

HOROLOGICAL TOUR OF PHILADELPHIA

by James W. Gibbs

(Part One)

Naturally those fortunate members who will be in the City of Brotherly Love, June 19 to 23, 1968, to help celebrate the Silver Anniversary of the founding of our Association will spend most of their time enjoying the planned activities of the Convention. There are always the adventurous who enjoy a little exploring, so for those we will present, in serial form, a very brief horological tour to see some clocks which won't be in the Convention exhibit.

To start Tour One take a taxi to Pennsylvania Hospital at Eighth and Pine Streets, Eighth Street entrance. Historically this is worth a visit, for it is the Nation's First Hospital, having been founded in 1751 by Benjamin Franklin and others. On the other

hand perhaps you are going there to see a David Rittenhouse astronomical musical clock which is well described and documented in George Eckhardt's "Pennsylvania Clocks and Clockmakers."

To save research we offer here a brief story of the clock as provided by the Hospital. "In the main hall of the Pine Street Hospital, under the vast staircase, stands an eight-day high-case clock which attracts the attention of every visitor, and which deserves special mention on account of its historical associations. It was constructed by Mr. David Rittenhouse of Norriton, about 1780, and is of a larger size than usual, requiring winding only 12 times a year. It was deposited in the hos-

SILVER JUBILEE CONVENTION JUNE 19, 20, 21, 22, 23, 1968

PENN-SHERATON HOTEL

1725 JOHN F. KENNEDY BLVD., PHILADELPHIA, PA. 19103

COME!

COME!



pital March 24, 1819, by Miss Sarah Zane. Subsequently, by her will, it was bequeathed to the institution; her death occurred in 1870. The following description is supplied by Mr. J. T. Gropengiesser, who for a long time has had charge of the clock. Some years ago he was called upon to make extensive repairs, on account of an accident caused by the breaking of a cord and the conse-

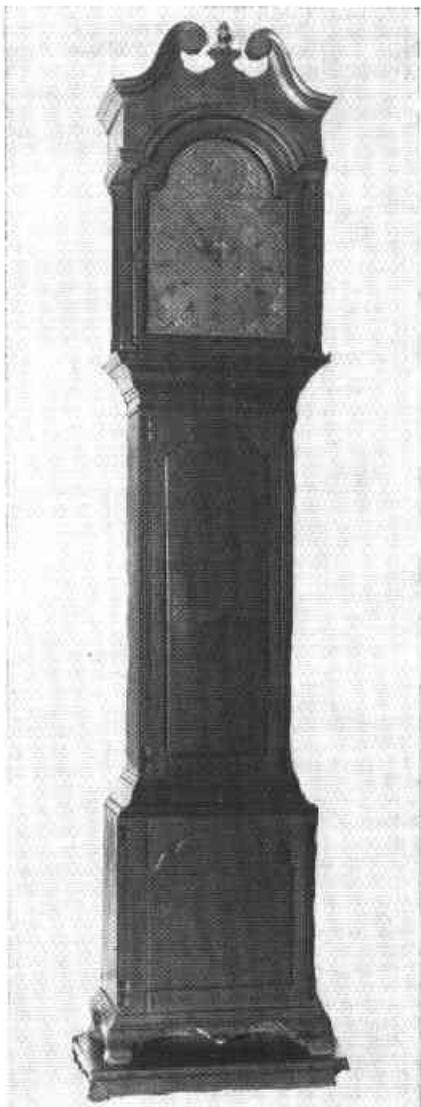
quent falling of the weight upon the mechanism, which then occupied the lower part of the case. He writes as follows:

"The clock is provided with a planetarium, showing the motion around the sun of the heavenly bodies — Uranus, Jupiter, Saturn, Mars, Venus, and the Earth.

It has a zodiac circle telling the daily equation of the sun and the length of the day. It shows the passage of the moon and its equation.

It has two chiming bells, sounding the quarter hours, and ten musical bells playing a tune every hour."

