

Glassmaking in Elmer at the Turn Of The Century

GLASS FACTORIES OF ELMER, NEW JERSEY

The small town of Elmer, New Jersey, was the birthplace of a large number of glass insulators. Several glass manufacturers operated there, primarily in the early 1900's. There were at least two factory locations, referred to as the "upper" and "lower" works. Both of the factories were the host to various firms. The production of fruit jars, battery jars, insulators, and other materials took place at both factories at various times in their existence.

THE "UPPER" WORKS and NOVELTY GLASS COMPANY

The "upper" works, called such due to its location in that section of the town of Elmer, New Jersey, was situated on property located partly in the township of Pittsgrove and partly in the borough of Elmer. It was bounded on the lower end by the Elmer-Malaga road. It was also placed next to the West Jersey & Seashore Railroad. The two parcels of property on which the factory was located consisted of five and one half acres. The site is presently occupied by a large community recreation park. (Figure 1.)

The property was purchased by the G.M. Bassett Glass Company in May 1896. A glass factory was constructed, and glass was produced for period of time. The property was sold on August 19, 1899, to the Gilchrist Jar Company. Fruit jars and battery jars were produced at the factory under this firm's name until a suit was brought against the company. The property was placed in receivership and was sold on December 3, 1901, to the Novelty Glass Manufacturing Company. Insulators were the main item produced at the factory by that firm. The company operated until late 1903 when a patent infringement suit, brought by the Brookfield Glass Company, forced its closing. The following excerpts taken from issues of the *Elmer Times* give an interesting description of the activities at the factory. One item that should be pointed out to save the reader any possible confusion is that the December 3, 1901, date mentioned above is the date that the property was actually purchased by the Novelty Glass Manufacturing Company.

Apparently, as will be determined by reading the following newspaper accounts, the company operated the works for several months prior to the actual purchase of the land.

1901

January 18 - Gilchrist Jar Company receivers sale of glassworks. Auction notice. By Virture--Jan 14 '01 to be offered Feb 13 '01 stock etc. at 10 a.m. Main factory buildings and connecting wings about 180 x 90 feet wide. Machine shop and box shop combined about 27x 65 feet. Ware shed 100 x 50 feet. Hay house 24 x 48 feet. Storehouse 30 x 48 feet. Office 16 x 24 feet. All buildings erected since 1896. Main factory contains one 40 ton tank furnace now containing about 30 ton of glass. Two large lehrs.

February 15 - THE GILCHRIST FACTORY SALE The big glass house sale in Elmer, Wednesday, kept auctioneer J.G. Brooks crying from 10 o'clock until dark. The biggest buyer was the Novelty Glass Manufacturing Company, which will operate the Gilchrist plant at once.

February 22 - Daniel Parker, manager of the Novelty Glass Works, has been in Elmer every day this week getting ready to start the fire at the Gilchrist Jar Works. Workmen began overhauling the furnace Monday preparatory to placing fire under it the last of this week. About 65 hands will be employed.

March 8 - One shop at the Novelty Glass Works began making glass Thursday. It is expected to have a full force at work on day and night by Monday.

April 5 - Heavy shipments of glassware have been sent from Elmer this week. About 50 tons were shipped to Chicago and today a shipment goes to Missoula, Montana.

April 12 - The Novelty Glass Company has been laying a railway track from the main factory building to the large ware shed, at the upper glassworks. They expect to add an overhead track in the ware shed to facilitate loading cars with ware. The factory is running very smoothly and turning out a large quantity of pressed glass, chiefly insulators.

