

2003

Made in West Chester: The History of Industry in West Chester, Pennsylvania, 1867 to 1945

James Jones

West Chester University, JJONES@WCUPA.EDU

Follow this and additional works at: http://digitalcommons.wcupa.edu/hist_facpub



Part of the [History Commons](#)

Recommended Citation

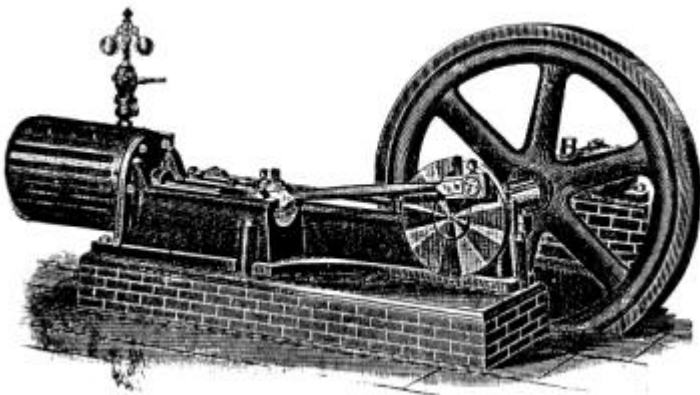
Jones, J. (2003). Made in West Chester: The History of Industry in West Chester, Pennsylvania, 1867 to 1945. , 1-104. Retrieved from http://digitalcommons.wcupa.edu/hist_facpub/8

This Book is brought to you for free and open access by the History at Digital Commons @ West Chester University. It has been accepted for inclusion in History Faculty Publications by an authorized administrator of Digital Commons @ West Chester University. For more information, please contact wcressler@wcupa.edu.



THE HISTORY OF INDUSTRY
IN WEST CHESTER, PENNSYLVANIA
1867 TO 1945

BY
JIM JONES



Made in West Chester

**The History of Industry
in West Chester, Pennsylvania
1867 to 1945**

by Jim Jones

Copyright 2003, 2013 by Jim Jones
All rights reserved

Printed in West Chester, PA by Taggart Printing

TABLE OF CONTENTS

| | |
|---|-----|
| List of Abbreviations | 3 |
| List of Illustrations | 4 |
| Foreword | 7 |
| 1. The Preconditions for Industry in West Chester | 9 |
| 2. Hoopes Brothers & Thomas Nursery (1853-1948) | 15 |
| 3. Hoopes Brothers & Darlington Wheel Works (1867-1972) | 22 |
| 4. The Sharples Separator Works (1881-1933) | 30 |
| 5. Change in Industrial West Chester | 35 |
| 6. Secondary Industrialization in West Chester | 48 |
| 7. After the Depression | 62 |
| 8. Conclusion | 70 |
| Notes | 74 |
| Bibliography | 100 |
| List of Interviews | 104 |

LIST OF ABBREVIATIONS

| | |
|--------|---|
| CCHS | Chester County Historical Society |
| CF | Chester County Historical Society clippings file |
| DLN | Daily Local News |
| HB&T | Hoopes Brothers & Thomas |
| HB&D | Hoopes Brothers & Darlington |
| HIS480 | History 480: Computer Applications in Historical Research (WCU local history research course) |
| HMMC | Hagley Museum Manuscript Collection |
| PRR | Pennsylvania Railroad |
| WC | West Chester |
| WCRR | West Chester Railroad |
| WC&PRR | West Chester & Philadelphia Railroad |
| WCSR | West Chester Street Railway |
| WCU | West Chester University |

LIST OF ILLUSTRATIONS

| Figure | Caption | Page |
|--------|--|------|
| 1.1 | Main wagon routes in the early 19th century | 10 |
| 1.2 | West Chester's businessmen promoted two railroads to Philadelphia | 12 |
| 2.1 | Advertisement for Josiah Hoopes' Cherry Hill nursery, 1857 | 17 |
| 2.2 | Packing room at Hoopes Brothers & Thomas nursery in the early 1900s | 18 |
| 3.1 | The HB&D factory on E. Market Street circa 1871 | 23 |
| 3.2 | The HB&D office at 239 E. Market Street, across from the railroad station, circa 1890 | 26 |
| 3.3 | Map of the HB&D factory next to the railroad station | 27 |
| 3.4 | The HB&D factory circa 1910 | 28 |
| 4.1 | Philip M. Sharples Machine Shop at the corner of E. Chestnut and N. Walnut Streets | 31 |
| 4.2 | A Sharples cream separator | 32 |
| 4.3 | Sharples employees in the paint room circa 1910 | 33 |
| 4.4 | Map showing the Separator Works and its surrounding neighborhood | 34 |
| 5.1 | African American children in West Chester circa 1899 | 38 |
| 5.2 | Early development along Goose Creek in Riggstown | 40 |
| 5.3 | Machinists with their tools circa 1899 | 43 |
| 5.4 | Chicken coops on S. Matlack Street before WW II | 44 |
| 5.5 | West Chester "Hook & Ladder" truck circa 1896 | 47 |
| 6.1 | Millions of paper tags like this one were printed in West Chester | 49 |
| 6.2 | Small factories occupied the remaining open spots in the southeast between 1900 and 1910 | 50 |
| 6.3 | The West Chester Electric Light Plant at Walnut and Chestnut Street circa 1899 | 51 |
| 6.4 | West Chester's steam heating lines | 52 |
| 6.5 | The corner of High and Gay Streets circa 1900 | 53 |
| 6.6 | The roller coaster at Lenape Park in 1948 | 54 |
| 6.7 | An Esco Cabinet Company milk cooler | 55 |
| 6.8 | The Philadelphia factory of Chris D. Schramm & Son | 57 |
| 6.9 | The West Chester factory of Schramm in 1954 | 59 |
| 6.10 | Raymond Rettew and Charles Heathcote in their Ashbridge Street laboratory | 60 |

| | |
|--|----|
| 7.1 The Denney Tag factory circa 1920 | 62 |
| 7.2 Charles Gincley making wheel hubs for HB&D in 1954 | 66 |
| 7.3 Gay and High Streets, 1945 | 69 |
| 8.1 The former Lasko factory on W. Gay Street | 70 |
| 8.2 The West Chester Cold Storage & Ice Plant on E. Union Street circa 1899 | 71 |
| 8.3 West Chester's Market Street railroad station | 72 |

FOREWORD

As I write these words, I still find it hard to believe that my friend Paul Rodebaugh is not here to proofread my work. He encouraged my interest in West Chester industrial history at a time when some people ridiculed it. His willingness to share his knowledge and personal library made this book considerably richer in content. With that in mind, I dedicate this book to the memory of Paul Rodebaugh.

Although I completed the vast majority of the research for this book on my own, that required the assistance of archivists and staff at the Chester County Archives, Chester County Historical Society, Hagley Museum, and West Chester University Library. I'd like to single out several people for recognition and special thanks including Laurie Rofini, Diane Rofini, Pamela Powell, Marian Strode, and Sarah Wesley.

Several former students provided original research that enriched this book, including Charlotte Bridges who investigated the West Chester Board of Health, Pam Colbert, who researched the West Chester Street Railway, Samuel Flammini who wrote on the local mushroom industry, and Kelly McVeigh, who examined women's work in the West Chester tag industry. This book also benefitted from original research by Thomas A. Pitt Jr. on Borough Council members, Paul Moore on the West Chester Railroad, and Penny Washington on African-American workers.

Many more people offered information and encouragement along the way. I would particularly like to thank Matt Bricketto, Anne & Marie Carroll, Richard & Rebecca Carey, Thomas "Sarge" Clark, Tom Comitta, Seamus Cummins, Clifford DeBaptiste, Jane Dorchester, Karin Gedge, Ann Gincley, Alice Hammond Jr., Jack & Charlotte Harvey, Senya Isayeff, Don & Sarah Kirkpatrick, Maurice Linnett, Ray Ott, Miriam Peacock, David L. Peirce, Tony Pillagalli, Devere Ponzio, Bill Scott, Jean Timmerman Swisher, George Weist, Ruth Weidner, and Mary Zimmerman.

Several people were kind enough to read early drafts of this manuscript including Dr. Thomas Legg of West Chester University, Lisa Cromley of the Westtown School, and Frank Senior of West Chester. Their comments helped me to clarify my own thinking and made this a better book in many ways. On the other hand, I alone am responsible for any errors that remain.

I also wish to thank the West Chester University College of Arts & Sciences for a CASSDA grant that supported the preparation of this manuscript.

Finally, I must thank my wife and family. If there is any fame or glory to be derived from completing this book, I gladly offer it to them.

CHAPTER 1

The Preconditions for Industry in West Chester

This is a book about industry and how it changed the town of West Chester, Pennsylvania. Geographically, its focus is narrow--covering industry within the Borough limits, plus Schramm, Inc. of West Goshen--but it describes a process that connected the Borough to every continent except Antarctica, and affected the economic and social networks that bound Cestrians together. The process is certainly not unique to West Chester, as many other communities underwent something similar in the 19th and early 20th centuries. Consequently, this book is not addressed to academic scholars, nor is it intended to advance theories of industrialization. Instead, this book is written for the people of West Chester and its surrounding area. It grew out of a series of articles, walking tours and a lecture that I created for the Borough's 1999 Bicentennial Celebration.¹ It draws on my own research on "Riggtown" (my old neighborhood) and individual industries, plus research on a variety of local topics by other historians and by West Chester University students.

Industrialization is a complex phenomenon.

Fundamentally, it is a way to produce things more quickly and efficiently. In practice, that involves a change in the way people work, as shown by the following example. A cobbler does everything from buying the leather to cutting it, assembling it into shoes and selling these shoes to customers. The cobbler acts as his or her own banker by buying materials and providing labor before any shoes are sold. A shoe factory does all of the same things, but organizes them differently, carrying out each step on a much larger scale using people (or departments) specialized for a particular task. Given enough capital to pay the start-up costs, the result is the ability to produce many more shoes at a lower cost per unit. Large-scale production also makes it practical to use machinery, so factory goods are more uniform (i.e. not "hand made") and include items that are impossible to create by hand, like computer chips. In brief, the task is to find raw materials, turn them into a product, and get the product to consumers. All of this requires financing, the ability to operate large-scale organizations and, in a competitive environment, the ability to innovate. It also requires people--large numbers of relatively low-skilled workers for labor and markets, and fewer people with specialized skills to

provide organization and inventiveness. Financing can come from a variety of sources including private fortunes, banks, and stock sales.

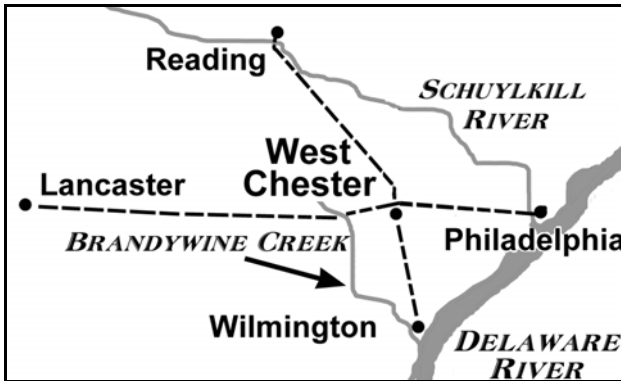


Fig. 1.1: Main wagon routes in the early 19th century.
Map by the author.

By the end of the Civil War, West Chester had everything it needed to industrialize. During the first half of the 19th century, it had grown from a crossroads village into a county seat and farm market town. The region's rich soil produced agricultural goods in abundance, while its proximity to Philadelphia, Chester and Wilmington provided ready markets. West Chester had more than five thousand inhabitants by 1870,² and in the same period, Chester County's population surpassed 75,000.³ Chester County was wealthy enough to supply capital and growing fast enough to provide labor and markets.

Every town in the nineteenth century had its "progressive" citizens--usually men--who embraced new technologies and found the money to try them out. West Chester had its share of early entrepreneurs, like the men who organized one of America's first railroads in 1831. Cestrians experimented with silk production,⁴ furniture-making,⁵ and had both a gas light company and telegraph by 1852.⁶ Cestrians also opened a number of schools, including the West Chester Academy in 1813, which educated a number of prominent local men like Washington Townsend, John Hickman, Dr. Wilmer Worthington, James B. Everhart and others.⁷

Although the region had both forests and quarries, the

Chapter 1, Preconditions

most abundant raw materials around West Chester were produced by farmers. Writing in 1881, J. Smith Futhey and Gilbert Cope observed that "Chester is essentially an agricultural county, and must have been so recognized at an early day, as a plow was the leading device of its first official seal in 1683." Local farmers produced corn, wheat, cattle and hogs, and experimented with silkworms and exotic horse and sheep breeds. The Borough was home to the Chester County Agricultural Society, which held annual fairs on property just outside of town.⁸

While the steady growth of West Chester's population provided an expanding market for local produce, the phenomenal growth of Philadelphia, with its global connections, provided even greater potential. Unfortunately, until 1832 the only route to Philadelphia was via wagon roads, unlike Chester or Norristown, which had connections by water.

On December 10, 1831, local attorneys Isaac Darlington and P. Frazer Smith presided over a group which met at the Turk's Head Hotel. The state was preparing to build the "Main Line of Public Works" from Philadelphia to Pittsburgh, and they wanted to make sure that West Chester was connected. Since the plan called for the Main Line to pass several miles to the north, and geography precluded the construction of a canal, they opted to build a road consisting of parallel rails on which a horse could draw heavily loaded wagons.⁹ "Railroad fever" was already strong in the coal regions of Pennsylvania at that time,¹⁰ and William Everhart's successful development of the 102-acre Wollerton farm in 1829 generated enthusiasm for speculative deals.¹¹ When stock in the West Chester Railroad (henceforth WCRR) went on sale on March 22, 1831, people fought for places in the line and the issue was oversold in less than two hours.¹²

The tracks were completed in September 1832, but service to Philadelphia had to wait until the Main Line was completed in October 1833. The WCRR used horses to pull wagons over nine miles of wooden rails topped with iron strips, where they joined the Main Line at "Intersection" (later Malvern) for the rest of the journey to Philadelphia. The trip took about three hours, a great improvement over the full-day trip normally required by wagons on dirt roads,¹³ and that meant farmers around West Chester could more readily sell perishable goods in

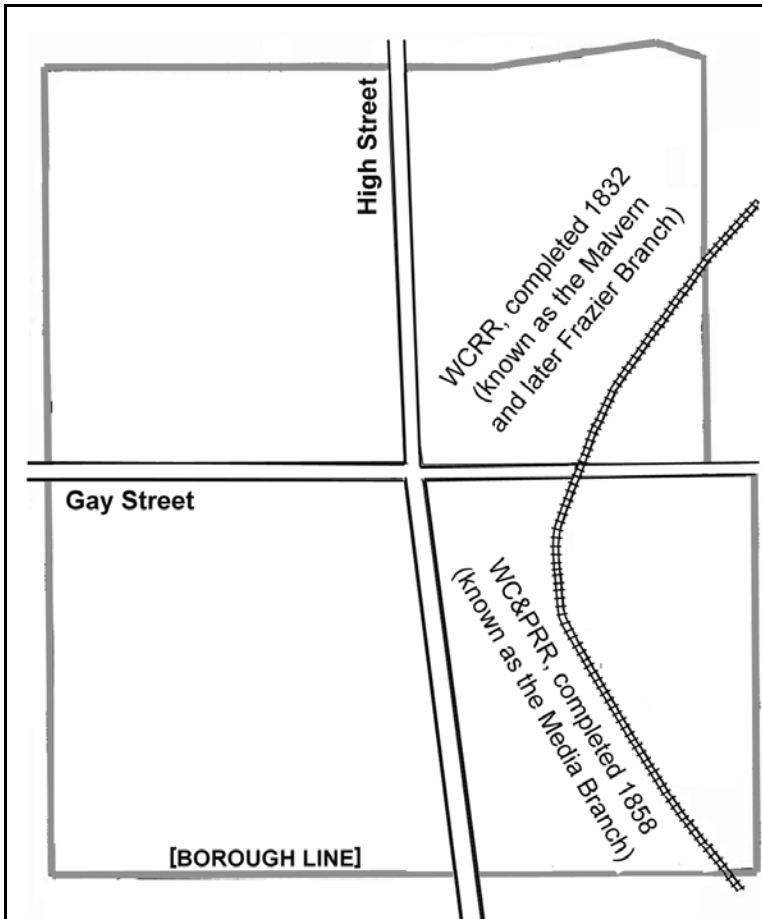


Fig. 1.2: West Chester's businessmen promoted two railroads to Philadelphia. *Map by the author.*

Chapter 1, Preconditions

the city. It also freed up farm land closer to Philadelphia for other uses, so in the long run, developments like the WCRR allowed Philadelphia to expand. A second railroad to West Chester via Media (the West Chester & Philadelphia Railroad, henceforth WC&PRR) was completed in 1858,¹⁴ and by the time that the Pennsylvania Railroad acquired control over both lines in 1881,¹⁵ West Chester's industries had access to the entire East Coast and beyond.

No one has yet compiled an account of privately held capital in West Chester before the Civil War, but family fortunes appear to have played a major role in financing the new industries. Josiah and Abner Hoopes, two of the founders of the Hoopes Brothers & Thomas Nursery, were sons of Pierce Hoopes, a local businessman who sold lumber in Philadelphia from 1835 to 1850.¹⁶ Philip M. Sharples, founder of the Sharples Separator Works, was the great-grandson of West Chester's first burgess (head of local government), grandson of a man who made farm machinery in the 1820s, and son of a successful coal and feed store owner in the late 19th century.¹⁷ Thomas and Edward Hoopes, founders of the Hoopes Brothers & Darlington Spoke Factory, were sons of another family of successful farmers and mill operators.¹⁸

Money does not seem to have been a limiting factor, since the West Chester Board of Trade gushed in 1888 that "Capital being super-abundant, no business promising a good income need, for one moment, lack the necessary funds for its vigorous prosecution; the alacrity with which stock has been taken in all such corporations as are located here settles that question quickly."¹⁹ With six million dollars in assessed real estate value and ten million in other investments, plus three national banks with a combined capital of \$3,373,500, West Chester's business community had enough wealth by 1888 to finance new industries.²⁰

All of that lay in the future, however, as the Civil War came to an end. The 1857 Borough Directory listed eleven farmers who still lived in town,²¹ and the Borough's largest businesses were banks, schools, and firms like James Andrews' cigar shop which employed ten people.²² Nevertheless, by 1851 Cestrians made up less than five percent of the county's population, yet they paid one tenth of all property taxes and were already negotiating to build a second railroad into town.²³ Before

anything could happen, the Civil War ignited, but it eventually brought new money into the Borough through war contracts. As soon as the war was over, the industrialization of West Chester began.

The rest of this book is organized chronologically. Chapters Two, Three, and Four describe the creation of West Chester's first major industries. The fifth chapter examines the impact of the first wave of industries on the Borough's neighborhoods, government and service industries. Chapter Six describes the second wave of industries, beginning about 1890, that took advantage of what was by then a well-developed infrastructure and labor pool. Chapter Seven covers the effects of the Depression and the decline of local industry, while Chapter Eight draws some conclusions about West Chester's experience.

CHAPTER 2

Hoopes Brothers & Thomas Nursery (1853-1948)

Given the region's agricultural base in the early 19th century, it is no surprise that West Chester's first industries addressed the needs of farmers. Despite the fertility of the local soil, early farmers had little incentive for market farming since their land grants were enormous, transportation was difficult, and labor was scarce. But as the population increased and the land became fully occupied, pressure developed to farm the land more intensively, especially nearest to Philadelphia. By the end of the 18th century, Chester County farmers had begun to abandon farm-and-fallow methods for crop rotation.¹ In the early 19th century they started to use seed-drills, cultivators and mowers; to invest in new animal breeds; and to use fertilizers like guano, bone meal and phosphates.² A group of local men founded the Agricultural Society of Chester County in 1820 in order to disseminate the results of their members' experiments.³ Businesses developed to meet farmers' needs, and by 1857 West Chester boasted three harness shops, nine blacksmiths, nine wheelwrights, six barrel makers and nearly two dozen grocers.⁴

Although Chester County's population consumed some of the increasing output, the biggest market by far was in Philadelphia. In the late 18th century farmers from the eastern part of the county regularly transported butter, eggs and poultry in saddlebags and horse-drawn carts to markets in the city. As late as the 1840s, however, poor roads meant that farmers from the western part made the trip as seldom as once a year.⁵ Railroads changed that, and the completion of the state's "Main Line" across the county in 1833,⁶ another line to Reading via Phoenixville by 1839, and a third line to Oxford by 1859, put every farmer in Chester County within 10 miles of a train station.⁷

The Nursery Business

The first enterprises to "industrialize" in West Chester were plant nurseries. Obviously, they did not erect factories to produce plants, but by organizing the production of seedlings and the distribution of mature plants, West Chester's nurserymen laid the basis for an industry that distributed plants throughout the

United States.

The depression of 1837 severely damaged the local economy, but as it recovered, several local farmers began to experiment with selling fruit trees and vegetable seed in the late 1840s. The first was John Rutter, who planted peach trees on land between Church and New Streets north of Lafayette Street.⁸ The second was Paschall Morris, who founded his own nursery and then went into business with J. Lacey Darlington, the son of botanist Dr. William Darlington. After Morris left, Darlington continued in business with Robert Otto, and finally sold it to George Achelis in 1866.⁹ Before Morris left, he and Darlington employed an Englishman named Joseph Kift, who left in 1852 to start his own business on High Street between Price and Dean Streets. Kift promoted the sale of flowers for funeral arrangements and established an international reputation with his "Bermuda Lily." By 1876 Kift's business was successful enough to have a sales office in Philadelphia.¹⁰

Hoopes Brothers & Thomas Nursery

West Chester's most successful nursery was created by two local brothers and their neighbor, an accountant. The founders were Josiah Hoopes and his brother Abner, fifth-generation Quakers whose family came to Pennsylvania with William Penn.¹¹ Their parents were successful: father Pierce made his fortune selling lumber to Philadelphia builders before the Civil War,¹² and mother Sarah Andrews, the daughter of a Wilmington merchant, became well-known as a teacher and Quaker minister. Their distant cousin Joshua was a celebrated teacher and scientist in West Chester, and they grew up surrounded by people with an interest in agriculture and horticulture.¹³

In October 1853, using plants imported from England,

Chapter 2: Hoopes Brothers & Thomas

Josiah started a nursery on his father's farm just north of the Borough.¹⁴ After a few years of raising and selling vegetable plants,¹⁵ he began to sell fruit trees.¹⁶ In 1855 he named his business "Cherry Hill Nursery,"¹⁷ and he brought his younger brother Abner into the firm in 1857 so they could open a stall at the Borough market.¹⁸ Their success continued, and in 1865 the brothers expanded with the purchase of forty-four acres along the railroad northeast of town.¹⁹

Their business really began to take off at the end of the Civil War. In 1866 they took on George B. Thomas, an accountant, as their partner,²⁰ and by 1870 the firm employed roughly one hundred employees at the height of the shipping season. By 1881 they farmed about 300 acres northeast of town and operated greenhouses that covered more than half an acre.²¹ In 1885 they changed the name of their firm to the "Maple Avenue Nurseries,"²² and by 1898, with six hundred acres northeast of the Borough,²³ they were the largest producer of peach trees in the United States.²⁴

A decade later the firm purchased Curtis Hannum's 800-acre farm in West Goshen,²⁵ and by 1913 the company had nearly 1000 acres in cultivation, about a third of an acre under glass, and their main business office in Philadelphia.²⁶

CHERRY-HILL
NURSERY;
WEST CHESTER, PA.
JOSIAH HOOPES, Proprietor.

The Subscriber would respectfully invite the attention of all who are interested in the culture of

FRUIT & ORNAMENTAL TREES,
SHRUBBERY,
GRAPE VINES, &C.,

to his collection, which he has selected with care, both from Nurseries in this country and Europe.

Having recently erected

COMMODIOUS GREEN HOUSES,

he is prepared to fill orders for

ROSES, DAHLIAS, VERBENAS,

and all plants suitable for bedding out through the Summer months.

N. B.—Bouquets neatly arranged and furnished at the shortest notice.

Fig. 2.1: Advertisement for Josiah Hoopes' Cherry Hill nursery. From *Darlington's 1857 Borough Directory*.

