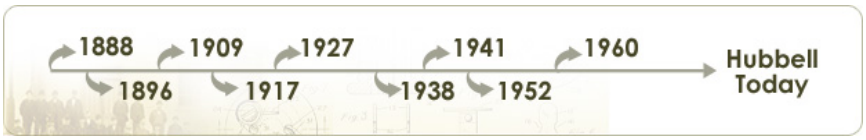
HUBBELL INCORPORATED
584 Derby Milford Road
Orange, CT 06477-4024
(203) 799-4100

History



1888

The closing decades of the 1800's comprised an era of invention and business development which were to power the world in the twentieth century. Like his contemporaries - Edison, Ford, Westinghouse - Harvey Hubbell was to contribute to both spheres of progress: new product design and manufacturing innovation.

Hubbell's family has a long history in the United States; the first family member in the country, Richard Hubbell, had immigrated from England in the 1640's. The first Harvey Hubbell - father of the Company's founder - had been a partner in two clothing manufacturing firms, the second of which was operating in Long Hill, Connecticut, during the founder's childhood. Harvey Hubbell II left home for his secondary education in Poughkeepsie, New York, and in New York City. Following that formal education, he began a business career which would make him one of the nation's true entrepreneurs. The long series of patents which he was awarded are testimony to his imagination, technical expertise, and skill in mechanics.

His first work experience was with manufacturers of marine engines and printing machinery, but his greatest interest was in a continuous series of his own ideas for products to make work more efficient, life more convenient. Though he advanced, by age 31, to the position of Superintendent of Works for the Cranston Press Works, Hubbell wanted to put those ideas to work. He resigned and in 1888 opened his manufacturing facility in a small loft on Middle Street in Bridgeport, Connecticut.

Hubbell's first patent, and the new Company's first product, was a specialized stand with moveable cutter for use, as the patent application stated: "...in stores to hold rolls of rolls of wrapping paper..." Virtually universal in retail stores in the early 1900s for use in wrapping goods, the same cutter stand is still widely employed today. Hubbell soon discovered that to manufacture the new product efficiently he needed, first of all, more space so he moved his new enterprise to a larger factory formerly occupied by Knapp & Cowles Company. He also discovered that he had to design machinery to make its parts. One of the first was a tapping machine, also his patent, which he installed in his shop. Though orders for the paper roll holder began to arrive, there was a greater demand from other manufacturers for Hubbell's efficient tapping machine. More important to the future of the business than those initial orders was the integration of ideas which Hubbell began: a product to solve a problem and new manufacturing techniques for its production.

Return to top

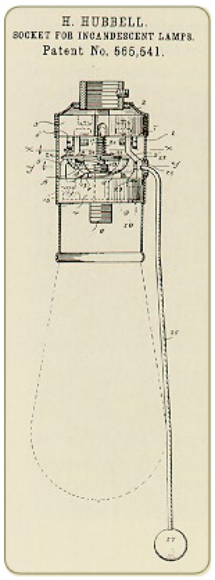
1896

With his business in machinery progressing, Hubbell's next patent was a major breakthrough in the fastener industry: the process and machinery for cold rolled screw threads which reduced the rate of material lost in production by more than 50%. He designed and built progressive blanking and forming dies, patented machinery to slot screw heads, a machine to assemble screws and small parts, devised tools to indicated speed, and patented a changeable speed screwdriver. He then began to see new ways to utilize and control electricity. His first electric switch design had been submitted for patent in 1891, but Hubbell had new ideas to make Edison's electric illuminating bulb more useful.

Fixtures for electric light were slowly replacing gas lamps, and were usually installed where the gas fixture had been in the center of the ceiling or mounted high on a wall. In many cases, the electric lights burned continuously since, with no existing wiring in the building , the installation of a separate circuit and switch to control each fixture was costly. Who knew, after all, whether this electrical novelty would last long enough to justify the expense.

Hubbell's idea was to provide convenience, safety, and control to an electric light with his new "pull socket" which was patented in August of 1896. The same familiar device with its on/off pull chain is still in use today. The success of this product necessitated yet another expansion, so in 1897 he moved to a larger building, also in Bridgeport, which had formerly been a school.

Hubbell's venture into electrical equipment manufacturing had been engendered by an incident some years before. While walking in New York City, Hubbell happened upon a penny arcade which had just closed for the day. The arcade had been equipped with several electrically operated games, including one where two boxers, maneuvered along slots in the floor of the miniature boxing ring, threw right or left uppercuts at each other with the touch of the proper button. While a favorite with customers, the



boxers and other electrical games caused problems for the arcade's staff.

