Robertsdale and Woodvale, Huntingdon County, Pa. (author).

Fig. 1.2 U.S.G.S. Topographic map showing Robertsdale and Woodvale (Wood), Pa.
Fig. 2.1 Map showing location of coal in Pennsylvania (author).

Fig. 2.2 Map showing location of East Broad Top Railroad, Huntingdon County (author). Township, Huntingdon County, Pa. (Nichols, 1873).

Fig. 2.3 Detail of map of Carbon Top Township, Huntingdon County, Pa. (Nichols, 1873).
Fig. 2.4 Village of Robertsdale, map showing mine openings, significant sites and structures (author).
Fig. 2.5 Village of Woodvale, map showing mine openings, significant sites and structures (author).
Fig. 3.1 Dwelling types built by Rockhill Iron and Coal Co. in Robertsdale, 1873-1925 (author).
Fig. 3.2  Dwelling types built by Rockhill Iron and Coal Co. in Woodvale, 1891-1925 (author).

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| Total         | 97                | 77             | 174   |            |

Fig. 3.3  Dwelling types in Robertsdale and Woodvale.
Fig. 3.4  Gable-roof Duplex, Type A, c. 1873-95, floor plans and elevation sketches (author).
Fig. 3.5  Hipped-roof Duplex, Type B, c. 1912-20, floor plans and elevation sketches (author).
Fig. 3.6 Hipped-roof Duplex Type Bb, c. 1915, floor plans and elevation sketches (author).
Fig. 3.7 Four-square Duplex Type C, c. 1912-20, floor plans and elevation sketches (author).
Fig. 3.8  Bungalow, Type D, c. 1910-12, floor plans and elevation sketches (author).
Fig. 3.9  I-house Duplex, Type E, c. 1876, floor plans and elevation sketches (author).
Fig. 3.10  I-house Duplex, Type Ee, c. 1882, floor plans and elevation sketches (author).
Fig. 3.11 Gable-roof Cottage, Type F, c. 1916, floor plans and elevation sketches (author).
Fig. 3.12 Cross-gable Duplex, Type G, floor plans and elevation sketches (author).
Fig. B.1 "Plan of the Village of Robertsdale," Nov. 1946. Collection of Africa Engineering.
Fig. B.2 "Rockhill Iron and Coal Company, Map of Robertsdale, Pa," July 12, 1926. Collection of Africa Engineering.
Fig. B.3 "Plan of the Village of Woodvale," Nov. 1946. Collection of Africa Engineering.