

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PH0684163
FOR NPS USE ONLY
RECEIVED SEP 12 1978
DATE ENTERED DEC 22 1978

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

AND/OR COMMON

McKim Observatory of DePauw University

2 LOCATION

STREET & NUMBER

Intersection of DePauw Avenue and Highridge Avenue ^{see}

CITY, TOWN

Greencastle

CONGRESSIONAL DISTRICT

Seventh

STATE

Indiana

VICINITY OF

CODE
18

COUNTY
Putnam

CODE
133

3 CLASSIFICATION

CATEGORY

- DISTRICT
- BUILDING(S)
- STRUCTURE
- SITE
- OBJECT

OWNERSHIP

- PUBLIC
- PRIVATE
- BOTH
- PUBLIC ACQUISITION**
- IN PROCESS
- BEING CONSIDERED

STATUS

- OCCUPIED
- UNOCCUPIED
- WORK IN PROGRESS
- ACCESSIBLE**
- YES: RESTRICTED
- YES: UNRESTRICTED
- NO

PRESENT USE

- AGRICULTURE
- MUSEUM
- COMMERCIAL
- PARK
- EDUCATIONAL
- PRIVATE RESIDENCE
- ENTERTAINMENT
- RELIGIOUS
- GOVERNMENT
- SCIENTIFIC
- INDUSTRIAL
- TRANSPORTATION
- MILITARY
- OTHER:

4 OWNER OF PROPERTY

NAME

Board of Trustees of DePauw University ✓

STREET & NUMBER

CITY, TOWN

Greencastle

VICINITY OF

STATE
Indiana 46135

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Office of the Recorder of Putnam County

STREET & NUMBER

Putnam County Courthouse

CITY, TOWN

Greencastle

STATE
Indiana 46135

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

none

DATE

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input checked="" type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The McKim Observatory was built in 1884 for the purposes of astronomical observation and teaching. Its location on a small hill at elevation 262 meters on the northeast edge of Greencastle, Indiana, was chosen after an earlier attempt to create an on-campus observatory failed because of environmental disturbances. The structure has a stone foundation with a crawl space. The walls are made of brick one foot thick, but in 1918 the outside brick surface was stuccoed and it is now painted white. The roof is flat and was originally tin, though it is now covered with rolled roofing. The dome is a new aluminum one manufactured by the Ash Company of Illinois and purchased in the Spring of 1975. It is activated electrically and is eighteen and one half feet in diameter. The original 17-foot-diameter dome was iron and was activated by a hand pull. When the new dome was installed, four courses of brick and mortar were removed and a concrete cap was made to enlarge the rim of the building to accommodate the new dome. There is a balcony around the south and west sides of the dome for outside observation.

In 1890 a four-inch almucantar owned by S. C. Chandler, Jr., son of the inventor of the modern almucantar, was housed in a separate building not far from the Observatory. It was used for very accurate work. Early pictures show it as a small, octagonal, domed building made of wood. It is not known when the almucantar was razed.

The Observatory is an L-shaped, one-story building surmounted by the dome and consists of five rooms: the chronograph, clock, transit, and equatorial rooms and the library. The library forms the north point of the L and the transit room the east point. The chronograph room (also the entry room) is on the corner of the L. The clock room is an octagon-shaped protrusion from the corner of the L, and the equatorial room is directly above it. At the present time only the equatorial room is used, though the library will soon be renovated and used as well.

The equatorial room contains a 9.53 inch clear aperture refracting telescope made by Alvan Clark and Sons of Cambridge, Massachusetts in 1885. At the time Clark was the most famous lens maker in the world, noted for grinding lenses which eliminated chromatic aberrations and color fringes. His grinding technique cannot be duplicated even today. The cast iron equatorial pier mounting of the telescope was done by Warner and Swasey of Cleveland, Ohio, and, since it is supported by a masonry pier resting on a special layer of clay, it provides an unshakable foundation for the telescope. The telescope was transported to Wilmot-Fleming Company of Philadelphia in October of 1970 for refurbishing and was returned in March of 1971.

The transit room has currently nonoperable sliding doors in the ceiling and a brass mercator transit with a sixteen-inch meridian circle manufactured by Fauth and Company of Washington, D. C. The original brass Warner and Swasey Chronograph and the glass slide library are still in the Observatory. The solar and sidereal pendulum clocks made by E. Howard and Company of Boston, Massachusetts, have been moved to the Mathematics Department of DePauw University and are in perfect working order. Both the transit and the clocks were installed at the time the Observatory was built.

Some of the floor joists and the entire floor of the transit room have been replaced because of termite damage and rot. The inside walls are plastered and painted. Work is currently being done to repair damaged plaster and peeling paint. The eleven windows are the common double hung type, while the floors are oak,

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CONTINUATION SHEET

ITEM NUMBER 7 PAGE 2

as is a four-foot high panel along the stairs.

Presently the library and chronograph rooms are heated by electric heaters though originally there was a wood-burning stove in the library, later converted to oil. It has now been removed, though the chimney remains. There is no plumbing of any kind in the building.

Of architectural interest are the curved oak staircase with its three porthole windows, the foot thick brick walls, the carved metal locks on the doors, the octagonal clock room, and the ornate cornices. Of historical interest are the pieces of teaching and research equipment dating back to 1885: the celestial globe and stand, lantern, cameras, star charts, sextant, and a hand-operated device to illustrate solar eclipses.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input checked="" type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input checked="" type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES Built 1884 BUILDER/ARCHITECT Joseph Marshall

STATEMENT OF SIGNIFICANCE

The McKim Observatory of DePauw University is a prime example of a late nineteenth century facility for teaching and research in astronomy. It has been in continuous use since 1885. McKim is distinguished as one of 355 optical observatories throughout the world and one of 107 in the United States listed in the annual American Ephemeris and Nautical Almanac. It is one of only 15 American observatories listed that are equipped with meridian transits. The lens of the telescope was made by Alvan Clark, the quality of whose work was unsurpassed in the nineteenth century. The one-meter lens made by Clark for the Yerkes Observatory in Williams Bay, Wisconsin, is still the largest one ever made and mounted.

In 1884 the Joint Board of Trustees and Visitors of Indiana Asbury University (the first Methodist College in Indiana) considered the building of the Observatory so important to raising the status of the University that it supplemented the \$8000 gift of Robert McKim with \$2000 in order to build the right kind of observatory. Indeed, it signaled the transformation of struggling Indiana Asbury University into the dynamic new DePauw University in January of 1884. In fact, Robert McKim and Washington C. DePauw made their gifts to the University interdependent, thus assuring the strong future and expansion of the University. We have detailed records of McKim Observatory's construction through this precarious period of the University's history and of its use during the ensuing 93 years. It still serves as a teaching facility and, though the nature of astronomical research has changed considerably over the last century, the Clark telescope is still a fine instrument valued not only by historians but by amateur astronomers as well. McKim Observatory is worthy of preservation not only for the record of its past usefulness but for its future promise as well.