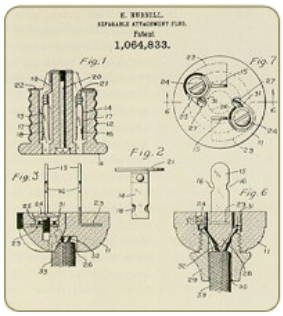
Looking through the window, Hubbell watched an exasperated janitor struggle to detach each of the power supply wires from separate post terminals extending outward from the wall. After moving the game to one side and sweeping the floor, the janitor faced the even more tedious task of identifying each wire and its proper terminal post, making each of the reconnections, and checking each terminal once more to preclude an inadvertent short circuit.

Hubbell's idea was to design a product with individual wires permanently attached in the proper sequence and correct polarity, and one which could be connected or disconnected, easily and safely, to a power supply in the wall. He built three prototypes by hand using metal and insulated wood parts which he delivered to the janitor who, probably unaware of his role in the field testing, found that his problem was solved. Later, Hubbell's "separable plug" design took shape on the drawing board back in Bridgeport, then was submitted to the patent office in Washington, D.C. Additional designs based on that basic concept - separable plugs in different configurations, a single flush mounted receptacle - as well as new products for electrical circuits - cartridge fuses and fuse block, lamp holders, key sockets - soon followed the same path. One of the most successful, and the one most familiar today, was the duplex receptacle still found everywhere that electrical power is used.

Return to top

1909

Hubbell's Company expanded through the early years of the new century as the use of electricity expanded. Other manufacturers had also entered the new field and it became apparent that certain standards for the interchangeability of plugs and receptacle were needed. Standardized dimensions of slot size, screw spacing, and other parameters - the same which Hubbell had been using - were developed and adopted by the industry.



The Company's first catalogue of 12 pages offering sixty-three electrical products had been published in 1901 and was designed to fit in a vest pocket. The Company was incorporated in the State of Connecticut as "Harvey Hubbell, Incorporated" in 1905. In the same year, the Company registered its trademark of "...a sphere with meridian lines and the name 'Hubbell' centered within." Hubbell's pace of new ideas and product design did not falter. Between 1896 and 1909 he was granted 45 patents on a wide variety of electrical products. The success of Harvey Hubbell, Incorporated, required substantially more manufacturing and product development space, so planning was begun in 1909 for a completely new facility. It was to be a U-shaped structure of four floors to increase manufacturing efficiency and like the products themselves, utilized the newest technology: reinforced concrete. The first such building constructed in New England, was in use by the Company's Wiring Device Division until 2001.

Also in 1909, Harvey Hubbell, Incorporated, acquired a "selling interest" in the Tea Tray Company of Newark, New Jersey. The name referred not to equipment for afternoon socials, but to a particular configuration of lamp shade which, fitted to Hubbell's electrical components, gave the Company a new family of products and a more diversified business base. Acquisitions were to play a larger role in the Company's diversification fifty years later.

Return to top

1917

The new Bridgeport plant had been in operation for more than five years, and the Company's product lines had been continuously expanded. Catalogue #17 was published in March of 1917 and made an interesting contrast to the old vest pocket edition of 1901. Now 8 1/2 by 11 inches in size an bound in gold stamped leatherette, the catalogue had more than 100 pages and listed more than a thousand products. In bulb sockets alone, the Company manufactured 277 different types and sizes. Hubbell's toggle action light switch which incorporated a "quick make or break" feature to meet the rigid requirements of Underwriters' Laboratories (UL) was replacing the former two button type push switch. Also appearing in the catalogue as a harbinger of the Company's future focus on the industrial electrical equipment was a line of "Presturn" products - 288 in all - which "...are guaranteed to sustain greater weight and resist more strain than any on the market...especially suitable for general use in mills..." Specialized designs and reliable performance in industrial electrical equipment, then as now, are an area of expertise for Hubbell Incorporated.

Return to top

1927

Until its last year, the Twenties brought a prosperous time and the nation had a seemingly insatiable demand for the convenience of electricity. A Company advertisement of 1920 noted: "Over Fifty Million Hubbell Receptacles Already Installed!" and new products emerged at a rapid pace. The Company produced a line of 32 volt devices for rural use; because city power had not yet reached the farms, some farmers had generators to produce current at lower voltages. In the city, electricity for public transportation and street lighting had become commonplace. The vibration of a moving trolley car, however, caused the bulbs used for interior illumination to loosen in their sockets, often shattering on the floor. Hubbell solved the problem with a "Loxin" mechanism which fit into any standard socket and locked the bulb in place. Falling lightbulbs no longer endangered streetcar passengers, and overly thrifty commuters had to find a new source of replacement bulbs for home use.

