

INSULATORS of the MID-WEST

Chicago and Its Insulators . . .

Chicago Insulating Company

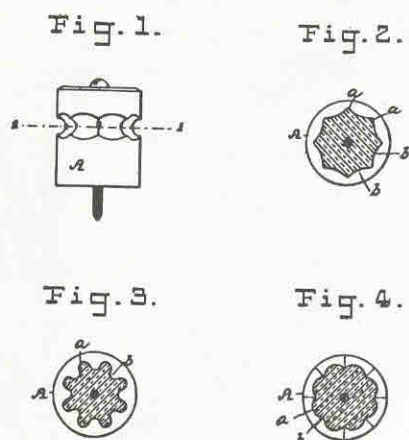
This organization made a brief stand with listings in the *Chicago City Directory* during 1883 and 1884. The company's office was located within the "Loop" or central business district of downtown Chicago, at 122 LaSalle Street. Their manufacturing facility was obviously at some other location, which remains unknown. The 1883 *Chicago City Directory* lists Nathan F. Fitch as president and during the following year N.F. Fitch is listed again as president and F.S. Bassett as secretary. During the organization's short existence, a number of insulators were either produced by, or made for, the Chicago Insulating Company. All of these specimens were manufactured at an unknown glassworks.

An interesting and unique feature about all Chicago Insulating Company insulators is their unusually-designed wire groove, which consists of a series of several diamond-shaped indentations encompassing the circumference of the insulator. This concept was invented by Bradley A. Fiske and Samuel D. Mott. (Figure 1.)

All Fiske and Mott-design insulators bear reference to the Chicago Insulating Company and no unembossed units are known. Chicago Insulating Company specimens have only been located in the CD 109 and CD 135 styles. All CD 109 units are embossed around their base rims with "CHICAGO INSULATING CO. PAT. OCT 16 1883". Some of the CD 135 units are embossed in the same manner on the base rim. However, there are also CD 135 units which are embossed on the shoulder of the insulator's crown just above the wire groove with "CHI. INS. CO. PAT^d OCT 16, 1883". (Figure 2.) There seems to be an equal number of units with each style of embossing location.

One might assume that the base-lettered specimens are connected in some way to Samuel Oakman, who produced virtually all of his insulators with the embossing around their base rims. It is entirely possible Mr. Oakman furnished some base-embossed molds for the Chicago Insulating Company, since he advertised that he was willing to produce molds on special order, meeting customer specifications. However, to date, no documentation has been found to associate Oakman and the Chicago Insulating Company. The Fiske and Mott patent was filed during the same time period as several of the Boston area patent filings.

B. A. FISKE & S. D. MOTT.
INSULATOR.
No. 286,801. Patented Oct. 16, 1883.

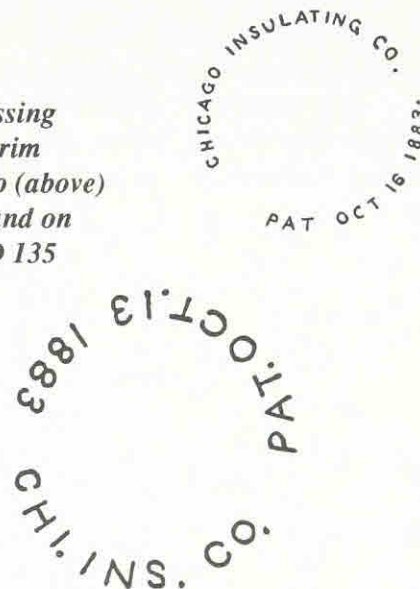


WITNESSES:
Geo. W. Chas.
C. H. Brown.

INVENTORS:
Bradley A. Fiske
Samuel D. Mott
By their Attorneys,
Banks, Isaac, & Co.

(Figure 1.) The Fiske and Mott patent of October 16, 1883, which claimed that the diamond-shaped indentations reduced the amount of contact between the line or tie wire and the insulator, thereby achieving a higher level of insulation.

