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*Business & Industry of
Lancaster County*

Edited by Dr. Thomas R. Winpenny and John W. W. Loose

*On the cover: Women working in a cigar factory on
North Prince Street in 1926. See pictorial on page 397.*

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Preface

What Lancaster County has enjoyed an outstanding economic climate is due in large part to its diversity of manufacturing and agriculture, the existence of various modes of transportation, the presence of numerous mineral deposits, and the legendary work ethic of its residents. The county's skilled artisans and craftsmen established a tradition of excellence that has characterized the production of its factories and shops to this day.

Throughout the late eighteenth and much of the nineteenth centuries grain milling was the major dollar-value producing industry. Flour and meal from the county's approximately 300 water powered grist mills provided for local needs as well as for export. Capital formation was not difficult, although ownership of the mills changed repeatedly.

In the 1830s the Industrial Revolution brought to Lancaster County the steam engine which turned the wheels of industry and had a great economic impact on the development of a manufacturing economy. Foundries and machine shops sprang up along the railroad tracks to produce all manner of machines including tools, locomotives, agricultural machinery, structural components for buildings, boilers and steam engines, hardware, and locks. Breweries, distilleries, umbrella factories, cigar factories, cork cutters, brickyards, cotton and silk mills, iron rolling mills, pig iron blast furnaces, carriage builders, and watch making provided thousands of jobs for Lancaster Countians.

The fascinating stories of some of these industries will illustrate the diversity of the manufacturing economy of the County, those who invested in the enterprises, and the workers whose skills built the reputation Lancaster County enjoys.

John Ward Willson Loose
Editor

Industries of Lancaster County Prior to 1800

by Horace R. Barnes

from Vol. 48 (1944)

Research and the attempt to gather data on the interesting and the important subject assigned to the writer of this paper prove that the thrifty people of this county have been very busy making history for over two hundred years, and that few have taken time to record it.

In the gathering of the more or less fragmentary evidence of our early industrial history I have naturally met conflicting statements as to dates. As far as possible I have avoided controversy concerning dates and persons.

Another decision which had to be made in the organization of my material concerned geographical limits. In the year 1682 Pennsylvania consisted of three counties, namely Philadelphia, Bucks, and Chester. The latter seemed to extend westward for an indefinite distance. May 2, 1729, Governor Gordon and his Council declared that

the upper parts of Chester County as determined by the Boundary Commissioners who had been appointed in February, 1729, "be erected and are accordingly erected into a county by the name of Lancaster County." On May 10, 1729, an Act of the Assembly of the Province of Pennsylvania providing "that all and singular the land within the Province of Pennsylvania lying to the Northward of Octorara Creek, and to the Westward of a line of marked trees running from the North Branch of the said Octorara Creek Northeasterly to the River Schuylkill, be erected into a county, named, and from henceforth to be called Lancaster County; and the said Octorara Creek, the line of marked trees and the river Schuylkill aforesaid shall be the Boundary Line or Division between the said County and the counties of Chester and Philadelphia," became effective.

Our history centers chiefly around an estimated population of some thirty-five hundred (3500) at the beginning, and, at the close of the period covered, less than seventy-five years later, with a population of forty-three thousand, four hundred and three (43,403), the Federal census figures for 1800.

Every effort has been made to consider only those industries which operated in Lancaster County as we know it

today. Reference will, of course, be made here and there to industries which were in Lancaster County at the time, for the following divisions from the original Lancaster County of 1729 should be kept in mind. In 1749 York County took a portion, and a year later Cumberland County took a portion. These were followed by Berks in 1752, Northumberland in 1772, Dauphin in 1785, and Lebanon in 1813, all of which took sections of the original Lancaster County.

The climate and the soil of Lancaster County, as well as the immediate needs of the settlers, naturally gave agriculture a foremost position as one of the most important industries of the county. To these assets have been added the aptitude, energy, and skill of the people who have made the county known far and wide as a fertile and rich agricultural centre. The subject of the agricultural industry here is a major study in itself, and it is my purpose in this paper to treat of those industries which are usually considered in speaking of an industrial society in contrast to an agrarian society or stage of economic life.

To be sure, there is a close connection between the two, and correlation, such as, for example, the fact that the fertile land provided the grains for the distil-

leries and the mills, will be pointed out.

At the beginning, and for sometime thereafter, the industrial development of Lancaster County was restricted due to the limited supply of raw materials which were chiefly consumed in local markets. This influenced the development of both the agriculture and the milling industry. The fertile soil took ample care of man's need for food, and local grist mills for the grinding of feed and flour soon were in operation. Eshleman claims that "before 1714, Christian Schlegel had a mill on Conestoga or a branch, because in that year he complained that a certain person hath seated himself near the mill he built lately at Conestoga." Other dates, names and places are claimed for "the very first mill in Lancaster County." For example it has been claimed that the first mill was built in 1714 by Stephen Atkinson on the Conestoga.¹ Frankly, I do not know when the first mill was operated but there is evidence to prove that along the creeks and rivers of Upper Chester County in the two decades prior to the formation of Lancaster County there were grist mills. This was to be expected for some enterprising man would see the possibility of attracting local settlers, who otherwise would have to travel over poor roads to mills located on the Brandywine Creek

or at more distant points.