Professor John P. D. John, the first Director of the Observatory (1885-1887), and Robert McKim visited nearly every prominent observatory in the United States when they were planning the McKim Observatory. In so doing they were able to design a facility well suited to both teaching and research, avoiding mistakes in design that would have detracted from its usefulness. It is telling of the care involved in the construction of the Observatory that so much interest was taken by both of these men. McKim, according to the daily journal of Joseph Marshall, the architect, was frequently on location checking the progress as well as the quality of the work and materials.

Dr. John became the President of DePauw in 1889, thus expanding his dynamic interest in the educational process to the total educational policy of the University. His inaugural address, titled "DePauw University: Its Opportunity and Its Duty," emphasized the greater freedom based on the increased resources of the modern university. Surely he spoke with the splendid new Observatory in mind as one of DePauw's finest resources.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

1. Irving Frederick Brown, Indiana University-DePauw University: A History, 1914.
2. Wilbur Vincent Brown, "McKim Observatory," The Sidereal Messenger, 4, 1885, p.305-307.
3. George B. Manhart, DePauw Through the Years, The Lakeside Press, Chicago, 1962.
4. William Warren Sweet, Indiana Asbury-DePauw University, 1837-1937, The Abingdon Press, Chicago, 1937.
5. Deborah Jean Warner, Alvan Clark and Sons, Artists in Optics, Smithsonian CON'T

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY less than one
 UTM REFERENCES

A	1,6	51,26,6,0	4,38,82,2,0	B			
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
C				D			

VERBAL BOUNDARY DESCRIPTION

The McKim Observatory is marked as "Observatory" on the accompanying map and is marked by a red circle.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

I, Charlotte Dudley / Administrative Assistant, McKim Observatory

ORGANIZATION

DATE

DePauw University

October 1977

STREET & NUMBER

TELEPHONE

(Mathematics Dept.) 653-9721 ext. 264

CITY OR TOWN

STATE

Greencastle,

Indiana 46135

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

STATE X

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

9/1-78

TITLE Indiana State Historic Preservation Officer

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

DATE 12.23.78

ATTEST Lucy B. Franklin

KEEPER OF THE NATIONAL REGISTER

DATE 12.19.78

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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CONTINUATION SHEET

ITEM NUMBER 8 PAGE 2

Meanwhile, Wilbur Vincent Brown came to DePauw in 1885, beginning his 43-year association with McKim Observatory. He became Director in 1887. In his notebooks we have a reflection of the uses to which the Clark telescope was put during its first half century. His observations were dedicated largely to comet sweeping. He evidently hoped to discover a new comet, though there is no record of his ever having done so. Then, in decreasing order, his observations were nebular, solar, planetary, double-star, and lunar. In addition to the long hours of careful and detailed observations, recording of angles and declinations, and sketching of various formations of stars, W. V. Brown was also using the Observatory for its other designated purpose - the instruction of students in astronomy. During Brown's tenure, both General or Descriptive Astronomy and Practical or Spherical and Instrumental Astronomy were taught, the former emphasizing the use of the telescope for purposes of observation and the latter using all of the Observatory's instruments. With the death of Brown in 1928 a key link with the 19th century was lost and the continuity of research at McKim Observatory was broken.

R. W. Babcock assumed the Directorship in 1928 and was in charge for three seemingly undistinguished years, during which time both Descriptive and Practical Astronomy continued to be taught. Dr. Will Edington began his 25-year tenure as Director of the Observatory in 1930. During this period the Observatory was used for regular astronomy laboratories and for campus and community open houses. The open houses were discontinued when it became apparent that students viewed open house night as an inexpensive date and as an occasion to exclaim in wonder rather than as a serious opportunity to learn skill with the telescope. During the World War II years Nautical Astronomy and Navigation was added to the curriculum.

Charles H. Johnson taught astronomy at DePauw from 1955-1967 and made extensive use of the Observatory. Also during this time an active Astronomy Club was formed in Greencastle, and the weekly meetings were generally held at the Observatory with Dr. Johnson and several employees of the local IBM plant in attendance. Joseph Corbett has regularly offered two courses in astronomy since 1968: Astronomy of the Solar System and Stellar Astronomy.

During the last several years interest in the Observatory has been renewed. The telescope has been refurbished and only recently has been used to view Pluto, a significant accomplishment for an instrument of its size. The dome has been replaced and a regular program of maintenance and repair has been begun. The Observatory and its equipment are presently valued at more than \$150,000, nearly 20 times the original value. Plans are underway to create a small museum in the Observatory containing 19th century teaching equipment and explaining the uses of the equipment. Perhaps some of the early Observatory pictures and documents may be included. McKim Observatory will not only be available for use by serious amateur astronomers, but will also serve as a museum of early astronomy. Thus, just as astronomy has always had an esteemed place in the liberal arts curriculum, so McKim Observatory will be of enduring value as a university building.

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DATE ENTERED DEC 22 1978

CONTINUATION SHEET

ITEM NUMBER 9 PAGE 2

Institution Press, City of Washington, 1968.

6. The American Ephemeris and Nautical Almanac for the Year 1977, U.S. Government Printing Office, Washington, 1975.
7. The DePauw University Archives.



1. McKim Observatory
Greencastle, Indiana SEP 12 1978
David Wallace DEC 22 1978
1977
Mathematics Dept., DePauw University
South elevation, looking north



