Mystery Of The Allen-Bradley Octagon

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Why does an octagon symbolize Allen-Bradley (now Rockwell Automation), one of Milwaukee and Wisconsin's great assets?

Octagons see a lot of use in stop signs but otherwise are not common.

There is no doubt that the Allen-Bradley trademark symbolizes wonderful things, from the superb reputation for quality it has helped the city earn around the world among electrical and manufacturing engineers and technicians particularly but also industrialists and other business people to the prosperity it has brought in terms of commerce and employment.

ongtime Milwaukee-area resident Rich Cieslak remembered, "When I was growing up on the south side in the 1950s and '60s, Allen-Bradley was the place everyone wanted to work."

Thousands of United Electrical, Radio & Machine Workers of America Local 1111 members and other laborers, from assemblers to punch press operators, have made their livings under the octagon along with thousands of management employees, from accountants to scientists.

Then there is the astonishing philanthropy. A generous portion of the wealth the octagon helped bring Lynde (rhymes with "mind") and Harry Bradley—who went into business in 1903 with the financial backing of orthopedic surgeon Dr. Stanton Allen—and their families was given back to the community and its citizens.

More than a half century ago, Harry's *Milwaukee Journal* obituary reported that by the time he died in July 1965 the Allen-Bradley Foundation had "contributed more than seven million dollars to hospitals, medical research laboratories, educational institutions, and established charitable organizations."

The foundation, according to the article, was established to "honor the memory" of Lynde, who died of cancer in 1942. Lynde's widow, Caroline, joined Harry in supplying funding. Now known as the Lynde and Harry Bradley Foundation, it is one of America's major charitable organizations, though in recent decades it has become known for it right-wing politics.

In addition, Margaret (Peg) Bradley, Harry's second wife, who began collecting art in 1950, donated hundreds of acclaimed works, including a number of Picassos, to the Milwaukee Art Museum.

The following is from *The Collection of Mrs. Harry Lynde Bradley* published in 1968 by what was then called the Milwaukee Art Center: "I don't believe it is excessive to state that while the Art Center has had many other generous patrons, none of them would be offended by the note that Mrs. Bradley's gifts have been the single most important factor in attaining the important status which our collection enjoys today...As Frederick Layton gave us our original impetus, the Bradleys have provided our modern history."

Family members have quietly supported many other causes over the years, including the Milwaukee Boys Club, one of Harry's favorites.

The Allen-Bradley magnanimity was crowned by the spectacular architectural gifts: the Bradley Center; Harry Bradley Technology and Trade School; and the Pettit National Ice Center. The first two were paid for by Jane Pettit and her third husband, Lloyd, and the last received \$6 million from the couple. Another \$13 million went to help build the Calatrava addition to the Milwaukee Art Museum. Jane, who was adopted by Harry, was the daughter of Peg from an earlier marriage.

Jane Pettit's fondness for the octagon was underscored by the number that were built into the Bradley Center. "There are 213 in the facility and on the grounds, including the shape of the building itself, which is an elongated octagon," recalled retired Rockwell Automation executive Ted Hutton who sent a photographer to do a count.

Beginning in 1951, the octagon has also helped citizens keep time. That's when the first Allen-Bradley tower clock was dedicated. It featured four faces, all octagonal, and could not have been called the "Polish Moon," the affectionate name sometimes applied to the current timekeeper.

The "Polish Black Hole" would have been more appropriate because the clocks featured red, neon hands that swung around black faces and pointed to yellow, neon hash marks. The *Milwaukee Sentinel* article about the dedication said it would be "the largest four-sided clock" in the United

States It also mentioned that "timing is by IMB," a typo that probably indicates how little known IBM was at the time.

My interest in the octagon began in 1982 when I left the Wisconsin Telephone Company to take a position at the Allen-Bradley Company as a creative specialist.

One of my responsibilities was writing scripts for a new information vehicle called the *Video Magazine*. It was produced on a quarterly basis in-house and disseminated mainly to Allen-Bradley salespeople and distributor personnel.