Another illustration of the local characteristics of both production and distribution in the first few decades of the industrial history of Lancaster County is found in the production of flax and the weaving of linens. In the eighteenth century Lancaster County farmers raised considerable flax. The wives using spinning wheels could spin the flax into thread. The mill owner in turn had a supply of thread for his looms and manufactured table clothes, grain bags, men's and women's wearing apparel, sheets, etc. From the flax seed pure linseed oil was made, and from the oil was made oil cake for cattle feed.

As I point out in this paper the early industries of Lancaster County inevitably felt the influence of new sources of raw materials, new inventions, and other changes in a dynamic economic society. Mills, furnaces, and other industries were to be more than local but they did continue to be important for a rather relatively long period of time. As far as those industries which were dependent upon agriculture as the source of raw material are concerned it seems to me that this relatively long period of importance of which I speak may be attributed to several factors or characteristics. Farms in this county were large and not small plots of land. Between the years 1710 and 1719 inclusive, practically all the land in the vicinity of the Conestoga

and the Pequea had been surveyed and claimed. Again it is noted that in the latter years of the eighteenth century the land in Lancaster County had a high assessed value which is evidence of both high productivity as a source of raw material and of income to support, as a market, the growing industries of the county. Furthermore, from early days ownership farming rather than tenant farming has been a characteristic of Lancaster County agriculture.

The Eighteenth Century Mills in Lancaster County

I have mentioned Atkinson's Mill built in 1714. An interesting side-light upon the rights of others and governmental action is noted concerning this mill, which was located on the south side of the Conestoga River between Reigart's and Graeff's Landings. Desiring to secure water power from the river, Atkinson built a dam. This prevented the shad and other fish getting above the dam. Citizens became incensed and one night a group of them destroyed the dam. Following the orders of the Legislature, Atkinson, in rebuilding the dam, constructed a twenty foot passage for boats and fish.

Grist mills were the earliest manufacturing industry in Lancaster County for the purpose of manufacturing flour and meal. Other mills also soon became important in the industrial life of the county. From records in the

Lancaster County courthouse, it has been established that there were four fulling mills in this county as early as 1756, and that there were nine such mills in 1776.

I will not list or mention each mill which it is known operated prior to 1800, but I will consider several which were located in various sections of the county to show that the industry was not confined to any one section. Some of those which I mention developed into other types of mills as new industries began operating. This development shows an economic trend. The grist mills along our streams two hundred years ago were a part of a localized economic life when men lived, produced and traded within a limited area. Poor roads and inadequate transportation facilities combined to limit men's operations. The settlers naturally first cleared the land and turned to raising food supplies which the fertile soil and suitable climate encouraged. Grist mills were but barometers of the type of the surrounding industrial life. In addition to the proximity of raw material industrial development was aided by the streams of the county which supplied water power not only for grist mills, but for the fulling, the planing, the saw, and other mills which characterized this county.

The need for mills, and a primary reason why milling was one of the first industries in this county is seen in the

erection of a mill built about 1720 on the Pequea Creek approximately one mile northwest from the present site of Strasburg. Some claim this to have been the first mill in Lancaster County, and for many years it was known as John Musselman's. Prior to the erection of this mill by a man named Kendig, settlers in the section were compelled to travel to Wilmington, Delaware in order to buy flour. The round-trip to Wilmington took approximately three days, and it is easy to imagine the conditions of traveling.

As early as 1733 a corn mill was in existence on the Conowingo about one-half mile east of Wakefield, and for over one hundred and sixty years the grain was ground into meal. About the year 1800 a carding machine and a saw mill were added to this corn mill.

In 1740 John Herr erected a two-story stone mill on the Pequea. This mill was later converted into a distillery.

Although very little wheat was raised two hundred years ago in the lower end of Lancaster County, the Pequea Valley, and the Codorus, and York Valley sections of York County supplied the raw material needed, and many mills were built. One of these has especial interest. It was built by James Gillespie who married the widow of William Fulton, the grandfather of Robert Fulton. Dr. H. M. J. Klein, in quoting Mr. Maxwell, gives an excellent picture of the industrial and economic

life of the period.

The mill "was originally owned by the grandfather of the illustrious inventor, Robert Fulton. William Fulton took up 393 acres on Conowingo Creek, which, by warrant No. 121,742, was surveyed to James Gillspsie (who had married his widow) and to this he added other pieces of land, making a total of 546 acres. On this in 1751 he erected a corn mill, one story and a half high. The first story was of stone, while the half-story or garret was of frame. In 1764 Gillespie had become involved in debt, and the sheriff sold his property, that on the west of the creek, including the mill, to George Ross and John Bickham, and that on the east to Robert Fulton, the elder, who also involved himself by the purchase and suffered a like fate. It is surmised by some that as Gillespie married the widow of William Fulton, the claims of the heirs of the said Fulton formed a part of the liabilities for which the property was sold, and as Robert Fulton became a purchaser, he was one of these heirs. If this were so, it would make William Fulton, Settler, the grandfather of Robert Fulton, the inventor. Ross and Bickham, the owners of the mill property, were residents of Lancaster City, the former being the George Ross of Revolutionary renown.

"In 1774 these gentlemen sold the property to Jacob Gryder, who

added a saw mill and sold it in 1792 to Martin Gryder, who passed it to Christian and Martin Gryder, and from thence it passed into the hands of Joel Smedley, a practical miller who, in 1833, rebuilt the old mill and added a sorghum factory. In 1893 it passed to F. C. Pyle, who refitted it with a good set of rolls; and the sorghum press and saw-mill were abandoned.