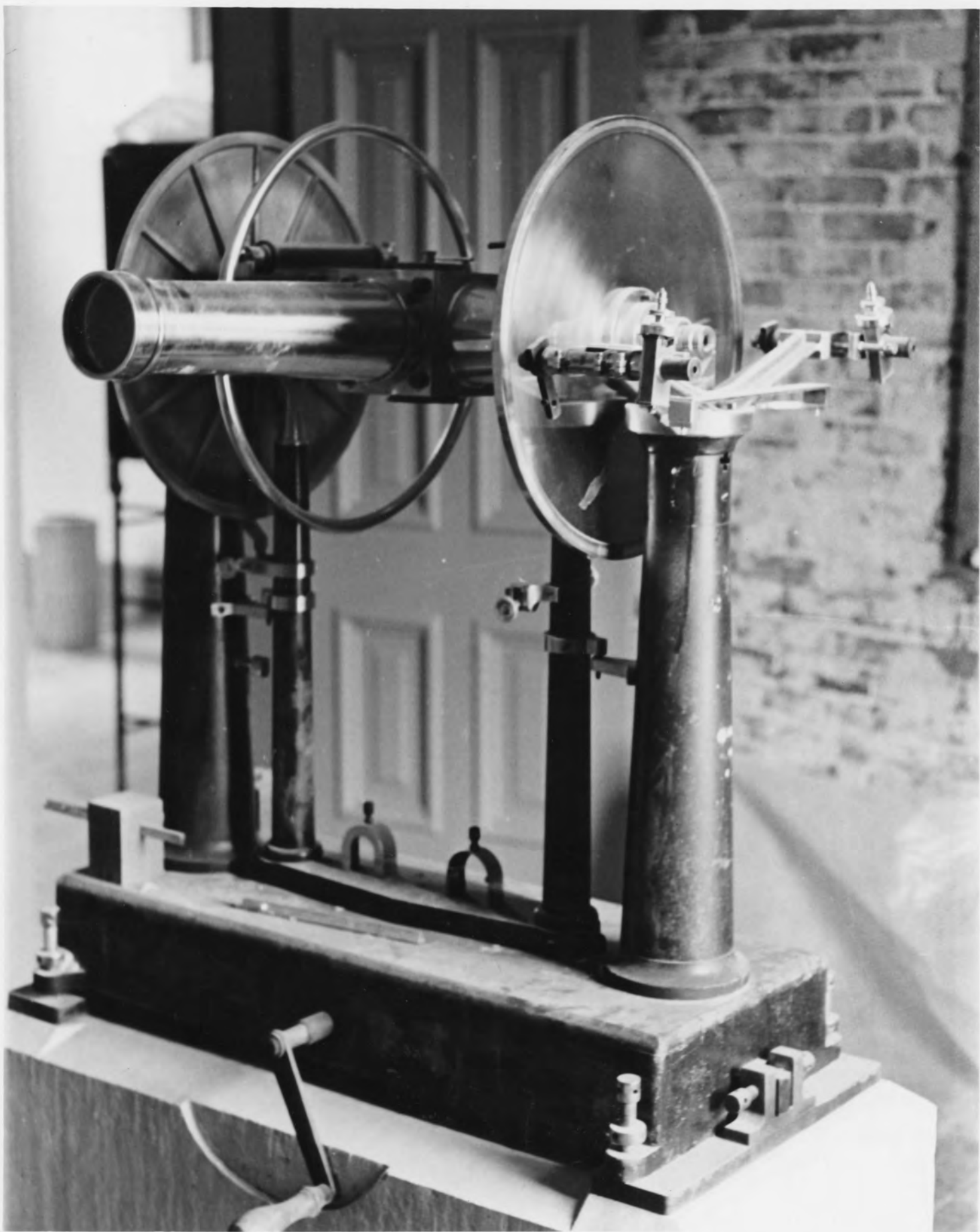
McKIM
OBSERVATORY
1884

SPEED
LIMIT
10
→

2. McKim Observatory
Greencastle, Indiana
David Wallace
1977
Mathematics Dept., DePauw University
West elevation, looking east

SEP 12 1978

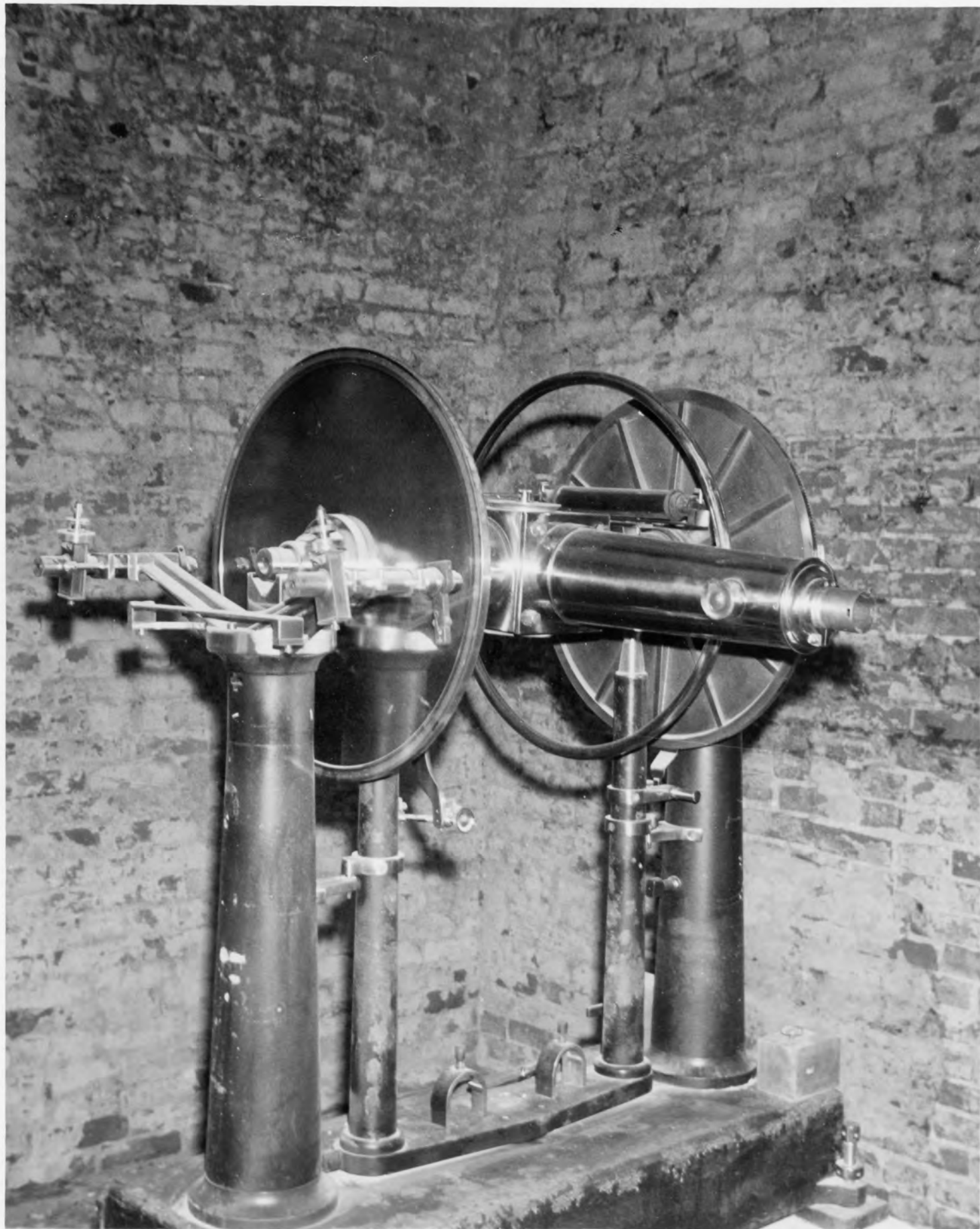
DEC 22 1978



3. McKim Observatory
Greencastle, Indiana
David Wallace
1977
Mathematics Dept. DePauw University
Transit Room showing 1885 brass
mercator transit

