

The Diamond Glass Companies of Montreal, Canada

Bill Lockhart, Beau Schriever, Bill Lindsey, and Carol Serr

The Diamond Glass Co. and Diamond Flint Glass Co. were two in a series of Canadian companies (headquartered in Montreal) that began with the Excelsior Glass Co. in 1879 and culminated as Domglas in the 1990s. This chapter deals with the first four firms during the 1879-1913 period (see the Dominion Glass section for the later companies). None of the glass houses used manufacturer's marks on bottles, but all of them left embossed jars that can be traced to them. The Diamond Flint Glass Co. also made – and marked – insulators.

Histories

Excelsior Glass Co., St. Johns and Montreal, Quebec (1879-1883)



Figure 1 – Beaver Goblet
(Sean George Pressed
Glass & Goblets)

William and David Yuile acquired control of the bankrupt St. Johns Glass Co. at St. Johns, Quebec, in 1878. They renovated the factory and incorporated in April of the following year as the Excelsior Glass Co. The plant made fruit jars, a general line of bottles, and insulators. Unhappy with the location, the brothers moved the factory to Parthenais St., Montreal, in 1880. The new plant produced prescription ware, fruit jars, and some tableware. The firm reorganized in 1883 as the North American Glass Co. (King 1987:67-70).

Toulouse (1971:189) told a slightly different story. He claimed that the Yuile brothers “had taken over the Foster Bros. Glass Co. Shortly after it was founded.” They renamed the plant the St. Johns Glass Co. in 1875 and the Excelsior Glass Co. in 1878. He noted that the plant made jars and “many paperweights, bird forms, and other



Figure 2 – Beaver band
(Sean George Pressed
Glass & Goblets)

whimseys, and especially the ‘Beaver’ goblet which was a mold-shaped piece.” The Beaver Band Goblet is scarce and was originally made by Excelsior Glass (Figures 1 & 2). We have accepted King’s dates.

Containers and Marks

EGCo

Toulouse (1971:176) claimed that the Excelsior Glass Co. (St. Johns and Montreal) used the EGCo logo from 1878 to 1883. Unfortunately, he failed to discuss products or details – and he probably intended to refer to the monogram discussed below.

EGCo monogram and Imperial (1879-1883)

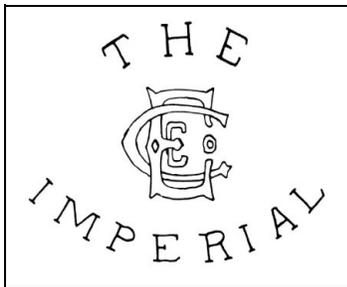


Figure 3 – EGCo monogram (Toulouse 1969:158)

Toulouse (1969:158) described and illustrated a fruit jar embossed “THE (slight arch) / {EGCO monogram} / IMPERIAL (slight inverted arch)” on the front (Figure 3). He suggested that the jar was made by the Excelsior Glass Co., St. Johns and Montreal (1879-1885). In his second book (Toulouse 1971:176), he changed the dates to 1878-1883). The jar

was sealed with a glass lid held in place by a metal band (Figure 4). Roller (1983:162; 2011:251) added a variation with the monogram in a large circular plate at the front. Another had “two 1” circles on reverse, one above the other and joined.” These small circles probably indicated a mold repair. Roller, too, suggested the Excelsior Glass Co. and dated the jar ca. 1880. He noted that “often the EGCo monogram is much fainter than the rest of the embossing.” Roller (1983:162) also described two variations in lid embossing but offered no explanation about IXL:¹



Figure 4 – EGCo jar (North American Glass)

¹ IXL (I excel) was used as a mark of quality by a variety of glass houses (and other firms) during the late 19th and early 20th centuries.

1. "EXCELSIOR GLASS CO. REGISTER'D APR. 19.79" on top; IXL monogram on bottom
2. "EXCELSIOR GLASS CO. INCORPORATED 1879" on top; IXL monogram on bottom

Creswick (1987a:56) illustrated the plate variation and described the first one – discussed above (Figure 5). She agreed on the Excelsior Glass Co. as the maker and dated the firm 1878-1883.

EXCELSIOR



Figure 6 – Excelsior jar (Bottle Finds)

Toulouse (1969:114) described a jar embossed "EXCELSIOR" over an EGCo monogram. He claimed the Excelsior Glass Co. as the manufacturer, dated the jar 1880-1889, and cited Steverns Early Canadian Glass as his source. No other source described a variation with the EGCo monogram, so Toulouse was probably incorrect. He received many of his reports from collectors via handwritten letters, creating great room for error. He also noted a variation without the monogram. The jars had glass inserts held in place by screw

bands (Figure 6). In his later book, he changed the dates to 1878-1883.

Roller (1983:119) noted that some of the jars had lids embossed "PATENTED DEC. 6 1884" and that the patent belonged to Charles G. Imlay of Philadelphia. The jars may have originally been made by the Houghton Glass Works but were later produced by the Hero Glass Works. He also noted that some of the bottles had a shape similar to milk bottles (Figure 7). Creswick (1987a:56)

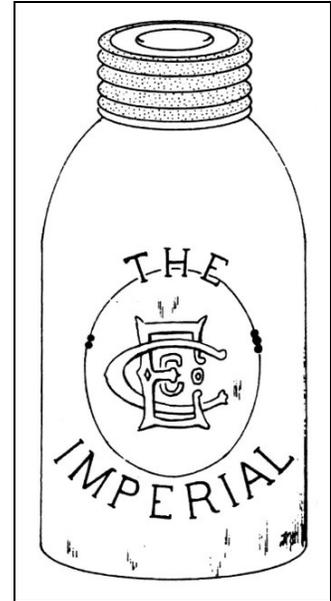


Figure 5 – EGCo jar (Creswick 1987:56)



Figure 7 – Milk-bottle shaped Excelsior (Southeast Bottle Club)

illustrated three variations and claimed the Excelsior Glass Works of Pittsburgh as the maker from 1859 to 1886 (Figure 8).

In Roller (2011:185), the editors turn the muddy water positively opaque. After some lengthy explanation that we will present in the Hero Glass Works section, they concluded that Excelsior jars were probably produced at the Houghton Glass Works in Philadelphia ca. 1864-1865, although they noted the Creswick Excelsior Glass Works suggestion and added that an Excelsior jar was also advertised by the Moore Brothers of Fislerville, New Jersey in 1865 (see the section on the Moore family glass houses of New Jersey).



Figure 8 – Excelsior variations (Creswick 1987:56)

EXCELSIOR IMPROVED

Toulouse (1969:114-115) also described a jar embossed “EXCELSIOR / IMPROVED” in horizontal letters. The jars had the same type of closures as the EXCELSIOR, and he gave them the same date and maker – the Excelsior Glass Co. of Canada. Also as above, he changed the date to 1878-1883 in his later book (Toulouse

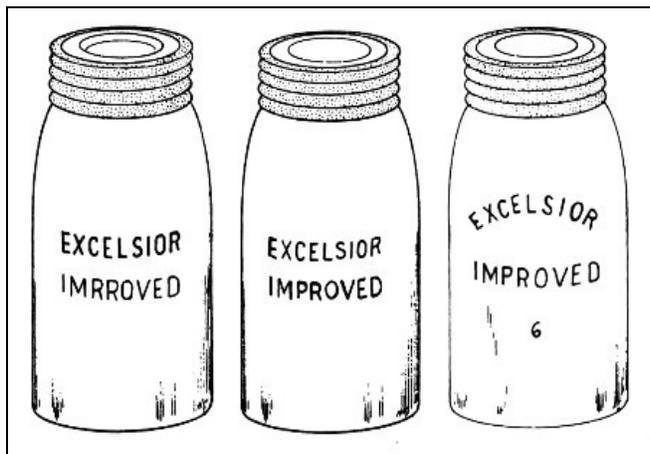


Figure 10 – Improved variations (Creswick 1987:56)

1971:189). As he did with the Excelsior jar above, Roller (1983:120) attributed these jars to the Hero Glass Works. Creswick (1987a:56) named the



Figure 9 – Excelsior Improved (Maple Leaf Auctions)

Excelsior Glass Works of Pittsburgh as the maker and noted and/or illustrated five variations – including arched and horizontal configurations of “EXCELSIOR” and an error “IMRROVED” marking (Figures 9 & 10).

