Shield F - The Mark of Quality

by Marg Iwen

A Family Affair

Ask people about the Federal Glass Company and chances are they'll scratch their heads and answer the question with a question, "It was mostly a bottle and jar factory, wasn't it?" Certainly bottles and jars made up a large percentage of the early output, but over a 79-year life span, the Federal made a wide array of products.

By the 1960s, this company had mushroomed into the undisputed industrial behemoth of the South Side of Columbus, Ohio. Nearly two decades later, multiple forces from both the inside and the outside felled this glassmaking giant.

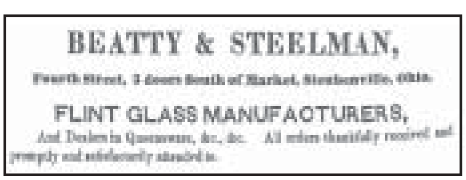
The factory site, bustling since 1900, is uncharacteristically quiet today. The hiss and clang of automatic glassmaking machines are only memories for those who still remember life at the old Federal. The physical plant, with its conglomeration of once tightly packed buildings, has been largely eviscerated to clear a thoroughfare for an industrial park that still bears its name—Federal Industrial Park.

The story of this major player in the American glass industry must also include the achievements of the Beatty family, pioneer glassmakers whose lives were inexorably linked to the trade starting before the Civil War. Family members built and managed glass factories in five cities—Steubenville, Tiffin, and Columbus, Ohio; Dunkirk, Indiana; and Washington, Pennsylvania.

Just as Beatty sons followed their fathers to the Federal, so did the sons in many other families. They considered co-workers their extended family. After working hours, employees joined in sporting and social events, and in times of illness or bereavement, comforted and supported one another. This "city within a city," this Federal Glass Company across all departments, became the home away from home for thousands of workers for almost eight decades.

The Early Beatty Factories

Long before the Federal Glass Company started up in Columbus, a small glassmaking operation built about 1830 near the banks of the Ohio River in Steubenville beckoned to Joseph Beatty. Together with his partner, Edward Stillman, they took over the previously unsuccessful glass factory in 1845 when only about 5,000 people lived in this thriving business community.



Early advertisement by Joseph Beatty and Edward Stillman (typo Steelman) who bought the old Kilgore & Hanna factory, which failed due to brittle glass. (Dohrman, 1884).

The partners called their new enterprise Beatty and Stillman. After they had updated and operated it for a few years, it passed through the hands of several owners until about 1852 when Joseph's younger brother, Alexander, became the new owner.

Alexander J. Beatty, already a successful Steubenville wholesale grocer and wool merchant, razed the early glass house buildings and erected a new factory. Before long, he had built the business to where 160 workers made 36,000 goblets and tumblers daily (Doyle, 1910). Although tableware was also made at the thriving Beatty factory, tumblers established A. J. Beatty & Sons' reputation in the glass business.

When Alexander J. Beatty was struck by a locomotive of the Pan Handle Railroad while walking along the tracks in the rain to his home, he received a severe brain injury and died a short time later in Kenbright's Hospital in Philadelphia. His tragic and unexpected death plunged three of his four children into full-time glassmaking.

Mary Gill Beatty (Rhodes Patterson) many years later described in detail how the untimely death of her father affected the family. "A heavy burden fell upon my brothers who were very young and boyish in appearance. Due to the business depression that had affected the glassworks, it was decided that Robert should go on a business trip at the earliest opportunity. In that case, someone should be in the office with brother George. Since they wished no outsider to know their state of affairs, I suggested that they allow me to take that place."


Alexander J. Beatty (born November 14, 1811; died November 29, 1875) and his wife, Abbie Ann Johnson, had four children, Sarah, Robert James, George and Mary Gill.

Mary Gill, then 19 years old and the youngest of the four Beatty children, continued, "We went to the factory very early in the morning stopping for mail on our way. After building a fire in the stove and thawing out our fingers in the cold weather, George would go out to the factory and I would open all the mail, laying the letters upon his desk ready for him and copying all the orders myself into the order book. After that I made out the invoices for what was shipped the previous day.

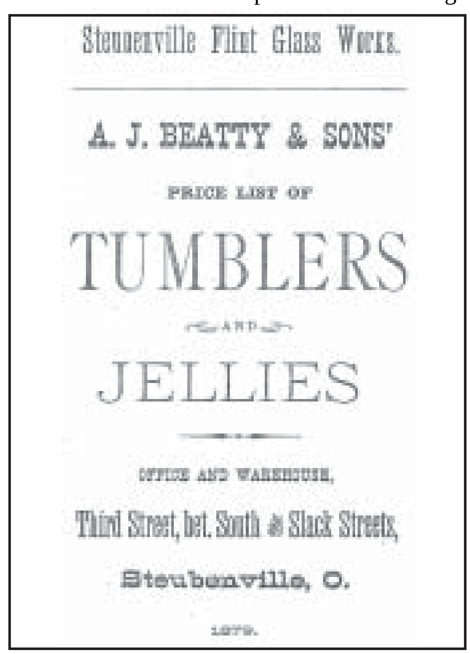
"I remember very clearly the puzzled and incredulous look on the faces of elderly businessmen from large cities when they were assured that this boyish, beardless young man of 21 [George] was the sole proprietor of the establishment in the absence of older brother age 23 [Robert]. No one but the three of us ever knew to what financial extremes we were reduced at the time," Mary Gill concluded.

Following the Natural Gas

By 1887, the Beatty brothers accepted the relocation offer of $50,00 in cash and land as well as free natural gas for five years from then gas-rich Tiffin, Ohio. In their new factory, constructed at a cost of $65,000, they made the first glass in 1889 from three furnaces of 15 pots each. Tumblers and tableware in crystal (clear), colored, and opalescent constituted the bulk of the output from the factory that still bore their father's name.

In Tiffin, the Beatty brothers established their reputation as outstanding glass men, beneficent employers, and hard-headed executives. By January 1892, A. J. Beatty & Sons had joined 17 other formerly independent glass companies that merged to form the United States Glass Company (U.S Glass) combine.

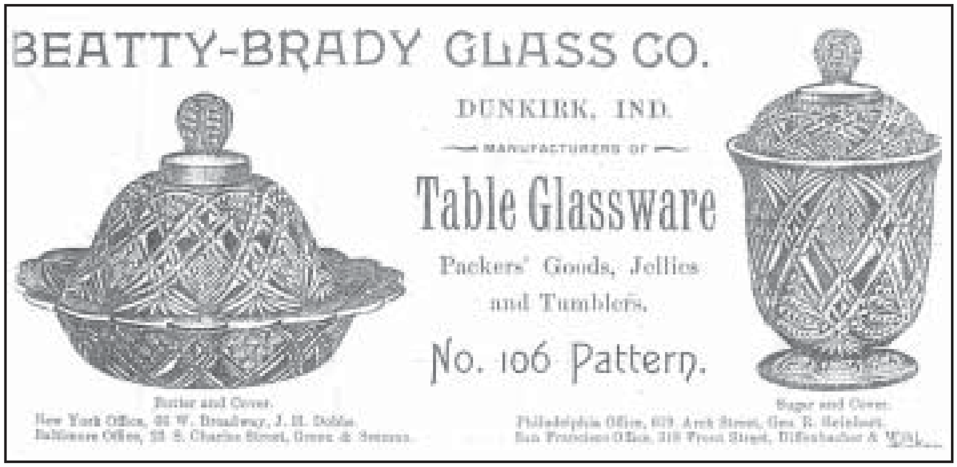
When the natural gas supply in Tiffin largely ran out, in 1896 the Beatty brothers headed west to Dunkirk, Indiana, where the gas still flowed freely. They bought the abandoned Dunkirk Locomotive and Car Repair Works buildings



A.J. Beatty & Sons 1879 catalog from Steubenville, Ohio, offering wares in over 20 categories, including table tumblers, ales, bar tumblers, handled jellies and tin-top jellies.

and grounds, which due to lack of funding, never became operational. From two continuous tank furnaces instead of pot furnaces they began making tumblers, jellies, packers' goods, fruit jars, and tableware at the factory they named Beatty-Brady.

In October 1899, Beatty-Brady joined with 18 other glass factories to form the National Glass Company combine. About a year later, George Beatty sold out to the combine. Now free from the controlling combine management, he marshaled his considerable assets, including plans for a new glass factory, and set out for Columbus, Ohio. At 515 E. Innis Avenue on the South Side he intended to manufacture low-cost wares from glass melted in continuous tank furnaces and formed by automatic machinery.



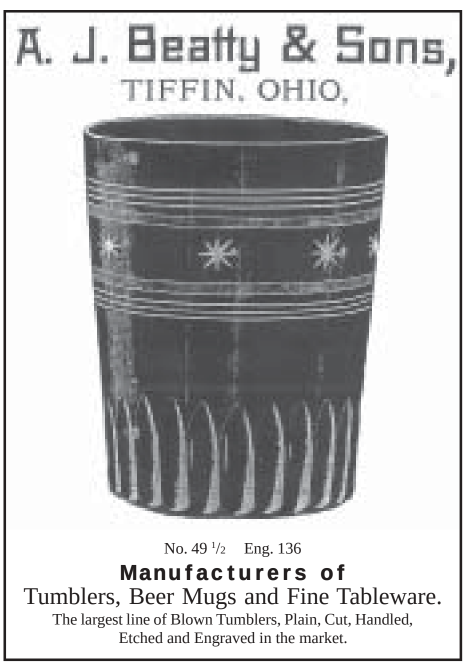
By 1896, George Beatty was making tableware, such as this sugar and butter, from continuous tank furnaces. No. 106 is now known as Spiralled Triangle (*CGL*, March 31, 1899).

Opened Under Foreign Charter

The Federal was originally incorporated under the laws of West Virginia by five Washington, Pennsylvania, glass men: George Beatty, Robert James Beatty, Charles Neave Brady, James Kuntz, Jr., John W. Donnan, and attorney H. M. Hussel of Wheeling. State law required that a West Virginia lawyer be appointed and present at the incorporation proceedings. Kuntz was also the president and chief stockholder in the Mississinewa Gas Company, Marion, Indiana. Donnan had served previously on the Beatty-Brady board of directors.

The new company's first officers included George Beatty, president; James S. Bracken, vicepresident; William C. Bracken, secretary; and James Kuntz, Jr., treasurer. To cover the cost of new buildings and machinery, the initial amount of capital stock was increased from $175,000 to $275,000.

The West Virginia charter under which the company had operated for about four years was retired when the Federal was rechartered in Ohio on May 28, 1904. The Ohio corporation purchased the West Virginia corporation for $245,000 and assumed all unpaid obligations. Incorporators included George and Robert James Beatty, James S. Bracken, George T. Everett, and George W. Davis. The capital stock of $250,000 was divided into 2,500 shares of $100 each.



A.J. Beatty & Sons Tiffin, Ohio, advertisement. Engraving cost 15 cents a dozen, or $3.00 for letter monogram (*China, Glass and Lamps* [*CGL*], April 29, 1881).

There is a Beginning . . .

Ground was broken for the new factory on June 1, 1900. Two Columbus contractors, William E. W. Cherry and D. W. McGrath, secured the contract for the two-story office building, mold shop, mixing room, finishing room, and a galvanized (zinc-plated sheet steel over a wood frame) structure for the engine room. Herman Laub of Pittsburgh won the contract for the factory buildings.

James Cuthbert, Sr., a life-long Federal employee originally hired at Tiffin, reported that George Beatty had rented an old stove works in Tiffin where "gathering-blowing machines, wire and gas cut-off machines, grinding machines and melting machines" were built. When the first Federal buildings neared completion, George Beatty shipped these machines to Columbus on December 17, 1900. He had successfully patented several of them.

By the end of the following year, the Federal had acquired 17 acres of "...ground as level as a floor"(*China, Glass and Lamps* [*CGL*] , November 7, 1901). The factory site was bounded by Woodrow Avenue on the north, Ann Street, Innis Avenue, and Wager Street on the west, and Marion Road on the south. "If the size of the factory and thorough equipment are any criterion, they will be one of the largest producers of tumblers in the U. S. once they get into full operation," declared *CGL*.

Federal Rises in the Outback

At the turn of the century, the area surrounding the budding Federal, mostly located in the Township of Marion, Franklin County, lay largely unimproved. Many residents planted their gardens near the factory at Woodrow and Parsons Avenues; corn fields abounded south of Innis Avenue.

"There was a baseball park on Jenkins Avenue east of Parsons which gave the saloons the business, then there were these signs, going out of town 'Last Chance' and coming into town 'First Chance,' according to Cuthbert. Columbus numbered about 125,000 residents in 1900.

When the Federal started up, Innis and Parsons Avenues were nothing but dirt roads. Helen Everett Fisher (daughter of George T. Everett, a Beatty faithful who was the plant manager at Dunkirk and a Federal stockholder as well as a factory supervisor) recalled that workers going to and from work often became mired in mud. Out of necessity, an early construction project entailed building a sidewalk of planks measuring eight feet long, four inches wide, and two inches thick, running from Parsons Avenue to the factory. Soon after, workers erected an eight-foot-high board fence around the factory buildings, a common practice among factories running non-union.

Fisher recalled that "After Parsons Avenue was paved we always knew when it was 8 o'clock because Mr. W. C. Bracken would pass in his black Packard, then Mr. Jim Bracken would pass in the same kind of car. Later Mr. George Beatty passed in a great White steamer [a steam-powered automobile built by the White Company from 1900 - 1911]."

