In Genesis we read, “God saw the light, that it was good: and divided the light from darkness. And God called the light Day and the darkness He called Night.” The earth’s rotation on its axis each day is uniform — and accordingly, from the very first, the earth has been man’s basic timekeeper.

The sundial, going back to Bible days, was probably man’s first effort to tell time. Actually, the sundial didn’t measure time but merely indicated it.

To measure time, the clepsydra or water clock was invented in the second century B.C. The clepsydra measured time by the amount of water running out of a hole in the bottom of the water clock.

The sand glass worked on the same principle, using sand instead of water. A type of mechanical clock was introduced as early as 996 A.D. It reached its highest stage of perfection in the 14th century as the foliat balance type clock.

For the application of Galileo’s law of the pendulum, we are indebted to a man from Holland named Christian Huygens. It was he who in 1658 applied the pendulum as a controlling element of the clock. A man named Froomantell introduced the pendulum clock into England around 1670.

The weight and pendulum clock in a tall case, now known as the grandfather’s clock and the Commonwealth of Pennsylvania came into being at the same time. Near the end of the 17th century men were seeking the true principles of science, government, and life itself. William Penn, a member of the Royal Society of London, founded Pennsylvania in 1782, a colony, “which should open its doors to every kindred, tongue and nation: which should transplant from the Old World the best in arts, sciences and culture.”
Penn's Woods, then, became the asylum for dissenters from many religious groups; not only from England but from the continent also. Among those were men from all walks of life from shoemakers to clockmakers.

Soon the colonists preferred their own clocks to imports from England. In 1753 an Isaac Norris of Philadelphia wrote that he recommended that the State House Clock in Philadelphia be made in Philadelphia rather than in England; for, said he, “The English will lose interest in the clock once it is delivered, whereas if a Philadelphia workman did it, he would feel uneasy if he did not exert his utmost skill in its manufacture.”

Early clockmakers were men of considerable standing, such as David Rittenhouse who was to become a great figure in making astronomical instruments. Even the rural clockmakers were treated with respect, ranking just below doctors and preachers.

Who would become clockmakers — the men who today would be engineers in industry. A clockmaker served a long apprenticeship before he set up in business for himself. A skilled clockmaker made only three or four clocks a year. The cabinet maker and the clockmaker collaborated. Raw parts were imported from England. But to turn the raw brass and other metals into the mechanism of a clock was a long, tedious process. The cabinet makers used many fine woods, such as walnut, mahogany and cherry and often used contrasting colored wood as inlays in the clockcase.

After more than two and a half centuries the weight and pendulum clock in a tall case is still considered the best designed mechanical device for accurate timekeeping.

The first tall clock faces were square and made of brass. Later, painted iron dials were imported from England. By 1730 clockmakers began building almanacs into their clocks where the phases of the moon might be ascertained at a glance and predictions made as to whether there would be some moonlight on a future night. The addition of the arched area above the clock face gave local artists a chance to draw the “man in the moon.” The idea of “moons” in the clock face did not originate in Pennsylvania, but the Pennsylvania clockmakers took to the idea and made them popular.

The Pennsylvania German went so far as to call his clock a weather prophet and said, “If the clock with brass works ticks very loud, it is a sign of stormy weather.”

The long, tall, hall or commonly known grandfathers' clocks were a symbol of prosperity in the eighteenth century. They flourished especially in Pennsylvania and Massachusetts but gave way to the cheaper “wag on the wall” and shelf clocks by the 1840's and 1850's.

These long clocks, according to the records of the Fraser clockmakers of Lincoln, could be made for about seventy dollars: $32 to $35 for making the clock; $15 to $20 for making the case; and $11 to $12 for the “works” put up in the rough and purchased from Steinman's Hardware Store in Lancaster, importers of raw clock parts.

Some of the more elaborate clocks must have cost more: for example, an Eby tall clock, made in Manheim and dated 1797, has the price
written in German script on the inside. This eight-day clock, owned by Mr. Walter Zook of Lititz and formerly of Ephrata, cost the original owner twenty-seven pounds, eight shillings.

It was not until the Centennial Exposition of 1876 (Philadelphia) that the collecting of grandfathers’ clocks began. Prior to that they had been neglected and even looked upon by some as junk. Then dealers could pick them up for $10 to $25. It was only after hundreds of these fine clocks left Lancaster County that the people began to realize their value and again haul out their tall clocks and cherish them.