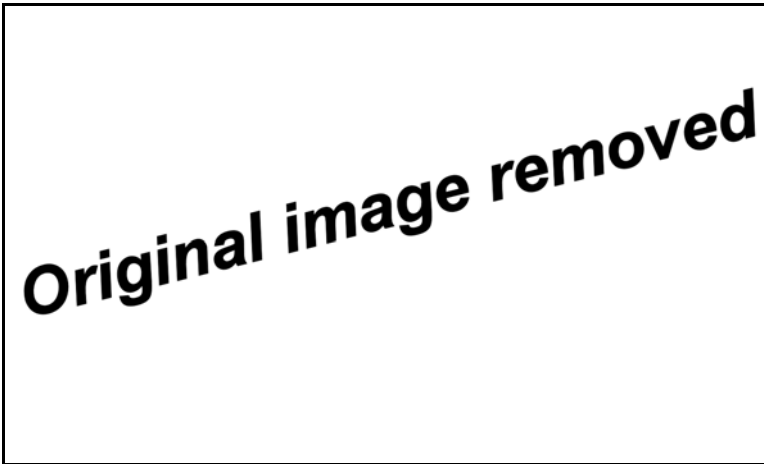


Fig. 2.2: Packing room at Hoopes Brothers & Thomas nursery (early 1900s). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

Part of the firm's success was due to its early adoption of "modern" business practices. The owners devised a way to mail small plants to customers by placing them in damp moss and then wrapping them in paper.²⁷ To advertise their products, they created displays for the 1875 Pennsylvania state fair²⁸ and sent "carloads of plants" to the 1876 Centennial Exposition in Philadelphia.²⁹ In 1878 they installed telephones in their office and main workshop,³⁰ and they added a railroad siding in 1879.³¹ They did other things like printing catalogs in both English and Spanish, and providing them with eye-catching tinted covers and engraved titles.³²

Using the postal system, railroads and steamships, Hoopes Brothers & Thomas (henceforth HB&T) shipped plants all over the United States,³³ and in March 1874 they sent their first shipment of plants to Europe.³⁴ By 1879 they had a Mexican sales agent,³⁵ and they reported sales throughout Canada in 1881.³⁶ Their 1882 catalog mentioned daily shipments to the Pacific coast and regular sales to Europe, Australia and the "West Indian Islands."³⁷ In 1886 they even received an order from the White House (then occupied by Grover Cleveland).³⁸ By the turn of the century, the company had sales offices in West Chester, Nashville³⁹ and Philadelphia.⁴⁰

Chapter 2: Hoopes Brothers & Thomas

For residents of West Chester the nursery was a source of both pride and concern. The company's office, completed in 1880, became a showplace for the town, thanks to its unique design and extensive landscaping. The frame and brick building was designed by a Philadelphia architect⁴¹ and decorated with flower gardens⁴² and a board walk for visitors.⁴³ As one newspaper reported, "There is no more attractive place in our borough than the grounds of this firm, including their private residences adjoining, and we as a people owe them a vote of thanks for the privilege extended us in visiting them."⁴⁴

The newspapers were less enthusiastic about the seasonal workers who came to the nurseries. They recorded yearly episodes of hiring in the spring (to ship ornamental plants) and fall (to ship fruit trees), followed by layoffs that left a reduced staff to take care of the greenhouses and orchards during the rest of the year.⁴⁵ During the busy season the company provided lodging in two large sheds along the railroad track, but many of the temporary workers preferred to construct their own shelters out of packing crates.⁴⁶ An 1895 report referred to "tramps" that flocked into the Borough to seek work at the nurseries,⁴⁷ while another report mentioned that the firm employed Italians for the first time in 1906 because they could not find enough local labor and they couldn't hire "colored men ... [because] the other employees, as a rule, do not like them."⁴⁸ A 1905 report mentions problems with rats,⁴⁹ and a 1908 article mentions workers drying their clothing on the outside of their shanties.⁵⁰ In response to local pressure, the company tore down the old sheds on Maple Avenue in 1912 and built replacements along Goshen Road, away from public view.⁵¹

As the company occupied more land, problems developed with trespassers and thieves. By 1876 the company began to post notices warning "gunners and all other trespassers" not to enter the nursery,⁵² and it issued further warnings against "rabbit hunters" in 1878,⁵³ although the company continued to stage "rabbit hunts" for friends and other prominent men.⁵⁴ In 1880 and 1881 the directors complained to the newspapers about people who pilfered flowers from the gardens in front of the office.⁵⁵ The company began to employ an armed night watchman who, on at least one occasion in 1895, discharged his weapon to scare away thieves.⁵⁶ Finally, in 1921 the company closed several private lanes through their property

to prevent the Borough or West Goshen township from claiming them as public roads.⁵⁷

Although their firm's success indicates that they worked well together, the three owners led very different lives. George Thomas was the son of a West Chester doctor,⁵⁸ a civil war veteran, and a graduate of Yale. He seems to have been more interested in Philadelphia society, and he twice married women from Philadelphia families.⁵⁹ Although he was a member of the West Chester Golf & Country Club, he became more heavily involved in the University Club of Philadelphia,⁶⁰ and he was the only member of the firm who did not join the West Chester Board of Trade when it started in 1888.⁶¹ Thomas outlived both of his partners, and died in November 1920.⁶²

Abner played the biggest role in West Chester society because he lived longer than his older brother Josiah and he started his family much earlier. Abner married Melinda M. Worthington, the daughter of Dr. Wilmer Worthington, a noted physician, state senator, and president of the National Bank of Chester County & Trust Company.⁶³ Abner's son Wilmer became a clerk at the nursery in September 1898⁶⁴ and general superintendent of the nursery six months later.⁶⁵ After uncle Josiah died, Wilmer became a director in 1907⁶⁶ and went on to chair the board of the Chester County Trust Company⁶⁷ and serve as its president from 1928 to 1946.⁶⁸

Although Josiah developed an international reputation, his legacy in West Chester was substantial. Josiah's best-known local accomplishment was landscaping and designing the benches and fountains for Marshall Square Park.⁶⁹ Since he married much later, Josiah had time to serve in a number of local organizations: as the corresponding secretary for the Chester County Horticultural Society,⁷⁰ chair of the annual meeting of the Pennsylvania Fruit Growers Association in 1873,⁷¹ and recording secretary of the Chester County Agricultural Society in 1874.⁷² He served on the first Board of Trustees of the West Chester State Normal School (West Chester University's predecessor founded in 1871) and continued for fifteen years.⁷³ Afterwards, he joined the West Chester Board of Trade when it began in 1888. Late in life, he served a term as the president of the Brandywine Athletic Association from 1901 to 1903.⁷⁴

In 1868 Josiah published the Book of Evergreens, a work which brought him to the attention of horticulturalists all over the

Chapter 2: Hoopes Brothers & Thomas

United States.⁷⁵ In 1876 Josiah was the first person from Chester County chosen to judge the Centennial Exposition in Philadelphia.⁷⁶ His work developing new varieties of evergreen trees resulted in one strain that was named after him, *picea pungens glauca var Hoopesii*. Josiah contributed articles on horticulture to *The New York Tribune*, *The Horticulturist*, *Gardener's Monthly*, *Mechan's Monthly* and other magazines. He was also a founder and president of the State Horticultural Association of Pennsylvania, a vice-president of the American Pomological Society, a member of the Academy of Natural Sciences, and an honorary member of many other horticultural societies, including the National Society of Brazil.⁷⁷

Unlike his partners, Josiah was nearly sixty-six years old when he married Helen A. Morgan, a young Catholic woman of West Chester, in March 1898.⁷⁸ Eleven months later, they had a son named Josiah Morgan Hoopes, but Josiah died in January 1904 before his son's fifth birthday, leaving his entire estate to his young wife and child.⁷⁹ Afterwards, Helen and their son appear to have had little to do with Josiah's Quaker family. Instead of the West Chester Friends School, Josiah's son graduated from St. Agnes High School in 1921 and attended Villanova University.⁸⁰ Unlike Josiah, who was buried in the family plot at the Friends cemetery on W. Rosedale Avenue, Helen and their son were buried in St. Agnes Catholic Cemetery north of town. At least some of his father's influence stayed with young Josiah, however, as he became interested in horticulture and, after studying landscape architecture, he became West Chester's tree commissioner.⁸¹

Although it used little machinery and produced no smoke, HB&T was a product of the industrial age just as surely as railroads and steel companies. From its origins in a preindustrial agricultural market town, HB&T became an integrated firm that produced and marketed goods all over the world. In the process, it helped spread the name of West Chester as well, and provided an example for other local entrepreneurs to follow.

CHAPTER 3

Hoopes Brothers & Darlington Wheel Works (1867-1972)

While the railroad revolutionized long distance transportation in the 19th century, people who needed to get to the station still depended on horses and wagons until the 1890s. Another of West Chester's first industries exploited that need by manufacturing wooden spokes and wagon wheels.

The "Spoke Works," as it was known to Cestrians, was founded by another pair of brothers named Hoopes and one of their Darlington cousins. Like the brothers who founded the Hoopes Brothers & Thomas Nursery, William and Thomas Hoopes were descendants of Daniel Hoopes who reached Chester County from England in 1696.¹ They were born on their parents' farm in West Goshen just north of the Borough, and grew up around machinery produced by their father and great-uncle, Ezra Cope.²

The Spoke Works arose from an economic opportunity created by the Civil War.³ When the enormous wartime demand for timber resulted in shortages in New England, entrepreneurs came to Chester County looking for fresh supplies of "second growth hickory" with which to manufacture wagon wheel spokes. The Hoopes brothers' parents, Thomas and Eliza, had a farm just north of town near the modern junction of N. New Street and the Route 322 bypass. It was equipped with a saw mill and grinding equipment for the manufacture of sorghum syrup. As a way to reduce their shipping costs, the New Englanders contracted with the two brothers to "rough finish" wooden spokes using a steam-powered Blanchard lathe. The brothers cut their first spokes in 1866 and kept the equipment after the contract ran out. In 1867 they moved it into the Borough.⁴

They selected a site on E. Market Street on the east side of the railroad in a mill that belonged to John G. Robison, a coal yard operator⁵ and member of Borough Council during the War.⁶ The Hoopes brothers bought the property in June for \$2500⁷ and started operations in September 1867.⁸ Money must have remained tight, since they sold off livestock and farm equipment the following January⁹ and brought their cousin Stephen P. Darlington into the business as a partner in September 1868.¹⁰ The following year they hired another relative, 18 year-old Edward S. Darlington, to work in the factory.¹¹

Chapter 3: Hoopes Brothers & Darlington

At first they just manufactured wheel spokes, but in 1869 they started to produce complete sets of wheels¹² as well as other products like hatchet handles.¹³ Evidently, business was good, because in 1871 they purchased more land for \$2352.87¹⁴ and provided roughly forty employees with a Christmas dinner and entertainment by the West Chester Cornet Band.¹⁵ By the summer of 1872 the company employed nearly a hundred men at cutting, hauling, and turning wood using steam-powered circular saws, lathes, a large belt sander and planes. They also used steam to bend the wooden wheel rims, and fueled the boiler with scraps from the shop. They shipped wheels and parts by railroad as far as the Pacific coast and by ship to Europe, where they helped replace equipment lost on both sides of the Franco-Prussian War.¹⁶ They also introduced a line of lightweight wheels for carriages in 1872.¹⁷

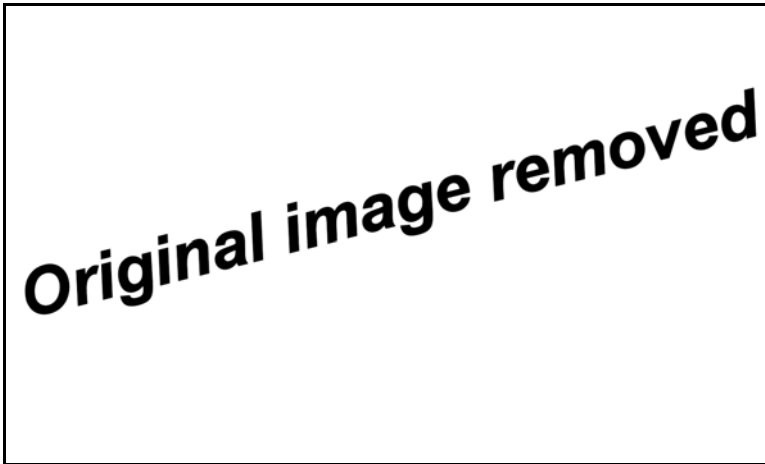


Fig. 3.1: The HB&D factory on E. Market Street (circa 1871).
Photo courtesy of the Chester County Historical Society, West Chester, PA.

In the months leading up to the financial crash of September 1873, the company invested heavily in new buildings and equipment. Their new building was nearly ready in November 1872, about the same time they took delivery of a spoke lathe manufactured by West Chester machinists Evans, Griffiths & Thomas.¹⁸ In March 1873 they exhibited wheels at the

Vienna Exposition¹⁹ and received a large order from Berlin a month later.²⁰ Confidently, they invested in forced air ventilation in their office²¹ and a fire suppression system throughout the factory.²²

Then the "Panic of 1873" struck in September. By the end of the month, the company cut wages and shifts by ten percent, and made their workers finish before sunset to save money on gas lighting.²³ Layoffs began in November, and by the following March the work force was down to just seventy-five employees.²⁴ Although some workers remained busy remodeling the office in 1874,²⁵ the company had to reduce shifts again just before Christmas 1875.²⁶

With the WCRR in control of both of the lines into town,²⁷ the owners of Hoopes Brothers & Darlington (henceforth HB&D) began to accuse the railroad of price gouging and threatened to move their factory to Chester²⁹ or Philadelphia.³⁰ The railroad took their threat seriously, since the firm was a major customer that brought in lumber from Maryland,³³ Virginia,³⁴ Mississippi³⁵ and Florida,³⁶ as well as heavy machinery³⁸ and coal for the factory's steam engine.³⁷ In exchange, the company shipped nearly all of its products by rail, including five thousand sets of wagon wheels in 1874³⁹ and more than a hundred sets of massive 125-pound wheels used for "heavy hauling" in 1878.⁴⁰ Although the data is scanty, in the single month of May 1872, HB&D paid \$4,000 in freight fees³¹ at a time when the railroad's monthly revenues were only about \$9,000.³²

The economic picture remained bleak for the rest of the decade, interrupted only by the firm's preparations for the 1876 Centennial Exposition in Philadelphia. Their exhibit attracted orders from England⁴¹ and Portugal,⁴² but that did not stave off another round of layoffs in August.⁴³ To boost the morale of the remaining workers, the company provided each employee with a day off in September, plus a train ticket to Philadelphia and a pass for the Exposition.⁴⁴ Morale received a further boost when the company's "Keystone Brand" and "Dorman Patent" wheels won a medal at the Exposition,⁴⁵ and the company sent wheels to subsequent international expositions at Paris in 1878 and Melbourne (Australia) in 1880.⁴⁶

As business recovered in 1880,⁴⁷ the owners embarked on a new round of improvements. That spring they reorganized as a stock company called "Hoopes Brothers & Darlington Ltd."

Chapter 3: Hoopes Brothers & Darlington

with Thomas as president and William as company superintendent. Stephen P. Darlington became the firm's treasurer,⁴⁸ David E. Allen was the secretary, and Jerome B. Gray, Edward S. Darlington, and Thomas H. Jackson became department managers.⁴⁹ In July they started to build a two-story wood-drying building on E. Miner Street at the rear of their property,⁵⁰ and replaced the roofs on their buildings with slate to reduce the hazard of fire.⁵¹ In spring 1881 the company purchased a saw mill near Hagerstown, Maryland and sent Jacob Farra, Owen Reagan, and J. R. Smith from West Chester to operate it.⁵² Late in the year they ordered two more spoke lathes from Philip M. Sharples (see Chapter Four),⁵³ and in the summer of 1882 they constructed an eighty foot brick smokestack.⁵⁴

Expansion continued in 1884 with the construction of a building for making carriage wheels and the installation of five telephones, making HB&D the largest Bell Telephone customer in the Borough.⁵⁵ Working conditions improved somewhat with a switch from "gang labor" to piecework,⁵⁶ the establishment of a "Mutual Beneficial Association" (described in Chapter 5),⁵⁷ and sponsorship of a company baseball team.⁵⁸ The firm also purchased another half block behind their property on which to stack wood for drying⁵⁹ and added a 200-horsepower steam engine to power the factory's machinery.⁶⁰

At the end of the decade, the directors began to seek closer cooperation with the West Chester business community, and in what the local newspaper described as a response to public opinion, they installed curbs along Market Street in front of their building.⁶¹ The HB&D leaders also helped to start the Board of Trade in 1888 by providing its first president (Thomas Hoopes) and secretary (David Allen). William Hoopes served on the Board's "Committee for Manufactures," Jerome Gray served on the "Committee for Railroads and Transportation," and Edward S. Darlington was a member.⁶²

In 1889 the company briefly merged with fourteen other wheel companies from across the country to form the "American Wheel Company" of Chicago. David Allen became the secretary of the new company,⁶³ while Thomas Hoopes remained busy as the president of the board of the National Bank of Chester County.⁶⁴ The interlude ended when the American Wheel Company went bankrupt in 1891, but the Hoopes Brothers and Edward Darlington were able to buy back the company in late

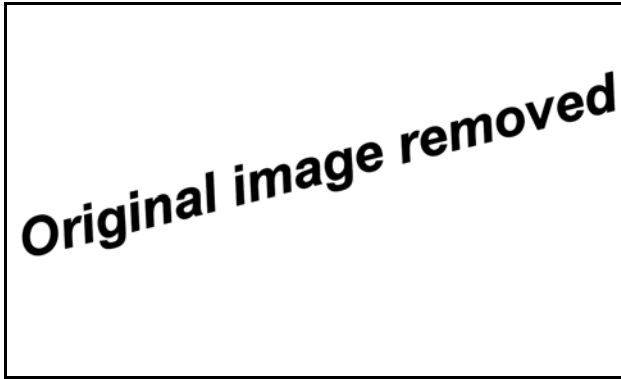
1892.⁶⁵

Fig. 3.2: Hoopes Brothers & Darlington office at 239 E. Market Street, across from the railroad station (circa 1890), now occupied by Ralph G. Smith, Inc. *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

In 1893 the company added a new product line--pneumatic tires on light carriage wheels⁶⁶--to its usual lines of Warner, Star and "Sweets Concealed Band" wheels.⁶⁷ That was not enough to counteract the national economic slump,⁶⁸ but business started to pick up when the factory began producing wooden bicycle wheels in the spring of 1894.⁶⁹ By the end of century the factory was working full time and the company was able to build another three-story assembly building,⁷⁰ buy hundreds of acres of Florida hickory timber,⁷¹ and construct a new railroad siding.⁷²

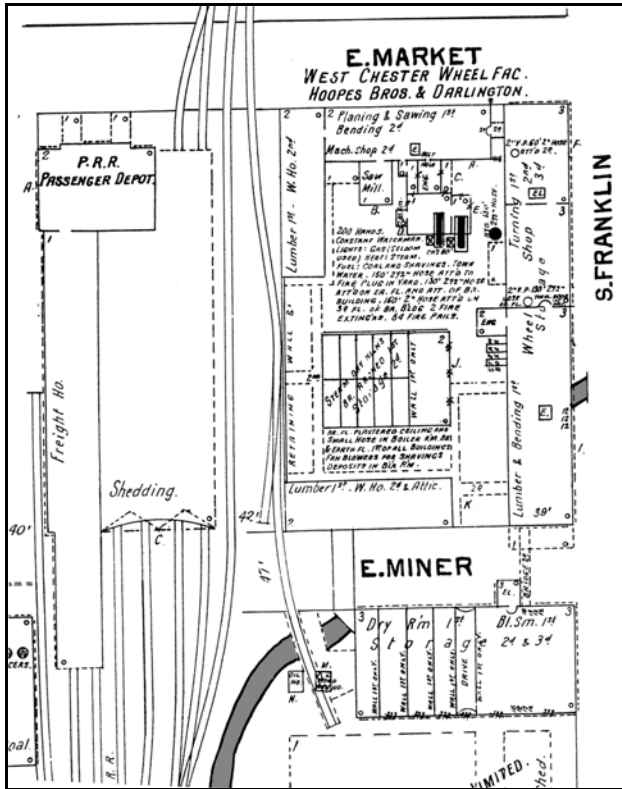


Fig. 3.3: Map of the HB&D factory next to the railroad station. Adapted by the author from 1902 and 1909 Sanborn Fire Insurance maps.

All of this activity took place against the backdrop of growing American involvement in overseas affairs. Under pressure from business owners and farmers who sought additional markets, the federal government became involved in a war with Spain and the construction of a canal across Panama.⁷³ For HB&D, that led to orders for wheels from places as far away as Europe, Japan and South America.⁷⁴ By 1902 the firm employed nearly two hundred people in a factory that covered the two blocks bounded by Market, Franklin, and Barnard Streets plus the railroad tracks.⁷⁵

In July 1903 the Hoopes Brothers and Edward Darlington reorganized once more as "Hoopes Brothers & Darlington, Incorporated." The company issued 2,750 shares at \$100 each, but sold only 320 shares to the public. Thomas Hoopes kept 720 shares and received an annual salary of \$3,000 as the president of the firm, wood buyer, and sales manager for the United Kingdom and Ireland. William Hoopes, with 840 shares, was paid \$2,500 per year as vice president and company purchasing agent. Edward Darlington held onto 870 shares and received \$2,500 per annum as company treasurer and head of sales outside the UK and Ireland. William's son Russell served as the plant superintendent.⁷⁶



Fig. 3.4: The HB&D factory (ca. 1910). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

The company continued to prosper and by 1907 it was the third largest wheel manufacturer in the world and the largest east of the Alleghenies.⁷⁷ That year they replaced the last wooden shop along Market Street with a three-story brick building⁷⁸ and vacated their offices on the north side of Market Street.⁷⁹ But business slumped again in 1909. The directors took a ten percent cut in their own pay⁸⁰ and effectively reduced their employees' wages by twelve percent by holding their wages steady and adding an extra hour to each work day.⁸¹

Changes were already underway in the wheel business,

Chapter 3: Hoopes Brothers & Darlington

thanks to the growing popularity of automobiles. Already in 1898 Burton D. Murdaugh built the first automobile in Chester County,⁸² and in 1900 Joseph Sager bought West Chester's first automobile, a "Locomobile" manufactured in New York City.⁸³ By 1903 Ransom E. Olds sold four thousand automobiles per year, and from 1904 to 1908 the number of miles of macadamized roads in the country nearly quadrupled.⁸⁴ By 1906 the road from West Chester to Philadelphia was paved.⁸⁵

The introduction of Ford's "Model T" in 1908 boosted the market for automobiles. The machine's low price meant that far more people could buy automobiles, and they created new uses that turned automobiles into necessities. In the Midwest especially, gasoline-powered vehicles helped develop rural areas by making it possible to establish farms at a greater distance from a railroad station. The change was also felt in Chester County, and by 1910 there were four automobile dealers in the Borough.⁸⁶

In June 1909 the *Daily Local* announced that HB&D's directors had decided to add automobile wheels to their output.⁸⁷ In August 1912 they began to advertise their new product,⁸⁸ and the demand must have been significant, because only a month later the directors voted to buy two more "automobile wheel machines."⁸⁹ During the rest of the decade, the company introduced other up-to-date devices like a time clock⁹⁰ and a 75hp "turbo generator" powered by the exhaust gases from the wood drying furnace.⁹¹

The company entered the 1920s in good shape as the manufacturer of a full range of wheels with both rubber and iron tires. Greater changes in transportation technology lay ahead, however, and their impact on HB&D is covered in Chapter Seven.

CHAPTER 4

The Sharples Separator Works (1881-1933)

After the nursery and the wheel works, the next industry that developed from the needs of local farmers was the Sharples Separator Works. Begun by a machinist named Philip M. Sharples, it developed into one of the world's largest dairy equipment companies, spawned a host of subsidiaries, and financed a lifestyle for its founder that rivaled that of the Vanderbilts and Morgans.

The dairy business was particularly well-suited for industrialization. Cows that fed on the County's rich grasses produced substantial quantities of milk, and many local families kept one to provide for their table. To increase its storage life, farmers extracted the cream by allowing it to rise, and then converted it into butter. This process was both time consuming and laborious until Dr. Carl Gustaf Patrik De Laval of Sweden invented the centrifugal cream separator in 1877.¹ De Laval's device used a rapidly spinning bowl to extract cream from milk by centrifugal force. Because milk could be introduced continuously into the bowl, and spinning extracted the cream faster than waiting for it to rise in pans, the new machine reduced milk handling and with it, the risk of spoilage and disease. Coupled with transportation innovations like early morning "milk trains"² and the growth of markets in cities like Philadelphia, local dairy output increased dramatically in the last quarter of the 19th century. Hand-operated separators enabled individual farmers to capture a bit more of the profit from cream sales by processing their own milk and shipping only the cream.³

The first De Laval separators reached the United States in the early 1880s. The owner of the first American sales franchise was Joseph Peale of New York City, but when he fell into debt, he was forced to sell it to Philip M. Sharples, a West Chester machinist.⁴ Sharples was a seventh-generation American Quaker whose ancestors arrived two months before William Penn. The Sharples family was prominent in 19th-century West Chester, providing the first burgess (mayor) and the main proponent of the WCRR.⁵ His father Samuel was a partner in the Sharples and Hall coal and lumber business,⁶ and Philip operated a successful machine shop in West Chester by the time he went into the separator business.⁷

Chapter 4: Sharples Separator Works

Sharples learned his craft at Edge Cope's shop next to the Brandywine Creek in East Bradford. After stints at the Moore Works in Philadelphia and the Buckeye Engine Works in Salem, Ohio,⁸ in April 1881 Sharples moved into a shop located on N. Walnut Street near Washington Street, across from his father's coal and lumber business.⁹ At first he built just about anything made out of wood or metal, including desks for the Pennsylvania State Indian School,¹⁰ creamery equipment for a Toughkenamon dairy,¹¹ and a 14-foot water wheel for a paper mill in Willistown.¹² He advertised "cider mills produced to order" and several lines of school furniture including the "Keystone Desk and Seat" and "the Normal Desk" made, presumably, for the State Normal School.¹³ His workers also cast large metal objects, such as an iron wheel

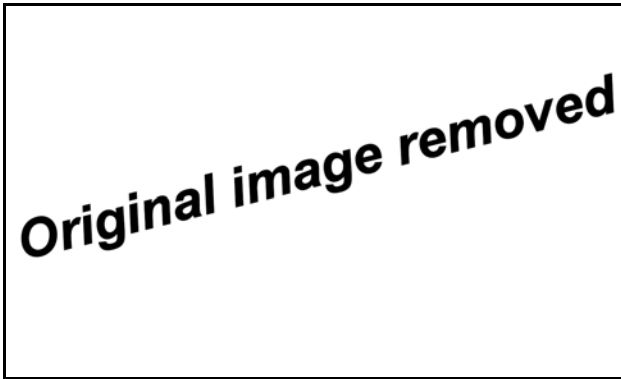


Fig. 4.1: Philip M. Sharples Machine Shop at the corner of E. Chestnut and N. Walnut Streets (before 1895). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

with a two-foot wide face and 10'2" diameter weighing roughly three tons.¹⁴ Business was so good that in 1882, Sharples felt confident enough to sign a five-year lease on a second building at the corner of Chestnut and Walnut Streets (on the site presently occupied by the YMCA). There, he began to build steam engines, farm machinery, porch railings and assorted cast metal products.¹⁵

It was on one of these jobs--installing an engine for Milton Darlington at Pomeroy--that Sharples saw his first cream separator. After asking the advice of local grocery store owners

J. & J. Darlington (and getting their promise to buy three units), in 1883 Sharples bought the right to manufacture and distribute De Laval cream separators in Pennsylvania and neighboring states.¹⁶ Although sales data is not available, Sharples' next actions suggest that the franchise was profitable, because by the end of 1884 he added a third floor to his existing building, constructed a new foundry,¹⁷ bought five new lathes from Massachusetts,¹⁸ and installed gas lighting.¹⁹ By 1888 he had branches in Elgin, Illinois and San Francisco,²⁰ and employed thirty-five men in West Chester alone.²¹ The same year he bought property along the railroad east of Franklin Street.²² A year later he laid the foundation for the Maple Avenue workshop that became home to the Sharples Separator Works.²³

The Maple Avenue shop became the nucleus of a factory that eventually employed six hundred workers,²⁴ covered more than five acres,²⁵ and manufactured as many as 3,700 cream separators per year.²⁶ By 1906 the company had customers in Europe,²⁷ Argentina,²⁸ Australia²⁹ and Japan,³⁰ and opened a factory near Hamburg, Germany.³¹ The firm also created a subsidiary to manufacture milking equipment,³² invested in a stone quarry near Phoenixville,³³ and financed the construction of skyscrapers in Chicago³⁴ and West Chester.³⁵ In brief, the Sharples Separator Works became the largest industrial company in West Chester's history.

