

## THE FOUNDATIONS OF A GREAT AMERICAN BREWERY: THE EARLY ARCHITECTURE OF ANHEUSER-BUSCH

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The Anheuser-Busch Brewery commands South St. Louis like a medieval castle, its distinctive profile recognizable around the world. But many would be surprised to learn that before the iconic 1891 brew house rose above Pestalozzi Street, an earlier - and humbler - brewery stood on the exact spot. Over the course of only one generation, the company Eberhard Anheuser and his son-on-law Adolphus Busch created would see four brew houses built as their brewery grew. First, the early history of Anheuser-Busch's architectural heritage will be investigated, showing how the company assiduously and strategically used architecture to promote and grow its business. The story of the great brewery begins before the Civil War, at the time out past St. Louis's city limits.

Georg Schneider was one of several German immigrant brewers settling in St. Louis in the years before the Civil War. According to records, he first operated a brewery at Third and Elm Streets, near where the Gateway Arch now stands. Looking at old fire insurance maps, there does seem to be the remnants of a brewery on the southwest corner, the circular brewing kettles marked out in one building.<sup>1</sup> Nearby, as was common, the 1875 Compton & Dry View shows a large building housing a beer garden was still operational in the 1870s.<sup>2</sup> But Schneider had already left downtown in the 1850s, apparently growing restless in the bustling center of the city, and headed south to the area north of the United States Arsenal.<sup>3</sup>

According to Ernst Kargau, writing in a German language tour book of St. Louis, the new location of Schneider's brewery was rustic at best:

Between Lynch and Dorcas Street lay, on the east side of Carondelet Avenue, a not very high hill, on which the little

brewery of Georg Schneider, who in the early 1850s had run the Washington Brewery on Third and Elm Street, was located. Related with said brewery was an Ausschank (Simple Bar, Draft Beer), and for the security of the visitors of the aforementioned on their way home, there was the small staircase leading up from the street fitted with a handrail to which those who swayed a little bit could hold on to if the necessity arose. In the hill itself was a cellar, which was honored with the name 'Felsenkeller' (Cellar in the Rock), although there was no trace of rock to be found. On the same side of the avenue, close to the Arsenal, was a Biergarten, which went by the name of Arsenal Park and where people went to dance on Sunday evenings.<sup>4</sup>

Looking again at the Compton & Dry View from 1875, there appears to be a curious little hill in the place where Kargau said it should be, with a small building on it.<sup>5</sup> Was this the since-vacated location of Schneider's first South St. Louis brewery? Regardless, Schneider had already moved up the hill to a new location due south of the current 1891 Anheuser-Busch brew house, where according to tradition he found a cave that was adapted into lagering cellars. German style lager beer, of course, required lower temperatures and brewers were quickly discovering that the caves and sinkholes gave builders a head start on constructing these subterranean chambers that would be filled with ice harvested from the frozen Mississippi. In fact, in 1875, there was still a large sinkhole or abandoned quarry just to the east of the brewery.<sup>6</sup> Logically, there were other fissures in the karst topography nearby. Schneider's new 1856 brewery architecture reflected antebellum buildings, as Susan K. Appel writes in her dissertation on Midwestern brewing architecture; it was simple, utilitarian, and built right over the lagering cellars.<sup>7</sup>

But unfortunately for Schneider, the Bavarian Brewery was not used by a sufficiently talented brewer, and went bankrupt, owing thousands of dollars to creditors. Suffice to say, and sparing the complete list of intervening owners, the brewery building ended up in the hands of one of its creditors, Eberhard Anheuser, in 1861. Apparently Schneider went on to secure some modicum of success. After burial in the old Holy Ghost Cemetery in South St. Louis (the current site of Roosevelt High School), his family was sufficiently successful to buy a large family plot in Bellefontaine Cemetery, where he was reinterred in the early 20<sup>th</sup> century.<sup>8</sup> And of course, once Schneider was gone and Anheuser had secured his new brewery, he turned to Adolphus Busch to operate it.

Only a couple of years after acquiring the Bavarian Brewery, Anheuser and Busch enlisted in the Union Army. Contrary to local legend, while the two were famously loyal to the federal government, the brewery's cellars probably never hid weapons from the nearby Arsenal. Nathaniel Lyon had already moved most of the weapons long before the Lindell Grove Affair, and the one mention of a St. Louis brewer smuggling weapons involved a Dr. Hammer, who had once owned a partial stake in the Bavarian Brewery.<sup>9</sup> Since he no longer owned any interest in the brewery by the 1860s, Dr. Hammer did not have the caves at his disposal. Likewise, accounts, such as the one in *The German Element in St. Louis* by Albert Bernhardt Faust, explain the doctor immediately delivered the weapons to loyal German-American enlistees.<sup>10</sup>

But as history does show, and has been written about elsewhere extensively, Busch was clearly talented at the art of running a brewery, as the Bavarian Brewery soon required a new brew house. In 1869, less than a decade after new management took over, Anheuser and Busch were turning to the talented Edmund Jungenfeld to design a new brew house.<sup>11</sup> Preserved in numerous photos, Compton & Dry, as well as fire insurance diagrams, this new brew house shows a new understanding of the importance of the building's role in marketing beer.<sup>12</sup> While the old Schneider brew house was plain, the new brew house shows a great panache, ornamented in the Italianate style with ornamental quoins and fenestration. Anheuser and Busch clearly sought to differentiate their brewery from dirty, polluting industries - cleanliness of course critical to beer production. Likewise, and probably not coincidentally, Busch bought out

Anheuser's remaining partner, William D'Oench, in 1869, showing the young brewer's optimism in his operation.<sup>13</sup> For Budweiser Beer enthusiasts, this brew house was the location of the first brewing of that famous drink, in 1876.

The 1875 Compton & Dry View shows a flourishing and expanding, and newly named E. Anheuser and Co. already beginning to take over more blocks around the original core. Telling, however, despite its name, Busch now held 238 shares in the new company, compared to his father-in-law's 140.<sup>14</sup> The old brew house was still standing, as can be seen in a promotional painting; the brewers wisely built the 1869 brew house just to the north to facilitate continuity of production. Giant malt kilns, where the brewing ingredients would be roasted or dried, were already beginning to tower behind the brew house. Large ice houses sat out in front, holding the harvest from the previous winter. But ironically, for all of the talk and popular lore around St. Louis about the importance of river ice and lagering caves, the brewery in the 1870s was already in the process of moving beyond those relatively primitive cooling methods. Anheuser-Busch pioneered the first use of artificial refrigeration, negating the need for cellars and ice houses (ice was still used in railroad cars) on the brewery property. Ice required huge, ungainly buildings, as can be seen in the maps and photographs.<sup>15</sup> Jungenfeld, the brewery architect used by Busch and most St. Louis brewers, was even taking out patents on ammonia pumps, used for early refrigeration compressors.<sup>16</sup>

While busy working on new refrigeration for brewers, Jungenfeld was already designing a new brew house that opened in 1879 - the success of Budweiser had already rendered their 1869 brew house too small.<sup>17</sup> If it had not already been demolished by this time, Schneider's brew house was torn down, and as before, the new brew house was built adjacent to the current operating brew house. The brewery had a knack for publicity, and seems to have used the 1879 brew house's completion to incorporate the new Anheuser-Busch Brewing Association. Production jumped, from 105,234 barrels in 1879 to 141,163 barrels in 1880.<sup>18</sup> All the ingredients were brought to the top floor, and then the beer worked its way via gravity down into the cellars.

Jungenfeld shows a new approach to the design of the 1879 brew house; it is compact and four stories tall,



Figure 1. Anheuser-Busch brewery, circa 1870s. Courtesy of Anheuser-Busch archives.

