TALL CLOCKS

When recently there came into my possession a tall or "grandfather's" clock which has been in my family for generations — maybe from the time it was made — my curiosity about its maker was aroused. In the base of the case was a loose sheet of paper with the following written upon it in the hand of my father "Jacob Godschalk, great, great uncle whose family came over in 1699 and had a deed from Penn—per Miss Godschalk." (By this he meant the information came from Miss Godschalk, late of the Posey Patch.) The name plate on the brass dial read Jacob Godschalk, Towamencin, but this and the above note told me little. My continuing curiosity sent me to the Lancaster Library where I found Wallace Nutting's "Clock Book" and Eckhardt's "Pennsylvania Clocks and Clockmakers."

The former told me little that I did not already know but the latter had the following entry — "Godschalk, Jacob. Towamencin Twp., Montgomery County and Philadelphia. — A famous pre-Revolutionary clockmaker, contemporary of David Rittenhouse, a native of Towamencin Twp. (then in Phila. County but now Montgomery). His earlier clocks bear the title "Jacob Godschalk, Towamencin." In the late 1760's Jacob Godschalk moved from Towamencin to the city of Philadelphia. The Phila. Tax lists of 1769 list him as a resident of Mulberry Ward, East Part. His shop was on Arch St. between 2nd and 3rd. He is mentioned as a clockmaker in the 1774 tax list and as a watchmaker in 1780. After coming to Philadelphia he marked some of his clocks "Jacob Godshalk" dropping the German "sch." Jacob Godschalk married Elizabeth Owen in December 1770. She was probably a widow with a son Griffeth, since in April 1773 Griffeth Owen, who later was a famous clockmaker himself, was apprenticed to Jacob Godschalk. The apprenticeship ended in 1780. Jacob Godschalk paid taxes in Philadelphia for the last time in 1781 and evidently died soon after. He was a member of the Fishing Company of Fort St. Davids and a lieutenant in the Revolutionary War."

Having obtained the information I sought I could not put the books away but enjoyed going over the fine pictures of old clocks and reading their history. The more I read the more interested I became in some of the highlights of my browsing in these and other books dealing with tall clocks.

Soon after the Dark Ages many attempts to build mechanical clocks were made. These finally culminated in clocks with a Verge Escapement and Foliot weights—just who invented this is not known but it was used in a clock built by de Vick in 1634. He was a German who built the clock for Charles V of France.

What is a clock? It is an instrument for measuring time. Actually, the water clock and hourglass did not **measure** time -- they merely indicated its passage. Time could not be **measured** until clocks could be given a periodic or intermittent movement. We are all familiar with the ticking of a clock or watch which brings to our ears the sound of what the mechanism is actually doing — ticking off time.

The ticking is the sound of the escapement which breaks the movement of the train of the clock into intervals — and in early clocks its rate was regulated by a foliot which was a sort of governor -- though an inaccurate one.

The so-called crown escapement and foliot were used until about 1660.

In 1581 Galileo made a discovery which was to revolutionize clockmaking — but though he issued an essay on its application to clocks neither he nor anyone else did anything about it for nearly one century. At the age of seventeen he noticed that a lamp in the cathedral swung in an arc at the same rate no matter how many degrees the swing was. A short swing was slow -- a long one faster — the elapsed time was always the same. He, and others after him, used a pendulum to measure eclipses and other astronomical occurrences, but they were maintained in motion by hand and counted by eye.

In 1656 a Dutch scientist and clockmaker by the name of Christian Huyghens published his important work "Horologium Oscillatorum" in which he outlined the use of a pendulum to regulate a clock and in 1657 he built the first clock of that type. An Englishman by the name of Robert Hooke disputed Huyghens' originality but whatever the case may be, he comes off second best, because he surely was not the first to apply it.

Indeed, a Dutch family named Fromanteel, who had been making clocks in England for some years, sent one son to Holland to work with Huyghens for a while, and upon his return, they introduced the first pendulum clocks in England.

Hooke, though not granted priority for the pendulum, has been recognized as the inventor of the anchor escapement which made pendulum clocks more accurate.[1] Though the "dead beat" escapement of Graham came along some years later many clocks continued to be made with the anchor type (This is especially true of American tall clocks).

It was soon discovered that the longer the pendulum and the smaller its arc the more accurately the clock would run. It was also found that weight driven clocks ran more regularly than those using springs — for as the spring ran down its force was reduced, but the force of gravity continued evenly as long as the weight could fall.

