

**Student Publications** Student Scholarship

Fall 2018

# A Tradition of Bells: Glatfelter Bell and Hall

Shannon R. Zeltmann Gettysburg College

Follow this and additional works at: https://cupola.gettysburg.edu/student scholarship



Part of the <u>Higher Education Commons</u>, and the <u>History Commons</u>

Share feedback about the accessibility of this item.

Zeltmann, Shannon R., "A Tradition of Bells: Glatfelter Bell and Hall" (2018). Student Publications. 716. https://cupola.gettysburg.edu/student scholarship/716

This is the author's version of the work. This publication appears in Gettysburg College's institutional repository by permission of the copyright owner for personal use, not for redistribution. Cupola permanent link: https://cupola.gettysburg.edu/student\_scholarship/

This open access student research paper is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact cupola@gettysburg.edu.

# A Tradition of Bells: Glatfelter Bell and Hall

#### **Abstract**

Every hour, students and staff hear the tolling of a bell. Some students hear it and count the number of times it rings to see what time it is. Others hear it and realize they are late to class. And many come back after they have graduated and are happy to hear the bell toll once more. There are many times when the bell is rung today. The bell is rung at graduation, funerals in the Chapel, and alumni and donor recognition. The Glatfelter Bell has been part of the Gettysburg experience since 1892. This bell is housed in one of the most iconic buildings on campus—Glatfelter Hall. The hall was built between 1887-1889, before the college considered buying the bell. Both Glatfelter and its bell have a long history that began with the building initiative of the late 1800's beginning under the presidency of Dr. Milton Valentine and that came to fruition during the presidency of Harvey McKnight.

### Keywords

Glatfelter, Glatfelter Bell, Glatfelter Hall, Gettysburg College History

#### Disciplines

Higher Education | History

#### **Comments**

Written for HIST 300: Historical Methods.

Shannon Zeltmann

Hidden in Plain Sight Paper

A Tradition of Bells: Glatfelter Bell and Hall

Due: October 2, 2018

Every hour, students and staff hear the tolling of a bell. Some students hear it and count the number of times it rings to see what time it is. Others hear it and realize they are late to class. And many come back after they have graduated and are happy to hear the bell toll once more. There are many times when the bell is rung today. The bell is rung at graduation, funerals in the Chapel, and alumni and donor recognition. The Glatfelter Bell has been part of the Gettysburg experience since 1892. This bell is housed in one of the most iconic buildings on campus—Glatfelter Hall. The hall was built between 1887-1889, before the college considered buying the bell. Both Glatfelter and its bell have a long history that began with the building initiative of the late 1800's beginning under the presidency of Dr. Milton Valentine and that came to fruition during the presidency of Harvey McKnight.

The tradition of a bell on campus emerged long before 1847 when some of the college trustees felt a bell was necessary on campus instead of the hand bells that had been used up until this point.<sup>2</sup> This first bell purchased weighed three hundred pounds and was placed into the cupola of Pennsylvania Hall in 1848.<sup>3</sup> The original schedule for ringing this bell was 7:55am, 10:55am, 1:45pm, 3:45pm, and 8:20pm.<sup>4</sup>

By the 1880's, there was a realization that the campus infrastructure was too small for the growing college.<sup>5</sup> Professor Phillip M. Biklé was the first to voice his concerns over the implications of the college growing student body, in the 1880 *College Monthly*. He believed the college should construct a new building before the fiftieth anniversary of the college in 1882.<sup>6</sup> President Valentine believed the college campus should expand, stating "the wonderful enlargement of the universities and colleges in the last few years, should be stirring and effective appeal to us." However, Valentine did not push for a new building project. The college became quiet on the topic for two years until it was written in the *College Monthly* once more that

something must be done.<sup>8</sup> There was more talk of a new building as people saw that the Old Dorm (Pennsylvania Hall) had also suffered several small fires. People wanted "more adequate facilities than the existing campus buildings could provide for larger classrooms, better-equipped libraries, and a more appropriately appointed chapel."