"A mile and a half below the Fulton Mills, Joshua Brown, from Nottingham, Md., built a mill in 1758, purchasing the property from Joshua Denny, son of Walter Denny. It was part of a large tract taken up by the latter, south of the Gillespie tract, in 1741. Joshua Brown was a Quaker leader or minister, and he frequently went to Quaker meetings in Virginia and the Carolinas. He was once arrested for espionage in South Carolina and imprisoned for six months, before his innocence was satisfactorily established. In 1775 the mills were sold to Jeremiah Brown, eldest son of Joshua. Jeremiah enlarged the mill, adding a story, of brick and another set of burrs. This mill was operated during the war to the advantage of the British, it is said, one of Brown's teams carting flour to Christiana, Delaware for shipment in sloops and other vessels, to depots of the British. Most of the wheat grown by Brown at this time came from the Pequea Valley, and

from York County. Jeremiah Brown was one of the original stockholders of the Farmers' Trust Company of Lancaster; and he had the distinction of making the largest individual subscription to that stock in 1810. He was still the largest stockholder in 1831, when he died."²

Along the Conowingo, Mill Creek, the Susquehanna River, and other streams in the southern portions of the county, flour mills, fulling mills and saw mills flourished prior to the Revolutionary War.

The same kind of history was being made elsewhere in this industrious county. Rather than quote statistics, and with the purpose of giving a picture of eighteenth century industrial life in Lancaster County, reference will be made to a few of these mills.

Some claim that the grist mill and the saw mill built on Donegal Meetinghouse Run in either 1720 or 1721 by John Galbraith was the first erected in the county. Others claim that in the Churchtown section Gabriel Davies, a Welsh settler, built a saw mill as early as 1718 and a grist mill in 1721. Certainly Rhoddy's grist and saw mill (1721 or 1722), and the mill built in 1729 by Hans Graf on the south side of the Conestoga where the Cocalico flows into the Conestoga were among the earliest industries in the county.

Beginning with the third decade of

the eighteenth century mills of various kinds were built in considerable number, and this county was becoming one of the most important industrial sections in the interior. Among the earlier mills, in addition to those I have mentioned, it is recorded that a Quaker by the name of Samuel Taylor in 1727 built a grist mill near the present site of New Providence. The next year, 1728, William Smith built a grist and saw mill on the site where New Providence now stands.

In 1730 we find mills erected along the Chickies. For example, in that year Patrick Hays built a carding and fulling mill at Myers, and about the same time on the west side of the Chickies Creek, where the old Paxtang and Conestoga roads cross, Samuel Scott built a grist and saw mill.

One of the mills constructed about 1730, namely, that erected by Samuel Blunston and James Wright on Shawnee Run, was destined to play a role in subsequent wars. It has been said of this mill which was known as the Shawnee corn and grist mill: "During Braddock's war, and afterward when General Forbes was organizing his army at Fort Rays or Bedford, in 1758, James Wright supplied these armies with flour packed in bags and carried to Bedford on pack horses. He also supplied the Indians on Turkey Hill with flour."³

The Eighteenth Century Iron Industry in Lancaster County

Reference has been made to the importance of the proximity of certain raw materials as an aid to the growth of the milling industry. But after the settlers had cleared land for the purpose of raising corn, wheat, and other agricultural crops, they could see that all the trees should not be cut down. The forests of Lancaster County made possible other industries. Cabinet making shops and tanneries as well as the planing mills and saw mills were dependent upon these forests. Furthermore, the abundant timber was destined to have a still more important part in the early industrial life of Lancaster County. Although no coal of commercial value was found in the county, the ample supply of timber converted in charcoal made possible the maximum utilization of local deposits of iron ore. So we find the iron and iron products industries among the most important in our early history.

The change in the relative importance of the eighteenth century Lancaster County iron industry as contrasted with the twentieth century iron industry in this county is similar to the change in the milling industry. Both have felt the march of time. As I have stated, in the eighteenth century the production of wheat, the milling of wheat into flour, as one example of economic life, was centralized in many different small local areas in which

sources of production and distribution and the ultimate consumption of the finished product was largely concentrated. The growth of our country has brought new sources, new areas of production as, for example, the wheat fields of the mid-west. Larger mills with improved machinery have meant the passing of the grist mills. Improved methods of transportation, and changes in the manner of living have also aided in centralizing milling in the twentieth century in a few places, such as Minneapolis, rather than in many small places.

The iron industry in our county has shown this same trend. Local iron ore deposits found keen competition with newly discovered rich iron ore beds. The growth of the United States, the opening of new markets, the constant improvement in transportation facilities as well as the introduction of large scale and improved methods of manufacturing were, in part at least, responsible for Birmingham, Gary, Pittsburgh and other centers causing this county to give way to other areas as the outstanding center in the iron manufacturing industry.

Another factor, and one frequently overlooked by historians, which handicapped local industrial development was financial. Students of money and banking are familiar with the unstable monetary conditions which existed throughout the colonies, and during

the early years of our history as a nation. With the exception of foreign coins, the currency was local and possessed little or no value in other colonies. In addition to this lack of a standard currency, a scarcity of capital was noted especially in the iron industry. This was certainly one of the chief handicaps which early industry in Lancaster County, as well as in other sections of the country, had to meet.

Although bills of credit were issued in Pennsylvania by the colonial government as early as 1722, laws were passed from time to time calling in these bills and in 1778 a law was passed stating that "all bills emitted prior to April 19, 1775" were no longer legal tender.

Much of the trading was of the barter type owing to the lack of money economy. That is the producers, ironmasters for example, in exchange for the iron which they sold received merchandise and various kinds of supplies.