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[1] Others credit Wm. Clement c 1671

This led to the development of the long case or tall clock. (Heavy weights for time and striking do not lend themselves to bracket mounting — and the cases kept out dirt.) The first British tall clock was made about 1659 and the Dutch made some about that period too. There were many variations and at first they had 8 inch dials with short pendulums. Soon, however, the 39 inch pendulum was adopted along with the use of 10 and 11 inch dials. Some of the movements were thirty hour but most were 8 day. Indeed a few clocks were built with movements which ran for a month. Moon dials and other features were added, and the cases became more elaborate. Some were finished fine woods, others lacquered or japanned.

Of course, this was the period when the American colonies were being settled. England exported a few clocks to the colonies, but, what is more, sent clockmakers as well. There was a clockmaker in Boston in 1673, in Philadelphia before 1690, and in New York by 1698. Germany and Switzerland also contributed clockmakers — especially to Pennsylvania.

The oldest American Tall clock extant is supposed to be one made by Abel Cottey of Philadelphia in 1707.[2] It is sure that others were made as early as 1680, however.

The early American clockmaker was a craftsman who worked alone or with but an apprentice or two. Hammer, drill, file, and sand for casting made up his simple tools. The work was tedious and painstaking. The blank wheels and plates were cast by him from metal he obtained where he could — many advertised for old brass or only would sell to those who could furnish this material. In some cases they even alloyed their own formulas of copper and zinc and occasionally tin. As the castings were soft they had to be beaten or "planished" with light hammer strokes for days to harden them.

When the brass was hard enough, it was filed smooth and polished to the required thickness. Later brass castings could be purchased — some coming from England and Europe — others being made in the colonies.

The blank gears had to be cut and filed by hand, and these pieces in many old clocks still bear the marks which the clockmaker used to guide his handwork.

Because of the handwork involved most clocks before the Revolution were made on order. Wooden movements were probably first made by German settlers in Pennsylvania who had learned this art in Germany and Switzerland. They were largely a post-Revolutionary development brought on by the scarcity of metal. The New Englanders quickly adopted this idea, and many such 30 hour clocks were made in the 1790's and the early years of the 19th century. There are even a few clocks with wooden 8 day movements around. Gideon Roberts, who originally lived in the Wyoming Valley of Pennsylvania, became the first clockmaker of Bristol, Conn. He produced very many small clocks with wooden movements, and others following his example did likewise. The mass production of such clocks in New England restricted the market for the more expensive tall clocks and, after 1830, when the Yankees started to make their parts with sheet brass which was fashioned by machine, they flooded the country and caused the production of tall clocks to dwindle rapidly.

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[2] Eckhardt makes claim for clock of Samuel Bispham of Philadelphia c 1695.

Jacob Gorgas' wheel-cutting engine being examined by Earl T. Strickler, F. B. H. I., secretary and editor of the National Association of Watch and Clock Collectors, Inc. Mr. Strickler and his father founded the Columbia Museum of Horological Antiques.

Courtesy, Bulletin of the N.A.W.C.C.

Actually there were two periods in the production of Tall Clocks — the pre-Revolutionary and post-Revolutionary. Almost none were made during the war for their makers turned to manufacturing arms or entered the service — and anyway no one had money or materials.

Most of the clocks made during the earlier period had brass dials and before 1740 most of these were square with molded or cast spandrels at the corners. After 1740 many had the arch at the top of the dial or contained moon movements at this place. Post-Revolutionary clocks have painted or enameled dials, almost all the better ones with moon movements.

The early cases were quite plain but after 1740 they became more elaborate and many excellent cabinet makers turned their hand to their production. Among the best were the Bachmans of Lampeter and Danner of Lancaster.

Most tall clocks were post-Revolutionary and the years from 1800-1830 saw the majority of them built. After 1830, as previously mentioned, they were driven from the market by Connecticut mantel and bracket clocks which were mass produced by the mechanical genius of these Yankees. Some tall clocks, however, were still being built up to the time of the Civil War. Indeed, if we are to be accurate, some were being made right in our decade.

The Rev. Harry E. Miller, an E.U.B. minister of Lebanon, who died in 1947, made 394 tall clocks that were sent to all parts of the United States. When he wanted an old tall clock and could not obtain one, he built his own following the old methods. When his avocation became known he was deluged with orders.

Among the better known Pennsylvania clockmakers, most of whom were students, scholars, and scientists, are the following.

Christopher Witt, born in England in 1675, was a physician who had delved into occult and practical astronomy. When he came to Philadelphia he joined Kelpius, the Pietist, in Germantown. His painting of Kelpius, done in 1706, shows a clock in the background. Witt made some shelf clocks and later some very fine tall clocks, a few of which still survive. Witt was an astronomer of great ability, but his main source of income was casting horoscopes for the credulous and he was known by the Germans as a "Hexmeister."