The transition from small town machinist to world-class manufacturer was not accomplished without friction. Sharples continued to manufacture De Laval separators for several years, but began to sell machines of his own design.³⁶ De Laval's US affiliate and its parent company, Aktioblaget of Stockholm, filed lawsuits for patent infringement in 1891,³⁷ but Sharples won in US federal court by claiming that his improvements were significant.³⁸ Sharples eventually received his own cream separator patent in 1897³⁹ but many more



Fig. 4.2: Sharples cream separator (circa 1905). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*



Fig. 4.3: Sharples employees at work in the paint room (ca. 1910). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

lawsuits followed--twenty-three in all between 1890 and 1919.⁴⁰

All the while, Sharples continued to expand his factory and introduce innovations like automatic fire alarms,⁴¹ electric lighting,⁴² color print advertising,⁴³ and a steam whistle that could be heard all over the Borough.⁴⁴ The company acquired a pair of "graphophones" in 1899 to record office dictation on paraffin cylinders.⁴⁵ At the same time, the skills of his workers improved, and by 1895 they were able to manufacture machinery to tolerances as high as 1/1500 of an inch.⁴⁶

By 1900 West Chester was a major manufacturing town, and the Sharples Separator Works was the premier industrial operation in the Borough. The HB&T nursery and the HB&D wheel works were based on the industrial organization of farm crafts--growing plants and shaping wood--but the Sharples Separator Company was a "high-tech" operation that combined foundries, machine shops, and metal fabrication with engineering and speculative investment. In the decade before World War I, Philip M. Sharples built West Chester's tallest building, the Farmers & Mechanics Building, at the corner of Market and High Streets. He also built a baronial mansion called "Greystone Hall" on a 1000-acre estate located along Phoenixville Pike northeast of town. He went on to buy a stone quarry and a coal mine, and

spin off two subsidiaries. Oddly enough, it was this powerhouse firm that became the first to declare bankruptcy in the 20th century. But before that took place, firms like Sharples, HB&D and HB&T changed West Chester by attracting people, money and other new businesses. These changes are the subject of the next two chapters.

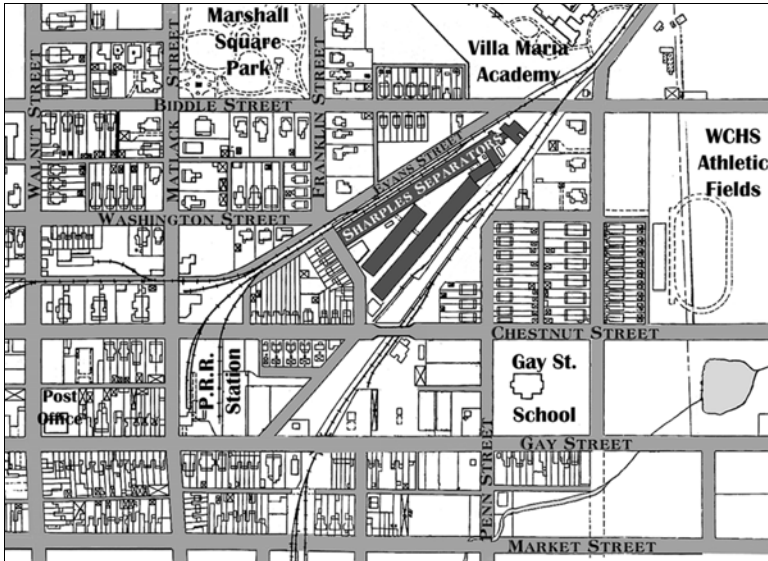


Fig. 4.4: Sharples Separator Works and surrounding neighborhood. *Map adapted by author from a 1933 railroad atlas.*

CHAPTER 5

Change in Industrial West Chester

The creation of three companies that employed hundreds of workers produced other changes in the Borough. By attracting new people and wealth to town, the factories stimulated improvements to infrastructure, population growth, new housing construction and concern about health issues.

Structural changes

All of this took place at the same time as even larger changes occurring throughout the nation and region. For instance, the Pennsylvania Railroad (PRR) acquired both of the Borough's railroads in 1879 and embarked on a series of improvements that greatly reduced railroad tariffs by 1899.¹ The company realigned its track to reduce the radii of curves, replaced worn rails, and moved the junction with the Main Line from Malvern to Frazer, reducing the length of the West Chester branch.² To consolidate its West Chester operations, the PRR built a new station on N. Matlack Street between Chestnut and Gay Streets (presently a muffler repair shop)³ which replaced the 1846 WCRR depot on E. Gay Street and the 1867 WC&PRR depot on E. Market Street.⁴

In addition to the physical changes, the PRR introduced new operating procedures. As one disgruntled employee explained after the PRR first leased the WCRR in 1859:

This road is now run by the Pennsylvania Railroad Company, and in its extensive business, everything must be done "just so"--according to a system which has to be rigidly adhered to. Every item of business is noted down--every act of the agent--every passenger, package or bundle of freight--has to be rigidly accounted for--while the cars, in their arrival and departure, note the time of day, with the accuracy of the town clock.⁵

The new procedures, designed to rationalize the railroad business and increase operating efficiency, signaled the end of an era for West Chester's workers. Within a generation, every factory and business that hoped to survive began to adopt similar

procedures for synchronizing the work of humans with the operation of machines.

The West Chester business climate underwent further change in 1888 with the formation of the Board of Trade. Its purpose was to invite "the attention of the general public to the superior attractions of West Chester," and the leaders of the Borough's major firms were well represented.⁶ The Wheel Works provided the Board of Trade's president and secretary, Thomas Hoopes and David Allen, as well as a third member, Jerome Gray. The HB&T Nursery was represented by Abner Hoopes, a director, and Josiah, a member. Philip M. Sharples of the Separator Works was also a member, and the other officers of the Board of Trade included Marshall S. Way, a real estate agent; I. Cary Carver, the cashier at the National Bank of Chester County; and J. W. Barnard, a lawyer. The other directors included Frank P. Darlington, a grocer; A. D. Sharples, a brickmaker; Plummer E. Jefferis, a builder; D. M. McFarland, a banker; Herbert P. Worth, the editor of the *West Chester Republican*; William P. Sharpless, a lumber and coal dealer; Marshall H. Matlack, manufacturer of farm machinery; and Charles W. Roberts, listed simply as "capitalist."⁷

The Board of Trade was influential in Borough government. Four of seven members of the Borough Council were members, including Marshall Way, the chief burgess. The Council acted on one of the Board's first recommendations in 1888 by granting a ten-year exemption from property taxes to entice the Denney Tag Company to relocate from Philadelphia to West Chester.⁸

Population growth

Within the Borough, the most noticeable change during the early industrial period was rapid population growth. During the 19th century Chester County's population nearly tripled from 32,093 to 95,695. In the same period West Chester grew nearly twenty-five times from 374 to 9,524. West Chester grew more than seven times faster than the County in the first half of the century, and almost five times as fast in the second half, with the fastest growth in the 1850s, 1860s and 1890s. By 1900 West Chester was the largest town in the county and home to nearly one tenth of its residents.⁹

Chapter 5: Change in Industrial West Chester

Growth of West Chester and Chester County
Population in the 19th Century

| Date | Chester County Population | WC Population | WC Gain | % County in WC |
|-------------|--------------------------------------|--------------------------|--------------------|---------------------------|
| 1800 | 32,093 | 374 | n/a | 1.17 |
| 1810 | 39,596 | 471 | 97 | 1.19 |
| 1820 | 44,451 | 553 | 82 | 1.24 |
| 1830 | 50,910 | 1,244 | 691 | 2.44 |
| 1840 | 57,515 | 2,152 | 908 | 3.74 |
| 1850 | 66,438 | 3,172 | 1,020 | 4.77 |
| 1860 | 74,578 | 4,757 | 1,575 | 6.37 |
| 1870 | 77,802 | 5,630 | 873 | 7.23 |
| 1880 | 83,475 | 7,046 | 1,446 | 8.44 |
| 1890 | 89,377 | 8,028 | 982 | 8.98 |
| 1900 | 95,695 | 9,524 | 1,496 | 9.95 |

The newcomers were mostly from Ireland, England, Germany and Italy, but most did not emigrate directly to West Chester. For instance, the 1840s potato famine triggered an influx of people from rural Ireland who found work on Chester County farms. After the Civil War their offspring moved into the Borough where they were joined by immigrants from Ireland's industrial north following the depressions of 1873 and 1883. These "urban Irish" obtained skilled work on the railroad and in factories, and augmented their incomes by working as private contractors in West Chester's building trades.¹⁰

Some idea of the economic role played by the new residents can be teased out of data from the County's "Register of Deaths" (1893-1907). The Register lists information on seventy-nine Irish immigrants who died in West Chester and provides the occupation for thirty of them. Three were "gentlemen." There was a cooper, a dressmaker, a rigger and a shoemaker, but seventeen--the majority--were laborers. Of fourteen Italians, six of their occupations were recorded; five were laborers and the sixth was a storekeeper. Of eleven German immigrants, the occupations of seven are known: two bakers, a tailor, a musician, two "dealers," but only one laborer. Seven of sixteen English immigrants had occupations listed including clerk, cook, florist, tailor, minister and veterinary surgeon. Only one was a laborer. In other words, Irish and

Italians appear most likely to have performed manual labor, while English and Germans were more likely to enter the professions.¹¹

African Americans made up roughly one fourth of the Borough's population by 1898, and most lived on the east side of the railroad tracks.¹² Of the three hundred aged sixteen or older

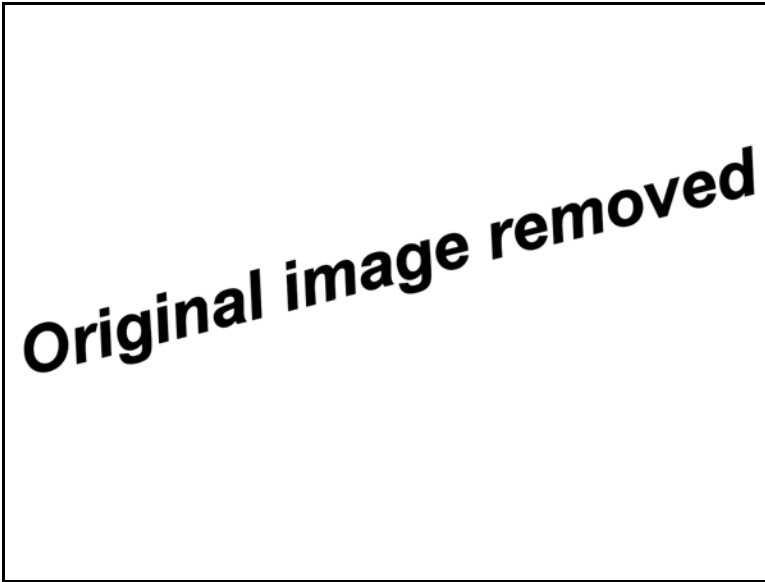


Fig. 5.1: African-American children in West Chester (circa 1899). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

who died in West Chester between 1893 and 1907, the occupations of sixty-six are known. Forty-five were listed simply as "laborers," while most of the rest worked in the building trades as plumbers, plasterers, bricklayers and carpenters. Only a few, like hotel keeper Moses Hepburn and store keeper Isaiah Smith, owned their own businesses.¹³

Population growth stimulated housing construction that extended the town's urban center. Expansion of the original town began in the 1830s with the subdivision of the Everhart farm on the west side, the Ashbridge farm to the northwest, and the Matlack farm to the northeast. There was a pause following the Panic of 1837, but during the recovery of the 1840s, development resumed at a slower pace north of Chestnut Street and on the

Chapter 5: Change in Industrial West Chester

east side near Market and Franklin Streets.¹⁴ New housing construction paused during the Civil War, but resumed after the war, stalled in the late 1880s, then reached a crescendo in the 1890s. Some of it was "in-fill development" on isolated lots located between existing structures, but the most impressive gains occurred in the southeast part of town below Union Street, between High Street and the railroad tracks.¹⁵

In general, development advanced downhill from the center of town toward the flood plain of Goose Creek which drains the east side of the heights that gave High Street its name. After 1858 the flood plain was also the route for West Chester's second railroad, and over the years it became home to lumber and coal yards, an illuminating gas manufacturing plant, and the HB&D Wheel Works. All of this industry was bad for the creek. Farmers downstream in West Goshen complained about pollution,¹⁶ and in 1888 a local writer called Goose Creek "one of the filthiest streams that flow near West Chester. Nearly all the sewage of the town flows into it, and, besides, a number of water closets sit over it."¹⁷

The surrounding land was not very desirable real estate, to say the least. The land east of Matlack Street between Lacey and Nields was the steepest, but the most difficult place to build was a block further south between Nields Street and Linden Street, where Goose Creek zigzagged through a marsh (now occupied by Ramsgate Townhomes) before veering sharply east toward the railroad tracks. Although houses were built along the 400-block of S. Matlack Street in the early 1880s, it took more than a decade for development to reach the railroad tracks 500 feet away.

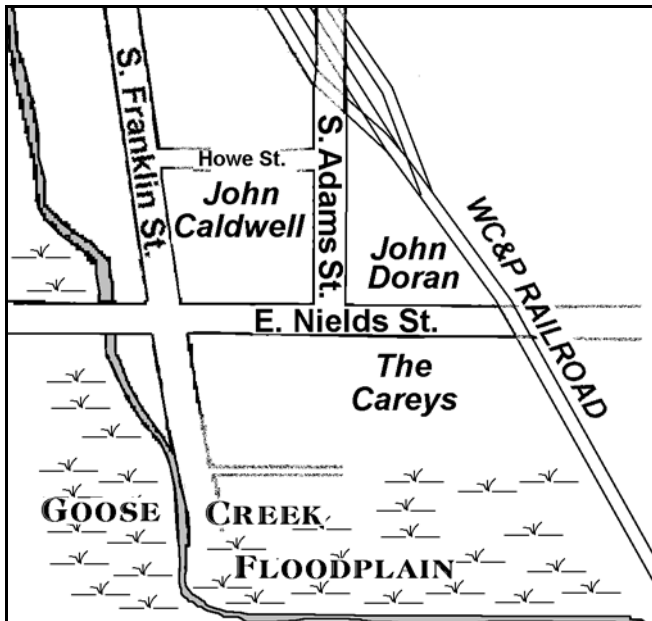


Fig. 5.2: Early development along Goose Creek in Rigtown. *Map by the author.*

C. Cadwallader Sellers, a local investor, made the first attempt to subdivide the land along Goose Creek in 1871. Alfred D. Sharples and Edward H. Hall bought a large parcel, as did Patrick King (who already owned most of the land along Rosedale Avenue), while smaller plots went to David Gill, William D. H. Serrill, John Doran, John Carey and John Caldwell.¹⁸ Most left their land unimproved, but Doran, Caldwell and Carey built the first houses in a neighborhood that became known as "Rigtown."

John Doran was a Borough street cleaner who purchased a lot on the north side of Nields Street next to the railroad tracks in 1872, and a second lot on the south side in 1882.¹⁹ Doran and his wife raised four children there, but after his son James died of typhoid in 1889, things began to go sour. After Doran moved to Nebraska in 1891, his wife had him declared insane and went to court to get his money. Doran returned and

Chapter 5: Change in Industrial West Chester

won,²⁰ and remained in West Chester where he died in 1917.²¹ His son opened a concrete block manufacturing plant on the north lot in 1923,²² and the two lots remained in the Doran family until World War II.²³ Today the two lots are occupied by the West Chester Area Day Care and Willows I Apartments.

John Carey was a railroad worker who lived on Linden Street facing the Goose Creek marsh. In November 1871 he purchased most of the south side of Nields Street between the railroad tracks and Goose Creek²⁴ and divided it between his two sons William and Robert in 1887.²⁵ By 1893 William (a wood turner) and Robert (a carpenter) built attached houses at 500-502 E. Nields Street,²⁶ while a third brother, John Jr., moved into a new house at 541 S. Matlack Street in 1894.²⁷ Three generations of Careys lived on E. Nields Street until after World War II,²⁸ and as this is written, John's grandson's widow Rebecca is the oldest resident at the Wentworth Home on S. Church Street.

The third "homesteader" in Riggstown was John Caldwell, who bought the entire block between Franklin, Nields, Adams and Howe Streets in November 1871 (see Fig. 5.2).²⁹ He built and lived in a brick and frame house at the corner of Nields and Adams Street some time prior to 1883.³⁰ After his death in 1894,³¹ Miffin Rigg, for whom Riggstown was named, bought the property.³²

Rigg was part of the second wave of development in the southeast. In 1891 the Muzante brothers,³³ peanut merchants who emigrated from Genoa,³⁴ started investing their profits in new home construction. One of their projects was a row of houses in the 100-block of E. Nields Street that became known as "Peanut Row."³⁵ About the same time, Patrick Barry, the owner of a hauling business, purchased land along the creek between Lacey and Nields Street and started building houses, selling his first in October 1891.³⁶ When Rigg acquired Caldwell's property at sheriff's sale in 1894,³⁷ he started building his first house within a month.³⁸ Meanwhile, Nathan and Frieda Braunstein from Philadelphia bought the undeveloped portion of John Carey's land in 1891, and in 1893 their son began to build twin houses at 386-388 E. Nields Street.³⁹

Builders like the Muzantes, Barry, Braunstein and Rigg followed a time-tested formula⁴⁰ by constructing "nice dwellings of moderate size with modern conveniences for working men."⁴¹ Arranged in rows or twos, they were built of brick on a stone

foundation with a full basement, six rooms, and an outhouse. The Muzantes estimated the cost of their houses at \$1,500 each, and rented them for \$2.50 per week, which was the equivalent of \$130 per year, a 6% return on their investment.⁴² The demand was so great that houses were frequently rented as soon as they were completed, and as late as 1907 real estate investors like Plummer Jefferis still thought there was a demand for more low cost housing.⁴³

Development also took place to the west of New Street and north of Gay Street in an area that became known as the "West End." Because of its proximity to St. Agnes Catholic Church, the West End became home to many Italian families by the turn of the century. Their men worked as stone masons, on railroad construction,⁴⁴ at mushroom houses, in the stone quarry located at the west end of Chestnut Street,⁴⁵ and even at companies like Sharples Separator Works when the company had trouble finding other employees.⁴⁶ Like African-Americans and Irish, Italians were treated with disdain by other Cestrians.⁴⁷ The following quotation from a *Daily Local News* article about the construction of the town's trolley system gives a sense of the racial tensions in the Borough at the turn of the century:

Mr. Mahoney is an experienced contractor [who] says that ... colored men are preferred to the Italians. They are more able bodied as a rule and do more work in a day. Another difficulty with Italians is that they do not understand English, and as Americans generally, do not understand Italian, it is more difficult to direct the operations of the gang of Italians.⁴⁸

Despite all this, by 1919 there were nearly one hundred Italian families in St. Agnes Parish, enough to justify the employment of an Italian-speaking priest to hear confession.⁴⁹ To augment their incomes, Italian women and even children found unskilled work in the Borough's paper tag industry (described in detail in the next chapter). According to a local reporter:

Every morning at six o'clock may be seen a train of small express wagons drawn by boys and girls, mostly Italians, on their way to the plant, every wagon piled high with boxes of tags which have been strung at homes of

Chapter 5: Change in Industrial West Chester

workers and are now being returned. Motive power for these wagons is largely supplied by girls of the grammar grades in school. They have jet hair and glistening black eyes, and many of them wear small earrings. While waiting for the doors to open and admit them and their tags, they jump rope and have many other games, occasionally singing the latest American songs. While they have the Italian cast of countenance, their speech is purely American and their slang is up to date.⁵⁰

Health issues

Despite the imagery of young girls with glistening eyes skipping rope and singing songs, the reality for West Chester's industrial workers was much harsher. For example, when the Borough began to complete Nields Street across the Goose Creek floodplain in 1892, neighbors complained of the stench from the fill which included "rotten tomatoes, fruit, etc. ... [and] ... old oyster shells."⁵¹ Epidemic disease was still a threat in the late 19th century, and John Caldwell's son died of typhoid on Nields Street in 1891,⁵² while scarlet fever struck two families on Nields Street in 1892.⁵³ A few blocks away, the swamp at the foot of Union Street was thought to be a source of malaria,⁵⁴ and while the neighborhood obtained water lines in the early 1890s, sewers did not arrive for another thirty years,⁵⁵ and outhouses remained in use as late as World War II.⁵⁶

Factory work offered its own kind of hazards, and in the late 19th century local newspapers regularly printed stories about injuries and their consequences. John Ryan, a hauler in the Borough, lingered for a few years before dying in Philadelphia from a crushed foot that never healed properly.⁵⁷ George Torbert, a railroad switchman who lost an arm in an earlier accident, was struck by a train at Franklin Street and suffered



Fig. 5.3: Machinists with their tools, probably at the Sharples Separator Works (circa 1899). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

a concussion.⁵⁸ John Carey's foot was crushed by a locomotive and had to be amputated,⁵⁹ while S. A. Conratt, a grocer, barely escaped death when a train destroyed his meat wagon at the Union Street crossing.⁶⁰

The HB&D wheel works, with its saws, drills, presses and heavy lumber, was the scene of many hand injuries. James Patterson, a 14 year-old employee, had a finger crushed,⁶¹ while a "colored man" named Henry Robinson lost two fingers after he had already suffered an earlier head injury.⁶² Henry Wright, another African-American, was thrown out of his wagon and injured while delivering wheels to the railroad station.⁶³ Taylor Stanley, a resident of S. Adams Street, lost fingers in three separate accidents at the factory.⁶⁴ Peter Ford Sr. lost two fingers on his right hand in 1889, and lost the remaining two fingers in 1904.⁶⁵

The most dangerous work appears to have been performed at the Sharples Separator Works where a combination of furnaces and machinery for cutting and shaping metal posed special hazards. Harry Somers was badly burned in 1881,⁶⁶ an engineer named Joseph Nichols was nearly killed when a boiler exploded in 1883,⁶⁷ and an oven exploded in 1918, injuring a "colored man."⁶⁸ The punch press at the separator works was particularly hazardous, and when it crushed Thomas Ford's thumb on August 16, 1914, he was the sixth victim in that year alone.⁶⁹

Without social security or life insurance, West Chester's workers had to take care of themselves. Following the success of national labor organizations like the Knights of Labor,⁷⁰ West Chester's workers began to organize for better working conditions. The employees at the Wheel Works organized a "Mutual Beneficial Association" as early as 1883⁷¹ to provide sick pay and death benefits from money contributed by its members.⁷² The Board

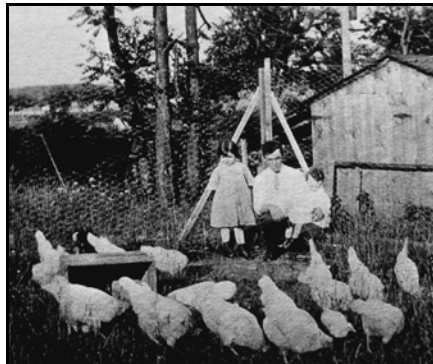


Fig. 5.4: Chicken coops behind 601 S. Matlack Street before World War II. *Photo courtesy of Maurice Linett.*

Chapter 5: Change in Industrial West Chester

of Trade listed ten separate "beneficial societies" in 1888,⁷³ and a similar association was in existence at the Separator Works by 1905.⁷⁴ It seems unlikely, however, that the nursery workers, who were mostly seasonal, ever became organized.