The faculty and students were finally heard in 1884 when Dr. Harvey McKnight became president of the college. Even though there was a recession in the early 1880's, McKnight began looking for donations for the building initiative. <sup>10</sup> The largest donation was from Phillip H. Glatfelter, a Spring Grove Paper Manufacturer, with a donation of \$10,000. <sup>11</sup> This originally came with some stipulations, but they were later removed. <sup>12</sup> At the June 29, 1887 college trustee meeting, the trustees approved beginning the building process. <sup>13</sup> They appropriated \$19,000 for the project. <sup>14</sup> The trustees also proposed and approved a building committee. They decided who would be on this board, which consisted of several trustee members—President McKnight, Dr. Milton Valentine, a trustee at the time of Dr. McKnight's presidency, John E. Graeff, the president of the board of trustees, John Krauth, secretary of the trustees, and trustee members Edward McPherson, Frederick W. Conrad, and J. A. Swope. <sup>15</sup>

Soon after, the building committee asked John A. Dempwolf of York, PA to create plans for the building. <sup>16</sup> This included a chapel in the building that would be able to house 400 people seated. <sup>17</sup> This was later scrapped as John P. Brua gave \$15,000 for the creation of a separate chapel on campus, which was named Brua Chapel. <sup>18</sup> By September 1887, Dempwolf had finished the design for the new building, which was approved with the condition that some things could be altered on the building while it was being constructed. <sup>19</sup> The exterior design was a mainly a Victorian Revival Romanesque style with flares of Gothic Revival architecture. During this period, it was common to have a combination of revival styles such as Revival Greek or

Renaissance with a modern Victorian twist to the design.<sup>20</sup> Glatfelter Hall has definite aspects of the Romanesque Revival style— the rounded, ornate archwayed entrances, the heavy stonework, and the gargoyle-like faces around the top of the building. The building was planned to be 162 feet long by 69 feet wide with the tower being 143 feet high.<sup>21</sup>

The building committee decided to hire a contractor and it received five bids for the project. At its December 1887 meeting, the committee decided to go with the second lowest bid of \$77,457 of William A. Slagle.<sup>22</sup> Construction soon began in 1888. Due to the scale of the project, the building required approximately 1.2 million bricks. For the trim, the contractor used Hummelstown brownstone.<sup>23</sup> In 1888, to transport the materials to the building, the college asked the Gettysburg and Harrisburg Railroads "to lay a 1200-foot spur from its mainline to the southern edge of the building site."<sup>24</sup> They also had to put in a well on the building site to mix the mortar; this well was converted into a large tank for use in the building once the building was finished.<sup>25</sup>

On March 1, 1888, the college held a groundbreaking ceremony. <sup>26</sup> During commencement week in 1888, on June 27<sup>th</sup>, the college had a cornerstone laying ceremony. The only original trustee of the college who was still alive, Dr. John G. Morris, gave a speech at the ceremony. Dr. Valentine gave a small speech and was the one who laid the cornerstone. <sup>27</sup> Dr. Valentine stated he believed the building allowed for "the training of the young to think God's thoughts after him." <sup>28</sup> People were excited to see the new building finished. The *College Monthly* editor wrote, "It becomes more and more evident that…a college building that, when completed, will be surpassed by few in our land. Our expectations were high, but thus far they have been more than met…"

However, this enthusiastic mood soon became tense as the college realized they were short on funds for the building project by the end of 1888. At the December 1888 trustee meeting, McKnight raised the issue to the trustees. They discussed whether they should continue with the project, meaning they would have to borrow money to continue, or completely stop the project until they could raise the funds necessary to continue. They received some help from James McMillan in mid-January. He donated \$5,000 for the building project. <sup>30</sup> The board felt it was necessary to continue the project because of how well it was going up to this point and so they borrowed the rest of the funds that were needed to continue.<sup>31</sup>

Construction continued at a steady pace and by September 1889, the project was finished. The dedication ceremony was held on September 11<sup>th</sup>. The ceremony was originally planned to be outside, but there was heavy rain that day, so they held the ceremony in one of the large recitation rooms on the third floor.<sup>32</sup> Governor James A. Beaver gave an address during the ceremony because he was already in town giving dedication speeches for a few Pennsylvania Civil War monuments.<sup>33</sup> Attorney General of Pennsylvania W. S. Kirkpatrick also gave a speech. In the second half of the dedication ceremony, John E. Graeff got up to ask who would donate money so they could raise \$20,000 that day—to pay back the \$14,000 the college borrowed to continue the project and \$6,000 to furnish the hall.<sup>34</sup> Graeff asked for a \$5,000 donation first, which Phillip H. Glatfelter quickly raised his hand and said he would pay this portion as long as the rest of the money was raised during the ceremony.<sup>35</sup> Graeff himself decided to pay for the next \$5,000 and soon the rest of the money was raised within a half hour.<sup>36</sup>