George Beatty, Federal's founder and first president.

According to Fisher, "People in the South End could always set their clocks by the Federal whistles. Factory people started to work about six in the morning. The noon whistle blew at 11:30 a.m. At 12:15 p.m. the first whistle blew and promptly at 12:30 p.m. the second whistle blew, and that meant everyone had to be there on the job. During the early months of operation, the night shift began at 5:30 p.m. and ended at 6 a.m. with a lunch hour at midnight."

Fisher confided that her father "...felt close to the people who worked for him and all their family woes were his. He often told about having to paddle this boy or that one, having caught him smoking cigarettes." She continued, "Also he had a lot of trouble during the hot weather because the men drank too much of the ice-cold well water which constantly gushed from an open pipe in the factory. For this reason, he made them all eat salt."

Her father presumed he had assembled a complete first aid kit. He kept it supplied with cheese cloth bandages—which she cut, rolled, and wrapped in newspaper. "He also always kept on hand a box of baking soda, a bottle of turpentine to use for cuts, and of course, the salt," Fisher added.

"I recall how often Mabel [Fisher's sister and first stenographer] took me with her to the office on Saturday and I was permitted to walk quietly up and down the little iron stairway which is still there (1951) but was allowed to speak to no one unless Mr. [George] Beatty spoke to me first." She was amused that students from Ohio State University who toured the plant during summer vacation aggravated George Everett by taking notes and asking "darn fool" questions.

President George Beatty and Vice president James S. Bracken established their first offices in an old tollgate house located at Parsons and Innis Avenues while the two-story office building was being built (a buff brick structure which later became the central core of the new office building).

James Cuthbert and the other workers who arrived in Columbus on Thursday, December 20, 1900, were met at the car line which terminated at Innis Avenue by George Davis (stockholder and incorporator under the West Virginia charter, and later Federal mold shop foreman). He took them to Henry "Hen" Reeb's for dinner. "First good thing we had to say for Columbus," remarked Cuthbert.

"Later Mr. George Beatty met us at the office door and showed us through the plant, and asked if we wanted to go to work then or start in the morning. One of the boys being superstitious said it was bad luck to start on Friday, so he went to work," Cuthbert reported. Apparently it was a long-held belief among glassmen that starting to work on Friday, but not working that day as part of a normal shift, was unlucky.

A critical housing shortage prevailed in Columbus around 1900. The Beatty brothers had already dealt with a similar shortage when workers moved with the factory from Steubenville to Tiffin. Now, in this place, they had to find housing, preferably on the South Side, for the immigrants who arrived from Belgium, Czechoslovakia, Germany, and Ireland, as well as for the regional workers who came from Pittsburgh and the lower Ohio Valley.

The first cohort of workers, while searching for room and board, discovered they would have to live two to a room, use kerosene lamps for light, bathe in a wash tub, and make do without running water or sewer. Most of them boarded at "Hen" Reeb's on Reeb Avenue where Cuthbert reported the meals to be "extra good."

Tumblers and Jellies First Output

The No. 1 continuous tank furnace was built in 1901; No. 2 furnace was added the following year. A third tank furnace was fired in 1905. At various times in its history, the Federal worked from one to six tank furnaces. It may have been the first U.S. factory to make hand blown wares from glass melted in a continuous tank furnace.

James Means Beatty, the son of Robert James Beatty, briefly described the structure and operation of a typical continuous tank furnace at the Federal, built of clay blocks 12 inches thick. The melting end, charged with the batch, averaged approximately 27 feet by 16 feet. The depth of the molten glass in the melting end equalled 42 inches.

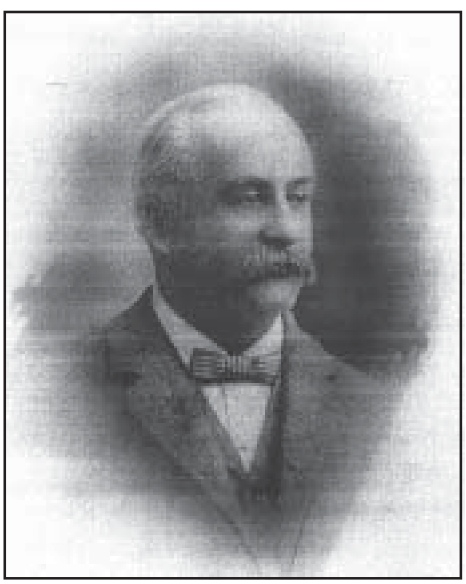
From the melting end the molten glass passed through a 24-inch-square aperture located at the base of the tank furnace into the smaller working end. The act of passing through this "hole" allowed "seeds" or small bubbles and other impurities to rise to the top. The smaller working end of the tank furnace was rounded to permit more even spacing of the delivery spouts that carried molten glass to the forming machines.

Although American glass factories were slow to accept the tank furnace, once they recognized its fuel efficiency and need for fewer workers, it became the standard for the industry. By 1919, nearly 600 tank furnaces operated in U.S. glass factories, compared with about 200 when George Beatty installed them at the Federal (Scoville, 1948).

The No. 630 tumbler was the first blown ware made in the No. 1 plant (blow factory) in February 1901. An early advertisement, among the Federal's first in trade papers, listed blown tumblers, plain and engraved (*China, Glassware, and Pottery Reporter [CGPR]*, August 1901). The same issue noted " ...a catalog of tumblers and price list will be sent on request to the Federal Glass Company." The *CGPR*, December 1902, stated that the "latest catalog sent out by Federal ...has the latest shapes in tumblers and stemware, plain and engraved styles."

The first press, driven by steam, turned out 1/3- and 1/2-pint round bottom jelly tumblers. The first pressed tumblers belonged to the No. 200 line, and included No. 201 with a star in the bottom, No. 202 with a horseshoe in the bottom, and No. 226 with an engraved band three-fourths of an inch from the top. During the early days, the company shipped all tumblers in excelsior-filled barrels made in the cooper shop. Packers' goods left the factory in wooden reshipping crates assembled in the same building as the barrels.

Fisher recalled that fruit jars (both pints and quarts) constituted the main output of Factory No. 2, supervised by her dad. According to



Robert James Beatty, Federal's co-founder and chief financier (photo courtesy of Patricia Patterson Allen).

James Means Beatty, son of Robert James Beatty, and Federal's second president.

Edmund A. Donnan, Sr., Federal's third and longest-serving president (photo courtesy of Russ Hughes).

Fisher, her mother often called the factory telephone number, Ma. 2404, during the canning season and requested that a boy deliver a couple of dozen fruit jars. "In those days no one ever thought of paying for ware," she confessed.

Residual Litigation Rankles

When the Dunkirk plant sold to the National combine in 1899, George Beatty allegedly entered into a contract stating he would not manufacture pressed tableware for five years (*CGL*, February 15, 1902). (Other references include jellies and tumblers as well as tableware.) Based upon this condition, he received an all-cash settlement rather than part stock and part cash for his plant.

The National Glass Company, with headquarters in Pittsburgh, filed suit in U.S. District Court in Columbus in 1902 to restrain Beatty from manufacturing tableware in violation of the contract alleged to have been entered into between Beatty and the National in 1899 (*CGL*, October 4, 1902). However, Federal made the first tableware in 1906—beyond the time limitation allegedly specified in the contract.

The National Glass Company, poorly managed and already faltering shortly after the individual factories merged, possessed limited resources to devote to this suit, falling into receivership by 1907. The outcome of the suit remains unknown; it may have been dropped or settled out of court.

Fuel Shortage—Well, Well, Well

The faltering supply of natural gas as early as 1902 prompted the Federal to build a gas producer plant to make gas from coal a year earlier than George Beatty had planned. Throughout the Federal's primordium, growth, and maturation, the natural gas supply would ebb and flow, a phenomenon dreaded but well understood by those who chose to make glass for a living.

In his 1906 report to the stockholders, George Beatty warned that the gas company which had supplied natural gas to the factory would probably increase the price by at least 20 percent. The supplier further notified that the existing contract would be valid for only a year at a time. More unsettling still, the supplier gave preference to residential customers, threatening to take the Federal off line before private customers suffered a shortage.

Given the tentative natural gas situation, the board of directors decided to search for an independent fuel supply. Together with the Buckeye Steel Castings Company (a Columbus foundry specializing in castings for the railroad), the Federal leased 8,000 acres in Licking County, Ohio, to drill for natural gas. The first well turned out to be a dry hole. Well No. 2 showed some promise, but not enough to warrant pumping. Well No. 3 was a total failure. Well No. 4 also showed promise, but the Federal directors decided to halt speculation until it produced enough natural gas and oil to justify further investment. Sadly, the entire drilling operation was a bust, and in 1907 George Beatty told the stockholders the Federal had resumed making producer gas from coal.

The neighborhood housewives as well as George Beatty would have preferred a cleaner-burning fuel supply. The early gas producers were not only inefficient, but also notoriously polluting. The soot buildup, cleared by a weekly "blow out" or "burn out," settled an oily black film over everything in the vicinity. Imagine the housewives' dismay when the blow out and hanging wash out took place on the same day.

Federal Displays its Wares

The Federal showed its wares at least as early as the January 1905 Glass and Pottery Exhibition in Pittsburgh. James Means Beatty, previously seasoned by 18 months of selling glassware for the U.S. Glass, staffed the first one-room display at the Hotel Henry.

A year later he was joined by Julius (Jule) Braun, an experienced glass salesman often dubbed "jovial" or "jolly" by the trade paper reporters who covered the show. By 1907, in two rooms at the Fort Pitt Hotel, pressed tableware occupied a prominent place in the Federal display. Included were imitation-cut tableware (No. 1910 line) and plain ware (No. 140 line) as well as blown tumblers, sodas, nappies, and packers' wares (*CGL*, January 12, 1907).

No. 630 blown tumblers, the first made at the Federal, with various engravings (October 1914 catalog).

The 1908 display included a plain line (No. 140), a grape line (No. 507), and a vine or wreath line (No. 508) as well as the limitation-cut line (No. 1910). The display also featured jugs (pitchers), molasses cans, bar goods, and berry sets (*CGL*, January 18, 1908).

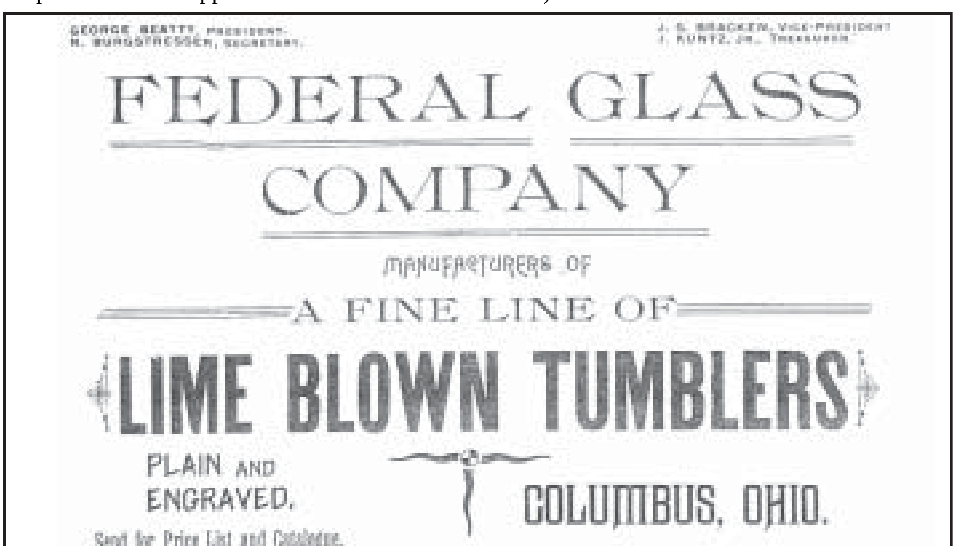
Judging from trade paper commentary, sales of Federal glass were keeping the representatives hopping. "It took longer to see Mr. Beatty than it does to see J. P. Morgan," said the *CGL* reporter in the January 25, 1908, issue. "But," he continued, "Mr. Beatty ought to have buyers and ought to sell glass because he has stuff that is salable. The 'lightness' and 'brightness' of it are distinctive. Mr. Beatty does not know when he will get away. Certainly not while buyers are keeping him as busy as they are now."

In subsequent years, displays included tableware patterns originally made by other companies, notably Kokomo/Jenkins, U.S. Glass, and possibly Indiana Tumbler and Goblet. After the initial run, or slow sales, many companies sold the molds to companies such as the Federal, which made the glass more cheaply from tank glass than other companies could make it from pot glass. This may help explain some of the variation in quality found between items of the same pattern.

Morris G. Woodhull, husband of Robert James Beatty's daughter Emma, assisted Braun with the 1910 display. By the 1920s, U. L. Conway appeared for the Federal, which continued to participate in various trade shows at least into the mid-1950s.

Financial Picture Looks Rosy

In spite of growing pains punctuated by cut-throat competitors and vacillating fuel supplies, the Federal made money. The Beattys remained the principal stockholders in the early years, holding slightly over 50 percent of the stock.