Workers' self-help extended to keeping animals for food and planting gardens in the backyard. Families in West Chester's poorer neighborhoods kept horses, pigs, chickens and rabbits in their backyards, and the more industrious tended vegetable "patches."⁷⁵ Self-help also meant scavenging, whether for bottles from the dumps located along the railroad tracks⁷⁶ or coal and wood from the railroad itself.⁷⁷ To augment their husbands' factory wages, wives did laundry,⁷⁸ took in boarders, and sold rags and paper to the local junk dealer.⁷⁹

Borough government responded to the problems caused by increasing density by creating the "Board of Health" in summer 1885. One of the first tasks of the Board was to place garbage containers at the end of every street,⁸⁰ and in 1886 the Borough began to schedule regular trash pickups.⁸¹ Another of the Board's initiatives was to enforce the removal of pigs from the Borough during the summer months in order to reduce odor and disease, even though it aggravated the trash problem because the Borough could no longer sell the garbage to pig owners for use as feed. In 1911 the Board prohibited pigs in the Borough altogether, except by special permit.⁸² Other animals like horses and chickens went unregulated, or were at least tolerated, until World War II.⁸³

Until the early part of the 20th century, many Borough households relied on cesspools to dispose of sewage, but as their neighborhoods grew more dense, that posed another health hazard. Beginning in 1911, Borough Council adopted ordinances to require connections to a publicly-owned system that collected sewage at treatment plants located at Taylor's Run on the north side and Goose Creek to the southeast.⁸⁴

The Borough attempted to reform its garbage collection system in 1893, but since the Board of Health opposed burning, they continued to feed it to pigs. Some people simply dumped their garbage in empty lots around town,⁸⁵ while other trash was left in alleys to spread or disintegrate.⁸⁶ In 1900 members of Borough Council considered buying a garbage incinerator,⁸⁷ but decided to continue paying hog farmers to collect the garbage.⁸⁸ Finally, in 1912, a Council that included Plummer Jefferis as chief

burgess and HB&D's Edward Darlington among its members hired Lewis M. Hickman as the Borough's first official garbage collector. He was paid to haul everything but "paper, brush weeds, bottles, tin cans or ashes" outside the Borough, where he continued to feed it to pigs.⁸⁹ Meanwhile, residents burned the remainder in their backyards or else dumped it wherever they could. That system remained in use until after World War II.⁹⁰

Other Borough initiatives included cellar inspections,⁹¹ dog licenses,⁹² and the establishment of the "Pest House."⁹³ The Pest House opened in 1901 to provide a place to quarantine dangerously ill patients away from the rest of the town. Despite complaints from the predominantly African-American residents of the Borough's east side,⁹⁴ the Pest House was placed in a building owned by A. D. Sharples on Niels Street east of the railroad tracks (on land now occupied by Wyeth-Ayerst).⁹⁵ A year later the Chester County Hospital added a ward for contagious diseases, and it incited opposition from the residents of the Borough's more prosperous north end. One of the opponents was Philip M. Sharples, then living at Marshall Square, who threatened to move out of the Borough.⁹⁶ In 1907 he did just that by moving into Greystone Hall on the Phoenixville Pike north of town.⁹⁷

As this chapter shows, the impact of industrialization on the Borough was not uniform. While the owners of West Chester's businesses enjoyed wealth, large houses and personal prestige, it came at a cost to their workers and some of their neighbors. If the Borough as a whole prospered during the late 19th century, the benefits were unevenly distributed. But with many of their members occupying positions in local government, West Chester's industrialists made certain that the Borough's response to the problems took the form of corrective measures rather than efforts to restrict or prohibit further development.

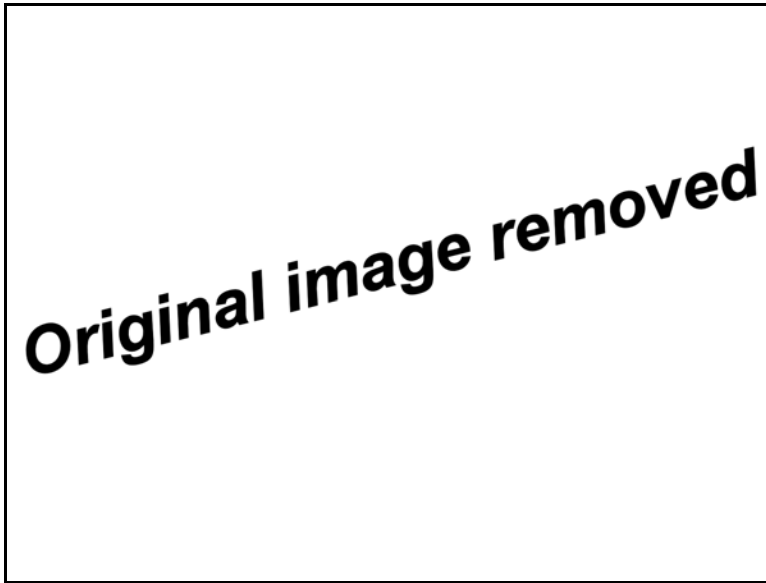


Fig. 5.5: The West Chester Fire Company was founded in 1799, the Good Will FC in 1833, and the Fame FC in 1838. As buildings in West Chester became larger, fire-fighters developed new techniques and acquired additional equipment. This horse-drawn "hook and ladder" truck was photographed by Albert Biles (circa 1896). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

CHAPTER 6

Secondary Industrialization in West Chester

West Chester's first industries were founded by local people with close ties to the community. The second stage of industrial development involved businesses founded by outsiders who were attracted by West Chester's reputation and population growth, coupled with improvements in railroad transportation. Credit should also go to the Board of Trade, which actively promoted the Borough to outside businesses, and the Borough Council which supported incentives. It is important to remember that all three groups--early industrialists, the Board of Trade, and Borough Council--included many of the same individuals as members.

The first outside company to move into West Chester was the Denney Tag Company. "The Denney," as it became known to Cestrians, was founded in Philadelphia in 1884 by Samuel L. Denney and his brother.¹ Their specialty was the manufacture of paper tags, an offshoot of the printing industry. Paper tags were used to indicate the destination of irregularly-shaped objects, to put prices on goods in stores, and to provide a temporary label for almost anything that was manufactured, bought or sold. Specialized machines printed and perforated the tags² while humans attached strings so that the tags could be tied to goods and parcels.³ Special presses printed sequential numbers on tags used for inventory control.⁴

In 1887 the Denneys met with the Board of Trade⁵ to see if local investors would help finance their company's move to West Chester. Two Borough burgesses, Marshall S. Way and A. P. Hall, visited the Philadelphia factory and reported that the company employed "the better class of workmen, and the work itself is clean and the manufactory just such as the people of West Chester should be pleased to have established here."⁶ With their support, Borough Council passed an ordinance granting a ten-year tax exemption to any firm that employed ten or more workers.⁷ Denney qualified, and on August 12, 1887, the brothers incorporated the Denney Tag Company of West Chester.⁸ The company chose an old school building on W. Barnard Street to house its operations,⁹ and they began tag production there in spring of 1888.¹⁰

Chapter 6: Secondary Industrialization

By that time, the Denney was already the second largest tag manufacturing company in the country.¹¹ Tag manufacturing prospered as the rest of the economy expanded, since goods for sale, in storage or in shipment needed tags to identify price, content and destination. The list of local stockholders was a "who's who" of local businessmen including owners of the

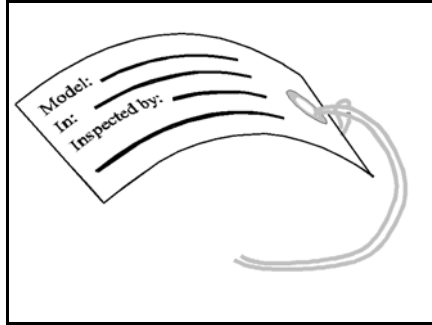


Fig. 6.1: Millions of paper tags like this one were printed in West Chester. *Artwork by the author.*

Wheel Works and the major nurseries, members of Borough Council, and other notable citizens.¹² Their enthusiasm was not misplaced—despite acquiring a debt of \$7,000 to move their operation,¹³ the firm was able to pay an eight percent dividend within six months of opening in West Chester.¹⁴ Over the next twenty years, stock dividends climbed as high as forty percent per year and averaged ten percent in most years.¹⁵ The firm received a number of enormous contracts, like one for eight million tags in 1890 for the American Express Company,¹⁶ two million in 1894 for a firm in Charleston, South Carolina,¹⁷ and four million in 1900 for a firm in Cincinnati, Ohio.¹⁸

When the Denneys moved to West Chester, they brought along a clerk named Samuel O. Barber¹⁹ who rose rapidly to become the company secretary²⁰ and plant superintendent in less than two years.²¹ In June 1901 Barber announced a plan to start his own business, the Keystone Tag Company.²² It was a good time to take a business risk, since the American economy had recovered from the slump of 1893 and the majority of Council members had ties to local industry. Chief Burgess C. Wesley Talbot and council members Marshall S. Way and John Thorp were all on the Denney Tag board of directors;²³ I. Roberts Comfort was the plant superintendent at the Separator Works;²⁴ Fred Heed managed the West Chester Cold Storage & Ice Company;²⁵ and Edmund Brown was a Pennsylvania Railroad employee.²⁶

Although Barber tried to remain with Denney while he

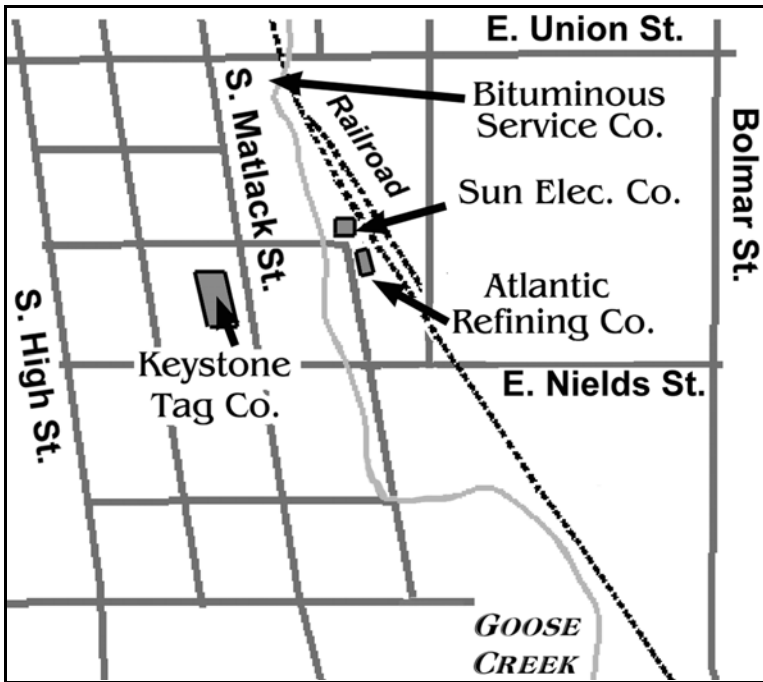


Fig. 6.2: Small factories occupied the remaining open spots in the southeast between 1900 and 1910. *Map by the author.*

made tags on his own, the board forced him out in August 1901.²⁷ Using equipment purchased from a Lancaster tag company,²⁸ Barber, his son Harry and his son-in-law George K. McFarland began work in a building at Barnard and Matlack Streets belonging to Ralston R. Hoopes (currently the site of the Apartments for Modern Living).²⁹ They immediately began to look for a more suitable location³⁰ and tried for a time to convince Borough Council to give them a parcel near the corner of Lacey and Matlack Streets.³¹ Although there was some support on Council,³² the plan fell through, and after they failed to acquire the building of the defunct Sun Electric Manufacturing Company (discussed below),³³ the company built a new building at "Waverly Place" in the 500-block of Mechanics Alley in 1907.³⁴

Meanwhile, as the country's economy expanded, the tag

Chapter 6: Secondary Industrialization

business boomed. Both the Denney and Keystone kept busy filling orders for customers as far away as Australia,³⁵ and as a local newspaper editor observed in 1909:

One of the signs which would seem to indicate ... a revival of trade this year is the fact that both the Keystone Tag Company and the Denney Tag Company are unusually busy. Orders are coming in briskly from every section of the country. The inference is that other manufacturing firms, merchants and shippers expect to use a large number [of tags] this year.³⁶

By 1910 there were a dozen corporations in West Chester. They included the original three--the Separator Works, the Wheel Works, and the Hoopes Brothers & Thomas Nursery--the

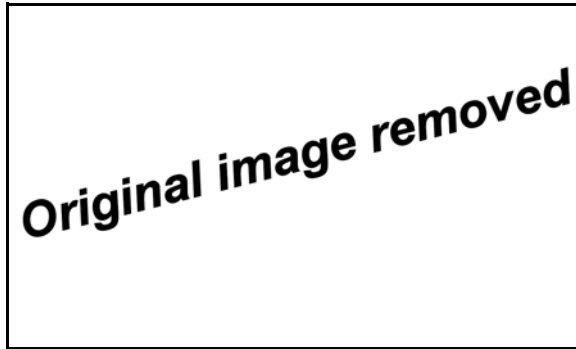


Fig. 6.3: The West Chester Electric Light Plant at Walnut and Chestnut Streets (circa 1899). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

two tag companies, plus the Edison Electric Illuminating Company, the Corcoran Construction Company, the National Crayon Company, Penn Mutual Fire Insurance Company, the People's Ice & Storage Company, the Rockwell Manufacturing Company (a subsidiary of the Sharples Separator Works) and the West Chester Cold Storage Company.³⁷

The Edison Electric Illuminating Company was organized

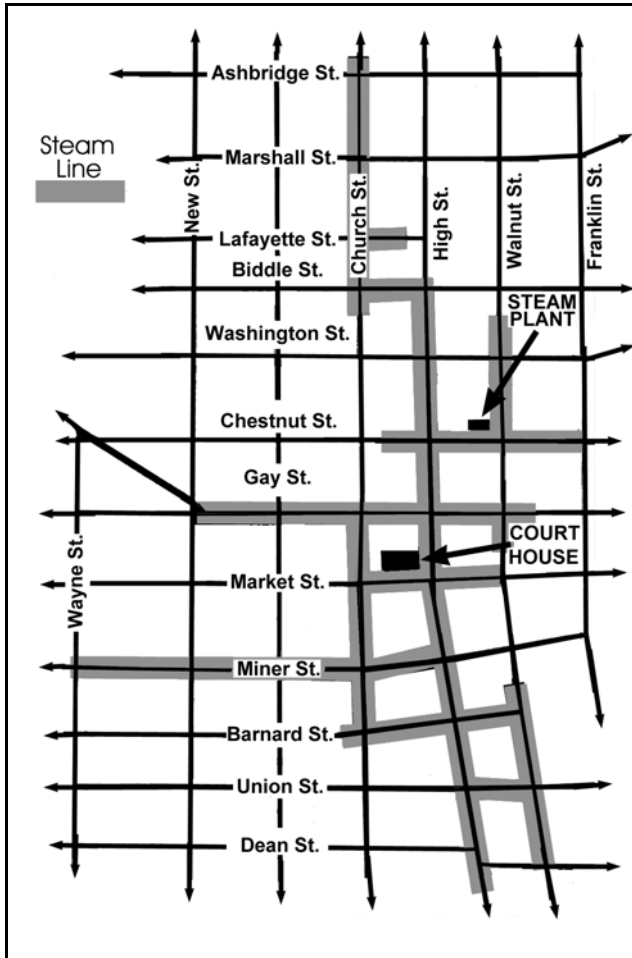


Fig. 6.4: West Chester's steam heating lines.
Adapted from a Daily Local News illustration (Feb. 12, 1970) by the author.

in 1885 by a group of West Chester investors including Abner Hoopes of the HB&T Nursery and William Hoopes of the Wheel Works.³⁸ They opened a generating station in the building at the northwest corner of Chestnut and Walnut Streets that was recently vacated by Philip M. Sharples.³⁹ At first, the plant served

Chapter 6: Secondary Industrialization

forty factories plus a few hundred houses and other businesses,⁴⁰ but in 1891 the company began to sell power to the West Chester Street Railway and in 1893 they added a generator to power street lights.⁴¹ The plant was enlarged in 1918 with the construction of two enormous smokestacks⁴² and the restoration of a railroad siding used to deliver coal.⁴³ After local electric companies were consolidated into the Philadelphia Electric Company in the 1920s, the plant continued to generate electricity until 1962. It then provided steam heat for most of the buildings in the center of town until PECO got permission from the state to shut it down in late 1970.⁴⁴

Electric "street railways" became popular in the late nineteenth century as low-cost alternatives to railroads, and West Chester was one of the first towns in the country to contemplate such a development.⁴⁵ In August 1890 a group of West Chester business owners began to sell stock in the West Chester Street Railway. Their leaders were M. H. Matlack, an agricultural equipment salesman; Plummer E. Jefferis, a builder; Henry C. Baldwin, who owned a planing mill; and William Hemphill, a patternmaker. Their lawyer was R. T. Cornwell, a former burgess who became the president of the Edison Electric Illuminating Company.⁴⁶ Their goal, as Mr. Hemphill explained, was to emulate Wilmington where "Accessibility to the heart of the city



Fig. 6.5: Looking east at the corner of High and Gay Streets, with West Chester Street Railway tracks in the foreground. *Postcard from the collection of Ron Garver.*

became so convenient that the city began to spread at once."⁴⁷ No doubt, they were also inspired by the success of a similar railway between Lancaster and Millersville that paid a 24 percent dividend in 1889.⁴⁸

Before they could even begin to lay track, a boardroom coup delivered control of the company to stockholders associated with the Wilmington & Northern Railroad.⁴⁹ When the new board announced plans to extend the proposed tracks from West Chester to a junction with that railroad at Lenape, Borough residents reacted with suspicion.⁵⁰ After extensive bickering that involved Borough Council, stockholders, and other influential citizens, the track was finally completed and service began on November 10, 1891.⁵¹ At first, the company operated three lines that crossed at High and Market Streets, linking the train station, the State Normal School (now the West Chester University), Quaker Hill (N. High Street), and Lenape.⁵² To increase ridership on the Lenape line, the WSCR built an amusement park that opened in 1892.⁵³



Fig. 6.6: The roller coaster at Lenape Park (1948). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

In 1902 the company laid tracks to Downingtown,⁵⁴ and in 1904 it extended the track from Lenape to Kennett Square.⁵⁵ In the meantime, a second company, the Philadelphia, Castle Rock and West Chester Railway Company, built a trolley line from Philadelphia that began service on January 2, 1899.⁵⁶ The second company opened its own amusement park at Castle

Chapter 6: Secondary Industrialization

Rock (between Crum and Ridley Creeks, west of Newtown Square) for the pleasure of its passengers.⁵⁷

Not all of the new firms that came to West Chester around the turn of the century were successful. Few companies ignited as much enthusiasm or produced as much disappointment as the Sun Electrical Manufacturing Company which arrived in 1901. The Sun Company, whose owners were from New Jersey,⁵⁸ announced plans to open a plant in the Borough. After much deliberation, they selected a site at the corner of Franklin and Lacey Streets between the railroad tracks and Goose Creek. Plummer E. Jefferis and Henry C. Baldwin, two of the WCSR founders, constructed the two-story brick factory during the summer of 1901,⁵⁹ and manufacturing commenced on September 11.⁶⁰

The company made telephone switchboards. In 1880 there were about 50,000 telephones in the United States (West Chester received its first switchboard in 1883.⁶¹) By the end of the century, the number of telephones had reached nearly 800,000, and the market showed every sign of continued



Fig. 6.7: A milk cooler manufactured by the Esco Cabinet Company at S. Franklin and Lacey Streets (1931). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

growth.⁶² Sun's West Chester operation seemed like a good investment, but the factory never really got up to speed--some critics said the owners paid too much for it--and manufacturing halted in March 1902.⁶³ The plant closed on March 20 with \$5,000 in debts,⁶⁴ and the building and its contents were auctioned off at the end of the year.⁶⁵ During the next quarter-century, the building was occupied by *The Village Record*, the Powell Knitting Company, and the Esco Cabinet Company.⁶⁶

One of West Chester's best-funded failures was the Rockwell Manufacturing Company, makers of gasoline engines. Rockwell was created in 1910 by Albert W. Rockwell, the general manager of the Sharples Separator Works. Most of the stockholders were associated with the Separator Works,⁶⁷ including Philip M. Sharples, who owned about eight percent of the firm.⁶⁸ This was not unusual for Sharples, who provided fifty-one percent of the capital for the "National Milking Machine Company" founded in 1902 to develop a machine invented by another Sharples employee, Daniel Klein (a.k.a. Daniel Kline).⁶⁹ By the time Rockwell founded his company, Sharples was the president of the Farmers & Mechanics Trust Company,⁷⁰ and had investments in gold and copper mines in Mexico, coal mines in West Virginia and a "manufactured marble plant" (probably the Silvia Stone Company on Swedesford Road) in Frazer.⁷¹

Rockwell broke ground in late spring 1910 for a three-story brick building located next to the railroad tracks near Garfield Avenue, northeast of the Separator Works.⁷² Although the firm managed to begin production, it struggled to survive and by the time Rockwell died in 1912, the company owed nearly \$63,000.⁷³ The bank foreclosed and the building was sold for \$20,000 in June 1913 to Thomas Lawrence Eyre, a politically connected investor and close friend of Philip M. Sharples.⁷⁴

A few months later, a new group of investors reopened the plant as the West Chester Engine Company. P. M. Sharples was still involved, only this time he served as the president of a board that included his son Philip T. and three of his employees: R. W. Egan, I. Roberts Comfort, and Ralph C. Luston.⁷⁵ According to their accounting stationary, the West Chester Engine Company manufactured "gas, gasoline and kerosene engines for farm and shop use." It lasted no longer than its predecessor, however, and in December 1917 the plant was purchased by Christian D. Schramm & Son of Philadelphia.⁷⁶

Schramm is one of the few West Chester industrial firms to survive into the 21st century. The company started in Philadelphia in 1900 when Christian D. Schramm and Emil Maerky, immigrants from Germany and Switzerland respectively, parlayed their savings from a variety of manufacturing jobs into a company that sold and repaired small gasoline engines. The partnership only lasted three years, but that was enough time for Maerky to invent a conversion kit that prolonged the life of an Otto slide valve engine, one of the most popular of its time. Sales of the kits made the company successful, and after Schramm bought out his partner, he sold engines for several companies from ever-larger shops in Philadelphia between 1903 and 1908.⁷⁷

In 1908, while still located in Philadelphia, Schramm

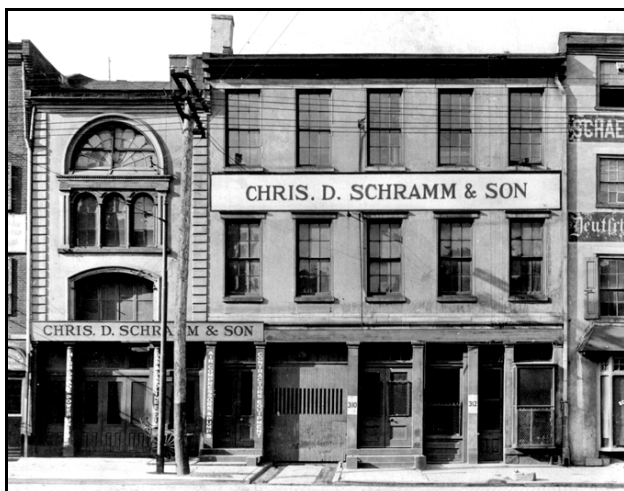


Fig. 6.8: The Philadelphia factory of Christian D. Schramm & Son. *Photo courtesy of Tony Pillagalli.*

made the first of his enormously successful portable air compressors for George W. Davidson of Wilmington. Compressed air was already widely used in railroad brakes and coming into use for power tools when Davidson, a stonecutter, asked Schramm to build him a portable compressor so he could add names to gravestones *in situ* instead of bringing them back to his shop. Schramm accomplished this by mounting two engines on something that resembled a steel wheelbarrow,

modified one to act as an air compressor, and connected them together with a flat drive belt. Davidson liked the result and suggested that Schramm advertise in *Monument News*. He did, and received twenty-four orders for the \$175 machine in the first year. By 1910 Schramm had redesigned his compressor to use engines made by the Domestic Engine Company of Shippensburg, PA, replaced the drive belt (which slipped unless properly adjusted) with gears, and introduced models in three different sizes.⁷⁸

Schramm continued to manufacture other products and, in 1917, got a contract to make winches to control observation balloons used in World War I.⁷⁹ Needing more space, he looked for locations outside of Philadelphia and found the struggling West Chester Engine Company. Through stock sales in Philadelphia, New York and West Chester, Schramm and his son Henry raised \$70,000 to buy the Engine Company's building and move their operation to the suburbs.⁸⁰

After World War I Schramm's sales slumped, but rebounded in 1922 with the introduction of an improved line of compressors.⁸¹ During the interwar period, the Schramm company revolutionized the design of air compressors, increasing their power, portability and reliability. They mounted an air compressor on a Ford truck in 1919, built the first self-propelled unit in 1922, and placed one on "Caterpillar" tracks a few years later.⁸² In 1926 Schramm became the first manufacturer to use a mechanical clutch between the engine and compressor, making it easier to start what was by then a fairly massive device. The ultimate innovation came in 1936 when Schramm introduced the "Ford-Air" compressor that used four cylinders of a standard V-8 automobile engine block to compress air in the other four cylinders.⁸³ Although the "Ford-Air" used much smaller cylinders than other designs, higher operating speeds enabled it to pump just as much air, while the mechanical simplicity of single unit design, plus the wide availability of automotive parts, made the resulting "Utility" line of Schramm air compressors highly successful.⁸⁴

While the rest of the world economy suffered through the depression of the 1930s, Schramm experienced almost no ill effects. Instead, the company grew thanks to government building projects that provided a stable market for their compressors.⁸⁵ Henry's son Harold joined the company in 1932,⁸⁶

Chapter 6: Secondary Industrialization

freeing up Henry to run for Borough Council in 1934 where he served for fourteen years.⁸⁷ To accommodate the demand for Ford-Air compressors, Schramm doubled the size of the West Chester plant in 1937 by erecting a 25,000 square foot steel and glass manufacturing building.⁸⁸ By the beginning of World War II, Schramm sold compressors to customers as far away as Bolivia and Czechoslovakia.⁸⁹

Another West Chester manufacturing firm to survive into the 21st century is Lasko Products. It was founded by a Philadelphia orphan named Henry Lasko who learned to fabricate sheet metal while serving in the Navy from 1902 to 1906. He opened a shop in Philadelphia after his discharge and began to make automobile radiators,⁹⁰ then moved to Lancaster in 1912,⁹¹ and relocated to West Chester in 1919.⁹² At first Lasko operated at 15 N. Walnut Street, but then he opened a radiator factory in the 400-block of West Gay Street in 1925.⁹³ His son Harry joined him in 1931,⁹⁴ and in 1933 the company began to



Fig. 6.9: The Schramm factory (1954). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

diversify its product lines,⁹⁵ eventually producing cooking utensils and other home appliances by World War II.⁹⁶

One other industrial sector deserves mention, even though its greatest success came after World War II. Pharmaceutical manufacturer Wyeth-Ayerst grew out of developments in West Chester's mushroom industry. Mushroom farming started in Chester County in the late 19th century when

William Swayne, a Kennett florist, began to grow mushrooms in unused space under the shelves used to support carnations in greenhouses.⁹⁷ The business took off, and by the 1920s mushrooms were grown in specialized buildings like those owned by the Edward H. Jacobs Company, the dominant firm in West Chester.⁹⁸ They sold out to Grocery Store Products in 1929, who erected a processing plant for "B-in-B" canned mushrooms that sold all over the country.⁹⁹ The plant still stands on the northeast corner of Union and Adams Streets.