FOUR GENERATIONS OF GORGASES MAKE CLOCKS

The Cocalico Valley furnished its share of famous clockmakers. Palmer in his “Books of American Clocks” lists the Breneisers and Leinbachs of Reamstown; the Frasers of Lincoln; John Gunkle; Benjamin, Jacob, Joseph, and Solomon Gorgas; G. Hackea; G. Hockers; P. Miller; and Abel Witmer, all of Ephrata.

The most famous of the Ephrata clockmakers were the four generations of the Gorgas family. The first one, John, came to America in 1688 on the same ship that brought the Rittenhouses. Both families settled in Germantown and intermarried. (The Rittenhouses were famous clockmakers in Philadelphia and possibly were taught the trade by John Gorgas.)

Jacob Gorgas, the fifth son of John, was born in Germantown in 1728. By 1763 he is living in Ephrata and married to Christina Mack, daughter of the noted preacher, Alexander Mack. In 1767 Jacob Gorgas purchased sixteen acres on the west side of Main Street, the present site of the Ephrata Post Office. Later he moved to what was known as the Ye Village Inn.

According to a paper read at a Lancaster County Historical Society meeting in 1917 and augmented and reread in 1939, the Ye Village Inn was built by Jacob Gorgas in 1777. However, the indentures in the possession of the present owner, Dr. Ira Wagner, indicate that the structure at 301 West Main Street was built by Ludwig Weaver.

The Lancaster Historical Society paper states that Jacob Gorgas used this “commodious house as a place of business and dwelling and that in the front (1917) may yet be seen a square frame-like projection where he placed a clock of his own manufacture.”

Here he remained and made clocks until his death in 1798. He made 150 of them and taught his sons Solomon and Joseph the trade. The Wagners’ indentures bear out the fact that the Ye Village Inn remained in the Gorgas family until it was sold to Jacob Mohler who in turn sold it to a John Bowman.

The third generation of Gorgas clockmakers left Ephrata. Joseph moved to the Elizabethtown area and made clocks until 1816 while Solomon moved to Cumberland County and made clocks there until 1800.

The fourth generation clockmaker, William, moved to Greensburg, Pennsylvania, and made tall clocks there until 1850.
Jacob, the most distinguished clockmaker and his wife, Christina, are buried in the Cloister Cemetery. Jacob Gorgas was the great-grandfather of General William Crawford Gorgas, Surgeon General of the U.S. Army, who by doing away with yellow fever in the Canal Zone made possible the building of the Panama Canal.

The Walter Moyer Collection of books pertaining to the early history of Ephrata and the Cloisters, housed in the library of the Ephrata High School, lists the names of a second generation Gorgas, Sophia Gorgas was a sister at the Cloisters.

In the same collection, Doctor Fahnestock's ledger, covering almost a century records the fact that a Jacob Gorgas paid a doctor bill on February 21, 1822.

Samuel Gorgas and Joseph Gorgas (third generation) were subscribers to the "History of Lancaster County," published in 1844.

According to Mrs. W. C. Frankfort of 229 West Main Street, Ephrata, the Gorgas family were also fine cabinet makers. Mrs. Frankfort has in her possession the bills for furniture the Gorgas cabinet makers made for her mother when she started housekeeping. Examples of the Gorgas craftsmanship can be seen in the walnut bedroom set, the twin tables and parlor chairs in the possession of the Hassler sisters, Mrs. Frankfort, Mrs. Burkholder, and Mrs. O'Brien.

Mr. Richard Shirk of Main Street, Ephrata, and Mrs. Helen Shirk Fassnacht of East Franklin Street are Gorgas descendants, their paternal grandmother having been a Gorgas.

**Historical Society Locates Ten Gorgas Clocks**

To date the Cocalico Valley Historical Society has located ten Gorgas clocks in the local area, together with some interesting data supplied by the present owners.

Mrs. W. C. Frankfort of 229 West Main street is believed to have one of the earliest tall clocks made by the second generation Gorgases. Jacob Gorgas's name appears on the dial of this twenty-four hour clock.

The Gorgas clock now owned by Mr. Walter Zook is numbered "seventeen" which would indicate that it too was one of the earlier Jacob Gorgas clocks. This fine walnut grandfather's clock was given to the late M. Elizabeth Spangler as a graduation gift when she graduated from Ephrata High School in 1908. It is believed that her father bought it for her in Lebanon County.

