The Lancaster Brick Company 1919-1979

By Roy A. Horning II

This is an effort to present a history of the Lancaster Brick Company. By any standard applied, this was a small business. But some very prominent citizens played a role in establishing and nurturing it through some very difficult times. The company did serve a timely need, and many lives were affected by its existence in one way or another.

Below is an excerpt from the book called *Lancaster County Pennsylvania*— A History, written in 1924 by Dr. H.M.J. Klein, a highly venerated historian and a professor under whom the writer studied at Franklin and Marshall College. This quotation sums up very well the situation regarding brick usage and the producers of that era.

Lancaster is noticeable to strangers by the preponderance of brick used in building construction. In most cities of its size in most parts of the United States, only the main business sections would be found to have buildings of the more permanent brick or stone construction; and in only rare instances would other than frame residences be found. But in Lancaster, and indeed through Lancaster county, the building material is mainly brick. In pioneer days stone was the material mostly used in Lancaster County, and several fine old stone buildings that were erected more than one hundred and fifty years ago are still standing.

The brickyards in the vicinity of Lancaster City were yielding annually about 15,000,000 bricks three or four decades ago. There were seven brickyards in or near Lancaster City in 1887; and the output stated was steadily maintained. In 1992 the yards of the county produced 19,421,300 bricks, and 18,400 tons of terra cotta and fire-clay products. The brickmakers of the Lancaster district include C. Wise & Brothers Company, Manor at southeast corner of Prospect; Fred Pontz, Ranck Mill road, near Conestoga creek; and the Mountville Brick Company. Fred Pontz continues a business established in 1877 by Adam Pontz, and still known as the Adam Pontz Brick Company. The brickyards of C. Wise & Brothers Company were established by Adam Wise in 1871, the fourth generation of the Wise family being now connected with the work there, and the annual output being in excess of 3,000,000.

The Martin family has for long been connected with the brickmaking industry in Lancaster. They were operating a brickyard in the city sixty years and more ago, and Henry Martin was the inventor of brickmaking machinery. The Martin brickyard later became Bomberger's Yard, Pearl street, but the Martins, J.P. and H.P., were members of the firm. James P. Martin is now vice-president of the Lancaster Iron Works, Incorporated, and general manager of the brick machinery department of that firm, which enters largely into the manufacture of machinery for the making of clay products. The Lancaster Brick Company produces a large quantity of bricks annually.

During recent years concrete blocks have come increasingly into use in Lancaster county for house-building. The Lancaster Concrete Tile Company, Harvey L. Saylor of Manheim, and the Musselman Concrete Pipe Company of New Holland, do considerable business in this new building material.

It was only about a year following the Great War that several Lancaster industrialists gathered, probably at the Hamilton Club, and discussed the possibilities of starting a brick manufacturing operation in the Lancaster area. The atmosphere of the times was electric with the prospects of unlimited industrial growth in the county, and particularly in Lancaster.

Among these men were John J. Evans, Francis L. Suter, Henry Boettcher, Walter W. Posey, James Martin, and Alexander Scully. Evans, Suter and Boettcher were Armstrong Cork Company people. Mr. Evans was manager of the linoleum plant Armstrong had built in 1907. Mr. Suter was his assistant, and Mr. Boettcher was the chief architect. Posey, Martin and Scully were all Lancaster Iron Works men. Mr. Posey was president of that company, and Mr. Scully was secretary-treasurer.

What brought up the idea of the need for a brick producing plant was Mr. Evans' mentioning that Armstrong was about to enter into a large expansion program in Lancaster, and this project would require a vast amount of brick. As brick is a heavy commodity and transportation of that product was then still in a primitive state, the source of brick should be reasonably near to Armstrong's expansion site. Also, the brick should be low priced.

Mr. Posey was very much interested in this idea, largely because the Lancaster Iron Works manufactured brickmaking machinery. He saw this as an opportunity to have a pilot plant to show the machinery in action to prospective buyers.

It was at a more formal session on December 8, 1919, that this same group decided to forge ahead with the organization of an actual corporation with the purpose of manufacturing brick. It was to have the name Lancaster Brick Company. Charles G. Baker, Esq. was the official solicitor of this corporation

and he drew up the necessary papers. Original subscribers to shares in the new corporation were: W. W. Posey, 100 shares, John J. Evan, 50 shares: Francis L. Suter, 50 shares; Henry Boettcher, 50 shares; and Alexander Scully, 50 shares. It was not long after that time that some other very prominent citizens bought shares in the new corporation. Perhaps the most dominant factor was Armstrong Cork Company itself, which invested in 850 shares of stock. Other individuals who came on board in the early stages were Herman A. and P. Harry Wohlsen, contractors; Harry A. Bevis of Cummings, Bevis, and Levan, jobbers of mill supplies; Samuel R. Fraim, secretary-treasurer of the Fraim Lock Co.; Fred S. Pyfer, secretary-manager of the B. B. Martin Co., lumber and millwork; Andrew B. Rote, president of the A. B. Rote & Co., structural steel and iron works; Frank E. Herr, treasurer, Herr & Co., wholesale and retail hardware and builders' supplies; James P. Martin, manager of the brick machinery department of the Lancaster Iron Works; and Robert Todd, merchant. Each of these men had something more to offer to the Lancaster Brick Company than merely their cash investment. All were experienced business men who brought expertise in various areas which contributed to an earlier success of the company than could otherwise have been achieved.

Now that the corporation was organized, the first item of business was to obtain a site for the plant. For earlier explained reasons, it was essential to locate the plant reasonably close to the Armstrong linoleum operation, where the expansion would take place. Also it was important to have a source of raw material at the new plant site, meaning basically clay. Water also was a vital need for making brick.

After considerable investigation a portion of a suitable farm that was available was located in Manheim Township, just off the Harrisburg Pike and little over a mile from the Armstrong complex. This was part of the Lant Estate farm and consisted of 55 acres. The property was accessible to the Harrisburg Pike by a farm lane which was a legal easement. The Pennsylvania Railroad had a branch line, the Columbia spur, which came through the property. The western border of the property was the Little Conestoga Creek, which could provide a source of water for manufacturing purposes.

The first officers of the corporation were the initial five shareholders. At that point, there were only five directors, who were the same founding fathers. Mr. Posey was president, Mr. Evans was vice-president, Mr. Suter was treasurer, and Mr. Scully was secretary.

Then came the planning for actual construction of the plant. This was mostly in the hands of Herman A. Wohlsen, Henry Boettcher, and James P. Martin. As Mr. Martin was manager of the Brick Machinery Division of Lancaster Iron Works, he became responsible for determining what machinery should be purchased and how it should be put in the production line. He had had considerable experience with other brickmaking clients, and he was really the only one in the group who knew anything about brick machinery or brick plants. Mr. Boettcher and Mr. Wohlsen together were to design and build the structures to house the operation. There were many suppliers of materials and equipment among the shareholders. The millwork would come from P. Harry Wohlsen. The lumber came from B. B. Martin Co., where Mr. Fred Pyfer was an executive. Some steel came from A. B. Rote Co. Hardware and mill supplies were furnished by Herr & Co. And, of course, most of the brickmaking machinery originated from the Lancaster Iron Works. The kilns were built of brick, with massive walls, and one would presume these brick came from other local plants. There were at least two other plants in the Lancaster area in 1920. One was the Wise plant, at Manor and Prospect Streets; the other was the Mountville Brick Co., owned by Joseph C. Budding. It would be interesting to know just how eager these plants were to sell brick to help create a competitor. But it would seem that most of the expenditures for building and outfitting the new plant were kept pretty much in the family of Lancaster Brick Company shareholders. There's really nothing wrong with that. At least the money was generally recirculated in this area.

The minutes of a special meeting of the board of directors held on February 16, 1920, indicate the corporate officers elected were: W. W. Posey, president; John J. Evans, vice-president; Alexander Scully, treasurer; and Sumner L. Brown, secretary. Mr. Brown had been executive secretary of the Manufacturers Association of Lancaster, and from his higher salary than that of the plant superintendent, it may be assumed he served as the on-site business manager. Somewhat later he was an investment broker with McClain & Co.