In 1928 a chemist named G. Raymond Rettew and a meatpacker-turned-investor named Joseph Strode founded the Chester County Mushroom Laboratories to produce spawn and provide testing services to area mushroom growers.¹⁰⁰ In 1931 they produced their first frozen mushrooms using technology supplied by Charles Birdseye.¹⁰¹ In 1942 Strode and Rettew created a subsidiary company named "Fungus Products" to mass-produce penicillin.¹⁰²

In 1928 English scientist Alexander Fleming had discovered penicillin.¹⁰³ Additional research by Ernst B. Chain and Sir Howard W. Florey showed that penicillin killed organisms that spread diseases without killing the humans who were infected.¹⁰⁴ By World War II penicillin was ready to use as an antibiotic, but the only difficulty was that the earliest production method—growing mold on the surface of liquid in jars—was too slow. In 1942 Rettew and his laboratory assistant, Charles Heathcote of the State Normal School faculty, devised a process for growing penicillin that made mass production possible. They sold their idea to Reichel Laboratories of Phoenixville, and in 1943 they began to deliver antibiotics to the government.¹⁰⁵

Most penicillin went to the military, where it was credited with saving tens of thousands of lives during the war. That success laid the basis for the postwar expansion of Wyeth



Fig. 6.10: Raymond Rettew and Charles Heathcote in their laboratory. *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

Chapter 6: Secondary Industrialization

Pharmaceuticals, which acquired Reichel Laboratories in late 1943.¹⁰⁶ The story of Wyeth is well covered elsewhere, particularly in Raymond Rettew's 55-page autobiography, A Quiet Man From West Chester.

One other firm got its start in West Chester during World War II, the National Foam Company. The company was founded in Boston about 1819 by James Boyd to manufacture fire hoses. By 1942 National Foam was a family-owned company based in Philadelphia, and it decided to build a plant at Adams and Union Streets to make fire-fighting foam out of water, air and soy bean byproducts.¹⁰⁷ They employed 140 people¹⁰⁸ to produce nine million gallons of firefighting foam for the Navy during World War II.¹⁰⁹ In 1950 National Foam moved its home office to the Borough next to their factory.¹¹⁰

Just as it did elsewhere, the success of early industrial firms in West Chester encouraged others to follow their example. The variety of industries that opened in the borough is representative of the diversification that took place in American manufacturing as a whole. But conditions changed, and as this chapter suggests, the depression of the 1930s treated local industry harshly. The next chapter examines how West Chester fared during and after the Depression.

CHAPTER 7

After the Depression

The Great Depression was a world-wide contraction of economic activity that had repercussions from Wall Street to Timbuktu.¹ West Chester's workers certainly felt its effects. The son of a dairyman told this story: "During the Depression, [my father] was making \$65 a week. All the rest of the family wasn't doing too good, so they came and lived with us so we could feed them."² Another reported, "During the Depression, I was real lucky. I was working at Denney's then, and I got three days of work each week,"³ while a third explained, "Some went on welfare, some didn't. My grandfather repaired antiques, and he never went on welfare. I guess he made enough money to feed us. But some of the families did."⁴

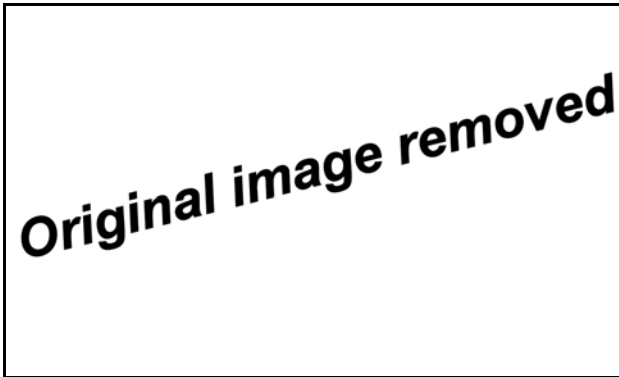


Fig. 7.1: The Denney Tag factory at 30 W. Barnard Street (circa 1920). *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

Some of West Chester's major industries fared worse than others during the Depression. Schramm, Inc., supplier of air compressors, benefitted from government-funded public works. Denney Tag, as noted above, limped along by reducing its work week and cutting expenses. Lasko's survived, as did the Wheel Works, but the Hoopes Brothers & Thomas Nursery and Sharples Separator Company were not so fortunate.

Chapter 7: After the Depression

Hoopes Brothers & Thomas

After Josiah Hoopes died in 1904, Abner reorganized the firm as a stock company in 1907. George Thomas left the firm, leaving Abner and his son Wilmer as the only shareholders from West Chester, and most of the firm's shares in the hands of two Philadelphia investors, Henry S. and Charles E. Cattrell.⁵ Company catalogs suggest that the company remained prosperous through World War I and into the 1920s. As late as August 1929 they were planning to add another railroad siding.⁶ But the stock market collapsed the following October, and after that the firm began to struggle. In 1934 they sold 78 acres to the Borough of West Chester for a reservoir.⁷ Although the company survived World War II, it was formally dissolved in July 1948.⁸

Sharples Separator Company

The collapse of Philip M. Sharples' business empire was more dramatic, largely because his holdings were more extensive and included a number of high profile properties in the center of town. In 1907 he moved into "Greystone Hall," an elaborate mansion on an eight hundred acre estate northeast of town.⁹ In 1908 he completed the Farmers & Mechanics Building at High and Market Streets,¹⁰ and served as president of the Farmers & Mechanic Trust Company based in his building.¹¹ Sharples purchased the Greentree Hotel at High and Gay Streets in 1918,¹² invested in other local firms, and even purchased a plant near Hamburg, Germany.¹³

Sharples' troubles began during World War I. Just after the Rockwell company opened in 1910, Sharples' first wife died.¹⁴ Rockwell failed a short time later and its successor, the West Chester Engine company, lasted no longer (see Chapter 6). Although local newspapers still treated Sharples with respect, by the end of the war they ran critical stories about his German subsidiary,¹⁵ an oven explosion in West Chester,¹⁶ and a lawsuit brought by a federal official for slander.¹⁷ In 1919 Sharples complained in a letter to the editor that the West Chester courts were prejudiced against him and threatened to move his factory to Chester.¹⁸ His son Philip T., a company vice president since 1914,¹⁹ moved fifteen miles away to St. Davids after his marriage in 1917.²⁰

There were troubles in the factory as well. On April 28, 1920, 73 men and women left work in protest after another worker, Gheen Wilson, was fired for talking back to a foreman.²¹ Many of the strikers chose not to return and went to work instead at the American Road Machine Company in Kennett Square.²² In March 1924 Sharples fired the accountant and credit manager, and replaced company secretary C. Fred Reed with a family friend, Frederick S. Wood.²³ Four months later, Wood starting laying off workers²⁴ and, less than a year later, Sharples announced his retirement.²⁵

His eldest son, Philip T., replaced him as president. The younger Sharples dismantled the company's milk machine subsidiary in 1926,²⁶ but kept the parent company going with a contract to build refrigerators for the Domestic Electrical Refrigerator Company of New York.²⁷ That, plus contracts to build portable electrical generators for Homelite and stoves for the New Era Electric Range Company,²⁸ kept the plant operating until the collapse of the stock market forced the elder Sharples to call in loans from many of his debtors, including the company he founded.

The stock market started its collapse in the last week of October 1929. On November 12, the day before the market bottomed out,²⁹ the company's milking machine subsidiary filed for bankruptcy.³⁰ A month later, Fred Wood, now the company vice president,³¹ told a reporter that the federal government needed to raise tariffs against European imports.³² The national economy continued to decline--the industrial index reached its lowest point on July 8, 1932³³--and on March 29, 1933, Philip M. Sharples asked a judge to place the Sharples Separator Company into bank receivership, claiming it owed him \$495,000.³⁴ Fred Wood and E. Raymond Scott, the former president of the Chester County Trust Company, were appointed to liquidate the company,³⁵ and they sold most of the factory buildings to the ESCO Cabinet Company of West Chester.³⁶ The *Daily Local News* purchased the F&M Building for only \$40,000 (it cost \$100,000 to build)³⁷ and Celia Hoffman of Philadelphia bought the Greentree Building.³⁸ Wood and his personal secretary, Anna Fitzpatrick, salvaged what they could from the remains of the Sharples company and used it to found the United Dairy Equipment Company.³⁹

Chapter 7: After the Depression

Hoopes Brothers & Darlington

Although wagon wheels were strictly a 19th-century product, Hoopes Brothers & Darlington survived the Depression and remained in continuous operation until 1973.⁴⁰ They prospered in the 1920s by manufacturing wooden automobile wheels⁴¹ and truck wheels for the Autocar Company in Ardmore,⁴² and were busy enough to justify the construction of a new truck loading dock in early 1926.⁴³ But by then founder Thomas Hoopes was already dead,⁴⁴ and within a year the company began to cut back their workers' hours⁴⁵ and eliminate year-end bonuses.⁴⁶ Thomas' son Charles became company president, and his grandson Thomas Jr. took over as treasurer.⁴⁷ Although the firm experimented with the production of metal wheels,⁴⁸ business remained poor and the stock market collapse made it abysmal. The directors reduced their salaries by ten percent in 1931⁴⁹ and closed down the factory for one week each month in 1932.⁵⁰ That was not enough, and late in 1932 the directors began to close the factory for two weeks each month.⁵¹

To offset their losses, the firm leased part of its factory to the Nachman Spring Company in 1934.⁵² Although the market for wooden automotive wheels no longer existed, the company still made wheels for milk wagons, trash wagons and vending carts.⁵³ The company tried to diversify by employing two specialists from Bavaria to manufacture wooden skis in 1937,⁵⁴ but despite all their efforts, the company's worth by 1940 was barely a third of what it had been in 1929.⁵⁵

During World War II HB&D made rolling pins, potato mashers and anti-aircraft gun carriage wheels for the War Department. They also turned over part of their factory to Schramm Inc., which used it to produce portable arc welding units for the military.⁵⁶ After the war, HB&D continued to share their premises with other firms including the Nachman Spring Company, the Wind Turbine Corporation, Aerial Towers, and the Titter & Peck Machine & Tool Company.⁵⁷ For a few years in the 1950s, they tried to produce baseball bats, but survived by making wheels for New York street cleaning carts, Philadelphia post office wagons, Amish buggies, Hollywood films, and railroad baggage wagons.⁵⁸

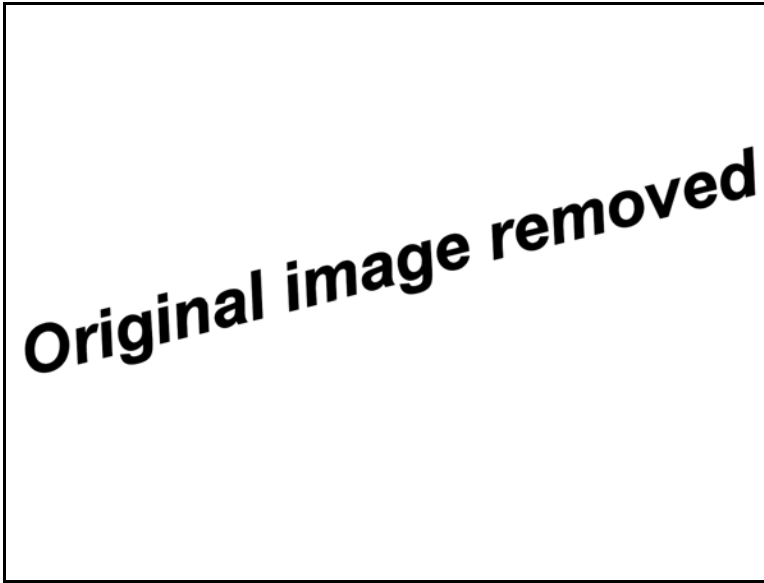


Fig. 7.2: Charles Gincley making wheel hubs for HB&D (1954). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

By 1958 the firm was one of only two or three wheelmakers remaining out of seven hundred that had once operated in the country.⁵⁹ In 1964 it employed fifteen workers to make wheels used mostly to decorate recreation rooms in new homes.⁶⁰ Although the work force increased to thirty by 1969,⁶¹ the firm was sufficiently endangered to warrant its selection as the subject of a Smithsonian documentary film.⁶² After a failed attempt by Harry Thompson of Oxford to purchase the Wheel Works in 1969, it reverted to the Hoopes family. Family members selected local dentist Edward Lawrence, a relative by marriage, to become president in 1972,⁶³ and he presided over the liquidation of the company.⁶⁴ Ray Carr and David Knauer of Pickering Creek Industrial Park sold the plant's contents and patents to Vern Barnett of Jonesboro, Arkansas in April 1973.⁶⁵

Keystone and Denney Tag Companies

The last major industrial casualties were West Chester's tag companies. Both the Denney Tag and Keystone Tag

Chapter 7: After the Depression

companies thrived during World War I, and inspired another Borough resident, Charles Lucas, to open a third company in a former Methodist Episcopal Church at Market and Darlington Streets. The tag industry proved relatively immune to the Depression, since even idle factories still used tags to label goods stuck in inventory, while retailers needed tags to advertise price changes and sales.⁶⁶ Although the Denney cut back to a three-day work week during the Depression,⁶⁷ as the economy recovered, the tag business boomed. World War II brought government contracts that resulted in record profits,⁶⁸ and Denney stock rose at a remarkable rate.⁶⁹ By May 1945 it sold for \$60 per share, three times its par value.⁷⁰ In 1948 company treasurer Casper H. Padmore estimated that a single share that cost \$20 in 1888 was now worth between \$1,850-2,000.⁷¹ Padmore did well enough to own a silver Rolls Royce.⁷²

The Keystone's fortunes were similar to those of the Denney. In 1950 the company had its best year in history thanks to large contracts from Dupont and Ford.⁷³ But by then, after two generations of Barber management, the company was owned by distant relatives,⁷⁴ and Edward F. Beatty, the last president,⁷⁵ offered to sell it to Denney in 1955.⁷⁶ In August Keystone's 54 employees joined Denney's work force of 250,⁷⁷ and their building became a warehouse for the West Chester State College.⁷⁸

Denney continued to expand by buying up other firms. After buying the Central Tag Company of Chicago in 1958,⁷⁹ they bought the Reyburn Manufacturing Company, makers of tag-printing machinery in Philadelphia, in 1960 and changed the company name to Denney-Reyburn in January 1961.⁸⁰ Denney-Reyburn continued to buy companies--the St. Regis (Missouri) Paper Company in 1966⁸¹ and the Dancyger Manufacturing Company of Cleveland in 1968⁸²--and by the end of the decade, the company had plants and warehouses in West Chester, Chicago and Cleveland, plus additional warehouses in Dallas and Los Angeles.⁸³

Expansion forced Denney-Reyburn out of its Barnard Street plant and into a new factory located in West Goshen Township next to the Route 202 bypass⁸⁴ in February 1968.⁸⁵ Although the company installed computers⁸⁶ and modernized its product lines,⁸⁷ it began to stumble in the 1970s and 1980s due to higher energy costs and stricter OSHA safety regulations.⁸⁸ After a bitter labor dispute in late 1985,⁸⁹ the company started to

lose money. In 1988 a pair of tag industry consultants bought the company,⁹⁰ but they failed to keep it running, so in early 1990, the Menasha Company of Wisconsin bought them out and closed down the last tag company in West Chester.⁹¹

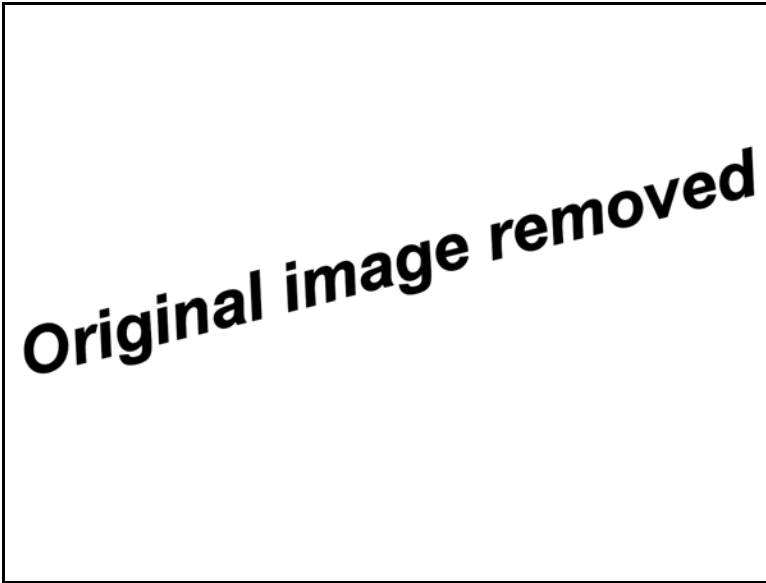


Fig. 7.3: Looking north at the intersection of Gay and High Streets (1945) with a Short Line Bus and the Greentree Building in the background. *Photo by Schramm, Inc. staff photographer, courtesy of the Chester County Historical Society, West Chester, PA.*

CHAPTER 8

Conclusion

The factories that once gave work to most of West Chester are gone. So are the machinists, planing mills, carriage makers, cart and wagon manufacturers, and brickmakers that supplied the factories.¹ The town is still prosperous, but its economy is dominated by government offices, a state university, and an assortment of insurance companies, real estate agencies and banks.²

Traces of the Borough's industrial past are still evident in the layout of the town. The 2001 Borough zoning map shows the industrial zone located in the Borough's southeast quadrant between E. Barnard Street, Bolmar Street and the railroad tracks.³ Individual factories remain in other parts of town like the old



Fig. 8.1: The former Lasko factory on W. Gay Street. *Photo by the author.*

Lasko factory on W. Gay Street, now used by a church and small industrial shops. The factories once occupied by the Sharples Works, Denney Tag and Keystone Tag have all been converted into housing.

Much has been lost, however. None of the railroad stations have survived, and the Wheel Works has been replaced by the bright yellow Rubenstein building. The YMCA occupies the site where Philip M. Sharples had his first foundry and PECO produced steam to heat the town center. John O. Green Park is located on the site of the old gas works, while the land once owned by Hoopes Brothers & Thomas is now used by Henderson High School, the Chester County Hospital and various office and residential buildings in the Borough's northeast corner.

The location of West Chester's industries was determined by the railroads which entered town along Goose Creek from the south and along high ground from the northeast. People with money lived as far away from industry as possible. Everyone else was crowded into houses that squeezed onto

Chapter 8: Conclusion

whatever land was left.

A stroll along Union Street from High Street to Bolmar Street shows this clearly. High Street, the Borough's main north-south thoroughfare, is lined with stately brick townhouses and mansions that were once occupied by the owners of West Chester industry. At Walnut Street, the houses are still quite grand, with a view to the east overlooking Goose Creek and the railroad



Fig. 8.2: The West Chester Cold Storage & Ice Plant on E. Union Street at the railroad tracks (circa 1899). *Photo courtesy of the Chester Chester County Historical Society, West Chester, PA.*

tracks. From there, Union Street drops quickly toward the creek between rows of smaller brick homes. Between Matlack Street and the railroad, a few houses remain, but an apartment complex marks the place where a coal yard operated for many years. Just beyond that is the railroad which follows Goose Creek, and on the far side is the former home of the West Chester Cold Storage & Ice Plant, which is still used by small manufacturing businesses. Beyond that lies a mixture of vacant lots, industrial buildings and working class housing in a neighborhood that lies literally "on the other side of the tracks."

A few conclusions are possible about why West Chester industrialized successfully. West Chester's first industries were small enterprises that consumed local raw materials, employed local labor and used the railroad to reach larger markets. Their founders came from old, established families that could provide financial support with which to start businesses, and they also provided connections to local authorities. When America went through the "Age of Reform" in the late 19th century, the local variant tended to boost business through efforts like the Board of Trade, rather than restrict it or prohibit it altogether.

Except for Josiah Hoopes' botanical research, West Chester's first industrialists produced neither inventions or discoveries, just the reorganization of existing activities on a larger scale. Hoopes Brothers & Thomas nursery grew plants. The Hoopes Brothers & Darlington Wheel Works started out

using a customer's equipment and specifications, and used other people's patents to expand their product lines. The Sharples Separator Works became successful by modifying a product invented in Sweden. It was only later that entrepreneurs like Samuel Barber, Chris Schramm, and Raymond Rettew developed original designs and machines in West Chester.

Based on the complaints of 19th-century entrepreneurs, their biggest obstacle was the cost of transportation. Frustration about road transport led to the construction of West Chester's first railroad in 1832, and resentment against that company produced support for a second railroad in 1858. Competition between the two lines lowered rates for a time, but left both of them vulnerable to takeover by the Pennsylvania Railroad in 1879. That triggered criticism against the "Pennsy" monopoly, yet people like the Denney brothers and Christian Schramm moved thriving businesses from Philadelphia to West Chester in the 1880s. Evidently, they thought that the added cost of transportation from West Chester to major markets was more than offset by savings on lower rents and wages in the Borough.

As West Chester's industry grew, the local economy became linked to the national economy. That created prosperity, but it also exposed the Borough to forces beyond the control of its entrepreneurs. As manufacturing moved south and overseas in search of lower wages, West Chester's factories gradually closed down. At the time this is written, only Schramm, National Foam, and Lasko are left.

If one tried to select a date for the end of West Chester's industrial age, September 15, 1967 might be appropriate. On that day, a fire destroyed the Pennsylvania Railroad's freight station on E. Union Street. Although an effort was made to shift operations to the passenger station on E. Market Street, the fire effectively ended 140 years of railroad freight service to



Fig. 8.3: West Chester's Market Street railroad station was built in 1867 and demolished in 1968. During the industrial age, it was West Chester's main portal to the world. *Photo courtesy of the Chester County Historical Society, West Chester, PA.*

the Borough.⁴ Although trucks had already taken over most of the borough's shipping business, the destruction of the freight station--and the demolition of the passenger station less than a year later--eliminated many of the sights and sounds associated with West Chester manufacturing.

NOTES TO CHAPTER 1

1. These include "A Brief History of West Chester Transportation," "The Paper Tag Industry in West Chester," and "Immigration to West Chester," all in West Chester, the First 200 Years: 1799-1999 (West Chester Bicentennial History Committee, 1999), plus "The Industrialization of West Chester," a Bicentennial Lecture at St. Luke Church (July 15, 1999).
2. U.S. census data from J. Smith Futhey & Gilbert Cope, History of Chester County, PA, with Genealogical and Bibliographical Sketches, (Philadelphia: Louis H. Everts, 1881), 215.
3. U.S. census data from W. W. Thomson, editor, Chester County Pennsylvania and its People (Chicago and New York: The Union History Company, 1898), 484.
4. Futhey & Cope, 336.
5. "Funeral home notes 132 years" in *Daily Local News* (henceforth DLN) (Nov. 14, 1972), 85.
6. Alfred Sharples, "A History of Railroading in Chester County" in DLN (Jan. 20, 1898), 9, and DLN (Aug. 5, 1892), in CCHS clippings file (henceforth CF) "WC Bus. Houses: West Chester Gas Co."
7. Others included William W. Jefferis, Dr. George Smith (author of the "History of Delaware County"), Nimrod Strickland, and Joseph Hemphill. Futhey & Cope, 304.
8. Futhey & Cope, 335-337.
9. Futhey & Cope, 359.
10. Nicholas Faith, The World the Railways Made (New York: Carol & Graf Publishers, Inc., 1990), 26.
11. Douglas Harper, West Chester to 1865: That Elegant & Notorious Place (West Chester: Chester County Historical Society, 1999), 308-309.
12. Sharples, "A History of Railroading," 4.
13. *Ibid.*, 2 & 4.
14. Charles William Heathcote, History of Chester County Pennsylvania (West Chester, PA: Horace F. Temple, 1926), 93.
15. "Our Double PRR Line to the City" in DLN (March 9, 1881), in CF "Transportation; Penna. RR 1881."
16. Pierce Hoopes was the first in his line not to farm. "Obituary: Josiah Hoopes" in DLN (Jan. 18, 1904), in CF "Hoopes, Josiah."
17. Details of the Sharples lineage were culled from Futhey & Cope, 334, and "Obituary: S. Emlen Sharples" in DLN (June 22, 1914), in CF "Sharples, S."
18. Obituary "William Hoopes" in DLN (Feb. 1, 1917), in CF "Hoopes, W."
19. West Chester Board of Trade, West Chester (West Chester, PA: F. S. Hickman, 1888), 14.
20. *Ibid.*, 18, 20 & 29.