In the Roller update (Roller 2011:186), the editors were uncertain of the manufacturer of this jar but noted that the patents belonged to S.B. Rowley, founder of the Hero Glass Works. They also reported that Jerry McCann had stated that the variations embossed with a horizontal “EXCELSIOR” were “usually found in Canada and the shape of the jar is similar to that found on some of the earliest ‘CROWN’ jars” (see discussions about Crown jars below). Thus, the discussion comes full circle from Toulouse, reawakening the possibility that the jars were made by the Excelsior Glass Co.

North American Glass Co., Montreal, Quebec (1883-1890)

The Yuile brothers reorganized the Excelsior as the North American Glass Co. in 1883 and expanded the factory to increase production. The plant had two continuous tanks, one for green glass (used for bottles and jars), the other for flint glass (tableware). In 1890, another reorganization created the Diamond Glass Co., Ltd. (King 1987:71-72).

Containers and Marks

Although King (1987a:60) reproduced drawings by Jack Kingdon, showing fragments of a Crown jar found at the site of the Hamilton Glass Works factory (Figure 11), the series of glass plants related to the Diamond Glass Co. (and later Dominion Glass Co.) actually caused the Crown jars to become the Canadian standard. These fragments make it highly probable that the Hamilton Glass Works made the earliest jars, although North American Glass probably began Crown jar production soon after – possibly purchasing the brand from Hamilton Glass. Logically, we would have expected the Excelsior Glass Co. to have made the initial production run, but the evidence favors Hamilton Glass. These first crown drawings were more crudely made than the ones that

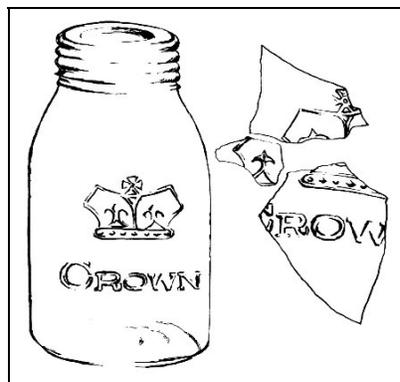


Figure 11 – Crown jar fragments
(King 1987:60)

followed – having an angular outline, a well defined fleur-de-lis on each side, only a single headband, and no dots around the edge of the crown (Figure 12).

Crown Jars

It is virtually certain that the North American Glass Co. made jars with embossed illustrated crowns on the front – some with “CROWN” embossed below the drawing. King (1987:72) cited Douglas and Marion Bird (*A Century of Antique Canadian Fruit Jars*) who noted that there were:



Figure 12 – Hamilton Crown jar (North American Glass)

three specific types of fruit jars with the North American Glass Company operation. They are the NAGC monogram, with a “Boyd”-type cap, handblown with ground lip two-part mould, and a Crown “bulge” fruit jar, the bulge appearing just under the upper cross, zinc ring, on outer seal glass lid, handblown two-part mould. The third one, Crown “ring,” is the same as the second except the crown emblem has a ring under top cross. They also made a general line of bottles and lamp chimneys.

We have not discovered jars with the NAGC monogram in any of the jar sources or with an internet search. However, Roller (2011:148) noted a variation of the crown jars with a lid that was embossed “NORTH AMERICAN GLASS CO.” around a crown in the center. The crown on the lid, shown in an eBay photo, was virtually identical to the drawing of the Ring Crown jar, described below. This drawing also had an angular outline and clearly defined fleurs-de-lis, but the top area was outlined with numerous dots; the crown had two headbands and a tiara, a cross at the center of the tiara, a well-formed pedestal, topped by a ring then a cross on top (Figure 13).



Figure 13 – North American Glass Co. lid (eBay)



Figure 14 – North American Glass Co. lid (North American Glass)

A photo from North American Glass (the auction, not the glass house) showed a variation embossed “NORTH AMERICAN GLASS CO.” around the outside of the lid – but no crown in the center (Figure 14). This was not reported by any other source we have found. These lids were probably used on both types of jars made by North American Glass.



Figure 15 – “Ring” crown jar (North American Glass)

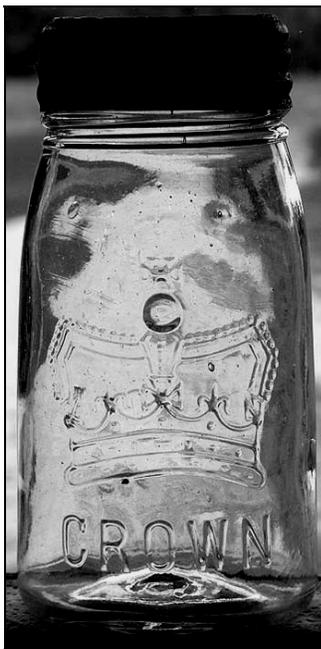


Figure 16 – “Bulge” crown jar (North American Glass)

The Ring Crown jar was likely the first style made by the glass house. As noted above, the crown was very similar to the drawing on the lid (Figure 15). The similarity between the Ring Crown and the drawing on the North American Glass Co. lid makes virtually certain the identification of North American Glass as the producer of the Ring Crown. The Bulge Crown was virtually identical to the Ring – again strongly suggesting the North American Glass Co. as the maker – except that the ring was solidly embossed and bulged out from the glass surface. The word “CROWN” was embossed below the drawing (Figure 16).

Creswick

(1987a:37) illustrated both jars (Figure 17) and noted that the Ring Crown was made with and without the word “CROWN.” Creswick also included a variation of a tall, slender crown with a ring – similar to the Ring Crown. This

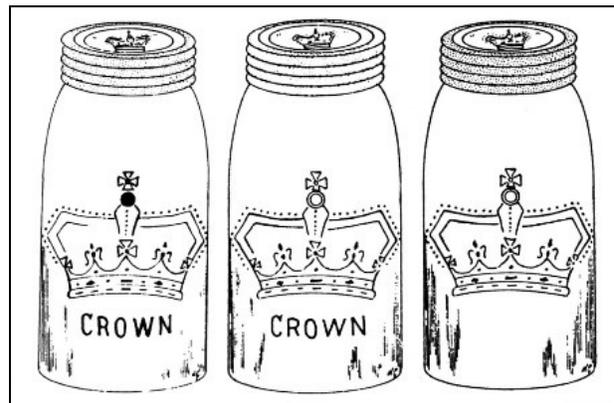


Figure 17 – Ring & Bulge jars (Creswick 1987a:37)

jar was probably a bridge between the North American Glass Co. and the Diamond Glass Co. (Figure 18). See the discussion in the Diamond Glass Co. container section below.