(Figure 2.) Embossing found on the base rim of CD 135 Chicago (above) and embossing found on the shoulder of CD 135 (below).



Of the two Chicago styles, the CD 109 is less common. Most units have been located in the East, are well made and of a light aqua color. The CD 135 style has been found in many locations with one of the largest installations being found "south of the border" in Mexico. The units are found in aqua and a blue which is sometimes nicknamed "Chicago Blue". Some of the units have milky swirls and several specimens have been found in an aqua jade milk and blue milk, both of which are quite rare.

S.S. & Co., MFRS.

At present, the source of insulators lettered "S.S. & CO., MFRS." remains a mystery. A considerable amount of research has been conducted within the Chicago city records to determine who the company actually was, and when and where they were in business, but without success.

So far, two styles are known, the CD 160 and CD 162. The insulators are light aqua, light green or nearly clear glass. Very few have been noted in distinctive apple green. The insulators appear practically identical in shape, quality of manufacture, and type of threading, to H.G.Co. (Hemingray Glass Company) -lettered specimens of the same style. Some S.S.&Co. insulators were made in molds containing remnants of H.G.Co. embossing, which suggests that old H.G.Co. molds were used in making them. Since there are occasional color discrepancies between S.S.&Co. and H.G.Co. specimens of the approximate time period when S.S.&Co. insulators were likely made (1895-1905), it is quite possible the S.S.&Co. produced these specimens themselves. Possibly they purchased some obsolete H.G.Co.-lettered molds from a salvage dealer, engraved them with S.S.&Co. lettering and made some insulators for a period of time. The practice of a glass insulator manufacturer acquiring scrap machinery or molds for making insulators has not been unusual, and has occurred on several occasions over the years. (Figure 3.)

There is a remote possibility that Hemingray produced the insulators on special order for the S.S.&Co. However, the occasional differences in color submit strong evidence they were made at another glassworks.

Most specimens are uncommon and have been found primarily in the Mid-west. However, there have also been some found as far west as the state of Washington.

S.S. & Co. MFG'S
CHICAGO
N° 19

DOUBLE
PETTICOAT

(Figure 3.) Embossing found on CD 162. Embossing on the CD 160 units is identical except for the use of "N° 40" catalog number.

Babson Brothers

Headquartered in Chicago was the Babson Brothers Company. They were a primary supplier of electric fences and milking machines. During the early 1940's John Schilling developed a fence post and insulator design for use in electric fence systems. Babson Bros. Co. was impressed with his design and purchased the line from him for distribution through their extensive dealership network.

Mr. Schilling sought out Hemingray to manufacture his insulator design. The design finally manufactured for and distributed by Babson Bros. was of clear glass with round drip points and a single petticoat. It resembled a scaled-down version of a CD 154 Hemingray 42.

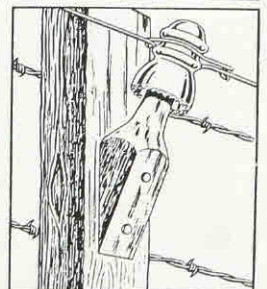
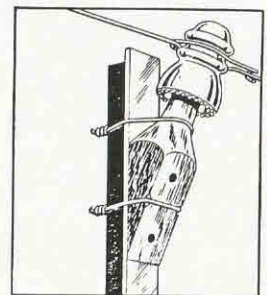
The CD 100.2 Surge style is of a larger design. Mr. N.R. Woodward states, "I believe the CD 100.2 was the insulator for the gate latch. Note its description as a 'large' insulator. Although it looks the same as the regular ones in the drawing, it is described as a different insulator. I think the diameter of the standard Surge pin would be inadequate for the mechanical strain placed on the pin in the gate latch."

The fencer post was a one-piece design with a wooden pin turned on the top of the post. The small insulator was attached to the pin and a standard tie wire or clips were used to attach the fence line to the insulator. Farmers with existing poles could utilize side-mounted wooden brackets for installation of the insulators.