1902

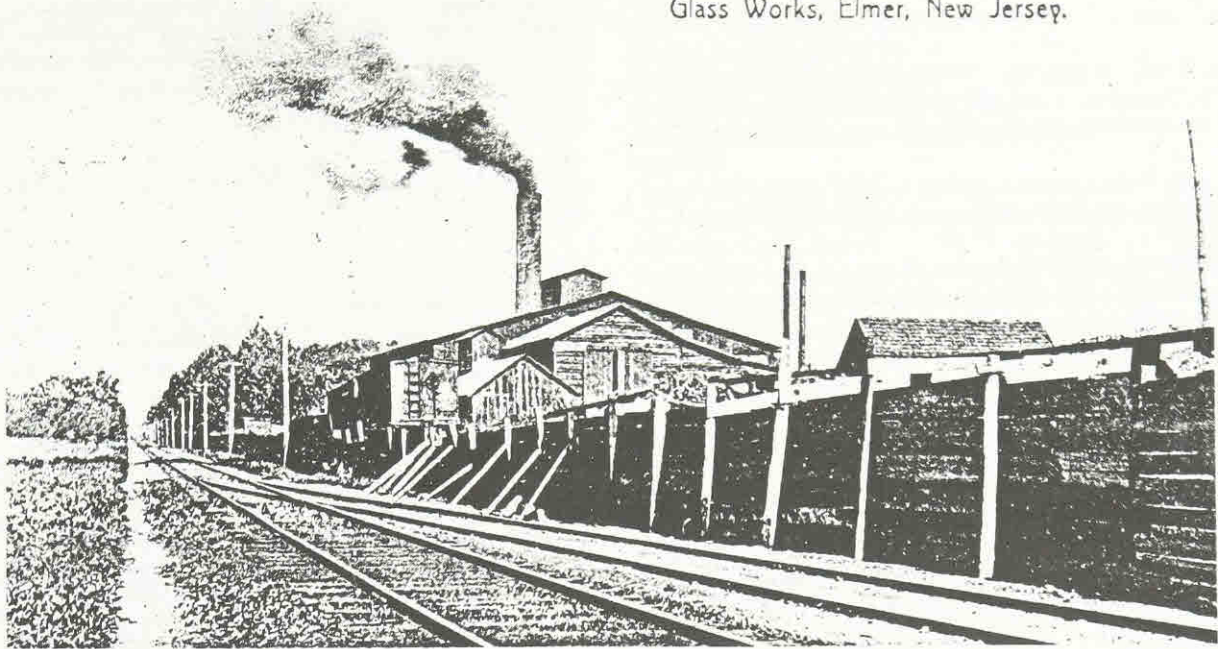
February 14 - The Novelty Glass Works is now manufacturing battery jars in addition to their insulator business.

February 28 - The fires at the Novelty Glass Works have been blocked on account of a shortage in fuel.

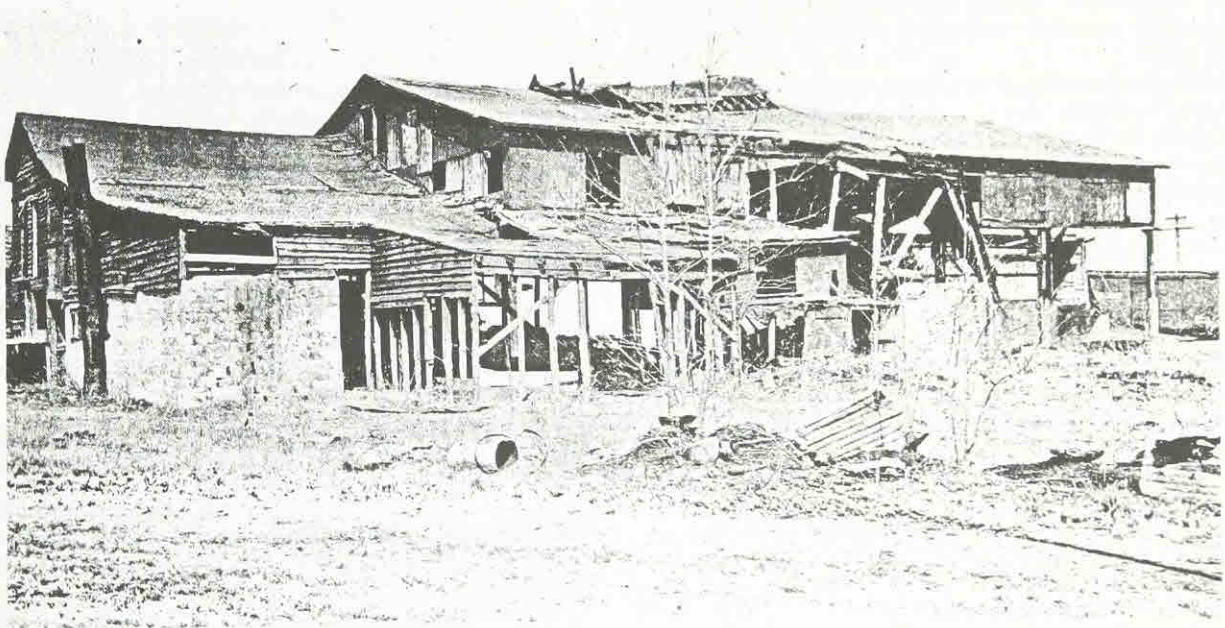
July 4 - The Novelty Glass Company will operate their works all summer it is said.