When the entire project was finished, the building cost approximately \$91,000.<sup>37</sup> The building housed ten to twelve recitation rooms, the library, a museum, the president's office, two halls for the literary societies on campus (Phrenakosmian and Philomathean, also known as

Phrena and Philo), two rooms for students to use however they wanted to, and a few other minor rooms.<sup>38</sup>

The new hall received many praises. In the first edition of *Spectrum*, the college yearbook, the editors made a college history section, in which they said the hall "is a monument of the liberality of the friends of the college" that was "conceded to be the finest building in the State, outside of Philadelphia." The hall had no official name for years. At the dedication ceremony, Phillip Glatfelter believed it should be named after McKnight because he had been the one to see the building project on campus come to fruition and the highlight of the building project was this new hall. McKnight did not want the building named after him and so, the building was not given an official name in 1889. The hall was unofficially called Recitation Hall and New Building, but due to its prominence on campus, the hall needed a name. At the 1912 commencement ceremony, it finally received one—Glatfelter Hall. President W. A. Granville in his speech named it such in honor of Phillip H. Glatfelter, who had supported the college and its building project. The support of the college and its building project.

The bell on campus was quickly moved from Pennsylvania Hall to Recitation Hall in 1889, but the old bell was inadequate for the new building. The old bell remained in use until 1892, when Mrs. John Wiseman and William Glatfelter donated money to the college for a new bell when they heard the old one was unsatisfactory. The bell was in honor of Wiseman's parents, Mr. and Mrs. Thomas J. Wallace. The plaque to in the tower of the bell states In memory of Mr. and Mrs. Thomas Wallace by their daughter Mrs. John Wiseman, Philadelphia, PA 1892. The bell cost \$1,200 and weighed 2,000 pounds. The bell was manufactured by Clinton H. M. Meneely Bell Company in Troy, NY for the E. Howard Watch and Clock Company, in New York City. The Meneely Bell Company was founded in the mid-19th century

and existed until 1928.<sup>47</sup> The E. Howard Watch and Clock Company was founded in 1842 and was originally called Howard and Davis.<sup>48</sup> In 1843, they began to make tower clocks. Most of the gears of their tower clocks were painted a bright blue-green with gold accents, like the Glatfelter clock gears, which are still in their original condition today.<sup>49</sup> The *College Monthly*, once the clocks were put in, rejoiced—"the blank clock faces on the tower of Recitation Hall now have bright dials and hands to indicate the time of day—an improvement to the appearance of the tower and a great convenience to the whole college community."<sup>50</sup>

The bell was praised in *the Gettysburgian* on the nearly fiftieth anniversary of the construction of Glatfelter Hall.<sup>51</sup> By this point, the bell had a different schedule than the original bell in Penn Hall, which more so resembles today's bell tolling. It rang 156 times per day; each hour it rings as many times as the hour, so it rings once for 1:00pm, etc. However, unlike today, the bell was also rung about 28 times starting at 7:40 am on weekdays to tell students to go to class or wake up and about 26 times on Sundays at 8:35 am to tell people when the Sunday service was.<sup>52</sup> The bell also tolled for football victories, though there was not a set number of tolls used for victories. The writer figured the bell had rung approximately 3,244,000 times—excluding football victories—since Glatfelter Hall was opened. However, this writer did not consider that the bell in Glatfelter was put in the tower in 1892, not in 1889 when the hall opened. Yet, this offers a notable estimate of the number of times the bell rings. Today, if the bell has actually rung 156 times each day since 1892, excluding other reasons the bell was rung and if this was the tradition even in 1892, the bell has rung over 7.1 million times.

With how many times the bell has rung, there have been many times it has been slightly off. *The Gettysburgian* seems to like to bring up Glatfelter Bell and its flaws. In 1942, one of the writers noted how the Glatfelter bell was two minutes behind the Seminary's bell. They stated,

"students can once more refer to Old Sol's timepiece (the sundial) on the SCA lawn." Another *Gettysburgian* writer would agree whole heartily with this insight. Doug Taylor in 1958 wrote of his attempt to get all the clocks and the bell on campus to be the accurate time so students would not have to worry about missing classes or being let out of class late. He set his watch to Glatfelter's bell and began his quest around campus. He found that most of the clocks were off by a few minutes. Taylor got so irritated at one point that, when he told one of the housemothers his idea, she called the local Western Union office to get the official time. He discovered that the bell was two minutes ahead. Taylor walked to Glatfelter to tell whoever oversaw the bell and clocks that Glatfelter needed to be changed, but he looked up to see that the clocks were different times and, not knowing which clock Glatfelter bell chimes with, decided to give up his quest. Even just a few years ago, one professor emailed the Dennis Mickley, who is currently the person in charge of Glatfelter's bell and clocks, stating the bell had been off by three minutes, causing his students to be late for their next class.