SEP 12 1978

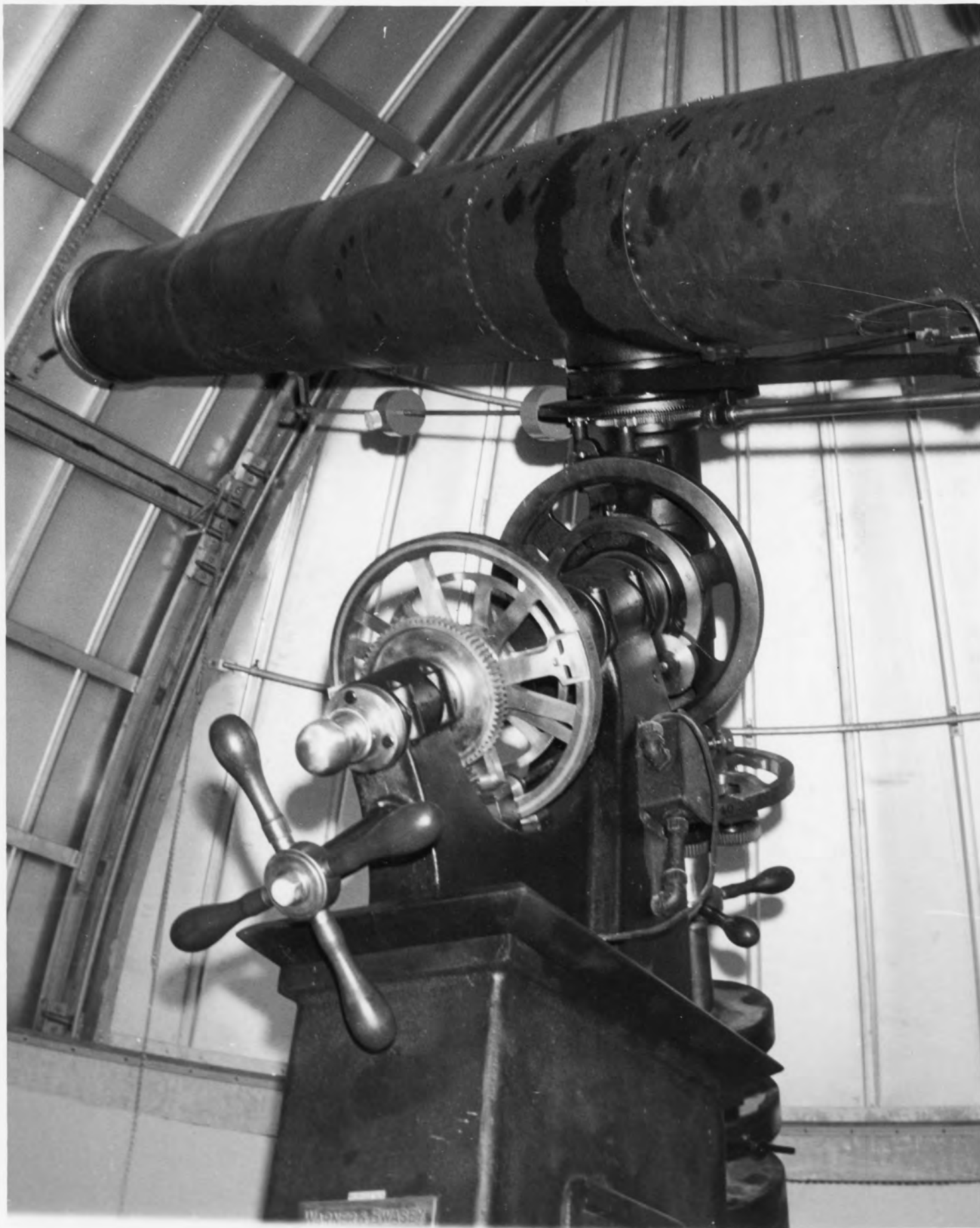
DEC 22 1978



4. McKim Observatory
Greencastle, Indiana
Charlotte Dudley SEP 12 1978
1977
Mathematics Dept., DePauw University
Transit Room showing 1885 brass
mercator transit