September 5 - The Novelty Glass Works closed down Saturday night for repairs and erection of a new furnace. The works have made a long run on the old furnace which lasted through the regular glass working season and also through July and August. This industry has been successful since locating in Elmer and has furnished steady employment at good wages to a large number of workmen.

Glass Works, Elmer, New Jersey.



(Figure 1.) (Above) The "Upper Works" in Elmer, New Jersey. "This building housed a glass factory in Elmer, on the site of the present Elmer Community Park." (Below) "Photo was taken after building was in a state of deterioration." (Courtesy of the Elmer Times, August 15, 1968, Souvenir Edition, page 34)



October 5 - The Novelty Glass Company started up again this week after a shutdown to build a new furnace.

December 5 - The Novelty Glass Works is having a serious time to get coal enough to keep their furnaces going.

1903

February 13 - C.W. Shoemaker, of Bridgeton, who returned last Saturday from a visit to California, was in Elmer Tuesday morning on business with the Novelty Glass Company, of which he is Treasurer.

March 20 - The Novelty Glass Company recently started their large continuous tank, giving employment to a number of extra hands.

June 26 - Owing to a difficulty over the foreman at the Novelty Glass Works, the workmen went out on strike Monday morning. The matter was satisfactorily adjusted and the work went on as usual on Wednesday.

September 25 - The West Jersey & South Shore Railroad have made a settlement with Frederick MacFarland, of Elmer, who was injured by the falling of a freight car door at the Novelty Glass Works a few weeks since. The settlement was made with J.C. Edmunds, Esq. attorney for MacFarland.

October 2 - The new machines at the Novelty Glass Works are turning out a big lot of insulators. About \$1,500 in cash is paid out every two weeks for wages.

November 13 - The big furnace at the Novelty Glass Works was closed down Saturday for repairs. The furnace was run all summer and has done a good job.

December 11

GLASS WORKS CLOSED

The Novelty Glass Works of Elmer was closed on Wednesday at the suit of the Cumberland Trust Company of Bridgeton, trustee for the bondholders. The primary cause of the troubles of the company will be of interest to the public. About three years ago the works were purchased of the Receiver of the Gilchrist Jar Company, and have been operated almost continuously winter and summer since in the manufacture of insulators. A large force has been employed, good wages paid promptly in cash, and it has been one of the best industries Elmer has ever had.

Shortly after the company started with special machines for the manufacture of insulators, the Brookfield Company, of Brooklyn which had long enjoyed a practical monopoly of the insulator business, entered suit against the Novelty Company, charging that the machines used by the latter were an infringement on the Brookfield patents. Since then the litigation between the two companies has been continuous and thousands of dollars have been spent in the courts in the fight which was finally decided against the Novelty Company. The Cumberland Trust Company, as trustee then took immediate steps to make themselves safe and the chances are that the Novelty Company will be wiped out of existence before the battle is over as it would be out of the question for the company with its present capital and assets to meet the claims brought against it including the big judgement of the Brookfields for infringement.

The Novelty plant is a good one and we doubt not will find a purchaser who will operate it when sold. So far as we know there will be no local losses in Elmer as the Novelty Company has always been very prompt to pay and stood high in town.

It is said on good authority that the Novelty Company believed that their machines did not infringe on the Brookfield patent, but the courts have decided otherwise, and since the decree of the court the Novelty installed non-infringing machines which they have since operated on a royalty.

December 18 - The employees of Novelty Glass Works are all to be paid in full this week.

December 18 - The employees of the Novelty Glass Company were disappointed last Saturday when they were informed that the officers of the Company were not permitted to pay them off owing to the proceedings against the company. The money was in bank ready to pay them and the officers at the company were also chagrined that they were not permitted to pay off the men as they intended to do. The company has always been prompt with their payments for labor. The claim for wages is a preferred claim and except for the inconvenience caused by the delay just in the Holiday season, it is not believed they will lose any portion of the amount.