Diamond Glass Co., Ltd., Montreal, Quebec (1890-1902)

Joined by David Williamson, Ralph King, and John Watt, the Yuile brothers again reorganized as the Diamond Glass Co., Ltd., on June 27, 1890. Although King could not discover the reason, the government canceled the charter on June 30, and the brothers again incorporated on August 6 of that same year.² During its 12-year tenure, Diamond Glass acquired eight other plants:

- North American Glass Co., Montreal, Quebec (1890-1902)
- Nova Scotia Glass Co., Trenton, Nova Scotia (1890-1892)
- Hamilton, Glass Co., Hamilton, Ontario (1891-1898)
- Burlington, Glass Co., Hamilton, Ontario (1891-1892)
- Foster Glass Works, Port Colborne, Ontario (1896-1899) – leased
- Lamont Glass Co., Lamont, Nova Scotia (1897-1899)
- Dominion Glass Co., Ltd., Montreal, Quebec (1897-1898)
- Toronto Glass Co., Ltd., Toronto, Ontario (1899-1902)

The Board of Directors approved the reorganization of the Diamond Glass Co., Ltd., as the Diamond Flint Glass Co. on December 23, 1902, and the stockholders approved the change on March 24, 1903.

Containers and Marks

Although King (1987:84) only noted a single Diamond Glass Co. jar – with the DGCo monogram, other researchers have assigned at least five other jars to the firm.

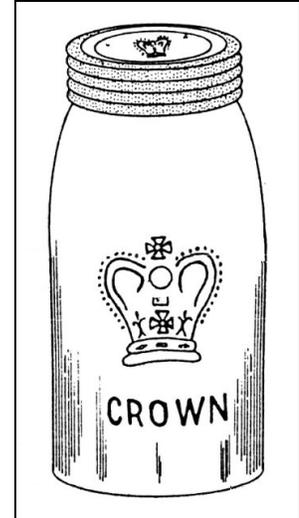


Figure 18 – Tall Ring Heart (Creswick 1987a:37)

² Ralph King was almost certainly the father of Thomas B. King – author of *Glass in Canada* – who was also involved with the Dominion Glass Co.

CROWN (1890-1902)



Figure 19 – Flame crown
(North American Glass)

Toulouse (1971:145-146) illustrated several marks with both the word “CROWN” and a line drawing of a crown and attributed them to six different Canadian companies (all eventually tied into Dominion) including the Dominion Glass Co. and the Diamond Glass Co. For some reason, Roller (1983:98) and Creswick (1987a:38-40) only listed Dominion Flint Glass Co. for these jars, but the editors of the Roller update (Roller 2011:148) suggested the Diamond Glass Co. as one of the manufacturers.

Unfortunately, none of the sources discussed *which* variation or variations were made by Diamond Glass.

It is important to recognize that the Diamond Glass Co. was open during the period of mouth-blown jars. Two types of jars fit into this period that have not been specifically assigned by any of the sources: the Flame Crowns and Heart Crowns. The flame crown was likely the first style made by Diamond Glass. These had elongated crown drawings with a heart-shaped outline, dots around the edges connected to the crown by lines, and a cross at the base of the pedestal as well as one at the top. The defining characteristic was a fleur-de-lis with elongated ends that all stretched upward – creating a flame effect (Figures 19 & 20). This design was the logical descendent of the tall, slender Crown design discussed in the North American Glass Co. section above. These two are the only tall, slender crowns we have found.

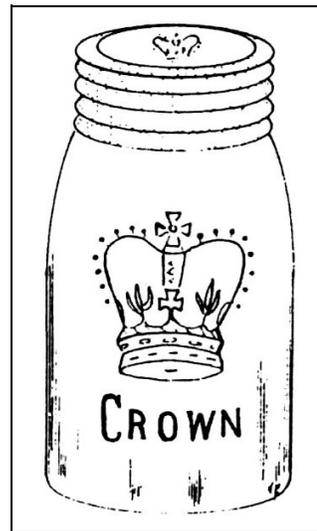


Figure 20 – Flame crown
(Creswick 1987a:37)

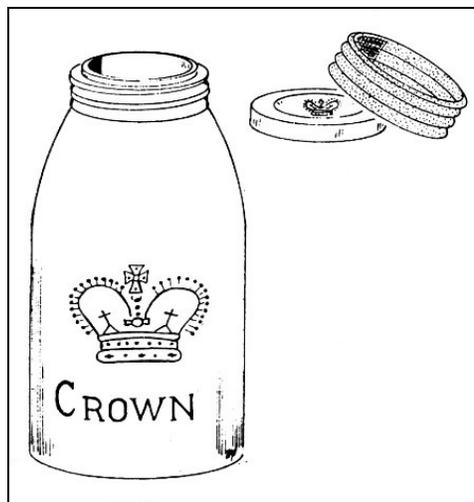


Figure 21 – Heart crowns (Creswick 1987a:37)



Figure 22 – Heart crown
(North American Glass)

The variations called the Heart Crowns logically followed. These returned to the lower profile crowns but retained the heart shaped outline. Each fleur-de-lis was cross shaped, and the dots surrounding the top of the crown were joined to it by lines. Each also had an abbreviated cross just above the tiara but a complete cross at the top. Some had the word “CROWN” along with imperial measurements, although others had neither designation

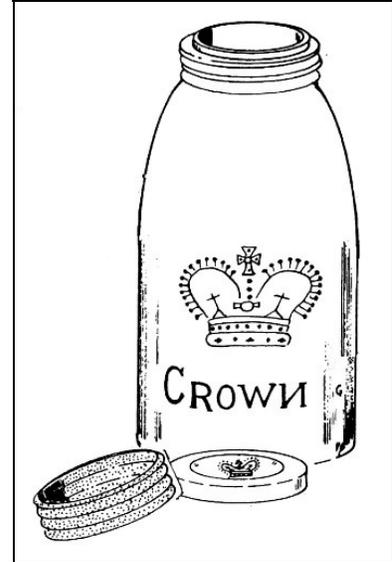


Figure 23 – Heart crown
(Creswick 1987a:37)

(Figures 21, 22, & 23). Some of these were probably also made by the Diamond Flint Glass Co. prior to the installation of the Owens machines.

Leybourne (2008:113-114) added several variations on mouth-blown crown jars, including the “Christian” Crown, “Cloud” Crown, “Posey” or “Petal” Crown, and “Airplane” Crown. These may have meaning for collectors seeking minor variations, but they are of little value in dating the jars. All of these were likely made by the Diamond Glass Co.

DGCo monogram (1890-1902)

Toulouse (1969:91) called this logo a “large elaborate monogram” and described the jar as “handsome squat round, ground lip, in flint.” He suggested either the Diamond Glass Co. (1891-1901) or Dominion Glass Co. (1887-1898), specifying that this was the Dominion Glass later “purchased by Diamond, and not the present Dominion formed by the merger of the Diamond (Flint) Glass Co., and the Sydenham Glass Co. in 1913.”

Roller (1983:102; 2011:162) described this mark as “DGCo (monogram with dual-line lettering)” on both the side of the jar and the top of the lid (Figure 24). The jars were made in aqua and colorless glass by hand (ground lip). The lids were glass, held in place by a metal



Figure 24 – DGCo logo jar (North American Glass)

screw band. Roller suggested that the Diamond Glass Co. made the jars between ca. 1891 and 1902, or they were made by the Dominion Glass Co. from ca. 1886 to 1898. He also noted that the jars were similar to the BEST and PANSEY jars (see below). Creswick (1987a:43) called the logo a “large, intertwined monogram” and suggested Diamond Glass from ca. 1890 to 1902. King (1987:84)



Figure 25 – DGCo monogram lid (North American Glass)

stated that “the company produced no glass in its own name, with the exception of a monogrammed fruit jar” – almost certainly this one.