The construction of the plant was well under way in March, 1920. Minutes of the March 9 directors meeting reveal the following: "In discussing the progress made in the erection of the plant for the Lancaster Brick Company, Mr. Martin stated that the great amount of bad weather experienced since the first of the year had caused a delay of at least two weeks in the completion of the plant. Mr. Martin said he believed that the plant would be ready to turn over to the company by April 1 and that the dryer would be finished a week from today."

At that same meeting Mr. Scully announced that he would be leaving the area soon, and for that reason was submitting his resignation as treasurer. Mr. Suter was elected to replace him. Then Mr. Evans was called upon to discuss Armstrong's schedule for brick requirements. Mr. Boettcher said, "The Armstrong Company would need four million bricks to be delivered at the rate of from 25 to 50 thousand per day and that delivery should begin not later than April 1, 1920."

Had the writer been on hand at that meeting he would have been scared to death at hearing those requirements from an untried, unfinished, unstaffed operation. But Mr. Martin, with the sangfroid of a Commodore Farragut, seemed totally unaware of any "torpedoes." And there was no one else on the board who was qualified to have any trepidations either.



View of Lancaster Brick Company plant in 1920.

The record indicated there were a multitude of problems that had not been anticipated by the "founding fathers." Electrical service was not yet available from the Edison Electric Co., a predecessor of the Pennsylvania Power & Light Co. The heavy machinery was to be powered by steam. The brick machine itself was driven through an elaborate system of line shafts and pulleys with belts. It is truly amazing to the writer that things worked as well as they did, because steam power was awkward to work with or fine tune. Also, the early brick made were, first, smaller than competitive local brick, then later they were bigger. This created many difficulties. Bricklayers are not a forgiving lot, and the reputation of this new brick producer was getting off to a bad start.

A batch of brick was the quantity that would be in one kiln burn. So, in the old scove kilns, which held about 250,000 brick, the plant was pretty much stuck with large quantities of "mistake" brick from time to time while all the trials and errors were occurring. As it was almost two months beyond the deadline earlier projected by Mr. Evans for the needs of the Armstrong project, it must have been a bit chaotic in the early going.

Not only were there these size problems, but it took some time to solve the problem of excess cracking of brick in the drying process. Reports indicated that some production days resulted in losses of 35 percent.

There is no explanation in the June 12, 1920, minutes as to why, but only that "owing to the resignation of William Bomberger, the company was without a plant superintendent." In view of the above described tribulations of early manufacturing woes, it is probably safe to conclude that Mr. Bomberger had had his share of heartaches. It was during that same meeting that Mr. Suter announced that Roy A. Horning, who was employed by Armstrong Cork Company as a ceramic engineer at their Beaver Falls cork plant, would be in Lancaster in a few days and would be spending some time at the brick plant to analyze the problems and make recommendations for solutions, particularly concerning the high rate of cracked brick in the drying process. Armstrong Cork Company had a vital interest in the brick company's success as a brick producer, not only as a source of building material for its expansion program, but also as an investment, being the largest shareholder of the corporation. It seems quite natural they would turn to an up-and-coming young executive in whom they had confidence to rescue the operation from disaster.

At about the same time all this was going on, it was mentioned in the board minutes that Mr. Budding, of the Mountville Brick Company, was expressing interest in merging his company with the Lancaster Brick Company, or selling his company to them. The Mountville Brick Company was having problems of its own at the time. The writer recalls hearing some years ago from Gil Lyons, who was married to Budding's niece, that in the old days when Gil was a salesman for Mountville Brick, that company experienced some serious problems with color control. He said there had been a deposit of clay at their plant which yielded brick of a beautiful shade of chocolate brown. They pushed this item pretty heavily. But the clay deposit must have been an aberration, because subsequent batches of brick would not match those brown brick at all. They had some projects started with the brown brick but were unable to produce matching brick to complete the projects.

But the board rejected Mr. Budding's propositions. Later on, however, when Mr. Budding requested permission to sell Lancaster Brick as an agent he was granted rights to sell—outside of Greater Lancaster. Mr. Budding also opened a building materials distributor operation on North Prince Street a bit later on. That site is currently occupied by the Warfel Construction Co.

Roy A. Horning did make the visit to the Lancaster brick plant that Mr. Suter had announced at the board meeting. There was plenty of work to be done, and Mr. Horning made countless suggestions as to how to improve the operation. Mr. Evans and Mr. Suter thought it would be a good idea for Mr. Horning to stay on as general superintendent and implement his suggestions. Roy A. Horning, the writer's uncle and namesake, was a young man full of innovative ideas, and having the Armstrong people solidly behind him, he confidently forged ahead.

After many exercises of trial and error the excessive cracking of brick in the drying process was reasonably corrected. The writer, when it was his time to manage the plant, experienced the same problem from time to time. It's one of those problems in brickmaking that comes and goes. You try everything to solve it, and one day, suddenly, the problem disappears, and you never really know what caused it or why it stopped.

Perhaps a rudimentary indoctrination of the reader in brickmaking as it was done at the old Lancaster Brick Company plant in its beginning would be helpful. Without such briefing, a lay person could find himself at a loss in visualizing the process. All building brick are made of clay or shale. Shale is chemically pretty much the same as clay, and differs only in its physical structure. There are two major types of building brick, the difference between the two being the manner of their forming. One type is the stiff-mud, extruded brick, which is relatively mechanical in appearance. This type is made with a minimum of water, is extruded in a column of stiff clay and then cut by wires, similar to a large cheese cutter. These brick, having less water, have a smaller shrinkage in the drying and firing processes. This permits the producer to have a more uniform product in size and shape.

The other type is the soft-mud, sand-molded brick. This process results in brick similar in appearance to the old brick made in colonial America. These brick are far less mechanically perfect, sometimes quite irregular in size and general configuration. They are made from clay which is thoroughly pugged with water and is quite soft, plastic, and pliable.

In selecting a clay or shale to be used to make brick, that material must have some qualities which, when water is added, lend themselves to becoming sufficiently plastic to be shaped and retain that shape when separated from the mold. There are also shrinkage considerations. If a clay shrinks too much, problems can arise such as size control of the finished brick. Normally a soft mud brick must be molded about 9" in length to allow for 1/2" shrinkage in the drying process and another $1/2^{"}$ in the firing in order to produce an 8" finished brick. In periodic kilns, meaning kilns which must be filled, fired and emptied in that order, the kiln must be brought from atmospheric temperature to about 1900° F, then cooled down again to atmospheric temperature. It is impossible for the entire batch to be exposed to the same temperature throughout the kiln. Thus, some brick are fired at more than 1900 degrees, and others don't even get close to that temperature. The brick receiving the greater heat will shrink more than those getting less heat, and there can be a size difference of 3/4" within a batch. Of course, some of the brick that are underburned are not hard enough to withstand weather exposure.

One basic operation at Lancaster Brick Company in 1920 was mining, that is, the digging of clay. This was a process using an electric shovel, manufactured by the Thew Shovel Co. An electric generator was used to power the shovel. Carts pulled by a mule brought the clay to the mill room, where it was fed manually into the brick machine, where steel knives chopped it up and water was added. This is called pugging. The wet clay was then propelled forward to the front of the machine, where a plunger pressed sufficient mud into a wooden mold that was partitioned off into seven pockets. The molds, twelve to a set, were made of maple wood. Before receiving the clay they had been moistened and then sanded. The sand on the contact sides of the mold enabled the wet brick to be released from the mold and dumped onto steel trays called pallets. As the mold released its seven bricks it fell back into a sanding machine and received another coating of sand. The steel pallets bearing the seven bricks were carried, first by a short roller conveyor, to a cable conveyor which took them into the dryer chamber. Men in the dryer took the pallets of wet brick off the cable conveyor and slid them onto the pipe racks in the dryer. These pipe racks were really steam pipes, and when the dryer was full the steam was turned on. As the wet bricks heated up and began to give off water vapor, exhaust fans were turned on and the moist air was expelled to the outside.

Normally the brick would be dried overnight, and were then ready to be taken to the kiln. The dried brick were stacked on cars manually and taken to a transfer-track junction. Eventually these cars were pushed into the kiln, where men would take the bricks off the cars, two at a time, and toss them to the men who set them in a prescribed pattern in the kiln. As mentioned earlier, each kiln held 250,000 bricks. There were five updraft, scove-type kilns. The work was very hard.