The December 25, 1903 issue of the *Elmer Times* had the following advertisement:

Master's Sale

By virtue of a writ of fieri facias, to me directed, issued out of the Court of Chancery of New Jersey, in a cause wherein The Cumberland Trust Company of Bridgeton, Trustee, is complainant, and Novelty Glass Manufacturing Company, is defendant, I will expose to sale at public vendue on

Monday, December 28, 1903,

at the hour of one o'clock in the afternoon of said day, on the premises of the said Novelty Glass Manufacturing Company, in the Village of Elmer, Salem County, New Jersey, all the following described property, to wit:

About 550,000 Glass Insulators of various types and sizes, mostly packed and ready for shipment, about 65,000 Glass Knobs, 6 Cordis Oak Wood, 15 Tons Lime, 20 Tons Sand, 5 Tons Soda, 125 Tons Soft Coal, 8 Tons Packing Hay, about 200 tons cullet, about 100 Empty Barrels, Office Furniture and Fixtures, including Sa e, Desks, Chairs and Typewriter, also Books of Account and all accounts thereon and moneys due and to grow due on said accounts and each and every of them.

ALEXANDER R. FITHIAN, Master,
107 East Commerce Street,
Walter H. Bacon, Solicitor, Bridgeton, N. J.
Room No. 2 Pioneer Building,
Bridgeton, N. J.

1904

January 1 - The sale of glass at the Novelty Glass Works last Monday amounted to a good many thousands of dollars. The books were sold subject to the result of litigation in which they are involved.

January 29 - The Novelty Glass plant was sold at public sale Saturday to R. Morris Davis, President of the Elmer Glass Works for \$2,500.

September 23 WON SUIT

Daniel Parker and Thomas Duffield were given a decision by Judge Lenning in the United States court last Saturday sustaining the validity of the patents on the Duffield Insulator making machines against the Brookfield Company who sued them charging infringement on their patents.

The fight against the Brookfields has been a long one. Soon after the Novelty Glass Company began the manufacture of insulators in Elmer the Brookfields brought suit for infringement and the Novelty Company ceased using the machines complained of and installed the Duffield machine. The Brookfields obtained an injunction but when it was served the old machines and had been laid aside. They then instituted an entirely separate suit against Parker and Duffield whose machines have for some time been used by the Elmer Glass Works. They have now however won out and it is hoped will not be annoyed further by the Brookfields in the use of the valuable patents. The original suit against the Novelty Company has dragged along for three years although the Novelty Company has gone out of business.

December 2 - The plant known as the Novelty Glass Works will be put in operation about next Monday by the same company that has been

operating the old Elmer Glass Works. The boiler at the old works has given out and a new one must be installed before work can be resumed there.

The above excerpts give a clear account of the difficulties which the Novelty Glass Works faced. Unfortunately, complete research has not yet been done on this factory site for the time period after the purchase of the factory by the Elmer Glass Works. It is known that the property was owned by them until July 6, 1907, at which time it was sold to Isaac L. Shoemaker. It would appear that many different insulator styles were produced for various electrical supply companies and other contractors by Novelty. A large number of insulators were produced for the C.S. Knowles Company which operated an electric supply business in the Boston, Massachusetts, area.

THE "LOWER" WORKS and STERLING GLASS COMPANY and HARLOE INSULATOR COMPANY

The "old" or "lower" works was located, as the name implies, in the lower end of town, situated along the right-of-way of the West Jersey & Seashore Railroad. The property consisted of a little over two and one half acres. The first firm to operate a glass factory there is reported to have been in business in the 1880's. During the 1890's, a man by the name of Deijo operated the facility, and bottles were made at that time. It is possible there were one or more ownerships during the 1890's, but the factory history was not extensively researched for that time period.

Albert Sturr purchased the property on January 26, 1900. It is unknown whether any items were produced at the factory from the time of Sturr's purchase of the property in January 1900, until May of 1901, when the factory was occupied by the Improved Gilchrist Jar Company. Sturr leased sections of the factory to different firms which made various products. Once again, perhaps it is best to have a look at excerpts from the *Elmer Times* for a more detailed account of information concerning the factory.

1901

February 15 - A.L. Sturr talks about turning the old Elmer Glass Works into an ice plant, tearing down such buildings as would not be needed for that purpose.

May 3 - The Improved Gilchrist Jar Company has been pushing the alteration at the old glassworks this week and getting their machinery and shafting ready for work. Clinton Johnson has been assisting in putting up the shafting, etc. They expect to be making jar tops by May 15.