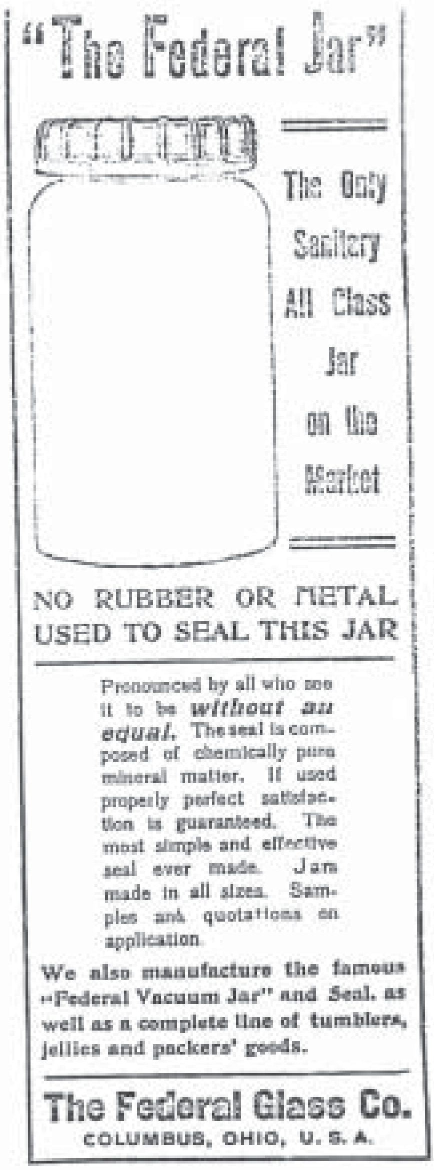


An early Federal advertisement announcing its wares to the trade (*CGL*, October 19, 1901).

In 1903, the company reported $338,651 in total sales. By 1904, sales had increased to $492,193 and rose to $652,133 during 1905. George Beatty gave no exact sales figures in 1906, but in his annual report he stated that sales had not increased much over 1905. In 1907, he said only that sales had "largely increased over the previous year."

The company officers received a salary increase in late 1911. President George Beatty's base salary rose from $8,000 per year to $13,625. Vice president James S. Bracken realized an increase from a base of $6,000 to $10,015. Secretary James Means Beatty saw his salary increase from $6,000 to $9,705, and Treasurer William C. Bracken's salary went from $4,000 to $7,205. If it's true that salaries double about every 10 years, these officials could have become wealthy men.

At the end of the first decade, the Federal property supported at least 45 structures, ranging in size from the individual factory buildings which housed the continuous tank furnaces and lehrs to the smaller buildings such as sand bins and hay storage sheds. Each building was numbered for easy identification. The American Appraisal Company, Milwaukee, Wisconsin, valued the company at $410,959, of which $355,580 was covered by insurance.



Advertisement in the 1907 *Thomas Wholesale Grocery and Kindred Trades Register* (courtesy of Bracken Library, Ball State University, Muncie, Ind.).

The Hercules Is Born

Based upon successful operation of the factory for a decade, officials saw the wisdom of creating a subsidiary to fabricate shipping containers. Such a move, they reasoned, could help alleviate problems previously encountered with paperboard suppliers.

When he spoke to the Federal stockholders in August 1911, President George Beatty said, "We have added a corrugating and paper box manufacturing plant, wherewith we are able to make all of our paper boxes and corrugated fillers for our wooden reshipping cases that are so largely used now by the packing trade." He called the subsidiary the Hercules Box Company. In later years, it would mark containers with the "Shield H."

President Beatty felt that building a box plant benefitted the Federal enormously because in the past the company " ...had to purchase paper from manufacturers and have had to be entirely at their mercy as to the time of delivery, and in many instances have lost customers or had unpleasant contentions through this delay, and we expect as well to furnish these boxes on a cheaper basis than we can now buy them from the outside manufacturers." Moreover, wrapping glassware in tissue paper and carefully nesting it in excelsior-filled barrels had become outmoded as well as more costly.

In 1912, the Federal improved its machinery when the company purchased the rights to the Miller Semi-automatic Press from Edward Miller, owner of the Miller Machine & Mould Works, Columbus (mechanical patent No. 787, 050 granted December 6, 1904). The semi-automatic-machine replaced some, but not all, workers in a shop. One Miller machine increased pressed ware production from one article per minute to 20 articles, and later to 35 articles per minute. Earlier Miller had collaborated with Robert James Beatty on glass making machinery in Tiffin, Ohio, and Washington, Pennsylvania.

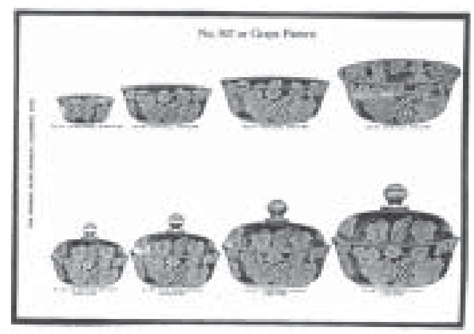
Strike Number One

On July 17, 1913, the Federal suffered its first strike when Local No. 122 of the American Flint Glass Workers Union (AFGWU) sought recognition following months of agitating. As a result of the strike, the factory shut down the operating departments, but later advertised for help that would work non-union. Many from the Pittsburgh area answered the call, only to be taunted by strikers who called them "scabs."

These workers were housed in barracks erected on the Marion Road site that later became the Hercules Box Company office, and fed at the company commissary. Some worked in production but output was minimal. Others installed new machinery, repaired existing machines, or made improvements to the facility. The plant resumed limited production in the fall of 1914, and continued operating non-union as it had before the strike occurred.

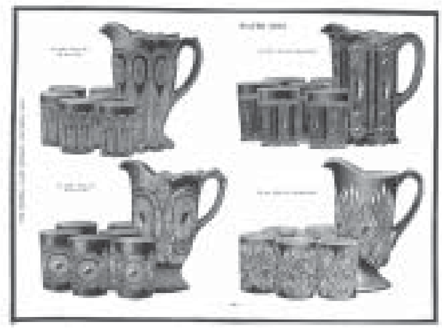
No. 140 Ware (plain ware) four-piece set, berry bowls, tumbler and jug (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).

No. 1910 line imitation-cut tableware comprising some 30 forms (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).



No, 507 line, Federal's Grape, has shapes identical to No. 508, Federal's Vine. Glass may have a slightly cloudy, grayish cast. (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).

No. 508 line, Federal's Vine tableware with pattern on the inside of the form pressed with design on the plunger. (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).



Tumbler and jug sets. Top row: Peacock Feather, Kansas. Bottom row: Cannonball Pinwheel (Caledonia), Boxed Star. (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).

Federal's packaging glass, ca. 1914. Left: Dewdrop and Raindrop sherbet (also Kokomo/ Jenkins, 1901); Center: Stippled Arrow toy mug; right: Ribbed Leaves variant mug (Patricia Klar photo).

Packers jelly tumblers (top row) and table tumblers (bottom row) in Federal's Grape, Boxed Star, No. 102 and Austrian (1913 catalog from Klopp, 1983, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).

Wabash toy sets. Top row: Fish set with Federal Vine border. Bottom row: Grape stein set and Tulip and Honeycomb forms (1914 catalog from Klopp, 1982, with permission from David Richardson, *The Glass Press*, Marietta, Ohio).

Fisher reflected on the Federal's first labor uprising: "It seemed that when the strike started, none of the men wanted to strike. Up to that time we had been a contented family. The men all felt they were making 'big money,' especially the blowers, who sometimes made as much as fifty dollars weekly. I vividly recall my special hatred for the union organizer by the name of Joe O'Malley, who was aided in his efforts by Ed Zimpher [Edward S. Zimmer], who went by the nickname of 'Liver.' These two men, to my notion, were hardly human."

During the mid-summer strike, the mold shop operated with only a few men, one of whom was John Moeller. He suffered severe burns when a freshly-filled gasoline torch he was carrying exploded, enveloping him in flames.

Fisher detailed the events following the explosion: "We saw the No. 14 fire department rushing over to the factory and everyone ...jumped to the conclusion that the strikers had set fire to the plant. However, in a few minutes, Cook's Ambulance came rushing down Parsons headed for the factory. Someone came running over to the mother of John Moeller. ...and told her that John had been burned. As the ambulance passed, John's mother said, 'My boy can't be badly burned or he would not be sitting up.'

"John Moeller died two days later at Grant Hospital. On the day of his funeral, all the strikers, union organizers, non-strikers, in fact everyone in the South End joined the funeral procession to the Lutheran Church on Reeb Avenue," reported Fisher. The plant remained closed that day in honor of John Moeller.

Fisher continued, "The only violent incident of the strike, which I believe lasted about two years, took place opposite our home on Parsons Avenue. Two strikers attacked a man who worked for my father and a short scuffle ensued. I told my father about it and he reported it to Mr. Jim [James Means] Beatty. The next day Mr. Beatty came to our home to get my version of the story.

"As my father so frequently predicted the factory never seemed the same to him after the strike ended. The men he knew so well were replaced, for the most part, by machines and many of them have never worked in a glass plant since."

George Beatty Reflects on Strike

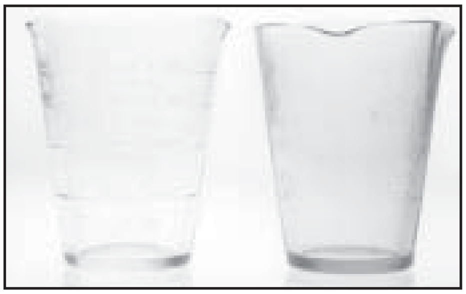
President George Beatty elaborated on the strike in his August 1915 report to the stockholders: "Gentlemen: We have just finished two years' business which was largely interrupted by our strike and the hostilities of union labor that have pursued us ever since July 17, 1913. At that time, we were midway through a year's business that seemed destined to be the most prosperous in the history of our company. We had a fine working force of skilled men, our books full of orders for immediate and future shipment and everything favorable for a satisfactory year's run.

"The going out of our entire work force, of course, completely upset our manufacturing business and while we were able to get some assistance from outside manufacturers in filling our orders, it did not amount to a great deal

Scarce Wabash toy ice cream set, 1914, with Federal Vine pattern border on large center plate (Patricia Klar photo).

Twisted Optic machine-blown packers' ware goblet. Design patent granted to George S. Dunbar, July 2, 1929 (*CGL*, June 11, 1928).

Corded Optic machine-blown table tumbler. Design patent granted to George S. Dunbar, July 2, 1929 (*CGL*, February 27, 1928).



Triple-lipped cooking cup patented by Dr. Samuel R. Scholes and George S. Dunbar, June 25, 1929. Made in crystal, amber and green. Pouring lips were shaped in the hand shop with a special tool (John Schoessow photo)

Depression-era mold-etched pattern Georgian (Lovebirds) sugar and creamer, made in green from 1931-1936

Depression-era pattern Diana demitasse cup and saucer, made 1937-1941, named by Gunter H. Kuse, marketing vicepresident, after his daughter, Diana (Patricia Klar photo).

and it seemed that the majority of them seized the opportunity to dump a lot of inferior goods on us, on which we had to make allowances to our customers before we could get them to retain the goods.

"We were able, after a long struggle, to get our factory full of workmen again, but there is a great difference between having a factory full of skilled workmen accustomed to the business we have always done and filling their places with new material that are either green to the trade entirely, or in any event green to our methods and machinery. It took a great number of months to get a production again that would cover our heavy expense, which was very much greater during the strike and for some time subsequent to it, than ever before," said Beatty.

He concluded his report with the following summary on labor relations: "The past two years have been the most unsatisfactory to the management of the company ...and we trust that there will be no further labor trouble in this line for many years to come. It is our opinion that our help have learned a lesson that they will not soon forget." (And labor relations did remain peaceful for some 30 years. The strikes that occured in the 1940s were less detrimental and of much shorter duration.)

The weather as well as the labor force appeared to have turned against the company. That August, George Beatty also told the stockholders "The summer of 1915 was the coldest and dampest for many years. As a result, blown tumblers which sold best in hot dry weather sold only slowly."

Further, the Macbeth-Evans Company, Pittsburgh and Marion, Indiana, could make blown tumblers on the end of lamp chimneys, but made only those that corresponded to the No. 0, No. 1, and No. 2 chimneys. (The Marion plant had become the largest lamp chimney-producing plant in the world by 1892-93, capable of blowing 12 million chimneys a year.)

In what would be his last August annual report before his death from heart and kidney failure in October 1916, the 62-year-old George Beatty spoke plainly regarding activities of union organizers: "We are still annoyed by union agitators, who are constantly endeavoring to get hold of our employees, and it as been necessary ...to discharge workmen ...on account of their union affiliation." He concluded that "...the interests of the company are much better served by continuing in operation as a non-union plant rather than submitting to the dictation of an irresponsible body of workmen."

Enter the Gob Feeder

How to automatically transfer molten glass from the continuous tank furnaces to the automatic blowing and pressing machines baffled the best minds in the business for years. Although the continuous tank furnace was invented in England, it was an American, Homer Brooke of New Jersey, who invented the first truly workable automatic feeder made practical by the automatic forming machines.

Simply described, a gob feeder consists of a trough or spout leading from the working end of a continuous tank furnace to an area above the automatic forming machines. As the molten glass flows down the spout, automatic shears cut the stream into gobs of the right size and shape, which then drop into a mold on the forming machine.