To stimulate interest and encourage viewership, it struck me that a good story would be a description of how Allen-Bradley came to choose the octagon as its logo. Bob Linder, the gentleman I reported to and his manager, Ed Allen, agreed. I figured there would be a clear-cut explanation, given the button-down rationality that characterized the company, its products and people. I guessed the octagonal shape might signify something in electrical schematics.

My video department colleagues didn't know the octagon's history, so I began asking others around the company but kept coming up empty. It had no role in drawings, electrical or otherwise I soon learned. Eventually I talked with Marion Wojtkowski who was the editor of a popular Allen-Bradley employee magazine called *Contact*. She didn't know either but said she would look into it.

At that time, in the early 1980s, Allen-Bradley was still a privately held enterprise with a distinctly old-fashioned feel. For example, not far from the comfortable and colorful cafeteria, the company had a gymnasium that was the scene of after-work employee basketball games and other physical activities. The gym included a stage where now and then the Allen-Bradley employee band would perform during the lunch hour.

Jane Pettit Anecdote

Retired Rockwell Automation executive Ted Hutton tells endless stories about the company and its people in his folksy way and is a delight to interview. One of his Allen-Bradley tales has to do with storied A-Ber Jane Pettit, adopted daughter of company co-founder Harry Bradley. "Jane worked for Allen-Bradley during World War II," Hutton recalled, "and she sometimes served as the switchboard operator. People who worked with her said that she often answered incoming calls with a cheerful, 'A-B, what'll it be!?'"



The original Allen-Bradley four-sided clock was dedicated in 1951. Courtesy of Rockwell Automation, Inc.

Not ready to give up and hoping to reach a broader resource group of retirees and others associated with the company, Wojtkowski published an article in the July 1982 issue of *Contact* titled, "How Did A-B's Octagon Mark Originate?" and subtitled "Let Us Know if You Know!"

The article stated that the original trademark registration "indicates first use in interstate commerce as October 1, 1923." The company magazine's original name was *Gossip*, but according to the article, it had "suspended publication for two years" in the early 1920s so there were no stories about why the octagon was chosen.

Lynn Matthias, who joined the company in 1927 and later became vice president of research, was contacted for the piece, but the article reported he could only "guess that the mark can probably be traced back to the fertile mind of Adolph Fensholt, founder of A-B's long-time advertising agency, since 'that's where most of that kind of thing originated.""

Fensholt Advertising of Chicago still existed in 1982, so the magazine contacted the agency and interviewed the employee with the longest tenure—Helen Kallam, who had 28 years in at the time. She recalled that "someone once told me the octagon was patterned after a clock."

The article continued, "That seemed a likely lead, until we determined that the first A-B clock, forerunner to our current pacesetter, did not appear upon the Milwaukee skyline until the 1930s."

Dan Stupek, who is still doing business as a marketer associated with what remains of Fensholt Advertising, told me that Kallam retired out west. After more inquiries I was able to talk with her; she's now in her eighties but had no recollection of the article that quoted her or the history of the octagon. More than 25 years have passed since she last thought about it so that is not surprising.

Her recollection in 1982 that it had something to do with a clock, however, rings true; Mathias' recollection about Fensholt might, too. Stupek said that before Fensholt formed his own agency in 1922, he worked for Allen-Bradley as an electrical engineer and a technical writer. It might be a coincidence that about one year after he left the company the basic trademark that has endured ever since was chosen, or maybe once he was on his own he impressed upon the Bradleys the need for a simple symbol and presented options, including the octagon.

I also visited the Rockwell Automation library, which has a copy of virtually every *Gossip* and *Contact* the company published and paged through many. After reviewing photographs of the growth of the Allen-Bradley complex of buildings, I concluded that contrary to the *Contact* article about the octagon no clock was present until the neon-accented beauty was unveiled in 1951. Before it moved into its first, built-to-order facility at the corner of Greenfield Avenue and South First Street in August 1928, the company occupied quarters that had been designed for other purposes and were adapted by the growing manufacturer.

Its original location was above Gordon's Codfish, a delicatessen. Lynde later wrote about it pointedly, "I was never in a place that smelled so villainously as it did there in the winter time."