Reference Notes

21. William Darlington, Directory of the Borough of West Chester, for 1857 (West Chester, PA: Wood & James, Publishers, 1857).
22. Harper, 705.
23. The US Census reported 3,172 people in West Chester and 66,438 in Chester County. See Futhey & Cope, 215; and Thomson, 484.

NOTES TO CHAPTER 2

1. Thomas Cheney Esq. of Thornbury, letter to relatives in England (1796), reprinted in Futhey & Cope, 339.
2. Futhey & Cope, 337-339.
3. Futhey & Cope, 341.
4. Culled from the individual listings in Darlington, Directory ... 1857, 63-97.
5. Futhey & Cope, 337.
6. Sharples, "A History of Railroading," 4.
7. A. L. Greenwood, "The Railroads of Chester County" in *Tredyffrin-Easttown History Club Quarterly*, vol. 7, no. 4 (Feb. 1953), 87 & 89; Futhey & Cope, 361.
8. Harper, 547. Rutter's orchard appears on the 1873 Borough map.
9. Futhey & Cope, 342.
10. "Our Florists" in DLN (July 12, 1892), in CF "WC Bus. Houses."
11. Futhey & Cope, 605.
12. "Obituary: Josiah Hoopes" in DLN (Jan. 18, 1904), in CF "Hoopes, Josiah."
13. Darlington, Directory ... 1857, 41.
14. Thomson, 977. See also George P. Donehoo, Pennsylvania, A History (n.d. [pre-1919]), quoted in Gerald R. Fuller, June Markus Hoopes & Lillian Fredsall Webster, compilers and editors, The Hoopes Family Record, Vol. II, The Seventh and Eighth Generations (Houston, Texas: The Hoopes Family Organization, Inc., 1979), 252.
15. Advertisement in *American Republican* (May 22, 1855), in CF "WC Bus. Houses, Josiah Hoopes."
16. Advertisement in *American Republican* (March 18, 1856), in CF "WC Bus. Houses, Josiah Hoopes."
17. West Chester Board of Trade, 38.
18. Darlington, Directory ... 1857, 114.
19. They purchased land and several buildings from the estate of Anthony Bolmar. *Village Record* (Dec. 19, 1865), in CF "WC Bus. Houses, Josiah Hoopes."
20. Extract from Donehoo, in Fuller, Hoopes & Webster, 252.
21. Hoopes Brothers & Thomas, A Handbook of Greenhouses and Bedding Plants (Philadelphia: Press of McCalls & Stavely: 1882), 2 & 7.
22. DLN (Sept. 11, 1885), in CF "WC Bus. Houses, HB&T."
23. Thomson, 978.
24. "Planting Nursing Stock" in DLN (April 11, 1895), in CF "WC Bus.

Houses, HB&T."

25. DLN (Oct. 15, 1908), in CF "WC Bus. Houses, HB&T."

26. Hoopes Brothers & Thomas, The West Chester Nurseries (West Chester, PA: 1913), 1. An advertisement in the Farm and Business Directory of Chester County, Pennsylvania (Philadelphia: Wilmer Atkinson Co., 1914), 287, gives the address of their Philadelphia office.

27. Hoopes Brothers & Thomas, Handbook, 8.

28. DLN (Sept. 14, 1875), in CF "WC Bus. Houses, HB&T."

29. DLN (April 28, 1876), in CF "WC Bus. Houses, HB&T."

30. "The Telephone" in DLN (July 15, 1878), in CF "WC Bus. Houses, HB&T."

31. DLN (Nov. 6, 1879), in CF "WC Bus. Houses, HB&T."

32. DLN (March 12, 1879), and "Completed" in DLN (April 26, 1879), in CF "WC Bus. Houses, HB&T."

33. Hoopes Brothers & Thomas, "Cherry Hill Nurseries Spring 1875 Semi-annual trade list no. 3" (West Chester, PA: 1875).

34. "Foreign Shipment" in DLN (March 10, 1874), in CF "WC Bus. Houses, HB&T."

35. DLN (April 17, 1879), in CF "WC Bus. Houses, HB&T."

36. DLN (April 11, 1881), in CF "WC Bus. Houses, HB&T."

37. Hoopes Brothers & Thomas, Handbook, 3.

38. "An Order From President Cleveland" in DLN (Oct. 20, 1886), in CF "WC Bus. Houses, HB&T."

39. Thomson, 978.

40. Extract from Donehoo, in Fuller, Hoopes & Webster, 252-253.

41. DLN (Jan. 23, 1880), in CF "WC Bus. Houses, HB&T."

42. "Ungrateful visitors" in DLN (July 13, 1880), in CF "WC Bus. Houses, HB&T."

43. DLN (July 16, 1880), in CF "WC Bus. Houses, HB&T."

44. DLN (May 20, 1881), in CF "WC Bus. Houses, HB&T."

45. DLN (Dec. 4, 1870); "Reducing their force" in DLN (July 5, 1880); "About Trees" in DLN (April 21, 1883); and *Morning Republican* (Dec. 8, 1899), in CF "WC Bus. Houses, HB&T." See also Hoopes Brothers & Thomas, Handbook, 6. For a description of the seasonal nature of their work, see Hoopes Brothers & Thomas, The West Chester Nurseries, 1.

46. DLN (April 3, 1911), in CF "WC Bus. Houses, Maple Avenue Nursery."

47. "They Are Awaiting the Opening of Work at the Nurseries" in DLN (March 9, 1895), in CF "WC Bus. Houses, HB&T."

48. "Employing Italians" in DLN (Nov. 24, 1906), in CF "WC Bus. Houses, HB&T."

49. DLN (Dec. 15, 1905), in CF "WC Bus. Houses, HB&T."

50. "Wash Day at Nurseries" in DLN (March 30, 1908), in CF "WC Bus. Houses, HB&T."

51. DLN (Sept. 19, 1912), in CF "WC Bus. Houses, HB&T."

52. DLN (Oct. 21, 1876), in CF "WC Bus. Houses, HB&T."

Reference Notes

53. DLN (Oct. 26, 1878), in CF "WC Bus. Houses, HB&T."
54. "Big Rabbit Hunt" in DLN (Nov. 19, 1880), in CF "WC Bus. Houses, HB&T."
55. "Ungrateful visitors" in DLN (July 13, 1880) and "Vandalism" in DLN (May 12, 1881), in CF "WC Bus. Houses, HB&T."
56. "Quinn's Ready Revolver" in DLN (May 9, 1895), in CF "WC Bus. Houses, HB&T."
57. DLN (Feb. 3, 1921), in CF "WC Bus. Houses, HB&T."
58. Darlington, Directory ... 1857.
59. Thomas married Helen Biddle and Linda Hastings. "Obituary: George B. Thomas" in DLN (Nov. 11, 1920), in CF "Thomas, G."
60. "Obituary: George B. Thomas" in DLN (Nov. 11, 1920), in CF "Thomas, G."
61. West Chester Board of Trade, 5-7.
62. "George B. Thomas" in DLN (Nov. 10, 1920), in CF "Thomas, G."
63. DLN (Nov. 5, 1955), in CF "Hoopes W."
64. *Morning Republican* (Sept. 23, 1898), in CF "Hoopes, W."
65. *Morning Republican* (March 14, 1899), in CF "WC Bus. Houses, HB&T."
66. "Application of Hoopes Brothers and Thomas Co." (26 March 1907), in Chester County Archives, Corporation Book 6, 143.
67. DLN (Oct. 11, 1950), in CF "Hoopes W."
68. "Obituary: Wilmer W. Hoopes" in *New York Times* (Nov. 7, 1955), in CF "Hoopes W."
69. West Chester Board of Trade, 39.
70. Darlington, Directory ... 1857, 194.
71. DLN (Jan. 2, 1873), in CF "Hoopes, Josiah."
72. Hoopes held the position from 1874 to 1888. Thomson, 967.
73. "Obituary: Josiah Hoopes" in DLN (Jan. 18, 1904), in CF "Hoopes, Josiah."
74. "Obituary: Josiah Hoopes" in DLN (Jan. 18, 1904), in CF "Hoopes, Josiah."
75. Josiah Hoopes, Book of Evergreens (New York: Orange Judd Co., 1868), cited in Fuller, Hoopes & Webster, 574.
76. DLN (Aug. 16, 1876), in CF "Hoopes, Josiah."
77. Fuller, Hoopes & Webster, 573.
78. "Mrs. Joanna Morgan" in DLN (Dec. 2, 1920), in CF "Morgan, J."
79. "Estate Goes to Son" in DLN (Jan. 21, 1904), in CF "Hoopes, Josiah."
80. Fuller, Hoopes & Webster, 250.
81. Personal observation by the author. See also Fuller, Hoopes & Webster, 250.

NOTES FOR CHAPTER 3

1. Futhey & Cope, 605. The "wheel works" Hoopes were descended

from Daniel's son Thomas, while the "nursery" Hoopes were descended from Daniel's son Nathan.

2. Their father, Thomas Hoopes, and his uncle, Ezra Cope, patented a hay mowing machine in 1825. Cope was one of the founders of the WCRR in 1831. See Futhey & Cope, 338; Harper, 324.

3. Rebecca Brooks Gruver, *An American History*, 3rd. edition (Reading, MA: Addison-Wesley Publishing Co., 1981), 388.

4. *Morning Republican* (March 28, 1899), in CF "WC Bus. Houses, HB&D, 1890-1899" and "Thomas Hoopes" (obituary) in DLN (Oct. 26, 1925), in CF "Hoopes, T."

5. Robison and his partner Kelsey Shoemaker sold lime, coal, and lumber. See the copy of the "History of John G. Robison written by him at the request of his daughter, Mrs. Helen W. Hoopes, then in his 89th year" (Feb. 24, 1904), 7-10, in the Hagley Museum Manuscript Collection (henceforth HMMC).

6. For the purpose of this book, "Council member" refers to either Council member or Burgess. Until 1895, the Borough was governed by a Chief Burgess, Second Burgess, and five Assistant Burgesses. From 1895 to 1961, Borough government consisted of a Burgess, a President of Council, and five Council members. Since 1961, the Borough has been governed by a Mayor, President of Council and six Council members. My thanks go to Thomas A. Pitt, Jr., who provided this information and compiled a list of Borough government members from 1799-2000 for the Bicentennial Celebration of the Borough of West Chester in 1999.

7. Chester County Deed Book I7 (June 4, 1867), 121.

8. "A West Chester Enterprise" in *Jeffersonian* (June 15, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."

9. "Public Sale of Personal Property" in *Village Record* (Feb. 1, 1868), in CF "Hoopes, T."

10. DLN (May 3, 1958), in CF "WC Bus. Houses, HB&D, 1950-1959"; and Chester County Deed Book N7 (June 4, 1867), 185, in Chester County Archives.

11. Reconstructing the Hoopes and Darlington family trees is laborious work, but Edward S. Darlington's father Franklin had a sister and a cousin both named Eliza. The mother of William and Thomas Hoopes was born Eliza Darlington. See Futhey & Cope, 510; and "Edward Shimer Darlington" (obituary) in DLN (1921), in CF "Darlington, E."

12. Their first customer for finished wheels was in Wilmington. "Hoopes Brothers & Darlington Spoke and Wheel Works" in DLN (March 26, 1874), in CF "WC Bus. Houses, HB&D, 1870-1879."

13. Hoopes Brothers & Darlington, "Stock List No. 4, West Chester Spoke Works" (Aug. 10, 1869).

14. Chester County Deed Book V7 (Nov. 4, 1871), 282.

15. "Presentations and Festival" in *Jeffersonian* (Jan. 6, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."

Reference Notes

16. "A West Chester Enterprise" in *Jeffersonian* (June 15, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."
17. "Local Hash in *Jeffersonian* (Dec. 28, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."
18. *Jeffersonian* (Nov. 23, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."
19. "West Chester's Representation at the Vienna Exposition" in DLN (March 1, 1873), in CF "WC Bus. Houses, HB&D, 1870-1879."
20. "Heavy orders" in DLN (April 30, 1873), in CF "WC Bus. Houses, HB&D, 1870-1879."
21. "Office Ventilators" in DLN (June 17, 1873), in CF "WC Bus. Houses, HB&D, 1870-1879."
22. DLN (Sept. 4, 1873), in CF "WC Bus. Houses, HB&D, 1870-1879."
23. "Reduction of Wages" in DLN (Sept. 29, 1873), in CF "WC Bus. Houses, HB&D, 1870-1879."
24. "Hoopes Brothers & Darlington Spoke and Wheel Works" in DLN (March 26, 1874), in CF "WC Bus. Houses, HB&D, 1870-1879."
25. "Completed" in DLN (May 10, 1874), in CF "WC Bus. Houses, HB&D, 1870-1879."
26. DLN (Dec. 6, 1875), in CF "WC Bus. Houses, HB&D, 1870-1879."
27. The West Chester & Philadelphia Railroad Company formed in 1852 to construct a second line to West Chester via Media. It reached Market Street on Nov. 10, 1858, triggering a rate war that nearly bankrupted both lines. From 1864 to 1879, the WCRR leased the WC&PRR, and in 1879 the Pennsylvania Railroad took them both over.
28. James J. D. Lynch Jr., "The West Chester Branch" in *The High Line*, vol. 8, no. 2 & 3 (Winter-Spring 1988), 5.
29. *Oxford Press* (April 8, 1874), in CF "WC Bus. Houses, HB&D, 1870-1879."
30. "Is It So?" in DLN (July 8, 1877), in CF "WC Bus. Houses, HB&D, 1870-1879."
31. "A West Chester Enterprise" in *Jeffersonian* (June 15, 1872), in CF "WC Bus. Houses, HB&D, 1870-1879."
32. Although I was unable to locate an annual report for the WC&PRR for 1872, the average monthly freight revenue for 1871 was \$8,882.41 and the monthly average for 1873 was \$9,820.42. The figures for May 1871 and 1873 were \$10,475.05 and \$10,633.93, respectively. Freight rates remained constant throughout the entire period. See Annual Report of the Auditor General of the State of Pennsylvania ... of the Railroad, Canal and Telegraph Companies for the Year 1871 (Harrisburg: 1872), 478 and Annual Report of the Auditor General of the State of Pennsylvania ... of the Railroad, Canal and Telegraph Companies for the Year 1873 (Harrisburg: 1874), 643.
33. "Going to Hagerstown" in DLN (March 11, 1881), in CF "WC Bus. Houses, HB&D, 1880-1889."
34. DLN (June 2, 1875), in CF "WC Bus. Houses, HB&D, 1870-1879."

35. "Frank Reagan Goes South" in DLN (Nov. 20, 1893), in CF "WC Bus. Houses, HB&D, 1890-1899."
36. DLN (Jan. 22, 1900), in CF "WC Bus. Houses, HB&D, 1900-1909."
37. "Coal for Employees" in DLN ([day not given] 1902), in CF "WC Bus. Houses, HB&D, 1900-1909."
38. The company received a lathe from Philadelphia. "New Turning Lathe" in DLN (Sept. 14, 1882), in CF "WC Bus. Houses, HB&D, 1880-1889."
39. "Hoopes Brothers & Darlington Spoke and Wheel Works" in DLN (March 26, 1874), in CF "WC Bus. Houses, HB&D, 1870-1879."
40. "Large Wheels for Africa" in DLN (Nov. 17, 1878), in CF "WC Bus. Houses, HB&D, 1870-1879"; "A Third Order" in DLN (March 20, 1879), in CF "WC Bus. Houses, HB&D, 1870-1879."
41. "Visitor from England" in DLN (May 20, 1876), in CF "WC Bus. Houses, HB&D, 1870-1879."
42. "Order from Portugal" in DLN (May 29, 1876), in CF "WC Bus. Houses, HB&D, 1870-1879."
43. "Few Orders" in DLN (Aug. 23, 1876), in CF "WC Bus. Houses, HB&D, 1870-1879."
44. DLN (Sept. 27, 1876), in CF "WC Bus. Houses, HB&D, 1870-1879."
45. Hoopes Brothers & Darlington, "Catalog and Price List No. 11, West Chester Spoke Works" (Nov. 1, 1876).
46. "Prizes at Paris Exposition" in DLN (Oct. 22, 1878) and DLN (May 13, 1880), in CF "WC Bus. Houses, HB&D."
47. "Twelve Hours a Day" in DLN (June 3, 1880), in CF "WC Bus. Houses, HB&D, 1880-1889."
48. In July 1883, Stephen P. Darlington left to join the Pennsylvania Railroad, where he eventually became the superintendent of its Harrisburg Division, and by the time he died in Philadelphia in 1915, he owned the Cortright Metal Roofing Co. and had an estate worth \$122,000. Jerome Gray replaced him as the company treasurer.
- "Withdrawn" in DLN (July 17, 1883), in CF "WC Bus. Houses, HB&D, 1880-1889"; DLN (March 27, 1915), in CF "Darlington, S."; and
- "Dividends Declared" in DLN (April 9, 1888), in CF "WC Bus. Houses, HB&D, 1880-1889."
49. "Stock Company Organized" in DLN (April 28, 1880), in CF "WC Bus. Houses, HB&D, 1880-1889."
50. "Raising" in DLN (July 17, 1880), in CF "WC Bus. Houses, HB&D, 1880-1889."
51. DLN (July 24, 1880), in CF "WC Bus. Houses, HB&D, 1880-1889."
52. "Going to Hagerstown" in DLN (March 11, 1881), in CF "WC Bus. Houses, HB&D, 1880-1889."
53. DLN (Nov. 29, 1881), in CF "WC Bus. Houses, HB&D, 1880-1889."
54. DLN (June 24, 1882), in CF "WC Bus. Houses, HB&D, 1880-1889."
55. "Leased the Depot" in DLN (May 19, 1884) and DLN (June 17, 1893), in CF "WC Bus. Houses, HB&D."

Reference Notes

56. Instead of workers receiving pay according to the output of their department, employees were paid for their individual output. See "To Do Piece Work" in DLN (March 21, 1885), in CF "WC Bus. Houses, HB&D."
57. "A Good Association" in DLN (Oct. 10, 1885), in CF "WC Bus. Houses, HB&D, 1880-1889."
58. DLN (Oct. 13, 1885), in CF "WC Bus. Houses, HB&D, 1880-1889."
59. Chester County Deed Book E10 (Aug. 30, 1886), 149, in Chester County Archives.
60. "New Engine" in DLN (July 28, 1887), in CF "WC Bus. Houses, HB&D, 1880-1889."
61. "Curbng and Paving" in DLN (Oct. 26, 1887), in CF "WC Bus. Houses, HB&D, 1880-1889."
62. West Chester Board of Trade, 4-6.
63. DLN (Jan. 25, 1890), in CF "WC Bus. Houses, HB&D, 1890-1899."
64. Author unknown, biography of Thomas Hoopes (copy of typewritten manuscript, n.d. [1925]), 4, in HMMC.
65. Chester County Deed Book B11 (Dec. 12, 1892), 140, in Chester County Archives. It is not clear what transpired, but HB&D sold their company to the American Wheel Co. in 1889 for \$30,000, signed a lease for the plant at \$12,000 per year, and then bought it back in 1892 for \$66,100. For the 1889 sales price, see Chester County Deed Book Q10 (Dec. 11, 1889), 362, in Chester County Archives.
66. "Remodeling Sulkies" in DLN (May 13, 1893), in CF "WC Bus. Houses, HB&D, 1890-1899."
67. Hoopes Brothers & Darlington, "Carriage and Wagon Wheels Price List" (Oct. 1893).
68. B. R. S., letter to the editor, *Morning Republican* (Dec. 2, 1893), in CF "WC Bus. Houses, HB&D, 1890-1899" and "Mill Men Laid Off" in DLN (March 17, 1894), in CF "WC Bus. Houses, HB&D, 1890-1899."
69. *Morning Republican* (April 9, 1894), in CF "WC Bus. Houses, HB&D, 1890-1899."
70. "Wheels are still round" in DLN (Nov. 14, 1972), 79.
71. DLN (Jan. 22, 1900), in CF "WC Bus. Houses, HB&D, 1900-1909."
72. DLN (Feb. 9, 1900), in CF "WC Bus. Houses, HB&D, 1900-1909."
73. For an introduction to American economic expansion at the turn of the century, see American Social History Project, [Who Built America?](#), vol. 2 (New York: Pantheon Books, 1992), 161-167.
74. *Morning Republican* (March 28, 1899), in CF "WC Bus. Houses, HB&D, 1890-1899."
75. Map #9, Sanborn Map of West Chester (New York: Sanborn Map Co., June 1902).
76. "Letters Patent" in DLN (July 21, 1903), in CF "WC Bus. Houses, HB&D" and Minutes of the Board of Directors meeting (July 24, 1903), in HMMC.
77. DLN (Oct. 22, 1907), in CF "WC Bus. Houses, HB&D, 1900-1909."
78. "Enlarging the Wheel Works" in DLN (June 10, 1907), in CF "WC

Bus. Houses, HB&D, 1900-1909."

79. DLN (Aug. 1, 1907), in CF "WC Bus. Houses, HB&D, 1900-1909."

80. Minutes of the Board of Directors meeting (Jan. 13, 1909), in HMMC.

81. DLN (March 2, 1909), in CF "WC Bus. Houses, HB&D, 1900-1909." The work day was extended from 8.5 to 9.5 hours.

82. "Oxford resident built first car" in DLN (Nov. 13, 1972), 49.

83. "Owned First 'Horseless Carriage' in Chester County" in *Co-op Review* (March 1938), in CF "Transportation, Automobiles" and "Adventure called first drivers" in DLN (Nov. 14, 1972), 108. An even earlier newspaper article names David M. Sharpless as the first to bring an automobile to West Chester in 1900. See "First 'Auto' Here" in DLN (April 6, 1900), in CF "Transportation, Automobiles."

84. The numbers were still small in 1908--from 141 to 540 miles. Val Hart, *The Story of American Roads* (New York: William Sloane Associates, Inc., 1950), 180-185.

85. "Automobile Notes" in DLN (Jan. 2, 1906), in CF "Transportation, Automobiles."

86. They were the Chester County Garage at 17 W. Miner Street, Henry R. Hoopes at 118 W. Market Street, John Hoopes at 29 S. Church Street, and Norris B. Slack at 10-12 N. Walnut Street. W. Andrew Boyd, compiler and publisher, *Boyd's West Chester Directory for 1910-1911* (West Chester, PA & Washington DC: W. Andrew Boyd, Aug. 1910), 138.

87. DLN (June 14, 1909), in CF "WC Bus. Houses, HB&D, 1900-1909."

88. Hoopes Brothers & Darlington, "Fine Carriage Wagon and Automobile Wheels" (Aug. 1912).

89. Minutes of "an informal meeting of the directors of Hoopes Brothers & Darlington, Inc." (Sept. 28, 1912), in HMMC.

90. The time clock was in use from 1913 to 1972. See Thomas J. Bray, "A Wood-Wheel Maker Finds It Helps to Have Dentist for President" in *Wall Street Journal* (Dec. 12, 1972), in CF "WC Bus. Houses, HB&D."

91. Minutes of the Board of Directors meeting (April 16, 1916), in HMMC.

NOTES ON CHAPTER 4

1. Peterborough (Ontario, Canada) Centennial Museum and Archives, Dossier 89-016 "De Laval Company Fonds," description (June 2002), at <http://www.pcma.ca/agricult.htm>.

2. After the Pennsylvania Railroad took over the WCRR in 1879, it constructed "milk stations" so that farmers could ship their milk to Philadelphia. "Notes on the W. C. Branch of the P. R. R." in (Nov. 24, 1879), from the CF: "Transportation, Pennsylvania Railroad, Frazer Branch."

3. By the 1880s, the "dairy interests" in the United States were well-

Reference Notes

- organized to influence both government policy and public opinion.
 Oscar E. Anderson, Jr., The Health of a Nation: Harvey W. Wiley and the Fight for Pure Food (Chicago: University of Chicago Press, 1958), 75-76.
4. "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M."
 5. William Sharples, P.M.'s great-grandfather, was the first burgess, and Philip P. Sharples, the railroad promoter, was his grandfather. Futney & Cope, 722-724.
 6. "Obituary: S. Emlen Sharples" in DLN (June 22, 1914), in CF "Sharples, S."
 7. "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M."
 8. DLN (April 11, 1881), in CF "WC Bus. Houses, Sharples Separator Works"; and "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M." Oddly enough, Sharples mentioned neither the Cope Works nor the Moore Works in his 1931 interview. For details on the Cope Works, see "Edge T. Cope" in DLN (Jan. 25, 1886), in CF "Cope, E."
 9. West Chester Board of Trade, 74, and DLN (April 11, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
 10. "Desks for the Indian School" in DLN (March 19, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
 11. DLN (July 9, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
 12. "A Mammoth Water Wheel" in DLN (Aug. 22, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
 13. Advertisement in *West Chester Daily Republican* (Sept. 22, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
 14. "Large Wheel" in DLN (March 20, 1882), in CF "WC Bus. Houses, Sharples Separator Works."
 15. Advertisement in *Chester County Agricultural Society Exhibition Book* (1882), in CF "WC Bus. Houses, Sharples Separator Works."
 16. "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M."
 17. DLN (Jan. 3, 1884), in CF "WC Bus. Houses, Sharples Separator Works."
 18. DLN (April 25, 1884), in CF "WC Bus. Houses, Sharples Separator Works."
 19. DLN (Oct. 10, 1884), in CF "WC Bus. Houses, Sharples Separator Works."
 20. DLN (Feb. 4, 1890), in CF "WC Bus. Houses, Sharples Separator Works."
 21. West Chester Board of Trade, 46.
 22. DLN (July 23, 1888), in CF "WC Bus. Houses, Sharples Separator Works."