It has been said that the first iron works in Lancaster County were those built about 1726 on the Octorara Creek.⁴ I have not been able to verify this statement from original sources. Certainly the David Jones furnace built in the early 1730s in Caernarvon Township was one of the first in this section.

Although the Grubb furnaces and the Cornwall ore banks have been in Lebanon County since 1813, they and the name of Peter Grubb are always

linked with the history of Lancaster County. The land which Grubb purchased in 1733, and in the years immediately thereafter were at that time on the Hammer Creek about six miles from Cornwall. The exact date of the building of these two forges is not known but it was no doubt prior to 1742 when his larger Cornwall furnace was built. He probably used ore from Cornwall mines in his first forges. All three later became the property of Robert Coleman. Much has been written on this subject, and, for this reason, as well as because of the intention to confine this paper largely to industries located within the present boundaries of our county, only this brief mention is made of this very important early iron industry. Your attention is called to the fact that during the Revolutionary War, Curtis Grubb, son of Peter, manufactured salt-pans at the Cornwall Furnace for the use of our army.

In December 1742, William Brandon, of Philadelphia, purchased land in Caernarvon Township. In 1743 he built the lower Windsor Forge, and later the upper forge. The name Windsor was taken from the name of the palace of the King of England.

Brandon had as his assistants at the two forges, his son-in-law, Lynford Lardner and Samuel Flower and Richard Hockley. Brandon sold his forges to these three men who carried on the work until 1773 when David

Jenkins, son of John Jenkins the original owner of the land, bought a half interest in the business at a cost of twenty-five hundred pounds. Soon thereafter Jenkins bought the other half of the business for twenty-four hundred pounds. This included the negro slaves. In 1779, David Jenkins and his son Robert inherited both forges and about three thousand acres of land.

In discussing these early Industries of Lancaster County of a period long before automobiles, concrete highways, radios, railroads, telephones, and other means of immediate contact and communication with distant points, it is fitting to attempt to visualize the rather primitive and narrow industrial life of some one hundred and seventy-five years ago as contrasted with life today. The lives of the workers were practically controlled by the owner of the forge. The nearest town was at least several miles distant, roads were poor and travel difficult. Those who were not actually slaves were almost like serfs of the days of the Manorial System in England. Supplies were obtained from the store which was operated by the individual or the Company owning the forge.

About the middle of the nineteenth century, the Windsor Forges ceased to operate, due chiefly to the competition from larger furnaces with more modern machinery and more favorably located. These were factors which accounted for the decreasing importance of the iron

industry in various sections of the county. Another cause was in the scarcity of timber which had been used for charcoal for many decades.

There is a difference of opinion as to the exact date when John Jacob Huber, whose daughter, Elizabeth, married Heinrich Wilhelm Stiegel, built a small furnace. The year 1746 has been mentioned, but it was probably 1750 when this small furnace was built near Brickerville. Little is known of Huber and his furnace. The significant fact is that in 1757 Stiegel purchased this furnace, and on its site built a larger one which he named for his wife, Elizabeth. Stiegel's partners were John Barr, Alexander Stedman and Charles Stedman.

By 1760 seventy-five persons were employed at Elizabeth Furnace, and for a few years the business prospered. But Stiegel was not an executive. He enjoyed pomp and show and lived beyond his financial means. In 1768 Daniel Benezet held a mortgage of three thousand pounds on Stiegel's share of Elizabeth Furnace. By 1770 Isaac Cox held a mortgage of twenty-five hundred pounds on Stiegel's Manheim property.

The year 1774 finds him in jail for debt. In August of that year there was issued at Lancaster:

"Writ of Levari Facias

" $\frac{1}{3}$ part of Elizabeth Furnace seized and taken in execution of the

above writ, being late the property of H. W. Stiegel, to be sold by

"John Ferree
Sheriff."

Although Stiegel failed, Elizabeth Furnace was destined to have a history of success under Robert Coleman, who in 1776 leased the furnace for a term of seven years. In 1780 he purchased the one undivided third part of the Elizabeth Furnace from John Dickinson.

During the Revolutionary War the furnace received large orders for shells and shot. Indeed they were so busy that two hundred Hessians who had been taken prisoners at Trenton were sent to dig a canal to carry water from Saw Hole (Saegelock Creek) around the base of Cannon Hill to Furnace Run. Their canal was more than a mile in length and made possible more water power at the furnace.

Another contribution which Elizabeth Furnace made to the products manufactured in Lancaster County prior to 1800 was the wood stove, and to Stiegel goes the credit for this invention which he developed in a "tenplate" stove with heavy castings.

For a time Hessian prisoners had a part in the iron industry of this county. One authority states: "Twenty-two Hessian prisoners were employed at Elizabeth Furnace for which the Continental Congress received thirty-

two to forty-five shillings a month for each of them, the amount being paid in iron. At Charming Forge, thirty-four Hessian prisoners were employed to cut a channel through a bed of rock to supply the slitting mill—one of the types of works proscribed by the British government—with water power. For their services, George Ege, the ironmaster, paid the government 1020 pounds in iron."⁵

Elizabeth Furnace ceased operations in 1856.

This was not the only furnace at which Hessian prisoners were employed. "In July, 1776, the Executive Council of Pennsylvania passed a resolution authorizing the employment of Hessian prisoners of War, at Lancaster and Reading, and in the furnaces of Chester, Lancaster, and Berks counties which were casting cannon and shot for the government."⁶

Many other furnaces were built in the eighteenth and early years of the nineteenth century. A brief description of but one of these will be sufficient to complete this part of our discussion of eighteenth century industries in Lancaster County.

