

— LCN —



— A Brief History —

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LCN History

How The Door Closer Was Invented

In 1880 Mr. L. C. Norton was employed by the Bishop at the Boston Trinity Church to remedy a condition annoying to the churchman and his congregation.

Several swinging doors in the church vestibule would open and close with every gust of wind. Banging and slamming doors interrupted the services.

Controlling devices to prevent slamming were unknown. Coil springs and double-swinging hinges were the only makeshifts available to close doors. In those days the Door Closer was unheard of.

Mr. Norton changed the doors to swing one way by installing a rubber-lined wood stop on the head casing. The Bishop, however, condemned this, saying that the continuous thumping of doors on the rubber stop disturbed him greatly while preaching.

Disgusted that his efforts were not appreciated, Mr. Norton took off his overalls and threw them with his tools into a closet off the vestibule and violently closed the door, which, to his surprise, did not slam. He tried it again and found that the quick action of the closing door formed a pocket of air in the closet and effectually prevented the slamming.



Lewis C. Norton
The originator of Door Closers
and Door Checks.

...The Problem Solved

On the way home he could not forget the action of the closet door. That evening he was determined to solve the problem, and finally decided upon a tube and plunger arrangement. After a search he located an old air pump to which he fitted brackets designed to hold it on the door.

The problem of controlling the speed of the plunger was accomplished by cutting several vents in the tube, which allowed the air to escape and the door to close silently. This device was installed and performed efficiently, making it the first Door Check ever invented. From this simple beginning, Mr. L. C. Norton, on June 17, 1881, founded the first company engaged in the manufacture of Door Closers; since that time his entire life has been devoted to the developing and perfecting of door-closing devices.

Mr. Norton, as guiding genius of the Norton Lasier Company, presents with a sense of pardonable pride the latest developments of a lifetime of effort in this direction — the complete line of L.C.N. Door Closers.

LCN Closers was founded by Lewis C. Norton, who invented the door closer in the U.S. and gave his initials to the manufacturing company he founded in the 1870's on the East Coast. The first units were mounted on the doors of the Boston Trinity Church in 1877 and are still in use today. In 1926, L.C. Norton and D.R. Lasier formed the Norton Lasier Company and built the first plant in Chicago, selling door closers under the LCN trademark.

After World War II, LCN moved to Princeton, feeling a move to rural Illinois would be advantageous. So in 1949, the LCN plant was built on West Railroad

Avenue. By 1950, the entire operation was moved from Chicago to Princeton. About 20 experienced employees moved with the plant, leaving 50 new jobs to be filled by Princeton area residents. Currently, LCN employs about 450 people.

Since 1950, the company has produced a variety of door closers ranging from surface-mounted and concealed closers as well as security closers used in prisons and correctional facilities. Currently, the Company has over 35 different series of closers and many other door hardware products including pivots and hinge guards.

LCN closers are designed to have an operating life of 15 to 20 years. They are used in schools, hospitals, stores, churches, office buildings and factories nationwide.

While developing new products to fill our market needs, LCN continues producing their popular closers that were designed almost 40 years ago and still provide a large part of our volume.

In 1994, LCN expanded its facility by almost 20,000 sq. ft. to now encompass over 180,000 sq. ft. There have been over 23 additions made to the factory since LCN was built in 1949. Beginning with a building area

of only 4,851 square feet, LCN is almost 37 times its original space.

With the passing of the Americans with Disabilities Act, AutoEqualizers have played a great role in aiding those with disabilities. These power operators automatically open and close doors when actuated. Offering both a



pneumatic and electric version, LCN has assisted building owners and architects with meeting their ADA requirements, as well as providing easy access for the frail, elderly or disabled. Manual closers are also available with reduced opening force to meet ADA requirements as well.

Since 1926, LCN has specialized in solving door control problems through the use of high quality, innovative door control products. By adhering to high standards of performance, LCN has earned a leadership role within the industry and is committed to meeting door control challenges of the future.



— LCN Time Line “The Early Years” —

- 1851 - Lewis C. Norton born May 5, 1851, Cheshire Co., New Hampshire.
- 1869 - Norton left family farm to move to Worcester, Massachusetts.
- 1880 - Norton invented and installed first door closer - Boston Trinity Church.
- 1881 - First Norton manufacturing plant - Boston, Massachusetts.
- 1900 - Norton's first hydraulic closer - used full rack and pinion.
- 1903 - Yale bought 51% of Norton's stock.



In August of 1930, LCN started a new venture - making children's wooden riding tricycle type toys in the form of elephants, zebras, and tigers and sold them to local department stores in the Chicago area. These toys were produced in rented space on the fourth floor of the same building in which the door closers were made. As a result of all of these efforts, not a single employee was laid off during the Depression years.

That was THEN...