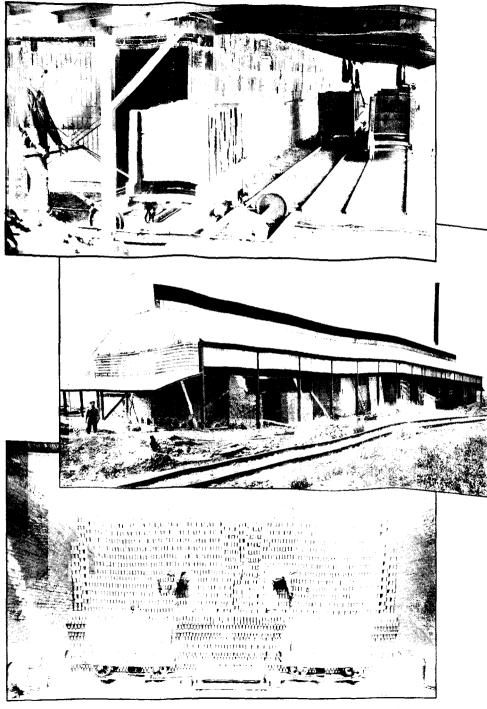
As to the kilns, they were constructed of massive walls of brick. There were two of these heavy walls, and the front and back of the kiln were bricked shut and coated with a mud wash when the kiln was full. Along the permanent walls were spaced openings which served as fireboxes. The new, "green" brick were set in the kiln in a manner which provided for arches across the width of the kiln. These arches allowed space for the coal which was skillfully and strategically thrown through the fireboxes by the kiln fireman, referred to as the "burner."

It was critical that the brick be exactly set so that the arches were formed to provide enough space for the coal and to give structural support to the brick above and around the arches. Also, the brick being set had to be a fingerwidth apart to permit proper flow of the hot gasses and yield as uniform as possible distribution of heat throughout the batch.

How the brick were set, and how expertly they were burned made all the difference as to whether or not a profit would result from the entire operation. One can see from this that setting and burning were the two phases of brickmaking that required skilled hands. Many of the other jobs were less demanding in expertise.

As there were five kilns available, all covered by a vented roof structure, it was not always urgent to empty a kiln after a burn was finished. Carts and trucks could be loaded directly from the kilns as needed for projects, or they could remain in inventory just where they were until needed. In the early days of the company's operations most of the brick were hauled by contract haulers.

This was pretty much what Roy Horning found in place when he arrived. It is no wonder that he saw room for improvement. Though the new plant was ultramodern compared to other, older, plants in the area, there were many refinements and adjustments needed to make the operation efficiently functional. As Mr. Horning was given almost carte blanche, he began to gradually correct the major defects in place. One of the first things he did was to send for his



Brick on a transfer car being moved from the dryer to a kiln; view of the updraft scove kilns and the Pennsylvania Railroad siding; removing brick from transfer cars

two brothers, who were then living in his original hometown, Paris, Illinois. Clarence Horning had been a veteran of World War I, wounded in the great battle at Belleau Wood. Bruce Horning, the youngest brother, served in the navy in the war. Both were raised with a strong work ethic, and Roy knew they would make a reliable cadre of plant leadership. Bruce was made the plant millwright, having much experience in "black gangs" in the navy. Clarence was given the responsibility of superintendent. And, of course, Roy was the general manager.

Roy had his hands full in bringing the plant around to becoming an efficient operation, but after the two brothers had gone through some on-the-job training and could see to the manufacturing needs, Roy turned his focus to the marketing aspects of the business. He saw the value of advertising, and as soon as there were a few projects built of Lancaster Brick he had a brochure made, showing photos of the structures. He devised the trade name and logo "Quaker Brick," and used that in all the advertising. He had new molds made with the name "Quaker" in the mold bottoms. And, though Armstrong was taking the lion's share of the early production for their new factory buildings, Roy wanted very much to compete in the market, aware that the Armstrong work would not be going on forever. He made a vigorous effort to sell to local builders, and never missed an opportunity to solicit brick orders from Armstrong people who were coming to Lancaster and were contemplating building a home. He was a "joiner," joining up with every possible club or organization to make personal contacts for future business. After a fairly short period of time, there were dealers and distributors from Philadelphia, Wilmington, Baltimore, New York, and other places who were inquiring as to the possibility of representing Lancaster Brick in their areas. Since most of these would receive brick by rail, Lancaster Brick Company had a sidetrack built. This not only facilitated brick shipment, but also enabled the plant to receive coal shipments. Coal was the fuel used both in firing the kilns and the boilers, which were providing most of the horsepower required to operate the plane machinery and the steam needed in the dryer. It should be apparent that a great quantity of coal was used.

Armstrong Cork Company found another need that coincided with Lancaster Brick's function. Early in the 1920s it became clear to the Armstrong management that they were going to increase greatly the number of personnel to man the new facilities being constructed. Later in that decade they formed the Armstrong Development Company, which built houses which were to be available to employees. And that company made every effort, spurred by Roy Horning, to use Lancaster Brick. Since this was in the days prior to the common use of concrete block as backup material, many of these houses were both faced and backed up with brick. Also, this was long before the days of Temlok, a product which Armstrong later produced with great success to be used in brick-veneered houses. During the regime of Roy Horning, many changes occurred in the manufacturing facilities. One of the first changes was to trade the mule in for a gasoline-engined locomotive to pull the clay cars to the plant from the clay pits. Because of the bothersome frequency of limestone encountered in the digging operation, Roy asked the board for permission to have a geological survey made of the entire property to determine where the clay could be mined at respectable depth without worrying about the presence of limestone. Limestone proved to be a great headache for management of the Lancaster Brick Company, off and on, for many, many years. In scanning the minutes of the company's board meetings, one sees reference to this plague in 1920 and as late as 1965.

The lay reader probably wonders why limestone would be such a serious problem in making brick. Here's the reason: When clay is mined and put through a crusher, many of the larger stones are seen and most are expelled by the conical-type roll crusher, but some of the smaller ones get through. A piece of limestone which seems small enough to be innocuous, perhaps smaller than 1/8", can lodge close to the face of the formed brick, be fired with the brick and still be no problem. But when the brick is subjected to rain, or even highly humid air, the limestone will swell to twice its original size. In doing so, it can pop off a piece from the face of the brick and show up as an ugly white spot in the wall. This presents no structural deficiency to the wall or the brick in the wall, but cosmetically it is a definite negative, especially when dealing with architects or particular owners.

The board didn't seem to be terribly concerned about the limestone problem at first. They reluctantly agreed to some limited testing of the clay pits in the immediate area of digging. Actually, a geological survey should have been made before the Lant property was purchased in the first place. But those were different times with different ideas about priorities, especially by a group of very successful business men, albeit without and knowledge of brickmaking.

Roy did succeed in getting other things approved that were very beneficial to the operation. He had a new roll crusher installed, which did reduce the limestone problem considerably, though not completely. He had storage sheds built, which protected the clay from falling weather. With the blessing and help of James P. Martin, who should have welcomed the idea, a newer style brick machine was installed to replace the original, and this machine had many more features of automation than the initial one. And, one very large improvement came with the acquisition of an Autocar truck with a Fontaine brickhauling body attached. The truck itself had solid-rubber tires, and a powertakeoff arrangement operated the body. What was unique about this system was that the unit could be used not only to deliver unitized packs of 2200 brick, but the method allowed the manufactured brick to be taken from the kiln either to the yard inventory or directly to a construction job. Most plants of the era either delivered brick on flat-bed trucks and unloaded by hand at the job site, or they were dumped there, causing a lot of chippage and broken brick. This was all right for a sewer job or where the brick were to be used as backup material. But where they were to be used as face brick, dumping was frowned on.