Christopher Sauer, born in Germany in 1693, came to Germantown in 1724. Two years later he moved to Lancaster County. Here his wife fell under the influence of the Seventh Day Baptists of the Cloisters and joined the order. Disturbed by this, Sauer returned to Germantown and joined Witt from whom he learned clockmaking. For some years this was his principal occupation but later he became a printer and published a German newspaper. He is credited with proficiency as a farmer, apothecary, botanist, clock and watchmaker, bookbinder, optician, and papermaker. He is known to have drawn wire and made other metal objects. In 1743 he printed the Bible in German. He died in 1758.

Although Benjamin Franklin has not been considered a clockmaker he did design an unusual three wheel clock. It had but a single hand and an unusual dial. Models which have been built worked very satisfactorily.

Among other famous Pennsylvanians who built clocks were Henry Vought, first coiner of the United States Mint; Joseph Elliott, and his son Andrew, who was Surveyor General of the United States; Isaiah Lukens, town clockmaker and member of the Philosophical Society and Franklin Institute: Jacob Custer, who also designed lighthouses; Joseph Saxton, who worked with the United States Coast Survey; and Matthias Baldwin, who founded the famous locomotive works.

From this group there stands out one man — David Rittenhouse, who built the most elaborate tall clocks ever constructed. David Rittenhouse was the great grandson of the first bishop of the Mennonite Church in America, William Rittenhouse, and the grandson of Claus or Nicholas, the second bishop. He was born in 1732 in Germantown, but his father soon moved to a farm at Norriton about 20 miles away.

Tall clock owned by Dr. J. H. Esbenshade. Clock made by Christian Forrer (1737-1783) of Lampeter. Case by Bachman of Strasburg.

Photograph by the author

At the age of 12 David inherited some tools and mathematical books from an uncle. His interest aroused, he turned to clockmaking and was instructed in this craft by his uncle, John Gorgas, the ancestor of clockmakers, statesmen and physicians, At the age of 17, he was accepted in his neighborhood as the maker of "accurate clocks." In 1751 Thomas Barton came to Norriton as schoolteacher. Barton, who had been trained at Trinity College, stimulated Rittenhouse in his studies — and later married David's sister. In 1770 Rittenhouse moved to Philadelphia where his scientific knowledge soon brought him to the fore. In 1771 he became secretary of the American Philosophical Society and later he succeeded Franklin as its president. His main source of income continued to be clockmaking. He lived on the southeast corner of 7th and Arch Streets and on the northeast corner built a brick observatory. He died on January 26, 1796.

Besides clocks Rittenhouse built two orreries or planetariums; one for Princeton and one for the University of Pennsylvania. Both are highly prized and carefully maintained.

THE DESCRIPTIONS OF TWO RITTENHOUSE CLOCKS

A clock owned by the Drexel Institute of Philadelphia.

"The case is a superb example of 18th century Philadelphia cabinet work 9 feet high, 2 feet wide and 15 inches deep. Its mechanism includes a musical attachment with 16 sets of chimes. An accurate planetarium is placed upon the face above the dial plate. The flight of time is recorded in seconds, minutes, hours and days, and the positions of the moon and stars are likewise indicated.

"Joseph Potts, the man for whom the clock was originally made, was a colonial forge owner and a man of wealth and consequence — but at the same time shrewd, frugal, and of simple tastes. He decided that this clock was too elaborate and expensive. Rittenhouse thereupon compromised by building Potts a 'half clock,' the only wall clock he is known to have made."

The Pennsylvania Hospital Clock.

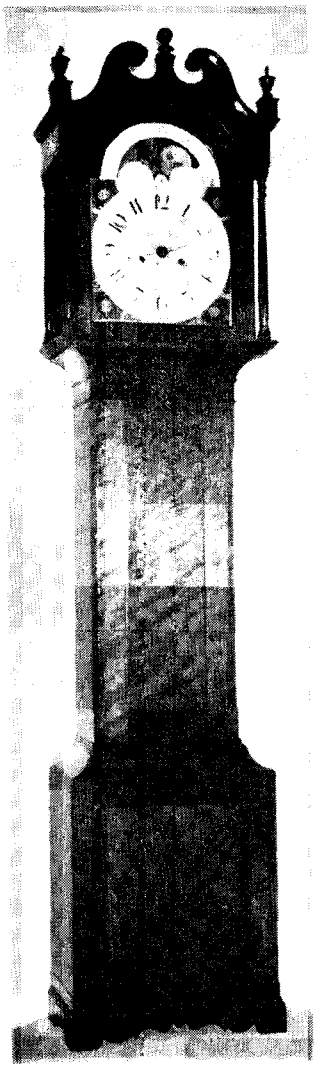
The Rittenhouse clock in the Pennsylvania Hospital is almost as elaborate. We know that it was built after 1781 as its planetarium shows the planet Uranus which was not discovered until that year when it was first noted by Frederick William Herschel. (Is it from him that the name Herschel for certain storms was obtained?)