According to Babson Bros. Co. records, they offered the entire electric fence line until 1955 and continued to have insulators in stock until 1978. All insulators sold were strictly intended for electric fence use. The Surge fence insulators are no longer in production, but Surge continues to be a distributor of other farm equipment.



SURGE
Fencer Post



THE SURGE
Insulator
Bracket

Babson Brothers' Surge fence illustrations.

(Courtesy of Kevin Lawless and Mr. N.R. Woodward)

Electrical Supply Company

During the years 1885 through 1893, the Electrical Supply Company existed in Chicago and was known as a prominent supplier of a wide assortment of electrical goods. Their office was located at 171 Randolph Street, and the firm also operated a branch office at 505 Delaware Street, Kansas City, Missouri, and a factory in Ansonia, Connecticut.

Since it is evident the Electrical Supply Company produced some of the equipment and supplies they cataloged, the company had some insulators made on special order with their name appearing on the units.

Although there is no proven documentation, all Electrical Supply Co. insulators very probably were produced by Brookfield, since they closely resemble the characteristics of Brookfield insulators of the period when the Electrical Supply Company was in business.

Two Electrical Supply Company styles are known. These are the CD 133.1 and CD 134, cataloged as numbers 904 and 905, respectively. Only the CD 134 bears the insulator's catalog number, which is lettered on the reverse side of the skirt. (Figure 4.) The CD 134 is somewhat scarcer than the CD 133.1. Most specimens are of aqua glass, but some of the CD 133.1 style have been located in a light green.

ELECTRICAL HOUSE GOODS CATALOGUE.

— THE —

Electrical Supply Co.

171 RANDOLPH STREET,

Chicago, Ills.

THE ELECTRICAL SUPPLY CO 905
CHICAGO

(Figure 4.) Embossing as found on CD 134 Electrical Supply Co.


As you will note in the Electrical Supply Company catalog cut (1888), the company also offered the CD 162, catalog number 908. (Figure 5.) Despite the fact the catalog illustrates a CD 162 with Electrical Supply Co. embossing, no specimens of this design bearing this embossing have been found.

P. and B. LINE WIRE.

BEST AND CHEAPEST.

W-E-A-T-H-E-R-P-R-O-O-F.

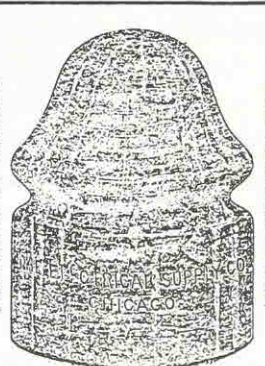
AND



NO. 908

P-O-L-E-S.
CROSS-ARMS.
PINS.
BRACKETS.
INSULATORS.
TOOLS.
PROMPT SHIPMENTS.
RELIABLE GOODS.
LOW PRICES.

AND



NO. 904

(Figure 5.) Above is an 1888 catalog of the Electrical Supply Co. Note the embossed CD 162, catalog No. 908 on the left. No such insulator has been located to match this advertised style. Also, the CD 133.1 on the right is advertised as No. 904. There also have been no insulators found in this style embossed with the catalog number.

Babson Brothers data came from a December 1985 article in *Crown Jewels of the Wire* magazine written by Kevin Lawless (See Contributions from California -- Crystallite Products and Maydwell Insulators chapter for biography) and from Mr. N.R. Woodward who provided historical information regarding the company.

Information on the Chicago Insulating Company, S.S. & Co. MFRS., and Electrical Supply Company was provided from research by Joe Maurath, Jr. (See The New England Manufacturers chapter for biography)

Indiana's King City Glass Works

Fairmount, Indiana, was home to several glass houses from 1888 to 1910. In 1890, the King City Glass Works was organized by Charles Tigner and Dr. A. Henley. The company only had one small glass tank when it began production and has often been referred to as the "Dinky." Its manufacturing came to a close when the Marion Fruit Jar and Bottle Company purchased the works in 1897.