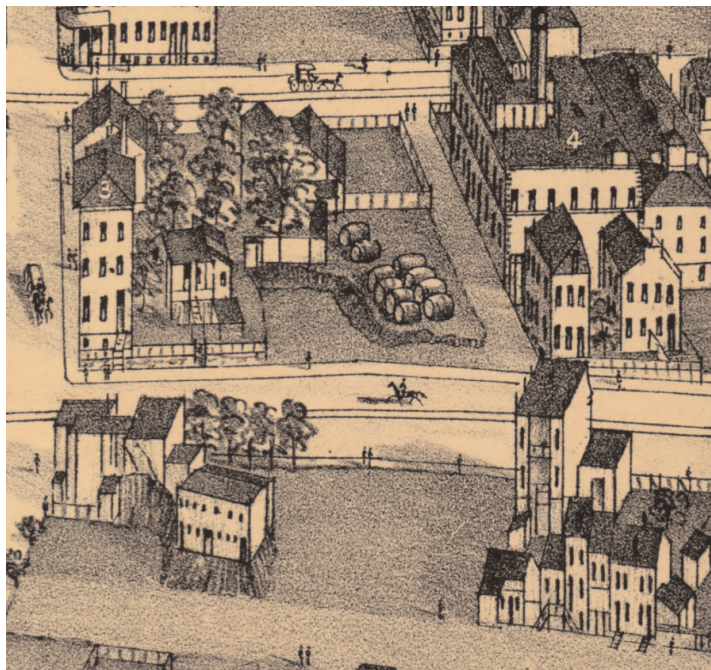


Figure 2. Schneider Little Hill. Compton & Dry, 1875. Courtesy of the Library of Congress.

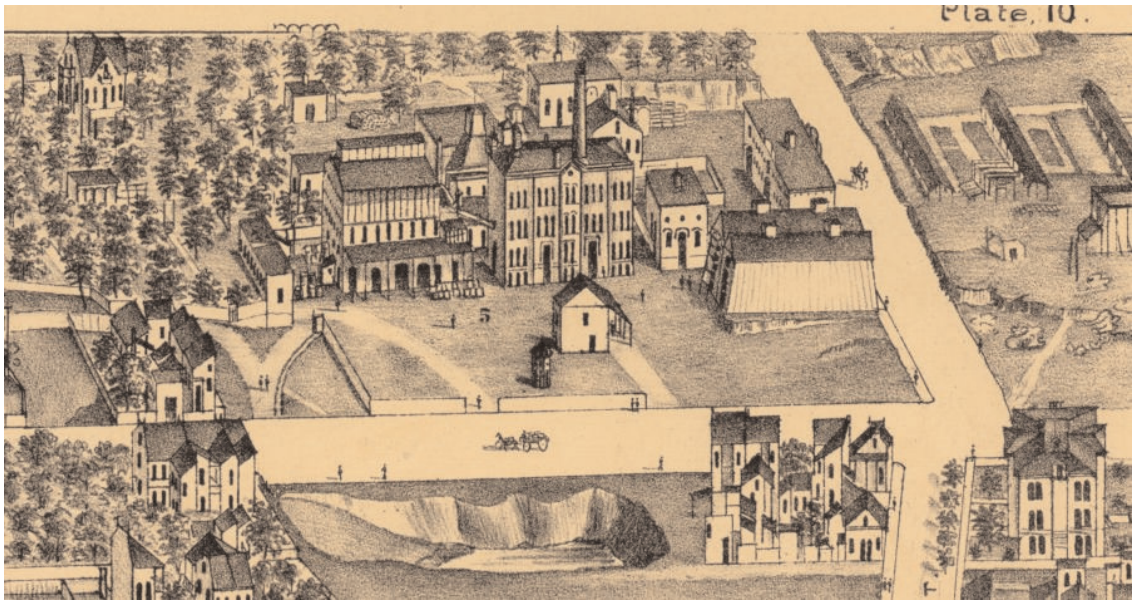


Figure 3. Bavarian Brewery. Compton & Dry, 1875. Courtesy of the Library of Congress.



Figure 4. Third and Elm Streets. Compton & Dry, 1875. Courtesy of the Library of Congress.

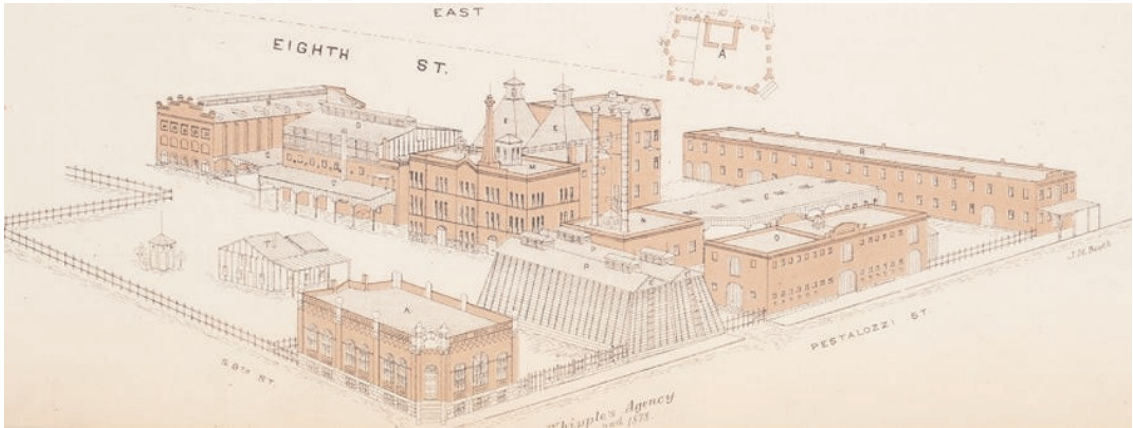


Figure 5. E. Anheuser Co. Brewing Association isometric view. Detail of brewery, 1878. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.

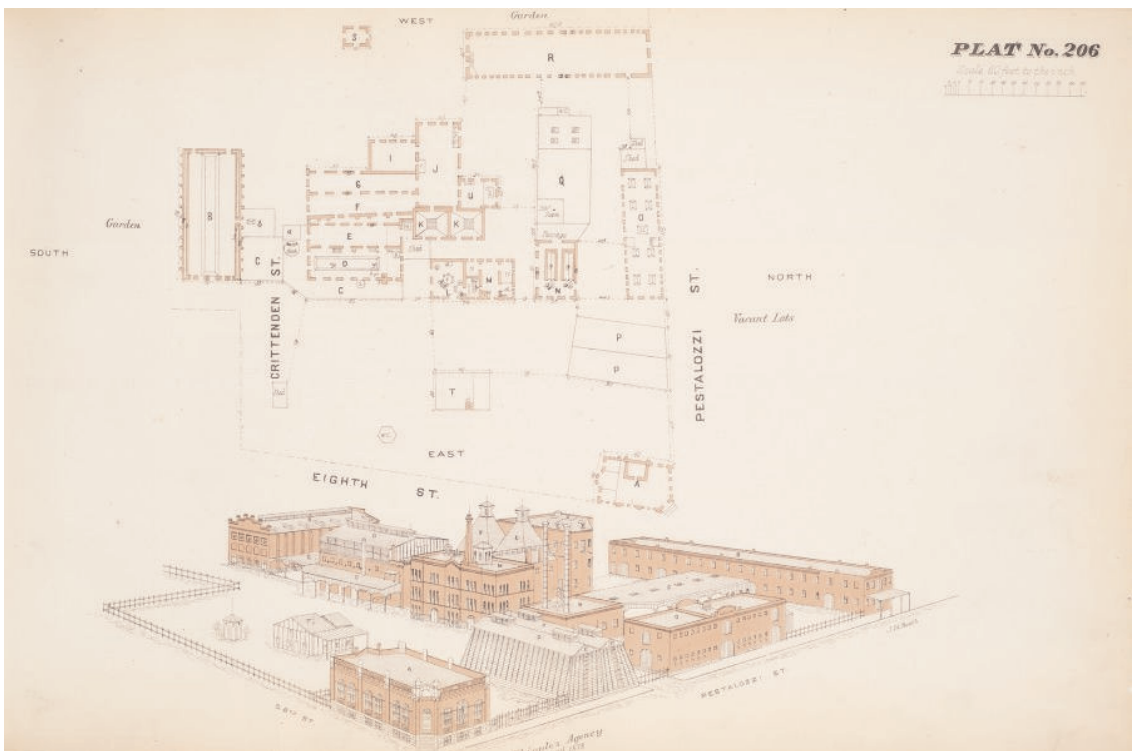


Figure 6. Busch ground plan and isometric projection, 1878 Whipple special risk map. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.

