The Goebel Press Era of Canadian Stamps

by Ken Sargent

with Leopold Beaudet

This article, with minor updates, was originally published as a supplement to
Corgi Times, Vol. 18, No. 4, Jan.-Feb. 2010.

Corgi Times is the newsletter published by The Elizabethan II Study Group
of the British North America Philatelic Society.

For information about The Elizabethan II Study Group, refer to the web site:
http://www.adminware.ca/esg/index.htm

For information about the British North America Philatelic Society, refer to the web site:
http://www.bnaps.org

The Goebel Press Era of Canadian Stamps

by: *Ken Sargent with Leopold Beaudet*

A few years ago, Ian Kimmerly suggested I should write the story of the Goebel press in Canada since I was a key participant in that story. I now think it is time to write the story because there is no one else to do it. I would like to acknowledge the help and collaboration of Ian and philatelist Leopold Beaudet in setting the story to paper.

History

From 1930 to 1935, British American Bank Note Co. (BABN) held the printing contract for Canadian stamps. This was the era of the King George V "Arch" and "Medallion" definitives, of which most of the low values were printed on a Stickney web-fed press. It was also the era of the Grand Pré, Mt. Edith Cavell, the award-winning Jacques Cartier, and other issues. BABN printed these stamps on its own sheet-fed presses and perforated them using the McAdams wheels. BABN was also producing Revenue and Excise stamps during this period. Canadian Bank Note Co. (CBN) won the next printing contract for postage stamps in 1935 and held it for several decades.

In the early 1960s, BABN expressed an interest in bidding for Canada's stamps, and this was favourably received by Post Office authorities. Thus, an investigation was started to determine the best way to approach this project. For many years, we had observed stamp production in the US. It seemed obvious we should be looking at a web-fed system rather than continue the sheet-fed process. The US machines were made by Cottrell Corp. while European printers leaned toward the Goebel press. I visited the Cottrell plant in Westerly, RI, and after discussions it was evident their machine would not suit our purposes. And so we concentrated our efforts on the Goebel press made in Darmstadt, Germany. In 1966, BABN would be 100 years old, and this seemed like a good Centennial project.

Sweden had been producing all its postage items on Goebel equipment for many years. We had a relationship with them that went back many years and included supplying them with one of the Stickney presses. They welcomed us to study their operations.

While our needs were different, we had much in common. In Sweden, all stamps are produced in booklets and rolls, no sheets or panes. Also we were in a competitive pricing situation and low-cost production was important, but their techniques and experience was of great value to us. We developed a technical relationship with Harrison & Sons Ltd. in England, renowned postage stamp printers and stamp paper suppliers. We also visited the security printer Joh. Enschedé near Amsterdam that printed all the stamps for The Netherlands.

BABN had designed and built its own banknote presses for many years, and we added to our strength with an experienced web press designer and three machinists who had worked with business form machines. Leading our team were R. P. White, President, and myself. Len McGurran and Bill Eyre were the Post Office negotiators.

Timing

It soon became obvious that delivery of the press and systems we wanted would take at least two years. This was a problem for Canada Post, but it was able to negotiate an agreement with CBN that, should they be unsuccessful in a new tender, they would agree to supply stamps for a two-year period until the Goebel press was operating in Canada. This was a key factor. Without this agreement, there would have been no Goebel press in Canada.

We thought 24 months would be sufficient for our needs, based on Goebel estimates, but time would tell a different story when delays took the timing beyond the two year period.

Tax write-offs for the new equipment in effect at that

Figure 1. 1930 KG V Arch 2¢ brown and 1932 Medallion 1¢ green printed on a Stickney web-fed press.

