Robert Good, Jr.  
Valverde  
and  ... Glass Works

Good, Western Flint Glass and Western Glass Manufacturing

An interview with Robert Good, Jr. in the Poughkeepsee Sunday New Yorker on March 11, 1945, recounts the progression of Mr. Good's sixty-five years with the glass business and some of the events associated with Denver insulator production. Robert, Jr. was born on April 1, 1866, in Sunderland, County Durham, in the north of England. When he was nine, his father Robert Good, Sr. packed his family off to Dublin, where he started a small glass factory. Glass was then generally made by melting the ingredients in clay pots at night, then working it out during the day. Britten's Patent Glass company of Northamptonshire, England, was one of the first to have a continuous melting tank or furnace. They contracted one of the famous Siemens brothers from Germany to install the tank and hired Robert Good, Sr. as manager of its new plant. This new process "went like wild fire" in the first ten years after its discovery, recalled Mr. Good. Within the next year or so the Anglo-American Glass Company was organized in Poughkeepsie, New York, and representatives were sent to England to find a man expert enough to build a continuous glass tank for them. They found Robert Good, Sr. He arrived in the U.S. in July of 1879 and the new plant opened in March of the following year.

After being persuaded to remain in Poughkeepsie and operate the plant, Robert Good, Sr. brought his family to Poughkeepsie in 1880. Robert, Jr. didn't wait long to find a job at the glassworks. The New Yorker reports, "His father listened to his pleading to let him go to work at the glass factory and learn the trade." He worked at his father's plant for three years, returned to England to attend Durham college for a year, then came back to Poughkeepsie to learn the art of glass-blowing. At that time all bottles were blown by mouth with a pipe about four feet long. "I was always dreaming about the possibilities of making bottles by machinery," Robert Good, Jr. recalled, "of running glass out in a stream instead of getting it out with an iron rod." He worked his way up to assistant foreman at the Poughkeepsie glassworks, but the dream of operating his own plant was no secret. In 1895 he left for Denver, Colorado, where he rented a defunct glass factory.

The plant that R. Good, Jr. reopened was originally built in 1887. It was operated by the Denver Art and

(Figure 1.) Drawing of the Denver Flint Glass Company taken from the Sanborn Map records of 1898 addition to the 1890 series. Sanborn Maps were used by insurance companies to chart real estate.
Plate Glass Company, led by Mr. P.C. Thompson of Philadelphia, Pennsylvania. The name of the plant was changed to the "Denver Flint Glass Company" in December of 1887. The plant was located in what was then called Valverde, Colorado, about two miles south and west of the city of Denver. (Figure 1.)

Robert Good, Jr. arrived in Valverde in the summer of 1895. The first contemporary writing that mentions the plant is an article from The Denver Republican in 1896. In a short interview with Robert Good he describes what appears to be a very successful glass-blowing operation. No mention is made on that date of insulator production.

The Denver Republican, April 16, 1896, printed the following article entitled "Glass Factories":

As the times improve throughout Colorado and the West, new manufacturing plants are continually being developed. Among the various manufacturing industries of Denver, the reopening of the Valverde Glass Works is of considerable interest, it being the only glass factory situated between the Missouri River and California. Mr. Robt. Good, Jr., in speaking of the business says: "We are running full and can't keep up with our orders. Our factory is making all the soda bottles used in Denver. Orders are now in for about 100,000 soda bottles, beer bottles, and pickle goods also form a large part of our output. This fall we expect to supply the bulk of the fruit jars used in Colorado and ultimately in the entire West. Being a Denver industry, our factory should receive the business of our legitimate territory, and so far we have no reason to complain."

An article from The Industrial Reporter in May of 1897 indicates that insulator production was in progress at the Valverde glassworks.

"The Colorado Glass Works"

The Colorado Glass Works are located on the Platte River at the foot of Bayaud St. Mr. Robert Good, Jr., the general manager, is a practical glassblower of many years' experience, thoroughly conversant with every detail of this very intricate business. Among the articles manufactured are pickle bottles, olive oil bottles, half-gallon water bottles, catsup bottles, green packing bottles for druggist's use, and also pop bottles and insulators. The insulators are all handled by the Rocky Mountain Electric Company. Twenty men and boys receive constant employment. The ware is equal to the best manufactured in the East. Mr. Good informs us that he contemplates enlarging his plant by the addition of flint glass.