As early as 1910, the Federal had used the Brooke feeder, but with limited success. In 1916, two Federal employees, Oliver M. Tucker and William A. Reeves, built an apparatus which fed uniform weights or gobs of molten glass into the automatic machines. James Means Beatty also worked on the feeder's development, later named the Tucker, Reeves, Beatty (TRB) gob feeder. Before his death, George Beatty deemed the TRB feeder superior to the Brooke device in making pressed tumblers, jelly glasses, fruit jars, and packers' wares.

In the early 1920s, the Hartford-Empire Company (formerly Hartford-Fairmount), Hartford, Connecticut, developed a gob feeder considered superior to the TRB feeder. In 1926, Hartford-Empire bought out four TRB patents. The following year, the Federal struck its first lease agreement with Hartford-Empire for one of its gob feeders and an annealing lehr. After 1940, the Federal replaced all of its TRB feeders with those made by Hartford-Empire, later Emhart Manufacturing.

James Means Beatty Takes Charge

Following the death of his uncle George in 1916, James Means Beatty resigned as the Federal secretary, after which the board of directors elected him president. Even as this newly elected 42-year-old came to office, he found himself at once faced with a nagging recurrent nightmare—the unreliable natural gas supply coupled with a non-enforceable gas contract.

James Means Beatty told the stockholders at the August 14, 1917, meeting that "At first, the loss of time due to the shortage of gas was limited to one or two days, at intervals, with longer periods of idleness. To sum it up in a few words, the result of the natural gas shortage amounted to practically five weeks total loss of production and at least five months of reduced output." He further emphasized that "...it was suicidal to place any dependence on a supply of natural gas."

The Federal hastily rehabilitated the old gas producer built in 1902 to provide fuel to the No. 1 factory. The Toledo & Ohio Central Railroad brought in coal at 70 cents a ton to make producer gas. From the rail siding, the coal was transported to the producer house by a large traveling crane. No. 2 factory was outfitted with an underground oil storage tank which held 300,000 gallons.

James Means Beatty confessed, "Being ...ignorant in the use of either of these fuels and being unable to secure competent men ...we had to operate as best we could and were greatly handicapped by the quality of coal we were able to buy and combustion problems with oil." He calculated that the new fuels cost $75,000 more in five months than natural gas during the same period when natural gas cost 30 cents per thousand cubic feet.

To further alleviate the gas shortage, the Federal dismantled the old power plant that had run on natural gas in favor of one run by electricity. The used power plant equipment sold for about the same amount the company paid for it originally.

A jubilant James Means Beatty further reported to the Federal stockholders in August 1917 that five years of discussion with competitors in the pressed tumbler, jelly tumbler, jar, and packer tumbler trade resulted in adopting standards for these lines. The capacity of individual items ranged from 2 ounces to 16 ounces with a difference of 1 ounce between each item.

Regarding this money-saving measure, he said: “We have ...for many years made hundreds of different designs and shapes to suit the whims and demands of the trade.” Standardization meant fewer molds to make, repair, and store. An added benefit included warehousing a smaller inventory with fewer odds and ends of accumulated stock.

The Federal Under JMB

During the first year of the James Means Beatty presidency, the company issued a 15 percent dividend to its stockholders. The following year, capital stock was increased from $250,000 to $2, 500,000 divided into 25,000 shares of $100 each. After the increase the Federal declared a stock dividend of three shares for one of the original stock. During the 1920s, Beatty family members continued to hold over 50 percent of the Federal stock.

That any growth at all occurred during the years of 1914-18 when World War I, the “War to end all wars,” was being waged abroad spoke favorably for the managerial skill shown by those in charge. Shortages of raw materials, compounded by undependable freight delivery, interrupted normal production schedules. During the war, the federal government controlled railroad operations, setting priorities commensurate with aiding the war effort.

Workers of any kind, skilled or “green,” were hard to get and harder to keep, demanding wages considered to be high for the times. “What a hurrah it caused when the first colored women took the places of boys in the factory, when the boys were called to World War I,” Fisher wrote.

Labor organizers continued their relentless pressure to unionize the plant across all departments. The company sought to offset their activities by sending letters to workers’ families enumerating company benefits and by sponsoring social events.

One of these events was a company-hosted picnic in 1923 to help promote better understanding between the employees in the various departments. Fisher described a Sunday outing to Sandusky, Ohio, on a train chartered by the company for all workers and their friends and relatives: “We met at Union Station about five in the morning and had a wonderful time up on the train and on the boat trip to Cedar Point. Returned that evening about midnight.”

Fisher described a second social event planned for employees. “Another favorite included a moving picture of activities at the factory, beginning when the workers entered the watch house and continuing through the daily operation in every department. Homer Steele had charge of running the film at the old Sherman Picture Show located at Innis Avenue and Fourth Street. Homer provided a lot of laughs by speeding up the film at certain places, making it appear that the turning-out and carrying-in boys were walking at breakneck speed.”

To improve the quality of its output, particularly the clarity, the Federal hired its first glass chemist, Mr. Adams, in 1920. After the hire, officials reported “consistently good glass.” In 1923, Mr. Adams was replaced by Dr. Samuel R. Scholes, who in turn was succeeded by Walter J. Power in 1927. Scholes left the Federal to accept a professorship in the Department of Glass Technology, New York State College of Ceramics, Alfred.

Pivotal resignations from the board of directors took place in 1928. James S. Bracken, a director since 1904, resigned as did Morris G. Woodhull from his position as assistant secretary. These resignations created an opening on the board for Robert James (Bob) Beatty, the son of James Means Beatty and grandson of Robert James Beatty. He was elected to fill the vacancy created by Bracken’s resignation, and also was named assistant secretary following Woodhull’s resignation.

President James Means Beatty heartily endorsed these actions by the board, which paved the way for a fourth generation Beatty to work in Beatty-owned factories. He genuinely wanted his son to become familiar with the workings of the company “...to give him the opportunity of broadening his scope of training to fit him for responsibilities in the future.”

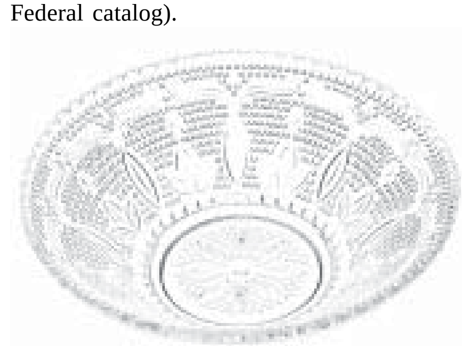
Colored and Crackle Glass Added

At least as early as 1925, the company had begun to pioneer a process whereby colored glass as well as crystal (clear) could be made in continuous tank furnaces. Green was the first color made. Cuthbert reported that “green glass was melted in a U-tank [horseshoe-shaped] with one spout [automatic feeder] and one gathering hole.” Thin blown tumblers were offered for sale in the 1927 catalog in a color the Federal called “Springtime Green.”

Other thin blown tumblers, made on automatic blowing machinery, came in fancy “optic” patterns named “Diamond Optic,” “Pear Optic,” “Corded Optic,” “Polka Dot Optic,” and “Twisted Optic.” Weatherman (1970) reported that “these earlier issues carried the Federal mark (the letter F in a shield).” They were shipped in corrugated cartons that held 12 dozen tumblers, made by the Federal’s subsidiary, the Hercules Box Company. The suggested retail was 5 cents for a water tumbler and 10 cents for an iced tea tumbler.

In 1927, the Federal received patent protection on its crackled or crazed glassware trade-named “JACK FROST” (mechanical patent No. 1,739,825, issued December 17, 1929), developed by employees Virgil O. Cornwell and Fred J. Blackburn. By the Cornwell-Blackburn method, the hot glass blank was chilled by streams of water hitting against it, cooling it sufficiently to produce the crackled surface, but not changing the temperature so drastically as to prevent proper shaping in the mold. Forms made included water tumblers, tankard pitchers, iced tea tumblers, ice tubs, and juice sets.

Park Avenue line showing “The most famous tumbler ever made,” ca. 1940-1971 (1941 Federal catalog).



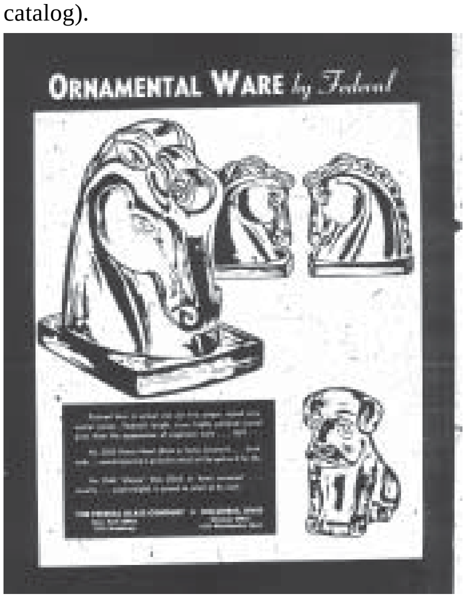
Heritage pattern pressed tableware 8-inch master berry bowl made in crystal, green, pink and blue from 1950 to 1955 (Patricia Klar photo).

Star tumbler (left) with gold band decoration, ca. 1948. Park Avenue tumbler, iridized (right), ca. 1940. The Park Avenue can be identified by the square bottom (John Schoessow photo).

Star pattern tableware in crystal and Sun Gold, salad plate, tumbler, bowl and whiskey (spelled with an “e” by Federal), ca. 1948 and later.

Popular Zombie 13 oz. beverage tumblers of the '50s and later. Center, Cock-cro pattern (John Schoessow photo).

No. 2563 Horse Heads bookends or mantle pieces sold for 15 cents each in 1940, often as a premium, and No. 2565 Mopey Dog paperweight sold retail for 5 cents (Above: Patricia Klar photo. Below: 1940 Federal catalog).



The Great Depression Hits

In addition to tumblers, glass aficionados probably remember the Federal best for the colored, machine-made glass that graced the tables during the 1930s and beyond, now known as Depression Glass. Widely collected today, prices have escalated unbelievably from that paid by homemakers of the time, who often received pieces free in boxes of soap or cereal, or with admission to a movie. Most of what we know about this class of Federal-made ware has been thoroughly researched and written about by authors whose works appear in the references.

Company papers make scant mention of the 13 major patterns of tableware produced in crystal, amber, green, blue, and pink between 1927 and 1942. Nevertheless, company officials must have recognized something inherently unique in these wares, as the 1931 board of directors' minutes recorded a $100 honorarium to Harold Nicholson and the same amount to Vernon Nicholson, both mold shop employees, for designing new tableware. No further information was given regarding the line number, pattern name, or number of forms made.

Weatherman (1970) reported that Harold and Vernon Nicholson were etchers who worked on all of the Federal's mold-etched tableware patterns. These patterns and the date of first issue include: "Georgian," 1931; "Parrot," 1931; "Madrid," 1932; "Patrician," 1933; and "Normandy," 1933. (By April 1943, Harold Nicholson had advanced to Art Department supervisor, and Vernon Nicholson had taken over the silk screening operation.)

In the early 1930s, pay cuts affected workers in all departments. Officers salaries were cut by 5 percent. Beginning on January 28, 1933, production workers earning between $13 and $20 per week saw a 5 percent reduction in their pay. Over $20 and up to $25 meant a 7.5 percent pay cut. Those earning $25 or more weekly got a 10 percent cut, as did all those on piece work.

Hourly workers also suffered pay cuts; those who earned less than 25 cents received no reduction. Workers earning over 30 cents an hour took the largest cut, 10 percent. These salary cutbacks, the company said, came during a time when cost containment was a must brought on by slow sales exacerbated by competitor undercutting.

King Kong Looms Large

In 1935, Robert James (Bob) Beatty, assisted by local designers and Federal engineers, built a machine for blowing paste-mold tumblers. He named it "King Kong." George and Robert James Beatty had been interested in using such a device even before they founded the Federal, but their early attempts to get one functioning failed.

The paste-mold machine eliminated seams or mold lines from the blown wares. The molds, usually cast iron, were coated with a specially prepared paste, often a mixture of charcoal and linseed oil, and lubricated with water. Thus the glass object being blown could rotate in the mold, removing the mold lines and giving it a polished surface. The obvious benefits of such a blowing machine lay in vastly increased production, greater uniformity in wares, and removal of high priced help from the payroll.

With this machine, the Federal developed and marketed the first machine-made heavy-bottom (sham) tumblers, said to be equal in quality to handmade wares. In subsequent years, factory managers became discouraged with the slow speed of the King Kong and projected costly improvements to the machine. They abandoned it in 1950.

Changes at the Helm

Federal's second president, James Means Beatty, died on November 22, 1937, at age 61, following a short illness. His grandfather, Alexander, died at age 64; his father, Robert James, and uncle, George, both died at age 62. The obituary in *CGL*, December 2, 1937, read: "To an unusual degree, Mr. Beatty was the Federal Glass Co., and the steadily growing business of the company was a reflection of his activity and leadership. His ability to select associates of skill was marked and many of his 'young men' rose to high places in the company." After he graduated from the Sheffield Scientific School of Yale University in 1896 he entered the glass trade.

The Federal, during his years at the helm, produced some 300 tons of wares daily. By 1937, output had increased so greatly that one man could put out 14,000 tumblers in one day. In his grandfather's Steubenville factory, one man made about 225 tumblers in a day.