DEC 22 1978

4

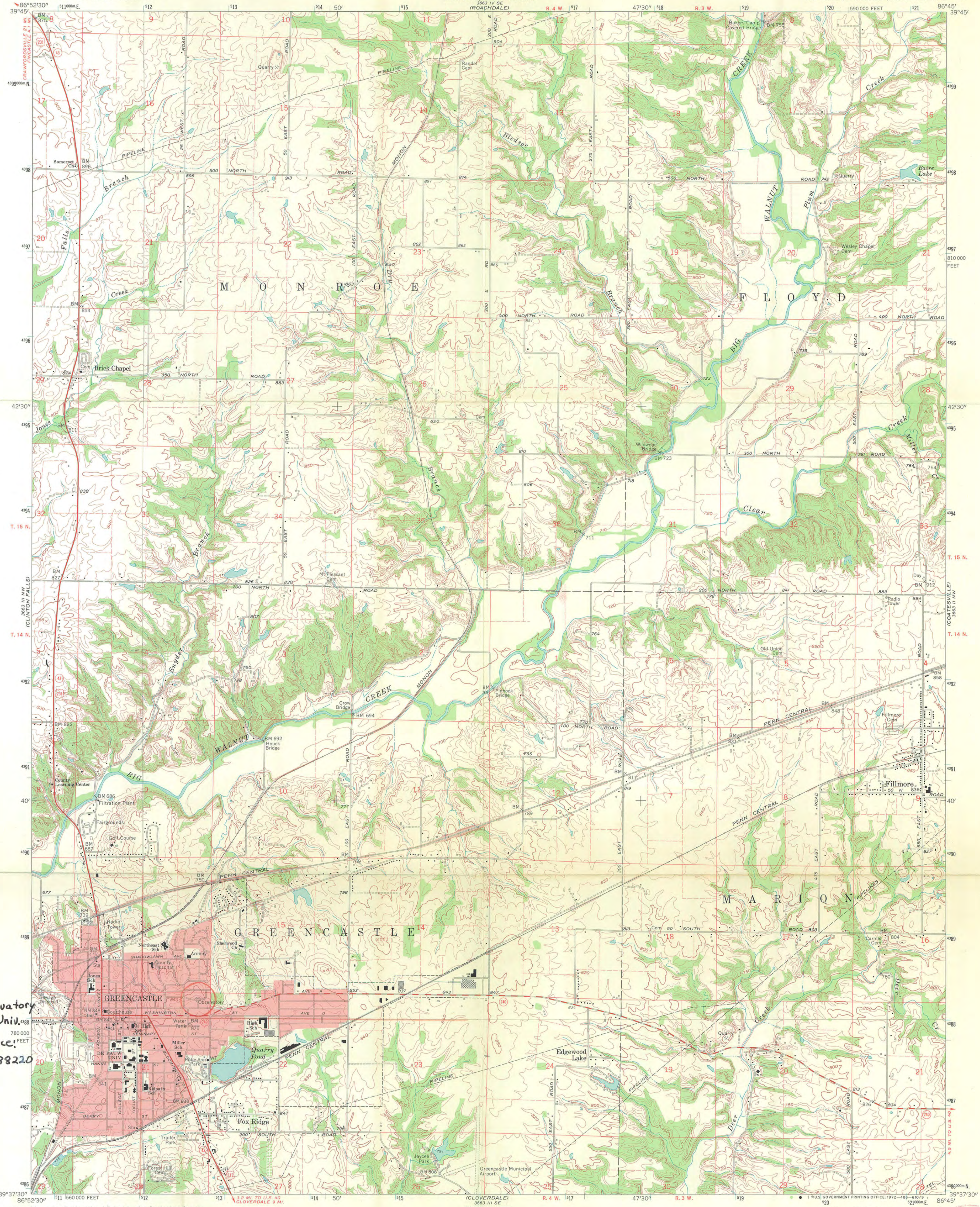


5. McKim Observatory
Greencastle, Indiana
Charlotte Dudley
1977
Mathematics Dept., DePauw University
Equatorial Room showing 1885 refracting
telescope

SEP 12 1978

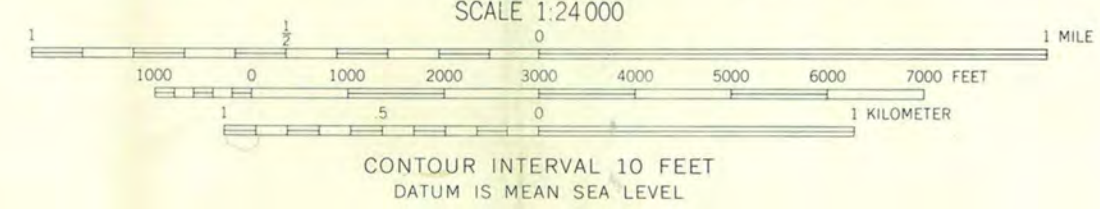
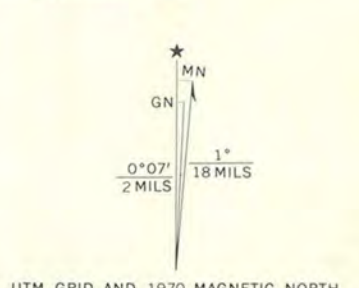
DEC 22 1978

5



McKim Observatory
of De Pauw Univ.
UTM Reference:
16/512660/4398220

Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial photographs
taken 1956. Field checked 1958. Revised from aerial photographs
taken 1969. Field checked 1970
Polyconic projection. 1927 North American datum
10,000 foot grid based on Indiana coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks,
zone 16, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked
Red tint indicates area in which only landmark buildings are shown



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
AND INDIANA DEPARTMENT OF NATURAL RESOURCES, INDIANAPOLIS, INDIANA 46204
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U.S. Route
State Route

RECEIVED
SEP 12 1978
NATIONAL REGISTER
GREENCASTLE, IND.
N3937.5-W8645/7.5
1970
AMS 3663 III NE-SERIES V851

DEC 22 1978

National Register of Historic Places

Note to the record

Additional Documentation: 2019

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

McKim Observatory, Depauw University
Name of Property
Putnam County, IN
County and State
78000051
NR Reference Number

State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this additional documentation move removal
 name change (additional documentation) other

meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

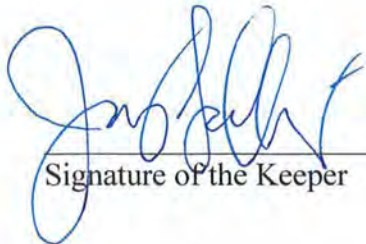
See Correspondence For SHPO Signature

Signature of Certifying Official/Title: Date of Action

National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- additional documentation accepted
- other (explain:) _____


Signature of the Keeper

2.14.2019
Date of Action

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

McKim Observatory
Name of Property
Putnam County, Indiana
County and State
ADDITIONAL DOCUMENTATION 2019
Name of multiple listing (if applicable)

Section number 7 Page 1

The purpose of this document is to update the official record for the National Register of Historic Places listing for the property, and to reinforce its statewide significance. McKim Observatory is located on a small hill at elevation 262 meters on the northeast side of downtown Greencastle, Indiana. This location and the surrounding land was originally purchased by the board of trustees to serve as the future site of DePauw university's campus. After that plan was abandoned, DePauw University began developing the land as a residential neighborhood for university faculty and staff in the 1950s. Today McKim observatory's context continues to be a mid-century residential neighborhood.

The observatory is an L-shaped, one-story building with an octagonal two-story tower surmounted by a retractable metal dome at the axis of the two wings. The observatory was built of solid, one-foot thick brick that rest on a stone foundation. The brick walls of the octagonal tower meet in stone quoining at each angle. The windows in the first floor of the building are tall, four-over-four windows with painted stone sills and lintels. The recessed entry is located on the west side of the building next to the octagonal tower and is topped by slightly projecting cornice supported by decorative wooden brackets. A single-leaf entry door topped by a transom window is further recessed from the walls of the entry. Matching brackets are found at every angle of the tower and support the cornice and walkway that wraps around the second floor of the tower. McKim's flat roof, originally tin and now covered with rolled roofing, has served as an outdoor classroom space over the years. Over the north wing of the building a raised platform bounded by a metal railing was constructed for outdoor observation. A walkway connects this platform to a single-leaf door that allows entry to the roof from the equatorial room on the second floor. The aluminum dome that sits above the tower was installed in 1975 and measures eighteen- and one-half feet in diameter. The original seventeen-foot diameter dome was iron and was activated by a hand pull. When the new dome was installed, four courses of brick and mortar were removed, and a concrete cap was made to enlarge the rim of the building to accommodate the new dome.

The observatory consists of five rooms: the chronograph, clock, transit, and equatorial rooms and the library. All rooms retain their original oak wood floors and windows, and the plaster of each room has recently been restored. The doors and woodwork, though original, have all been painted, as have the single-lite transoms that top the doors leading to each room. The library forms the north point of the L-shaped floorplan and the transit room the east point. The chronograph room (also referred to as the entry room) is on the corner of the L. The clock room is located on the first floor of the octagon-shaped tower and the equatorial room is directly above it.