Robert Good produced insulators with the embossing "R. Good Jr." or simply "GOOD". (Figure 2.) Embossed insulators were produced in CD 106, CD 121, CD 134, and CD 162. Other than the common aqua, characteristic colors include very light sun-colored purple and amber-swirled aqua, with some of the amber-swirled glass being homogenized into a brilliant green.

(Figure 2.) CD 134 showing the "GOOD" embossing.

Robert Good used three insulator molds for each of his embossed styles. An interesting progression of mold varieties can be seen in each of these styles. For example, the CD 162 signals were first embossed with "R. GOOD Jr." on the front and "PETTICOAT" on the back. A later stage saw the addition of "'Denver, COLO."' in the blank plate beneath "R. GOOD JR." The next notable modification was the addition of a large dot above the word "PETTICOAT" and finally the "R GOOD JR." was replaced with "'W.F.G. CO."’ (when the molds were reused by the Western Flint Glass Company). A similar progression can be shown in each of the other three embossed CD's. Other insulators may have been produced by Robert Good, but none have been positively identified. (Figure 3.)

(Figure 3.) CD 162 signals illustrating the progression of embossing changes produced by Robert Good, Jr.
The furnace was rebuilt that summer and the plant opened for business in October of 1899, but with new owners. In his 1941 interview, Robert Good, Jr. recalls that, “he operated his own factory for four and a half years, experimenting all the time with new methods, until a defective part of the tank gave way one night and the whole factory burned down” (June 27th, 1899). The cost of rebuilding the plant and tank for a second time was prohibitive.

During the summer of 1899 a group of young investors saw potential in the glass plant and organized the Western Flint Glass Company (W.F.G. CO.). The young entrepreneurs were sons of wealthy businessmen who had grown up in Denver. Each had roots in pioneer families that built fortunes in the rough-and-tumble early days of the Colorado Territory, but had little or no background in the glass business.

Robert Good, Jr. remained in Denver in the fall of 1899 to help get the plant back into operation. One of the officers of Western Flint Glass Company was John H. Porter. A letter from Mr. Frank Galigher, the plant manager, to John Porter contained a summary of the first three days of production at the W.F.G. CO. plant. Along with the production totals was a notation of wages paid to Robert Good, Jr., and the production cost for 2,750 D.P. (double petticoat) insulators that were produced in the first three and one half days. By the end of 1899 Robert Good, Jr. moved back to New York.

Fire at an early hour this morning entirely destroyed one of the buildings of the Valverde Glass Works in Valverde. The loss will reach at least $5,000 and some estimates place it higher. The fire originated with a glass furnace bursting, scattering the molten mass about the floor, and starting a conflagration which the men were unable to control. The works are located outside the city limits, and by the time the fire department could reach the scene, the building in which the fire originated was ruined. The building was a one-story stone. It was owned by P.C. Thompson (sic) and operated by Robert Good.

The embossing found on most of the Western Flint Glass insulators is “W.F.G. CO.” and “DENVER, CO.” Close examination shows that all of the embossed insulators were made from molds previously used by Robert Good, Jr.

Western Flint Glass Company insulators were made in a wide range of colors. It is difficult to identify one as the most common. Characteristic colors range from dark green to blue, lavender, very light sun-colored purple, aqua, and clear. The plant produced insulators at such a
high volume that quality control was often overlooked. W.F.G. CO. insulators with overpours, underpours and distorted shapes from improper annealing are not uncommon.

Within a year the W.F.G. Company was reorganized. Additional investors joined the original group and a new manager, Michael Nester of East St. Louis, Illinois, was hired. The company was renamed the "Western Glass Manufacturing Company" (W.G.M. CO.) in November of 1900. (Figure 4.) The plant underwent expansion that doubled the work space by 1904 (Figure 5.), and continued to operate at the same site until about May or June of 1909. The Denver City Directory indicates that as many as one hundred fifty employees worked at the plant at its peak.

All of the embossed insulators from the W.G.M. plant found to date have the simple embossing "W.G.M. CO.". They produced five embossed insulator styles: CD 106, CD 121, CD 134, CD 145, and CD 162. The CD 145 has a variant which is narrower than the more common Western Union "beehive" shape. It is nicknamed the "Postal" due to its similarity in shape to the CD 145 embossed with that name (Figure 6.).