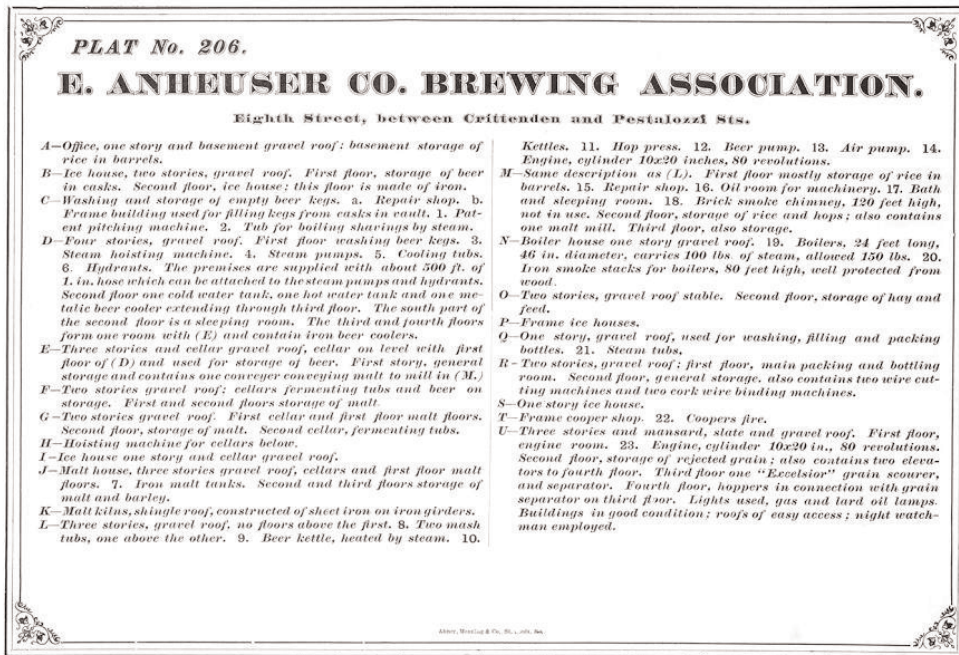


Figure 7. E. Anheuser Co. Brewing Association key, 1878. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.

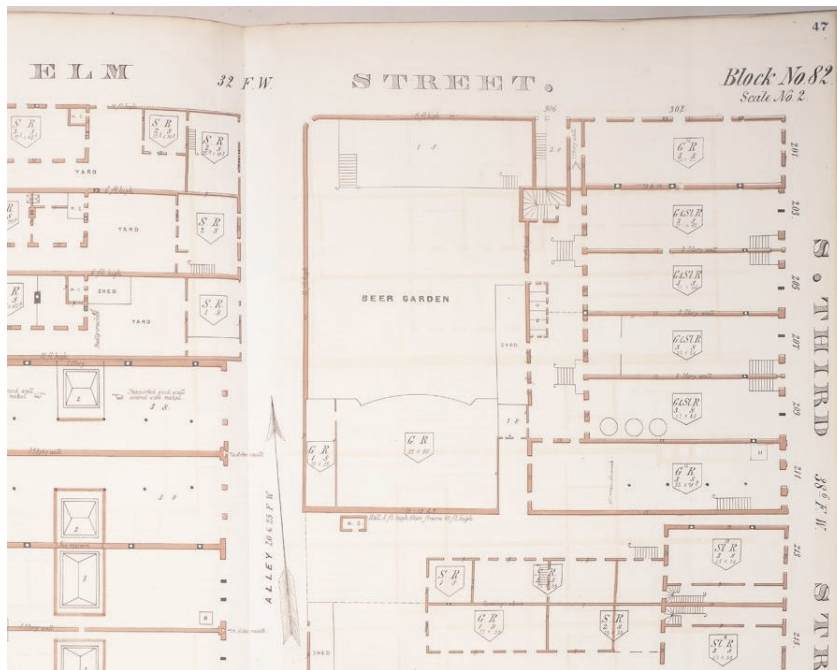


Figure 8. 1870 Whipple map, cropped view, showing the original 3rd and Elm location of Schneider's brewery. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.



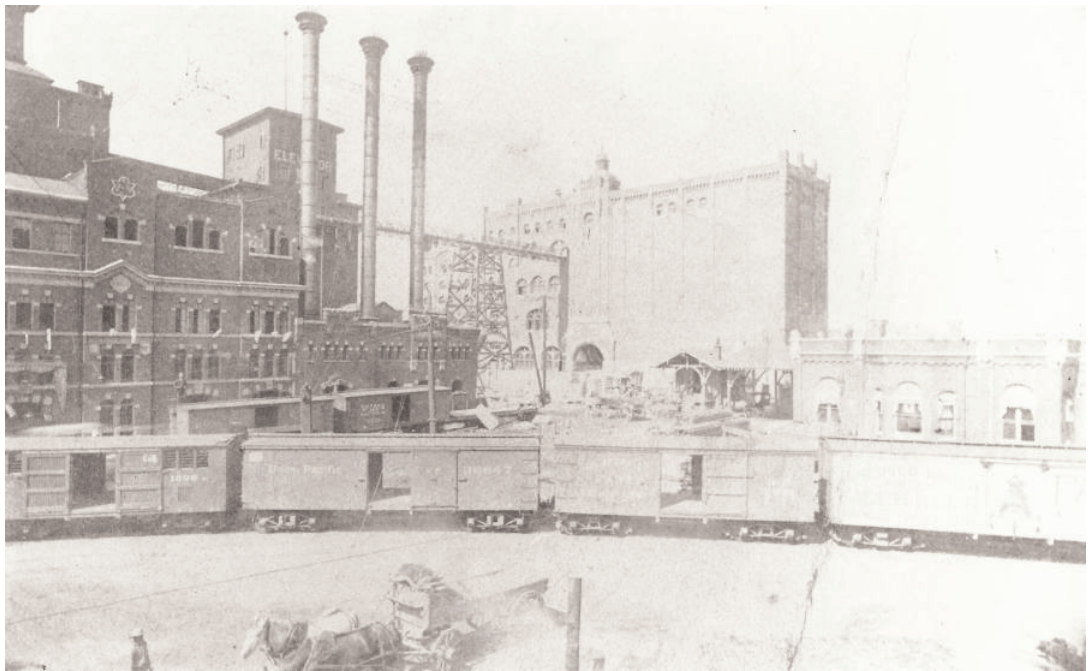
*Figure 9. Brew house yard, 1880-2, taken from the third floor of the Lyon School. Courtesy of Anheuser-Busch archives.*



*Figure 10. Brew house yard, c.1880, view from the second floor of the Lyon School. Courtesy of Anheuser-Busch archives.*