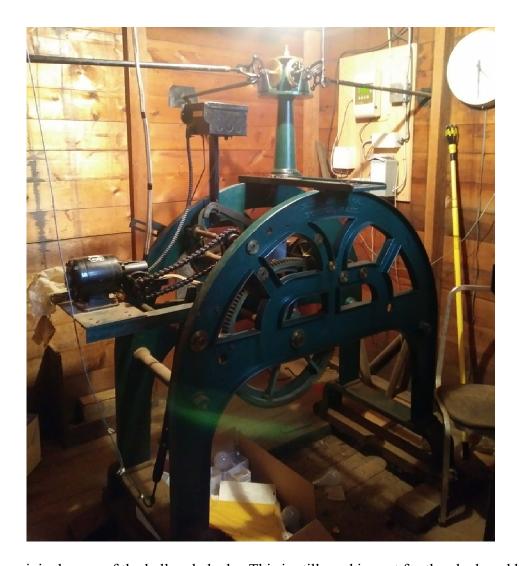
While there are many stories of the bell and clocks being slightly off, they seem to be working well for a 126-year-old system. The original system of the bell has been replaced by an electron mechanism which is controlled by a phone number. This system was installed by McShane Bell Company, in Baltimore.<sup>57</sup> Prior to this they had "to manually initiate the strike by rotating the clock gears to align 15 minutes before or after the strike hour and then manually work the switch to ring the bells for the duration requested."<sup>58</sup> The original gears of the clock are still used and have to be set manually. There is also are two different tolls besides the normal toll to tell the time—a celebration toll that is the bell ringing every two seconds for two minutes and a funeral toll that is the bell ringing for two minutes with fewer, slower tolls in between.<sup>59</sup>

Glatfelter Hall and its bell have been remembered by good words throughout its time on this campus. The Hall was a new major building on campus, so it received praise when it was being constructed. Glatfelter Hall in 1887 was described in the *Gettysburg Star and Sentinel* as "the classical Romanesque style, a style greatly admired and adapting itself readily to a modern structure of this character—its form suggesting dignity and strength." In 1972, the Hall was also described in the *Gettysburg Alumni Bulletin* as representing "an emerging, multi-faceted education with numerous electives, broadened science programs, coeducation, and important developments in student government and intercollegiate sports." Indeed, Glatfelter is one of the highlights of the growing college as a whole in the late 19<sup>th</sup> century.

As important as the building, Glatfelter Bell represents the college and campus traditions. What student does not listen to the bell and simply count the number of times it rings to see what time it is instead of checking their phones? In a time where time is told with a quick glance at one's phone or computer, people still enjoy hearing Glatfelter Bell ring. In the fiftieth anniversary article in *the Gettysburgian*, the writer asks, "early classes, chapel call, football victories, class meetings, athletic practices—what would happen to all of these activities without the services of a Glatfelter Bell?" The tradition of the bell has been one on this campus that has stayed so long. In an age of technology, it is a good reminder of the traditional ways people told time. Every alumnus can come back to campus and remember the old tradition of the bell once they hear it on the hour. Prospective students can hear what they may soon find to be a common sound if they become students. Glatfelter Hall was created at the height of the building campaign of the late 19th century. The bell is 1892 tradition that dates to when the campus was established and continues to tell students, staff, and others what time it is.



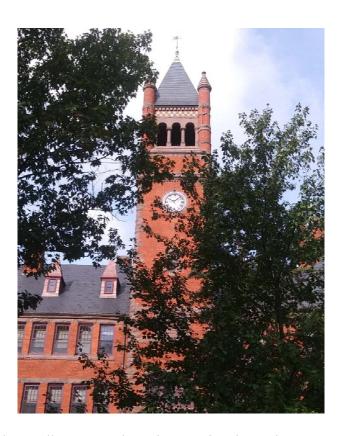
Glatfelter Bell today, picture taken by author, September 21, 2018.



The original gears of the bell and clocks. This is still used in part for the clock and bell mechanisms. Picture taken by author, September 21, 2018.



Recitation Hall, Postcard published by Louis Kaufmann and Sons, c. 1905-1915, from GettDigitial: Gettysburg Postcard Collection, Special Collections, Gettysburg College, Gettysburg, PA.