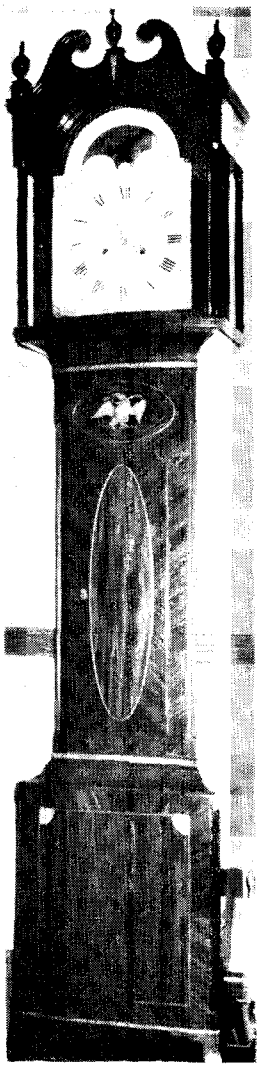
Another Rittenhouse clock which is now in York has a planetarium in the front panel beneath the works. It is owned by Joseph Kendig, antique dealer of New Market Street, who will not sell it for less than $7,500.

LANCASTER COUNTY FAMILIES WHO MADE CLOCKS

Perhaps the most interesting are the Gorgases. They came to this country in 1688 on the same ship which brought the Rittenhouses. These families settled next to each other in Germantown. One of the Gorgas sons, John, married Sophia, daughter of old Wm. Rittenhouse. The fifth son of this union was Jacob who was taught clockmaking by his father who also instructed his nephew, David Rittenhouse, in this art. Jacob later moved to Ephrata where he made clocks, acquired property, farmed, married and raised a family.

(Refer to D. F. Magee, Esq., Grandfather's Clocks, LCHS Papers, Vol XLIII, No. 5).





(Left) Clock by Christian Hall of Lititz who worked between the early 1790's and 1830. Owned by James R. Johnson of Lititz. (Right) Clock by Jacob Eby of Manheim, son of Christian Eby and brother of George Eby. Mid-19th century. This swell front mahogany case is inlaid with maple. Owned by Mrs. W. Scott Bushong of Rohrerstown. A similar Eby clock is in the Fort Dearborn Museum.

Photograph by the author

He was closely associated with the Brethren of the Cloisters but never joined them as he differed on their beliefs on celibacy. He maintained correspondence with David Rittenhouse about clocks and one can easily see how his work changed over the years.

He made his own castings and plates as well as the cases for his clocks. His early work is simple and his later work plain but beautiful. A brother and two sons worked with him and, at times, independently.

Born in Germantown in 1728, he died at Ephrata in 1798. His wife died six years later. Both are buried in the cemetery at the Cloisters.

Christine, his wife, had borne him three sons and a daughter. From this line has sprung many successful business men, a general of the Confederate Army who was later an educator, and the famous physician, General William Crawford Gorgas, Surgeon General of the United States Army, who, by defeating Yellow Fever, made the building of the Panama Canal possible.

Thomas Burrows, born in Ireland, came to Delaware in 1784 and moved to Strasburg in 1787. Educated for the Episcopalian ministry, but never ordained, he settled into "mechanical pursuits" and among other things built some clocks. In 1810 he returned to Ireland to get an inheritance but returned to Strasburg in 1822. His wife, Ann, gave birth to 8 children among them was Thomas H. Burrows, the father of the Pennsylvania Public School System.

Martin Shreiner probably made more clocks than any other Lancaster clockmaker. Born in 1769 he started in business for himself in 1790. He continued until 1830 when his sons, Martin and Philip, took over the business. They continued only six or seven years because of "Yankee" competition. All three of the Shreiners were also known as manufacturers of fire engines and in their later years this was their principal occupation. Old Martin made much money and bought much land. He laid out the Shreiner cemetery in 1836 and there, in 1866, he was laid to rest. His descendants are even now in our midst and all one has to do is mention such names as Cochran, Sprecher or Mueller to call them to mind.

There are many other families in the clock business we might trace, the Esterlies, the Forrers, the Ebys, the Ebermans, etc. (By the way who was George Eberman? There is no record of him but his #6 clock is running in Rohrerstown.)