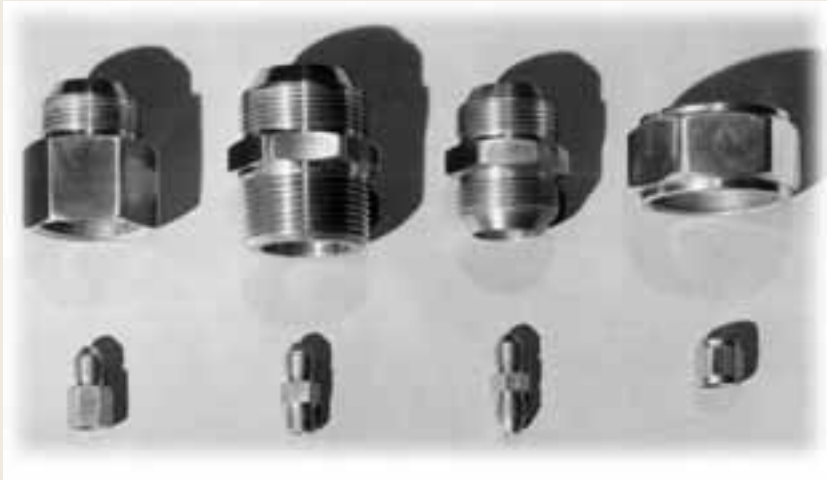
The Traditional series closers were the primary focus of the products offered by LCN in the late 20's. The early catalogs devoted many pages to the various versions, sizes and accessories available at the time. In the 1928 catalog, there were six sizes of Traditionals, A through F, available in four standard colors (LCN Standard, Gold Bronze, Silver Bronze and Dead Black). Standard models also included the telephone booth and coupon booth closers. Fusible-link hold-open arms and regular hold open arms were available in 100° and 180° versions. Parallel arms were also available. Typical installations of the time used various brackets. (Modern closers often do not require any additional mounting hardware or, as needed, use a simple mounting plate.) In 1928 the list price of a size D closer with regular arm was \$16.00, special painted colors an additional \$.50. Plated finishes were also available. Sizes C, D and E were tested and approved by the National Board of Fire Underwriters Laboratories in December, 1926.



Traditional closer bodies, made from solid bronze, were available for corrosion resistance on ships. In 1928 the list price of an unpolished bronze size D closer with regular arm was \$45.35.

The Traditional series was discontinued in 1980. Many are still in regular use. It is not uncommon for closers from the 1930's to be returned for repair.

— LCN Time Line “The Early Years” —



- 1905 - Adjustable hydraulic backcheck added.
- 1908 - Norton factory moved to Chicago.
- 1915 - Friction door holders and floor closers added to line.
- 1917 - David R. Lasier joined Norton as timekeeper.
- 1923 - First double acting floor closer.
- 1925 - Norton Door Closer Company sold to Yale and Towne.
- 1925 - Norton-Lasier Company started -
466 W. Superior Street, Chicago.
- 1927 - First hardware manufacturer to employ
commissioned reps.
- 1928 - First to make overhead concealed closers.
- 1929 - L. C. Norton made Chairman of the Board.
Moved to California.
- 1930 - L. C. Norton started California Door Closer Company.
- 1930 - Production of "Joy Toys" to cope with the Depression.
- 1931 - Volks Hardware Company started distributing
LCN's in Toronto.
- 1932 - First closer concealed in top rail (303).



**No more
DOOR
CLOSERS**

* * *

**WAR
PRODUCTION
ONLY**

* * * **U.S.A.**
May 5, 1942
WPA Order No. M-1261



We're ready with skill and experience to make any and every door closer for as long as it takes. There's no one else making door closers again, better than ever.

LCN

466
Third Superior Street
Chicago, Illinois

- 1937 - L. C. Norton passed away
November 4, 1937.
- 1937 - License granted to R. B. Davies
to manufacture door closers in
Australia and New Zealand.
- 1938 - Assembly of door closers by
Toronto Lock &
Manufacturing Company.
- 1942 - 100% war work, 3 shifts,
producing aircraft hydraulic
fittings until end of war.

10 CENTS

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26 Pages
 This Week

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LCN PLANT TO OPERATE IN 30 DAYS
Launch New Princeton Enterprise



Officials of LCN Closers, Inc, makers of door closers, of Chicago, are shown at the "housewarming" party at their new Princeton plant on the north side, as they made ready to begin operations there within 30 days. In the above group are: left to right James L Kirkland, of the sales department a graduate architect who designed the new plant here. Eddie Brousek, foreman of the plant and only member of the Chicago staff to be sent here, as the company will hire 10 local people to man the pans-making machinery now being installed. George Brandon secretary-manager of Princeton Chamber of Commerce, who was given principal credit for securing this new enterprise for the city; Miss Lucille Smith secretary of the company, Walter J. Hodge vice president, who will direct the operations by frequent visits to Princeton, and David R Laster, president of LCN Closers, Inc.
 Photo by Dale Nickelsen.