Martic Furnace, originally named Martock after a town in England, was built in 1751 by Thomas and William Smith, brothers. The forge was started in 1755. In 1760 the property was purchased by Messrs. Ferguson,

McIlvaine, Samuel Webb and William Webb. From this date until it finally ceased operations over a hundred years later, in 1886, Martic Furnace was owned by many different persons. The size of this property may be found in an advertisement in 1769 stating that Martic Furnace and Forge were to be sold by the sheriff. The property included some thirty-four hundred (3400) acres on which were located in addition to the furnace the usual "mansion" in which lived the owner, eight houses for workers, a grist mill, carpenters' and other shops, stores, six stables, and a mine bank of ore. Four miles from the furnace, more houses, shops, a store, and the forge were located. Two slaves were included as part of the property.

It is recorded that this furnace went out of blast during the Revolutionary War, but I have been unable to learn the reason. Students of history may well inquire why the Elizabeth Furnace was so very busy making shot and shell for the government and why, on the other hand, Martic Furnace located in the same county should temporarily cease operations. Apparently the Forge contributed to the support of the Revolution, for Robert S. Potts, the landowner of the Forge is quoted as saying: "During the Revolution round iron was drawn under the hammer at the forge and bored out for musket barrels at a boring

mill, in a private road doubtless with a view to prevent discovery by the enemy."⁷

The same writer states that Robert Potts told of negro slaves being employed at Martic from its opening, and that negroes were employed until it closed in 1883. Bining also writes of negroes being used in early Pennsylvania Ironworks.⁸

Eighteenth Century Mining In Lancaster County

Here again is a separate topic for study, research, and comprehensive recording for early in the eighteenth century, copper, iron ore, nickel and silver deposits were found in Lancaster County. To be sure some of these had little commercial value but they were of sufficient importance to aid in making this an important industrial centre.

One of the best known mines was the Gap Copper Mines which will be used as an example of the mining industry for the period under discussion.

In 1725 James Steel, of Philadelphia, purchased a large tract of land, a part of which was known as the Markham Tract, on which were located the copper mines. Accurate records concerning the Gap Copper Mines are scarce. It seems, however, that the mines were in operation from some time in the early 1730's until 1763. During a part of the last half of the nineteenth century they were successfully operated as nickel mines.

Again we encountered disagreement as to dates and persons. Dr. H. M. J. Klein states that an "Historical Atlas," printed by Everts and Stewart, claims "that some Marylanders discovered the mines in 1718."⁹

On the other hand, R. J. Houston, writing in 1897, speaks of a pamphlet which he had borrowed from a Captain Charles Doble who had been manager of the Copper Mines for almost forty years. This pamphlet at that date was one hundred years old, being dated "Gap Copper Mines, Lancaster County, Pennsylvania, March 27th, 1797," and records that the mines were situated five miles from Strasburg and thirteen miles from Lancaster. According to this pamphlet these mines "were discovered by a German by the name of Tersey, in or before the year 1732, and in that year Hon. John Penn had made a grant of the land where the mine was found to the following gentlemen, for the express purpose of having it worked, viz: Governor Hamilton, Judge Allen, James Logan, James Steel and Thomas Schute, Esq., and it also appears that Mr. Penn joined in the expense of operating the mine."¹⁰

One purpose I have in mind is to point out the diversification of industry which has characterized Lancaster County from early days. To mention but a few of the various types of factories and mills, some of which will not be discussed in this paper, it is known that

cordage, flax and hemp stock; cotton, silk and woolen goods; flour feed and sorghum; guns, rifles, saddles and saddles; baskets, bricks, pottery and watches; glass-ware, and the products of the furnaces all combined to add to the fame and growing prosperity of this county.

Distilleries and breweries paralleled the other industries throughout the county from practically the beginning. That there were breweries is proved by an affidavit, sworn to on February 28th, 1764 relative to trouble with the Indians. This affidavit reads in part as follows:

"Colonel John Hambright, gentleman, an eminent brewer of the borough of Lancaster, personally appeared before Robert Thompson, Esq., a justice for the county of Lancaster, and made oath on the Holy Evangelists, that in August 1757, he, an officer, was sent for provisions from Fort Augusta to Fort Hunter, that on his way he rested at McKees' old place; a sentinel was stationed behind a tree to prevent surprise."

[signed] John Hambright
"Sworn and subscribed the 28th of February, 1764, before me.

Robert Thompson, Justice."¹¹

In a study such as this, one is tempted to devote considerable attention to the colorful iron-maker and glass manufacturer, Henrich Wilhelm Stiegel as a

manufacturer of glass-ware. But much has been written about Stiegel, and we will content ourselves with saying that from 1764 to 1774 he manufactured in the Manheim Glass House the first and the finest flint glass in Pennsylvania. He is credited with having employed highly skilled workmen.

Another short-lived eighteenth century Lancaster County industry was silk. England looked to the colonies as a source of raw material for the manufacture of silk, for during the seventeenth and early eighteenth century she had been importing the raw material from Italy. As early as 1726 Benjamin Franklin and others discussed this matter and attempted to encourage the production of the silk-worm in the Province of Pennsylvania, but it was several decades before much was accomplished.