The board of directors met in special session on December 10th to elect a new president, Edmund A. Donnan, Sr., who received an annual salary of $15,000. Previously Donnan had been the Federal's assistant treasurer and president of the Hercules Box Company. Other officers and their annual salaries included: Morris G. Woodhull, vice president ($12,500); U. L. Conway, vice president ($12,500); Edmund W. Hillman, treasurer ($12,500); and Walter J. Power, secretary and general manager ($12,500).

When the 1930s ended, the company operated 14 sales offices and display rooms in major cities including Atlanta, Baltimore, Chicago, Dallas, Los Angeles, Miami, New York, St. Louis, and Seattle. Sales offices had been opened in three foreign countries: Havana, Cuba; Montreal, Canada; and Panama City, Panama.

Employees Enjoy Sporting Events

The Federal's Welfare Department promoted athletic and recreational activities for the workers including baseball, basketball, bowling, and football. Two employees, Fred J. Blackburn and Charlie Dunbar, were credited with organizing the championship baseball and basketball teams. While Blackburn and Dunbar were the acknowledged powers behind many of the pre-World War II teams, sporting events at the Federal actually began about 1913 with the first baseball team.

Play was largely curtailed during the strike of 1913-14, but by 1916 the baseball team was reorganized and that year won the league championship, the first of many to come. The Federal team captured the National Amateur Championship in 1931. The next season it finished runner-up for the same title. During 1938-39, the Federal basketball team won its league championship. Employees played football in the open field behind the Hercules Box Company.

Many employees played more than one sport, some receiving tryouts with major league teams; several actually made it into the majors. The World War II draft called up many of the employees, vastly diminishing sporting activities during the early and mid-1940s. In the post war period and up to the time of closing, renewed interest in sporting activities, especially bowling and golf, continued to help cement the sense of "family" among the employees.

Federal Goes Closed Shop

Proceedings of the AFGWU annual meeting in Toledo in 1942 devoted a large section to the successful June 1941 unionization of the Federal, a process that had been in the works for many years. The proceedings also noted that the rival Congress of Industrial Organization (CIO) leaders had tried to lure Federal workers away from the AFGWU and toward their organization.

The proceedings further reported that on June 10, 1941, the National Labor Relations Board, Ninth Region, supervised the choice-of-union election at the Federal. Of the 1,517 eligible voters, 1,349 cast their ballots. The AFGWU received 872 votes. The Federation of Glass, Ceramic, and Silica Sand Workers of America, CIO, received 459 votes; 18 workers voted "no union" and 10 ballots were spoiled (Rowe and Cook, 1957).

While the AFGWU proceedings summarized the numbers, Russell H. (Russ) Hughes, former controller and plant manager, gave a livelier account of an early step in the unionization process. It seems that Russ, fresh out of high school in the spring of 1941, had just started his first full-time job in the Federal office. The other office workers, seeking respite from the summer heat, had already left for the day when President Edmund A. Donnan, Sr. entered searching for someone to type seven copies of the labor agreement between the Federal and the AFGWU. Hughes said he could do it, never mind that he had never typed anything of that magnitude before. A little over an hour later, the copies were ready, requiring only signatures from officials of the AFGWU and the Federal.

The group then left for a restaurant on High Street to enjoy dinner. Even though the contract needed only signatures, AFGWU officials continued to pick at details. Tired of the prolonged discussion, President Donnan's usual composure evaporated as he exhorted the (expletive deleted) union officials to get the (expletive deleted) union contract signed.

Donnan, always the consummate gentleman, so shocked the union officials, and his colleagues as well, with his earthy language that they sprang into action and signed the contract. By 6 p.m., with all signatures in place, the Federal became a closed shop. All production workers were required to join the union by October 1, 1941. New employees were allowed 60 days from their date of employment to become members.

Certain groups of employees were not included in the union contract: executives, department heads, office and plant clerical employees, foremen and assistant foremen, supervisors, draftsmen, laboratory workers, watchmen, gatekeepers, technical and engineering staff, art department staff, restaurant workers, medical department staff, and office janitors.

To bargain effectively with the union and voice the company's position on labor issues, the Federal board of directors approved company membership in the National Association of Pressed and Blown Glassware Manufacturers (NAPBGM) with headquarters in the Conestoga Building, Pittsburgh. On July 14-15, officials from both the national AFGWU and the NAPBGM met in Columbus to negotiate an agreement that would satisfy both the union demands and the Federal's stipulations.

The employees of the Hercules Box Company became members of the United Pulp and Paper Workers of America, CIO. about the same time the Federal glass production workers joined the AFGWU, AFL.

Pearl Harbor Forces Change

After the December 7, 1941, bombing of Pearl Harbor by the Japanese, life at the Federal changed dramatically. When President Donnan delivered his annual message to the stockholders in 1942, the U.S. had been fighting World War II for about eight months. Donnan said, " We need hardly touch upon the many difficulties encountered ...in labor problems, material shortages, sales, and administration situations which war brought to us. These difficulties are continuing and are growing more complex with each day's passing."

When the war broke out, the Federal employed 1,600 people. One year later, as more workers entered the military, the work force had shrunk to 1,100. Donnan remarked that the Federal could not keep some departments staffed, and unloading sand and other raw materials often fell to men working overtime and after their regular duties were finished.

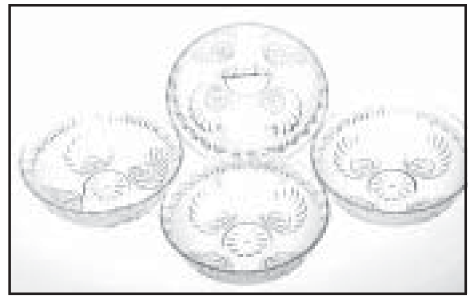
"Before Pearl Harbor, we were making metal aircraft parts on a sub contract in our mould and machine shops. At present, over 50 percent of the man hours in these shops are devoted to precision work of the most confidential nature," Donnan reported. The Federal was selling more of its output to the armed services and less to its civilian customers.

The Sales Department, headed by U. L. Conway, developed an equitable plan to ration output among the Federal's civilian customers. The sales staff hoped that by treating all civilian customers as fairly as possible, the company would retain their business not only during the war years, but into the recovery period as well.

Throughout most of World War II, the Federal operated under Presidential Order No. 9240. The order covered all work relating to the prosecution of war, including all work performed by prime contractors on government war contracts, and those who made the materials necessary for honoring those contracts. If any employer engaged in both war and non war work, the order would apply.

If anyone doubted that the Federal qualified as a war plant they had only to observe the War Plant posters printed by the War Department blanketing the entire factory. Moreover, all plant watchmen were sworn in as members of the U.S. Army, an action carried out only in war plants.

A war hero tumbler featuring the World War II flying ace, Eddie Rickenbacher, was a special order filled by the Decorating Department.



Individual berry bowls sold in a set that also included a master berry, ca. 1948. Often confused with Shell and Jewel (Westmoreland, 1890s) that has a patterned rim (Patricia Klar photo).

No. 2517 handled whiskies (1 oz.) covered with tin lids and sold as salt and pepper shakers, and enamel-decorated with red and white dots. Also in Sun Gold, pink and iridized Made 1940s to closing Marked Shield F (Patricia Klar photo).

Assorted 9 oz. table tumblers, ca. 1950s, with enamel and gold silk-screened designs, just a few examples of hundreds of designs available, selling wholesale for about 60 cents a dozen (John Schoessow photo).

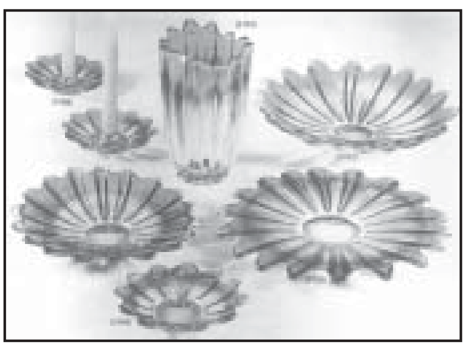
"Shield F" trademark use was claimed since August 1, 1932, but it had already appeared on some Depression-era wares and on the cover of the 1927 catalog (*U.S. Patent Office Gazette*, December 16, 1947).

According to a report in the July 1945 *Shield* (employee newsletter), Captain Rickenbacher began his working life as a cracking-off boy at the Federal. That summer his life story in film was about to premier in Columbus. In honor of the event, the Federal produced 6,000 souvenir tumblers. The silk-screened messages on the restaurant- and hotel-style tumblers read: "Welcome Captain Eddie, Columbus, Ohio, August 1, 1945" and "Compliments of the Federal Glass Company, Columbus, Ohio, Captain Eddie's First Employer."

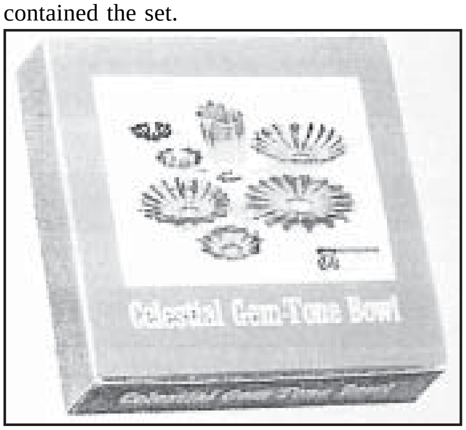
Federal's subsidiary, the Hercules Box Company, became a major supplier of boxes to companies whose goods aided the war effort. By August 1943, it began supplying containers directly to the armed services. Hercules in-house staff designed the cartons that held ammunition, aircraft parts, food stuffs, clothing, and all sorts of miscellaneous equipment. The War Production Board controlled the Hercules' paperboard allotment, invariably granting less than required. To combat the shortage, the Hercules bought up used boxes, overruns, and misprints.

Shield F Trademark Registered

The Federal trademark, "F in a Shield" or "Shield F," was filed at the U.S. Patent Office on December 6, 1944, and published in the *Official Gazette* on December 16, 1947. The company claimed use since August 1, 1932, but the trademark already had appeared on company catalogs at least as early as 1927. Additionally, certain patterns of Depression Glass carried the mark, as well as some measuring tumblers, shot glasses, and salt and pepper shakers (Weatherman, 1970).



Celestial giftware designed by George Wood, director of design assisted by Thomas Turner, chief mold designer. In crystal and iridized, ca. 1955 and later. Below: the box that contained the set.



A brief note in the October 1942 *Shield* shed light on the Shield F trademark's originator, if not on the exact date of origination. John C. Peters, the sales representative in the Federal's Baltimore sales office, reported: "About 35 years ago we made fruit jars. The H. A. [Hazel-Atlas] and Ball Brothers had their trademark on their jars, and one of my jobbers suggested we adopt a symbol on our jar. The Shield F was suggested by me and was adopted by the Federal."

However, to date, no pint or quart fruit jars or bottles embossed with the Shield F have been reported. This might be explained, at least in part, by the notation accompanying the trademark in the *U.S. Patent Office Official Gazette*—"For glass tumblers, glass tableware, and glass kitchenware not including glass bottles and jars."

About 1906, the Federal did mark a clear jar embossed on the base with DIAMOND FRUIT JAR TRADE MARK around a diamond with IMPROVED in the center. It was reported to have been produced for Smalley, Kivlan & Onthank jar jobbers of Boston (Roller, 1983). Another jar thought to have been made by Federal, but of uncertain manufacturing date, was a clear tumbler-shaped jar with an 8-10 ounce capacity. The embossing on the base read FEDERAL VACUUM JAR PAT. APPLIED FOR WARM CAP PUNCTURE TO OPEN (*Fruit Jar News*, May 1998).

In the 1907 *Thomas Wholesale Grocery & Kindred Trades Register*, a Federal advertisement appeared for "The Federal Jar." The ad copy continued "The only sanitary all glass jar on the market. No rubber or metal used to seal this jar. Pronounced by all who see it to be without an equal. The seal is composed of chemically pure mineral matter. If used properly perfect satisfaction is guaranteed. The most simple and effective seal ever made. Jars made in all sizes. We also manufacture the famous 'Federal Vacuum Jar' and Seal, as well as a complete line of tumblers, jellies and packers' goods." This jar, intended for packers, might have been a jelly jar.

Sheet music for the Federal Shield Song with music by Robert James (Bob) Beatty and lyrics by Malcolm Havens.

Some jar collectors have postulated that a wire bale fruit jar embossed with SECURITY SEAL and FGCo in a triangle on the side (Red Book No. 2608) might have been made by the Federal rather than by the Fairmount Glass Company. They base their assumptions on the name change of Fairmount Glass Company to Fairmount Glass Works around 1890, and this company's lack of glass blowing machines to make this machine-made jar.

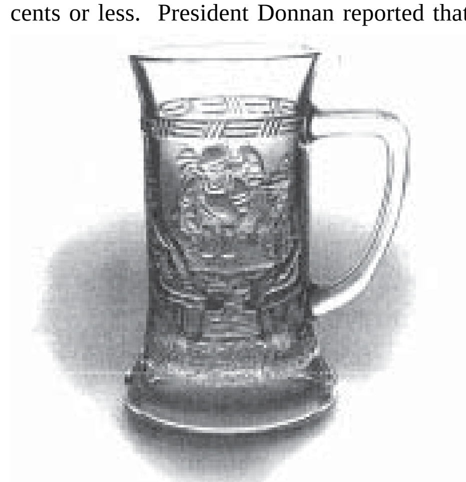
The Federal discontinued fruit jar manufacturing sometime during the late 1920s or early 1930s. Packers' ware, however, continued to be made at least into the 1960s. During the 1950s, company papers suggest that the Federal stepped up packers' ware prodution, selling to the Great Atlantic and Pacific Tea Company (A & P) and Welch Foods, Inc. (juice bottles, jelly jars).