The monogram, itself, deserves comment (see Figure 24). From the outside to the inside, the actual letters were D, C, G, o in order of decreasing size. The “D” was defined by internal hash lines and had two flourishing serifs; both the letter and the serifs wove in and out of the “G” and “C.” The “C” was larger and surrounded the “G” while the “o” sat atop the bottom termination of the “C,” and the serif at the top of the “C” hooked into the top of the “o.” The “G” had a top serif that was under the serif of the “C,” and the defining serif of the “G” hooked through the “o.” A leaf – probably a maple leaf – descended from the serif of the “G” to ornament the center of the monogram (Figure 25). The “D” on the lid seems to lack the hatching, and at least one lid variation had a simplified, single-line monogram (Figure 26).



Figure 26 – single-line DGCo monogram (eBay)

BEST (1890-1902)

Toulouse (1969:47) discussed a jar embossed “BEST” in a slight arch on the front. He noted the jar as machine-made squat-round, in flint and green.” All other sources, however, show the jar as mouth blown. The base was embossed with the Diamond-D logo, and Toulouse attributed the jar to the Dominion Glass Co. “circa 1922, since in Dominion catalog of that



Figure 27 – BEST jar
(North American Glass)



Figure 29 – BEST ray base
(eBay)



Figure 31 – BEST jar –
amber (North American
Glass)

date.” Roller (1983:66) described the BEST jar the same way he had described the one with the DGCo monogram – a squat, wide-mouth jar (Figure 27). He suggested the Diamond Glass Co. as the maker between ca. 1890s and 1900. He also noted a variation embossed with a “ray design” on the base and on some lids (Figures 28 & 29). Lids were either plain (no design or lettering), embossed “BEST,” or had the ray design (Figure 30). There were also unembossed jars, some with BEST lids. He claimed that these were made by the Diamond Flint Glass Co. and its successor, the Dominion Glass Co., from ca. mid-1900s to the 1920s.

Roller (2011:104) noted that the jars were made in “amber, aqua, clear, green, Sun Colored Amethyst (SCA)” (Figure 31). The jars were made in quart and half-gallon sizes (see Figures 27 & 28). Creswick (1987a:17) illustrated the BEST jar and claimed that the Dominion Glass Co. made it “after 1898.” One lid from North American Glass was embossed “PATENT,” although there is no evidence that the jar was patented (Figure 32)



Figure 28 – BEST with rays
(North American Glass)



Figure 30 – BEST lid (eBay)



Figure 32 – Patent lid (North
American Glass)

PANSY (1890-1902)

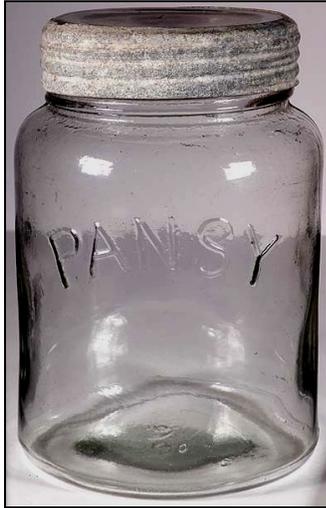


Figure 33 – PANSY jar
(North American Glass)



Figure 35 – Ground rim
(North American Glass)

Roller (1983:274) described the Pansy jar as similar to both the one with the DGCo monogram and the BEST. The jar was embossed “PANSY” in a slight arch on the front that was sometimes over a ghosted “BEST” (Figure 33). Another variation of the “BEST” had 24 panels. Roller suggested that “the appearance of the BEST ghost . . . on some of these jars makes it possible that they were made by the Diamond Glass

Co. or Diamond Flint Glass Co.”

The jars were made in amber, aqua, colorless, and light green glass (Figure 34). Like the Best jar, these were made in quart and half-gallon sizes. These, too, were mouth blown with ground rims (Figure 35). Creswick (1987a:168) illustrated the 24-



Figure 34 – 24-panel PANSY
(North American Glass)

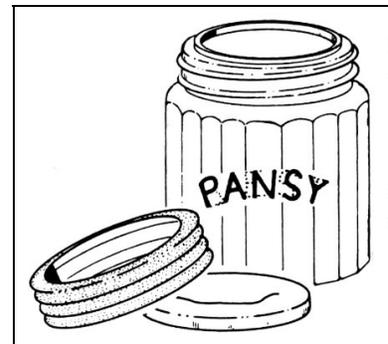


Figure 36 – 24-panel PANSY
(Creswick 1987a:168)

panel variation “superimposed over an erased BEST” and agreed that Diamond Glass was the likely maker (Figure 36). See Table 1 for a comparison of these jars.

DGCo in a Maple Leaf (1890-1902)

Roller (1983:102) discussed a jar embossed “DGCo” in a maple leaf. These had “a wide band at the bottom and a narrow band at the top and were probably packer jars.” He added that “jar fragments of similar shape (without the side embossing have been found at the Burlington site” and thus suggested that the Burlington Glass Works made the jars. The Roller update

(Roller 2011:162) noted that the jar had been deleted and referred to the earlier Roller work. This *may* mean that they found no evidence for this jar.

Table 1 – Probable DGCo-BEST-PANSY Jar Progression

Variation	Firm	Dates	Comments
DGCo monogram	Diamond Glass Co.	1890-1902	per King (1987:82)
BEST (plain base)	Diamond Glass Co.	1890-1902	per Roller (1983:66)
BEST (ray base)	Diamond Flint Glass Co.	1903-1913	based on Roller comments (1983:66)
BEST (base unknown)	Dominion Glass Co.	1913-1920s	Toulouse (1969:47)
PANSY	Diamond Flint Glass Dominion Glass Co.	ca. 1910-1920s	
PANSY (24 panel)	Diamond Flint Glass Dominion Glass Co.	ca. 1910-1920s	
PANSY (ghosted over BEST)	Dominion Glass Co.	1920s-1930s?	
PANSY (ghosted over BEST; 24 pan.)	Dominion Glass Co.	1920s-1930s?	
Best WIDE MOUTH	Dominion Glass Co.	1940s	date codes & logos

Creswick (1987a:43) illustrated a jar embossed “DGCo / D” in a maple leaf (Figure 37). The jar was colorless and mouth blown with a one-piece screw cap. Creswick also attributed the jar to the Burlington Glass Works at Hamilton and dated it between 1875 and 1909. She noted that “only one jar is presently known, a pint.” The identification of the Burlington Glass Works seem incredibly counterintuitive. The “DGCo” and the “D” would seem to make the Diamond Glass Co. a more likely choice, 1890-1902. Since the Burlington Glass Works became part of the Diamond Glass Co. in 1891, these jars were likely made at the former Burlington plant.