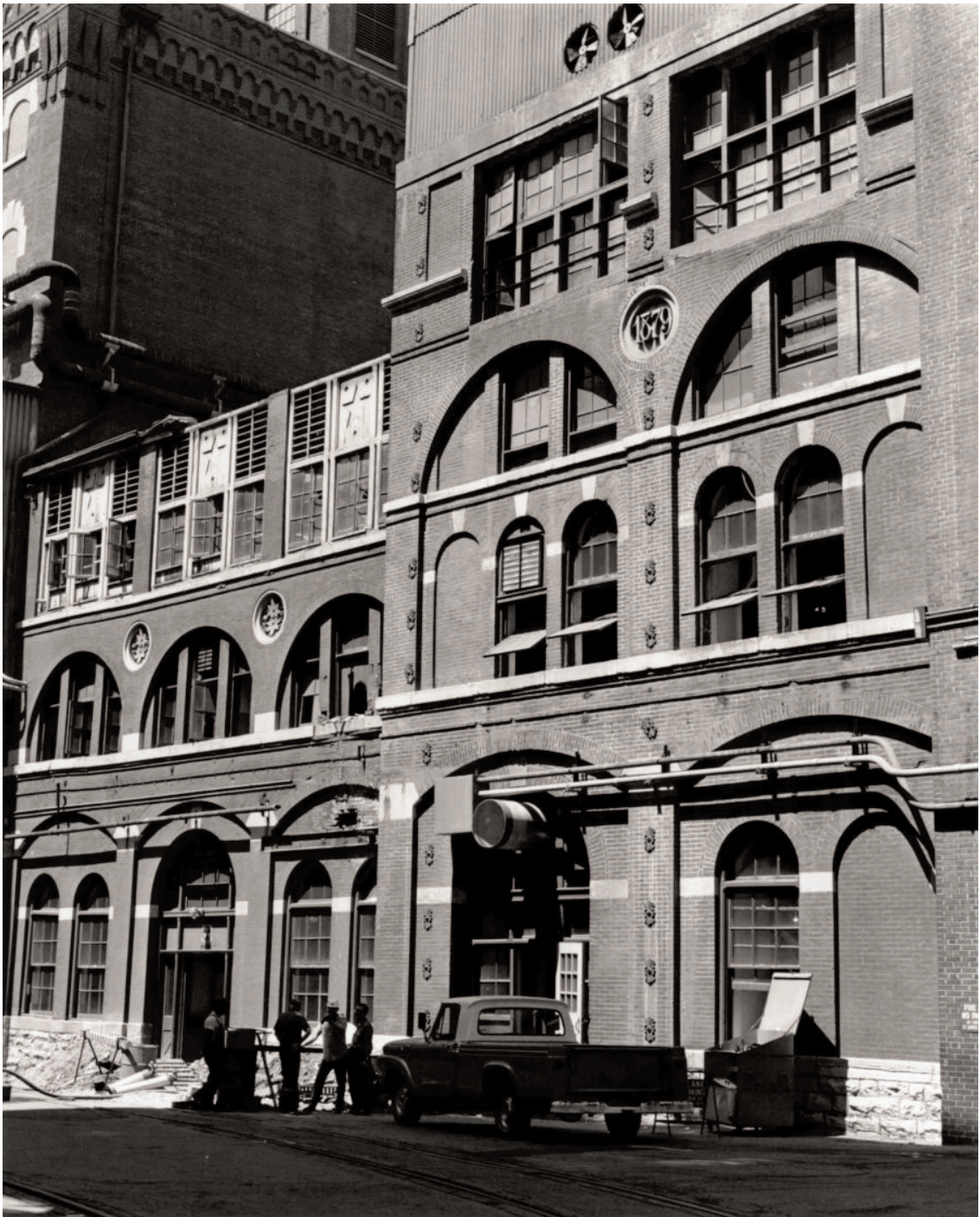


*Figure 11. General view, 1881. Courtesy of Anheuser-Busch archives.*



*Figure 12. Principal buildings C, c.1881. Courtesy of Anheuser-Busch archives.*





*Figure 13. 1879 brew house taken in the 1960s. Courtesy of Anheuser-Busch archives.*



Figure 14. Lyon School. Photo by Chris Naffziger.



Figure 15. Bas-relief Anheuser-Busch advertising piece, Historic Schoolhouse Museum (formerly the Lyon School). Courtesy of Anheuser-Busch archives. Photo by Chris Naffziger.

with two stories below ground. Switching from the Italianate style to what could be best described as early Romanesque Revival, or as Appel describes it, *Rundbogenstil*, the brew house is capped with a pyramid hip roof and cupola.<sup>19</sup> Also, and apparently at this time, the 1869 brew house received a new fourth floor, unifying the brew house facilities. Outside of the brew houses, the brewery campus was growing rapidly with numerous new railyards and malt houses. The pioneering use of bottled beer also necessitated the construction of bottling facilities. The 19<sup>th</sup> century and Romanticism argued for the beauty of picturesque, irregular arrangement of buildings, and the brewery carefully arranged its new malt houses to match the street grid, creating a seemingly organic composition of red brick edifices and towers. Surely Busch would not have missed the obvious connection to the castles along the Rhine River near his birthplace, perched here and there among the mountains. A promotional painting on tin commemorates the expanding brewery; more so than any modern corporation Anheuser-Busch linked its identity to the beauty of its architecture.

Amazingly, the 1879 brew house still stands, though slightly altered, just to the south of the famous 1891 brew house that tourists visit today. Unless there is a previously unknown building still surviving somewhere, that brew house is the oldest structure on the Anheuser-Busch campus built by the brewery. The Lyon School House, later the brewery's offices (from where those stunning views of the brewing were taken in the 1880s), was built by the St. Louis Public Schools in 1868.<sup>20</sup> Likewise, the 1879 brew house is probably one of the oldest surviving industrial buildings left in the entire city, and represents a fascinating link to 1870s brewery design from a period where most structures no longer exist. But of course, again, in just over a decade, Anheuser-Busch was growing so meteorically that a new brew house was already needed in 1891.

#### **'The Finest Brew House in the World': How Adolphus Busch changed brewing-and architecture**

'Make this the finest brew house in the world'.<sup>21</sup>

With these words, Adolphus Busch ordered E. Jungenfled & Co. to commence work on designing a new brew house in 1891. The most recent addition from

1879 was already too small; the old, 1869 Italianate brew house with its later modifications came down, and a broad new expanse in the heart of the brewery was opened up for Busch's 'finest brew house'. The introduction of Budweiser had been a huge success, and Anheuser-Busch, through its system of ice houses, was snatching up market share in western markets not served by other large breweries. The new brew house would be the first built without Edmund Jungenfled or Eberhard Anheuser, as both had passed away in 1884 and 1880 respectively. Frederick Widmann, Robert Walsh, and Caspar Boisselier would continue on under the Jungenfled name before becoming an eponymously named architecture firm later.

The Temperance Movement was also gaining traction, and Anheuser-Busch was strategically placing its products as alternatives consumed in family-friendly beer gardens to the heavy consumption of whiskey in saloons, dank dens of inequity. Brewers did not take such criticism lying down. In the back of a library book published in 1885, in a section labeled 'St. Louis Business Cards', the narrator focuses on Anheuser-Busch's high standards of employee conduct at 'The Great Brewery of the World', relating the following information from their tour:

In visiting this immense establishment we were told by our escort, the cashier, that an employee who drinks to intoxication, when discovered, is immediately discharged. The business seems to be conducted strictly upon a temperance basis, and among the many hundred men we witnessed at work we did not see one taste beer but seemed as indifferent to its use as if foreign to the temptation.<sup>22</sup>

The message was clear; the beer industry, exemplified by Anheuser-Busch, was the perfect solution to the Temperance Movement's fear of intoxicating spirits such as whiskey. Likewise, the very architecture of the new brew house that Widmann, Walsh, and Boisselier designed correlated to the careful public relations campaign the brewery was waging.