Apparently the industry had been started in Lancaster County by 1770 for in 1771 among those who raised cocoon or silk balls in Lancaster and sold them in Philadelphia were John Ashbridge, Samuel Davis, William Henry, Caleb Johnson, and Isaac Whitlock.

During the Revolutionary War the industry all but died out in Pennsylvania, and did not become important again until about 1830.

A. C. Buell, in his *History of Andrew Jackson*, gives credit to Lancaster County for introducing rifles to this country in

the following words:

“The art of making rifles was brought to this country in the year 1721, when a small colony of Swiss refugees from religious persecution settled in what was then known as the Conestoga County of Pennsylvania, but now Lancaster. It was a singular dispensation that brought this colony of rifle-makers to our soil under the auspices of the peaceful and non-combatant Proprietary of William Penn and his Quaker progeny. The Quakers of Penn and his progeny were supposed to be the supreme architects of all that was patient and pacific—if not pusillanimous—and yet their regime gave shelter to a little Swiss colony that in its time produced the most murderous weapon known to the annals of war.

“At first the Swiss at Lancaster made rifles on the model of their own rather clumsy weapons and carried ounce balls. Their barrels were thirty to thirty-two inches long, and were rifled to a twist of about one-half revolution in the length of the bore. The frontier settlers and hunters at once saw the superiority of these rifles to the smooth-bores they had previously used, both in range and accuracy, and the industry grew rapidly. But the type was radically changed. The frontiersmen demanded longer and lighter barrels and smaller bullets.

The Swiss gunsmiths at first protested, but the demand soon created the supply. In a few years the short, heavy, large calibered Swiss ‘Jager’ was laid aside, and the new, distinctive American rifle took its place.”

This was known as “the Lancaster Rifle.”

Matthew Roener was a gunsmith in Lancaster in 1744 for in that year William Henry, to whom, Dr. Robert H. Thurston, Professor of Engineering at Cornell University wrote in 1891 in his book entitled *Robert Fulton*, “belongs the honor of conceiving the idea of utilizing steam as a motive power for marine navigation, and of building the first steam-boat ever built in the United States,”¹² was apprenticed to said Roener.

A few years later Henry formed a partnership for the making of guns with Joseph Simon, a well-known citizen of Lancaster. The firm of Simon and Henry continued in business until 1759.

William Henry was considered the leading gunsmith in the Province of Pennsylvania, and from 1755 to 1760 he was the principal armorer of the troops in the Indian wars. Although shipbuilding cannot be considered as a Lancaster County industry, Henry's work without a doubt had more than a minor influence in aiding subsequent inventions. Henry on a visit to England had met Watts and had seen the steam engine in operation. Upon his return to

Lancaster he began working on a machine which would operate boats by steam power. In 1763 he installed his machine on a boat, a stern wheeler with paddles, on the Conestoga River. The boat was too weak to withstand the pounding of the engine. Although the experiment was a failure William Henry's mechanical ability without a doubt aided and inspired Robert Fulton who as a lad in 1777, according to the *Lancaster Pathfinder* in an 1858 issue, “was a daily visitor at Mr. Henry's works” just across the street from Fulton's home, “aiding and assisting him in making astronomical and mathematical instruments for the famed mathematician, astronomer and philosopher, David Rittenhouse of Germantown, Philadelphia.”¹³

William Henry's gun works were located on Mill Creek, outside the Borough of Lancaster at a point where the “Old Factory Road” crosses the creek.

From neighboring colonies came the call for famed Lancaster gunsmiths, and numbers of them moved to other sections of the colonies where they carried on the manufacture of guns and rifles.

The importance of the work of the gunsmiths in this county was given greater significance by the Revolutionary War. This is illustrated by an action of the Committee of Safety of Lancaster County at a meeting held Friday, November 10, 1776. This Committee took the following

action: "Resolved, That in case of any gunsmiths, in the county of Lancaster, upon application made to them by the members of the committees of the respective townships to which they belong, shall refuse to go to work and make their proportion of the firelocks and bayonets required by this county, by the honorable House of Assembly, within two weeks from such application agreeable to the patterns, at the Philadelphia prices—such gunsmiths shall have their names inserted in the Minutes of this committee as enemies of their country and published as such, and the tools of the said gunsmiths so refusing shall be taken from them and moreover, the said gunsmiths shall not be permitted to carry on their trade until they shall engage to go to work as aforesaid, nor shall leave their respective places of residence until the arms are completed. And it is further Resolved, That the committee of correspondence and observation, do take especial care that their resolves be carried into execution." ¹⁴

The result of the above action found bayonets and muskets made in this county delivered to the Committee of Safety.

Early Newspapers

According to F. R. Diffenderffer the Lancaster Gazette was the first newspa-

per published in Lancaster County.¹⁵ This was a fortnightly paper printed in English and German in alternate columns, and had but a few months' existence. As far as I know no other paper was published until Francis Bailey printed the *Die Pennsylvanische Zeitung* in either 1775 or 1778.

Diffenderffer is also my authority for stating that six different newspapers were started in Lancaster prior to 1800. In addition to the two mentioned above, there were: *The News*, 1778; *The Neue Nuparthenische Lancaster Zeitung and Auzeigs Nachruhten*, 1787; *The Journal* 1794; and *The Intelligencer*, 1799.¹⁶

Paper Mills and Printing

The exact date of the establishing of the first paper mill in Lancaster County is not known but it was certainly not later than the early 1740's, for Christopher Sauer finished his Bible in Germantown in either 1742 or 1743, and this, printed in German, was the first Bible printed in this country. It was printed upon paper, most of which, if not all, was manufactured in the "Papier Muhle der Binderschaffet zu Ephrata." Furthermore, the Bible was bound at Ephrata by the Brotherhood.