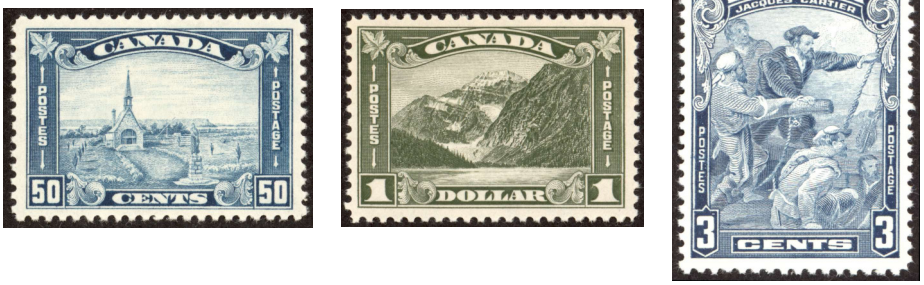

Figure 2. 1930 50¢ Grand Pre and $1.00 Mt. Edith Cavell and 1934 3¢ Jacques Cartier printed on a sheet-fed press.

time were useful in our cost justification calculations. I think we paid for the press in 24 monthly installments while the equipment was being manufactured.

Our Tender for the Stamp Printing Contract

Many hours were spent trying to determine prices to submit to the Post Office for the various categories. We had no idea what the existing prices were. Our configuration was for a two-pane wide layout for which there was no comparison. We knew the theoretical press speeds, but there were many unknowns such as start-up times and spoilage. We had to guess at wage rates and manning, having decided there would be great difficulty pre-negotiating these matters. Our printers were trained on sheet-fed presses. How would they adapt to a complicated web press? Did they have the necessary skills? So we submitted our proposals with a lot of faith, knowing many unknowns were ahead.

Later on, the press crew was negotiated to be two plate printers and one printer's helper regardless of the configuration. Initially the printers earned a 10% premium but this was later incorporated into their overall rate to allow selection of pressmen without regard to seniority.

In our proposal, we had to assume that, in the long run, production on this single, multi-purpose machine could be scheduled to meet all requirements. Unfortunately in those early months, the Post Office wanted to get going on all items in tender at once, especially commemoratives, and this created many problems in getting started.

BABN was successful in its tender for the following items:

1. The first class rate definitives in panes of 100
2. The medium value and high value definitives
3. The stamp booklets
4. The aerogrammes in two-colour gravure
5. The opportunity to quote on all commemorative issues

CBN was awarded the contract for stamps issued in roll format.

It was exciting for everyone in the Company to know we would be bringing to Canada an entirely new production system for printing stamps. For over a decade after the tender was awarded, the Goebel press was the workhorse for Canadian low and medium values definitives in sheet and booklet format. It was also used to print many commemoratives over a twenty-year period.

Press Configuration

The Goebel press that BABN procured was a model BRNST-500, with the 500 giving the maximum paper width in millimeters. It consisted of the following:

1. One steel-engraved printing cylinder unit with three ink fountains for multi-colour stamps
2. Four gravure printing cylinders
3. One platen die-perforating unit
4. An intaglio ink-drying system
5. A sheet delivery and counting system for panes
6. A roll delivery system for booklets and rolls

Auxiliary equipment consisted of:

1. A Rotary Transfer Machine to produce intaglio cylinders
2. A Goebel booklet machine that merged cover stock with rolls of stamps
3. A Booklet Criss-Cross machine to prepare booklets for the vending machines in use at that time
4. An Electrostatic Assist device, which was added to the press to minimize the effect of electrostatic buildup

I recall the cost was about $6 million.

The Post Office agreed the stamp sizes would be 24 x 20 mm, 24 x 30 mm, and 24 x 40 mm or multiples of these. The Goebel press was very rigid in this regard due to the platen perforation system.

Manufacturing the Cylinders

Once a stamp design was approved by Canada Post, the gravure portion of the design was separated into its constituent colours photographically. This was done because each colour was printed from a separate cylinder. Using a step-and-repeat camera, the image for each colour was replicated on a sheet of carbon used to etch the printing cylinder.

The exposed areas of the carbon harden and retain their original thickness when developed. The unexposed areas wash away during development, creating valleys. The carbon was placed around a copper cylinder and dipped into an etching bath. The varying densities of carbon controlled the depth of the etching. The deeper the etching, the more ink it held and the darker the colour. After the cylinder was etched, it was chromium plated and was then ready for the press.

In contrast, for the engraved portion of the design, a single die was made irrespective of the number of engraved colours (Figure 3). The Goebel press could handle up to three. In the case of se-tenant designs like the multi-denomination booklet panes, a separate die was made for each design; however, all designs were transferred onto the same cylinder.