This was a beautiful system in its time. Here's how it worked. First, a heavy wooden pallet was set on the ground near where the brick were to be loaded, usually near or in the kiln. A back section of wood was set up along with two side sections. The brick were then packed in a formulated style which made them knitted and nestled together to later become a self-sustaining pile of brick when the sides of the form were removed. When the pack was completed, the sides of the form were removed. The truck backed up to the pack and the Fontaine body was lowered over the pack. The body was powered back on rails and then downward. The body fit precisely over the pack. Then heavy steel bars were inserted through hooks at the base of the lowered body and under the wooden platform. Then the body was raised and brought forward with the load. If the load was not immediately destined to go to a job, the body was not brought all the way forward, and the truck would take the load to yard stock, lowered, and the steel bars removed. The truck pulled away and the pack was sitting there in place and intact.

This system gave Lancaster Brick Company a distinct edge over local competition. It was a convenience for the builders and bricklayers and a laborsaving feature for the company. In addition, there was a definite advantage in inventory control because the brick were all stacked in uniform packs which were easier to count.

Around 1923 the company had completed the plant revamping to such an extent that it was a fairly efficient operation. At that point the Lancaster Brick Company was clearly the most modern brick manufacturer in the area. And some of the competing brickyards were having difficulty in matching the volume and delivery convenience the new plant offered. Also, the plant was now fully electrified.

There were still plenty of problems, of course. Mining was still difficult because of the uncertainty of clay deposit locations. And there were still the occasional episodes of excessive cracking in the dryers. Also, there was the ever present risk of encountering limestone pops. But Roy Horning was an ingenious problem solver, and ultimately made the plant into a profitable operation.

One of the last acts Roy Horning performed, in 1925, the last year he was plant manager, was the acquisition of the Starr Farm. That farm, which consisted of 75 acres, was located to the immediate west of the brick company's original property. It was just across the Little Conestoga Creek and was in East Hempfield Township. That property extended past the Farmingdale Road, and was really quite close to Rohrerstown. There were no immediate plans for taking clay from that farm, and it was sublet to various farmers over the

years. The net result of the acquisition was that the Lancaster Brick Company was then in possession of approximately 130 acres. Perhaps it might interest the reader to know that the Starr Farm was bought for \$400 per acre.

Brickyard work has always had the reputation of being exceedingly hard labor. The writer, who at one time or another in his youth performed many of the tasks involved in the process, can honestly attest to the fact that the reputation was well deserved. Of course, in the 1920s most people were accustomed to hard-work jobs. The Industrial Revolution was still going on, but almost every industry still relied heavily upon manual labor to produce a product. But, along with foundry work, brickyard labor was truly among the least desirable choices for job seekers. The Lancaster Brick Company was fortunate to be able to recruit workers in that era. Many came from other brick plants in the area. And not a few of these men were second or third generation brickyard workers. In the early days of the plant there were a number of brother teams that came on board. There were at least two Kissingers, John and Harry. Another name which was prominent, and was represented by several brothers and cousins, was Rittenhouse. Both of these families had long brickyard backgrounds. Some of the workers were merely farm boys who wanted a taste of the "easy" city life. Anyone who ever worked much on a farm would know what a demanding regimen that can be. It was not at all unusual to visit the plant any time through the decades of the company's existence and find a foreman named Kissinger or Rittenhouse. These names actually made the plant and the yard go. John Kissinger was the yard foreman when the writer was a very young boy, and was still considered a hard taskmaster by the workers in the 1950s. Harold Rittenhouse, known as "Joe," succeeded John in that role and became a most valuable asset to the company for many years following that appointment.

On the administrative and clerical side of the operation, there were many names. An early office manager and bookkeeper was Charles Supplee, who later in his life became involved in the Frantz Candy Company with Russell Moedinger. Other office people over the years included Phillip Blessing, Landis Hershey, George Cramer, Ralph Groff, Delbert Hendershott, John Krallinger, Albert Shank, Kenneth Wissler, and there were undoubtedly others who may not have been around long enough to be either remembered or documented in the archives.

From the record, it seems that Roy Horning left the brick company in 1926 to return to an executive position with Armstrong Cork Co. Mr. Evans, who clearly had a "full plate" with the business of operating the linoleum plant, felt that the brick company was on the right track as a result of Roy's capable and ingenious management, and that Roy could be better utilized at Armstrong. Mr. Evans was devoting less time to the brick company then too. But Armstrong's interests were still very much protected by the presence on the board of directors of F. L. Suter and Alfred Jones. There was always someone of high corporate



Employees of Lancaster Brick Company in May 1925.
Front row, left to right: Bruce Horning, Richard Johnson, John Hunsdorffer, Robert Saylor, Harry H. Rittenhouse, Edward Bowman, and Arthur Barley.
Middle row, seated on porch: Parke Erb, Amos Longenecker, Walter Heiss, John Goss, Walter Brubaker, Willis Erb, Frank or Joe Styer, John Rittenhouse, Benjamin Leakway, Earl Davidson, George Morrow, and Harry Peacock.
Rear row: Jerome Styer, Daniel Sowers, Foster Adams, Christ Lehman, John Kissinger, George Laird, George Barron, Harry Kleinhans, Nate Getz, Harry Kissinger, Clarence Horning, Charles L. Supplee, and Roy A. Horning. The latter three were the company's executives.

status from Armstrong on the brick company's board until the mid-1940s. And, of course, John J. Evans was elected president of the Armstrong Cork Company in 1928, at about the same time Armstrong established its corporate headquarters in Lancaster.

Clarence B. Horning seemed the logical choice to take the reins of management when Roy left. Clarence was a different-type fellow from his brother Roy. Where Roy was a smoothly polished, university-educated and urbane man, Clarence was sort of a diamond in the rough. He'd worked at every job in the plant. He knew where all the problems of production were likely to crop up, and what to do to solve them. Though smallish in stature, Clarence was a real "scrapper." Remember, this was in the days when men had to "prove themselves," and Clarence was known throughout the plant to have "proved himself" with his fists many time, and with much larger opponents. But he also had a certain charm that won him many more friends and helped him achieve much more than his fists did. Though his formal education was limited, he was a ready learner, and possessed uncanny business acumen. Having several years of experience in all-around brickmaking, and the tutelage of brother Roy in the business aspects. Clarence was ready to take over the management. He found many helpful friends on the board of directors. W. W. Posey, president, was in the forefront of these. James P. Martin, Francis L. Suter, Harry Bevis, P. Harry Wohlsen, Herman A. Wohlsen, Andrew B. Rote, Alfred Jones, and Frank Herr all served on that board and lent guidance and support to Clarence during his early days of management.

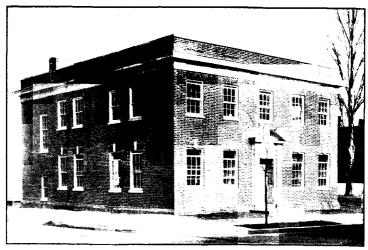
From 1926 until 1929, the company had some very excellent years of operation. One of the brochures the company had in the late '20s boasted that over 20 million brick had been used in the factory buildings of Armstrong Cork Co. And local builders were becoming more amenable to using Quaker Colonials in house construction. A few of the local architects were even beginning to specify Lancaster Brick for commercial and institutional projects. Ross Singleton liked the rugged and traditional effect of the "Quakers." Henry Shaub, a "tough sell," even admitted the rough, updraft Colonials had a distinctive charm.

The methods of masonry construction, before the emergence of concrete block as wall backup units, largely utilized common brick as backup and the better grades of brick as face brick. True colonial-style buildings employed the use of "Flemish Bond," which was a way to use alternate stretcher (8") brick and headers (4"). The headers were tied into the backup brick. As the heads of these brick were "flashed," or having a darker hue, sometimes jet black, the contrast of the stretchers and headers was quite pleasing. Most of the truly old American colonial structures, such as Independence Hall, and the old buildings of Williamsburg, were built using that masonry pattern. Good examples of that style can be seen in most of the buildings on the Franklin and Marshall College campus. Another is the building of the Lancaster County Historical Society.

Mr. Harry Bevis was elected secretary of Lancaster Brick Company around the same time that Clarence Horning became manager. He replaced A. C. Scully in that position. Mr. Scully had been the secretary at various times from the inception of the company. Mr. Bevis served as secretary then for another 38 years. He served the company in that capacity and as a board member for close to 45 years in all. Mr. Bevis was associated with Haldy Memorials as his full time pursuit, and was in every sense a fine gentleman.