For the home, the Company developed a system for lighting fixture connections called "Elexit" which allowed the homeowner to install most fixtures without hiring an electrician. Moving or replacing

fixtures became much easier as did the necessary task of taking all the lighting fixtures with you when moving to a new house.

The year also ended the Company's first era when its founder Harvey Hubbell II died on December 17, 1927. He was succeeded as President of the Company by his son, Harvey Hubbell III. Twenty-six years old when he succeeded his father, Harvey Hubbell III had already spent years working in the business. That early experience with electrical equipment engineering and learning the discipline of production was to stand the Company in good stead in the decades to come.

Return to top

1938

Harvey Hubbell, Incorporated, like most manufacturers, could not escape the rigors of The Depression. Employee layoffs were unavoidable, those who were fortunate enough to remain saw pay cuts, and some received shares of the Company's stock - issued in the 1936 when the Company went public to raise capital - in lieu of pay. But as the county struggled with the economic storm, and manufacturers saw previously robust markets shrink, there was time for preparation for better times ahead - when they came. Harvey Hubbell III soon showed that he had inherited his father's twin acumen for product innovation and business development. In product, as examples, he devised the Company's lines of Twist-Lock industrial connectors with new 2-,3-,and 4-wire devices of various ratings, designed a whole new series of locking connectors for industrial use which he named "Hubbellock", and introduced heavy-duty, circuit-breaking devices. During the same period, and with the help of his small staff, Hubbell established a vital foundation for future success by assembling a network of independent electrical distributors through which to market Hubbell products. This core network of distributors, expanded in future years, formed a partnership with Hubbell Incorporated which brought mutual growth in the decades ahead. Today, that partnership is one of Hubbell Incorporated's greatest strengths.

Return to top

1941

The Company played a large part in the war effort not only in meeting the demand for electrical components and systems to power the nation's industries, but also in products for the special applications needed for victory. These included components for military vehicle electrical circuits, battery-charging systems for M-4 tanks, power jacks for test meters, vacuum tube sockets for radio communications, and a line of electrical and electronic connectors for aircraft. The Company's years of experience in building devices reliable enough for industrial use was a valuable asset in the production of products which could perform under rugged battlefield conditions.

A second plant was opened in Lexington, Kentucky, in order to meet the demand and as a safety measure since the main plant in Bridgeport was considered vulnerable to air or sea attack. A further protective step was taken to ensure availability of Hubbell's critical components by microfilming all engineering drawings, production records, bills of material, etc. Three sets were produced, sealed in metal tubes, and secreted in safe places. Fortunately, the "insurance" was never needed and the Company continued its contribution to the national effort until the end of the war.

In retrospect, the war had helped end the nation's economic depression of the Thirties, and Harvey Hubbell, Incorporated, had helped end the war. In the interim between the two periods, in the Company's 50th Anniversary Brochure published in 1938, Harvey Hubbell III had marked his, and his Company's philosophy for the future:

"The present management is proud of the Company's past, but concerns itself entirely with its present and future, recognizing that times change and that it is the service of today that determines our position in the industry tomorrow."

Perhaps seen only as an introduction to the brochure at the time, the statement now confirms the validity of his vision and his resolution to take the Company forward to success. By establishing the foundation of Hubbell Incorporated's vital distribution network in the 1930's, by continuing his father's record of technological innovation with patents of his own and by extending the Company's focus on customer service, Harvey Hubbell III formulated the corporate philosophy which positioned the Company for the accelerating growth which would mark the last three decades of the Company's first century.

Return to top

1952

The shift to a peacetime economy had not been without difficulties - housing, appliances, clothing were in short supply for several years after the war - but the thousands of veterans back from the overseas and the consequent increase in the nation's marriage and birth rates comprised a soaring domestic demand. Industry modernized - wartime shortages had kept plant maintenance to a minimum - then expanded. Housing contractors and consumer goods manufacturers were busy. New businesses began to meet the needs of increased leisure time. Harvey Hubbell, Incorporated, was ready to serve all of these markets.

Hubbell had been one of the first to manufacture flush toggle switches for alternating current only. The first Safety Receptacle was designed and produced as were the original "grounding only" devices which, again, helped to set the standards for the industry. And while Hubbell was busy on land, the Company found new opportunities at sea.