The new structure that Allen-Bradley occupied on the eve of the Great Depression sported the first of many towers that would adorn company buildings but only the words Allen-Bradley and the octagonal logo appeared on it. No clock. When I spoke with Wojtkowski about this she said the 1982 article's assertion about the first clock might simply have been wrong. She also confirmed my recollection that the article produced no leads as to what inspired the octagon's use in the trademark.



1982 *Contact* Graphic for story in 1982 Contact. Courtesy of Rockwell Automation, Inc.



Allen-Bradley's first location was in this building above Gordon's Codfish. Courtesy of Rockwell Automation, Inc.

It is interesting to note that the first tower—like the one that held the blackfaced clocks and now holds a four-sided temperature gauge and the one that holds the current clocks—was primarily intended to hide the building's water tower. It wasn't purely decorative.

Although I thought the story about the origin of the octagon was fascinating, worth pursuing, and quite a good mystery, when the *Contact* article and additional inquiries didn't produce an answer, the company's communications hierarchy said it was time to give up and pursue other stories.

I left Allen-Bradley in November of 1984 to become a freelance writer but continued doing assignments for the company.

Years went by and I didn't think much about why the octagon became the trademark, but then one day the mystery was brought back by something I had seen countless times since at least the early 1980s. My wife's parents were moving from their ranch-style home near the driftless area outside of Cross Plains, Wisconsin, to a retirement community on Madison's northeast side.

They decided that a clock that had hung in their living room for years was too large to take to their new condominium and asked my wife if she wanted it. The clock originally kept time in the office of her grandfather's used-carsalvage-yard business in Kingsford, Michigan.

My wife took the clock, which wasn't working at the time. It's operated by a key that winds a spring which in turn drives a pendulum. The pendulum, with a somewhat ornate and weighty brass medallion at the end, swings back and forth in a compartment below the round face, which is surrounded by an octagonal frame. "Made by the Sessions Clock Company, Forestville, Conn. USA" is printed in an arc at the bottom of the dial.

A door with a glass pane provides access to the lower compartment and permits the pendulum's movements to be viewed. The word "Regulator" is painted across the glass.

I took the clock to Hawkins Clock Center in West Allis to have it fixed. The repairman said that it probably had been produced in the early 1900s and was called the "schoolhouse clock" because such timekeepers were frequently used in classrooms, beginning in the late 1800s.

Clocks by Douglas H. Shaffer, provides confirmation, "...because of its widespread use in schoolrooms in the late nineteenth and early twentieth centuries, it is often called the schoolhouse clock." They were also popular in train stations, post offices, and other public buildings.

The clock was fairly accurate the Hawkins repairman said and the whole package, octagonal wood case, mechanism, etc. was inexpensive. In fact, he added, along with their use in public buildings which are not known for lavish spending, clocks of this kind were often given away by businesses as a goodwill gesture, much as companies today give away T-shirts, caps, and other merchandise.

In Antique American Clocks & Watches, Richard Thomson writes that the earliest American examples of these clocks were, "made by Seth Thomas, with movements designed by Silas B. Terry." Chris Bailey, author of 200 Years of American Clocks and Watches and curator at the American Clock and Watch Museum in Bristol, Connecticut, said these clocks were first produced in the 1830s and became enormously popular.

Bailey pointed out the word "regulator" has its own distinctive history. "Originally, a 'regulator' was a specialized and unusually precise clock that jewelers would acquire as a standard of time-keeping," he said. "Other clocks and watches in the jeweler's shop would be set to the time displayed on the regulator."



Both Towers Current clock and original clock tower converted to temperature gauge. Photo by author.



Sessions Clock Company schoolhouse clock. Photo by author.

The word was appropriated by enterprising clock makers, he explained, to inflate the precision of cheaper devices. "It was a marketing ploy," Bailey continued. "In the second half of the 19th century, true regulators cost \$1,000 or more whereas a schoolhouse clock could be purchased for just \$5.00."

Support appears in *A Study of Simon Willard's Clocks*, by Richard W. Husher, "The use of the regulator on the many Connecticut spring driven wall clocks sometimes called 'school clocks' was only a ruse to encourage sales and such a clock must not be confused with a true regulator clock."