Insulators produced at this plant were embossed "K.C.G.W." on the front skirt. Some of the styles had the additional embossing of "FAIRMOUNT" on the rear skirt. The five styles manufactured were the most popular designs used for telephone and electrical applications in the 1890's.

The CD 120 pony, the CD 145, and the CD 162 signal style are embossed simply "K.C.G.W.". The CD 134 units have the "FAIRMOUNT" embossing added to the rear skirt as well as large glass buttons above each embossing on both the front and rear skirts. Many times units that were to have no manufacturer or user embossing had a glass bar line or a glass button or dot engraved in the mold so that the insulator would not turn in the mold at the time the mandrel was unscrewed when forming the pinhole threads. The CD 134 has an embossing as well as the glass buttons. However, there are later unembossed units attributed to King City Glass Works that had only the "bar" and "button" embossing.

The CD 164 signals are found with "K.C.G.Co." on the front skirt and "PERU" on the rear skirt. They share all the same characteristics of the "K.C.G.W." pieces but there has been no explanation for the meaning of the "PERU" embossing. [Editor's note: There have been reports of CD 162's embossed "K.C.G.Co" and CD 164's embossed "K.C.G.W.", but to date, they are unconfirmed.]

All "K.C.G.W." and "K.C.G.Co." insulators appear in a light blue, light green or aqua colors. The nature of the glass seems quite fragile for the units seemed susceptible to a great deal of chipping. Some of the King City Glass Works molds were reused by a later company since specimens are found with the embossing still detectable even though an attempt was made at erasure.

Even though production was limited during the seven years of operation, King City Glass Works insulators were widely distributed throughout the Mid-western states.

"Indiana's King City Glass Works" was authored by J. Dennis Donovan. (See Baltimore Glass Manufacturing Company chapter for biography)

Ohio Valley Glass Company

According to their articles of incorporation, on August 16, 1902, five investors formed the Ohio Valley Glass Company in Cincinnati, Ohio. These articles describe the Ohio Valley Glass Company as being involved in "manufacturing and dealings in glass and all materials used in the manufacture of glass." An early Guernsey County history book listed the items manufactured as telephone and telegraph insulators and battery jars.

On September 16, 1902, the company purchased approximately four acres of land from Mary Rosa and John Kachley of Pleasant City, Ohio, for the consideration of \$412.00. The factory still stands today on State Route 146 in Pleasant City.

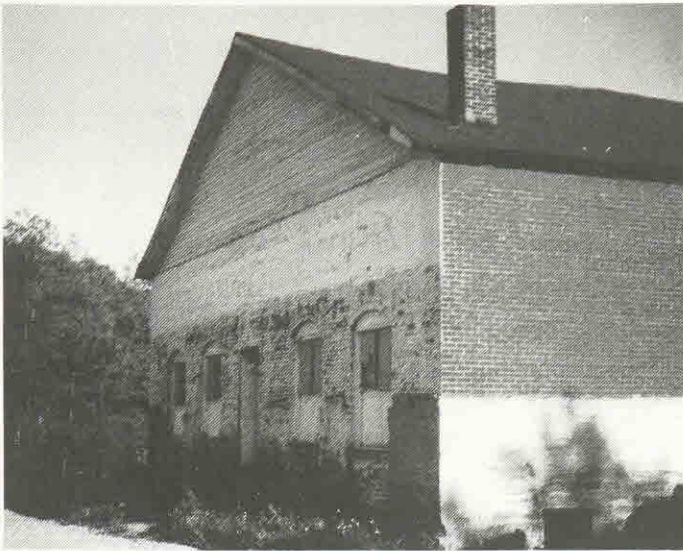
The persons named in the articles were listed in the 1903 *Cincinnati Business Directory*: B.L. Kilgour, president of Ohio Valley Glass Company and also the supervising engineer for the Cincinnati and Suburban Bell Telephone Company; R. J. Lewis, secretary-treasurer; Phil S. Kiechler, trustee; F.A. Rothier (position not identified); J. Hartwell Cabell, listed under Cabell & Frieberg, Attorneys, 1201 Union Trust Building (assumed to have been the corporate lawyer).