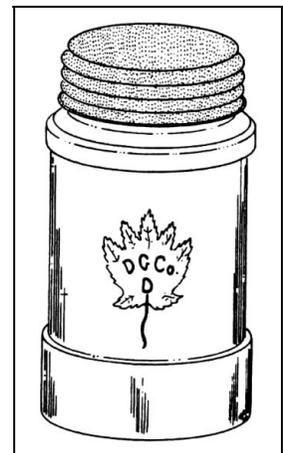


Figure 37 – DGCo in a maple leaf (Creswick 1987a:43)

Diamond Flint Glass Co., Toronto, Ontario and Other Locations (1903-1913)

This incorporation changed several players in the game. William Yuile withdrew from any active involvement, but his son, Norman MacLeod “Mac” Yuile, took his place on the Board. Ralph and James Watt King joined, along with the Grier family – George A. Grier and his sons, George W. Grier, Arthur H. Grier, and Charles B. Grier. Finally, David A. Gordon and his son, John E. Gordon, joined the group. Beaumont Shepherd was the first president, with George Waldrop as vice president. In a rearrangement just six months later, David Yuile became president, with Frank Ross in the vice presidential slot (King 1987:107-108).

The main purpose for the creation of the Diamond Flint Glass Co. was to adopt the new Owens Automatic Bottle Machines. In March 1905, the Board selected the Hamilton plant to receive the new machines and began refurbishing the facility. The Montreal and Toronto locations were to remain hand operations. The group formed a new corporation, the Canadian Glass Mfg. Co., to manage the new setup for Diamond Flint (for details about this holding company, see King 1987:115-118). Henry Herdt was successful in capturing the Owens exclusive licence for Canada on June 29, 1906, and the first machine was installed the following year. On February 14, 1908, the Diamond Flint Glass Co. signed an agreement with the Canadian Glass Mfg. Co. to operate the machines at the Sydenham factory. Thus, in 1908, Owens machine production began at Canadian Glass, the Hamilton Glass Co., and Sydenham Glass Co. (King 1987:108-111; Miller & Pacey 1985:39).³

By 1909, the *National Glass Budget* (1909:1) reported that a plant (or plants) at Toronto operated seven semiautomatic machines, making “milks, mustards, pickles, etc.” Montreal had ten machines, “3 miscellaneous, 1 Owens automatic, making sodas, Peruna bottles, beers, etc., 3 fruit jars, 1 lantern globes, 2 insulators.” Although not part of Diamond Flint Glass, Wallaceburg had three machines, producing “wide-mouth ware; jars made occasionally.” These were the only machines reported in Canada at that time. By 1910, the Hamilton plant had two Owens machines, with one at Montreal (*National Glass Budget* 1910:1).

³ This may indicate an affiliation between these glass houses prior to the merger that created the Dominion Glass Co.

The Directors closed the Canadian Glass Mfg. Co. in 1911, returning all control of the Owens operations to Diamond Flint Glass. On October 24 of that year, Diamond Flint increased its capital from \$1.6 million to \$3.5 million. The Hamilton plant suffered a major fire in May of 1912, and, on May 13, the Richards Glass Co. incorporated and became the sales agent for some of the Diamond Flint Glass Co. pharmaceutical production in Toronto (see the section on Richards in the R Volume).

The firm again increased the capital on October 10, 1912, to \$4 million. In further expansion that year, Diamond acquired the Independent Glass Producers at Toronto. Finally, on September 28 of that year, Diamond gained control of the Manitoba Glass Co. factory at Beausjour. By that time, the Montreal plant had “seven machines. One fruit jar machine. Average wages \$6 per day. One bottle machine making 4 oz. vases. Average wages per day \$4.50. Five finishing machines.” At the Toronto factory, there were “nine machines. Three fruit jar machines, average wages \$7 per day; two bottle machines, making pickles, vases, mustards and lantern globes. Average wages \$6 per day. Four finishing machines” (*National Glass Budget* 1912:1). The firm reorganized on May 13, 1913, as the Dominion Glass Co., Ltd.

Containers and Marks

BEST and PANSY

It is virtually certain that the Diamond Flint Glass Co. continued to make the BEST and PANSY jars, probably originally produced by Diamond Glass. Since Toulouse (1969:47) found the BEST jars in the ca. 1922 Dominion Glass Co. catalog, and many jars had “PANSY” embossed over “BEST,” both jars likely continued to be made into the Dominion Glass era.

Crown

Creswick (1987a:38-40) discussed and illustrated a series fruit jars with embossed crowns on the front. She noted that these were made by several Canadian glass houses but noted one as being specifically from the Diamond Flint Glass Co. “& elsewhere.” She called this variation the “Bulge” Crown. She dated the jar ca. 1903-1904, but this jar was much more likely made by the North American Glass Co. (see that section for more on the “Bulge” Crown). She

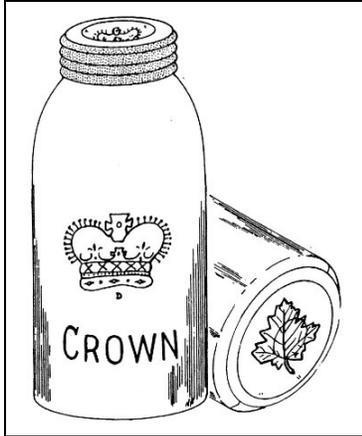


Figure 38 – “Maple Leaf” Crown (Creswick 1987a:39)

also ascribed the “Maple Leaf” Crown to the Diamond Flint Glass Co. but did not explain her reasoning (see our explanation below) (Figure 38). This jar had a leaf motif embossed on the base (Figure 39) and was machine made (Figure 40).

Roller (1983:96) had earlier commented that some of the Crown jars were probably made by either the Diamond Flint Glass Co. or the Sydenham Glass Co. prior to their production by the Dominion Glass Co. However, he did not discuss specific variations. The update (Roller 2011:148) featured both the Diamond Glass Co. and Diamond Flint Glass Co. (among others) as makers of the crown jars – although the editors also did not ascribe specific variations to certain glass houses, except for the lid embossed “NORTH AMERICAN GLASS CO.” that we discussed earlier.



Figure 39 – “Maple Leaf” base (North American Glass)



Figure 40 – “Maple Leaf” finish (North American Glass)

We propose a much more specific chronology (see Table 2 at the end of this discussion). The mouth-blown Heart Crown jars discussed in the Diamond Glass Co. section almost certainly continued to be produced by the Diamond Flint Glass Co. Diamond Flint Glass received the exclusive license to manufacture containers in Canada with the Owens Automatic Bottle Machine in 1906. From 1907 – when the installations were complete – to a point in the 1940s or even later, Diamond Flint Glass used the Owens machine and produced most of its containers by machine from that point on. By 1909, the firm used semiautomatic machines to make wide-mouth ware – including fruit jars. All of the machine-made jars described in this section continued to be produced by the Dominion Glass Co. until 1928, although a few, like the Maple Leaf Crown or Cross Crown may have been discontinued prior to that time.



Figure 41 – Double scar (eBay)

One unusual machine left a double valve scar on the base (Figure 41). The machine was probably one of the wide-mouth machines made by the O’Neill machine company. O’Neill certainly invented a machine in 1916 that left such scars on small-mouth bottles. Both examples of these jars in our sample were solarized to a deep purple, had two headbands as well as a tiara, and had very low crosses at both top of crown and tiara. One had ten dots around the edges of the crown attached by lines; the other had 13 dots (Figure 42). These may have been the earliest machine-made bottles – possibly a year or two ahead of the Owens machines.