We hung the repaired schoolhouse clock in our living room and it kept excellent time. After several months of winding and admiring it and enjoying its pleasant tick-tocking, it hit me like a bolt: Could this octagonally shaped, 19th century type of clock with the word "regulator" painted on the glass be the inspiration for the Allen-Bradley trademark?

Chances are the Bradley brothers, Lynde born in 1878 and Harry in 1885, would have seen clocks like this frequently when they were growing up and attending school. Adolph Fensholt, principal of the advertising agency they used for decades, also would have been familiar with schoolhouse clocks.

Most important, this type of clock fits well the science-oriented business the brothers built that was based on "regulating electricity" with all the precision of the finest timepieces.

In a history of the company that he wrote in serial form in 1935 for *Gossip* and that was reprinted upon his death in 1942—Lynde, reminisced about how as a lad he was influenced by a textbook titled *Electricity for Engineers*, written by Charles Desmond.

He was loaned the book while a student at the 18th District School of Milwaukee (now the Maryland Avenue Montessori School) by a friend named Ralph Skidmore who, Bradley writes with a touch of cryptic humor, "was known to some of his intimates as Banyan, due to some interest he had inadvertently and carelessly shown in the course of his school work in connection with the tree bearing that name."

According to Lynde, Banyan knew that he (Lynde) had a "boyish penchant for playing with electricity" and thought he would enjoy this book from "his older brother's library."

Lynde offers the following about a "brush regulator" described in *Electricity for Engineers*, which he says was "originally patented in 1880":

"Reading about this regulator brought to my youthful mind for the first time that this variable contact resistance of carbon could be utilized for electrical control in other forms...On the strength of this knowledge I built what might be called the first Allen-Bradley rheostat."

The *American Heritage Dictionary* defines rheostat as "a continuously variable electrical resistor used to regulate current." Lynde later employed this early realization to build the first products of The Compression Rheostat Company, which was the forerunner of the Allen-Bradley Company.

Controlling electricity—regulating current—was the foundation of the company and ultimately led to a value of some \$1.65 billion—the amount Rockwell paid for Allen-Bradley in 1985. It was achieved in just over eight decades.

Like many success stories, Allen-Bradley's had humble beginnings. Lynde, who didn't graduate from high school, recollected in his history:

"We had been paying out the doctor's money for labor and material and I had been living on next to nothing. I got a little money from Doctor Allen now and then for personal use, but I asked him for as little as I could get along with, although I was certain he would give me any amount I asked for within his means. My clothes were about worn out and it appeared that we must either make some money or quit."

Until the 1920s, in fact, the Allen-Bradley Company struggled. A book the firm published in the 1960s titled *The Allen-Bradley Story* comments on the quiet years leading up to the Roaring Twenties:



Schoolhouse clock in early 1900s West Allis classroom. Courtesy of West Allis Historical Society.



Milwaukee Grade School Lynde Bradley attended this Milwaukee school in the late 1800s. Photo by author. "The end of World War I brought on a recession—orders were scarce, and, for a time, Allen-Bradley's future did not appear very rosy. Looking for any kind of business, the brothers developed a small rheostat for the adjustment of the battery charging current in automobiles..."

The device was called the Bradleystat, a clear play on "rheostat." Soon, it found much greater application as a volume control for radios which were booming in popularity at the time. A commemorative published by Rockwell Automation upon reaching a century in 2003 noted:

"When the Bradleystat knob is turned, an equalizer spring exerts force on two columns of carbon disks, which vary the resistance—and radio volume smoothly, without steps. By 1925 Radio Component sales account for nearly 50% of the company's sales."

On the crest of this unexpected wave of success, in 1923, the octagon trademark appeared for the first time. It was divided into two sections, the upper featured the letters A-B and the lower the name Allen-Bradley. Later, the word "quality" replaced the company name.

The upper and lower sections of the trademark are graphically similar to the upper and lower sections of the schoolhouse clock, whose face is surrounded by an octagon in the upper section and whose lower section features the word "Regulator" stenciled across the glass door in front of the pendulum compartment. Even the slightly curving line formed by the bases of the letters in the words Allen-Bradley is similar to the slight arc of the word Regulator.

The trademark doesn't match the clock perfectly, but it certainly is close in form.