When the clock was put in order by Mr. Gropengiesser he introduced a new musical barrel, playing six different airs, vis. *Old Folks At Home*, *Home Sweet Home*, *Auld Lang Syne*, *Star Spangled Banner*, *The Last Rose of Summer*, and *Then You'll Remember Me*. There is no record telling what airs were formerly played by this instrument. The clock was originally made with a *Cirhell* (circular) or *Graham* escapement, which has no maintaining power, such as now is commonly used in these clocks. It also has a peculiar system of calculating fractional numbers, which early in the present century was abandoned by clock-makers, for a better mode of dividing equal numbers by higher number of cogs in the calculation. The clock has a wooden pendulum, beating seconds. The dial is of metal, engraved, the numbers being in Roman characters. The upper central portion above the dial exhibits the planetarium, on the left hand upper corner of the dial is a small dial giving the tonic position of the moon, the right upper corner shows the sun equation, by a hand indicating the daily differences between the mean and the apparent time. In the left lower corner is an arrangement to control the mechanism for striking; on the right side is a dial indicating the succession of six times. On the inner hour circle of the dial is the moon with a special visage of the position of the same. It also shows the movement of the earth independently of the moon.



PH 1 Rittenhouse Tall Clock

When the musical portion of the clock was renewed by Mr. Gropengiesser, new connections with the planetarium were also introduced. Previously to repairing, it had only been used for several years as a silent timepiece, but since the restoration, the chimes are now regularly heard; the musical airs, however, are generally kept in reserve, in order to obviate annoyance by their constant repetition.

The Hospital clock was made under the personal direction of Rittenhouse and cost at that time considerably more than one thousand dollars, but its intrinsic value is greatly increased by its historical associations with the development of the institution, of which it has been an inmate for the greater part of a century." (History of Pennsylvania Hospital 1751-1895)

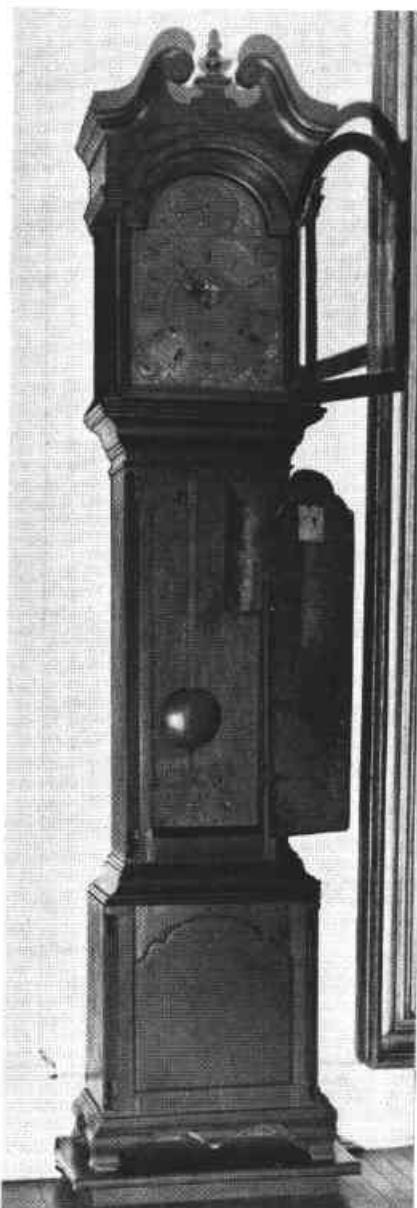
For a foretaste of what you will see glance at photographs PH 1, PH 2 and PH 3.

David Rittenhouse — April 8, 1732 O.S. (1732-1796), a noted colonial astronomer, was born at Paper Mill Run, a tributary of the Wissahickon Creek, in Germantown in a house which is still standing in Fairmount Park. He was the great-grandson of William Rittenhouse (or Wilhelm Rittenhausen (b 1644) or Ruddinghuysen), a Mennonite from Mulheim am Ruhr in Rhenish Prussia. This ancestor came to Germantown in 1688 and erected the first paper mill in the colonies (1690). William Rittenhouse was the first Mennonite minister in the community. In 1703 he was chosen bishop of the first Mennonite church in America.

David Rittenhouse aided in surveying a part of the Mason and Dixon Line; was a member of the Pennsylvania Constitutional Convention (1776); and was first state treasurer (1777-1789), and director of the Mint. He introduced the spider lines in the focal plane of the telescope (1786), and also invented one form of the temperature-compensated pendulum. He became president of the American Philosophical Society in 1791. In general, Rittenhouse was best known for his work in astronomy.

