

“Celebrating 170 Years of American (Cincinnati) Astronomy”

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Tucked away at the end of a shy street in a quiet Cincinnati neighborhood, reside two buildings from a different time, telling a story quite their own. Entranced by their beauty, you make your way up the narrow drive, feeling the awesome power of history’s embrace. Getting lost in the gracefulness of tall trees and the grandeur of great houses, your attention turns to the picturesque silver domes. And with this very sight, you know that you’ve come across something truly special- the Cincinnati Observatory.



John Quincy Adams, who had given several speeches regarding his support for astronomy in America, travelled for two weeks in order to lay the cornerstone at the site of the Original Cincinnati Observatory.

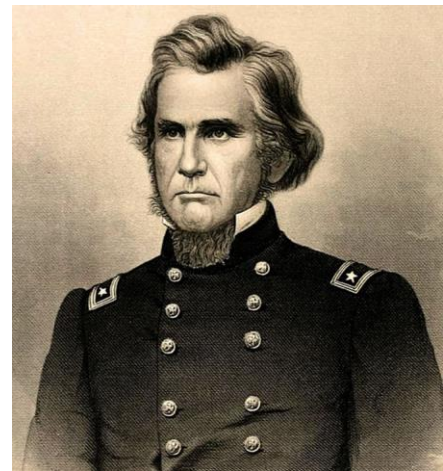
Known as *The Birthplace of American Astronomy*, the Cincinnati Observatory was the first public observatory in the western hemisphere. It houses the oldest public telescope in the United States, which is also believed to be the oldest operating professional telescope in the world.

On April 14, 2015, the Cincinnati Observatory will be celebrating 170 years of astronomy, history and heritage.

The journey of the first national observatory began when John Quincy Adams was appointed as the nation's first Minister to Alexander I, the Czar of Russia, in 1809. The two gentlemen became fast friends. The Czar, being well educated in astronomy, passed this knowledge onto his friend, who developed a passion for astronomy for the rest of his life.

Fuelled by his newfound desire to create the first national observatory, Quincy returned home to fight for his cause. In 1825, he was elected as the sixth President of the United States. During his first address to Congress, the new president challenged them to build an observatory, "On the comparatively small territorial surface of Europe, there are existing upward of one hundred and thirty of these lighthouses of the skies, while throughout the whole American hemisphere, there is not one." Unfortunately, he failed in his attempts and after a one-term administration, Quincy returned to work in the House of Representatives.

While the former President had not been successful, fate dictated that it would be another to whom the Observatory would owe its very existence. Ormsby "Old Stars" MacKnight Mitchel, a graduate of West Point, moved to Cincinnati because it was the fourth largest city in the country and the most important place west of the Atlantic seaboard at the time.



Ormsby MacKnight Mitchel, founder of the Cincinnati Observatory, graduated from West Point in 1829, alongside future starlets like Robert E. Lee. When the Civil War broke out, he joined the Union Army.

After trying his hand at law and becoming a civil engineer, Mitchel became a professor of mathematics at the Cincinnati College. His gift as an orator attracted many to his lectures, eventually causing him to put on a lecture series for the citizens of Cincinnati. He captured his audience's attention and was encouraged by their enthusiasm. He asked why the citizens of Cincinnati could not do something for their country that a former President was unable to do- build the nation's first public observatory.



When the Cincinnati Observatory moved to Mt. Lookout, the original cornerstone was incorporated into the structure of the new building. To this day an unopened time capsule resides within the cornerstone.

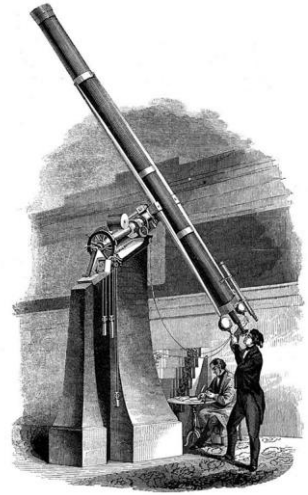
In that moment of 1842, private citizens from the community came together and formed the Cincinnati Astronomical Society, an organization responsible for the founding of a public institution. The members bought shares for \$25 in order to construct an observatory and purchase a telescope. Upon acquiring sufficient funds, Mitchel traveled to Bavaria, where he purchased the hand-built 11" Merz und Mahler telescope.