In addition to the commonality in terms of what the schoolhouse clock represented—precision and regulation—and the form match, clocks clearly were a major interest of the Bradleys.

Jerry Blackstone, manager of public relations for Rockwell Automation before he retired, in his introduction to a history of the company that was published in 1987 began: "It's likely that few industrial companies founded 80 years ago or more have as detailed a record of their history as Allen-Bradley. This can be credited largely to the interests of their founders Lynde and Harry Bradley (photography, history, and clocks being among them) and their sense that what they were doing would be significant to a great many people for a long, long time."

An Allen-Bradley retrospective about the current clock, published in 1982 on its twentieth anniversary, referred to "Harry Bradley, master tinkerer and lover of clocks." Though already in failing health that Halloween eve in 1962, Harry threw the switch that lighted for the first time what Guinness proclaimed to be the largest four-sided clock in the world.

John Gurda's book *The Bradley Legacy: Lynde and Harry Bradley, Their Company, and Their Foundation* posits that Harry intended the current clock to be, "...the village clock for Allen-Bradley's home neighborhood." Architect Fitzhugh Scott, Jr., who died in 1998, said, according to Gurda, "Harry wanted a clock that Allen-Bradley's workers could read from their houses."

Scott, Jr. created the look and scale of the clock, but the complex mechanisms that drive eight hands synchronously and have kept accurate time for more than 40 years, were engineered from a blank sheet by Ray Ellsworth, who was a designer in the special machinery engineering department of the company, beginning in 1960. Until Walter Freeburg, then the plant engineer, stopped at his desk and gave him the project in early 1962, he had never done anything involving clocks. He didn't let that stop him.

"A clock is just a gearing situation and I had worked on many motors and machines in the shop," he said. "This was the same sort of thing. It was a challenge because of its size."





Courtesy of Rockwell Automation.

Did the schoolhouse clock inspire the Allen-Bradley logo?

Ellsworth took classes at UWM and Marquette but never received a degree. "I had an aptitude for engineering, though," he explained, "and was able to obtain a professional engineer's license."

Flattered that he was given the job, Ellsworth took on the project with the sort of gusto Milwaukee is famous for. Amazingly, by that October 31 evening in 1962, less than a year later, work on the clocks was complete and a shroud that had hidden the four faces while they were under construction was removed. The hands were already marking time when Harry, whom Ellsworth had no interactions with, flipped a switch that turned on the lights for the first time.

"I don't know much about Harry's interest in clocks," remarked Ellsworth, who also doesn't have any theories as to why the octagon became the company's trademark. "But I remember people who knew him saying he liked towers."

Retired Rockwell Automation executive Hutton, who spent his entire professional career with the company, stated, "The Bradleys liked castle

architecture with towers and lookouts and that's what inspired the A-B buildings."

In addition to towers and other fixtures of castles, it is clear the Bradleys, Harry in particular, had an intense interest in clocks. The Web site for the Milwaukee Section of the American Society of Mechanical Engineers, which was established in 1906, states:

"The interest in creating the tower was Harry Bradley, younger of the firm's two founding brothers. An inventor, Bradley included in his tinkering several of the clocks which he owned."

The huge sums that were invested in the four-sided examples that have topped the company's buildings on either side of Milwaukee's Second Street since the early 1950s are the strongest evidence of Harry's fascination with clocks. It's not surprising then that the primary influence for the company's trademark was a type of timekeeper—the schoolhouse clock—the Bradleys were probably exposed to regularly as children, adolescents, even adults.

Other possible inspirations for the Bradlys use of octagon have been advanced and at least a few might have played roles.

Someone suggested the octagon's use in the stop sign attracted the Bradley's interest. Thinking might have been, this individual averred, that customers should "stop and look at A-B!"

Although the rationale seems far-fetched, it is possible that the Bradleys or others close to them would have been aware that the octagon had been recommended as the standard for stop signs by a small committee supported by the American Association of State Highway Officials that met in 1922, about a year before the octagon was used for the A-B trademark.

This is still fairly unlikely because the committee's recommendations weren't implemented widely until years later. Incidentally, a primary reason the octagon was picked for the shape of the stop sign was that once it became established, drivers could tell what it meant from the back almost as easily as from the front.