The Great Depression came on toward the end of 1929, and the brick business almost came to a complete halt, along with most other industries. John J. Evans, who had been elected president of Armstrong Cork Company only a year earlier, was in for the same sort of problems that Clarence Horning had, only on a much larger scale. But, in common, they both managed to bring their respective companies through the depression. Both were resourceful. Both shared an intense dislike for what Mr. Roosevelt was trying to do with his "New Deal."

Clarence advanced some ideas to the board pertaining to making a better product. His major aim was to construct a beehive, downdraft-type kiln, in



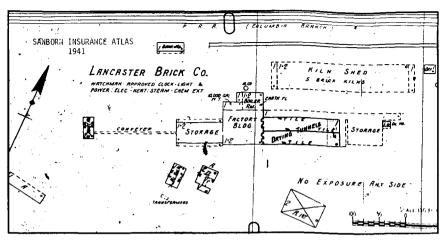
Office building of the B.B. Martin Company, northeast corner of West James and North Charlotte Streets, built in the early 1930s using Lancaster Brick Company brick.

which could be made a full range of color shading in Colonial brick. Other plants in eastern Pennsylvania were already making brick of that type. Glen Gery Brick Co. in Reading, the Spring Garden Brick Co. in York, and the Alwine Brick Co. of New Oxford were all engaged in making that type brick, and it was going over well with the architects and builders.

Not only were the downdraft brick more salable, but that type of firing produced much less waste and a high percentage of first-class product. Also, the costs of production were lower, from both a labor and a fuel standpoint.

In 1936, Clarence was able to go ahead with the construction of a downdraft kiln. For the lay reader, perhaps a brief explanation is in order here. The original kilns were the updraft, scove-type. An earlier description of that type was already given. But to reiterate, that kiln was operated on the basis of the heat rising from the floor level of the kiln through the brick above the fires. Then the heat escaped out the vents in the roof structure above the ware. The round beehive, downdraft kiln—the initial one built in 1936 was 36 feet in diameter had a self-retaining dome constructed of firebrick with each ring of the dome keyed in and had a series of fireboxes arranged around its circumference. A system of flues under the floor of the kiln was manifolded to the main flue which led under the kiln wall to a smokestack. The principle of this system was to make more effective use of the heat and to subject all the bricks within the kiln to a more uniform exposure to the heat. This was accomplished by having the heat travel from the fireboxes up to the crown of the kiln, then down through the ware, into the flues, and out to the stack.

The big saving that accrues from the downdraft firing is that there are



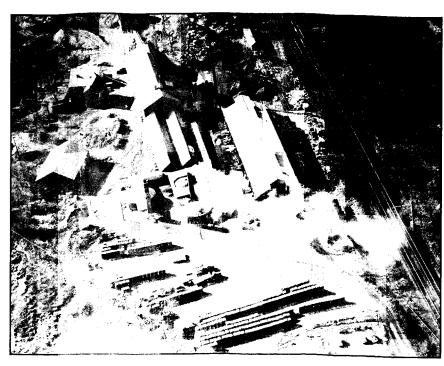
Plan of the Lancaster Brick Company property as shown in the Sanborn Insurance Atlas (1941).

practically no soft or underburned brick in the batch. In contrast, the recovery of good quality brick from the old kilns was usually less than 65 percent, and even that recovery didn't offer much more than a plain red brick with little or no range in shading.

The demand for the downdraft brick was immediate and great. About a year later, a second downdraft kiln was underway. This kiln could feed its exhaust into the same stack, from the opposite side of it. So, though this kiln was a bit larger in diameter, (34'), it actually cost about the same as the first.

These two kilns were timely, because the demand for common backup brick was diminishing steadily. Concrete block were now the product of choice in masonry backup. So the production at the plant was scheduled in such a way as to give priority to the downdraft kilns and to put the overflow in the old kilns when the downdrafts were inaccessible.

In spite of the depression, the Lancaster Brick Company was doing fairly well toward the end of the decade. The year 1940 was even better, and 1941 wasn't too bad. The war in Europe was stimulating American industry, and there was some new building activity taking place. But after Pearl Harbor, the company was once again in a big slump. Since brickmaking was not deemed a critical war industry, there were all sorts of shackles placed upon it. Manpower was scarce. Fuel was rationed. Through most of World War II, the plant did not operate anywhere near capacity. When there was enough clay mined and enough coal on hand, Clarence and his brother Bruce would go down into the plant and run the brick machine, or rack brick in the dryer, or set brick in the kilns. As they had been long removed from doing that sort of labor, it must have been an unpleasant time for them.



Aerial view of Lancaster Brick Company in 1954. Beehive kilns are at center. Columbia secondary branch of the Pennsylvania Railroad at right.

Also, to demonstrate the versatility of the Horning brothers, Bruce took in contract work for the brick company's machine shop from various companies in the area, and Clarence was out soliciting that sort of work for the shop.

When the war ended, and the many restrictions were removed from unessential industries, a boom in housing and general construction began. It seemed an opportune moment to build yet another downdraft kiln. And that was done. Other new features were added to the activities of the Lancaster Brick Company. Clarence Horning saw the potential for the sale of outside products such as glazed tile, flue liners, firebrick, and unglazed tile for milkhouses. He developed a substantial volume of sales in these items. As it took some months to get back sufficient labor to attain acceptable production levels of brick, this new line of activity was most welcome. For several months following the end of the war, there was a real problem in obtaining an adequate work force. Fortunately there was a strong nucleus of older, experienced men available, and with strategic usage of this nucleus a great deal was accomplished with a very small group of men.

It was only around the middle of 1948 that the plant was able to resume a normal production capacity.

It was in the late 1940s that the Armstrong Cork Company ceased to be the largest stockholder in the Lancaster Brick Company. W. W. Posey negotiated for and obtained the Armstrong stock, which was divided between the Lancaster Iron Works, Inc., and W. W. Posey personally. This did not end the very cordial relationship between Armstrong and the brick company however. Armstrong continued to be a very valuable customer for the brick company. Mr. Boettcher had much to do with that, and Lancaster Brick was still the most convenient source of brick, plus having the advantage of using the Fontaine-body trucks which could maneuver in the tight confines of the Armstrong plants.

In examining the minutes of the company's board meeting in March of 1948 one can see a slight change in the names of directors. They were W. W. Posey, Clarence B. Horning, Herman A. Wohlsen, Edward A. Dryer, James K. Martin and Harry A. Bevis. Mr. Dryer was an engineer at Armstrong Cork Co. James K. Martin was the son of James P. Martin, who had died in 1941. Mr. Martin had also succeeded his father as head of the Brick Machinery Division of the Lancaster Iron Works.

There had been a few changes through the early 1940s also in the position of treasurer. Earl Hopton, of Armstrong Cork, served for several years. Then Arthur Campbell, of Lancaster Iron Works, Inc., held that position for a few more years. After Mr. Campbell, most succeeding treasurers of the Lancaster Brick Company were also either the treasurer or controller of the Lancaster Iron Works, later to become Posey Iron Works, Inc. The one exception was a brief period when John H. Stauffer, president of Herr & Co., served in that capacity. Following Mr. Stauffer, there were William H. Sweet, Robert Flinchbaugh, and Albert W. Seitz.

After World War II there was a decided change in the marketing of all brick. Transportation was becoming much more sophisticated. The distance brick could be hauled, either by rail or by truck, increased dramatically. Lancaster became a market for brick from New Jersey, Ohio, and even from the Carolinas. This made the market in the local area much more competitive. And Glen Gery Brick Company expanded substantially, acquiring existing plants in Ephrata and York, and by building some new plants in the Reading area. They also had plants in Middletown and Harrisburg.

These developments made it necessary for Lancaster Brick Company to seek new markets in new territories. Dealers and distributors were already actively representing the brick company in Philadelphia, which was a good architectural market. The O. W. Ketcham Company, of Philadelphia, had been representing Lancaster Brick almost since its origin. After the war they increased their staff and sent a good volume of business to Lancaster Brick. Then came the Young Brick Co., of Germantown, who got into housing development work in a big way, and moved a lot of the cheaper, lower-grade brick which were destined for houses to be painted. New markets then developed in Buffalo, Rochester, New York City, Hartford, Boston, Detroit, and Chicago. Most of those brick were shipped by rail. But, to Philadelphia and other locations within 100 miles or so, shipment was on tractor trailers. Some went on contract haulers, and the company eventually acquired two tractors and trailers of its own.