The original Observatory was built atop Mt. Ida and was dedicated on

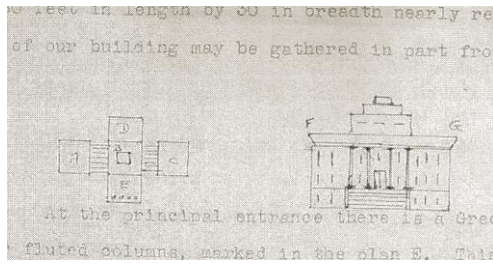
November 9, 1843 by former President John Quincy Adams. In light of all of his support towards

citizen science and American astronomy, it was only befitting that

he was the one to lay the original cornerstone of the building. The city honored his visit by renaming Mt. Ida to Mt. Adams. Quincy later recalled that this event was the most memorable and honorable of achievements in his life.



Mitchel looking through the Merz und Mahler Telescope, which is still used for weekly stargazes open to the public.



Copies of sketches of the Observatory design, which were included in a letter from Mitchel to Adams in 1845.



The Original Cincinnati Observatory located on Mt. Adams.

On April 14, 1845, Ormsby MacKnight Mitchel used the Merz und Mahler telescope for the very first time. Significant research was conducted at the Observatory, including the cataloging of

double stars and the discovery of a feature on Mars' southern pole (the Mountains of Mitchel). Mitchel launched the nation's first astronomical journal, *The Sidereal Messenger*. Outside of these findings, the first director also opened up the Observatory for stargazes.

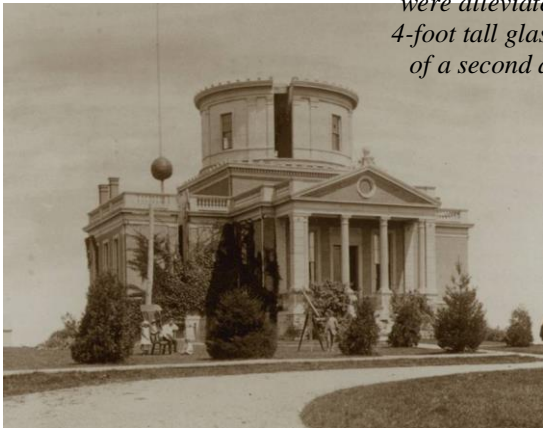
By the 1850s, viewing conditions at the Observatory on Mt. Adams were less than ideal due to the sooty haze produced by soft coal pollution. After the Civil War, the new director, Cleveland Abbe, turned his attention to meteorology.



(Weighing 2,500 pounds, the 11" Merz und Mahler telescope was built in Bavaria and shipped to Cincinnati by 1845. It was manufactured during a time without power tools. Every single nut and bolt fits in a specific and non-interchangeable location on the telescope.)

Abbe began to daily weather, “With weather reports much welfare of man, and benefited.” He Cincinnati Weather the federal his findings, Washington D.C. to National Weather

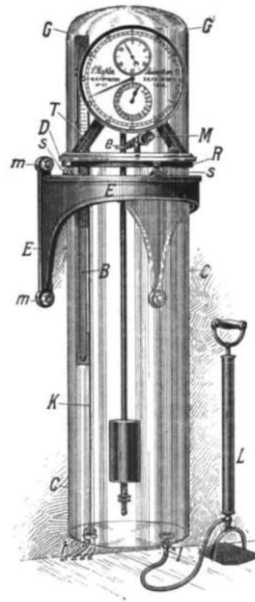
The pollution be a problem on Mt. Cincinnati decided to close the donated the library, telescope and other with the provision be given to the newly Cincinnati (UC) and a



The Cincinnati Observatory, atop Mt. Lookout, was designed by Architect Samuel Hannaford. The cupola rested on cannon balls, allowing it to rotate for telescopic viewing. A metal dome replaced the cupola in 1892. To the left of the building stands the timeball, which told Cincinnati Standard Time. The timeball would drop daily at noon, thus indicating accurate time to the surrounding areas. A telegraph signal would be sent downtown where another timeball would drop simultaneously.

along with the purchase of a 16” Alvan Clark & Sons telescope.