Glatfelter Hall Tower today, picture taken by author, September 7, 2018.

<sup>&</sup>lt;sup>1</sup> Dennis Mickley, email to author, September 21, 2018.

<sup>&</sup>lt;sup>2</sup> Charles Henry Glatfelter, *A Salutary Influence: Gettysburg College*, *1832-1985* (Gettysburg: Gettysburg College, 1987), 107.

<sup>&</sup>lt;sup>3</sup> Ibid., 108.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Junior Class of 1892, *1893 Spectrum*, 43.

<sup>&</sup>lt;sup>6</sup> Norman O. Forness, "Glatfelter Hall: Gilded Age Building Reflects a Past Era in Academic History," *Gettysburg Bulletin* 63, no. 2 (October 1972): 3. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.

<sup>&</sup>lt;sup>7</sup> Glatfelter, A Salutary Influence, 251.

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Ibid, 252. Sadly, the college lost all the Office of McKnight Records in the flood that took place in Penn Hall, so it is hard to find anything on what McKnight wrote specifically about the building project, as well as the bell later.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Ibid

<sup>&</sup>lt;sup>13</sup> Minutes, Board of Trustees, Gettysburg College 1880-1899, (North Manchester: The Heckman Bindery Inc, 1977), 291.

<sup>&</sup>lt;sup>14</sup> Forness, "Gilded Age Building," 3.

<sup>&</sup>lt;sup>15</sup> Phillip M. Bicklé, "Editorial Notes," *Pennsylvania College Monthly 1887-1888*, (Gettysburg: J. E. Wible Printer, 1888), 1-2. Glatfelter, *A Salutary Influence*, 252. The decision on who would be on the building committee does not appear in the Trustee meeting minutes, but it listed in several histories on the subject, though most fully in these two publications.

<sup>&</sup>lt;sup>16</sup> Glatfelter, A Salutary Influence, 253.

<sup>&</sup>lt;sup>17</sup> Samuel Gring Hefelbower, *The History of Gettysburg College: 1832-1932* (Gettysburg: Gettysburg College, 1932), 261.

<sup>&</sup>lt;sup>18</sup> Forness, "Gilded Age Building," 4.

<sup>&</sup>lt;sup>19</sup> Glatfelter, A Salutary Influence, 253.

<sup>&</sup>lt;sup>20</sup> Forness, "Gilded Age Building," 6-7.

<sup>&</sup>lt;sup>21</sup> Glatfelter, A Salutary Influence, 253.

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Forness, "Gilded Age Building," 3.

<sup>&</sup>lt;sup>24</sup> Ibid., 4.

<sup>&</sup>lt;sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Glatfelter, A Salutary Influence, 253.

<sup>&</sup>lt;sup>27</sup> Forness, "Gilded Age Building," 4-5.

<sup>&</sup>lt;sup>28</sup> Ibid., 5.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> Glatfelter, A Salutary Influence, 255-256.

<sup>&</sup>lt;sup>31</sup> Forness, "Gilded Age Building," 5-6. Glatfelter, A Salutary Influence, 255.

<sup>&</sup>lt;sup>32</sup> Glatfelter, A Salutary Influence, 256.

<sup>&</sup>lt;sup>33</sup> Junior Class, 1893 Spectrum, 44.

<sup>&</sup>lt;sup>34</sup> Martha E. Epley, "Report of Glatfelter Hall," unofficial report, May 28, 1924, Gettysburg College Special Collections Vertical Files, GCVFM-420: 2.

<sup>&</sup>lt;sup>35</sup> Glatfelter, A Salutary Influence, 256.

<sup>&</sup>lt;sup>36</sup> Forness, "Gilded Age Building," 6.

<sup>&</sup>lt;sup>37</sup> Junior Class, 1893 Spectrum, 44.

<sup>&</sup>lt;sup>38</sup> Forness, "Gilded Age Building," 6. Hefelbower, *The History of Gettysburg*, 262. Yearbook Committee, *1957 Spectrum*, (Gettysburg: Gettysburg College, 1957), table of contents.

<sup>&</sup>lt;sup>39</sup> Junior Class, 1892 Spectrum: vol. 1, Spring Term, 1891, 13.

<sup>&</sup>lt;sup>40</sup> Hefelbower, *The History of Gettysburg*, 263.

<sup>&</sup>lt;sup>41</sup> Ibid.

<sup>&</sup>lt;sup>42</sup> Glatfelter, A Salutary Influence, 257.