In March 1948 Lancaster Brick Company agreed to lease ten acres of land to the Peoples Broadcasting Co. Frank Altdoerffer was the principal owner, and that company built transmitter towers on the land. This piece of ground was between the plant and School Lane Hills. Some of it had been partially excavated for clay earlier, and all of it was quite low and somewhat marshy. The acreage involved was out of circulation as far as the brickmaking process was concerned.

Building construction was very active in the late '40s and early '50s, and the Lancaster Brick Company shared in that activity. Investment in commercial and industrial growth was setting records. Lancaster County was booming with new industries, new schools, and new buildings of all sorts, particularly residential. But this was a two-edged sword. Lancaster became a desirable market for many outside brick producers also, which served to keep prices and profits at a modest level. It was around that era that the Lancaster Brick Company fell slightly behind the curve in modernization of its plant. Many competitors were already building tunnel kilns and installing much more labor-saving equipment which enabled them to reduce their costs of manufacturing. The tunnel kiln is the type in which the brick are set on a kiln car and go through the dryer and then the kiln in one continuous process. Not only is labor saved, but fuel is used much more efficiently than in a periodic kiln. The kiln is zoned off in heat sections that gradually attain final temperatures. The cars bearing the brick move through these zones. Fuel saving is achieved in that it requires much less fuel to maintain the higher temperatures than is required to heat up and cool the other type kiln on a repetitive basis. For the most part the earlier tunnel kilns were only used for wire-cut, extruded brick, as they are more easily set before drying than the molded type.

But it wasn't so much the lack of tunnel kilns that was holding back progress at the brick company as it was the lack of downdraft kiln capacity. There were only three of these beehives, and they could only be turned over as they were filled, fired, and emptied. This meant that too much of the plant's production was going into the old scove kilns, which yielded too many inferior quality brick. And the market for that type was severely limited, considering the construction methods in play at that time.

One of the greatest deterrents to modernization was always the life expectancy of the clay supply. Periodically over the history of the company questions appear from the board to the manager about "how long will the clay last." The answer was always necessarily vague because nobody really knew. This goes back to the days when the first Roy Horning requested geological surveys of the property and was denied. So the mining just went on from day to day, the shovel operator probing here and there, one day finding he could dig 15 feet deep; the next, five feet. And there were some board members who never really expected the brick company to make much money making and selling brick, but they had the idea that the land itself would be appreciating dramatically owing to the surburban growth of Greater Lancaster. These men were not eager to invest large sums of money on plant improvement, arguing that there was no point in it since the plant had a limited supply of clay.

There was another angle militating against large capital expenditures, and that had to do with the plant's location. When the writer was a child and accompanied his father to the brickyard from time to time, the plant seemed to be way out in the country. But as the suburbs started closing in, new problems were arising, such as smoke and dust which started straining relations with the neighbors. So a sort if laissez-faire policy was adopted. Since Clarence Horning was beginning to experience bad health in the early '50s, he probably was content to "go with the flow." As has been mentioned, Clarence Horning was an extremely adept businessman. He made the most of the situation, and, feeling that not a lot could be done with the plant he would emphasize the brokerage aspect of the business. He did an excellent job of selling tile, firebrick and related products. He also developed some new markets for the soft "salmon" brick with foundries, which found they could use them to build molds for large castings. One very good customer Clarence cultivated was the Kutztown Foundry. He even sold them on the idea of using "green" brick (dried but unfired). This type could be sculpted and used for the large marine castings that Kutztown made.

Clarence Horning died in August 1953, and the company was left without a manager. Bruce Horning was still at the plant, and, with the help of Harold Rittenhouse, took over temporarily until a new manager could be appointed.

Roy A. Horning II was at that time employed in the claims department of the United States Fidelity and Guaranty Insurance Company at their Harrisburg branch. Bruce first approached Roy with the idea of replacing his father Clarence at the brick company. He said that he'd already talked with W. W. Posey, the company's president, about the idea and Mr. Posey was all for it. So Roy agreed to meet with Mr. Posey and the board of directors for an interview and general discussion.

Without going into all the details, Roy did accept a proposition to become manager of the brick company. Bruce had told Roy that he'd already met with the board and pointed out a number of things that should be done to make the plant a viable brick producer, and said the board seemed to be willing to support most of the suggestions. As Roy was still green as grass at running a brick plant, this sounded like very positive encouragement.

One of Bruce's first ideas was that the company should purchase another shovel. At that time, the mining was being done with a Unit shovel, powered by gasoline. Bruce's ideas was that if a second shovel could be put to use, the two shovels could be strategically positioned in different parts of the property, and that blending the materials would make for a more consistent product, with more uniform color and shrinkage characteristics. When Bruce and Roy went to W. W. Posey with the idea, he approved. So it was done and the results were rewarding.

But it was soon recognized that this new development created some new problems. When the plant was operating with one shovel, and the material was going directly into the primary crusher, there was no need for mixing. But, with the clay coming from two sources the full benefits could not be had if the two varieties of clay were not blended at the earliest opportunity. It became necessary to acquire a rubber-tired front-end loader to be used for blending the clays as they were fed into the crusher. Then, of course, there were weather problems, and so a pole building was erected to insure an allweather operation when it rained or snowed. This also provided cover for the stock pile of material.

When all these things were accomplished there was a great improvement in the quality of the finished brick. But there still remained the problem of insufficient production capacity of first-quality brick because of the lack of downdraft kiln space, necessitating the continuance of firing the overflow production in the old scove kilns, and this, of course, continued creating too many unsalable or very low-priced brick. It was decided that a new beehive kiln should be built. When that was completed it was apparent that more of the same would be needed if the company was to be competitive. Over the span of the next twenty years, two more were built. Each kiln built after the fourth was slightly larger in diameter and capacity.

One reason it was decided to construct larger capacity kilns was that experimentation with Robinson Tubeaxial fans on the smokestacks showed that the induced draft, under accurate control, could produce a more even burn, even with larger batches per burn. These draft fans were installed at all the kilns with very satisfactory results. These fans permitted the saving of at least one full day of firing for each kiln. They also permitted faster cooling of the kilns, so that the brick could be removed faster, making room for more new production.

The Lancaster Brick Company almost went out of business in March of 1957 because of a disastrous fire which wiped out the entire main manufacturing facilities. The building which housed those facilities was frame, and it was totally destroyed along with most of its contents.

The question arose at an emergency board meeting shortly after the fire as to whether it would be worthwhile to rebuild, or to take the insurance settlement, sell the land, and liquidate the corporation. There were some very convincing arguments by some board members that the latter alternative was better. Roy Horning II, who was then on that board, attempted to take a neutral posture in the discussion, largely because of his brief experience as a brick person, and also because of the stature in community business and industry of the other members. He'd been there only about $3^{1}/_{2}$ years. But W. W. Posey, the company's president and major stockholder, was all for rebuilding. He felt that the land value would surely appreciate in time, and that none of the shareholders really needed the money from an immediate liquidation. And that was that.

It was decided to rebuild and, wherever possible, to modernize the operation. Clearly this process would take quite a long time, if indeed all the necessary equipment could be found. And this was not going to be easy. James K. Martin was quoting about six months to build a brick machine, and that would have been an extremely long time to wait for the machine that was the key to the whole operation. Roy Horning began a search for machinery and equipment, mostly of the used variety. Martin Autobrik Machines were not easily available, but Roy remembered seeing one that was not in service during a visit to the McAvoy Vitrified Brick Company, of Phoenixville, Pa. He called Jack McAvoy, who was a personal friend, and asked if Jack would be willing to sell that old machine. McAvoy Brick Co. had never made a softmud brick during their existence, but had bought the Martin machine during the depression from a Philadelphia plant that went out of business, thinking that sometime they might make that type brick to supplement their regular production of extruded brick. It was somewhat fortunate that the machine McAvoy had was a twin sister of the machine Lancaster Brick Co. had lost in the fire.

Jack McAvoy was a bit reluctant to let the machine go, probably for sentimental reasons, but finally agreed to sell it to Lancaster.