Another possibility mentioned by retired Public Information and Training Coordinator Todd Weiler, City of Milwaukee, is that the inspiration for the trademark might have been octagonal electrical junction boxes. There is a match given the brothers' focus on electricity, but from what I've been able to determine, the type of wiring that was common in America until the 1930s, called knob and tube, didn't use junction boxes as we know them today.



Early stop sign. Photo by John Rietveld, signalfan.com. Used with permission.



Modern octagonal junction box. Photo by author.



Junction boxes shown in 1912 catalog. octagonal junction box. Courtesy of International Brotherhood of Electrical Workers Museum Tom Evans, senior applications engineer for Thomas and Betts, the owner of Steel City, a leading junction box manufacturer, said he thought octagonal boxes didn't come on the scene until the late 1920s or early 1930s, well after the development of the Allen-Bradley trademark. He also mentioned that the octagon was ultimately used for junction boxes because it provides multiple flat surfaces to connect conduit, armored cable, or other wire carriers and has more interior space than a square or rectangle.

A representative of the International Brotherhood of Electrical Workers Museum in Washington, DC, Michael D. Nugent, thinks octagon boxes appeared later than the 1920s, too, after the knob and tube era. He sent several 1912 catalog pages from an early electrical supplier that list round junction boxes but no octagonal or even rectangular ones.

In a meandering river of a story with many tributaries, another major feeder was discovered by former executive Hutton and reported by Gary Drinan now retired—a writer for Allen-Bradley and later Rockwell Automation, who authored an article in 1992, titled "The Mystique of the A-B Octagon."

While reviewing a map of Milwaukee's Forest Home Cemetery, Hutton was stunned to see that Lynde and Harry were buried in an area of plots within Section 19 that is in the shape of an octagon—actually three octagons, one inside another like nesting dolls. Drinan investigated and found the area surrounds a kame—a glacial feature common in Wisconsin—and it is one of two areas of plots in the cemetery that is shaped like an octagon. The second, he wrote, "is designed around a kettle," another common glacial feature. Both octagonal areas hold the plots of a number of families.

Drinan's research indicated the Bradley plots were purchased in 1854 by William Pitt Lynde, who was Lynde and Harry Bradley's maternal grandfather. Milwaukee was a new city then, having adopted its first charter in 1846. A U.S. Census estimate from 1850 put the population at 20,060.

Grandfather Lynde was a brilliant and accomplished man, who Drinan reported, "graduated valedictorian from Yale College in 1838 and from Harvard Law School in 1841."

He went on to found, with partner Asahel Finch, Jr., the law firm that became Foley and Lardner, currently Wisconsin's largest. Later he was "the

Attorney General of the Wisconsin Territory before it became a state, U.S. congressman, and mayor of Milwaukee from 1860 to 1861."

Not surprisingly, the impression Father Lynde made on daughter Clara was deep. She named her first born, Lynde, and made her surname the middle name of her second born, Harry. Whatever fortune William Pitt accumulated, however, didn't pass to her. She and husband, Henry C. Bradley, returned to Milwaukee in 1891 from Kansas City after a wholesale business he operated there was sold. The husband suffered a lingering illness, she took in roomers to help make ends meet, and he finally died around the turn of the century in Wauwatosa.

The brothers undoubtedly inherited some of their maternal grandpa's drive and intelligence. It's obvious they were skilled businessmen; less wellknown are their technical achievements which were spectacular. Lynde was awarded 26 patents by the time he died at 64 and Harry earned 29, receiving the last at age 74. Hutton said people who knew the brothers personally invariably commented on their intellects, and he recalled the phrase "wonderful thinkers" being applied to them.

"Lynde was considered to be the technical one and Harry the people motivator," Hutton continued. "Fred Loock, whom they hired when the company was less than five years old and who later became president was the marketing man—he had a sharp commercial sense.



Forest Home Cemetery map. Courtesy of Forest Home Cemetery.



William Pitt Lynde's headstone in Section 19 of Forest Home Cemetery is the large, stair-stepped rectangle in the background. The four blocks in the foreground mark, from left to right, the graves of Lynde, Caroline, Harry, and Peg Bradley. Jane Pettit's ashes rest in her mother's space, and her name is engraved on her mother's block. Photo by author.