In conclusion there are a few things I want to point out. First — a well-made Tall Clock was and is an instrument of great accuracy. The thirty-nine inch pendulum swings at intervals of one second (minute adjustments can be made to compensate for minor inaccuracies) so that the basic mathematics of these clocks is relatively simple. There is in England, running today, a tall clock which has traveled this whole wide world over. Built by John Shelton for the Royal Society in 1760, in 1761 it was used for observations of the transit of Venus at St. Helena and later at the Cape of Good Hope. It returned to London in 1762, and in 1764 it went to Barbados to check Harrison's #4 chronometer. In 1765 Mason and Dixon obtained the use of it to measure a degree of longitude and a degree of latitude in this country. It returned to London after a shipwreck in 1767. 1768 saw the clock in Tahiti where it was used in observing another transit of Venus.

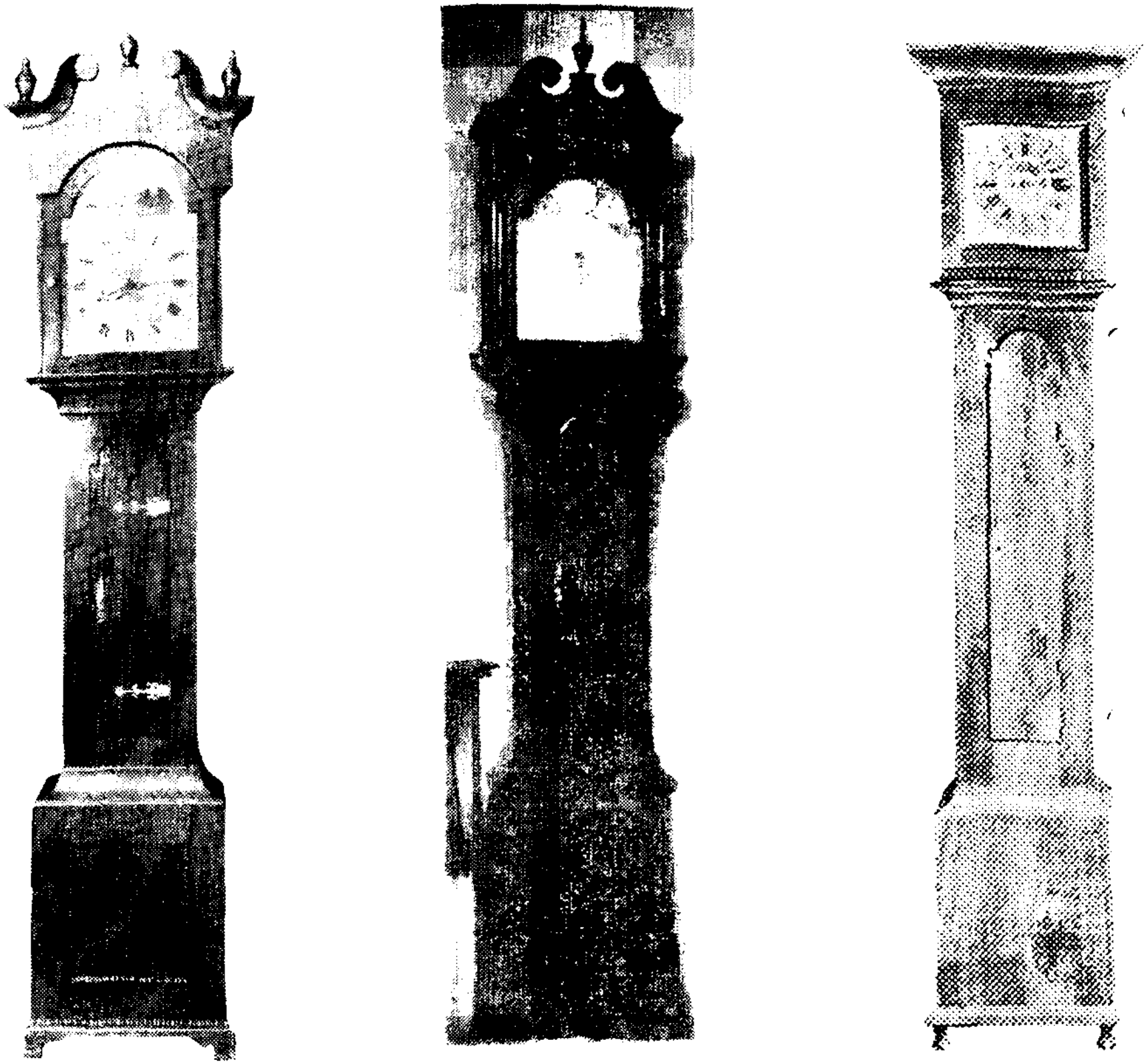
In 1774 it was transported to the top of Mt. Schillion where studies on the density of the earth were being carried out. Finally, in 1819, the clock accompanied Lt. W. E. Parry on his search for the Northwest Passage.