For some of the 1967 Centennial, 1973 Caricature, and 1977 Environment definitives, CBN and BABN were called upon to print the same stamp designs. The stamp dies were the property of Canada Post. For dies produced by CBN, BABN would borrow the hardened die and produce its own transfer rolls.

Figure 3. Die for the 1970 6¢ Henry Kelsey commemorative engraved by George Gundersen. [Source: *Something Canadian*]

Figure 4. Siderographer Murdo Stewart transfers the image from the die to a transfer roll. [Source: *More Than Just a Pretty Face*]

Figure 5. Using the Rotary Transfer Machine, siderographer Tony St. Denis transfers the image from the transfer roll to the printing cylinder. [Source: *Something Canadian*]

The Goebel, or any web press, has to have a continuous impression cylinder of relatively hard material much like the calender roll on a paper machine. Engravings must be done to work with this. A sheet-fed press has a rubber blanket on the impression cylinder, which is more resilient, and can even be back-patched if necessary to assist printing. So the dies had to be altered for the Goebel press.

After the die was approved, a siderographer transferred the design from the die to a transfer roll (Figure 4). Several copies of the design were impressed onto the transfer roll.

In our plant, some new techniques were required in "plate" making. BABN had produced electroformed nickel plates for several years for sheet-fed presses. Now the stamp images had to be transferred to nickel-faced cylinders. A thin layer of nickel was deposited on the cylinder, enough to exceed the required diameter. Then, using a Landis cylindrical grinder, the excess nickel was ground off to the precise diameter, ready for the transfer process. The siderographer mounted the transfer roll onto the Rotary Transfer Machine, and transferred the design, subject by subject, to the intaglio cylinder (Figures 5, 6). This step was new because the transfer was to a cylindrical surface rather than a flat plate. After all the subjects were transferred, the intaglio cylinder was chromium plated for hardness and for easier wiping of excess ink. So a new nickel plating tank was required as well as new chromium plating and stripping tanks.

The gravure process was entirely new to us. We did our own nickel buildup for intaglio cylinders, but all gravure cylinders were sent to a Toronto firm that deposited additional copper and then ground them to the required diameter.

For security purposes, after an issue was completed the chrome plating would be stripped and the images in nickel (intaglio cylinders) or copper (gravure cylinders) would be ground off. The cylinders were then reused.

Jurisdiction for the gravure printing was given to the plate printers. However, all the gravure cylinders were made by members of the Lithographic Union. This arrangement was never challenged.

Experience had proven, due to the printing pressures used, the intaglio cylinders should be just below the theoretical size, while the gravure cylinders should be slightly over the theoretical size.

Figure 6. Close-up of the transfer roll mounted in the Rotary Transfer Machine, above the intaglio cylinder. [Source: *A Stamp Is Made*]

Producing the Stamps

Both domestic and imported (Harrisons) paper stock was used on the Goebel press. The rolls of paper were always pregummed. Postage stamp paper does not require strength, and is made from shorter fibres that assist perforation and separation.

Because of different inking and wiping systems between CBN presses and the Goebel press, some printing difficulties occurred in the early stages, but these were soon corrected. Even the "direction" of the stamp on the two presses could be a factor. For example, the 8¢ QE II Centennial definitive was printed in sheet format by BABN and coil format by CBN. The sheet stamp was laid out sideways around the circumference of the cylinder, whereas the coil stamp was laid out vertically in the direction that the coil plate was bent. Each printer does best with its own engravings.

The inks used for the intaglio on the Goebel press were basically the same as those for sheet-fed presses, but adjusted for the plain white paper wipe on the Goebel press versus crimped kraft paper on sheet-fed presses. The gravure inks we purchased were all solvent based. The effluent could be flammable but we had no problems with this.

The Goebel press printed the gravure colours first, one cylinder for each colour, and then the engraved colours, up to three from a single cylinder (Figure 7). The tagging was printed by gravure; thus, it was printed before the engraved colours. BABN printed four precancelled stamps. The precancel bars were printed by gravure; hence they were also printed before the engraved colours.