The choice of the Romanesque Revival style, the predominant architectural mode for the new brew house, fits in perfectly with the age. Popularized by the Boston architect Henry Hobson Richardson, the Romanesque became in the decades after the Civil War the dominant style of the wealthy industrialist in both commercial

and residential settings. While lower social classes in St. Louis still built houses in the Italianate or other vernacular styles, the wealthy could afford the often large amounts of cut, rusticated stone emblematic of the style. Likewise, the Romanesque style was viewed by German nationalists as a more manly, masculine style in contrast to the French-originated Gothic style, which was seen as more feminine and anti-classical. As tensions continued to simmer between France and the German Empire after the latter's defeat of the former in 1871, architectural styles were not chosen by accident. The Busches kept close ties with the home country, and Adolphus even purchased a portrait of Otto von Bismarck, the chancellor of the German Empire.<sup>23</sup>

Busch would also likely remember the great Romanesque edifices that crown cityscapes up and down the Rhine River near his hometown. The memory of the great Romanesque cathedrals of Mainz, Worms, and Speyer certainly would have been on the mind of the great brewer as he watched the new brew house rise in front of him. Concurrently, the picturesque placement of the tower off-center of the main massing of the brew house also recalls the fortresses that line the Rhine River in Hesse. It should also be remembered that the new brew house would have towered over every building in South St. Louis, and rivaled the heights of the skyscrapers rising downtown several miles to the north. The new brew house was also substantially, and notably, many, many times larger than the most recent 1879 brew house, dwarfing the older buildings in its proximity. None of his competitors, not even the Lemps, possessed a brew house even remotely close in size. The message was clear: Adolphus Busch ruled South St. Louis, and this was his castle, crenellations and all, that protected his domain.

But while historic precedents featured prominently in the mindset of the brewery, the 1891 brew house also fits in perfectly with modern trends in industrial and commercial architecture in St. Louis and the United States in general. Particularly, Widmann, Walsh, and Boisselier seem to have taken the Merchants Laclede Building, a recently completed Romanesque Revival skyscraper on Fourth Street in downtown St. Louis, as a model for their new brew house. The Merchants Laclede, located on the 'Wall Street of the West', set the standard in the 1880s for commercial architecture in the city.

While containing Romanesque proclivities, the 1886-88 office building's design by New York architect Stephen D. Hatch creates a decidedly modern design. Stripped of heavy encrustations of ornament, the office building's pared-down decoration turns the viewer's eyes towards the strong vertical lines created by pilasters the stretch from the ground floor to the parapet. At the intersection of vertical and horizontal members, Hatch switches from brick to square terracotta medallions with various designs. Fenestration features groups of three windows, separated by narrow brick pilasters. Likewise, as was common in Renaissance palazzi, the Merchants Laclede possesses a heavy granite base anchoring the building on the first two floors. A conical tower once rose above the street corner, but was removed by a later renovation.<sup>24</sup>

Turning to the new brew house, the influence of the Merchants Laclede becomes apparent. The first floor, constructed of giant blocks of rusticated cut stone, grounds the brew house with a stable foundation, punctuated with massive Romanesque arches. Above, following the lead of the Merchants Laclede, the brew house features strong vertical lines with terra cotta reliefs of hops leaves at the intersection of the floors and pilasters. Likewise, again following its antecedent, the fenestration includes three windows per bay.

The majestic tower certainly served several purposes; it still contains a working clock, large enough to not just provide time to brewery employees, but to serve the general public living nearby. While no record of its existence survives, the tower also possibly contained a sprinkler system reservoir.<sup>25</sup> Again, no records seem to exist to document municipal water pressure in the city at the time, but certainly Anheuser-Busch would have considered the importance of having a reliable water reservoir for fire prevention. A large water reservoir in a St. Louis building's tower is not without precedent; Union Station, built only a couple years later in 1894, still possesses a giant steel sprinkler supply tank in its clock tower. Strangely, neither of the Sanborn maps for Union Station (where one clearly exists) or the 1891 brew house show such a tank. Why would a fire insurance company not show such a feature?

What is made clear in the book published by the architects, *Portfolio of Breweries and Kindred Plants Designed & Erected by E. Jungenfeld & Co.*, is that the



Figure 16. *The Brew House, c.1890s. Courtesy of Anheuser-Busch archives.*



Figure 17. *Rear view of the brewery, 1895. Courtesy of Anheuser-Busch archives.*



Figure 18. Image printed in The Western Brewer. Courtesy of Anheuser-Busch archives.

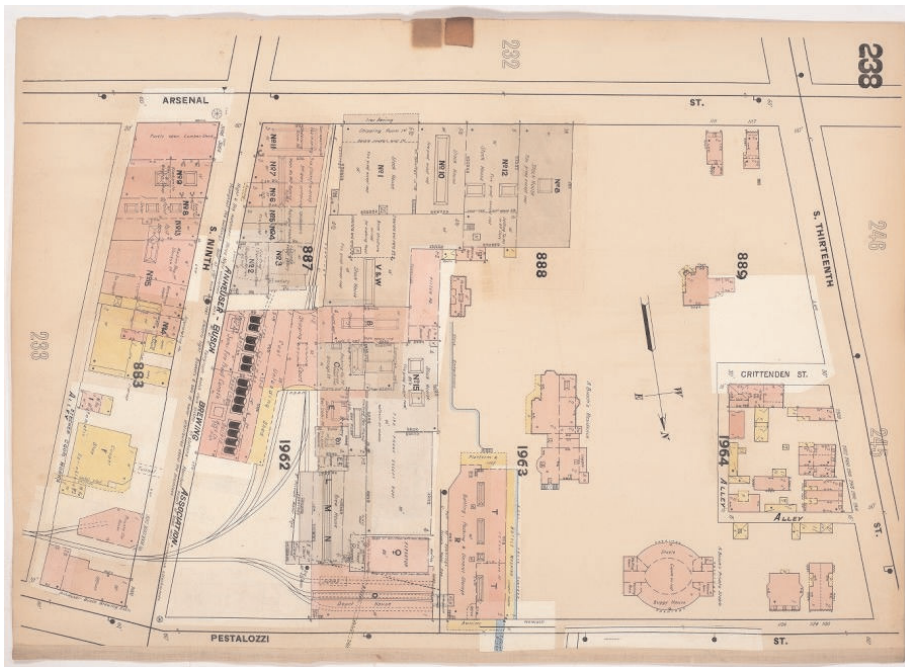


Figure 19. Whipple fire insurance map of the brewery complex, 1898. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.

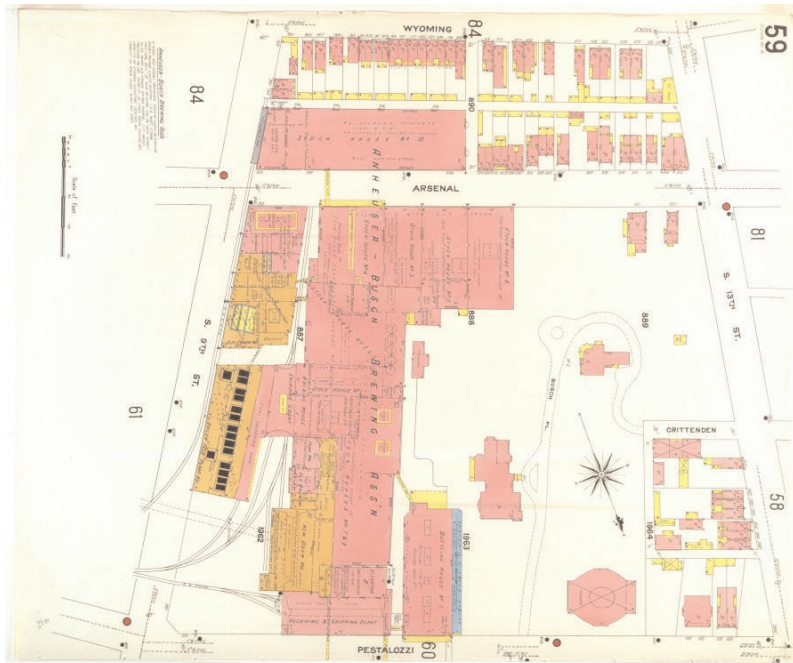


Figure 20. Sanborn map of the brewery complex, c.1904. Courtesy of the Washington University in St. Louis, University Libraries & Missouri Historical Society Library.