With this initiation, the adventurous may now wander westward on Pine Street (toward larger street numbers) and will soon be in a wonderland of antiques shops.

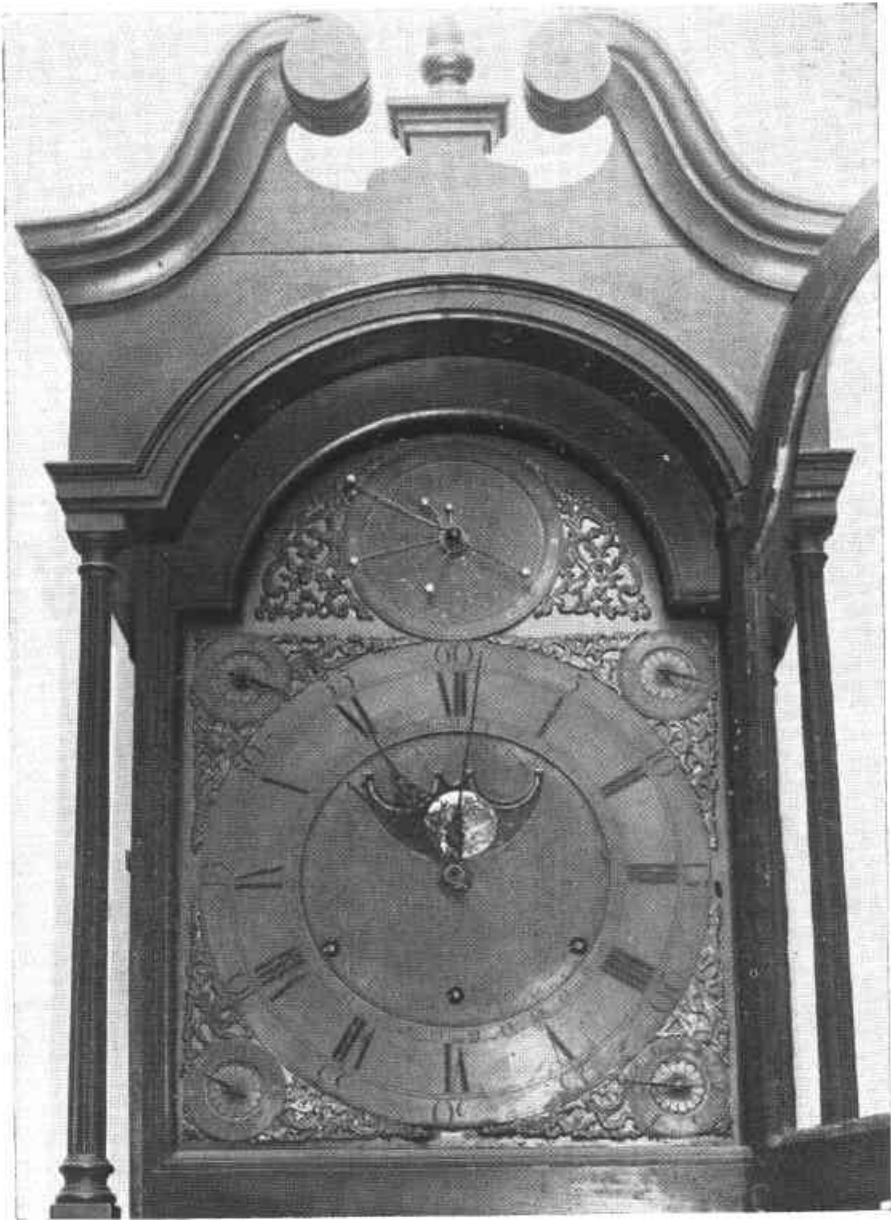
Watch collectors, be not dismayed!



PH 2 Rittenhouse clock with bonnet door and waist door open

This tour is for you, too. Instead of walking west on Pine Street, walk north on Eighth Street to Walnut. On the north side of Walnut for a half block east and west of Eighth, on both sides of Eighth up to Chestnut, and on Sansom (halfway be-

tween Walnut and Chestnut), for a block east and half a block west, you will find watch emporiums galore. Return to Walnut and take a bus to Seventeenth, get off and walk north three blocks to Convention headquarters. (To be continued)



PH 3 Dial of the Rittenhouse Clock