On September 16, 1903, the O.V.G. Company opened their books to capital stock. The capital, according to their certificate of subscription, was to be divided in five hundred shares of one hundred dollars each. In 1904, the address of the company was listed in the directory as 71 Atlas Bank Building. P.S. Kiechler was listed as secretary-treasurer and B.L. Kilgour as general manager of the telephone company.

The next reference to the glass factory is in 1905 from the Library of Congress fire insurance maps. This reference shows the plant closed as of April 1905. The O.V.G. Company name was also absent from the *Thomas Register of American Manufacturers, 1905-1906*.

Documents show that the Ohio Valley Glass Company was sold on August 6, 1906, for \$4,000 to the Hemingray Glass Company of Covington, Kentucky. Names listed in the deed transaction were B.L. Kilgour, P.S. Kiechler and Leroy Brooks. On August 13, 1907, Hemingray sold a sidetrack to the Cleveland and Marietta Railroad for one dollar. Fire insurance maps for 1913 show no roof over this siding. On April 11, 1912, Hemingray sold the property to John Secrest of Pleasant City for five hundred dollars. In 1913, the Sanborn fire insurance maps show the building belonging to the U.S. Food Company.

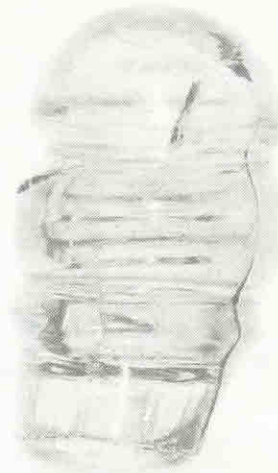
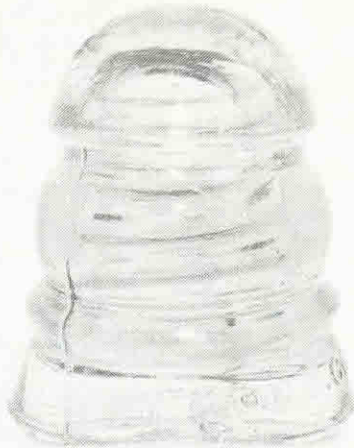
The Ohio Valley Glass Company operated for two years at most. It must have taken a considerable amount of time to purchase the property, construct the building, set up operations, and finally dissolve the company. It is probable that they were only producing from



The abandoned factory in Pleasant City, Ohio, which housed the Ohio Valley Glass Company.
 (Photo courtesy of Bob Harding)



Another part of the abandoned factory which formerly housed the Ohio Valley Glass Company.
 (Photo courtesy of Bob Harding)



(Figure 1.) A melted and lop-sided CD 112 embossed "#11 O.V.G.Co." found by Darrel Moore underneath the office section of the abandoned Ohio Valley Glass Company building which was built about four feet above the original glass factory floor. (Photo courtesy of Bob Harding)

early 1903 to late 1904 or early 1905.

To date the only glassware located with the O.V.G.Co. embossing are insulators. Most of the insulators were made in various shades of aqua. However, there were some produced in a celery and emerald green color. A limited number of CD 112 and CD 162 units have also been located in a light purple, the keg style having been used on an early telephone line in Bourbon County, Kentucky. Attempts to locate insulators with drip points, and also battery jars, have been unsuccessful. Eight different styles were manufactured: CD's 106, 112, 121, 133, 145, 160, 162 and 196. It appears that the O.V.G. Company remelted their glass rather than dump it, since no dump has been found.

Bob Harding, of Pickerington, Ohio, is an avid insulator collector, researcher, and prospector. He can be found most any weekend walking or digging along early abandoned railroads in the Mid-west. He has been collecting since 1972 and specializes in early telegraph insulators of all types as well as Harloe and O.V.G.Co. products.

Bob is grateful for the research provided by Glenn Drummond, R. David Dale, and Darrell Moore. The September 1987 *Crown Jewels of the Wire* has an article chronicling digging excursions at the Pleasant City factory site.