Figure 21. Merchants LaCledde building. Courtesy of Rob Powers.



*Figure 22. The brewery today. Photo by Chris Naffziger.*



*Figure 23. The brewery today. Photo by Chris Naffziger.*



new brew house for Anheuser-Busch was indeed the 'finest brew house in the world'. St. Louis brewers shared the architects without jealousy, and it is fascinating to see how designs by the same architecture firm could vary in scale and finesse depending on the setting or clients' financial means. The new Anheuser-Busch brew house is stately and unified in composition; but around the city, at competitors' breweries, buildings seemed slapdash in design, built in jumps and starts, and without a strong sense of purpose.<sup>26</sup>

One must also address the intentions of a brewery choosing to build a new brew house that looks more like an office building than the less august breweries of St. Louis. Anheuser-Busch was clearly making a statement: brewing was a gentleman's pursuit, and the light-filled space, open to visitors for over 100 years now for tours, was a place where no secrets were being kept. Beer brewing was not done in dark, shadowy places of ill-repute, as the Temperance Movement claimed. While the giant skylight that lights the floors of the brew house certainly cut down on electricity expenses and improves employee morale, it suggested the metaphor that divine light could shine down on the noble art of brewing while God looked on.

Perhaps the most interesting aspect of Anheuser-Busch's new brew house is its place in American, and world, architectural history. In 1892, as construction was completed on Pestalozzi Street, Dankmar Adler and Louis Sullivan's Wainwright Building was rising on Seventh Street downtown. Rejecting current Romanesque Revival trends, Adler and Sullivan created a brand-new definition of the tall building in America, revolutionizing architecture around the world. And in an interesting twist, Widmann, Walsh, and Boisselier would actually relocate to the Wainwright Building.<sup>27</sup> One must wonder, if Busch had held off for a couple more years to build his grand new brew house, would the newly prominent influence of Sullivan have changed brewery architectural history?

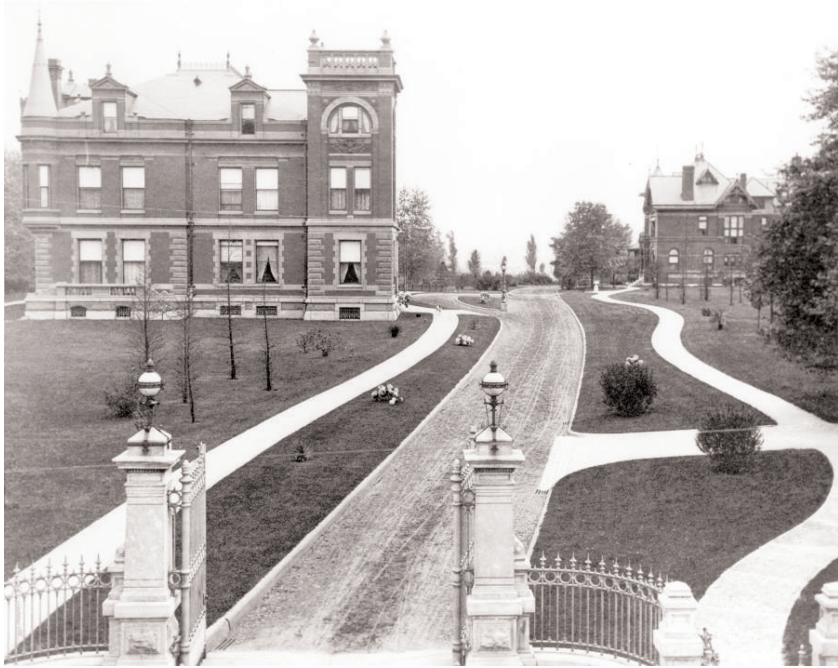
### **Before Grant's Farm, there was No. 1 Busch Place**

Before there was One Busch Place, there was No. 1 Busch Place. As was the case with most brewers in the St. Louis region, Eberhard Anheuser and Adolphus Busch lived near their business. It was partially out of

loyalty and solidarity with the brewery; an owner lived close to his brewer to show he had faith in his enterprise. Such close living arrangements also came out of necessity. Travel in mid-19<sup>th</sup> century St. Louis was slow, and often meant traversing muddy roads. And the Anheuser-Busch Brewery was hardly in the middle of the city, but south in the common fields near the United States Arsenal.

Compton and Dry gives an idea of Anheuser's and Busch's residences in 1875, sitting in park-like surroundings further up the hill, west of the rapidly growing brewery.<sup>28</sup> Though the details are sparse, the two houses' massing and roofline seem to indicate an Italianate villa style design, as was common south of the city (For a similar, intact contemporary example, the Lemp Mansion on DeMenil Place gives a good impression of their original appearance). Compton and Dry charged extra for the numbering of houses and businesses, and both Busch and Anheuser spent the required upcharge to have their houses, and brewery, included at the bottom. Adolphus lived at No. 10, according to the Compton and Dry numbering, and his father-in-law's house was labeled No. 11; the brewery was No. 12. Both houses featured broad, arched front porches that would have most likely still afforded their residents views of the Mississippi before brewery buildings blocked the vista. Of course, the houses were not only at a higher elevation than the brewery, they also sat upwind from the smoky coal-powered engines that ran the ice machines and refrigeration. Interestingly, and not shown in Compton and Dry or fire insurance maps, the Anheuser house sat on a slightly higher hillock, documented only in topographical maps.<sup>29</sup>

After the death of his father-in-law, Busch moved up the hill, into the old Anheuser house. Busch's old house was either demolished after this time, the victim of a rapidly expanding brewery, or possibly converted into what is labeled a laundry on the 1904 Sanborn Fire Insurance Maps.<sup>30</sup> The commemorative painting on tin shows that shortly after the move, Jungenfeld and Co. had completed a massive, Renaissance Revival addition to the west of the original Anheuser residence. Strangely, and probably only to make the newly expanded house contrast with the red-brick brewery, the newly christened No. 1 Busch Place is depicted white, shining above the malt kiln buildings. Anheuser's old house is still shown, but it is unclear if it was torn down in favor of the newer



*Figure 24. No.1 Busch Place. Courtesy of Anheuser-Busch archives.*



*Figure 25. No.1 Busch Place. Courtesy of Anheuser-Busch archives.*



Figure 26. Courtesy of Anheuser-Busch archives.



Figure 27. Private Stable. Courtesy of Anheuser-Busch archives.



Figure 28. Courtesy of Anheuser-Busch archives.

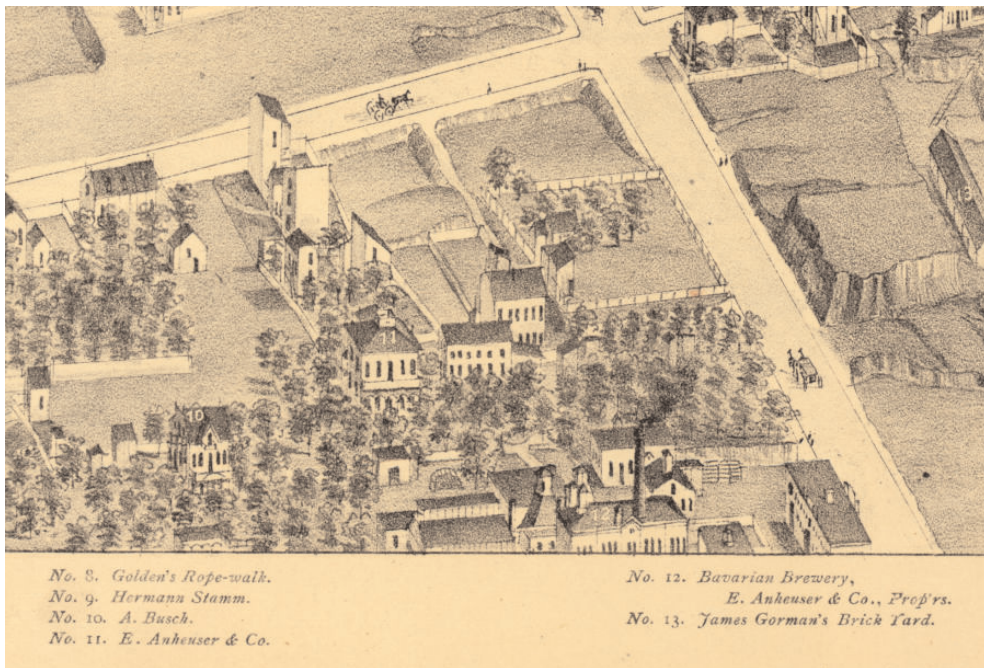


Figure 29. 1875 Compton and Dry featuring the Anheuser-Busch gardens. Courtesy of the Library of Congress.

portion of the mansion shortly thereafter, or remained tucked back behind the new addition.