1902

February 14 - An addition measuring 16 x 20 is being built to the old Elmer Glass Works. Machinery is to be placed in the old Elmer Glass Works for the manufacture of Mason jar caps.

April 4 - The machinery recently placed in the old Elmer Glass Works for the manufacture of Mason jar caps will turn out the lids in a marvelous fashion and with great rapidity. It is persistently rumored that the manufacture of glassware will also be carried on in the works by a subtenant.

April 11 - The Sterling Glass Company is the name of the corporation which is to make glass at the old Elmer Glass Works. It is composed of out-of-town residents. Workmen have been industriously engaged erecting the new furnace at the old Elmer Glass Works this week and it is supposed the furnace will be completed and ready to melt glass by May first.

April 23 - The Sterling Glass Company started fire under their new furnace at the old Elmer Glass Works last Saturday. There are now three corporations doing business at these works and still there is room in the big plant. The Sterling Company is composed of Ellison Elmer, Newton Elmer, and Frank Bigson of Bridgeton, and will run one furnace at present on pressed ware. The New Jersey Metal Company, composed of city people has machinery for making Mason jar lids which they turn out at a rapid rate. The Gilchrist Improved Jar Company, composed chiefly of Pennsylvania people, is manufacturing the lids for the Gilchrist Jar. The jars are made in Pennsylvania and shipped to Elmer, where they are fitted up, boxed and shipped. The chief trade this year so far on the jars has been filling western orders...

June 6 - The Sterling Glass Company has been making glass at the old Elmer Glass Works this week for the first time. They have one press in operation.

October 3 - The Sterling Glass Company was forced to block their fires this week owing to inability to obtain coal.

October 31 - The Sterling Glass Company blocked its fires Thursday, owing to inability to obtain coal.

1903

January 16 - The car of soft coal arrived yesterday for the Sterling Glass Company.

March 13 - Work will be resumed at the Sterling Glass Works next Monday.

August 14 - The Harloe Insulator Company of Hawley, Pa., which succeeds the Sterling Glass Company last March in operating the old Elmer Glass Works, has had the plant closed down this week for repairs and has put a new cap on the furnace. They will start up again next week and perhaps continue making insulators all summer. In addition to manufacturing the ordinary Western Union insulator they are patentees and manufacturers of the Harloe insulator which is pronounced by many to be superior to any insulator now on the market.

October 30 - The old Elmer Glass Works which is being vacated by the Harloe Insulator Company, was purchased of A.L. Sturr on Tuesday by Jonathan Parker, of Parker Brothers, the Bridgeton glass manufacturers. It has not yet been made public whether they will be operated or not.

December 11 -

GLASS WORKS TO START
REPAIRS BEING RAPIDLY PUSHED
BIG FORCE WILL BE
EMPLOYED

The old Elmer Glass Works which has been idle for a time, was recently purchased by Jonathan Parker, of Bridgeton, and the work of repairing them and erecting new furnaces preparatory to starting with a large force of workmen is being pushed rapidly forward. The big smokestack which has not been considered safe for several years has been torn down and a new one will take its place. New roofs and other

needed improvements are being put in place and the Duffield blowing machines will soon be put to work giving employment to a large force. Insulators will be a chief product of the factory.

The old glassworks has been run irregularly and only a few persons have been employed at any one time, for about four years. Business will doubtless be pushed to the utmost capacity in the big factory as soon as furnaces are completed.

December 18 - Work is being pushed rapidly at the old Elmer Glass Works preparatory to making an early start.

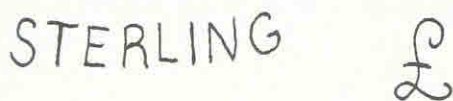
1904

January 22 - The Elmer Glass Works started to make insulators on Wednesday. It is said the Company has many more applications from workmen than they can employ.

June 24 - William Moncrief Jr., the night boss at the lower glassworks, had his hands burned extremely badly Monday night while examining some insulators. It is thought that someone threw an insulator covered with oil into a box of hot glass and Mr. Moncrief attempted to put a hot insulator into the box when an explosion caused the flames to come up with such force that his hands were severely burned. A local physician dressed the burns and Tuesday morning he went to a city hospital where he will probably be obliged to stay several weeks, before his hands will be sufficiently healed to admit of returning to work.

The above information is very helpful in determining who produced insulators during that time period, and also gives some clues as to the origins of some of the insulators in collections today.