Fred Loock anecdote

Fred Loock learned that a company truck was going to make a major delivery amid the skyscraper canyons of Manhattan. "Fred had the truck brought into the paint shop," Hutton said, "where he ordered that a big A-B octagon be painted on top of trailer. When asked why Loock exclaimed that he 'wanted people who might be looking down at the street from windows high above to know Allen-Bradley's in town!"

In his investigations of the origin of the octagon, Drinan discovered one of Grandfather Lynde's hobbies was "reading in the original Greek language" and speculated this might have exposed him to Greek and Roman architecture that occasionally featured octagons.

Accepting this interest in the octagon developed is one thing. Two bigger leaps are that it inspired Grandfather Lynde to select a burial plot in an area of the cemetery that was octagon-shaped purposefully and for his grandsons to pick up on his affection for octagons and make the shape their trademark. A Forest Home representative said Lynde might have been more motivated by the slightly higher ground the 20 burial sites he purchased are on than the shape of the area as delineated on—and only visible on—a cemetery map.

It is a fascinating circumstance whether coincidental or deliberate. As striking is the esteem the brothers had for their grandpa which led them to be buried near him in plots he purchased originally, when they certainly could have afforded grander surroundings.

That Lynde and Harry are interred almost side by side with their wives is also extraordinary and bears witness to the closeness of a relationship that kept them together not only throughout their lives but also in death. According to Hutton, Dr. Stanton Allen—one of the namesakes of the company—is also buried at Forest Home.

Arguing against any special interest William Pitt Lynde had in octagons is the reality that his substantial headstone is not an octagon but instead is a simple stair-stepped stack of three rectangles. No octagon is carved into it either. Other markers near his—including Lynde's and Harry's—are small

rectangular blocks. The octagon was of tremendous importance to them in life, but evidently they didn't desire to take it to their graves.

Another possible influence Drinan presented was the 19th-century octagonal home movement that perhaps began with Thomas Jefferson. The main floors of Monticello, completed in 1809, are shaped like an elongated octagon; its signature Dome Room is a classic octagon. His less well-known retreat, Popular Forest, completed in 1812, is also a classic octagon.

Though never common, eight-sided structures have been built since antiquity, particularly in Holland where the form was often used for churches.

A leading popularizer of the shape in America was Orson Squire Fowler, who published *A Home for All, or a New, Cheap, Convenient, and Superior Mode of Building* in 1848 which promoted what he viewed as the many advantages of octagon-shaped houses. By trade, Fowler was not an architect or engineer but a phrenologist; that is, a practitioner of the now discredited analytic method that claimed bumps, fissures, and other features of an individual's skull revealed traits such as intelligence.

In America, Fowler's book launched what author Carl F. Schmidt summed up as *The Octagon Fad* in his 1958 book with that title. "The 1850s could be called the decade of octagons," Schmidt wrote, "because it was during this ten-year period that most of the strange eight-sided buildings were erected." Interestingly, and perhaps significantly, the octagonally shaped schoolhouse clock appeared about two decades earlier and began its march to widespread use in the 1850s.

Hutton thinks that another well-known trademark was on the Bradleys' minds when they chose the octagon. Square D was a potential competitor that began operations at about the same time as Allen-Bradley, only in Detroit.

According to a Square D webpage that features a timeline of the company, a product the firm manufactured in 1915 carried an embossed square. In the center of the square was a capital D, which stood for Detroit. At the time, the firm was known as the Detroit Fuse and Manufacturing Company. By 1917, the timeline continues, "The safety switch becomes so popular that the company adopts Square D Company as its official name."

With the square already in use by a growing concern that also focused on electricity, Hutton suspects, the Bradleys looked for similar, geometric simplicity and found the octagon. Circles, too, it should be pointed out, had been called into service years earlier by electricity pioneers, General Electric and Westinghouse, and used to enclose a significant letter or two in their trademarks.

The Bradleys went with the trend, found a shape that hadn't yet been employed by a company focusing on electricity, and put the initials of the founders central, featuring letters in a manner that had already been established by Square D and others.