In 1952, the ocean liner "United States" was launched in Newport News, Virginia. Queen of the seas for many years, the ship was completely fitted with Hubbell wiring devices designed expressly for narrow stateroom partitions and to withstand the effects of salt air. An ardent yachtsman himself, Harvey Hubbell III designed a complete family of corrosion resistant devices including both on-board and dockside equipment for the expanding pleasure boat industry. A familiar sight of marinas today, these first products were so successful that alternative designs were produced for many industrial applications where corrosive atmospheres and materials pose problems for standard wiring devices. The Company's sales in the new products and continuing lines increased proportionately to these successes, but more was to come as Harvey Hubbell, Incorporated, added diversification.

Return to top

1960

Beginning in 1960, the Company entered a new period of rapidly expanding growth in both sales and income. Much of the growth resulted from the Company's internal product development, a longstanding Hubbell tradition, and a source which expanded under the industry leadership of Harvey Hubbell III and other Hubbell engineers. A second source of growth through acquisition not only brought additional products to the Company's network of distributors, but opened entirely new market

opportunities as well. The acquisition program began in 1958 when a plastics molding operation was purchased to provide both in-house supply of components to other Hubbell operating units as well as incremental sales to independent customers. Other businesses, all contributing to the Company's growth, have been added through the continuing acquisition program. These businesses, their year of acquisition, and their products were:

- 1962: Kellems Division with mesh grips, cord connectors, and wire management products
- 1963: Shalda Lighting as the foundation of Hubbell Lighting Division with fixtures for indoor and outdoor applications, and Grelco Ltd. industrial controls in England
- 1966: Euclid Electric which became Hubbell Industrial Controls, Inc.
- 1967: The Watford Electric Company in England producing industrial electrical components now manufactured by Harvey Hubbell, Ltd.
- 1969: The Kerite Company producing critical application electric power, signal, and control cables
- 1970: Steber Lighting with fixtures which further broadened the base of today's Hubbell Lighting Division
- 1972: Pulsecom Division with voice and data signal processing components and systems for telecommunications, and Southern Industrial Diecasting providing components to Hubbell operating units and independent customers
- 1976: Hubbell Hermetic Refrigeration, Inc., for the remanufacture of air conditioning compressors
- 1978: The Ohio Brass Company with post and suspension polymer insulators and surge arresters for electric utilities
- 1981: Raco Inc. manufacturing switch, junction, and outlet boxes and electrical fittings
- 1985: Miller Lighting indoor fluorescent fixtures for office and commercial applications, and The Killark Electric Manufacturing Company with specialty application enclosures, wiring devices, and lighting fixtures
- 1986: The Bell Electrical Products lines of outdoor and weatherproof boxes and enclosures
- 1989: Efcor, Inc., with enclosure products, and Elan Lighting products
- 1990: Marvin Electric Manufacturing with track and down lighting fixtures, and certain assets and the business of Brand-Tex Telecommunications – Modular Products Group which became Hubbell Premise Wiring which manufactures components used in applications for voice and data signal routing and connections
- 1991: The net assets of Bryant Electric with its wiring devices and associated components, and Lexington Switch and Controls with its transfer switches and fire pump controls
- 1992: Hipotronics, Inc., with high voltage test equipment
- 1993: E. M. Wiegmann, Inc., which fabricates a wide range of cabinets, panels, and other enclosures
- 1994: A. B. Chance Industries, Inc., with electrical apparatus, associated hardware, tools, and safety equipment for electric utility applications
- 1996: Anderson Electrical Connector which manufactures electrical connectors, hardware, and tools for the electric utility industry, Gleason Reel Corp., with cable and hose management products, and two small acquisitions of businesses manufacturing power poles for commercial applications and fault detection systems for power cables
- 1997: Fargo Manufacturing Company, Inc., with transmission and distribution line products for the electric utility industry
- 1998: Three lighting businesses to broaden the Company's product lines which were Devine Lighting (architectural outdoor fixtures), Sterner Lighting (specification grade and custom fixtures for outdoor and indoor applications including sports facilities), and Chalmit Lighting (fixtures for harsh and hazardous locations), and Siescor Technologies with digital loop carrier systems for telecommunications
- 1999: Chardon Electric Components with high voltage cable accessory products for electric utilities, and Haefely Test AG with high voltage test and instrumentation
- 2000: GAI-Tronics which manufactures specialized communication systems for indoor, outdoor, and hazardous locations, and Temco Electric Products with its boxes, enclosures and related accessories
- 2001: MyTech which designs and manufactures microprocessor-based occupancy sensors and other controls for lighting systems
- 2002: Lighting Corporation of America which manufactures a wide range of indoor and outdoor products for commercial, industrial, and residential applications, Hawke Cable Glands, Ltd., with its range of brass cable glands and connectors, enclosures, and field bus connectivity components for harsh and hazardous applications, and a pole line hardware business manufacturing various components used in the construction and maintenance of utility transmission and distribution lines
- 2005: Five businesses in separate transactions which expanded Hubbell's revenue base in each of the three segments. Added to the Industrial Technology segment were two businesses: one which manufactures pressure switches for industrial markets, and one supplying contractors and switches. The Power Systems segment added ATLAS, a civil anchor business, and FABRICA DE PECAS ELECTRICAS DELMAR LTDA, a Brazilian manufacturer of surge arresters, cutouts, and other utility products. Victor Lighting, based in the United Kingdom, is a supplier of lighting fixtures for harsh and hazardous applications joined Hubbell's Electrical segment
- 2006: Strongwell Lenoir City, Inc., renamed to Hubbell Lenoir City, Inc., added a line of precast polymer concrete products to the Power Systems segment. Joining the Industrial Technology segment was Austdac Pty. Limited. Based in New South Wales, Australia, it manufactures products for harsh and hazardous applications in a variety of industries