In contrast with his old house, and the earlier Anheuser residence, the focus of the new Busch mansion was clearly west, towards the rapidly growing neighborhoods filled with the brewery employees' homes. The architecture of Busch's new 20-room mansion, Renaissance Revival, came from two motivations. First, it stood out from the Romanesque Revival brewery buildings, but secondly, and more importantly, it further promoted the image of Busch as a socially accepted gentleman. Just as German princes had expanded their old fortresses with new Northern Renaissance residences centuries before, Busch was creating his own palace grounds in the midst of the city.

Jungenfeld and Co. continued the picturesque motif that had served them so well in earlier brewery designs, placing a three-story tower on one corner of the two-story mansion. Like an Italian Renaissance palazzo, the first floor featured heavy stone quoins and window treatments, accenting the red brick walls. Underneath, a heavy stone sill anchored the house to a rusticated basement projecting out of the ground. On the second floor, Tuscan pilasters framed windows while above classicizing dormers punctuated a steep slate roof. A conical turret and the tower, heavily ornamented with terracotta swags, further gave the house an august appearance. A porte cochère with a glass roof allowed Busch and his family to alight from their carriages without concern for the weather.

Busch and his wife Lilly enjoyed one of the more lavish lifestyles in St. Louis at No. 1 Busch Place until both of their deaths (in 1913 and 1927, respectively). The fashionable elite of the city were already living in the Central West End or even Clayton by then. But Percy J. Orthwein, who had married into the family, related the lifestyle the Busches enjoyed at the mansion by the brewery:

The family residence was one of Victorian splendor. The spacious rooms were designed by the color scheme - the Rose Room, the Green Room, the Blue Room. The floors were covered with Aubusson rugs and on the walls hung artists of note.<sup>31</sup>

Orthwein also reported that Busch had switched from collecting German artists to American artists, supposed-

ly on a whim.<sup>32</sup> But it seems likely that the new nationalism in his collecting stemmed from his efforts to paint the German-American-dominated brewing industry as a patriotic endeavor.

The giant, National Register stables, incorrectly believed by many modern St. Louisans to have been built for the brewery's draught horses, added to the sense of opulence at the urban estate. Unlike most houses of the city's elite, the private Busch family stable was not tucked around in back, but placed right in front of Busch Place's front gates (this could be explained, of course, by the increasingly tight confines behind the house). Fire insurance maps confirm family stories that claim the stable featured a billiard room for visiting guests' chauffeurs.<sup>33</sup> Of course, all horses brought by guests could have easily fit inside the stable's rotunda. Often hidden by trees today but beautifully drawn in the original blueprints, the tin painting of the brewery and fire insurance maps, the stable possesses a second floor on its western side, probably originally functioning as a hay loft. Busch was clearly proud of his stable, as it appears emphasized and larger in proportion than his own mansion in the tin painting.

In addition to any enlightened prince from Germany's collection of horses, interest in botany and gardening also would have been a sign of a gentleman industrialist's status in America. By accident, while the photographer was taking a picture of the malt house sometime after 1892, he captured the layout of the estate's gardens. Placed here and there in the middle of the lawn are little clumps of bushes and plants, perhaps showing off the family's collection of flowers. Busch Gardens in Pasadena demonstrates Adolphus' interest in botany; one can imagine the brewery's groundskeepers carefully mowing around each of the clumps of flowers. Fire insurance maps also show us the children had access to a small wood frame playhouse - a feature later replicated at Grant's Farm. But tellingly, on the eastern wall of the estate, bordering the brewery proper, the photograph captures a large net stretching the length of the property. Was it there to catch errant ash or other airborne particulates floating over from the brewery?

Meanwhile, down the winding coach path that snaked through the property, August Busch, Sr. lived in No. 2 Busch Place, a smaller but perfectly nice Romanesque Revival house that was expanded at some point out

the back, according to fire insurance maps. If the inheritance line was to continue, August should have next moved into the mansion at No. 1, as his father had done on the death of Eberhard Anheuser. But St. Louis County was calling, and the luxury of a paved Gravois Road and an automobile to drive on it out to Grant's Farm was too great of an opportunity to pass up. And the three 225-foot smokestacks of the brewery's power plant were probably making his parents' house less desirable by the early 20<sup>th</sup> century. By 1929, the house was demolished, and replaced with new buildings in the midst of Anheuser-Busch's much more pressing problem: Prohibition.<sup>34</sup>

### **The Busch Mansion: a little bit of Versailles (and Prussia) in St. Louis County**

Grant's Farm holds a special place in the collective consciousness of St. Louis. Few residents cannot relate fond memories of walking through the historic Bauernhof, or being assaulted by hungry goats in the nearby petting zoo. But perhaps what captivates the people of St. Louis the most is not what they have seen at Grant's Farm, but rather what they have not seen. Looming larger in the imagination than its actual physical proportions and glimpsed only furtively through the trees is the fabled Busch Mansion itself. The family opened the grounds surrounding the mansion to tours this season, allowing for visitors to see the 'Big House' up close.

August A. Busch acquired Grant's Farm in 1903; far outside the city, the land originally served as hunting grounds for August and his friends.<sup>35</sup> His father Adolphus still lived down by the brewery in the now-demolished mansion; the lavish stables are the only remnant of that house. Brewers, and many businessmen, believed one should live close to his place of work, both out of a sense of pride, but also to deal with any problems that might arise.

The ascent of the automobile, and the improvement of Gravois Road, calmed Adolphus's concerns about his son relocating his primary residence so far away from the brewery. August turned to German American architect Frederick Widman and Thomas Walsh for the design of the mansion; both men had worked for the brewery's trusted architect Edmund Jungenfeld. Julius Pitzman, the famous German American surveyor and

George Kessler designed the grounds around the new house. The new mansion and its deer park continued the theme of Grant's Farm's previous role as hunting grounds for the Busch family. Construction costs reached \$300,000; the construction firm of Fruin and Colnan began work in 1910.<sup>36</sup>

While usually described as French Renaissance Revival, a close analysis of the mansion's influences creates a much richer and complex pedigree, drawing from some of the most beautiful and influential European palaces of the 16<sup>th</sup> through 18<sup>th</sup> centuries. The most immediate and obvious source of inspiration was the French Renaissance chateau of Chambord. Built for King Francis I between 1519 and 1547, the palace in the Loire Valley features four massive turrets on each corner of its central residence. Looking at the southern façade of the Busch Mansion overlooking the deer park, one can see the clear similarity of the massing and rooflines of the two flanking towers to their predecessors at Chambord.