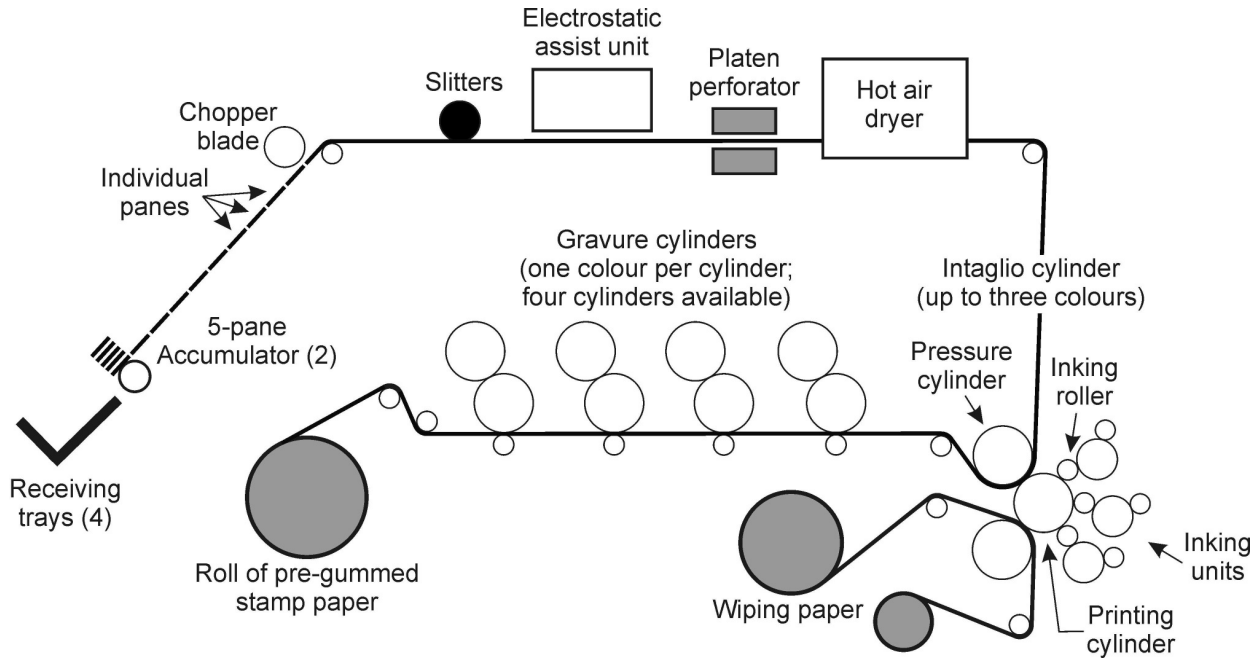

Figure 7. Sketch of the Goebel press layout. The roll of stamp paper is fed through the gravure and intaglio units. The web then travels to the top of the press where the ink is dried, and the web is perforated, slit into rolls, and, for sheet stamps, cut into individual panes.

Figure 8. Side view of the Goebel press. The gravure units are in the middle. The intaglio unit is hidden from view at the far end. Plate printer Eddie Major is probably examining the security control numbers printed on the selvedge that has been slit from the side of the web. [Source: *Something Canadian*]