This was a good start. Pugmills, roll crushers, conveyors, etc., were not difficult to find, and they were obtained in short order. Herman Wohlsen directed the construction of the necessary buildings. And Bruce Horning guided the activities, working with Herman and his foreman on the job.

The timing of the fire could not have been worse. Normally the prime sales season for a brick plant in the northeastern part of the country is from early spring to late fall. It became immediately obvious that the company would lose out on much of that vital period of potentially profitability. The urgency of resuming normal operation was clearly defined.

Around mid-July the plant was ready to resume some production, and within another few weeks was back to some semblance of normal production. Most of the key people had been kept on during the reconstruction period, but some had been laid off and were difficult to retrieve.

Fortunately the need for manpower was not quite as great as it had been in the early 1950s because of some automation features which had been implemented about a year or so prior to the fire. At that time, the plant was modernized to the extent of the installation of a pallet car loading system which lent itself to drying the brick on cars which went through a series of tunnel dryers which were heated by water heat from cooling kilns. This was done by constructing ducts within each kiln which fed heat to the dryers by means of a huge blower fan, furnished by Champion Blower and Forge Co. An elaborate system of underground tunnels and flues was built to convey heat to the dryers from the appropriate cooling kiln.

This method of drying was a tremendous improvement over the old pipe rack system. Not only was it not necessary to generate steam in the boiler, which required a great deal of coal, but, along with the fuel savings, there was considerably less effluent from the heavy smoke created in firing the boilers. Additionally, there was considerably less labor in getting the new brick in and out of the dryer. The heat was "waste heat." For anyone who never saw the inside of a beehive brick kiln in the final days of its firing, it would be difficult to conceive of the volume of heat generated from a hot kiln. Normally, three to four days' production could be dried from one cooling kiln. The larger diameter kilns, containing more brick, could be counted on for more waste heat than the smaller ones. Also, a bit later on, the larger kilns were much more adaptable to forktruck setting and packaging, although those aspects had never even been considered when the decision was made to build larger kilns. It is always nice to find windfall benefits regardless of planning.

There were many improvements made to the plant during the 1960s and 1970s. There were also new problems. When the fire devastation was repaired, and more improvements made in the packaging and delivery system, the plant was probably at the most efficient level of its existence. The one big drawback of the whole operation was that the plant never attained the production levels originally forecast by James P. Martin. Mr. Martin had predicted in 1920 that the plant would be making 60,000 brick per day. The writer has researched the archives, and it seems that it averaged only about half that production. The highest production achieved during Roy Horning II's management was around 40,000 per day, and that was not consistent, owing to the lack of kiln space. Of course Mr. Martin's projections were based upon using the old scove kilns exclusively. But even in the heyday of the scoves, very few days produced more than 35,000. The key to profitability in making and selling brick is the ratio of thousands of brick per man day. And, with the arrival on the scene in the industry of high-tech automation, of sophisticated tunnel kiln firing, and other labor and fuel saving techniques, which seemed out of reach for a small plant, eventually surrounded by urban growth, the only thing left to do for the Lancaster Brick Company was to specialize in authentic-appearing colonialstyled brick. There was some substantial success for a number of years along that line.

It became obvious, even to an experienced brick man such as Roy Horning II in 1953, that just plain red brick had very limited appeal in the market. Other plants were producing rose tones, off-whites, and varieties of pastel shades which seemed to be in demand in the home building market. By experimenting with new kinds of molding sand, a number of new colors and shades were found possible, and most of those new items met with favor with the trade, and with prospective home builders.

One other innovation was the production of simulated hand-crafted brick. This effect was achieved by running the mud a bit stiffer, and reducing the pressure in the forming process. This produced a cruder looking brick. There were creases and other antique-looking characteristics, which along with the rose or off-white colors yielded a most pleasing effect. These items became so much in demand that it was impossible to keep up with the demand. Suddenly the plant was in the position of making too many different items. The past partially determined what product should be made. Much business came from matching older projects, such as additions to schools, etc. Though the demand was increasing for the newer items, and these were bringing a higher selling price, it was still essential to manufacture the older items which had been the staple for most of the company's existence.

There was cause for alarm in 1960 among the plant's employees when W. W. Posey died. Mr. Posey had been the company president since the founding of the company. Everyone knew him to be the principal cause for the plant to still be operating, through a war, a disastrous fire, and pressures from some shareholders to terminate the operation and reap the rewards of a lucrative real estate sale.

But the company was most fortunate in inheriting the grandson of Mr. Posey, Walter W. Posey II, as its new corporate leader. Walt had many of the characteristics of his grandfather. He demonstrated shrewd common sense, and also brought some slightly more modern approaches into the equation. It became apparent from the start of his presidency that Walt understood that if the Lancaster Brick Company was to survive it would have to make a successful conversion from a "common" brick plant into a face brick operation. He realized that the market had shifted from demand for ordinary red brick to one for new colors and styles which appealed both to the architectural market and the home building industry. Walt fully backed Roy Horning in trying to achieve that goal.

The next 15 years or so of the plant's operations were fairly good. The new products were moving well and the market expanded. Shipping became more adaptable to long-distance hauling. There were still limitations on production because of the lack of sufficient kiln space. But one factor became more and more critical, and that was the lack of raw material—clay—on the property of the company. Experiments were made with other materials, principally shale. A source of soft shale was located near Lititz, but this brought new problems. First, the distance from the plant was roughly 25 miles round trip. This drastically increased the cost of manufacture. Also, the roll crushers were just right for processing clay, were not adequate for reducing shale to the desired state. Various methods of crushing were investigated. Finally, after much investigation and experimentation, it was decided to install a hammermill in a closed circuit screening system. This was the setup in place until the end of the plant's existence.

The last few years of the plant's operation were rather unpleasant. The costs were getting out of hand. The cost of the shale purchases, with expensive transportation costs included, was pretty well absorbed. The big factor of cost increase was in the huge increments in the price of natural gas which were brought on by the shortage of Mideast oil. As the major costs of making brick are labor and fuel, this crisis pretty well determined the destiny of the Lancaster Brick Company. It would have been useless to consider going back to coal. To convert back to that would have been of prohibitive cost, not to mention the environmental problems that would have been created. Because the company had already been struggling competitively with modern plants which had considerably lower manufacturing costs, it was becoming a real challenge just to break even.

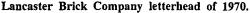
It was fortunate that Walt Posey, recognizing the difficulties, and engaged in trying to find a buyer for the property, made a solid contact with Franklin and Marshall College. The college people, however, were interested only in the original 55 acres that were contiguous to their Baker Campus. It was Walt's idea, and the board concurred, that the other parcel, on the west of the Little Conestoga Creek, referred to as the Starr Farm, should be disposed of at the same approximate time, making for a neater liquidation of the corporation. Toward the end of 1980, a buyer for the Starr Farm was found. The Lancaster Malleable Castings Company decided to buy that land, and the whole deal was consummated.

In the 60 years of operation, through some very trying times and also some pleasant ones too, there was a long list of personalities involved in the corporate structure, most of whom have been named someplace in this narrative. It might be appropriate to name some of the board members during the latter years. The writer had a very warm feeling toward all of them. William Sweet, Robert Flinchbaugh, Albert Seitz, Robert Breneman (another grandson of W. W. Posey), Edward Dryer, John B. Rengier, Esq. (nephew of Charles G. Baker, Esq.), James Wohlsen (son of Herman Wohlsen), and John H. Stauffer (president of Herr & Co.) all served and provided solid support for the good of the company.

As a very young lad and as a young man, the writer came to know many men who worked in the plant. Back in the '30s there were men such as Arthur Barley, Harry Kissinger, Bob Saylor, John Rittenhouse, Dan Sowers, Charles Evans, John Hunsdorffer, Foster Adams, and Richard Johnson. These are all names that come to mind.

During the writer's management years, names such as Harry B. Witmer, Frank Glass, Nick Fusco, Edwin Kunkle, Howard Ross, Erza Smeltz, Charles





Shaub, Guy Neaves, Norman Eberly, John Kern, Leon Williams, Evortha Jones, and Charles Stauffer are some the key people who made the plant operate.