23. DLN (Oct. 7, 1889), in CF "WC Bus. Houses, Sharples Separator Works."
24. One account claims that the Separator Works employed up to one thousand men. See Richard Cramer, "Descendants of Mary Edwards Lewis and George Fawkes Brinton" (2000), located at <http://www.springhillfarm.com/broomhall/lewis1.html>.
25. DLN (March 24, 1927), in CF "WC Bus. Houses, Sharples Separator Works."
26. Henry L. Brinton, commentary in DLN (Dec. 19, 1983), in CF "Sharples, Philip M."
27. DLN (Oct. 9, 1899), in CF "WC Bus. Houses, Sharples Separator Works."
28. DLN (July 28, 1902), in CF "WC Bus. Houses, Sharples Separator Works."
29. *Morning Republican* (Jan. 22, 1898), in CF "WC Bus. Houses, Sharples Separator Works."
30. DLN (March 8, 1906), in CF "WC Bus. Houses, Sharples Separator Works."
31. DLN (Oct. 27, 1902), in CF "WC Bus. Houses, Sharples Separator Works."
32. The "National Milking Machine Company" and the "West Chester Dairy Specialty Company" in DLN (May 27, 1902), in CF "WC Bus. Houses, Sharples Separator Works"; DLN (March 1, 1907), in CF "WC Bus. Houses, Sharples Separator Works."
33. *Coatesville Record*, in CF "WC Bus. Houses, Sharples Separator Works."
34. DLN (Sept. 26, 1911), in CF "WC Bus. Houses, Sharples Separator Works."
35. "Soon Be Ready for Occupancy" in DLN (Feb. 13, 1908), in CF "WC Bus. Houses, Farmers & Mechanics Building."
36. *West Chester, Pennsylvania Centennial Souvenir 1799-1899*, reprint edition (West Chester, PA: Spectrum Publishers Direct, 2001), 126.
37. DLN (Feb. 4, 1890 and Oct. 27, 1891), both in CF "WC Bus. Houses, Sharples Separator Works."
38. DLN (Jan. 8, 1892), in CF "WC Bus. Houses, Sharples Separator Works."
39. DLN (Dec. 7, 1897), in CF "WC Bus. Houses, Sharples Separator Works."
40. DLN (April 29, 1919), in CF "WC Bus. Houses, Sharples Separator Works."
41. *Morning Republican* (March 2, 1897), in CF "WC Bus. Houses, Sharples Separator Works."
42. "A Reading Room opened for Employees at Sharples Separator Works" in *Morning Republican* (Dec. 11, 1897), in CF "WC Bus. Houses, Sharples Separator Works."
43. DLN (Feb. 21, 1900), in CF "WC Bus. Houses, Sharples Separator

Reference Notes

Works."

44. *Morning Republican* (Jan. 21, 1897), in CF "WC Bus. Houses, Sharples Separator Works."

45. DLN (Aug. 18, 1899), in CF "WC Bus. Houses, Sharples Separator Works."

46. DLN (March 26, 1895), in CF "WC Bus. Houses, Sharples Separator Works."

NOTES ON CHAPTER 5

1. Railroad tariffs in 1899 were one eighth of their 1872 levels. *Morning Republican* (March 28, 1899), in CF "WC Bus. Houses, HB&D, 1890-1899."

2. DLN (July 26, 1879), from the CF: "Transportation, Pennsylvania Railroad." The transaction is recorded as "WCRR to Pennsylvania Railroad Company, lease" (Sept. 15, 1879), in Chester County Miscellaneous Deed Book No. 17, 544-546.

3. "The New Depot" in DLN (March 25, 1880), from the CF: "West Chester, Transportation."

4. "More Changes at Old Depot" in DLN, in CF, "Transportation; PA. RR 1915-1919."

5. *Village Record* (West Chester, April 3, 1860) from the CF "Transportation, PRR."

6. West Chester Board of Trade, 10.

7. *Ibid.* 4.

8. DLN (April 20, 1888), from David L. Peirce notes (henceforth "Peirce notes"). David L. Peirce was the last president of the Denney Tag Co., and he was kind enough to share his notes on the company history.

9. In 1900 Phoenixville was second with 9,225 and Coatesville was a distant third with 5,721. Population figures for Chester County, 1800-1880, are found in Thomson, 484. Figures for West Chester 1800-1880 are from Futhey & Cope, 215. The census figures for 1890 and 1900 are from "U. S. Census, 1900," available on microfilm at Chester County Historical Society.

10. This pattern of movement from Ireland to rural areas and then on to West Chester needs further study. It is based on a study of the population of Riggstown, a mostly Irish neighborhood in southeastern West Chester. Data for this study was drawn from death records and borough directories for the period 1880-1910. I am also thankful to Seamus Cummins of the Community Academy of Philadelphia for explaining the different waves of Irish immigration.

11. Chester County "Register of Deaths" (1893-1907), in Chester County Archives. The author and West Chester University history students digitized information from 15,048 entries in the register, of whom 1,959 were born or died in West Chester. The results are available on the Internet at

<http://courses/wcupa/edu/jones/his480/riggstown.htm>.

12. Thomson, 349.

13. Ibid. African-Americans were restricted by law from many professions. See Robert Bussel, "The Most Indispensable Man in His Community: African-American Entrepreneurs in West Chester, Pennsylvania, 1865-1925" in *Pennsylvania History* (Vol. 65, No. 3 (Summer 1998), 329.

14. Harper, 383-387, & 607-608.

15. Although this paragraph is based on data from maps and deeds, a useful history of land development in West Chester appears as Chapter One in "A Growth Management Plan for the Borough of West Chester (1985)" (adopted Oct. 8, 1986).

16. Letter to the editor entitled "Dead Fish" in DLN (April 10, 1874), in CF "WC Bus. Houses: West Chester Gas Co."

17. DLN (July 1888), cited in Keith Gitterman, "West Chester Through Time" (West Chester University: unpublished paper, Dec. 30, 1982), in CCHS.

18. This information is derived from deeds and Borough maps.

19. Chester County Deed Book B8 (1870s), 549, cited in Deed Book R20 (Nov. 19, 1944), 28, and Deed Book M9 (March 30, 1882), 183.

20. DLN (Oct. 26, 1892).

21. DLN (Aug. 17, 1917).

22. DLN (Sept. 19, 1923).

23. Chester County Deed Books O19 (March 7, 1939), 484 and R20 (Nov. 19, 1944), 28.

24. The deeds are recorded in Chester County Deed Book B8, pages 298 and 300 (Nov. 29, 1871), and Chester County Deed Book F8, page 248 (Nov. 22, 1871), both in the Chester County Archives. Note that the 1873 atlas of Chester County incorrectly shows that the land was still owned by Sellers. See A. R. Witmer, Atlas of Chester Co. Pennsylvania (Safe Harbor, Lancaster County, PA: A. R. Witmer, 1873), 2.

25. Chester County Deed Book E10, pages 327 and 328 (March 21, 1887), in Chester County Archives.

26. Helen Percolini, interview by the author (April 5, 1996). By 1893, Carey's sons Robert and William E. lived at 500 and 502 East Nields Street, respectively. See W. Andrew Boyd, Directory of Chester County, 1893-1894 (Washington DC: W. Andrew Boyd, 1893).

27. DLN (April 27, 1894). The address appears in Boyd's Chester County Directory, 1898-1899 (Philadelphia: C. E. Howe & Co., 1898).

28. Charles R. Carey, telephone interview by the author (Aug. 22, 1996).

29. Chester County Deed Book B8, page 300 (Nov. 29, 1871), in Chester County Archives.

30. Caldwell's house appeared on "East Ward of West Chester" in the collection of Breou's Original Series of Farm Maps, Chester County (Philadelphia: W. H. Kirk & Co., 1883), 18-19.

31. "Sheriff's Sale" in DLN (May 1, 1894).

Reference Notes

32. DLN (July 30, 1894).
33. DLN (June 19, 1891), in CF "WC Bus. Houses: Muzante Brothers."
34. DLN (Feb. 19, 1881), in CF "WC Bus. Houses: Muzante Brothers." and DLN (Sept. 8, 1892), in CF "Matlack Street."
35. DLN (June 14, 1890); and DLN (March 12, 1948), in CF "West Chester Streets: 1935-1949."
36. Patrick J. Barry to Michael M. Lacey, Chester County Deed Book Y10 (Oct. 7, 1891), 36. The property is located at 500 S. Franklin Street, at the corner of Lacey. The DLN (Oct. 7, 1891) reported the sales price as \$1450. According to the DLN (May 18, 1889), Barry bought the land from the Sharples & Evans coal and lumber company.
37. DLN (July 30, 1894).
38. DLN (Aug. 23, 1894).
39. John Carey to Nathan & Frieda Braunstein, Chester County Deed Book W10 (March 7, 1891), 464; and DLN (June 1, 1893).
40. Thomas Ogden built similar houses around Gay and New Streets in the early 1830s for about \$1100. On Jan. 6, 1830, the *Village Record* carried an advertisement for a house with six rooms, full basement, and well with a pump next to the door. Cited in Harper, 320.
41. Obituary for "Patrick J. Barry" in DLN (Dec. 5, 1918), in CF "Barry, P."
42. DLN (Sept. 8, 1892).
43. DLN (April 11, 1907).
44. DLN (Nov. 20, 1900 and April 25, 1901), in CF: "Transportation, Pennsylvania Railroad."
45. William B. Schuyler, The Pioneer Catholic Church of Chester County, Saint Agnes, West Chester Pennsylvania 1793-1943 (Philadelphia: The Peter Reilly Co., 1944), 230.
46. When business fell off at the Separator Works, the Italians were the first workers discharged. DLN (Sept. 28, 1908), in CF "WC Bus. Houses, Sharples Separator Works."
47. Bussel, 342. For examples, see DLN (April 3, 1894); DLN (May 8, 1909); and DLN (Dec. 1, 1909); in CF "West Chester Institutions, Chester County Hospital."
48. DLN (Dec. 2, 1890), cited in Pamela Colbert, "When the Trolley Came to Town: The Construction of West Chester, Pennsylvania's First Street Railway, 1890-1891" (unpublished research paper, April 30, 1999).
49. Schuyler, 231.
50. DLN (June 23, 1923), in CF "WC Bus. Houses--Denney Tag."
51. DLN (Sept. 19, 1892).
52. DLN (Nov. 11, 1889).
53. DLN (Dec. 5, 1892).
54. Editorial in DLN (March 5, 1894).
55. Thomas J. "Pat" Morley, interview by the author (West Chester, Feb. 8, 1997).

56. Charles Richard Carey, interview by the author (Sept. 9, 1996).
57. DLN (July 21, 1902).
58. "A Fearful Accident" in DLN (July 19, 1881), in CF, "Transportation; Penna. RR 1881."
59. "Foot Crushed By A Locomotive" in DLN (Sept. 24, 1881), in CF "Transportation, West Chester & Phila. RR 1881-1884."
60. DLN (Nov. 25, 1892), from the CF.
61. "Mill Accidents" in DLN (Oct. 24, 1883), in CF "WC Bus. Houses, HB&D, 1880-1889."
62. "Unfortunate" in DLN (Jan. 31, 1881), in CF "WC Bus. Houses, HB&D, 1880-1889."
63. "Thrown out and Injured" in DLN (Feb. 19, 1881), in CF "WC Bus. Houses, HB&D, 1880-1889."
64. "Finger Amputated" in DLN (Jan. 25, 1882), in CF "WC Bus. Houses, HB&D, 1880-1889."
65. DLN (Dec. 19, 1904), in CF "WC Bus. Houses, HB&D, 1900-1909."
66. DLN (June 10, 1881), in CF "WC Bus. Houses, Sharples Separator Works."
67. "A Narrow Escape" in DLN (March 12, 1883), in CF "WC Bus. Houses, Sharples Separator Works."
68. DLN (April 13, 1918), in CF "WC Bus. Houses, Sharples Separator Works."
69. DLN (Aug. 4, 1914), in CF "WC Bus. Houses, Sharples Separator Works."
70. Edward Chase Kirkland, Industry Comes of Age: Business, Labor and Public Policy, 1860-1897 (Chicago: Quadrangle Books, Inc. 1967), 358-9.
71. "A Wise Move" in DLN (Sept. 11, 1883), in CF "WC Bus. Houses, HB&D, 1880-1889."
72. "A Good Association" in DLN (Oct. 10, 1885), in CF "WC Bus. Houses, HB&D, 1880-1889."
73. West Chester Board of Trade, 43.
74. DLN (July 7, 1905), in CF "WC Bus. Houses, Sharples Separator Works."
75. Helen Percolini, telephone interview (West Chester, April 3, 1996); Charles R. Carey, interview (Sept. 9, 1996); Dorothy Parker, telephone interview (Oct. 29, 1996); Dorothy Parker, interview by Wendy Smoker, (March 28, 1997); John "Jack" Dougherty, interview (West Chester, June 5, 1997). All interviews by the author except where noted.
76. Charles R. Carey, interview by the author (Sept. 9, 1996).
77. DLN (Nov. 11, 1893).
78. Rebecca Gibson Carey, interview by the author (West Chester, May 29, 1997); John "Jack" Dougherty, interview by the author (West Chester, June 5, 1997).
79. Charles Richard Carey, interview (Downingtown, Sept. 9, 1996); T. Walter "Sarge" Clark, interview (West Chester, Nov. 11, 1996); Rebecca

Reference Notes

- Gibson Carey, interview (West Chester, May 29, 1997); John "Jack" Dougherty, interview (West Chester, June 5, 1997); Jack Harvey, interview (West Chester, June 7, 1997); Harry Townsend Jr., interview (West Chester, July 7, 1997). All interviews by the author.
80. DLN (March 14, 1885).
81. DLN (June 29, 1886).
82. The material in this paragraph is based on research by Charlotte Bridges using the Chester County Historical Society's clippings files on the Board of Health. See Bridges, "A preliminary research paper of the West Chester Board of Health" (West Chester University HIS480, April 28, 1999), available at <http://courses.wcupa.edu/jones/his480/reports/boh.htm>.
83. A chicken coop on S. Franklin Street was mentioned in "Roaring Oil Blaze Perils Crowd Here; Three Are Injured" in DLN (Sept. 12, 1931). Charles Richard Carey mentioned raising chickens and turkeys in his backyard in the 1930s. Interview by the author (Downingtown, Sept. 9, 1996).
84. "An ordinance adopting a system of public sanitary sewerage, adopting plans for out-fall sewers, septic tanks and disposal plants in the Howell Run and Goose Creek sewer districts, authorizing bids and the execution of contracts for the construction thereof" (May 16, 1911), 223-225; and "An ordinance providing for the construction of intake or lateral sewers connecting with the sanitary sewer system and the payment of the cost of regulating connections with Borough services, requiring plumbers to be licensed and regulating plumbing works and imposing penalties for violations of this ordinance" (Sept. 16, 1912), 313-322, both in CCHS "West Chester Borough collection, Borough Ordinances."
85. DLN (June 29, 1909), cited in Bridges.
86. DLN (Dec. 12, 1906) in CF "West Chester Public Offices, Ordinances."
87. Armstrong, 435, cited in Bridges, contains a detailed description of machines used to burn garbage.
88. DLN (May 3, 1900), cited in Bridges, describes the procedure of incinerating garbage in detail. Apparently the initial cost was very high, and it was mostly used in larger cities.
89. *West Chester Star* (Nov. 5, 1913 and Dec. 3, 1913), both cited in Bridges.
90. DLN (Jan. 10, 1947 and Feb. 2, 1949), cited in Bridges.
91. DLN (June 5, 1907), cited in Bridges.
92. DLN (May 27, 1909), cited in Bridges.
93. *Morning Republican* (Feb. 17, 1897) in CF "WC Institutions, Chester County Hospital."
94. DLN (Dec. 17, 1901) in CF "WC Institutions, Board of Health."
95. DLN (Dec. 6, 1901), cited in Bridges.
96. DLN (June 30, July 6, Nov. 6, and Nov. 22, 1902), all in CF "WC Institutions, Chester County Hospital."

97. Mediaguy, "History of Estate Built in 1907 for Philip M. Sharples" (Jerrehian Partnership, 2002), available at <http://www.greystonehall.com/history.htm>.

NOTES FOR CHAPTER 6

1. "City of Philadelphia--Leading Merchants and Manufacturers" in *Pennsylvania Historical Review* (Historical Publishing Co., 1886), 99.
2. Mrs. Marian Wright, interview by Jim Jones and Kelly McVeigh (West Chester, May 8, 1997).
3. DLN (Jan. 18, 1902), in CF "Keystone Tag Co." Even after the invention of the tag-stringing machine in 1902, tag companies continued to employ handworkers to meet surges in demand and for specialty tags that could not be strung by machine. DLN (Jan. 18, 1902), in CF "Keystone Tag Co."; and Mary Masimini Basilio, interview by the author (Sept. 16, 1997).
4. Christine McCallin, interview by Jim Jones and Kelly McVeigh (Downingtown, May 8, 1997).
5. DLN (Feb. 1, 1888), from Peirce notes.
6. DLN (Feb. 3, 1888), from Peirce notes.
7. DLN (April 20, 1888), from Peirce notes.
8. *West Chester Star* (May 30, 1914) from Peirce notes.
9. "Report of the Committee to the Subscribers of the Capital Stock of the Denney Tag Company, West Chester, PA," from Peirce notes.
10. DLN (March 26, 1888), from Peirce notes.
11. DLN (April 20, 1888), from Peirce notes.
12. From Peirce notes based on "original handbook of M. Darlington."
13. DLN (Feb. 3, 1888), from Peirce notes.
14. DLN (Sept. 14, 1888), from Peirce notes.
15. The highest dividend was paid in 1909. Edwin Darlington, "Annual Stockholders' Report of the Denney Tag Company" (Sept. 21, 1909), from Peirce notes.
16. From Peirce notes.
17. From Peirce notes.
18. DLN (Dec. 4, 1900), from Peirce notes.
19. The "report by Mark H. Darlington, Treasurer" (Feb. 13, 1888), listed Samuel O. Barber as one of the original stockholders in the Denney Tag Co., with five shares.
20. DLN (Oct. 12, 1889), from Peirce notes.
21. DLN (Nov. 11, 1889), from Peirce notes.
22. DLN (June 19, 1901), in CF "Keystone Tag Co."
23. C. Wesley Talbot, annual report to stockholders of the Denney Tag Company (West Chester, Sept. 4, 1902), from Peirce notes.
24. "An Alarm at Separator Works" in *Morning Republican* (March 9, 1898), in CF "WC Bus. Houses, Sharples Separator Works."
25. West Chester ... Centennial Souvenir, 125.

Reference Notes

26. DLN (Jan. 20, 1917), in CF "Brown, Edmund H."
27. DLN (Aug. 15, 1901), in CF "WC Bus. Houses--Denney Tag."
28. DLN (June 19, 1901), in CF "Keystone Tag Co."
29. McFarland married Barber's daughter Linda. For a brief history of the company, see the article from the *West Chester Star* (May 30, 1914), in CF "Keystone Tag Co."
30. DLN (March 1, 1902), in CF "Keystone Tag Co."
31. Ibid.
32. DLN (March 10, 1902), in CF "Keystone Tag Co."
33. DLN (Sept. 1, 1906), in CF "Keystone Tag Co."
34. DLN (Dec. 12, 1907 and Feb. 24, 1908), both in CF "Keystone Tag Co."
35. DLN (July 17, 1902), in CF "Keystone Tag Co."
36. DLN (Jan. 9, 1909), in CF "Keystone Tag Co."
37. W. Andrew Boyd, compiler and publisher, Boyd's West Chester Directory for 1910-1911 (West Chester, PA & Washington DC: W. Andrew Boyd, Aug. 1910), 169.
38. Thomson, 610.
39. Thomson, 611; and DLN (March 30, 1882), in CF "WC Bus. Houses, Sharples Separator Works." See also West Chester ... Centennial Souvenir, 126.
40. West Chester Board of Trade, 30.
41. Thomson, 611. In 1913, Warren Baldwin, one of the plant's employees, eventually started his own company, Baldwin Electric, which is still in existence today. See DLN (Feb. 22, 1901), in CF "Transportation, Automobiles" and "Advertisement for Baldwin's Electric Shop" in Ray Doyle, editor, 175th Anniversary of West Chester (Borough of West Chester, 21 July 1974), 95.
42. The new smokestacks were about 200 feet tall, making them the tallest structures in the Borough for many years. "Ready to Erect Big Stack" in DLN (March 12, 1918), in CF, "WC Bus. Houses, Philadelphia Suburban Gas & Electric Co."
43. "Improved Long Siding" in DLN (May 30, 1918), in CF, "WC Bus. Houses, Philadelphia Suburban Gas & Electric Co."
44. John Dubois, article in *Evening Bulletin* (July 31, 1968) and *Evening Bulletin* (Dec. 10, 1970), both in CF, "WC Bus. Houses, Philadelphia Electric Co."
45. A group of investors from Media and West Chester obtained a state charter for the "West Chester Street Railway Co." in 1887, but before they could begin construction, Frank Sprague's Union Passenger Railway began operating in Richmond, Virginia. See DLN (July 21, 1887), in CF "Transportation, West Chester Street Railway" and the Institute of Electrical and Electronic Engineers web page located at www.ieee.org/organizations/history_center/milestones_photos/richmond.html.
46. DLN (Aug. 8, 1890). Details on Matlack, Jefferis, Baldwin, and

- Cornwell appear in West Chester Board of Trade, West Chester (West Chester, PA: F. S. Hickman, 1888). On Hemphill, see the West Chester ... Centennial Souvenir. On Cornwell's relationship with Edison Electric, see Boyd's ... Directory, 1898-1899, 194.
47. DLN (Aug. 2, 1890), in CF "Transportation, West Chester Street Railway."
48. DLN (Aug. 7, 1890), in CF "Transportation, West Chester Street Railway."
49. DLN (Jan. 13, 1891), in CF "Transportation, West Chester Street Railway."
50. DLN (June 10, 1891), cited in Colbert.
51. DLN (Nov. 11, 1891), in CF "Transportation, West Chester Street Railway."
52. Stanley F. Bowman Jr. & Harold E. Cox, Trolleys of Chester County Pennsylvania (Forty Fort, PA: Harold E. Cox, 1975), 12.
53. *Ibid.*, 7, cited in Colbert.
54. *Ibid.*, 24, cited in Colbert.
55. *Ibid.*, 13, cited in Colbert.
56. DLN (Jan. 2, 1899), cited in Colbert.
57. Timetable for the Philadelphia & West Chester Traction Company (Feb. 24, 1899) in CF "Transportation, trolley, Philadelphia & West Chester Traction Co."
58. DLN (April 23, 1901), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
59. Diane LeBold, personal communication (June 1999); and DLN (May 6, 1901), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
60. DLN (Sept. 11, 1901), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
61. "Boys were sassy on switchboard" in DLN (Nov. 14, 1972), 100.
62. Arthur M. Schlesinger Sr., "The City in the Gilded Age" in John H. Cary, Julius Weinberg, & Thomas L. Hartshorne, The Social Fabric: American Life from the Civil War to the Present, 5th edition (Boston: Little, Brown & Co., 1987), 62.
63. DLN (March 14, 1902), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
64. Chester Valley Union (March 20, 1902), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
65. DLN (Dec. 10, 1902), in CF "WC Bus. Houses: Sun Electric Manufacturing Co."
66. Map #2, Sanborn Map of West Chester (New York: Sanborn Map Co., Sept. 1909); West Chester Sesquicentennial, 1799-1949 (West Chester, 1949), 84.
67. "We want to make gasoline engines" in DLN (March 19, 1910), in CF "WC Bus. Houses, Rockwell Manufacturing Co."
68. Sharples provided between six and seven thousand dollars of the firm's \$82,700 initial capital. DLN (May 16, 1913), in CF "WC Bus.

Reference Notes

Houses, Rockwell Manufacturing Co."

69. DLN (May 27, 1902), in CF "WC Bus. Houses, Sharples Separator Works." This article mentions that Klein/Kline had a collaborator, William P. Schwartz, who does appear to have been a Sharples employee.

70. W. Andrew Boyd, compiler & pub., Boyd's West Chester Directory for 1910-1911 (West Chester PA & Washington DC: W. Andrew Boyd, Aug. 1910), 166.

71. DLN (May 16, 1913), in CF "WC Bus. Houses, Rockwell Manufacturing Co." Sharples acquired control of the Silvia Stone Company through a mortgage foreclosure in 1909. See *Coatesville Record* (Dec. 2, 1909), in CF "WC Bus. Houses, Sharples Separator Works."

72. DLN (April 8, 1910), in CF "WC Bus. Houses, Rockwell Manufacturing Co."

73. DLN (Dec. 18, 1912 and May 16, 1913), both in CF "WC Bus. Houses, Rockwell Manufacturing Co."

74. DLN (June 9, 1913), in CF "WC Bus. Houses, Rockwell Manufacturing Co." Eyre served in the state senate from 1916 to 1922. On Sharples' friendship with Eyre, see "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M."

75. "Activity at Rockwell Plant" in DLN (Oct. 31, 1913), in CF, "WC Bus. Houses, West Chester Engine Co."