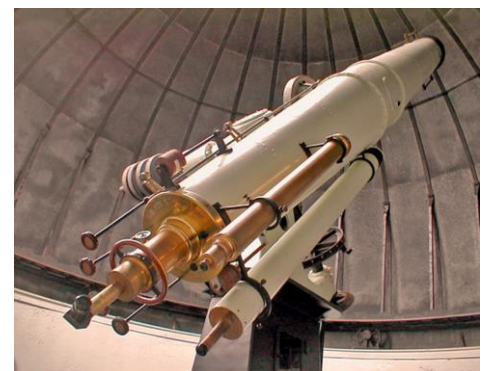
Between 1943 and 1978, internationally acclaimed astronomer Dr. Paul Herget was the Observatory’s director. He quickly realized that telescopic observing was no longer practical in the city and decided



(Above) The Riefler master clock was housed in the basement of the Cincinnati Observatory where thick, insulated doors protected the clock from temperature variations. Air pressure differences were alleviated by a vacuum sealing the clock in a 4-foot tall glass jar. Time was regulated to the 100th of a second and precise time keeping was sold to those who required it.

John Kilgour, a university board member, donated four acres on Mt. Lookout as the site for the new observatory and \$10,000 towards the new infrastructure. The new observatory was designed by architect Samuel Hannaford.

The Cincinnati Observatory established “standard time” for commerce and rail schedules, observed the proper motion of stars and gained worldwide recognition for its calculations, all the while continuing to offer public access to the telescope just as Mitchel had done. In 1904, a second building was added to the campus,



The 16” Alvan Clark & Sons telescope was installed in 1904. Manufactured by the premier telescope makers in the country of the time, it is still the largest refracting telescope in Ohio.

experiment predicting a proper system of could be done for the astronomy also could be published the first Bulletin in 1869. Once government learned of Cleveland headed to form and head the Bureau.

conditions continued to Adams, so the Astronomical Society Observatory. They the Merz und Mahler equipment to the city that these assets would founded University of new observatory would be built. This led to the merger between the Cincinnati Observatory and UC.

to use electric punch-card computers to generate orbit calculations of asteroids. The Cincinnati Observatory was designated the Minor Planet Center for the International Astronomical Union, but the center moved in 1978.

Alas, the beautiful Observatory set idly as a research institution for several decades. Even though both telescopes were restored to optimal working condition in the 1980s, the owners, the University of Cincinnati, explored the possibility of selling the property to real estate developers.



The Mitchell Building was added to the Cincinnati Observatory in 1904. It now houses the Merz und Mahler telescope.

Once more, the community intervened to save the people's observatory. A coalition of neighbors, historians, preservationists and astronomers took action to save a prominent piece of their heritage. They created a nonprofit organization, which would be responsible for preserving the Cincinnati Observatory and its legacy. UC leased the site to the nonprofit in 1991, which still continues to run the daily operations to this very day.

After a \$2.5 million dollar restoration and renewed support from UC, the Cincinnati Observatory was designated as a National Historic Landmark in 1997. While it was no

longer the focus of modern day research, the institution took up an even bolder mission.

Opening up its doors and domes to the public, just as Mitchell did 170 years ago, it became a center of astronomical and historical education. The Cincinnati Observatory has become the place to be in the community, as it serves over 25,000 visitors a year.

Eight generations of Cincinnatians have created meaningful memories as they passed the fluted columns, explored the splendid buildings and looked through the oldest public telescope in the country.

Welcoming you to experience the wonders of the universe and share a piece of national history, the Birthplace of American Astronomy has stood tall and proud, enduring the test of time.

Here's to honoring the traditions, the heritage and the legacy of the Cincinnati Observatory for another 170 years.



The Cincinnati Observatory on Mt. Lookout in 1943.

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The Cincinnati Observatory Archives and Collections

University of Cincinnati Archives and Libraries: Cincinnati Observatory Archives