Postwar Profits and Problems

Record breaking sales and net profit marked 1945 as the best year ever for the Federal. The following year, sales and profits continued to climb even though the company shut down one continuous tank furnace that had previously produced 110 tons of glassware every 24 hours. The furnace shut down was forced by the 1946 strike occurring among silica sand workers in Ottawa, Illinois, who were asking for an hourly increase of 18 cents, a closed shop clause, and a dues check-off system.

At that time, three Ottawa pits produced nearly all the silica sand for Midwestern and Pacific Coast glassware manufacturers. The Federal preferred this pure white sand hydraulically blasted from St. Peter Sandstone because no decolorizing agent was needed to clear the glass made from it. (Otherwise, manganese dioxide or selenium added to the batch offset the pale green color in finished glassware caused by iron compounds found in some sand.)

The timing of this strike was particularly unfortunate for the Federal, as the company had just initiated a new advertising campaign for the "Park Avenue" pressed tumbler and the "Hi-bright" blown shell tumbler. The Park Avenue continued to be the company's best seller at 5 cents or less. President Donnan reported that



Popular No. 299 Beer Stein made in clear, opaque white and opaque white iridized, ca. 1958 to closing (photo courtesy of Russ Hughes).

"One in every four tumblers made and sold in the United States is a Park Avenue" (*Retailing*, July 24, 1947).

The 1946 railroad strike also contributed to production problems at the Federal. Of the 24,000 freight trains normally operating, fewer than 300 ran (Atleson, 1998). At that time, the Federal depended upon the Toledo & Ohio Central and the Chesapeake & Ohio to deliver sand and other raw materials to the plant's storage facilities.

Nevertheless, for the first time in its history the company reached a milestone of $40 million in gross sales, with a net profit of over $1 million. Reaching this milestone shortly after the war, and in spite of strikes in the soda ash (sodium carbonate) industry as well as in the sand and rail industries, makes it a truly remarkable achievement. Soda ash, which acts as a flux to speed melting, often accounted for up to 33 percent of Federal's total batch, second only to sand, depending on the grade of glass being made.

The company took a bold step toward cost containment in 1946, prompted in part by increasing foreign competition, when it eliminated the costly hand shops. Here skilled blowers withdrew molten glass from the ring hole in the working end of the continuous tank furnace to fashion the wide variety of stemware sold by the Federal. By this time, Henry H. Blau, Ph.D., formerly employed at the Corning Glass Works, and his team of Federal engineers were hard at work on a machine that could produce stemware totally by machine.

When the war ended, the company welcomed back veterans, 206 in number, to resume their old jobs or positions of greater responsibility. Of the 592 Federal employees who served in the military, 19 lost their lives while serving their country. They were memorialized at a ceremony on Thursday, May 29, 1947, when a brass plaque bearing their names was mounted on a rock in front of the office building and a memorial Oak was planted. Four veterans, representing the four branches of the military, placed a wreath and 19 white carnations at the base of the plaque. Fearing vandalism, the plaque was removed in 1979 to a still undisclosed location.

By now, the Hercules Box Company, which had outgrown its original quarters, overflowed into several adjacent buildings. A new addition costing $400,000 increased manufacturing space by 60,000 square feet. A mere five years after this addition, a new buiding west of the original building was added for $1 million. The work force, up to 200 by mid century, produced 10 carloads of corrugated products daily.

With increased capability, the character of the containers was transformed, punctuated with die cuts, colored boxes, foil cartons, oversized boxes for appliances, and ingenious displays for supermarkets and other outlets. As the Hercules grew, it became largely autonomous, controlling its own sales office and sales force.

Worry Over the "P" Word

Even though President Donnan asseverated "Glass is Better," by the end of the 1940s more and more plastics were entering the market, especially in kitchen wares. That the dreaded word "plastic" had become a topic of grave concern is evidenced by a poem in the July 1943 *Shield* entitled "Plastics are not Glasses" credited to S. R. S. Glass Industry. Four verses extracted from the 10-verse poem reflect the mood prevalent among glassmakers:

The plastics are products artificial
But we've reached a pretty pass
When their makers name them "Glass"
And glass men rise to call it prejudicial.

The plastics have organic composition
They do not very well resist ignition
They are formed when chemists wise
Make some stuff polymerize.

And so it is with plastics we aver
In hardness quite inferior
Durability is low—
Solvents make them yield and flow
As lenses they produce a dismal blur.

Elastic, hard, of splendid durability
And washable because of hot ductility
Is this substance so unique
Among useful things men seek
And calling plastics "Glass" is mere futility.

Sued and Suing

The Corning Glass Works, Corning, New York, sued the Federal in August 1949, alleging infringement on two patents, both relating to how the Federal heat-treated or tempered its strengthened tumblers, sold under the trade name "STURDEE®." Almost six years after Corning brought the suit, the case was finally tried in May 1955.

After seven years of legal action, on August 1, 1956, the court dismissed the suit and awarded the Federal court costs plus the $15,000 retainer the company had paid to attorneys. Concerned that Corning might emerge the winner, however, President Donnan prudently established a cash reserve fund of about $260,000.

In other legal action during 1949, the Federal brought a suit against another glass manufacturing company, the Federal Glass Company, Inc., of Dover, Delaware. The Federal requested that this glass company stop using the name "Federal" in its title and refrain from selling glass under that name. The Columbus-based Federal named no set amount of money it wished to recover, but contended that its " trade reputation and goodwill are worth hundreds of thousands of dollars" (*American Glass Review*, October 22, 1949).

The Delaware firm rejected the request to change its name, preferring instead to have the matter heard in court. The case was tried and settled in favor of the Columbus-based Federal in 1952. No report of a financial settlement was discovered. The court, however, awarded the Columbus-based Federal the opportunity to choose a new name for the Delaware-based company.

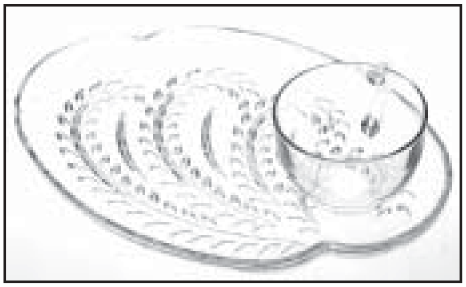
Celebrating 50 Years of Prosperity

The Federal marked its Golden Anniversary in 1950. At the annual meeting that year, President Donnan told the stockholders: "June 30th marked the end of Federal's 50th year of existence. No particular fanfare was made of this milestone, it being our conviction that the best possible celebration of the anniversary would be to turn in favorable earnings reports, provide steady work for our employees, and improve our products and plants. We believe you will agree that those goals were attained."

Nevertheless, the company did showcase wares in a new celebratory color introduced to the trade as "Sun Gold," comprising 27 forms including tumblers, mixing bowls, tableware, and giftware.

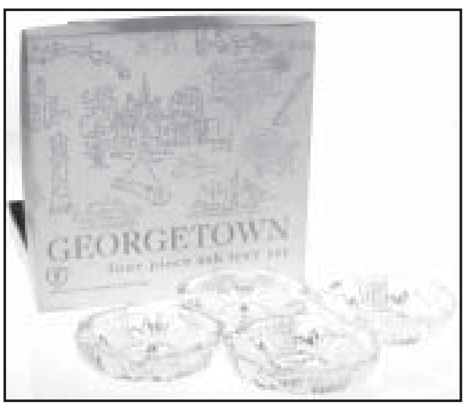
One year after celebrating its 50th anniversary, the Federal increased capital stock

Aerial view of the sprawling Federal Glass Company, ca. 1965, with batching tower on the left and large warehouse on the right (*Shield*, date unknown).



The popular Homestead snack set of tray and cup, packaged in sets of four, ca. 1951 to 1975 (Patricia Klar photo).

Gather Ye Roses … silk-screened Rose pattern tumblers, ca. 1950s, in 5 oz. juice, 9 oz. table tumbler and 9 oz. old-fashioned (John Schoessow photo).



Georgetown ash tray set giftware, ca. 1960-1975, in gold foil box lined with black made by the Hercules Box Company (Patricia Klar photo).

Supermarket display of Moon Glow heat-proof dinnerware in ten forms, cartons by the Hercules Box Company, ca. 1967 (photo courtesy of Russ Hughes).

to $3,500,000 divided into 175,000 shares of $20 each. An exciting event occurred in February 1951 when the company launched its new stemware machinery developed by Blau and his team of company engineers. With this fully-automatic machinery, stemware could be made completely by machine under a patented process. The first output consisted of cocktails and wines for both commercial and home use; 14 other forms followed soon after.

Not long after the company announced this remarkable achievement, Robert James (Bob) Beatty died on April 28, 1951, at age 47, before a promising career in both the glass and music industries could be fulfilled. He had served on the board of directors and had been an employee since 1927. He headed a group of engineers who designed and built the Federal's first paste-mold machine, the King Kong, which operated from 1938 to1950. He was granted, at minimum, five mechanical patents and two design patents. Also an accomplished musician, he wrote the music for the "Federal Shield Song," published by the Edwards Music Company, New York. Malcolm Havens of Federal's Chicago sales office won the contest for writing the best lyrics.

(Almost) Peaceful Times

Although a decade earlier, labor relations between management and the AFGWU locals had been somewhat contentious, the 1950s started peacefully enough with both sides seemingly acclimated to terms of the contract they had negotiated. "Throughout the year, relations with our labor unions were amicable and generally satisfactory. In view of a splendid attitude and remarkably good production, we voluntarily increased certain benefits for a large number in the glass division," said President Donnan. In the postwar period, industrial peace was sought not only at the Federal, but became an overriding principle in labor relations industry-wide.

Federal officials were becoming noticeably alarmed by the increasing freight rates by both rail and motor truck companies which often amounted to as much as 50 percent of the value of the finished wares. Generally, the rates per ton ran higher on finished and packaged glass than on bulk commodities such as sand and other raw materials necessary in the batch.

The freight hikes forced small merchants to buy in uneconomical quantities, or cut out selling glassware entirely. The Federal Traffic Department tried its best to forestall the latter, while engineers continued the quest for ways to reduce the weight of wares while still maintaining durability. This weight-reduction research was originally begun by the late Robert James (Bob) Beatty.

Hoping to cut operating expenses, the Federal accomplished successful annexation to the City of Columbus in 1956. Prior to annexation, only 3.4 acres fell within the corporate limits of Columbus, while some 35 acres lay outside in the Township of Marion, Franklin County. President Donnan indicated that petitioning the city was an arduous three-year process, but one that saved the company $14,000 in the first year in formerly purchased services including fire and police protection, water, and sewer.

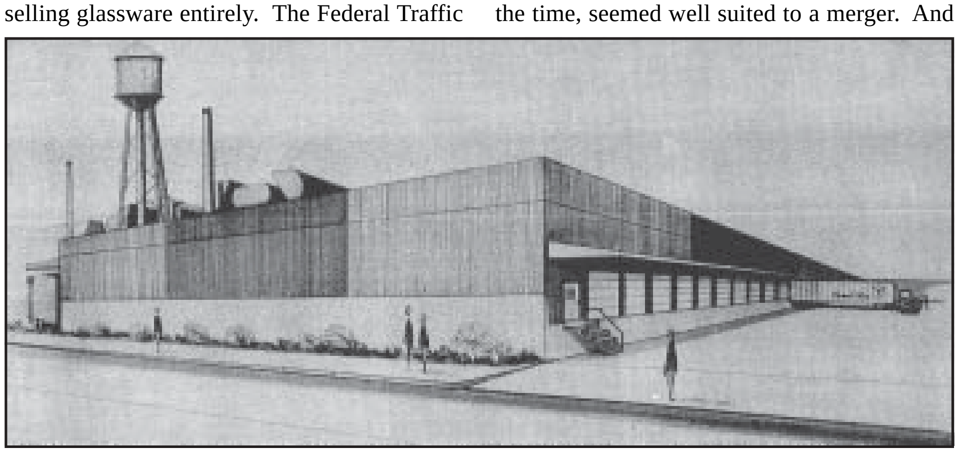
By the end of the 1950s, President Donnan had spoken warningly numerous times regarding the influx of glassware from foreign countries. "We are beginning to have very severe competition from German, Japanese, and French firms..." His message would play over and over again in the minds of Federal officials before the doors closed for the last time.

A large warehouse was completed in 1955, equal in size to two football fields and costing $220,000. The company installed the sixth Hartford-Empire No. 28 paste-mold machine for which it paid $165,000. President Donnan told the stockholders to expect no let up in plant improvements. Furthermore, he intimated that additional upgrade plans had already been drawn to help keep the Federal competitive.

The Urge to Merge

Late in 1957, Federal officials were approached by executives of the Federal Paper Board Company, Inc., Montvale, New Jersey, regarding a possible merger. According to Russ Hughes, the Federal Paper Board was mainly interested in acquiring the Federal's subsidiary, the Hercules Box Company. After many get-acquainted meetings, plant visits, and studies by both companies, a merger was agreed to by two-thirds of the stockholders, and was carried out on June 30, 1958.