76. DLN (Dec. 14, 1917), in CF, "WC Bus. Houses, West Chester Engine Co."

77. Preston Foster, "History of Schramm Engines" in *Engines & Engineers* (Feb.-March 1980), 19-20.

78. *Ibid.*, 20 & 22.

79. "Balloons lifted Schramm stock" in DLN (Nov. 14, 1972), 59.

80. DLN (Dec. 14, 1917), in CF, "WC Bus. Houses, West Chester Engine Co. On the amount of the stock issue, see Foster (April-May 1980), 3.

81. DLN (July 6, 1921 and March 18, 1922), both in CF: "WC Bus. Houses, Schramm, Inc."; Foster, (April-May 1980), 6.

82. Preston Foster, (June-July 1980), 3.

83. *Bores and Strokes*, vol. XIII, no. 4 (March 1, 1936), 1.

84. Except where otherwise indicated, information in this paragraph was found in "New Schramm Factory Completion Marks Anniversary" in *Bores and Strokes*, vol. XIV, no. 19 (Nov. 15, 1937), 8; and Foster (June-July 1980), 4-5.

85. "State Business . . ." in *Bores and Strokes*, vol. XIV, no. 2 (Feb. 1, 1937), 4.

86. Foster (June-July 1980), 5.

87. Thomas A. Pitt, Jr., "West Chester's First Fifty Years, 1799-1849" in West Chester, the First 200 Years, 11.

88. "New Factory Addition Completed" in *Bores and Strokes*, vol. XIV,

- no. 16 (Sept. 1, 1937), 1.
89. "Sales Flashes" in *Bores and Strokes*, vol. XIV, no. 8 (May 1, 1937), 4.
90. DLN (Dec. 28, 1961), in CF, "Lasko, H."
91. Lasko Products, Inc., "Employee Handbook" (West Chester: Human Resources, March 30, 2000), 2.
92. "New Industry for West Chester" in DLN (Oct. 7, 1919), in CF "WC Bus. Houses, Lasko Metal Products Co."
93. DLN (July 9, 1925), in CF "WC Bus. Houses, Lasko Metal Products Co."
94. Lasko, "Employee Handbook," 2.
95. DLN (Dec. 28, 1961), in CF, "Lasko, H."
96. DLN (Dec. 11, 1945), in CF "WC Bus. Houses, Lasko Metal Products Co."
97. DLN (March 29, 1928), cited by Sam Flammini, "The Evolution of the Mushroom Industry in Kennett Square" (WCU English 121 paper, June 17, 1999).
98. Jacobs' mushroom houses and canneries were located near the eastern and southern edges of the Borough. A 1906 article mentions a "nitro house" on Maple Avenue, while other articles and informants mentioned facilities on E. Union Street and S. Matlack Street. DLN (May 17, 1906 and Oct. 27, 1923), both in CF "WC Bus. Houses, Edward H. Jacobs"; and Dorothy Parker, interview by the author (Sept. 16, 1996).
99. "Chef's browning secrets founds firm" in DLN (Nov. 14, 1972), 67.
100. J. R. Marryat, "Penicillin Produced Night and Day at West Chester Mushroom Plant" in *Philadelphia Evening Bulletin* (Sept. 3, 1943), in CF "WC Bus. Houses: Reichel Laboratories." Note that mushrooms, being fungi, are grown from spawn, not seeds.
101. G. Raymond Rettew, *A Quiet Man From West Chester* (West Chester PA, Chester County Historical Society, 1974), 20.
102. *Ibid.*, 27.
103. After WWII, Alexander Fleming and his wife visited West Chester and had lunch at the Mansion House Hotel before visiting the Great Valley plant. DLN (June 19, 1945), in CF "WC Bus. Houses: Reichel Laboratories."
104. The three men shared the 1945 Nobel Prize in Physiology and Medicine for their work on penicillin. "Fleming, Sir Alexander" in William Bridgwater & Seymour Kurtz, editors, *The Columbia Encyclopedia*, 3rd. edition (New York: Columbia University Press, 1967), 728.
105. *Chamber of Commerce of Greater Philadelphia News* (July 8, 1953), in CF "WC Bus. Houses: Reichel Laboratories" and Rettew, 30.
106. Different company names on documents from Sept. 1943 and May 1944 show that Wyeth bought out Reichel's West Chester operation during that period. DLN (Sept. 28, 1943) and "Advertisement" in DLN (May 2, 1944), both in CF "WC Bus. Houses: Reichel Laboratories."

Reference Notes

107. "National Foam started with fire hoses in 1819" in DLN (Nov. 14, 1972), 85.
108. DLN (Aug. 28, 1945), in CF "WC Bus. Houses, National Foam Co."
109. *Downingtown Archive* (Jan. 18, 1967) and DLN (May 3, 1942), in CF "WC Bus. Houses, National Foam Co."
110. DLN (April 6, 1950), in CF "WC Bus. Houses, National Foam Co."

NOTES FOR CHAPTER 7

1. James A. Jones, "The Impact of the Dakar-Niger Railway on the Middle Niger Valley" (Newark, Delaware: University of Delaware, Ph.D. dissertation, 1995), 268.
2. T. Walter "Sarge" Clark, interview by the author (West Chester, Nov. 11, 1996).
3. Rebecca Gibson Carey, interview by the author (West Chester, April 29, 1997).
4. Dorothea Parker, interview by Wendy Smoker (March 28, 1997).
5. The last ten percent belonged to Harvey Gourley of Montgomery County. "Application of Hoopes Brothers and Thomas Co." (26 March 1907), in Chester County Archives, Corporation Book 6, 143.
6. DLN (Aug. 25, 1929), in CF "WC Bus. Houses, HB&T."
7. The reservoir is still in use on Airport Road east of town. *Coatesville Record* (Aug. 20, 1934), in CF "WC Bus. Houses, HB&T."
8. "Corporation Notices" in *Chester County Law Reporter* (July 1, 1948), in CF "WC Bus. Houses, HB&T."
9. Mediaguy, "History of Estate Built in 1907 for Philip M. Sharples" (Jerrehian Partnership, 2002) located at <http://www.greystonehall.com/history.htm>.
10. "Soon Be Ready for Occupancy" in DLN (Feb. 13, 1908), in CF "WC Bus. Houses, Farmers & Mechanics Building."
11. W. Andrew Boyd, compiler and publisher, [Boyd's West Chester Directory for 1910-1911](#) (West Chester PA & Washington DC: W. Andrew Boyd, Aug. 1910), 166.
12. Chester County Deed Book M15 (Dec. 1, 1918), 575.
13. "Interview with Philip M. Sharples" in DLN (April 11, 1931), in CF "Sharples, Philip M."
14. DLN (Nov. 12, 1915), in CF "Sharples, Philip M."
15. DLN (April 4, 1917), in CF "WC Bus. Houses, Sharples Separator Works."
16. DLN (April 13, 1918), in CF "WC Bus. Houses, Sharples Separator Works."
17. DLN (May 6, 1918), in CF "WC Bus. Houses, Sharples Separator Works."
18. Philip M. Sharples, letter to the editor, DLN (April 29, 1919), in CF "WC Bus. Houses, Sharples Separator Works."
19. *West Chester Star* (Jan. 17, 1914), in CF "WC Bus. Houses,

Sharples Separator Works."

20. DLN (June 18, 1917), in CF "Sharples, P."

21. DLN (April 28, 1920), in CF "WC Bus. Houses, Sharples Separator Works."

22. "Going to Kennett Square" in DLN (May 1, 1920), in CF "WC Bus. Houses, Sharples Separator Works."

23. DLN (March 10, 1924), in CF "WC Bus. Houses, Sharples Separator Works." Wood, a 1920 State Normal School graduate, married his wife Roselynd Atherholt at Greystone Hall and continued to live there for a number of years. See "Wood-Atherholt" in DLN (Oct. 25, 1924), in CF "Wood, F."

24. DLN (July 3, 1924), in CF "WC Bus. Houses, Sharples Separator Works."

25. Sharples retired at age 67. DLN (April 16, 1925), in CF "WC Bus. Houses, Sharples Separator Works."

26. DLN (Nov. 13, 1929), in CF "WC Bus. Houses, Sharples Separator Works."

27. DLN (March 19, 1927), in CF "WC Bus. Houses, Sharples Separator Works."

28. DLN (March 24, 1927), in CF "WC Bus. Houses, Sharples Separator Works."

29. On Nov. 13, the Dow Jones industrial average reached its lowest level for 1929, roughly half of its level in early Sept.. William E. Leuchtenberg, *The Perils of Prosperity, 1914-1932* (Chicago: The University of Chicago Press, 1958), 244.

30. DLN (Nov. 13, 1929), in CF "WC Bus. Houses, Sharples Separator Works."

31. DLN (Jan. 6, 1927), in CF "Wood, F."

32. DLN (Dec. 28, 1929), in CF "WC Bus. Houses, Sharples Separator Works."

33. Leuchtenberg, *The Perils of Prosperity*, 245.

34. DLN (March 29, 1933), in CF "WC Bus. Houses, Sharples Separator Works."

35. *Oxford Press* (Aug. 9, 1934), in CF "WC Bus. Houses, Sharples Separator Works."

36. *Coatesville Record* (July 31, 1934), in CF "WC Bus. Houses, Sharples Separator Works."

37. *Coatesville Record* (March 4, 1937), in CF "WC Bus. Houses, Farmers & Mechanics Building."

38. Chester County Deed Book B19 (Oct. 7, 1933), 82.

39. "UDEEC 'Mechanical Cow,' Vital Help to Our Armed Forces" in DLN (July 22, 1943), in CF "WC Bus. Houses, United Dairy Equipment Co."

This article gives 1933 as the year that Wood and Fitzpatrick founded the United Dairy Equipment Company, but other local newspaper articles give dates ranging from 1929 to 1934. It lasted until 1962, when Wood merged it with his real estate firm. See DLN (July 9, 1962), in CF

Reference Notes

- "WC Bus. Houses, United Dairy Equipment Co."
40. Chester County Deed Book F41 (March 2, 1973), 93, in Chester County Recorder of Deeds Office.
41. DLN (July 17, 1924), in CF "WC Bus. Houses, HB&D, 1920-1929."
42. The board of directors discussed their negotiations with the Autocar Company at various meetings in 1921. The minutes are located in HMMC.
43. The newspapers reported that the loading dock was intended to relieve congestion at their railroad siding. DLN (April 8, 1926), in CF "WC Bus. Houses, HB&D, 1920-1929."
44. Obituary "Thomas Hoopes" in DLN (Oct. 26, 1925), in CF "Hoopes, T."
45. "Working on Four-Day Time" in DLN (June 17, 1926), in CF "WC Bus. Houses, HB&D, 1920-1929."
46. DLN (Dec. 18, 1926), in CF "WC Bus. Houses, HB&D, 1920-1929."
47. DLN (Jan. 22, 1929), in CF "WC Bus. Houses, HB&D, 1920-1929."
48. Hoopes, Bro. & Darlington., "Hoopes-Parker hub integral malleable wheels: for use on trucks and buses taking single and dual pneumatic tires" (West Chester, PA, 1927).
49. Minutes of the Board of Directors meeting (Feb. 9, 1931), in HMMC.
50. Minutes of the Board of Directors meetings (March-May 1932), in HMMC.
51. Minutes of the Board of Directors meeting (Nov. 4, 1932), in HMMC.
52. Minutes of the Board of Directors meeting (Jan. 8, 1934), in HMMC.
53. "Wheels are still round" in DLN (Nov. 14, 1972), 79.
54. Their names were Erwin Frank and Michael Bauer. DLN (Aug. 16, 1940), in CF "WC Bus. Houses, HB&D, 1940-1949."
55. At the end of 1929, the firm was valued at \$711,050.98, but by the end of 1940, it had dropped to \$282,812.53. Minutes of the Board of Directors meetings (Dec. 31, 1929 and Dec. 31, 1940), in HMMC.
56. Tony Pillagalli, telephone interview by the author (March 22, 2003); *Coatesville Record* (July 27, 1943), in CF "WC Bus. Houses, HB&D, 1940-1949" and "Wheels are still round" in DLN (Nov. 14, 1972), 79.
57. DLN (Sept. 27, 1948), in CF "WC Bus. Houses, HB&D, 1940-1949."
58. DLN (April 27, 1950), in CF "WC Bus. Houses, HB&D, 1950-1959." and "Wagon Wheels" in *Philadelphia Inquirer Magazine* (Sept. 28, 1952), in CF "WC Bus. Houses, HB&D, 1950-1959."
59. DLN (May 3, 1958), in CF "WC Bus. Houses, HB&D, 1950-1959."
60. *Evening Bulletin* (July 23, 1964), in CF "WC Bus. Houses, HB&D, 1960-1969."
61. "Louis Napoleon Bought Wheels at Hoopes Firm" in *Evening Bulletin* (Sept. 19, 1968), in CF "WC Bus. Houses, HB&D, 1960-1969."
62. "Hoopes Rolls On" in *Philadelphia Inquirer* (Dec. 28, 1969), in CF "WC Bus. Houses, HB&D, 1960-1969."
63. DLN (Feb. 19, 1972), in CF "WC Bus. Houses, HB&D." "Wheels are still round" in DLN (Nov. 14, 1972), 79.

64. Chester County Deed Book F41 (March 2, 1973), 93.
65. "Borough Tradition Moving out" in DLN (March 16, 1973), in CF "WC Bus. Houses, HB&D."
66. "Tag Industry Grows" in DLN (March 23, 1922), in CF: "WC Bus. Houses, Lucas Tag Co." and "West Chester Makes Many Lines" in DLN (Nov. 18, 1922), in CF "WC Bus. Houses, Maple Avenue Nursery."
67. Rebecca Gibson Carey, interview by the author (West Chester, April 29, 1997).
68. DLN (March 27, 1945), from Peirce notes.
69. Keystone was privately held, so it sold no stock.
70. *Coatesville Record* (May 22, 1945), from Peirce notes.
71. DLN (Feb. 6, 1948), from Peirce notes.
72. Frank Senior, interview by the author (Jan. 8, 2003).
73. DLN (July 7, 1951), in CF "Keystone Tag Co."
74. "Keystone Tag Company" in Sesqui-Centennial 1799-1949 West Chester, Pennsylvania (West Chester, PA, 1949), 77.
75. S. Leroy Barber, the founder's son, married Margaret McLeod Beatty in 1905. S. Leroy Barber's daughter Sara Fulton Barber married Samuel Fulton Beatty Jr. in 1940. In Feb. 1941, the Barber family sold the company to investors that included Edward F. Beatty. Wedding announcement DLN (Oct. 17, 1905), "Beatty-Barber" in DLN (May 4, 1940), in CF "S. Barber"; and "Keystone Tag Company" in Sesqui-Centennial 1799-1949 West Chester, Pennsylvania (West Chester, PA, 1949), 77.
76. DLN (July 28, 1955), in CF "WC Bus. Houses--Denney Tag."
77. DLN (Jan. 20, 1956), in CF "Keystone Tag Co." On the number of Denney workers, see DLN (Aug. 10, 1955), in CF "Keystone Tag Co."
78. Maurice Linnett, interview by the author (April 18, 1996).
79. Original manuscript, "Purchase of the Central Tag Company" (Nov. 4, 1958), from Peirce notes.
80. DLN (Jan. 5, 1961), in CF "WC Bus. Houses, Denney-Reyburn Co."
81. *Impressions* (Denney-Reyburn Co., July 1966), from Peirce notes.
82. *Impressions* (Denney-Reyburn Co., Nov. 1968), from Peirce notes.
83. *Impressions*, Denney-Reyburn Co., Nov. 1968), from Peirce notes.
84. "Denney-Reyburn Dedicates New Plant" in *Impressions* (Denney-Reyburn Co., Nov. 1968), from Peirce notes.
85. DLN (March 2, 1967) and DLN (Feb. 15, 1968), in CF "WC Bus. Houses, Denney-Reyburn Co."
86. "Denney-Reyburn Installs New Computer with Built-In Future" in *Impressions* (Denney-Reyburn Co., Aug. 1979), from Peirce notes.
87. *Impressions* (Denney-Reyburn Co., April 1983), from Peirce notes.
88. *Impressions* (Denney-Reyburn Co., June 1986), from Peirce notes.
89. Tom Jensen & Brian McCullough, "Trucker Shot on Rt. 202 Bypass" in DLN (Dec. 5, 1985), 1; and "An Open Letter to the Public . . . Denney Reyburn: A Strike With A Purpose" in DLN (Dec. 11, 1985), 21.
90. "Denney Tag among first borough industries" in DLN (May 4, 1991),

Reference Notes

A8.

91. Steve Reinbrecht, "Denney-Reyburn Co. Closing" in DLN (May 4, 1991), A1.

NOTES FOR CHAPTER 8

1. "West Chester Makes Many Lines" in DLN (Nov. 18, 1922), in CF "WC Bus. Houses, Maple Avenue Nursery."
2. West Chester Directory, 1966 (Chillicothe, OH & West Chester, PA: Mullin-Kille of Pennsylvania & Daily Local News, 1966).
3. "Zoning Map of the Borough of West Chester" (Adopted Nov. 28, 2001).
4. DLN (Sept. 16, 1967), in CF "Transportation, PA. RR 1966-1968."

BIBLIOGRAPHY

Books, Articles and Unpublished Papers

- American Social History Project, Who Built America?, 2 vols.
New York: Pantheon Books, 1992.
- Anderson, Oscar E. Jr. The Health of a Nation: Harvey W. Wiley and the Fight for Pure Food. Chicago: University of Chicago Press, 1958.
- Anonymous, "City of Philadelphia--Leading Merchants and Manufacturers" in *Pennsylvania Historical Review*. Historical Publishing Co., 1886.
- Bowman, Stanley F. Jr. & Harold E. Cox, Trolleys of Chester County Pennsylvania. Forty Fort, PA: Harold E. Cox, 1975.
- Boyd, W. Andrew. Directory of Chester County, 1893-1894. Washington DC: W. Andrew Boyd, 1893.
- _____. Boyd's Chester County Directory, 1898-1899. Philadelphia: C. E. Howe & Co., 1898.
- _____. Boyd's West Chester Directory for 1910-1911. West Chester PA & Washington DC: W. Andrew Boyd, Aug. 1910.
- Breou's Original Series of Farm Maps, Chester County. Philadelphia: W. H. Kirk & Co., 1883.
- Bridges, Charlotte. "A preliminary research paper of the West Chester Board of Health" WCU HIS480: unpublished research paper, April 28, 1999, at <http://courses.wcupa.edu/jones/his480/reports/boh.htm>.
- Bussel, Robert. "The Most Indispensable Man in His Community: African-American Entrepreneurs in West Chester, Pennsylvania, 1865-1925" in *Pennsylvania History*, Vol. 65, No. 3, Summer 1998.
- Colbert, Pamela. "When the Trolley Came to Town: The Construction of West Chester, Pennsylvania's First Street Railway, 1890-1891." WCU HIS480: unpublished research paper, April 30, 1999.
- Darlington, William. Directory of the Borough of West Chester, for 1857. West Chester, PA: Wood & James, Pub., 1857.
- Doyle, Ray, editor. 175th Anniversary of West Chester. Borough of West Chester, 21 July 1974.
- Faith, Nicholas. The World the Railways Made. New York: Carol & Graf Publishers, Inc., 1990.

Bibliography

- Flammini, Samuel. "The Evolution of the Mushroom Industry in Kennett Square." WCU English 121: unpublished research paper, June 17, 1999.
- Foster, Preston. "History of Schramm Engines" in *Engines & Engineers*, February-March, April-May, and June-July 1980.
- Fuller, Gerald R., June Markus Hoopes, & Lillian Fredsall Webster, compilers and editors. The Hoopes Family Record, Vol. II, The Seventh and Eighth Generations. Houston, Texas: The Hoopes Family Organization, Inc., 1979.
- Futhey, J. Smith, & Gilbert Cope. History of Chester County, PA, with Genealogical and Bibliographical Sketches. Philadelphia: Louis H. Everts, 1881.
- Gitterman, Keith. "West Chester Through Time." West Chester University: unpublished paper, Dec. 30, 1982,
- Greenwood, A. L. "The Railroads of Chester County." in *Tredyffrin-Easttown History Club Quarterly*, vol. 7, no. 4, Feb. 1953.
- Gruver, Rebecca Brooks. An American History, 3rd. edition. Reading, MA: Addison-Wesley Publishing Co., 1981.
- Harper, Douglas. West Chester to 1865: That Elegant & Notorious Place. West Chester: Chester County Historical Society, 1999.
- Hart, Val. The Story of American Roads. New York: William Sloane Associates, Inc., 1950.
- Heathcote, Charles William. History of Chester County Pennsylvania. West Chester, PA: Horace F. Temple, 1926.
- Hoopes Brothers & Thomas, A Handbook of Greenhouses and Bedding Plants. Philadelphia: Press of McCalls & Stavely: 1882.
- Hoopes Brothers & Thomas, The West Chester Nurseries. West Chester, PA: 1913.
- Jones, James A. "The Impact of the Dakar-Niger Railway on the Middle Niger Valley." Newark, Delaware: University of Delaware, Ph.D. dissertation, 1995.
- Jones, Jim. "A Brief History of West Chester Transportation" in West Chester, the First 200 Years: 1799-1999. West Chester Bicentennial History Committee, 1999.
- . "The Paper Tag Industry in West Chester" in West Chester,

- the First 200 Years: 1799-1999. West Chester Bicentennial History Committee, 1999.
- . "Immigration to West Chester" in West Chester, the First 200 Years: 1799-1999. West Chester Bicentennial History Committee, 1999.
- Kirkland, Edward Chase. Industry Comes of Age: Business, Labor and Public Policy, 1860-1897. Chicago: Quadrangle Books, Inc. 1967.
- Leuchtenberg, William E. The Perils of Prosperity, 1914-1932. Chicago: The University of Chicago Press, 1958.
- Lynch, James J. D. Jr. "The West Chester Branch" in *The High Line*, vol. 8, no. 2 & 3, Winter-Spring 1988.
- McVeigh, Kelly. "Small Tags. Big Business, A Narrative History of the Keystone Tag Company of West Chester, PA (1901-1956)." WCU HIS480: unpublished research paper, April 29, 1997.
- Pitt, Thomas A. Jr. "West Chester's First Fifty Years, 1799-1849" in West Chester, the First 200 Years: 1799-1999. West Chester Bicentennial History Committee, 1999.
- Rettew, G. Raymond. A Quiet Man From West Chester. West Chester PA, Chester County Historical Society, 1974.
- Schlesinger, Arthur M. Sr. "The City in the Gilded Age" in John H. Cary, Julius Weinberg, & Thomas L. Hartshorne, The Social Fabric: American Life from the Civil War to the Present, 5th edition. Boston: Little, Brown & Co., 1987.
- Schuyler, William B. The Pioneer Catholic Church of Chester County, Saint Agnes, West Chester Pennsylvania 1793-1943. Philadelphia: The Peter Reilly Co., 1944.
- Sharples, Alfred. "A History of Railroading in Chester County." In *Daily Local News*, Jan. 20, 1898.
- Thomson, W. W., editor. Chester County Pennsylvania and its People. Chicago and New York: The Union History Co., 1898.
- West Chester Board of Trade, West Chester. West Chester, PA: F. S. Hickman, 1888.
- West Chester Borough, "A Growth Management Plan for the Borough of West Chester (1985)" (adopted Oct. 8, 1986).
- West Chester Borough, "Zoning Map of the Borough of West Chester." Adopted Nov. 28, 2001.
- West Chester Directory, 1966. Chillicothe OH & West

Bibliography

- Chester PA: Mullin-Kille of PA & *Daily Local News*, 1966.
- West Chester, Pennsylvania Centennial Souvenir 1799-1899, reprint edition. West Chester, PA: Spectrum Publishers Direct, 2001.
- West Chester Sesquicentennial, 1799-1949. West Chester, 1949.
- Witmer, A. R. Atlas of Chester Co. Pennsylvania. Safe Harbor, Lancaster County, PA: A. R. Witmer, 1873.

LIST OF INTERVIEWS

(All interviews were conducted in West Chester by the author unless otherwise noted).

- Basilio, Mary Masimini. Kennett Square, September 16, 1997.
- Carey, Charles R. August 22, 1996 & September 9, 1996.
- Carey, Rebecca Gibson. April 29 & May 29, 1997.
- Clark, T. Walter. November 11, 1996.
- Dougherty, John. June 5, 1997.
- Harvey, Jack. June 7, 1997.
- Linnett, Maurice. April 18, 1996.
- McCallin, Christine. Interview by Jim Jones & Kelly McVeigh. Downingtown, May 8, 1997.
- Morley, Thomas J. February 8, 1997.
- Parker, Dorothy. September 16, 1996 & October 29, 1996; interview by Wendy Smoker. March 28, 1997.
- Percolini, Helen. April 3 & 5, 1996.
- Pillagalli, Tony. March 22, 2003.
- Senior, Frank. January 8, 2003.
- Townsend, Harry Jr. July 7, 1997.
- Wright, Marian. Interview by Jim Jones & Kelly McVeigh. May 8, 1997.

West Chester . . .

was once a great manufacturing town, thanks to companies like Hoopes Brothers & Darlington, Sharples Cream Separators, Denney Tag, Schramm and Lasko. This book is a modest attempt to recount how those firms, plus many more, transformed West Chester, Pennsylvania after the Civil War.

Jim Jones . . .

teaches history at West Chester University and leads walking tours of the Borough's industrial zone. He created the *Riggtown History Homepage*, a web site that presents interviews, data and research reports on the history of the Borough's southeast quadrant.

The *Riggtown History Homepage* is located at:
<http://courses.wcupa.edu/jones/his480/riggtown.htm>

US\$15