The William Bruggers of Lincoln Heights Avenue, Ephrata, got their Jacob Gorgas clock from Mr. Brugger's father as a wedding present. Where the late Mr. John B. Brugger bought it, the present owners do not know, but he stipulated that it should always remain in the family.

Robert C. Wenger of South State Street, Ephrata, owns an eight-day Jacob Gorgas clock which he bought in Lancaster. When Walter Zook and he went to pick it up several days later he almost came home without the clock. The owner had had a change of heart and had not deposited the check in the bank. Mr. Wenger's power of persuasion convinced the owner to keep the check and part with the clock. The Gorgas clock owned by Mr. and Mrs. Miles Fry of R. D. #3, Ephrata, has been in and out
of the family and currently is in the family. It originally belonged to the Fry clan but through a daughter’s marriage got into the late George Kemper family of Akron. When it was sold there at public sale, both Mr. Fry’s father and Mrs. Fry’s mother bid on it. Mrs. Fry’s mother, the late Mrs. L. Ruppin, was the highest bidder and got it for $112.

Mrs. Ruppin willed the clock to her daughter, Babette, and now it is back where it belongs. The late Mr. Jacob Fry used to tease his son, Miles, saying, “You married the girl to get the clock back.” When Mrs. Ruppin bought the clock the Ruppins did not know the Frys.

Mr. and Mrs. Lee Brenner of R. D. #3, Ephrata, are the proud owners of three Gorgas clocks. Their Jacob Gorgas clock was purchased at a sale in Lincoln. Their Solomon Gorgas clock was bought from the Musselmans in Bowmansville in 1949. This thirty hour clock is made of poplar wood. Its metal dial is decorated with hand-painted moss roses. Mrs. Brenner prefers their third Gorgas clock, which they purchased from Dr. Cameron Lane of Lititz, who in 1944 bought it from the estate of Horace Lorimer, former editor of the “Saturday Evening Post.” There is an eagle inlaid on the case and the map on the clock dial shows Australia as “New Holland.”

One of the rarest Gorgas Clocks left Ephrata when Mr. David Musselman’s mother, an antique dealer, sold it to the secretary of one of the DuPonts. This brass dial grandfather’s clock, with a moving moon and a nest of bells which plays a tune every fifteen minutes and strikes on the hour and the half hour, was bought in Lititz on a Saturday and sold the very next day to Titus Geesey of Wilmington, Delaware. It is now on exhibition in the Philadelphia Museum of Art.

Perhaps the most unusual Gorgas clock in the Cocalico Valley is the one that has been gathering dust for three generations in the attic of Mr. Harry Stauffer in Farmersville. When Mr. Stauffer was asked why he doesn’t display the heirloom properly, he replied, “The works are missing.” As for the face and the case, they were acquired by his grandfather in an unusual manner. One day a tenant farmer named Richardson who lived close by drove up to the gate of the Jacob Stauffer farm. In the bottom of his spring wagon lay the case and face of a tall clock.

Mr. Richardson asked Jacob Stauffer to make a coffin for his little child from the Gorgas grandfather clock case. Instead of using the case as a coffin, Mr. Stauffer offered to make one from some seasoned walnut wood he had in his cabinet shop. Thus the Richardson infant was buried in a walnut casket which was paid for with a Gorgas tall clock case.

The eighteenth century clockmakers never knew their tall clocks by the name we give them now, namely the grandfather’s clock. A song writer, Henry Clay Work, gave the clock its name in the song entitled “Grandfather’s Clock.” That song, written in 1875, together with the interest in American history initiated by the Centennial Exhibition in Philadelphia in 1876, did much to save the old timepieces from oblivion. At least, so wrote George H. Eckhart in his book titled “Pennsylvania Clocks and Clockmakers.”

In 1878 Mr. Work wrote a song entitled “Grandmother’s Clock.” Surprisingly, a copy of the song accompanied the purchase of the “New York
Family Story Paper.” This clock, not over five feet tall, became popular with the women since it cost less.

By 1830 the New Englanders, principally of Connecticut and Massachusetts, introduced a cheaper clock costing only one fifth of the amount of a tall clock. In succession came a flood of cheaper clocks: the wall clock often known as “wag-on-the-wall” clock, then the shelf clocks in all kinds of shapes and sizes — the pillar and scroll, the banjo, the lyre, the steeple and the marbleized clock. One should probably also include the wall regulator which hung in business offices and classrooms across the nation, reminding “the ten o’clock scholar” he was late for school.