Figure 42 – Purple Crown (eBay)

Thus, beginning in 1906, we find Crown jars with feathered Owens machine scars on their bases (Figure 43). These were embossed with the most common type of crown drawings. These crowns had a rounded outline, similar to the heart crowns but without the center indent. They had two headbands and the tiara, with diamond designs and dots (almost certainly representing jewels) on the bottom headband. Most of the diamonds were outlined on the Owens-made jars, although some had the filled diamonds that were used on mouth-blown jars and those made by other machines (Figure 44). The pedestal was missing from this design, but the crosses were present at both the tiara and the top of the crown. The outside had seven or nine dots that were not attached to the crown by lines. The most defining feature, however, was two accidental hearts that were created by the shapes of the fleurs-de-lis on the right and left sides



Figure 43 – Owens scar (North American Glass)

However, was two accidental hearts that were created by the shapes of the fleurs-de-lis on the right and left sides



Figure 44 – Diamond “jewels” (North American Glass)



Figure 45 – “Heart” motifs (North American Glass)

(Figure 45). These jars – *with* Owens scars but *without* the words “MADE IN CANADA” – were produced between 1907 and 1928.

The semiautomatic machines made very similar jars – although these had circular valve marks on the bases instead of the Owens scars

(Figure 46). The crown drawings on these were very similar to the Owens jars except for the valve scars. The number of dots around the outside varied from seven to ten, and they were usually connected to the crown with embossed lines. Other design features shifted slightly, and most of the jars had a number or letter-number combination embossed below the headband (Figure 47).

The pattern of filled diamonds and dots on the lower headband varied slightly, with an open diamond on one example (see Figure 44). These jars were used between at least 1909 to 1928.

There were a few specific crown jars made during this period. Manufacture of these may have continued into the Dominion Glass period, although that is unclear. The Maple Leaf jar was described and illustrated above. Diamond Flint Glass also made jars for the T. Eaton department store chain. According to Wikipedia (2015), Timothy Eaton purchased a dry goods store at 178 Yonge St., Toronto, in 1869 and opened a second store at Winnipeg on July 15, 1905. The Diamond Flint Glass Co. made at least four jars for Eaton.



Figure 46 – Valve scar (eBay)



Figure 47 – Number below crown (North American Glass)

The earliest of these was embossed with a typical Diamond Flint Glass Co. crown and the word “CROWN” on the front and “THE (horizontal) / T. EATON C^o (arch) / LIMITED /

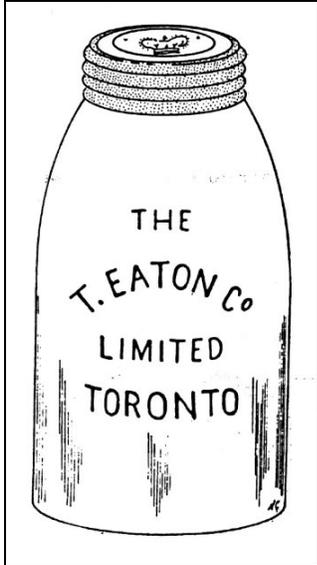


Figure 48 – First E. Eaton jar (Creswick 1987a:37)

TORONTO (both horizontal)” on the reverse (Figure 48). Unfortunately, the front embossing of the crown was indistinct on the only example we have seen, so we cannot describe it beyond its outer shape. Although Creswick (1987a:37) dated the jar as ca. 1890s, it was more likely made during the ca. 1900-1907 period by either the

Diamond Glass Co. or the Diamond Flint Glass Co. (or both).

This was the only Eaton jar that was mouth blown (Figure 49).

The other three jars noted by the sources were all made on Owens machines (with the distinctive Owens basal scars). The oldest was embossed on the reverse with “THE (small – upwardly slanted) / T. EATON C^o LIMITED / 190 YOUNGE ST. TORONTO, CAN.” – with the “L” in “LIMITED” directly under the “o” in “C^o.” The crown on the front was fairly typical of the Diamond Flint Glass Co. crowns, with the heart shapes created on both sides by the way the fleurs-de-lis were embossed, and the ten dots surrounding the crown were connected by lines. Toulouse (1969:78) and Creswick (1987b:39) identified a “B3” below the crown, but the example from North American Glass was embossed with a “2” in that position (Figure 50). Since Roller (2011:148)



Figure 49 – Ground rim of Eaton jar (North American Glass)



Figure 50 – Younge St. Jar (Creswick 1987a:39)



Figure 51 – Toronto & Winnipeg (North American Glass)

noted that the jars were made in “narrow and wide mouth, aqua and clear, American pint, quart, and half-gallon” sizes, there were likely several numbers below the crown. Even though these jars were only made for the Yonge St. store, they had to have been produced in 1907 or later. A variation had “TORONTO AND WINNIPEG” replacing the Young St. address, and this was made after 1905 (Figure 51).

The final jar had a similar crown on front and an Owens scar on the base. The reverse, however, was embossed with an “E” in a rotated square or diamond. Above the diamond was a one- or two-digit number, with “TORONTO AND WINNIPEG” below the diamond.

Toulouse (1969:79) noted this reverse marking as did Creswick (1987b:39) and Roller (2011:148). Creswick and Roller also noted a variation with the “T” from “TORONTO” still visible, along with a

“12” on the reverse heel, but all the other reverse embossing was ghosted. Creswick (1987b:39) also included a final variation with each “N” in “WINNIPEG” reversed (Figure 52). This was probably the last in the Eaton series, possibly ca. 1910.

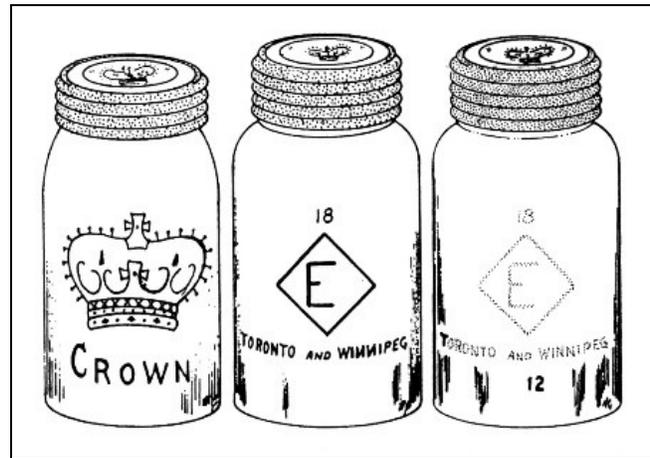


Figure 52 – Diamond E variations (Creswick 1987a:39)

Leybourne (2008:113) added the “Quebec” Crown, “Non descript” Crown, “Pinch Cross” Crown, and what he called the “Tall, top cross variety.” All of these were machine made and were probably produced by the Diamond Flint Glass Co. The patterns were likely more standardized by the Dominion Glass Co. era.

Improved Crown

Roller (1983:164) ascribed a jar embossed “IMPROVED / {embossed crown} / CROWN” to the Diamond Flint Glass Co. ca. 1900s-1920s (although the firm reorganized as the Dominion Glass Co. in 1913). These were machine made (Figure 53). He also discussed a jar embossed “Improved / Crown” in upwardly slanted cursive and an underlining tail extending

down from the “n” in “Crown” – with no embossed figure of a crown. The jar was machine made in colorless glass. Roller noted that the jars were

found with an Owens machine mark on the base . . . and may have been made by Canadian Glass Mfg. Co., Montreal, who were granted c. 1906-1908 the exclusive rights to make jars on these machines. This company later became part of Dominion Glass Co.



Figure 53 – Improved Crown jar (North American Glass)



Figure 54 – Improved Crown jar (Creswick 1987a:40)

As discussed above, the Canadian Glass Mfg. Co. was a subsidiary of the Diamond Flint Glass Co., and Diamond Flint actually made the jars.