Return to top

Hubbell Incorporated Today

The Company operates manufacturing facilities in the U.S., Canada, Puerto Rico, Mexico, Italy, Switzerland, Brazil, Australia and the United Kingdom, participates in joint ventures in Taiwan and the People's Republic of China, and maintains sales offices in Singapore, Hong Kong, South Korea, the People's Republic of China, Mexico, and the Middle East. Because the Company has been an integral part of the growth of the electrical equipment industry and a pioneer in the development of new products and technologies, the Company has established a foundation of basic strengths on which to build its future growth.

Fundamentally, Hubbell Incorporated's commitment to electrical equipment manufacture has enabled the Company to consistently maintain its focus and apply its energies to the technology of generating, transmitting and utilizing electrical energy. Electricity is the most adaptable form of energy, and the one which will power the 21st century from basic industry to the most advanced electronic devices. The expertise developed during the first 100 years is an asset vital to the Company and its customers in the future.

Diversification of product and market will provide the advantage of flexibility, i.e. the benefits to the Company of counter-cyclical markets to provide opportunity in a dynamic economy, the benefit to customers of a single source of supply for new construction, modernization, or rehabilitation. Through internal growth and acquisition, in the future as in the past, Hubbell Incorporated's breadth of line will

expand the Company's position among the industry's leaders.

The Company's tradition of quality, most apparent in its products but a part of its operations as well, will continue its contribution in the future. To Hubbell management, quality is an emphasis on asset deployment to provide the flexibility and resources to implement planned growth and consistent return to shareholders. To Hubbell employees, quality is the focus on each day's work in design, engineering, testing, and production. To customers, Hubbell quality is the superior operation, reliable performance, and dependable service which distinguish Hubbell products from others.

The Company's network of independent electrical distributors, who provide Hubbell products and their own expertise to the end-user, are a critical asset. Some of those distributors have been associated with the Company since the early years; others have joined as the industry expanded. Together, they form a partnership with Hubbell Incorporated which has played a large part in the past growth, and which will plan a larger part in the future.

The combination of these – commitment to the industry, diversification of product and market, a continuing tradition of quality, partnership with the independent electrical distributor, and the experience of accomplishment in research and development – have forged Hubbell Incorporated's exceptional records of growth. The same comprehensive corporate capability will expand Hubbell's growth in the commercial, telecommunications, lighting, utility, industrial, and consumer markets of the future.

Return to top

Senior Management

In 1975, Robert W. Dixon succeeded to the position of President and Chief Executive Officer. Like his predecessors and those Chief Executive Officers who followed him, Mr. Dixon brought to the company's top position the qualities needed for continued leadership for Hubbell Incorporated: an expertise in professional management founded on years of service with the Company in positions of increasing responsibility and the flexibility to adapt the Company's assets and human resources to maximize opportunity. Mr. Dixon was succeeded as President and CEO in 1983 by Fred R. Dusto. Mr. Dusto led the Company through the mid-1980's, lengthening those Hubbell traditions of product innovation, complementary acquisitions, and management succession through internal development. His retirement in 1987 and the appointment of G. J. Ratcliffe, a member of senior Hubbell management for 13 years at that time, as Chairman and Chief Executive Officer positioned Hubbell Incorporated for a new era of growth.

In June, 2001, Hubbell's Chief Financial Officer Timothy H. Powers was appointed as President and Chief Executive Officer and a Director of Hubbell Incorporated succeeding G. J. Ratcliffe. Mr. Powers became Chairman of the Board of Directors in September 2004.

Return to top