The former Federal Glass Company became the Federal Glass Division of the Federal Paper Board, Inc., organized under the laws of New York. The Federal Paper Board made corrugated boxes, packing cartons, and machine-made glassware, parallel lines that, at the time, seemed well suited to a merger. And



Artist's sketch of new warehouse and shipping facility with 23 loading docks (*Shield*, October 1968).

both companies already used the name Federal.

At the time of the merger, the Federal Glass Company's balance sheet showed that it poured more than $13 million worth of assets into the merger, clearly a financially healthy company. About half of the $13 million was in cash, government securities, accounts receivable, and inventories of finished wares and raw materials. The other $6.5 million represented land, buildings, machinery, and mold sets.

A Towering Achievement

The hallmark technological achieve-ment of the sixth decade involved constructing the 40-foot-square automatic batching tower, a 130-foot-high monolith that still dominates the South Side skyline. It cost $600,000 to build in 1964, accommodating freight-car-loads of glass sand, soda ash, lime, and other ingredients necessary to complete the batch.

In the tower, each element was stored separately in roof-high hoppers and released in precise amounts through large pipes. Blending the elements was done electronically by an operator seated at a console pushing a series of buttons. Once thoroughly mixed, the batch was transferred automatically through large tubes to the melting end of the continuous tank furnaces which ran at 2700° F.

By May 1966, another new warehouse costing $1 million and adding another 120,000 square feet of storage space was completed. This warehouse sat on a former residential area and parking lot that had been purchased earlier for just such an expansion.

Shortly after, the company began constructing a vastly improved shipping facility adjacent to the newest warehouse. This facility comprised 23 truck loading docks and 7 rail car docks. Since it extended across Innis Avenue, a new plant entrance was required and subsequently opened on Woodrow Avenue. Once the new entrance became functional, the company's address changed to 555 E. Woodrow Avenue.

In 1965, Edmund A. Donnan, Sr. retired as the Federal Glass Division president after serving in that office for 28 years. Oliver F. Runde, formerly the vice president in charge of manufacturing, became only the fourth president to head the Federal Glass Division, by now a mature 65-year-old factory.

The Declining Years

The beginning of the end for the Federal may have been accelerated by the 1973 OPEC oil embargo when the Middle Eastern oil producing countries cut the flow of oil to the U.S. About 40 percent of Federal's business during the 1970s came from the major oil companies that gave tumblers and other premiums to customers who filled their tanks. When the gas shortage hit, long lines formed at the pumps. The lure of free glassware became a ploy of the past.

Federal's sales plummeted. Business dropped from $39 million in 1972 to $34 million in 1973. The company lost money in both 1974 and 1975. During 1976, the company marked the first profitable year among several previous years on sales of $50 million. It clung tenaciously to a 12 percent share of the machine-made glassware market.

What officials previously had touted as a "perfect fit" between the Federal Glass Company and the Federal Paper Board in the mid-1950s started to fall apart a couple of decades later. By 1977, Federal Paper Board officials decided that making glass no longer fit into the overall corporate structure.

"Federal Paper Board is primarily in the paper business," said President John R. Kennedy, Jr. "We were overdue in getting out of the glass business. Our first choice was a sale to Lancaster Colony," added Kennedy (Garvey, 1979).

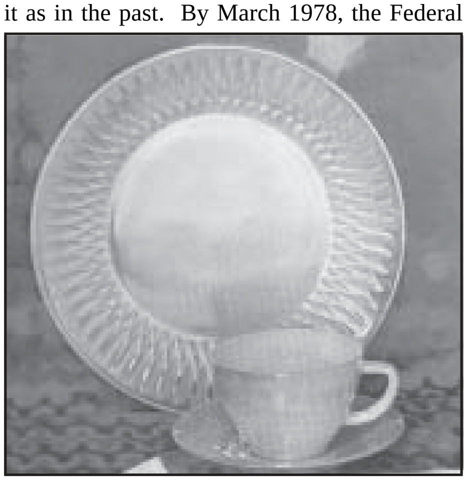
When the Federal Paper Board gave notice that it wanted to sell the Glass Division to Columbus-based Lancaster Colony Corporation in March 1977, it put a $45 million price tag on the plant. Lancaster Colony's President, John C. Gerlach, was eager to acquire the Federal at that price. Once the purchase became final, Gerlach would have added both a blowing and a pressing operation to his plant. What should have been a straight ahead sale benefitting both companies turned into a major muddle that fermented for nearly two years and, in the end, benefitted no one.

Who Bungled the Sale?

Most analysts agree that the Federal Trade Commission (FTC) came off as the heavy; some say the cause of the whole debacle. Partnering with the largest U.S. glass makers, Anchor Hocking and the Libbey Division of Owens-Illinois, the FTC effectively blocked the sale to Lancaster Colony. The FTC charged that the sale would violate anti-trust laws by reducing the number of glass companies producing tableware. By the FTC's own estimate, the Federal owned only 11 percent of the market. Lancaster Colony held onto 7 percent. Together they realized less in annual sales than Libbey, and far less than Anchor Hocking.

In spite of the FTC blockade, Kennedy persisted with his efforts to sell the Glass Division. What followed the FTC's first injunction escalated into an on-again off-again tale of failure to sell to other glass makers, and heroic but unsuccessful attempts by a group of Federal employees to buy the plant.

In its defense, the FTC maintained that three months after it had filed the sale-stopping injunction, Federal officials said they planned to upgrade the now antiquated plant and operate it as in the past. By March 1978, the Federal Paper Board, still hoping to attract a buyer, petitioned the FTC to re-evaluate its initial objection to the Lancaster Colony sale.



Moon Glow heat-proof dinnerware, 1968.

Kennedy stressed that the Glass Division had been failing for some time, the reason he had decided to shut it down. When the Federal Paper Board's annual report covering 1977 surfaced, it showed declining earnings that officials attributed to severe weather. The next annual report presaged a gloomy financial outlook for the year, with an anticipated downturn in sales possibly attributable to news of a pending sale. Shortly after this annual report was released, Kennedy placed a liquidation value of $30 million on the plant, $15 million less than Gerlach would have paid to acquire it.

The FTC further charged that the Federal Paper Board had failed to make a good faith effort to sell the plant. It commissioned the Harvard Business School to review the Federal's books, beginning with 1959 (after the merger) through July 1978 (six months before closing). Based on the Harvard study findings, the FTC determined that the Federal Glass Division was not a "failing company." It argued that large corporations can tolerate a weak subsidiary at break-even or low profit margins without meeting failing company criteria. Federal never argued failing company in its own behalf until four days before the plant closed. Perhaps the company didn't make the argument sooner for fear of turning away prospective buyers.

During 1978, Kennedy agreed to enlist the help of the investment banking firm, First Boston Corporation, to find another buyer, acting upon the FTC's promise to reconsider the Lancaster Colony sale. If no buyer was found during the 60-day searching period, the FTC said it "might reconsider" the sale to Lancaster Colony. First Boston contacted 79 potential buyers. Only J. G. Durand of Arque, France, expressed interest, but never made an offer.

Sixty days later, Kennedy told the FTC he wanted a decision on the Lancaster Colony sale.

Continued to page 72.

Recollection tableware, a 1976 Centennial reissue of the Depression-era Madrid pattern made in 1932. Indiana Glass later acquired the molds and removed the 1976 date, creating confusion among collectors of the early Madrid pattern.

"Shield F - The Mark of Quality"
Continued from page 26.

Hoping for the best, and since no other buyers were waiting in the wings, Kennedy and Gerlach agreed on a reduced sale price of $40 million.

By October 25, 1978, the FTC had completed its Federal liquidation estimates, valuing the Glass Division at $20 to $24 million, considerably less than Kennedy's assessment of the plant's value. At the end of the month, the FTC halted the sale to Lancaster Colony for the second time. It further warned Federal officials they must give notice before taking any drastic action such as closing down the plant. At this point, angry Federal officials wondered if the FTC had overreached its authority in making such a heavy-handed demand.

During the month following, Federal officials hired a California firm to explore the likelihood of selling the plant to a select group of employees. At this juncture, Kennedy agreed to lease the machinery and buildings to the employee group, and to finance $12 million of the $17 million asking price for the inventory.

Throughout the uncertain months of 1977 and 1978, yeoman efforts to save the Federal continued. Company officials received assistance from Columbus Mayor Tom Moody and Ohio Governor James A. Rhodes, both of whom worked diligently to find a buyer or work out a deal whereby employees could buy the plant. The Columbus Economic Development Council explored securing a loan to assist the group of 15 interested Federal executives led by General Manager Jack E. Spengeler.

Concurrently, the California firm continued its efforts to effect an employee buyout. It conceded, however, that it would take at least $3 million up front to stabilize the antiquated plant, invested over a period of four to five years. Following this announcement, Kennedy agreed to sell the plant and contents to the employee group at the knock-down price of $17 million.

The still staggering figure required for plant purchase and reclamation proved very discouraging to the employee group. So much so, that they never applied for a loan, neither federal nor local, even though they qualified for both.

During the pre-closing period Kennedy spoke repeatedly of undue harassment by the FTC, which persisted in gathering more and more information, particularly as it related to the plant's finances and the $3 million loss reported for 1978. He said he had been "litigated to death" all the while he was spending more than $100,000 weekly just to keep the plant operating. Because making glass requires an enormous amount of energy, production costs had skyrocketed. Additionally, the plant's distance from New Jersey added to management costs.

The FTC interpreted Kennedy's actions to mean that by now he just wanted to be rid of the Glass Division, one way or another. It also suggested that he only tried to sell to Lancaster Colony because Gerlach would pay the highest price. Furthermore, by unloading the Glass Division in January, a tax loss could claimed for the preceding year.

Aside from the several-year financial losses reported by the company, the Federal had a suit pending against it prepared by the Ohio Environmental Protection Agency (OEPA) citing water pollution emanating from the plant. Due to the plant's uncertain ownership, the OEPA never filed the suit (Garvey, 1979).

At the same time, the Federal Paper Board owed $12 million, due in February 1979, in several damage suits brought against it and 24 other paper carton manufacturers. The FTC had found the 25 companies guilty of price fixing. Kennedy denied that he needed the sale price of the Glass Division to pay off the damage suits, saying that the money had already been put aside to satisfy the suits (Garvey, 1979). While purely conjectural, perhaps the FTC already had its sights trained on the Federal Paper Board, sensitized by the price fixing suit, and mulishly refused to cut the company any slack.

By February 1979, two other glass makers, Eastcliff Corporation, Reading, Pennsylvania, and Wheaton Industries, Millville, New Jersey, who had expressed some interest in the plant, baled out of negotiations. Frank Wheaton, Jr., president of Wheaton Industries, once considered buying the plant if money could be borrowed at 2 to 3 percent. Wheaton lost interest in the deal when he couldn't secure cheap money and when J. G. Durand of France, the world's largest tableware manufacturer, opted out of a partnership agreement.

Even if Wheaton had gone ahead with the purchase, he wanted only the factory buildings, not the inventory. He would have sold off most of the equipment, retaining only 400 employees to start. In his opinion, "Federal overproduced. We don't see any future in that business," he said (*Columbus Dispatch*, [CD], February 19, 1979).

Lancaster Colony Nixes Terms

On February 23, 1979, after more than a year of vacillating and two blockades, the FTC finally voted to allow the sale to Lancaster Colony to go forward. The Commission members took this action despite disagreeing with the FTC's administrative judge, Paul Teetor, who still recommended against the sale. Teetor explained that the law makes no provision for considering the impact, negative or otherwise, on the local economy.

Lancaster Colony's President Gerlach said that his buying the Federal would depend largely on negotiating a new union contract comparable to the one that covered some 1,800 workers at the Indiana Glass plant in Dunkirk, Indiana. Moreover, the Lancaster Colony management felt it could not put the plant back on its feet if it had to endure continual grievance filings by the unions.

In the end, Lancaster Colony and Federal's unions seemingly could find no common ground on wages, benefits, and managements rights clauses. Ivan Uncapher, the AFGWU national secretary-treasurer, said, "We were willing to negotiate a clause. They said they had to have it exactly as they wrote it...they wanted the right to do about anything they wanted to do. We would have no rights whatsoever" (*CD*, March 19, 1979).

Theodore Lazar, legal counsel for Lancaster Colony, said his company needed concessions from the union because it would need to borrow a great deal of money and operate at a loss for a while. Further, management rights clauses were already in place with the company's other unions.

Most importantly, Lancaster Colony intended to hold fast to its right to determine hours and work schedules. Lazar emphasized that the Federal lost money in four of five of its last operating years due to the contracts negotiated with the unions. Federal's President Kennedy admitted that labor costs amounted to about 50 cents on every sales dollar.

The final contract proposal Lancaster Colony made to the Federal AFGWU would have: reduced wages from 50 cents to $1.40 an hour; eliminated pension plans for five years; cut life insurance from $10,000 to $5,000; cut benefits for sickness and accidents in half; eliminated work incentive bonuses for three years; reduced shift premiums; and eliminated one of eight paid holidays.

A 14-member union bargaining committee rejected Lancaster Colony's final offer. They felt this company's position was untenable, not amenable to union rights, and nearly bordered on union busting. However, they proposed that the offer be put to a rank and file vote.