At the Ephrata Cloisters the first stereotyping in America was done. At the same place was printed the first genealogical work in this country. In 1767 the same shop printed a book of

common prayer, primarily for the use of the Episcopal congregation of Caernarvon, Lancaster and Pequea. This is believed to be the first book of its kind printed in America.

Apparently a considerable amount of printing in the German language was done at the Cloisters in Ephrata. Books, hymns, and various tracts, most of which have been destroyed or lost, were printed at this place which was no ordinary printing establishment. Artists and skilled craftsmen were the workmen.

In the 1770's German almanacs were printed in the town of Lancaster.

Those who know the history of the Ephrata Cloisters are familiar with the fact that here was located an industrial life of many kinds, for in addition to printing and other activities, it included basket making, a pottery, different kinds of mills and quarries.

A list of businesses and trade occupations taken from the assessment roll of Lancaster for the year 1780 affords a picture of the size and diversification of business life in the town. It includes bakers, barbers, coopers, distillers and brewers, clockmakers, butchers, carpenters, shoemakers, saddlers, gunsmiths, wagon-makers, silversmiths, tinsmiths, tanners, a printer, a glassblower, a founder, and a dyer among others.¹⁷

In recent years Lancaster County has maintained its reputation as one of the richest agricultural counties in the United States. At the same time it has

enjoyed an enviable record as a commercial and industrial section. In this paper the extent and diversification of its early industries have been emphasized. In closing it seems fitting to quote from a letter written by Edward Hand, Burgess of the Borough of Lancaster under date of March 17, 1789, and addressed to the Senators and Representatives of Congress, explaining the advantages of Lancaster, Pa., as a permanent location for the Federal Capitol. In part this letter states

"...Within the Distances of 9 & 30 miles from this Place, we have
6 Furnaces
7 Forges
2 Slitting Mills &
2 Rolling Mills for the
manufacture of Iron.

Within a compass of 10 miles square we have
18 Merchant Mills
16 Saw Mills
1 Fulling Mill
4 Oil Mills
5 Hemp Mills
2 Boring & Grinding Mills for
Gun Barrels &
8 Tan Yards.

"Within the Borough alone are the following Manufacturers and Artisans, Viz.—
14 Hatters
16 Shoemakers
4 Tanners

17 Saddlers
 25 Taylors
 22 Butchers
 25 Weavers
 3 Stocking Weavers
 26 Black Smiths, & White Smiths
 6 Wheel Wrights
 21 Bricklayers & Masons
 12 Bakers
 30 Carpenters
 11 Coopers
 6 Plasterers
 6 Clock & Watch Makers
 6 Tobacconists
 4 Dyers
 7 Gun Smiths
 6 Rope Makers
 4 Tin Men
 2 Brass Founders
 3 Skin Dressers
 1 Brush Maker
 7 Turners
 7 Nailers
 6 Silver Smiths
 3 Potters &
 3 Copper Smiths, besides their
 respective Journey Men &
 Apprentices.
 There are also
 3 Breweries
 3 Brick Yards
 3 Printing Presses &
 40 Houses of public
 Entertainment within the
 Borough."¹⁶

Lancaster County of the eighteenth

century was a quickly growing commu-
 nity which gave early promise of its
 continued virility and importance.

- 1 *Some Early County Mills*, Samuel Evans;
Lancaster County Historical Society
Papers, Vol. 1, No. 6 (1896).
- 2 *Lancaster County, Pennsylvania—
A History*, H. M. J. Klein, p. 482.
- 3 *Old Mills and Country Ordinaries*,
Samuel Evans; pp. 317-318
Lancaster County Historical Society
Papers; Vol. 1, No. 8 (March, 1897).
- 4 *Forges and Furnaces In the Province of
Pennsylvania*, Publication of the
Pennsylvania Society of the Colonial
Dames of America, Vol. III, 1914,
p. 41.
- 5 *Pennsylvania Iron Manufacturing In the
Eighteenth Century*, Arthur C. Bining,
p. II2. Publications of Pennsylvania
Historical Commission, Vol. IV.
- 6 *Forges and Furnaces In the Province of
Pennsylvania*, p. 118. Charming
Forge—Berks County—Augustus M.
Longacre, Publications of the
Pennsylvania Society of the Colonial
Dames of America, Vol. III.
- 7 *Forges and Furnaces in the Province of
Pennsylvania*, p. 139, Mable Rogers
Baird; Publications of the Pennsylvania
Society of the Colonial Dames of
America, Vol. III.
- 8 *Pennsylvania Iron Manufacturing In the
Eighteenth Century*, Arthur C. Bining,
p. 114; Publications of Pennsylvania
Historical Commission, Vol. IV.
- 9 *Lancaster County Pennsylvania—A
History*, H. M. J. Klein.
- 10 *The Gap Copper Mines*, R. J. Houston;
Lancaster County Historical Society
Papers; Vol. 1, No. 7.
- 11 *History of Lancaster County*,
Daniel Rupp, Lancaster. Pa., 1844,
p. 435.
- 12 *The Life of William Henry*,
Francis Jordan, Jr., 1910, pp. 1 and 2.
- 13 *Ibid.* P. 51.
- 14 *History of Lancaster County*,
Daniel Rupp, Lancaster. Pa., 1844,
pp. 402-403.
- 15 Lancaster County Historical Society
Papers, Vol. 1, p. 77, Oct., 1896.
- 16 *Ibid.*, p. 79.
- 17 *History of Lancaster County,
Pennsylvania*, Ellis and Evans, 1883,
pp. 369, 370.
- 18 *The Pennsylvania Magazine of History
and Biography*, Vol. XI., p. 360; The
Historical Society of Pennsylvania,
1916.