**NEW PRINCETON FIRM
 TO MAKE DOOR CLOSERS**
**Eddie Brousek Made Foreman;
 250 Guests at "Housewarming"**

Princeton's newest industry, the LCN Closers, Inc., will have its north side plant in operation within 30 days, Walter J. Hodge, of Chicago, vice president in charge, announced.

The plant, a new building 50 feet long and one story in height, is located on the former Ed Hansen property west of Main street and north of Railroad avenue.

More than 250 Princetonians were guests of the concern at a "house warming" party at the plant New Year's day.

At the open house celebration, officials of the concern which operates a parent plant at 466 West Superior street, Chicago making door closers, announced that 10 local persons will be hired to operate the machinery for production of parts for the closers.

Brousek Came to Princeton

Eddie Brousek, of the Chicago plant's staff, has been named foreman of the local plant, and has taken up residence here at 435 Lincoln street.

Of the ten local employees, Mr. Brousek has employed three. They are Herman J. Johnson, Tiskilwa rural route 2; Jack A Erickson, 905 North Euclid avenue, Princeton; and Wilbert A. Chelin, 718 North Chestnut street, Princeton.

New machinery, duplicating in pan the equipment at the Chicago plant, was being installed this week at the concern's north side building.

Officials Speak

At the "house warming," David R. Lasier, of Highland Park, president of the company, and Walter J. Hodge, of...

- 1948 - Company name changed to "LCN".
- 1949 - Pilot plant built in Princeton, Illinois.
- 1950 - Entire factory moved to Princeton.
- 1950 - Joint venture between LCN and Sargent in Peterboro, Canada - Liftlock Hardware.
- 1956 - Original "Smoothee" closer introduced (4003).
- 1958 - Large "Smoothee" closer, modular, produced (4010).



— Time Line “The Princeton Years” —

- 1959 - LCN sold to Schlage Lock Company, San Francisco.
- 1960 - Independent Canadian plant established, Port Credit.
- 1962 - 2010/5010 overhead concealed closers introduced.
- 1964 - "Pacer" overhead concealed (1-3/4x4) closers introduced.
- 1966 - David R. Lasier retired. David W. Lasier became President.
- 1969 - "Niftee" introduced. Steel tube design (1050).
- 1971 - "Cush-N-Stop" produced - closer/holder.
- 1972 - "Sentronic SE" for fire and life safety market.
- 1973 - First non-sized, non-handed closer (4040).
- 1974 - Schlage (and LCN) sold to Ingersoll-Rand.
- 1974 - "Sentronic" ME and MED introduced.
- 1977 - "Swing Free" arm introduced.
- 1977 - David W. Lasier promoted to Schlage. Thomas R. Lasier became President.
- 1978 - "Equalizer" introduced to accessibility market.
- 1978 - Marketing efforts started in England.
- 1980 - Production ended on Traditional series after 55 years.
- 1981 - "Super Stock" closer introduced, midrange market (1460).



Time Line "Recent Past"

- 1982 - "Auto-Equalizer" low-energy operator produced.
- 1985 - "Thriftee" series introduced (1070).
- 1987 - International sales responsibility given to LCN.
- 1992 - LCN "Safety Guard", door edge protector.
- 1993 - Powder-coated finishes introduced.
- 1993 - T.R. Lasier retires; Charles V. Havill appointed general manager.
- 1994 - 4010 adjustable size 1 - 4, introduced.
- 1994 - HSA introduced.
- 1994 - Spring Cush arm introduced.
- 1994 - SDB introduced.
- 1994 - D.W. Lasier retires from Ingersoll-Rand.
- 1995 - Electric operator introduced.
- 1995 - 4040 T introduced.
- 1995 - 4840 pneumatic operator introduced.
- 1996 - Commercial closer line introduced.
- 1996 - 520/1520 product introduced.
- 1996 - 1460 fusible link introduced.
- 1996 - 320 product introduced.
- 1996 - 7200 series pivots introduced.
- 1996 - Charles V. Havill promoted to Schlage; Brian M. McNeill becomes general manager of LCN.
- 1997 - Acquisition of Newman Tonks by Ingersoll-Rand.
- 1998 - Brian M. McNeill promoted to President, Ingersoll-Rand Architectural Hardware.
- 1998 - Worldwide Door Control group formed consisting of LCN, DOR-O-MATIC, Briton and Mustad.
- 1998 - Larry O'Toole named president of Worldwide Door Control.
- 1998 - 8100/8200 Series Floor Closers introduced.
- 1998 - Quest1370 product introduced.
- 1999 - Enhancements made to the 1460 and 4040 closers.
- 2000 - LCN continues it's commitment to progress by offering improvements to the best products in the industry.