That vote took place on April 1, 1979. When the secret ballots had been counted and recounted, the majority of union members voted to retain their existing contract. At that time, most preferred to be without a contract rather than work under the one proposed by Lancaster Colony. Perhaps the Federal workers believed that Lancaster Colony would acquiesce, and their jobs would be saved after all.

They were wrong. When Gerlach heard the results of the vote, he backed out of negotiations for the last time. Many saddened rank and file union members felt betrayed by their leadership, and in retrospect, admitted that a thinner contract with Lancaster Colony might have been better than no work at all.

Some said they were confused about what they were voting for. A Yes vote meant the employee supported the union bargaining team and rejected the Lancaster Colony contract. A No vote meant accepting the Lancaster Colony contract and staying employed. The 393 Yes votes won over the 286 No votes.

The Federal's seven union locals waited until the June 1979 AFGWU annual convention in New Orleans to formally disband. Some had already divided their treasuries ranging from $3,000 to $6,000 among the members before the convention. Union members received no severance pay, as that had been ruled out during the last contract negotiations.

...And There Is an Ending

The death knell sounded for the Federal at 1 p.m., Wednesday, January 31, 1979. General Manager Jack E. Spengeler announced that no more glass would be made after that time. (After the Federal closed, he became a special assistant to Federal Paper Board President Jack R. Kennedy, Jr.)

As the furnace fires died, so did the hopes of some 1,500 glass workers. The first 1,000 were laid off immediately; the remaining 500 stayed on temporarily to fill orders from existing inventory, work in maintenance, and tie up loose ends. During its 79-year life span, the Federal had flourished under 15 U.S. presidents, but only five presidents had led the Federal.

When the Glass Division closed, so did the Hercules Box Company (Columbus Container Corporation), adding 200-plus employees to the unemployment line where they stood side by side with the glass production workers.

What Really Shattered the Federal?

The controversial shut down will probably spark discussion as long as the cohort involved has breath to argue it. Each may see it from a different perspective, though all agree it was a frustrating, demoralizing time. If Jack R. Kennedy, Jr. effectively killed the Federal, other forces both internal and external, contributed to the plant's demise. One thing seems certain—there is blame to be shared, but who or what should shoulder the lion's share?

Rather than a single individual or factor being responsible it appears that the potpourri of plastics, foreign competition, overproduction, fat union contracts, management overkill, absentee landlordism, and the irresolute FTC synergistically brought the Federal to its knees.

Some think just the financial losses over several years, except for 1976, weakened the company to the point where it literally fell in on itself. And a major weakness, company insiders report, continued to be its shaky fuel supply. Though officials tried to remedy this situation over the years, they failed to secure a dedicated source. A major competitor, Anchor Hocking, benefited from a more stable supply of fuel, owning its own gas fields near Marietta, Ohio, which supplied the factory through self-owned transmission lines (McCallum, 2005).

Cardboard of directors

Since the Federal Paper Board's president readily admitted the corporation's major production consisted of pasteboard containers, how heavily had he devoted resources to the Glass Division over the years? Why had the Federal Paper Board pressed for a merger in the first place with a company that primarily made glass?

Some insiders answer that it was to take advantage of the fiscally healthy Federal Glass Company and its subsidiary, the Hercules Box Company. They say "It wasn't about the glass." The more candid among them say Federal was lured into the merger, a "cash cow" ready and waiting. Russ Hughes, former controller and plant manager, sums it up this way: "With regard to the Federal Paper Board, there were paper people versus glass people. The paper people never took over in Columbus." In the years following the merger, major corporate decisions were made at the Montvale, New Jersey, office, effectively making the Federal Paper Board an "absentee landlord" in Columbus.

Foreign affairs

Were marketing officials fully aware of their company's niche in the global market? As foreign imports flowed into the U.S., company profits declined. As early as the mid-1940s, President Edmund A. Donnan, Sr. underscored the threat not only to the Federal's well-being, but to other American glassmakers as well. In November 2001, the Indiana Glass Division of Lancaster Colony Corporation closed its doors in Dunkirk, a victim of foreign imports. Indiana Glass, originally Beatty-Brady, had been producing glassware at the same site since 1896.

Plastic culture

And what about that persistent polymer, plastic? Plastics, along with imports, became an overriding issue as Federal entered the 1970s. Officials first expressed concern over the influx of plastics in the late 1940s and early 1950s when plastic first appeared in the form of kitchenware. Although many maintained liquids taste better in glass, plastic possesses some desirable attributes, among them lighter freight weight and less breakage.

Growing pains

Or had the Federal "just gotten too darn big?" Was market research into the buying whims of the American consumer and foreign export market adequate to support the costly expansion program? Many still question the wisdom of the expansion undertaken in the 1960s as the Federal at closing occupied some 57 acres. The South Side neighborhood watched while more and more Federal structures filled with newer more costly equipment sprang up, to the point where the manufacturing and warehousing ability exceeded the market place.

Labor pains

Over time, was management's resolve gradually worn away during negotiations with the AFGWU? Or were concessions granted to avoid strikes and maintain a peaceful labor-management relationship? During negotiating sessions the Federal unions rarely yielded to management's requests. Characteristically, management granted ever greater concessions in wages and benefits. At midpoint in the company's lifespan, President Donnan regularly reported that wages cost the company plenty.

Admittedly strikes were costly to the company. Shutting down the continuous tank furnaces, then cleaning and readying them for the next fire was no mean task. Further, recruiting and training nonunion workers to operate the specialized glassmaking machinery would have been inefficient and costly.

President Kennedy agreed that the company's softness in union negotiations "happened over a period of years. You give a little away each contract time. In addition to that, you tend to give away more when you're doing well. And there was a time when the plant was doing quite well. To some degree it was a reflection of our own management. You've got to take a strong hand and you've got to be willing and able to take strikes in order to maintain your management rights over a plant." (Garvey, 1979).

Kennedy had apprised the unions in July 1978 regarding the eroding financial situation at the plant. At that time, he asked them to help out by foregoing the last contractual wage increase, but they turned him down. Federal glass workers traditionally numbered among the best paid in the business. In the last contract, the lowest paid unskilled workers made about $5.50 an hour and the highest paid skilled workers made at least $8.50 an hour, above industry norms at that time (*CD*, March 19, 1979). The company paid fringes, including life insurance, health and accident insurance, holidays, vacations, and incentive bonuses. Retirees, or next of kin if deceased, received a pension.

Migratory managers

The plant closing, unions said, stemmed from bad management. Certainly management was top-heavy, with one set of officials in New Jersey and another set in Columbus, both sets commanding generous salaries. And even though Kennedy assembled managers from time to time asking them "What's wrong with the company?" he paid little heed to their suggestions and major corporate decisions continued to come out of New Jersey (McCallum, 2005).

FTCrats

Did the FTC show itself to be the biggest villain of all? Since the injunctions to block the sale occurred during a balance of trade deficit as reported by the U.S. Department of Commerce, the FTC played directly into the hands of foreign glassmakers and stifled competition at home by driving another U.S. supplier out of business, effectively creating the monopoly it sought to prevent.

A former Federal employee placed the blame for closure directly on the FTC. He said, "They are bureaucrats, and the last three letters tell you they are rats." The FTC wasted hundreds of thousands of taxpayer dollars to block the sale in concert with the two largest Ohio glass makers who together already owned 60 percent of the glassware market. (Lancaster Colony was the fourth largest, and Federal Glass was the third largest maker of machine-made soda-lime glass). Clearly the FTC members bought onto the depositions put forth by the two largest companies, supporting their claim that the merger would indeed create a monopoly.

Federal officials insisted that the FTC never gathered facts about the U.S. glass industry and whether the Federal-Lancaster Colony merger would actually limit competition. Instead, they insisted, the FTC's constant probing for information was to support a decision that had already been made.

Repeatedly Federal officials told the FTC they would close the plant if no buyers could be found. Whereupon the FTC questioned Federal's right to close its own plant. It went so far as to ask the company to reopen in February 1979, to see if any bargain-hunting buyers might happen along. As it turned out, none did. Further, the FTC prohibited the Federal from selling the specialized glass making machinery to Lancaster Colony, but sales to other companies, including the two giants, appeared to be acceptable.

Loyal Customers Let Down

A disappointed Federal customer, William

O. Cutler, Cutler Brands, Ltd., Toronto, said regarding the FTC blockage, "I was shocked." His opinion of the FTC contention that the Federal-Lancaster Colony merger would create restraint of trade "Is absolutely incomprehensible" (*CD*, February 9, 1979).

In the past, Cutler's firm annually bought in excess of $1 million dollars worth of tumblers and miscellaneous wares. Some were sold as blanks, but the firm decorated others before shipment. Cutler said he envisioned buying more from J. G. Durand of France, Ravenhead of England, and other glass makers in Czechoslovakia, Germany, and Poland.

Cutler and other long-time customers praised the Federal's products for quality, especially the clarity of the glass and the unique sheer rims (SHEER RIM ®) found on tumblers, rather than the thick bumper rims usually found on machine-made glass. "We had it all," said Robert B. McCallum, Sales Manager of Retail Promotion, who agreed that Federal made the best glassware. In his words, "Our tumblers were so uniformly made they would roll forever." Federal-made glass contained more soda than average for the industry, making it good for cutting.

Hersh Harvey, owner of Harvey Industries, Clarksburg, West Virginia, cited Federal's closing as "A terrible loss to us." He bought about $500,000 worth of blown glass lighting fixtures from the Federal each year, one-third of his total volume. He anticipated having to lay off 40 of his 140 employees (*CD*, February 9, 1979).

Perhaps the best summary statement regarding the FTC's actions came from Senator John H. Glenn, Jr. (D-Ohio). He told the FTC Chairman Michael Pertschuk that "...when we carry our anti-trust laws to the extent that we are preventing mergers in a still competitive field and tossing people out on the street unemployed, that is a ridiculous use of anti-trust powers (*CD*, February 1, 1979).

Another strong sentiment was voiced by U.S. Representative Chalmers Wylie (R-Columbus) who with Senator Howard Metzenbaum (D-Ohio) also tried to keep the Federal afloat. Wylie said "If I introduced a bill to abolish the Federal Trade Commission, I'd be a hero in Columbus." (Garvey, 1979).

A Tragedy of Errors

Although there had been plenty of signs and early warnings, no one really believed that the Federal, a Columbus institution solidly imbedded in the South Side, would actually close its doors. Russ Hughes, plant manger at that time, still shakes his head and says, "I was shocked. We all were." When a manufacturing plant employing more people than live in many U.S. cities and has an annual payroll of $25 million shuts down, nobody wins.

Add to the lost payroll the $1.2 million the Federal spent annually for goods and services in central Ohio. In 1978, the plant paid over $500,000 in property tax; over $375,000 went to support the Columbus school district. Another $84,000 was paid in real estate tax as well as over $424,000 for personal property tax (*CD*, January 31, 1979).

The aftermath of the closing cost the federal government $4.5 million in special benefits paid to workers who lost their jobs. The benefits became available beginning August 19, 1979, under the U.S. Department of Labor's Trade Adjustment Assistance Program, and reflected payouts made from the benefit start date through March 31, 1980. Benefits to eligible workers were extended up to 52 weeks past the August 19 start date. Employees 60 years or older at closing realized 78 weeks of benefits (*CD*, December 10, 1980).

Industrial Park Arises

Unlike some companies that close a glass plant and either board it up or leave it as fodder for vandals, the Federal Paper Board transformed the old Federal Glass Company grounds into the Federal Industrial Park.

The specialized glassmaking machinery and molds were eventually auctioned off. Quite a number of molds went to Indiana Glass, notably those for the "Madrid" Depression-era tableware reissue the Federal named "Recollection" in 1976.

Russ Hughes became the manager of the newly-formed Federal Industrial Park. In this position he worked with real estate brokers on leases for a variety of tenants. He reported that some of the old glass company buildings had to be razed to make way for a new park thoroughfare as well as to meet the needs of the new enterprises.

According to Hughes, when the Industrial Park had operated successfully for about two years, the Federal Paper Board decided to sell the property. Two individuals, one from New Jersey and the other from Florida, bought the Industrial Park. They operate it as a limited partnership, FIP Realty Company, Ltd.

Russ Hughes retired in 2003. He turned the operation over to son David, the present facilities manager, who signs leases and tends to the overall operation of the Federal Industrial Park. Now enjoying his eighty-first year, Russ looks back with fondness at how it used to be at the old Federal Glass Company when over 1,000 workers sweated under the heat of the 2700 ° F furnaces. "There was a regular heartbeat to each machine. The overall plant had a rhythm to it. It's really depressing not to see anything like that going on here." In the next breath, and with a smile and a distant look in his eyes, he said, "But it's been a good life for me."

Epilogue

The Federal Paper Board Company, Inc. was integrated into the International Papers (IP) family in March 1996, in a $3.4 billion transaction that also included mills in: Augusta, Georgia; Riegelwood, North Carolina; and Versailles, Connecticut, as well as other packaging and wood products operations. John R. Kennedy Jr., the former president, secured a seat on the IP board of directors. This huge corporation makes many products, including a multitude of different papers, pulp products, folding cartons, corrugated containers, and plywood.

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Notes

l. Quoted material, unless otherwise referenced was drawn from MSS 665, the Federal Glass Company papers, and is used with permission from Elizabeth L. Plummer, Assistant Head, Library/Archives Division, Ohio Historical Society, Columbus.

2. Dates may vary slightly according to the source examined.

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