The entry room holds the original functioning Warner and Swasey drum chronograph that records timing from both the meridian transit telescope and the refracting telescope. The library to the north of the entry hall provides space for instruction and continues to house select records from the previous 134 years of instruction at McKim. The northeast corner cuts from the north wall to the east wall at an angle where a chimney has been covered and plastered.

Paired long curved windows are centered in the door that leads to the clock room on the first floor of the octagonal tower. The masonry pier providing support to the refracting telescope above dominates the room. A wooden octagonal enclosure constructed around the pier originally held the sidereal and solar clocks from E. Howard and Company. Simple single-leaf doors with circles cut at the height of the clock face facilitate viewing and access to the clocks. The clocks are currently displayed in the Mathematics Department in the Julian Science and Mathematics Center on DePauw University's campus. The clock enclosure leaves only a narrow walkway around its west side with more space on its east side. This room is currently used for storage.

To the east of the entry hall is the transit room containing the original brass Fauth and Company meridian circle transit telescope, which is still in use on its original pier with its original striding level. This type of instrument

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

McKim Observatory
Name of Property
Putnam County, Indiana
County and State
ADDITIONAL DOCUMENTATION 2019
Name of multiple listing (if applicable)

Section number 7 Page 2

is a combination of a transit, which observes objects crossing the local meridian, and a meridian circle, which measures the zenith angle of astronomical objects. The masonry pier, like that of the refracting telescope, prevents settlement or vibrations from disrupting observations. Two panels from the center of the ceiling were designed to open by pulley system that would expose a strip down the center of the ceiling and halfway down the north and south walls. These panels still open though the original pulley system is no longer attached.

A spiral oak staircase leads from the first floor to the equatorial room on the second floor. The staircase is lit by three porthole windows at the second-floor level. The 9.5-inch clear aperture refracting telescope made by Alvan Clark and Sons of Cambridge, Massachusetts in 1885 sits in the equatorial room west off the staircase, resting on its independent cast iron base and masonry pier. A layer of special clay provides an unshakable foundation for the telescope. The Clark refractor is still actively used with the original weight driven tracking clock drive built by Warner and Swasey of Cleveland, Ohio. It was refurbished in 1970 by Wilmot-Fleming Company of Philadelphia in October of 1970 and returned in 1971. Though located on the second floor of the octagonal tower, the room is circular with smooth plaster walls. Single leaf doors leading to the staircase and balcony are located at the east and west points of the room respectively and one four-over-four window is located at the north and south points of the room. Cardinal directions are marked in the painted black trim at the top of the wall. The room is now topped by a mechanical dome that rotates and opens to allow faculty, students, and members of the public to observe the sky during classes and programs.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

McKim Observatory

Name of Property

Putnam County, Indiana

County and State

ADDITIONAL DOCUMENTATION 2019

Name of multiple listing (if applicable)

Section number 8 Page 1

Listed on the National Register of Historic Places on December 22, 1978, McKim Observatory retains an incredible amount of architectural and technical integrity as an outstanding example of a nineteenth-century educational observatory. Students, professors, and members of the public have been continually using McKim for educational purposes since it opened in 1884. The property has statewide significance. It is the oldest remaining teaching observatory in the State of Indiana and the only observatory in Indiana to retain its original telescope in its original location.

As early as the 1970s, McKim was being praised for its integrity of feeling. In his book *U.S. Observatories: A Directory and Travel Guide*, H.T. Kirby-Smith wrote that McKim “seems to furnish the most outstanding example in the country of an excellent nineteenth-century observatory. One wishes the Smithsonian could arrange to have it preserved and regularly open as a museum piece...This is one of the most interesting small observatories in the world from an historical point of view.”¹ Since that writing, the interior of McKim has been appropriately restored, confirming its integrity of feeling. The plaster walls of the classrooms have been repaired, the original wooden floors restored, and the original telescopes cleaned so that McKim could continue to serve the classes and public programs that regularly use the observatory for lessons in astronomy.

Though McKim is already uniquely distinguished amongst observatories across the state of Indiana due to its age and integrity, McKim is most significantly distinguished by the quality and integrity of its 9.5-inch Clark and Sons refracting telescope. This telescope, dating to 1884, is still located on its original pier and continues to be used regularly for educational purposes. As a Clark and Sons, McKim’s is not only the oldest operable telescope in Indiana, but also stands among the most impressive historical telescopes in the country. Known as the leading telescope opticians for their time, Alvan Clark & Sons came to prominence in 1865 when the largest in the world, an 18.5 inch refractor, was installed in the Dearborn Observatory in Chicago.² Clark’s method of lens grinding left the lens virtually without blemish, and allowed the viewer to use the telescope without the impediments of lens flairs or chromatic aberrations. The quality of their product was such that Clark & Sons lenses were placed in the most prestigious universities and observatories across the world.

¹ DePauw University, “McKim Observatory History”, DePauw.edu, <https://www.depauw.edu/academics/departments-programs/physics-astronomy/mckim-observatory/history/> (accessed 18 December 2018).

² Clifford Anderson, “Clark Refracting Telescope”, The National Museum of American History, http://americanhistory.si.edu/collections/search/object/nmah_1183755 (accessed 18 December 2018).

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

McKim Observatory

Name of Property

Putnam County, Indiana

County and State

ADDITIONAL DOCUMENTATION 2019

Name of multiple listing (if applicable)

Section number 8 Page 2

Bibliography:

DePauw University. "McKim Observatory History. DePauw.edu.

<https://www.depauw.edu/academics/departments-programs/physics-astronomy/mckim-observatory/history/> (accessed 18 December 2018).

Anderson, Clifford. "Clark Refracting Telescope". The National Museum of American History.

http://americanhistory.si.edu/collections/search/object/nmah_1183755 (accessed 18 December 2018).

Name of Property: McKim Observatory

City or Vicinity: Greencastle

County: Putnam

State: Indiana

Photographer: Emily Royer

Date Photographed: 11/15/2018 and 1/9/2019

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 4

Date Photographed: 11/15/2018

Description: Looking east at the observatory

2 of 4

Date Photographed: 1/9/2019

Description: Looking northwest at the observatory

3 of 4

Date Photographed: 11/15/2018

Description: Standing in the equatorial room facing west towards Alvan Clark & Sons 9.5 inch refracting telescope.