One more potential influence influence came to my attention while researching the history of tower clocks. Underscoring the marvel that is the Internet, I came across a site that presented information on the largest clocks in the world, Allen-Bradley's four-sided tower clock among them.



Richards octagon house, Watertown, Wisconsin, completed in 1854. Photo by author.



SQUARE D®

Square D Square D trademark. Courtesy of Schneider Electric

Pictures and particulars about a clock in Jersey City that faces Manhattan across the Hudson River caught my eye. Erected by the toothpaste giant in 1924, it's called the Colgate Clock and is the second-largest, single-faced clock in the world (the largest is in Istanbul) with a diameter of about 50 feet. The minute hand is just under 26 feet and the hour hand, 20 feet. By

contrast, the faces of the current Allen-Bradley clock are about 40 feet in diameter. Minute hands are 20 feet long and hour hands just under 16 feet

This clock had a similar but smaller predecessor that was erected in 1906 to commemorate the centennial of Colgate. Its single face was 38 feet in diameter, not quite as large as the current Allen-Bradley clock faces. When the larger clock was installed in 1924, the original was moved to Jeffersonville, Indiana, where it still helps citizens keep time.

The frames that hold round faces on both Colgate clocks are octagons, a shape that was inspired by a popular product Colgate first produced in the late 1800s and still manufactures today called Octagon Soap. A company spokesperson checked but was unable to determine why the soap has the shape of an elongated octagon.

Possibly Lynde or Harry, while visiting Manhattan, saw the first Colgate clock in the years leading up to their choosing the octagon. Moreover, once they were using the octagon in their trademark to identify the company and its products, it seems probable that one or both would have heard about the octagonal Colgate clock and perhaps seen it or pictures of it. It certainly could have been a factor in Harry's decision to install the first Allen-Bradley clock in the early fifties. As the night photo shows, the Colgate clock also has lighted hands and hash marks.

Although nothing popped up in my research that indicated the value of the Allen-Bradley clocks in terms of community goodwill and publicity, it had to have been substantial for the company to devote large amounts of money to designing, building, and maintaining them. Today the octagon is so tightly linked with the company and its products that when I was researching this article, almost everyone I talked with, regardless of location, recognized the octagon as the trademark of Allen-Bradley and Rockwell Automation.

How it came to be is a question that I was not able to answer with airtight certainty. It is still an open case. Naturally, if you have any idea why the octagon was chosen or have evidence to support my primary theory—that it was inspired by the schoolhouse clock—or any of the other possibilities, please e-mail ted@tswrites.com.

Before leaving you to other mysteries, it occurred to me that you might be wondering why the schoolhouse clock itself featured an octagonal surround. I explored this but again, sadly, didn't find a positive explanation. I did discover that its most likely progenitor was a late 18th-century timekeeper known as the Act of Parliament Clock, sometimes called the Tavern Clock. Legend says it was first produced by English clock makers as a response to a tax levied on clocks by the English Parliament in 1797. The tax dampened sales to citizens so clock makers created a device taverns could purchase to draw in patrons who wanted to know the time. Other sources, however, say clocks of this kind were around before the tax.

Even if the Act of Parliament Clock was the certain predecessor, it doesn't explain the octagon.

Because some of the octagon clocks I have encountered—especially the schoolhouse type—are 8-day, it seemed possible that the shape was chosen to match the wind period. Various clock makers and specialists, however, told me they think this unlikely because many clocks were 8-day and featured surrounds of various shapes.

Instead, they say its origin is probably fairly mundane, strictly a matter of style, manufacturability, and marketing. The octagonal shape is simply more exotic and perhaps more appealing than a plain square or rectangle and, in the years before modern manufacturing, far easier to cut from wood stock— even with all the mitered corners—than a perfect circle.



Colgate clock, New Jersey. Photo by Brian Dube http://newyorkdailyphoto.blogspot.com/2007/10/lonely-clock.html Used with permission



Photo by Colgate-Palmolive Company. Used with permission.



Octagon Soap Octagon soap was first made in the late 1800s. Photo by Colgate-Palmolive Company. Used with permission.



Act of Parliament Clock, 1797. Photo by Bunratty Castle, Gort Furniture Trust. Used with permission.

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