Locally, Theodore Schwalm has an interesting and I feel, valuable clock. It was made here in Lancaster by Godfreid M. Zahm in about 1879. It was built for the Lancaster Watch Co. and used by its successors, the Keystone Standard Watch Co. and the Hamilton Watch Co. to time their products until 1932 when an elaborate German timing apparatus was obtained. This fine example of the clockmaker's art is running today in Ted Schwalm's office and is regularly and lovingly checked by a retired employee of Hamilton.

Now, of course, not all tall clocks are as accurate as the two mentioned above. From the literature and other sources I have assembled a list of more than 140 individuals connected with the clockmaking industry in Lancaster County alone. It stands to reason that there was a great deal of variation in the quality of work done. As noted before, most of the Lancaster clocks of the tall variety — as elsewhere in the United States — were made after the Revolution. Their value, therefore, rests largely on the accuracy of the clock and the fineness of the cabinet work of the case. Pre-Revolutionary clocks may be judged likewise except that on the market their age seems to add to their basic value. The reputation of their maker, too, plays a part. For instance a very simple clock of David Rittenhouse would command at least $2,000.00, while one of his like the Drexel clock could bring in most of the gold from Fort Knox. The average Lancaster clock — in good shape — could bring $200, while those of the Forrers, Shreiners, Hoffs, Gorgases, Gunkles, and Ebermans — especially if they had Bachman or Danner cases — would bring considerably more.

When bidding on a clock at a sale one thing must be kept in mind — if there is a member of the family who wants the clock the sky will be the limit and the clock will surely go for far more than its true value. Since starting this paper, I've been surprised at how many of these clocks, good, bad and indifferent, are around Lancaster. They are the pride and joy of their owners whether they be the Historical Society, the North Museum, collectors, or just plain individuals like myself.

Lancaster, Pennsylvania WILLIAM F. HARTMAN



(Left) Clock by Martin Shreiner, numbered 38. (Center) Clock by Jacob Gorgas marked 1771, owned by Miss Mabel Nolt. Design is similar to David Rittenhouse clock in the Pennsylvania Hospital. (Right) A plain George Hoff clock.

Photographs by author and Earl T. Strickler

CLOCKMAKERS OF LANCASTER CO.

(This list is drawn from the published works of Eckhardt, Dreppard, Palmer and Magee, and other sources. Most were clockmakers, some were dealers and others made or sold parts such as cases, dials, cords, etc.)

Atkinson (Mrs.) Wilmer	Lancaster 1748 (Daughter of Abraham Leroy)
Atlee, John S.	Columbia c 1820 cases
Ayers, Hamilton	New Holland c 1820-40
Bachman, Jacob	Lampeter c 1766-1790 (cases)
Bachman, John	Lampeter c 1790-1840 (cases)
Bachman, John Jr.	Lampeter c 1818-1850 (cases)
Baker, Joseph (?)	Near Brickerville c 1800. Made at least one 8 day wooden clock. (Dr. Grosh of Lititz has it)
Baldwin, Anthony Wayne	Lampeter — B 1783 — D 1867
Baldwin, John C.	Son of above
Benedict, Philip	Lancaster — B 1771-1862 crude unusual clock. Made at least one.
Bishop, Rufus	Mt. Joy c 1850's
Bixler, Christian	Lancaster c 1753-1800
Bowman, Joseph Sr.	New Holland & Elliott's Corner c 1790-1820
Bowman, Joseph (Jr.)	Strasburg B 1794—D 1872
Bowman, John	New Holland, Lampeter c 1809
Boyter, Daniel	Lancaster, Advertised 1805
Bradycamp, Lewis	Lancaster c 1836-60
Brenneisen(er) Samuel	Reading and Adamstown c 1790-1810
Brown, Albert	Columbia c 1850's
Brown, John	Lancaster c 1820-40
Burgi(Burg) Jacob	Lancaster c 1850. May have been 2 men.
Burrows, Thomas	Strasburg c 1787-1810
Carpenter, Anthony	New Holland B 1790—D 1868
Carpenter, A. W.	New Holland c 1830-1860 son of above
Charles, Andrew	Strasburg, Early 19th century. Made cases for the Bowmans.
Cook, Frederick B.	Columbia c 1828-32 York c 1832-42
Cope, John	Lancaster B 1763. Later in West Chester.
Danner, Alexander	Lancaster c 1790-1850 (cases)
Davis, Gabriel	Manheim c 1780
Davis, John	Churchtown and New Holland c 1800-10
Dickey, Thomas	Marietta 1810-20 Middletown c 1820. Harrisburg, after 1820.
Doll, Joseph	Lancaster c 1800-20 Harrisburg after 1821
Dysart, James P.	Lancaster c 1850's