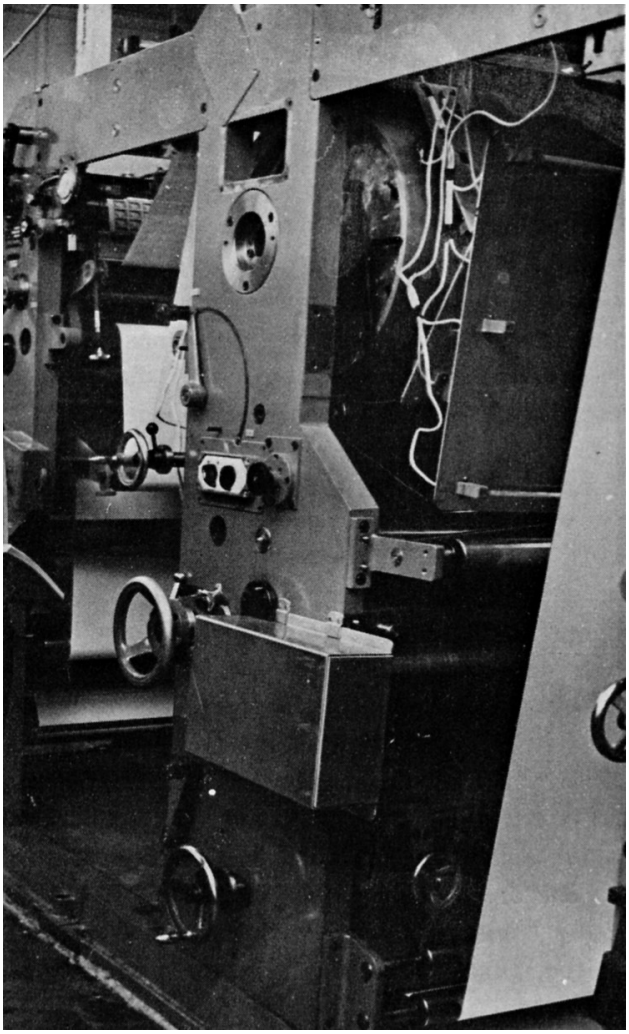

Figure 9. One of the gravure units. [Source: *The Postmark*]

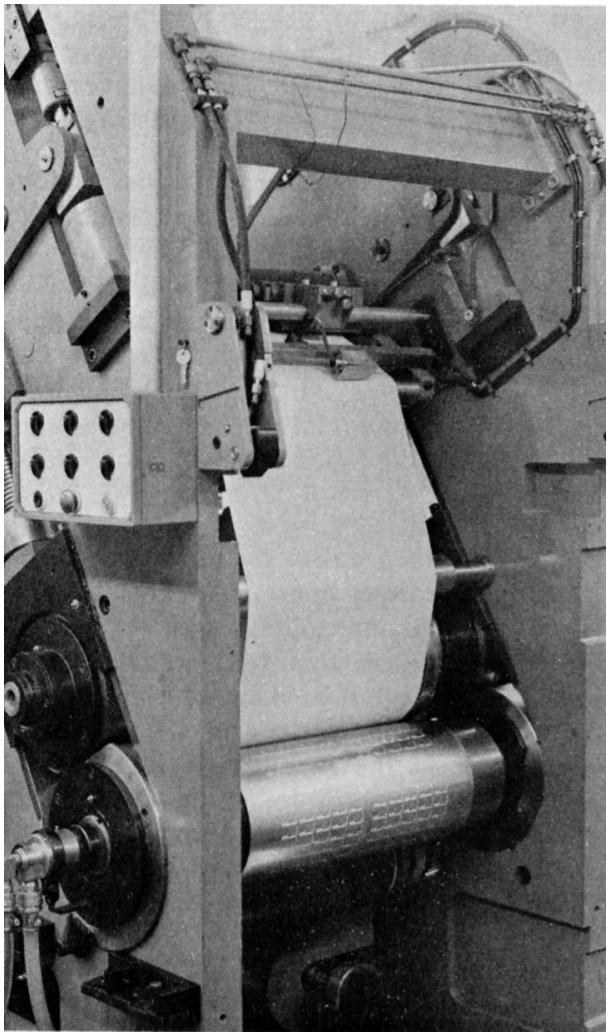

Figure 10. The web is printed by the intaglio cylinder and moves up towards the hot air dryer. [Source: *The Postmark*]