Further French archetypes arrive from the 17<sup>th</sup> century Baroque palace at Versailles. While the palace is now more famous for its gargantuan additions under Louis XIV, the original horseshoe-shaped hunting lodge constructed by his father Louis XIII provides inspiration for the layout of the Busch Mansion. Following Versailles's model, Widman and Walsh placed a large entrance courtyard, or *cour d'honneur*, on the north façade, anchored by the central core, or *corps de logis*, and flanked by two wings. Known as the Marble Court at Versailles, this 'Court of Honor' served as the formal entrance for carriages to the palace; the Busch Mansion inherits this function. Also of note, Versailles provides the exterior decorative scheme for the house, with the use of brick alternating with limestone-trimmed window fenestration.

Perhaps the most interesting feature of the Busch Mansion's *cour d'honneur* consists of the compressed oval-shaped entrance tower, which houses the grand staircase. Breaking with the design of the Marble Court at Versailles, Widman and Walsh seem to have looked to the 17<sup>th</sup> century chateau of Vaux-Le-Vicomte. The chateau features a massive, oval-shaped tower that projects slightly from the front façade of the palace. Certainly the memory of that massive tower remains in the Busch Mansion's north façade.



*Figure 30. The Busch mansion. Photo by Chris Naffziger.*



*Figure 31. The Busch mansion. Photo by Chris Naffziger.*



*Figure 32. The Busch mansion. Photo by Chris Naffziger.*



*Figure 33. The grounds of the Busch estate. Photo by Chris Naffziger.*



While the French influence of the Busch Mansion is obvious, the German heritage of the Busch family weighs heavily, if subtly, on the final designs of the house and grounds. Though it might seem chauvinist today, German rulers such as Frederick William I of Prussia had long condemned French art and architecture as too ‘effeminate’ for the manly autocrats east of the Rhine River. The Busch Mansion rejects the elaborate sculpture that permeates its French predecessors. Overall, the articulation of the façade is much more restrained, more ‘masculine’ and less exuberant than at Chambord, Versailles, or Vaux-le-Vicomte. Also, German pride for brick certainly weighed in its use in the construction of the exterior. In fact, the front balustrade rejects the traditional stone for brick balusters. Perhaps keeping with the hunting lodge theme, the Busch Mansion dispenses with the elaborate, ordered gardens that feature prominently in the design of all French chateaux. Nature comes right up to the front steps of the southern façade.

Suffering from terminal illness, August Busch would later end his own life in the mansion. His son, Gussie Busch, would be the last permanent resident of the house. After Gussie’s death, the house became part of a trust for his children and descendants. Walking the grounds of the mansion, one cannot help feeling the centuries of history that surrounds this secluded corner of St. Louis and its rich architectural legacy.

#### **Appendix: A tour of the historic Anheuser-Busch Campus with General Manager, Jim Bicklein**

More than 150 years after Eberhard Anheuser and his son-in-law Adolphus Busch took over a failing brewery on the southern outskirts of St. Louis, the business of brewing beer on Pestalozzi has only become more complex and demanding. But luckily for Anheuser-Busch, the brewery is in the able hands of current general manager, Jim Bicklein. He sat down with St. Louis Magazine earlier this week to discuss the challenges and rewards of managing the oldest continuously operating brewing in St. Louis, and how the historic buildings, many now over 100 years old, still function in the modern, technology-driven beer industry in 2016.

A graduate in electrical engineering at the University of Missouri, Rolla, Bicklein joined Anheuser-Busch

when the brewery was expanding due to the success of Bud Light. Continuing on a tradition of promoting all brewmasters from in-house, Bicklein was trained in the art of brewing by earlier company experts; he in fact held that position until he was just recently promoted to general manager at the brewery. It requires decades of hard work at Anheuser-Busch to rise to such a position; currently, not a single brewmaster was hired from outside of the company. Did he start out scrubbing the fermentation tanks, as legend states all future presidents of Busch once did? No, but Bicklein has climbed into the small, claustrophobic tanks on occasion to scrub out the nooks and crannies where the water jets can’t reach.

Besides the universal requirement of keeping a brewery of any era spotlessly clean to avoid the contamination of fermenting beer, Bicklein faces other challenges unique to a historic physical plant such as the St. Louis brewery. For example, there are approximately 260 different roofs of various age and sizes that must be maintained across the 100 acres of the brewery. Typically, in modern breweries, such as the next oldest Anheuser-Busch brewery from 1951 in Newark, New Jersey, brewing operations are contiguous under one roof. Consequently, at Newark and newer breweries, fermentation can occur right next to bottling, with little need for transportation between different departments.

In St. Louis, ever since the 19<sup>th</sup> century when a bridge soared over Pestalozzi Street from stock houses over to the brew house, the brewery has faced the challenge of maintaining efficiency even while transporting the beer and its ingredients between different buildings. Bicklein estimates that the beer and its ingredients travel several miles during production. The giant pipes, high overhead and snaking throughout the complex, require their own maintenance to preserve the beer as it moves through production. For example, during the winter the brewery must keep the pipes from freezing; ‘heat tracing’ electrical wiring wrapped around the pipes keeps the conduits at just the right temperature. High-efficiency pumps push the beer through the network at a rapid speed. In order to further increase efficiency, the water used to flush the pipes is reused when vats and tanks are washed out in the brewery. Computer automation allows for the careful regulation of kettle temperatures without the need for manual adjustment by workers.

Maintaining and outfitting the brew house with the highest quality machinery is also paramount to the operation of a brewery in historic surroundings. For example, the mash tubs and brew kettles are now made out of stainless steel, as opposed to the traditional copper. Simply put, any metal subjected to high temperature variations over several decades will warp. While the brewery still maintains a few kettles with copper tops, they actually conceal stainless steel interiors. If properly maintained, the steel kettles should last 50 to 60 years. Bicklein is highly motivated to keep the kettles in good condition; when the brewery last replaced a kettle, the staff had to remove the brew house's skylight and slowly lower the kettle down several stories, and the crane operator was unable look directly at where the huge metal vessel was going. One can imagine the logistical challenges of such a feat.

Another interesting facet of the brewery is its preservation of utilities such as the power plant that sits just to the east of the brew house. The three, 225-foot-tall smokestacks still function, having been built one at a time around the turn of the 20<sup>th</sup> century. Just a year and a half ago, the plant converted from coal to natural gas, which is more efficient, less expensive, and cleaner than coal. Amazingly, up until the conversion, the boilers, which date to the 1950s, were still burning coal, trucked in to the brewery grounds. The brewery does not exist in its own electrical grid, however. The plant, as massive as it might seem, is relatively small compared to municipal power plants, so it co-generates electricity with AmerenUE. The Anheuser-Busch power plant is perhaps one of the oldest continuously operating generating stations in St. Louis; once dozens of coal-fired power plants and their smokestacks dotted the landscape, and now it is one of the last. There is also an old water treatment plant on the brewery grounds, but Anheuser-Busch maintains a close relationship with the City of St. Louis Water Division, carefully monitoring water quality. In fact, local legend has always claimed that the city's water supply is so robust and high quality because of the demands of local breweries.

In these cynical times, with a majority of Americans now unhappy with their workplace, and the average time at a job at 4.4 years, it was refreshing and inspiring to talk to Bicklein, someone who clearly lives and breathes his position as general manager. One of his favorite places to go, when not working in his office in

the Bevo Bottling Plant, is to climb up onto the roof of the brewery and look out over stunning vistas of the city and the Mississippi River. Also, it was fascinating to learn that the 1879 brew house, built when Eberhard Anheuser was alive, still functions as a small test brewery, the Michelob Brewing Company. Bicklein sums it up best:

It's humbling, because brewmasters for over a hundred years have walked in the same footsteps as I walk, looked into brew kettles in the same spot as me, and were making the same beer that has stood the test of time since 1876. It's humbling to be a part of that.

### Acknowledgements

The author would like to thank Jim Bicklein, Brittany Brandt, Lisa Derus and Tracy Lauer at Anheuser-Busch, Jacklyn Barron at Weber Shandwick and Stefan Kraus for help on this article.

### Note

Versions of the pieces that make up this article first appeared in *St. Louis Magazine*.

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