4 of 4

Date Photographed: 11/15/2018

Description: Looking north into the library



McKIM
OBSERVATORY
1884

ONE
WAY
→







ENTRIES IN THE NATIONAL REGISTER

STATE INDIANA

Date Entered **DEC 22 1978**

<u>Name</u>	<u>Location</u>
Levey, Louis, Mansion	Indianapolis Marion County
Germany Bridge	Rochester vicinity Fulton County
McKim Observatory, DePauw University	Greencastle Putnam County

Also Notified

Honorable Richard G. Lugar
Honorable Birch Bayh
Honorable Andrew Jacobs, Jr.
Honorable Elwood Hillis
Honorable John T. Myers

State Historic Preservation Officer
Mr. Joseph D. Cloud
Director
Department of Natural Resources
608 State Office Building
Indianapolis, Indiana 46204

State IN Working Number 9.12.78.4067

TECHNICAL

Photos 5
Maps 1

CONTROL

cm
OK 9.13.78

HISTORIAN

Well justified as significant contribution to De Pauw's educational program. Telescope itself well justified as object but not nominated. Call to clarify. See plow slip.

B. Franklin
11.17.78

ARCHITECTURAL HISTORIAN

Constructed 1884 & in continuous use since 1885, the McKim Observatory is an intact well-preserved example of late 19th century facility for teaching astronomy. The telescope w/ lens by Alvan Clark is quite significant

Accept
Franklin
12.19.78

ARCHEOLOGIST

Indiana Review Board wished instruments included in nomination.

They are on display in the observatory they were designed to be housed in. Documentation of their significance is adequate to list them under Criterion C as the work of a master lens maker.

OTHER
Accept
B. Franklin
12.18.78

HAER

Inventory wh
Review _____

REVIEW UNIT CHIEF

Related equipment included are: tele-scope, Mercator transit & teaching & research equipment listed in item # 7, p. 2.

Accept
Franklin
12.19.78

BRANCH CHIEF

KEEPER

National Register Write-up _____ Send-back _____ Entered DEC 22 1978
Federal Register Entry 2-6-79 Re-submit _____

INT:2106-74

STATE OF INDIANA



INDIANAPOLIS, 46204

DEPARTMENT OF NATURAL RESOURCES
JOSEPH D. CLOUD
DIRECTOR

September 7, 1978

Dr. William J. Murtagh
National Register of Historic Places
Heritage Conservation & Recreation Services
U.S. Department of the Interior
Washington, D.C. 20240

Dear Dr. Murtagh:

Please find enclosed a National Register nomination for the McKim Observatory of DePauw University in Greencastle, Indiana.

This nomination has been reviewed at several meetings of the Indiana State Professional Consulting Committee, and it is unanimously recommended.

Very truly yours,

Joseph D. Cloud
State Historic Preservation Officer

JDC:RAG:kj

Enclosure



TELEPHONE REPORT

OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

PROJECT: *McKim Observatory, Depauw University, IN*

TO/FROM: *Dick Gontz*

DATE: *12.6.78*

ADDRESS: *In 5140*

PHONE:

STAFF MEMBER: *B. Frazier*

DIVISION: *NR*

REPORT:

Asked if instruments were to be considered as included?

Definitely, yes. *Review Board was insistent*

that telescope + related equipment be included in nomination.

NATIONAL REGISTER DATA SHEET

① NAME as it appears on federal register: McKim Observatory, DePauw University
 ② OTHER NAMES:
 ③ date of entry: DEC 22 1978
 ④ county code: 133

⑤ LOCATION street & number: DePauw and Highridge Aves.
 city / town: Greencastle
 vicinity of:
 state: IN
 county: Putnam
 ⑥ NPS REGION: Midwest

⑦ OWNER PRIVATE STATE MUNICIPAL COUNTY MULTIPLE FEDERAL (agency name)
 ⑧ ADMINISTRATOR:

⑨ EXISTING SURVEYS HABS HAER NHL
 ⑩ FUNDED? YES NO
 ⑪ CONGRESS. DISTRICT: 7
 ⑫ SOURCE of NOMINATION STATE FEDERAL
 if state who prepared form?

⑬ WITHIN NATIONAL REGISTER HISTORIC DISTRICT? YES, NAME NO
 ⑭ WITHIN NATIONAL HISTORIC LANDMARK? YES, NAME NO
 ⑮ ACREAGE
 LOCAL PRIVATE ORGANIZATION

⑯ CONDITION
 excellent
 good
 fair
 deteriorated
 ruins
 unexposed
 unexcavated
 altered
 unaltered
 reconstructed
 excavated
 original site
 moved
 unknown

⑰ features:
 INTERIOR SUBSTANTIALLY INTACT-1
 NOT INTACT-0
 UNKNOWN-4
 NOT APPLICABLE-7
 EXTERIOR SUBSTANTIALLY INTACT-2
 NOT INTACT-0
 UNKNOWN-5
 NOT APPLICABLE-8
 ENVIRONS SUBSTANTIALLY INTACT-3
 NOT INTACT-0
 UNKNOWN-6
 NOT APPLICABLE-9

⑱ ACCESS YES-Restricted YES-Unrestricted No Access Unknown
 ⑲ ADAPTIVE USE YES NO
 ⑳ SAVED? YES
 ㉑ IS PROPERTY A HISTORIC DISTRICT? yes no

㉒ AREAS OF SIGNIFICANCE:
 ARCHEOLOGY-prehistoric-2
 ARCHEOLOGY-historic-1
 AGRICULTURE-3
 ARCHITECTURE-4
 ART-5
 ENGINEERING-11
 ENTERTAINMENT-26
 EXPLORATION-12
 CONSERVATION-8
 ECONOMICS-9
 EDUCATION-10
 LANDSCAPE ARCH.-15
 LAW-16
 LITERATURE-17
 MILITARY-18
 MUSIC-19
 PHILOSOPHY-20
 POLITICS/GOVT.-21
 RELIGION-22
 SCIENCE-23
 SOCIAL/HUMANITARIAN-24
 SOCIAL/CULTURAL-30
 TRANSPORTATION-25
 RECREATION-28
 SETTLEMENT-29
 URBAN PLANNING-31
 OTHER (SPECIFY)

㉓ CLAIMS: explain
 'first'
 'oldest'
 'only'

㉔ functions
 WHEN HISTORICALLY SIGNIFICANT:
 CURRENTLY:
 ㉕ dates of initial construction:
 major alterations:
 historic events:
 ㉖ ETHNIC GROUP ASSOCIATION

㉗ architectural style(s):
 ㉘ architect:
 ㉙ master builder:
 ㉚ engineer:

㉛ landscape architect / garden designer:
 ㉜ interior decorator:
 ㉝ artist:
 ㉞ artisan:
 ㉟ builder/contractor:

㊱ NAMES give role & date
 PERSONAL:
 EVENTS:
 INSTITUTIONAL:

㊲ NATIONAL REGISTER WRITE-UP

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action: Additional Documentation