HSA Sentronic Closer



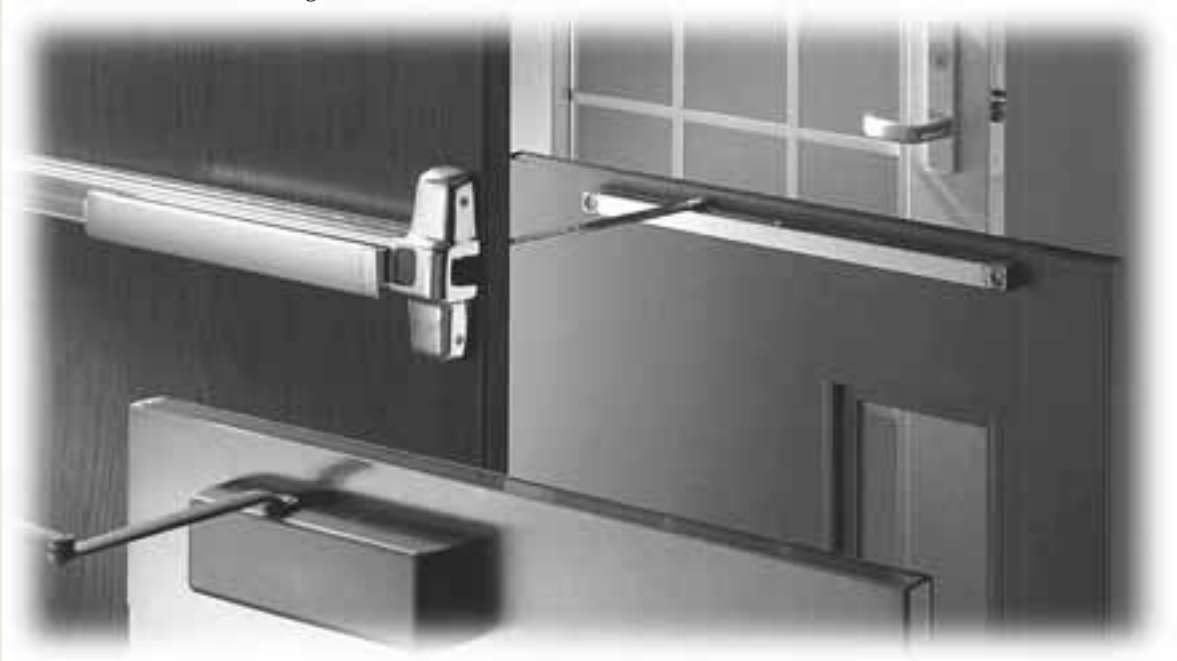
Electric Auto-Equalizer

— Ingersoll-Rand Security & Safety —

The Ingersoll-Rand Security and Safety Sector

The businesses comprising of the Security and Safety Sector have long been regarded as leaders within their respective product categories. The powerful brand names of Schlage, Von Duprin, Glynn-Johnson, Steelcraft and LCN will often lead the list of specified products for new commercial and residential building construction.

Being part of one powerful, cohesive group, Ingersoll-Rand can offer all the critical components of an entrance system; the total door opening plus the reliability of having the best brands in the business for every specification.



This is Now...

Today's LCN products are a mix of traditional cast and forged products of the past to modern high technology. Cast iron closer cylinder bodies began as the industry standard in the first half of the 1990's and continue into the new century, to be considered the best material. Forged pistons are also still used in the heavy duty closers being manufactured today.

The new QUEST 1370 series closer developed for the mid-range commercial market continues the LCN tradition of cast iron closer cylinder bodies and forged pistons.

Door control devices incorporating electronics started appearing in the 1970's and have evolved into sophisticated holding devices and power operators. ME's and SE's work with building fire and security systems to detect smoke and return an alarm signal which will release the fire doors to close, sealing off the danger area.

LCN pioneered the low energy door operator market in the early 1970's with the pneumatic Auto-Equalizer line and continues that innovation with the new 4600 Series of Electric Auto-Equalizers. The 4600 Series utilizes modern microprocessor motor and motion controls to provide the most complete operator feature set in the industry.



LCN's Vision Statement

LCN's people, practices, and policies strive to create an environment that encourages pride within everyone associated with our company. Pride will be cultivated and sustained through LCN's "Focus on Excellence", a total quality culture dedicated to satisfying customer requirements for LCN products and services. Through continuous education and training, "Focus on Excellence" promotes and supports notions of individual and interpersonal creativity, innovation, growth, opportunity, and involvement in improving every aspect of our business. Furthermore, LCN is committed to honoring the highest level of integrity, honesty, and ethics in our internal and external relations with people.



LCN

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