<sup>&</sup>lt;sup>43</sup> Bickle, *College Monthly 1892-1893*, 213.

<sup>&</sup>lt;sup>44</sup> Dennis Mickley, email to author, September 21, 2018.

<sup>&</sup>lt;sup>45</sup> Glatfelter, A Salutary Influence, 257.

<sup>&</sup>lt;sup>46</sup> This is on the bell itself. See the picture of the bell.

<sup>&</sup>lt;sup>47</sup> "Meneely Bell Company (Troy, NY) Account Books, 1870-19129," New York State Library, New York State Education Department, last updated January 12, 2017. http://www.nysl.nysed.gov/msscfa/sc12681.htm

<sup>&</sup>lt;sup>48</sup> Irene Ndikumwenayo, Princeton University, Princeton University, accessed September 28, 2018. http://www.princeton.edu/~timeteam/history01.htm

<sup>&</sup>lt;sup>49</sup> İbid.

<sup>&</sup>lt;sup>50</sup> Bicklé, "Editorial Notes," 212.

<sup>&</sup>lt;sup>51</sup> "Glatfelter Hall Clock Stays Loyal after Fifty Years," *The Gettysburgian*, March 17, 1938, 2. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA. This article, while an interesting read, does wrongly state the bell and clocks have been in the tower since Glatfelter Hall was opened; however, both were put in in 1892.

<sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> "Sundial Tells Once More," *The Gettysburgian*, May 15, 1942, 1. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.

<sup>&</sup>lt;sup>54</sup> Doug Taylor, "This Clockeyed World," *The Gettysburgian*, April 24, 1953, 3. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.

<sup>55</sup> Ibid.

<sup>&</sup>lt;sup>56</sup> Dennis Mickley, email to author, September 21, 2018.

<sup>&</sup>lt;sup>57</sup> Ibid.

<sup>58</sup> Ibid.

<sup>&</sup>lt;sup>59</sup> Ibid.

<sup>&</sup>lt;sup>60</sup> Glatfelter, A Salutary Influence, 253.

<sup>&</sup>lt;sup>61</sup> Forness, "Gilded Age Building," 7.

<sup>62 &</sup>quot;Glatfelter Hall Clock," 2.

## Bibliography

- Bicklé, Phillip M. *Pennsylvania College Monthly 1892-1893*. Gettysburg: J. E. Wible Printer, 1892.
- ----. "Editorial Notes." *Pennsylvania College Monthly 1887-1888*. Gettysburg: J. E. Wible Printer, 1892.
- Epley, Martha E. "Report of Glatfelter Hall," unofficial report. May 28, 1924. Gettysburg College Special Collections Vertical Files, GCVFM-420.
- Forness, Norman O. "Glatfelter Hall: Gilded Age Building Reflects a Past Era in Academic History." *Gettysburg Bulletin* 63, no. 2 (October 1972): 3-7. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.
- Glatfelter, Charles Henry. *A Salutary Influence: Gettysburg College, 1832-1985.* Gettysburg: Gettysburg College, 1987.
- "Glatfelter Hall Clock Stays Loyal after Fifty Years." *The Gettysburgian*, March 17, 1938. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.
- Hefelbower, Samuel Gring. *The History of Gettysburg College: 1832-1932*. Gettysburg: Gettysburg College, 1932.
- Junior Class, 1892 Spectrum: vol. 1, Spring Term, 1891. Baltimore: Isaac Friedenwald Co., 1892.
- Junior Class of 1892. 1893 Spectrum. Lancaster: The New Era Printing House, 1893.
- "Meneely Bell Company (Troy, NY) Account Books, 1870-19129." New York State Library. New York State Education Department. Last updated January 12, 2017. http://www.nysl.nysed.gov/msscfa/sc12681.htm
- Mickley, Dennis. Email to author. September 21, 2018.
- Minutes, Board of Trustees, Gettysburg College 1880-1899. North Manchester: The Heckman Bindery Inc, 1977.
- Ndikumwenayo, Irene. Princeton University. Princeton University. Accessed September 28, 2018. http://www.princeton.edu/~timeteam/history01.htm
- "Sundial Tells Once More." *The Gettysburgian*, May 15, 1942. GettDigital: Historic Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.
- Taylor, Doug. "This Clockeyed World." The Gettysburgian, April 24, 1953. GettDigital: Historic

Gettysburg College Publications, Special Collections, Gettysburg College, Gettysburg, PA.

Yearbook Committee. 1957 Spectrum. Gettysburg: Gettysburg College, 1957.