Property Name: McKim Observatory, DePauw University

Multiple Name: _____

State & County: INDIANA, Putnam

Date Received: 2/1/2019 Date of Pending List: 2/12/2019 Date of 16th Day: 2/27/2019 Date of 45th Day: 3/18/2019 Date of Weekly List: _____

Reference number: AD78000051

Nominator: _____

Reason For Review: _____

X Accept Return Reject 2/14/2019 Date

Abstract/Summary Comments: Updates description to reflect restoration efforts since 1978; provides more context for significance under Criterion A

Recommendation/ Criteria: Accept Additional Documentation

Reviewer Jim Gabbert Discipline Historian

Telephone (202)354-2275 Date _____

DOCUMENTATION: see attached comments : No see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

Observatories of Indiana

<http://www.go-astronomy.com/observatories-state.php?State=IN>

Prepared by Thomas Grier, 2018

1 Ball State University

Source:https://en.wikipedia.org/wiki/Ball_State_University_Observatory

- Largest telescope is a 16-inch Meade LX200
- Have 4 other permanently mounted telescopes on the Cooper Science Building.
- Mainly used for astronomy classes and not research
- Also have a planetarium (Charles Brown Planetarium)

2 Manchester University

Name: **Morris Observatory**

Source:https://www.manchester.edu/Common/VisitingManchester/campus_map/observatory.htm

- Built in 1973
- 14 ft dome and 10-inch Newtonian reflector

3 IU Bloomington

Name: **Goethe Link Observatory**

Source:<http://www.astro.indiana.edu/goethelink.shtml>

- 0.91-meter reflector and 10-inch astrograph (on loan from the Cincinnati Observatory)
- Has a kitchen, library, and 150 seat auditorium
- The reflector was completed in 1939, and the observatory was donated to IU in 1948
- Used jointly by IU, the Indiana Astronomical Society, and the Link Observatory Space Science Institute

4 Butler University

Name: **Holcomb Observatory and Planetarium**

Source:<https://www.butler.edu/holcomb-observatory>

- Claims to be one of the largest public observatories in the world
- Has a 38-inch Cassegrain reflector and other small telescopes
- Recently underwent a \$425,000 refurbishment by Astronomical Consultants and Equipment
- Does frequent planetarium shows(\$4 kids, \$6 else), tours, and viewings (free)

5 Indiana State University

Name: **John C. Hook Memorial Observatory**

Source:<https://www.indstate.edu/cas/ees/public-outreach/john-c-hook-observatory>

- Located on the roof of their science building
- Has weekly tours and observations
- *There isn't much about its history anywhere

6 IU Bloomington

Name: **Kirkwood Observatory**

Source:<https://www.visitbloomington.com/listing/kirkwood-observatory/222/>

- *This is a second observatory owned by IU.
- Built in 1900 and houses a 12-inch refractor and other astronomical equipment
- Appears to have weekly viewings

7 DePauw University

Name: **McKim Observatory**

Sources:

- <https://www.depauw.edu/academics/departments-programs/physics-astronomy/mckim-observatory/>
- <https://www.depauw.edu/academics/departments-programs/physics-astronomy/mckim-observatory/instruments/>

*Instead of going into details we know, I will list what are doing differently.

- Listed on the National Register of Historic Places
- Our web pages going into great detail of the history of the observatory
- Additionally, we have an extensive list of equipment and their histories

8 IU Bloomington

Name: **Morgan-Monroe Observatory**

Source:http://www.astro.indiana.edu/morgan_monroe.shtml

- *This appears to be a third observatory owned by IU
- Developed in mid 60's as the urban lights were degrading the Goethe Link Observatory site.
- In 1964, a 16-inch Cassegrain telescope was installed
- In 1989, the telescope was converted to an automated, unattended system for monitoring variable stars.

9 Rose-Hulman

Name: **Oakley Observatory**

Source:<https://www.rose-hulman.edu/academics/learning-and-research-facilities/oakley-observatory/index.html>

- Founded in 2000 through a grant from the Oakley Foundation
- Hosts a variety of groups
- Previously was Lynn H. Reeder laboratory and observatory, created through an interest from the Moonwatch program
- **They have a 6-inch Clark refractor (was donated to them in 1990)**
- Have: Takahashi 9-in refractor, 4–14-inch Celestron Schmidt-Cassegrains (2 have filter wheels and CCDs; used imaging and research), 20-in Ritchey Chretien (deep-sky imaging), 17-in Dall-Kirkham reflecting telescope (deep-sky imaging), and a 10-in mounted Newtonian

10 Prairie Grass Observatory

Source:<http://indianastars.us/>

- Has 4 telescopes: 28-inch Dobsonian, 16-inch LX200R Schmidt-Cassegrain, 16-inch Newtonian, and a 7-inch apochromatic refractor
- Technical assistance through the Wabash Valley Astronomical Society
- Camp Collom received \$10,000 gift to build observatory: opening July 2001

11 Jefferson College

Name: **South Harrison Observatory**

Source:<https://www.harrisoncountyparks.com/parks/south-harrison-park/observatory#info>

- They maintain the observatory in South Harrison Park
- There doesn't seem to be info about their equipment or history

12 Wahnsiedler Observatory

*Appears to be run by the Evansville Astronomical Society, but their webpages are currently unavailable.



Indiana Department
of Natural Resources

AD 78000051

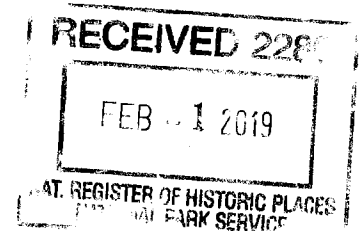
Eric Holcomb, Governor
Cameron F. Clark, Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov • www.IN.gov/dnr/historic



January 17, 2019

Ms. Joy Beasley
Keeper of the National Register
National Register of Historic Places
Mail Stop 7228
1849 C St, NW
Washington, D.C. 20240



Re: Additional documentation, McKim Observatory, Putnam County, Indiana

Dear Ms. Beasley,

Enclosed is additional documentation for the National Register of Historic Places nomination for the McKim Observatory, Putnam County, Indiana. The property was listed on the National Register on December 22, 1978.

The additional documentation includes a full description, discussion of restoration work done since 1978, and information about the statewide significance of the property. Current photos of the exterior and interior are included on disk #2. We believe the information meets all applicable standards for documentation.

The enclosed disk contains the true and correct copy of the additional documentation for the McKim Observatory, Putnam County, Indiana, for the National Register of Historic Places.

Please address any questions you or your staff may have about this nomination to my National Register staff members, Paul Diebold or Holly Tate.

Sincerely,

Paul C. Diebold
Assistant Director of Preservation Services

PCD:pcd

enclosure: additional documentation package