Creswick (1987a:40) discussed and illustrated the jar (Figure 54) and attributed it to the Diamond Flint Glass Co. The Roller update (Roller 211:149) still claimed Diamond Flint as the manufacturer of jar with the crown drawing and

added the a variation with a large cross on the reverse – also illustrated by Creswick (Figures 55 & 56). The later Roller added that there were two types of closures for these jars: 1) top seal (inner seal in Canada), glass lid and metal screw band; and 2) top seal (outer seal in Canada) straddle-lip glass lid and metal screw band.



Figure 56 – Cross variation (North American Glass)

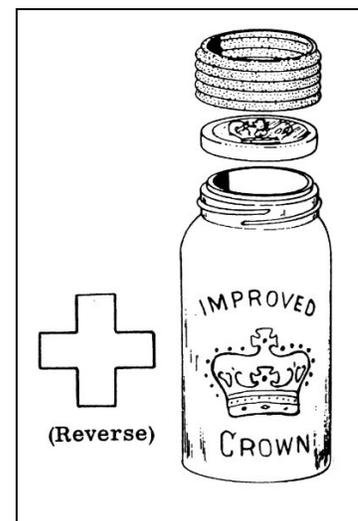


Figure 55 – Cross variation (Creswick 1987a:40)

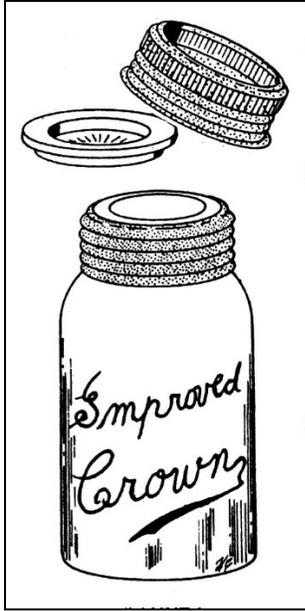


Figure 57 – Cursive Improved Crown (Creswick 1987a:40)

Creswick (1987a:40), however, did *not* ascribe the cross variation to Diamond Flint Glass, but she suggested that the cursive variation was made by both the Diamond Flint Glass Co. and the Dominion Glass Co. (Figure 57). These jars lacked the drawing of the crown but were embossed “Improved Crown” in upwardly slanted cursive, with an underlining tail extending from the “n.” In one of the many oddities in container studies, Roller (2011:149) claimed the maker of the cursive jar as “uncertain.”

Diamond Motif (1890-1902)



Figure 58 – Diamond jar (eBay)

Creswick (1987b:42) illustrated a single “insert and screw band” jar with a horizontally elongated diamond embossed on the front (Figure 58 & 59). She identified the Diamond Glass Co., “Montreal, Quebec & elsewhere” as the manufacturer. She made no attempt to assign a date to the jar, although this second volume was about 20th century jars. Roller (2011:162) discussed what was apparently this same jar – with no illustration and suggested that it was made ca. 1915 by the Dominion Glass Co. The editors noted that these were possibly used as product jars. These jars were machine made and thus too late for the Diamond Glass Co., although the Diamond Flint Glass Co. is a more intuitive match than Dominion for the embossed diamond. The plants had wide-mouth machines by at least 1909, and the firm used a diamond logo on insulators (see next entry).

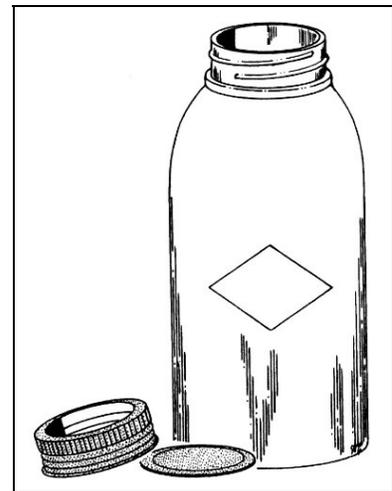


Figure 59 – Diamond jar (Creswick 1987b:42)

Table 2 – Crown Jars

Crown	Base	Mfg.	Glass House
Angular; filled diamonds; one band	Bare	H	Hamilton Glass
Lid: Ring Crown: angular	N/A	N/A	North American Glass
Ring Crown: angular; filled diamonds; 3 bands	Bare	H	North American Glass
Bulge Crown: angular; filled diamonds; 3 bands	Bare	H	North American Glass
Heart Crown: rounded; tall, thin	Bare	H	North American Glass Diamond Glass Co.
Flame Crown: rounded; filled diamonds; 3 bands	Bare	H	Diamond Glass Co.
Heart Crown: rounded	Bare	H	Diamond Glass Co. Diamond Flint Glass
Normal Crown; rounded, 3 bands	Owens scar	M	Diamond Flint Glass Dominion Glass Co.
Normal Crown; rounded, 3 bands	Valve scar	M	Diamond Flint Glass Dominion Glass Co.
Normal Crown; rounded, 3 bands	Double valve	M	Diamond Flint Glass Dominion Glass Co.
Maple Leaf Crown: normal crown	Valve; Maple Leaf	M	Diamond Flint Glass
Cross Crown	Owens; valve	M	Diamond Flint Glass
T. Eaton Jars; normal crown	Owens; valve	M	Diamond Flint Glass
Improved Crown	Owens; valve	M	Diamond Flint Glass Dominion Glass Co.
Made in Canada	Owens	M	Dominion Glass Co.
Made in Canada	Valve	M	Dominion Glass Co.

Schram Automatic Sealer

Roller (1983:319-321; 2011:465-466) listed and discussed several variations of the Schram Automatic Sealer. These jars used two patents issued to Alexander L. Schram of Woodstock, Ontario, Canada, in December 3, 1901, and July 21, 1903. Both patents were for jar closures, but the latter called for one or more “air escape openings” in the sidewall of the lid. Some of the jars were made in the U.S., but most of the early jars were made in Canada. The earlier jars had sloping shoulders with no beads on their necks. They were embossed “Schram / Automatic / Sealer” in upwardly slanted cursive



Figure 61 – Schram lid
(North American Glass)

(Figure 60). Roller cited a 1904 report, stating that these jars were made in Canada and the U.S. (see the section on Schram for more on the U.S. jars). He dated the jars ca. 1903-1905. The Canadian jars are only identifiable by their lids – always made of aluminum in Canada (Figure 61). Later jars – with beaded necks – were made in the U.S. Canadian jars included five variations stamped into the tops of the lids (as well as one lid from St. Louis):



Figure 60 – Schram
Automatic Sealer (North
American Glass)

1. SCHRAM BOTTLE CAP WOODSTOCK, ONT. CANADA PAT'D DEC 3 1901
2. SCHRAM BOTTLE CAP WOODSTOCK, ONT. CANADA PAT'D 1901 & 3
3. SCHRAM AUTO. SEALER WATERLOO, ONTARIO PAT'D 1901
4. SCHRAM AUTO SEALER CO WATERLOO, ONT. PATD 1901 & 3
5. SCHRAM BOTTLE CAP MFD. FOR GOWANS KENT CO. TORONTO PAT'D 1901 & 3

Creswick (1987b:118-119) also discussed and illustrated the Schram Automatic Sealers (Figure 62) and included the same lids. However, she added that the December 3, 1901, Canadian patent number was 73,980, and the U.S. patent number for July 21, 1903, was 734,140. She dated the jars ca. 1904-1906 and noted the Diamond Flint Glass Co. as the manufacturer.