Eby, Christian)	
Eby, George)	Manheim c 1830's - 1860's
Eby, Jacob)	
Erb, John	Conestoga c 1835-1860 (also at Safe Harbor)
Eberman, C. F.	Lancaster c 1850's
Eberman, George	Lancaster #6 No date. One clock so marked belongs to Jacob Brubaker, Rohrerstown.
Eberman, Jacob	Lancaster c 1795-1820
Eberman, John Sr.	Lancaster c 1760-1790
Eberman, John Jr.	Lancaster c 1773-1830. D. Nov. 25, 1846 (M. Z.'s Diary)
Esterlie, John	New Holland c 1810-13 Branch at Maytown (B 1778) later a shop in Lebanon.
Eyster, P.	Lancaster, probably late 18th century
Fabian, H.	Lancaster and Chester c 1853
Faver, Christian	Lampeter—no dates (Maybe should read Forrer)
Fedderman, H. F.	Lancaster c 1850's
Felix, J.	Columbia c 1840
Fiester, John	Lancaster B 1846 (Apostolic clock in Danner collection)
Filber, John	Lancaster and York c 1810-25
Fisher, George	Lampeter Square late 18th early 19th centuries
Fisher, John	Lancaster c 1749-56 later at York
Ford, George	Lancaster c 1811-40 clock at Landis Valley Museum marked Manheim.
Ford, George Jr.	Lancaster c 1825-45 (also a lawyer)
Forrer, Christian)	Lampeter Square—later in York
Forrer, Daniel)	c 1754-77
Fraser, Jacob	New Ephrata (Lincoln) c 1830-1860's
Fraser, Samuel	New Ephrata (Lincoln) c 1880-1940
Fraser, Wm.	Phila. c 1814-21 New Holland c 1821-34 New Ephrata after 1834
Fraser, Wm. Jr.	New Ephrata (Lincoln) c 1855-1900
Gemmill, John	Lancaster, Carlisle and York c 1756-60's
Getz, Peter	Lancaster c 1790-1820's
Gobrecht, David	B. in Lancaster Hanover c 1795-1829
Goletiel, S.	Lancaster c 1850
Gorgas, Benjamin	Ephrata. Worked with his brother Jacob.
Gorgas, Jacob	Ephrata B 1728 - D 1798
Gorgas, Joseph	Ephrata Son of Jacob—later at Myerstown
Gorgas, Solomon	Ephrata B 1764 — D 1838. Son of Jacob.
Groff, Amos	Rawlinsville c 1850's
Groff, Jacob	Lancaster c 1775
Grosh, Peter	Lancaster—artist painted dials c 1830's
Gunkle (Kunkle) John	Cocalico c 1830-40

Hall, Christian	Lititz B 1755 D June 30, 1848 (M.Z.'s Diary) Most work c 1790-1820. Jas. R. Johnson has a nice example of his work.
Hall, Henry Wm.	Lititz B 1809 — D 1868. Son of above.
Heilig, Jacob	Lancaster and Phila. c 1770's—1820's
Heintzelman, Hieronymous	Lampeter & Willow Street c 1750 (some marked H.H.)
Heintzelman, John C.	Manheim c 1786-1804 B 1766 D 1804
Heintzelman, Peter	Various locals c 1806-1816
Heisley, Frederick	Partner of John Hoff C 1794-1802 Frederick, Md. c 1763-93. Harrisburg c 1805. Pittsburgh c 1820-39
Heppleman, John	Manheim c 1790'c—1810's
Herman, John	Lancaster c 1790
Hertz, Jacob	Lancaster and Berks Co.'s c 1780-1810
Hockea, G.	Ephrata c 1760's
Hockers, G.	Ephrata c 1850's
Hoff, George	Lancaster c 1766-1816 D Jan. 22, 1822 (M.Z's Diary)
Hoff, John	Lancaster c 1785-1819
Hoff, Mrs. John	Lancaster D 1822 (continued husband's business)
Hoof, Michael	Lancaster c 1780's-1800 (Palmer says 1708!)
Horgas, Joseph	Myerstown (Lebanon Co.) c 1800-10. Probably should read "Gorgas"
Huber, Christian	Cocalico c 1765-1789 (D 1789)
Hurst, David	Sporting Hill c 1850's
Jameson, Jacob	Columbia c 1818-1823 Later Dayton, O. (D 1830)
Keplinger, Frederick	Lancaster c 1830 cases
Kern, Herman	Mt. Joy c 1850's
Kerner, Nicholas	Marietta c 1850's
Kersey, Robert, Jr.	Lancaster early 19th century
Kinkead, James	Churchtown and Morgantown c 1790's - 1800's
Kline, John	Amity-Lancaster c 1800 Phila 1812-20 Reading 1820-30
Kohl, M.	Columbia c 1840's-1850's
Lansche, John	"Canovaga" Lancaster or York Co. No date.
Leinbach, Elias)	Reamstown
Leinbach, John)	c 1788-1810
Leroy, Abraham	Lancaster c 1750's - 1760's
Mans, John	Columbia c 1800-1820 (same as Maus?)
Martin, Edward F.	Lancaster Contemporary mostly repairs but has built at least one clock and case.
Martin, George	Lancaster c 1780-1830 (cord and cat gut)
Maus, John	Columbia c 1812 (same as Mans?)
Mendenhall, Thomas	Lancaster—advertised in 1775