6 August Sessions 1877

Comth } Aiding a Strike
66 No. }
97 Aug. }
Edward N. Seals } on a Rail Road

Indictment.

True Bill

Geo. Byrod foreman
Dec. 11th 1877 - Defendant
pleads "Not Guilty."

Not guilty
County for 1877

Fred,

of August Sessions, 1877.

Lancaster County, ss.

The Grand Inquest of the Commonwealth of Pennsylvania, enquiring for the County of Lancaster, upon their oaths and affirmations, respectively Do Present, That Edward N. Seals

late of the County aforesaid, German - on the twentieth day of July in the year of our Lord One Thousand Eight Hundred and Seventy seven at the

County aforesaid, and within the jurisdiction of this Court, with force and Arms wilfully, maliciously and unlawfully, in aid and furtherance of the objects of a strike upon the Pennsylvania Rail Road in said County, did interfere with, molest and obstruct a locomotive engineer and other rail road employees engaged in the discharge and performance of their duty as such, to the evil example of all others, in the like case offending, Contrary to the form of the Act of the General Assembly, in such case made and provided, and against the peace and dignity of the Commonwealth of Pennsylvania.

And the Inquest aforesaid, upon their oaths and affirmations aforesaid, do further present, That the said Edward N. Seals, afterwards, to wit, on the day and year aforesaid, at the County aforesaid, in aid and furtherance of the objects of a strike, upon the Pennsylvania Rail Road, in said County, did obstruct the track of said Pennsylvania Rail Road and injure and destroy certain engines, cars and other rolling stock and other property of the Pennsylvania Rail Road Company and did take possession of and remove such property, and did prevent ~~and did attempt~~ and attempt to prevent the use thereof by said the Pennsylvania Rail Road Company and its employees, to the evil example of all others in the like case offending.

contrary to the form of the Act of the General Assembly in such case made and provided, and against the peace and dignity of the Commonwealth of Pennsylvania.

Witnesses for Commonwealth:

John Rowe

Saml Evans ✓

Geo. Weiserman ✓

B Van Lew ✓

Andrew Bales ✓

James Dailey ✓

Thomas Connel ✓

Wm Bales ✓

W. W. Wep. ✓ Frank Spotten ✓

J. R. Johnson

District Attorney.

For arising a strike on a Railroad
~~the~~ guilty, County for costs

Geo Young Jr

Thomas Bechard

Henry Marsh

John B. Myler

Frank Hegens

W. B. Sack

John S. Miller

E. R. Girwin

Edw. Rhoads

Samuel Harrison

A. J. McCallan

B. F. Taylor

August Sessions 1877

Committ. 66/99 Aug. no. Edward N. Seals } Aiding a Strike on a Rail Road

Indictment

True Bill

Geo. Byrod foreman

Dec. 11th 1877 - Defendant pleads "Not Guilty"

Not guilty

County for costs

Of August Sessions, 1877

Lancaster County, ss.

The Grand Inquest of the Commonwealth of Pennsylvania, enquiring for the County of Lancaster, upon their oaths and affirmations, respectively Do Present That Edward N. Seals, late of the County aforesaid, Yeoman on the twenty-sixth day of July in the year of our Lord One Thousand Eight Hundred and Seventy-seven at the County aforesaid, and within the jurisdiction of this Court, with force and arms, willfully, maliciously, and unlawfully in aid and furtherance of the objects of a strike upon the Pennsylvania Railroad in said County, did interfere with, molest and obstruct a locomotive engineer and other railroad employees engaged in the discharge and performance of their duty as such, to the evil example of all others in the like case offensive. Contrary to the form of the Act of the General Assembly, in such case made and providence, and against the peace and dignity of the Commonwealth of Pennsylvania.

And the Inquest aforesaid, upon their oaths and affirmations aforesaid, do further present that the said Edward N. Seals, afterwards, to wit, on the day and year aforesaid, at the County aforesaid, in aid and furtherance of the objects of a strike, upon the Pennsylvania Rail Road, in said County, did obstruct the track of said Pennsylvania Rail Road and injure and destroy certain engines, cars, and other rolling stock and other property of the Pennsylvania Rail Road Company and did take possession of and remove such property, and did prevent and attempt to prevent the use thereof by said the Pennsylvania Rail Road Company and its employees, to the evil example of all others in the like case offending.

Contrary to the form of the Act of the General Assembly in such case made and provided, and against the peace and dignity of the Commonwealth of Pennsylvania.

Witnesses for Commonwealth

John Rowe

Sam E Evans

Jno. Weiterman

B. Van Lew

Andrew Baker
James Dailey
Thomas Connel
Wm. Baker
W.W. Upp Frank Spotten

J. W. Johnson
District Attorney

For aiding a strike on a Railroad
Not guilty, county for costs
Geo Young, Jr.
Thomas Bechard
Henry Marsh
John B. Mylin
Frank Hegener
P.B. [Vache]
John H. Miller
E.R. Girvin
E.M. Rhoads
Samuel Harbison
A.T. McClellan
B.F. Taylor