The Sterling Glass Company was organized as a corporation on April 7, 1902. Shareholders in the company included Ellison Elmer, Newton Elmer, and Frank H. Gibson, all of Bridgeton, New Jersey. While the company was short-lived, and produced glass only part of the time during its existence due to a shortage of coal to fire the furnace, it did produce a fairly large number of insulators. They were produced in CD's 102, 112, 160 and 164. Some of these are marked only with an English pound insignia, "£", while others include the name "STERLING" spelled out. (Figure 1.)

The image shows the word "STERLING" written in a simple, hand-drawn, uppercase font. To the right of the word is a stylized, hand-drawn symbol of the pound sterling (£), consisting of a vertical line with a loop at the top and a horizontal line at the bottom.

(Figure 1.) Sterling embossing on their insulators.

The reference to the Harloe Insulator Company having occupied the factory is interesting, as prior to the research in Elmer, it would have been easy to believe that all of the "H.I.CO." insulators were made at the Hawley, Pennsylvania, factory. The property in Hawley, Pennsylvania, owned by the Harloe Insulator Company, was purchased on July 29, 1902. According to the *Elmer Times*, the Harloe company occupied the lower works in

Elmer from March to October 1903. It is possible insulator production took place in both towns for a period of time. However, it would seem more likely that most of the production in Elmer took place while the factory in Hawley was being prepared, and once the Hawley facility was capable of full production, the business was moved to Hawley. (See The Pennsylvania Manufacturers chapter)

Some of the old Sterling molds which were engraved with the company markings were later used by the Harloe company. The earlier engraving was filled in and the molds were reengraved with the Harloe company markings. Traces of the old Sterling markings can be seen blotted out under the Harloe marking on some units.

It is not known to what extent insulator production took place after Jonathan Parker purchased the works on November 2, 1903, from Albert Sturr. The Parker Brothers from Bridgeton, New Jersey, were very much involved with the production of glass. The January 22, 1904 issue of the *Elmer Times* does have an entry which mentioned that insulator production had once again started at the factory earlier that week. Once again, further research needs to be done on the factory for later years.

While researching the Elmer factories in 1980, the author had the good fortune of interviewing two individuals who had clear recollections of the factories at the time of their operations. These gentlemen were brothers, and the information given is accurate to the best of their knowledge.

The following information was obtained on October 23, 1980, from Eugene W. Bostwick, a resident of Elmer, New Jersey:

Mr. Bostwick was born in 1895. As he recalls there was a window factory located there in earlier years. Around 1900 insulators were made there. There were two shifts of workers, from 6 a.m. to 6 p.m., and from 6 p.m. to 6 a.m. He described the factory as a wood frame building with a high dome top where the tank was. There was a railroad spur which came onto the property. A batch house was on the other side of the spur, opposite the main factory. There was a storage building on the far end of the property, and also another building near the main railroad track. The soda ash and sand used in the glass batch was brought in on the railroad, and the lime was supplied by Eugene Bostwick's father.

At about age 10 (approximately 1905), Mr. Bostwick recalls being inside the plant. He remembers how the gathering rod was placed into the molds with a small amount of glass on it; the "shear boy" then cut off the right amount. The insulator was pressed, the machine turned, and the "take off" boy then removed the insulator from the mold. They were placed on a tray and taken to the lehr where a wagon would slowly take the insulators through the lehr to reduce the temperature of the insulators. The above-mentioned wagon was run on a track which went through the lehr. There were different sizes of insulators made at that time. Some were large, perhaps at least seven inches in diameter with a large top, while others were small, perhaps 2 1/2" to 3 inches tall, which just had side grooves. Mr. Bostwick recalled that some of the small ones may have been shipped to the West Jersey & Seashore Railroad warehouse in Camden, New Jersey. There was one tank, and at least two insulator machines. Each machine had six or more stations for molds. The molds were of a cast metal. Pipes were hung from the ceiling, which brought fresh air from outside to the workers. He recalled the following people worked at the plant: Jack and Bill Brewer, Union Street; two Laymens (father and son) of Union Street; Gus Koechig of Center Street; John Bates of Center Street, and a man by the last name of Daily, corner Union and Salem Streets. A man

by the name of Billy Downs reportedly bought the buildings for \$500 after the plant closed, dismantling the buildings and selling the lumber for a profit. Mr. Bostwick recalls the smokestack as being at least 45-50 feet high, and that the plant probably closed in 1907. The buildings were torn down no later than 1909 as he recalled.