A few early jars – with lids identifying St. Louis – were almost certainly made in the U.S. during a very short period. Roller (1983:319; 2011:465) presented evidence that Schram opened his St. Louis firm in 1904 and closed due to bankruptcy in 1905. Thus, the St. Louis outfit was only in business briefly. It is probable, however, that the Canadian manufacture extended for a longer period – as suggested by the presence of five distinct lid markings. Two of the five lids were only stamped with the 1901 patent date, suggesting that these were produced prior to the issuance of the second patent. These jars also may also have been made later, leading us to suggest a ca. 1901-ca. 1907 date range for the Canadian lids and jars.



Figure 62 – Schram jar (Creswick 1987b:118)

The Canadian Schram plants have been virtually ignored by the glass sources. Patent dates on the lids suggest that there was at least one Schram plant making the closures – not fruit jars – prior to 1903 at Woodstock and Waterloo. We have been unable to find any evidence for the Woodstock firm, although it must have existed to have the location on the lid. The Schram Automatic Sealer Co., Waterloo, Ontario, was noted in a 1916 book on Canadian Industry, but the author did not mention the date. The Schram Automatic Sealer Co. of Canada, Ltd., Toronto, was listed in 1916 with a capital of \$100,000. Unfortunately, the publication did not list the date of incorporation or partnership (Harpell 1916; Legislature of the Province of Ontario 1909:16). This firm or these firms were almost certainly the manufacturers of the lids for these early jars. The *Winnipeg Free Press* mentioned the Gowans Kent Co. – a name stamped on one of the lids – at least as early as August 4, 1900. The company was a glass and ceramic jobber at Toronto, and it remained in business under that name until at least the late teens. Some of these early jars and lids were made for Gowans Kent.

Assuming these 1901-ca. 1904 dates are correct, King (1987:248) and Roller (1983:319; 2011:465) were in error in stating that the Dominion Glass Co. made Schram jars. Creswick (1987b:118) seems to have been more correct with her suggestion that the Diamond Flint Glass Co. made the containers. However, these jars may have been first produced by the Diamond Glass Co. – although production almost certainly continued into the Diamond Flint Glass Co. period. All sources agreed that the jars were made by automatic bottle machines, and that is



Figure 63 – Purple Schram jar (eBay)

supported by our very small sample of the jars (1 from eBay and 1 from North American Glass). Further, the base of the eBay example showed a double-ring scar, very similar to the scars on some Crown jars – *and* the Schram example was solarized to a deep purple, again like some of the Crown jars (Figures 63 & 64). This suggests that the Diamond Glass Co. adopted semiautomatic jar machines – possibly as early as 1901 – and that the purple jars with double ring scars were the firm’s earliest machine-made containers. Alternatively, the Diamond Flint Glass Co. may have been at least partially created to make jars with semiautomatic machines. If this hypothesis is correct, then the jars were made beginning in 1903.



Figure 64 – Double ring scar (eBay)

Diamond (horizontally elongated)

King (1987:107-115) made no mention of any mark being used by the Diamond Glass Co. (of Canada). However, the McDougalds (1990:154-155) noted that the Diamond Flint Glass Co. used a horizontally elongated diamond to mark their insulators (Figure 60). Occasionally a vertical line (or bar) was added above the diamond (Figure 61). The earliest embossing was single diamond on one side of the insulator skirt. After the reorganization that created Dominion Glass, the plants continued to use the elongated diamond logo, but it



Figure 60 – Diamond insulator (eBay)

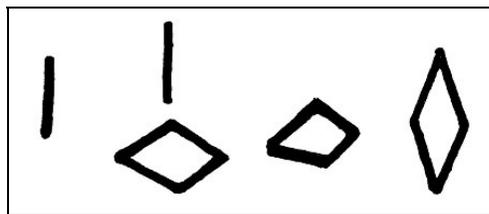


Figure 61 – Diamond variations (McDougald & McDougald (1990:155))

was usually embossed on two sides of the skirt. Insulators made by Dominion Glass

were generally of better quality, including much less crude embossing (Figure 62). On some of the insulators, the diamond was vertical (McDougald & McDougald 1990:154-155). A single example from eBay had two vertically elongated diamonds (Figure



Figure 62 – Diamond insulator (eBay)

63). The diamond mark was almost certainly not used on bottles – by Diamond Glass of Canada – although it was certainly the ancestor of the Diamond-D logo used by the Dominion Glass Co.



Figure 63 – Vertical diamond (eBay)

Discussion and Conclusions

Each of the four firms – the Excelsior Glass Co., North American Glass Co., Diamond Glass Co., Ltd., and Diamond Flint Glass Co., Ltd. – produced containers, especially jars, with embossed names and/or logos that can be traced to each factory. These provide a rich source for container dating for archaeologists and others.

It is certain that some specific names, logos, etc., need more research. The Excelsior Jar is an excellent example. The jar appears to have been made by several firms but little research seems to pin specific jars to individual glass houses. Future research should center around Canadian newspapers and other sources for possible advertisements.

Acknowledgments

Our gratitude to Greg Spurgeon for granting us permission to use the North American Glass photos and to Doug Leybourne for allowing us to use the drawings from the Alice Creswick books. We are also grateful for the thousands of photos available from eBay sellers.

Sources

Creswick, Alice

1987a *The Fruit Jar Works, Vol. I, Listing Jars Made Circa 1820 to 1920's*. Douglas M. Leybourne, N. Muskegon, Michigan.

1987b *The Fruit Jar Works, Volume II, Listing Jars Made Circa 1900 to Modern*. Privately printed, Grand Rapids, Michigan.

Harpell, J.J.

1916 *Canadian Industry, Commerce and Finance*. Industrial and Educational Press, Montreal.

King, Thomas B.

1987 *Glass in Canada*. Boston Mills Press, Ontario.

Legislature of the Province of Ontario

1909 *Sessional Papers, Volume XII, Part VIII, First Session of Twelfth Legislature of the Province of Ontario Session, 1909*. L.K. Cameron, Toronto.

Leybourne, Douglas M.

2008 *The Collector's Guide to Old Fruit Jars: Red Book 10*. Privately published, North Muskegon, Michigan.

McDougald, John & Carol McDougald

1990 *A History and Guide to North American Glass Pintype Insulators*. Volumes 1 & 2. The McDougalds, St. Charles, Ill.

Miller, George L. and Antony Pacey

1985 "Impact of Mechanization in the Glass Container Industry: The Dominion Glass Company of Montreal, a Case Study." *Historical Archaeology* 19(1):38-50.

National Glass Budget

1909 "Hayes on Bottle Machines." *National Glass Budget* 25(11):1.

1910 "Bottle Machine Statistics." *National Glass Budget* 25(50):1.

1912 "Changes Wrought in 7 Years." *National Glass Budget* 28(30):1.

Roller, Dick

1983 *Standard Fruit Jar Reference*. Privately published.

2011 *Standard Fruit Jar Reference: 2011 Update*. Edited by Jerome McCann and Barry Bernas. Fruit Jar Annual/Phoenix Press, Chicago.

Toulouse, Julian Harrison

1969 *Fruit Jars*. Thomas Nelson & Sons, Camden, New Jersey.

1971 *Bottle Makers and Their Marks*. Thomas Nelson, New York.

Wikipedia

2015 “Eaton’s.” <http://en.wikipedia.org/wiki/Eaton%27s>

Last updated 3/20/2015