Meyer, David	Morgantown—No date
Miller, George	Germantown c 1760's - 90's Lancaster after 1797
Millington, Isaac	"The Buck" c 1850's
Montandin, Hannah	Lancaster c 1802-10 (Partner Oliver Roberts)
Montandin, Henry Lewis	Lancaster c 1778-1802 (D 1802)
Ober, Henry	Elizabethtown c 1820
Peters, A. R.	Marietta c 1850's
Pine, David	Strasburg c 1770's
Quest, Henry	Waterford (Marietta) c 1810-20
Quest, Samuel	Maytown c 1810-30
Ransinger, M.	Elizabethtown c 1850's
Roberts, Oliver	Lancaster c 1790-1810 (see Montandin, Hannah)
Rudisill, George	Manheim c 1810-20
Sennert, F. L.	Lititz c 1850's
Shaeffer, Benj.	Elizabethtown c 1850's
Shaffer, Philip	Lancaster c 1788-1802
Shreiner, Henry	Lancaster c 1850's - 1860's
Shreiner, Martin Sr.	Lancaster c 1790-1830 B 1769! — D 1866!)
Shreiner, Martin Jr.)	
Shreiner, Philip)	Sons of Martin Sr. — Martin Jr. lived into the 20th century. Martin Jr. married Marie Zahm, who was born 1813. (See M. Z.'s Diary)
Shreiner, P. & Son	Columbia c 1850
Siur, Adolph	Reamstown N.D. Mrs. R. S. Houser has his #6 known built before 1817.
Skidmore, Thomas	Lancaster c 1767
Smith, John	Lancaster c 1800
Spangler, Rudi	Lancaster & Chester Co.'s 1740's York c 1760's - 1800's
Stauffer, Samuel C.	Manheim c 1760-1820 made some clocks with Christian Eby c 1820-30
Steinman, George	Lancaster cases
Stickler, John	Marietta c 1850's
Stoner Steiner & Steinen, Rudy	Lancaster c 1750-69 (B1720-D1796)
Stoy, Gustavious	Lancaster c 1790-1800's. Lebanon 1810's. Schnitz Creek c 1820's
Streade, Chas.	Lititz c 1850's
Thomas, Isaiah	Lancaster c 1870
Todd, Richard	Strasburg c 1769
Willard, Benj.)	In Lancaster during the Revolution. Whether they
Willard, Simon)	built any clocks while here may be questioned.
Witmer, Abel	Ephrata c 1790's-1820's
Witwer, Isaac	New Holland c 1850's
Wolf, Henry	Marietta c 1850's
Yorkee, Jacob	Manheim c 1790's-1810's
Young, Jacob	Manheim—later Phila c 1796

Zahm, G. M.	Lancaster c 1850's (opened shop in Columbia March 19, 1838; married Susan Hensel March 21, 1839; returned to Lancaster April 18, 1839.
Zahm, G. W.	Lancaster c 1840's-1850's
Zahm, H. L.	Lancaster c 1850's started apprenticeship to G. M. on January 17, 1838
Zahm, E. J.	Lancaster c 1850's apprenticed to G. M. on February 22, 1847. Some Zahm's active into 1890's.
Zahm & Jackson	Lancaster c 1850's

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ABOUT THE AUTHOR

William F. Hartman, M.D., is a native of Lancaster, the son of the late Dr. and Mrs. Edwin M. Hartman. He practices obstetrics and gynecology among us. While his principal interest is his profession, Dr. Hartman's membership in our Society as well as the Pennsylvana German Society, the Pennsylvania German Folklore Society and kindred organizations reveals that he does not limit his activities to medicine. He served about five years on active duty with the U. S. Navy during World War II.

On file in the Society is a fine collection of photographs of Grandfather clocks presented to the Society by the author. Most of these clocks are from our county.