The detailed description by Eugene Bostwick gives us a much better understanding of the methods that were used in producing insulators, and the description of the factory is most interesting. Eugene had also stated that he thought perhaps his grandfather, Isaac Sturr, owned the factory at one time. (Actually, it was Isaac Sturr's brother, Albert, who owned the factory from 1900 into 1903.) Eugene had an amazing recollection of the period 75 to 80 years previous to the interview. All information that could be cross-referenced, with the exception of the information on Isaac Sturr proved very accurate.

Continuing with another interview, additional information was obtained on October 23, 1980, from Garie E. Bostwick of Newfield, New Jersey:

Garie was born in 1886, and came to Elmer in 1894. He recalls the lower works being there when he came to Elmer. At first the plant was a "window lite" factory. Later a man by the name of Deijo operated a bottle factory. At the age of 10 or 11 he worked at the factory during the summer as a "snap up" boy, and did the duties of closing the molds. He can only recall bottles having been made at the factory.

At about age 15 (approximately 1901 or 1902) he worked in the upper works, or Bassett factory, as he called it, for one summer. He remembered only insulators being made at that time. Some of the insulators were large and weighed at least 3 pounds. Two men he remembered working in the plant were Walter George and a man by the last name of Murphy. These two men were pressers. The insulator molds formed a circle around a machine. There were six to eight molds per machine, and there were at least three machines. He thought, but could not recall for certain, that perhaps two or three plungers came down at one time into two or three molds, rather than pressing one insulator at a time. As he recalled the insulators were carried to the Lehr on a paddle. Both blue and green glass might have been produced. The insulators were shipped in wooden barrels, with straw used for packing.

Aside from the information obtained from the Bostwick brothers, and the *Elmer Times* excerpts and deeds recorded at the Salem County courthouse, the author also learned much about insulators produced at the lower works by excavating the site in 1980. The property owner at that time had in his possession a whole CD 102 embossed with a five-point star that had been found at the factory site, and also told of various insulator fragments scattered around the property which were evident when the property was cleared a year or two previously. Permission was granted to myself for further excavation. While no whole insulators were found, over 100 insulator fragments were located in a period of several days. While there is always

the chance that broken insulators were present in cullet purchased by the factory in operation during the 1900 to 1907 time period, it would seem very probable that the glass fragments located were not from that source, but rather were fragments of insulators produced at the factory. Several embossing and style variants were located.

The Sterling Glass Company was represented by pieces of CD 102's embossed with "£" and "STERLING". The Harloe Insulator Company fragments included pieces of CD's 102, 112 and 145. The CD 145 units included the "MADE IN U.S.A." in both the backward "S" and regular embossed "S" variants. One of the more exciting finds was the discovery of three "fingers" from a Harloe patent insulator. They were large in size, more so than would be found on a CD 109.5 style. They also seemed to be larger than the type found on the CD 206.5 style.

Items with an embossed five-point star included CD's 102, 112 and large portions of CD 162 variants. The CD 162 examples did not have complete skirts, and therefore were missing all embossing. However, their distinctive dome shapes made them obvious Star types. Colors included green and blue glass.

An unembossed CD 187 was located in medium-dark aqua. Battery insulators were located in two sizes. The larger type was represented with specimens embossed with the "E.S.B." (The Electric Storage Battery Company of Philadelphia, Pennsylvania) marking. Smaller, unembossed units were also found.

Several pieces of large power type insulators made for the C.S. Knowles Co. were present. (See The New England Supply Companies chapter) These included types with the four inner braces. The pieces found would indicate the production of several different styles. It should also be noted at this time that a blue CD 252 embossed Knowles, with prism and patent date was purchased from Mr. Eugene Bostwick, and was one reported to have been made at the lower works.

The above-mentioned insulator fragments are valuable sources of identification when documents on production are not available. It would seem likely the star-embossed units as well as the Knowles items were produced in both Elmer factories. The Star units probably were produced by various glasshouses of which the Elmer factories manufactured but a fraction of the total production. While the story of insulator production in Elmer is not complete, perhaps the information gathered to this date will lead to further discoveries.

Authored and researched by Ray Klingensmith. (See Glass Insulators-The Beginnings chapter for biography)