Most W.G.M. insulators have a distinct purple color from years of exposure to the sun. These insulators were made from glass which contained manganese, a decolorizing agent used to produce clear glass. The characteristic color of W.G.M. insulators is deep royal purple, but a few were hidden from the sun and have remained clear. W.G.M. insulators have also been found in various shades of straw, milky straw, light green, and very light sun-colored gray purple. Except for the very light sun-colored gray purple, which is found in the CD 145 Western Union style, these shades and the clear ones are rare. Unfortunately, some concern has been raised about the tampering of light purple insulators by heating to produce some of the lighter purples, clear, or burgundy specimens. Although it's been demonstrated that heat can remove most of the very light sun-colored purple color from the glass, the heat also deforms the glass, and a close inspection can most often identify the bogus insulators. Bottles have been found with the W.G.M. "belt buckle" trademark on the bottom in colors matching the straw and milky colors in the insulators. For some reason these glass pieces did not contain manganese. One should, when possible, investigate the source of non-sun-colored purple W.G.M. insulators.

The last contemporary reference to the W.G.M. plant found to date is from the October 5th, 1908, Denver
(Figure 5.) Western Glass Manufacturing Company in 1904

January 29, 1909 letterhead of the Western Glass Manufacturing Co. (Courtesy of Colorado Historical Society)
Post which states that the glass plant would open after Labor Day. Several items of correspondence plus financial reorganization within W.G.M., all indicate that the business was not doing well at that time. Bottles were the mainstay of the Denver plants, but the mouth-blown bottle could no longer compete with the machine-made ones for quality or efficiency. By the spring of 1910, the Western Glass Manufacturing Company had disappeared from the Denver directory.

The Robert Good, Jr., Western Flint Glass and Western Glass Manufacturing Company plants were all located at the same site between the east-west streets of Bayaud and Maple, and just west of the South Platte River. Today, new buildings and concrete cover any traces of the old glassworks.

Insulators from the Denver plants were used extensively in Colorado. A great number have been found in surrounding states, primarily along the length of the Denver-El Paso and Denver-Salt Lake City toll lines. Evidence suggests that several additional insulators found in Colorado were also produced in the Denver plants. They do not contain any of the indigenous embossings so it is difficult to certify their origin. Perhaps the most notable is the familiar Western Union style insulator (CD 145). This unembossed insulator (nicknamed the ‘Grand Canyon’ by some) has been found in colors which match embossed W.F.G. signals and tolls. Most of the insulators that were produced at the Denver plants have been replaced, moved or removed from service at the time that thousands of miles of open wire lines were retired. Occasionally though, one can still find Robert Good’s name atop an aging wooden cross-arm.

Robert Good’s first attempt at operating a glass plant was short-lived, but his involvement in the glass business was just beginning. A 1941 interview recounts that, ‘“during that four and a half years in Denver, he had partly developed a machine to make fruit jars.”’ In late 1899 he returned to Poughkeepsie, New York, to work on his machine. Two years later he was introduced to C.N. Brady, later the president of Hazel Atlas Glass Company, which was then being organized. Mr. Brady invited him to go to Washington, Pennsylvania, with one of the Hazel Atlas plants. Mr. Good accepted the offer in 1902, and remained with the company until he died in 1947 at the age of eighty-one.

In his six decades with the glass business he made a significant impact on the evolution of that industry. He was granted 24 patents for equipment or process innovations between 1894 and 1933. His patents include, among others, machinery for making glass vessels, devices for threading and finishing necks, for controlling glass furnaces, a glass-pressing device, an apparatus for delivering glass from a furnace, and a number of large machines for making glassware.

These devices and methods were part of the modernization of the glass industry that led to the end of the commercial mouth-blown bottle. Ironically, these modern bottle machines would contribute to the demise of many small glass factories including both the Poughkeepsie and the Denver plants where Robert Good, Jr. experimented with his bottle-making devices. In the interview, Robert Good ponders the changes: ‘‘My fellow bottle blowers used to say, ‘They’ll never do THIS by machinery.’ I used to give them the laugh, because I was so sure it would be done. Bottles aren’t made any other way now.’’ That bold prediction foretold the end of Denver bottle production and with it, the last of a colorful line of Denver glass insulators.

"R. Good, Jr. and the Valverde Glass Works" is an excerpt from a work in progress about Denver glass insulators by Don Reinke (2513 Flintridge Place, Fort Collins, Colorado 80521) and Mike Miller (Box 16127, Denver, Colorado 80216). Extensive research of the Denver glasshouses and the products they made for use in and out of that geographical area is being conducted by these two enthusiastic collectors. Don Reinke also has served as information director for the National Insulator Association and his son Daniel provided the pen and ink illustrations for this article.