But perhaps the feature of the company's operation for which it is impossible to find a peer was the superb delivery service the company offered. The company was blessed with some of the very best brick truckdrivers that ever worked. In the earliest days, Parke Erb was the driver. He pioneered the usage of the Fontaine delivery service, and he demonstrated a skill unequalled. Later, and even into the writer's tenure, there was a driver named George Gordon, who combined his delivery skills with a winning job-site personality. And there are simply not sufficient words of praise for the driver who was the main local delivery man during most of the writer's management years. That man was, and is, John R. Ross. John was not just a brick truckdriver. He was a salesman. He was a problem solver. And more than a few builders or mason contractors have told the writer over the years that the skillful placement of brick packs on job sites saved them thousands of dollars in handling costs. At last report, John was still delivering brick for the Drohan Brick & Supply Co., of Mount Joy, Pa.

Though he was mentioned earlier along with a group of key employees, Harry Witmer deserves special emphasis. Harry passed away several years ago. Along with Harold Rittenhouse, Harry Witmer was among the most dedicated and hard working of them all. He was an ingenious man who could make do with less than ideal equipment. A lay person couldn't possibly appreciate the extent of wear and tear experienced with clay working machinery. The abrasion of the material and the heavy pressures exerted necessitated constant attention, replacement and repair. Harry learned these things under the tutelage of Bruce Horning, and he learned them well. The job he had as manufacturing and maintenance superintendent could not have been filled better by anyone.

The company ceased manufacturing brick late in 1979. The realities of uncontrollable fuel price spirals; the excessive cost of obtaining raw materials; the environmental concerns which resulted from the urban growth closing in on the site; and the lack of corporate will to invest in the relocation and building of a more high-tech plant were the causative factors leading to the demise of the company. And, as the country was in an economic slump which appeared to be worsening, the atmosphere for any of the remedial measures was poor indeed.

Surely there will be some readers of this narrative who will share a slight feeling of nostalgia with the writer at the thoughts brought on with regard to the "Old Brick Yard." Many men who spent their youth on the west side of Lancaster during the 1930s, '40s, and '50s, availed themselves of the brickyard as a weekend playground, or dipped into the old swimming hole at the creek. The wonders of adventure, running through the abandoned clay pits, riding on the old clay car railroad, and playing cowboys and Indians in the vast weeded areas evoke some memories which produce an involuntary smile on the writer's face, and cause him to unconsciously reach to pull burrs from his corduroy knickers.

Appendix

Brick Manufacturers in Lancaster City

Compiled by John W. W. Loose

1843

Jacob Bundle	West King Street near Charlotte Street
Michael Hartley	West King Street near Charlotte Street
Emanuel Kautz	Manor Street
George Kautz	Manor Street
Jacob Kautz	Water Street near West Walnut Street
Michael Lutz	Manor Street
Michael Shay	Manor Street

1850

		Raw M	laterials					
Manufacturer Clay		Wood		Employees		Production		
Location	Tons	Value	Cords	Value	Number	Wages	Bricks	Value
Jacob Bundle Southwest Ward	1,500	\$ 200	150	\$ 525	12	\$ 288*	500M ⁶	\$ 2,700
Carson and Kautz Southwest Ward	9,000	1,200	1,000	3,250	15	1,700 °	3,000M	16,500
Hartley and Lorentz Southwest Ward	2,3 87	382	350	1,170	16	320		6,450
George Kautz Southwest Ward	1,600	192	240	900	12	312	-	6,450
Jacob Shirk Northeast Ward	1,800	400	270	877	24	546	900M	4,725

• For 6 months • M= Thousand

1866-1867

George Coonley	89 Manor Street
Henry Gantz	65 Manor Street
John Kahl	Mulberry above Walnut Street
William Kahl	Lemon above Charlotte Street
Andrew Shay	26 Manor Street
Peter Ziegler	109 Manor Street

1868-1869

George Coonley	89 Manor Street
E. Eberman	Fulton and Plum Streets
Henry Gantz	65 Manor Street
John Kahl	80 North Mulberry Street
William Kahl	West Lemon above Charlotte Street
Adam Pontz	67 Manor Street
William Shay &	85 Manor Street
William Shay, Jr.	

1875-1876

F. W. Coonley	North Charlotte Street near railroad
Eberman and Atlee	North Duke and Lititz Pike
Casper Forrest	Manor Street near Fairview Avenue
Henry Gantz	Manor Street
William Kahl	West Lemon and Charlotte Streets
William Lorentz	Manor Street near Faiview Avenue
Adam Pontz	766 East Chestnut Street
James Prangley	Manor Street near Fairview Avenue
George Shay	701 Manor Street
Ziegler and Yudith	Manor Street near Fairview Avenue

1877-1878

F. W. Coonley	Charlotte Street near railroad
George Coonley	Manor and Laurel Streets
William Kahl and Son	North Mary and West James Streets
William Lorentz	Manor Street near Fairview Avenue
Adam Pontz	768 East Chestnut Street
James Prangley	Manor Street near Fairview Avenue
A. W. Russell	Manor Street near Fairview Avenue
Emanuel Shay	Fulton and Shippen Streets
Wise Bros.	Manor Street near South Pearl Street
Yudith and Ziegler	Manor and Laurel Streets

								Producti	on
	Capital	# E	mployees	N	Vages	Fuel	Brick	ks	
Manufacturer	Invested	Men	Children*	Total	Daily	Cost	Common	Pressed	Value
Christian Gitlich	\$ 9,000	7	2 \$	2,175	\$ 1.15 \$	§ 1,170	750M°	100M ^c	\$ 4,462
William Kahl & Sor	n 10,000	9	3	2,932	1.10	1,56 1	1,000M	80M	5,940
William Lawrence	11,000	24	4	6,250	1.15	3,330	2,075M	225M	12,075
Adam Pontz & Bro.	5,000	12	3	3,518	1.10	1,875	1,200M	100M	6,822
David Pontz	4,000	7	1	2,050	1.15	1,094	750M	50M	4,200
Jacob Pontz & Bro.	8,000	18	4	5,087	1.10	2,691	1,765M	115M	9,870
Wise & Bro.	3,500	8	2	2,510	1.15	1,433	900M	100M	5,250
Peter Ziegler	3,000	8	3	2,400	1.10	1,300	896M	64M	5,040

^a Under age 16 ^b Average daily wage ^c M = Thousand

Frederick W. Coonley	North Charlotte Street
Christian Gitlich	North Queen Street near Liberty Street
[Gillich]	
Griel & Co.	Lemon and Pine Streets
Kahl & Martin	Charlotte Street near James Street
William Lorentz	524 Manor Street
[Lawrence]	
David Pontz	703 Manor Street
Pontz & Bro.	Charlotte Street at Harrisburg Avenue
Christian Wise & Bro.	Manor Street near Fairview Avenue

Christian Gillich	Liberty and Prince Streets
Griel & Co.	Lemon and Pine Streets
William Kahl	Mary and James Streets
William Lawrence	825 Manor Street
Henry Martin	Charlotte and James Streets
A. Pontz & Bro.	Grofftown Road near Broad Street
David Pontz	708 Manor Street
Jacob Pontz	351 James Street
Christian Wise & Bro.	844 Manor Street
Peter Ziegler	723 Manor Street

1888

Griel & Co.LenWilliam KahlMarHenry Martin & Co.542Jacob PontzChaJames Prangley853Christian Wise & Bro.MarPeter Ziegler829

Lemon and Pine Streets Mary and James Streets 542 North Christian Street Charlotte and James Streets 853 Manor Street Manor Street near Fairview Avenue 829 Manor Street

1896

Henry Bomberger	202 Pearl Street
H. M. Griel & Co.	Lemon and Pine Streets
Adam Pontz	Chestnut and Broad Streets
James Prangley	405 South Water Street
Christian Wise & Bro.	922 St. Joseph Street

1911

Bomberger Brick Yard	202 Pearl Street
Adam Pontz	Ranck Mill and Grofftown Roads
Christian Wise & Bro.	Manor and Prospect Streets

1919

Frederick PontzRanck Mill and Grofftown RoadsJacob Pontz513 North Charlotte StreetChristian Wise & Bro.Manor and Prospect Streets

Sources

United States Industrial Census for 1850 and 1880. Lancaster City Directories for the other years.