Here we must stop and warn the reader that his cherished timepiece cannot be classified as a collector’s item if it was made since 1850. Though antique dealers may set the date for collectors’ items, we are free to treasure the clocks which have measured off our grief and joy.

**BIBLIOGRAPHY**


**GRANDFATHER’S CLOCK**

Words and music by Henry C. Work

(copyright, 1875)

My grandfather’s clock was too large for the shelf
So it stood ninety years on the floor;
It was taller by half than the old man himself,
Though it weighed not a penny weight more.
It was bought on the morn of the day he was born
And was always his treasure and pride;
But it stopp’d short never to go again
When the old man died.  (chorus)

In watching its pendulum swing to and fro,
Many hours had he spent while a boy;
And in childhood and manhood the clock seemed to know
And to share both his grief and his joy.
For it struck twenty-four when he entered at the door,
With a blooming and beautiful bride;
But it stopp’d short never to go again
When the old man died.  (chorus)

My grandfather said that of those he could hire,
Not a servant so faithful he found;
For it wasted no time, and had but one desire
At the close of each week to be wound.
And it kept in its place not a frown upon its face,
And its hands never hung by its side;
But it stopp’d short never to go again
When the old man died.  (chorus)
It rang an alarm in the dead of the night
An alarm that for years had been dumb:
And we knew that his spirit was pluming for flight
That his hour of departure had come.
Still the clock kept the time, with a soft and muffled chime,
As we silently stood by his side;
But it stopp’d short never to go again
When the old man died.  (chorus)

Ninety years without slumbering
(tick, tock, tick, tock)
His life seconds numbering
(tick, tock, tick, tock)
It stopped short never to go again
When the old man died.

GORGAS FAMILY

1JOHN GORGAS, born in Holland, came to America prior to 1708, progenitor of the family in America; settled in Germantown, and there attended the Mennonite Meeting; married Psyche Rittenhouse, died 1737, of the famous Rittenhouse family in Philadelphia.

Their son:

2JACOB GORGAS, clockmaker, born in Germantown, August 9, 1728, and died in Ephrata, Pennsylvania, March 21, 1798. Served as sergeant in Capt. John Jones’ Company, Col. Peter Grubb’s Battalion, Lancaster County Militia, which was organized August 15, 1776. Married Christina Mack, born March 29, 1734, died October 20, 1804.

Children: Solomon, Joseph, Maria.

3SOLOMON GORGAS was born at Ephrata, September 21, 1804, removed to Cumberland County near White Hall, where he kept the first tavern and store in that section of the country. A barn he erected, still standing in 1934, was marked “Solomon Gorgas 1833.” He married Catharine Fahnestock, born 1774, died 1853.


4WILLIAM RITTENHOUSE GORGAS, born May 8, 1806, died December 7, 1892, at Harrisburg. He was held in high esteem, for “the world is better for his having lived in it,” “he never wronged any man.” He was born on a farm in Lower Allen Township, Cumberland County. From 1836 he was thrice elected a Democratic member of the Legislature; in 1842 elected a member of the State Senate. He was a director of the First National Bank of Mechanicsburg, the Harrisburg National Bank, the Harrisburg Bridge Company, the Harrisburg Market Company, and the Harrisburg City Passenger Railway Company. He removed to Harrisburg in 1877. On March 5, 1840, he married Elizabeth Hummel. They had eight children. (See Egle’s Notes and Queries, 4th series, vol. 1, p. 133.)
Josiah Gorgas, born in Dauphin County, Pennsylvania, July 1, 1818, son of Joseph and Sophia (Atkinson) Gorgas. He was a graduate of West Point in 1841, served in the Mexican War, and was a brigadier general in charge of the ordnance department of the Confederate Army. He was seventh president of the University of Alabama "where he speedily won all hearts," 1878-1879. In 1872 he was vice-chancellor of the University of the South at Sewanee, Tennessee. He was married in Mobile, Alabama, December 29, 1853, to Amelia R., daughter of Governor John Gayle. He died at Tuscaloosa, Alabama, May 13, 1883. There were six children in the family. A son:

William Crawford Gorgas was born near Mobile, Alabama, October 3, 1854, and died in London, England, July 3, 1920, where the funeral was held from St. Paul's Cathedral. He was chief sanitary officer in Havana, Cuba, 1898-1902, where he successfully combatted yellow fever, and in 1904-1913 served in the Panama Canal Zone. In 1914 he was made surgeon general of the United States Army. (See Encyclopaedia Americana.)