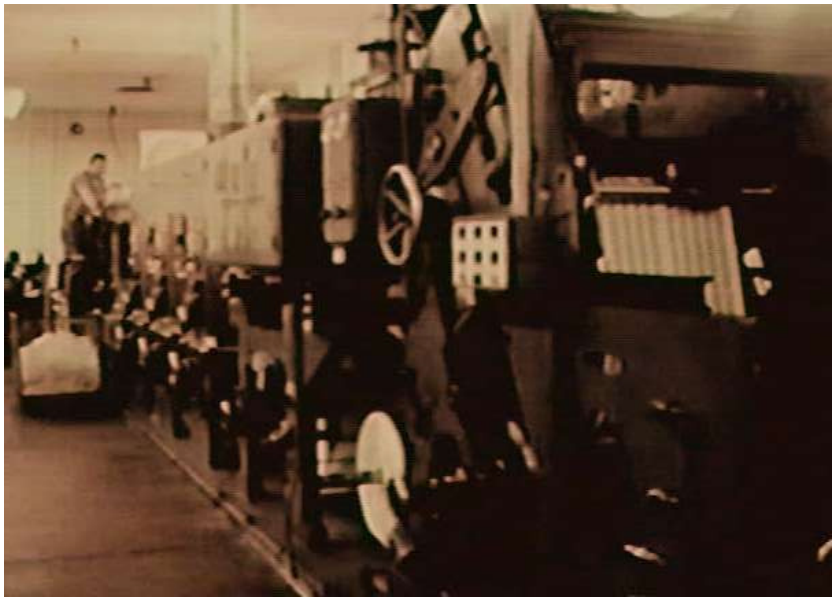

Figure 11. Like Figure 8, side view of the Goebel press but from the opposite end with the intaglio unit in the foreground. [Source: *Something Canadian*]

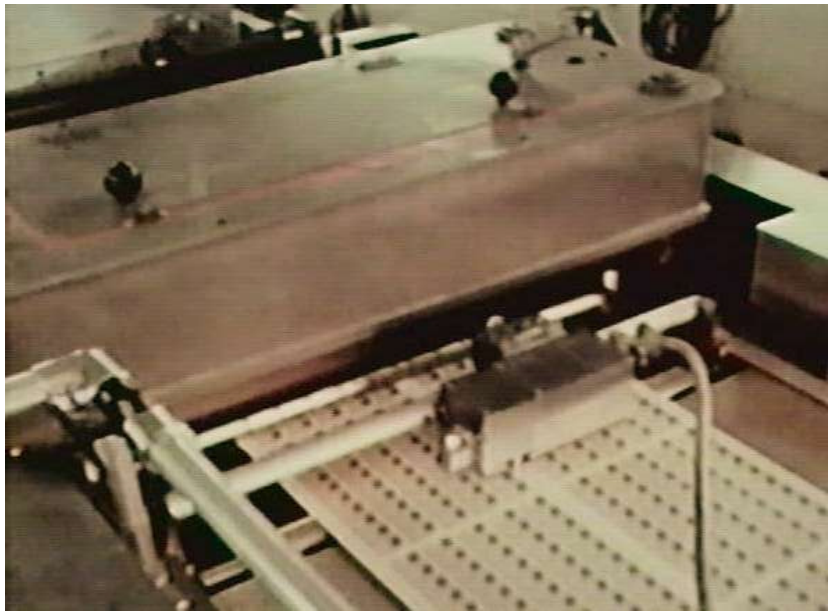

Figure 12. The metal box-like structure is the top half of the platen perforator. The web in the illustration has been perforated. [Source: *Something Canadian*]

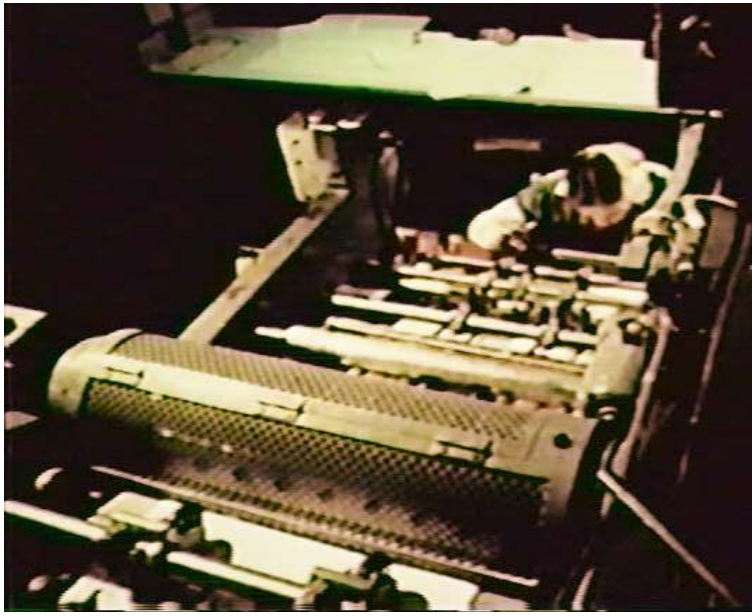

Figure 13. Top view of the delivery area. The web has been center-slit, cut into panes, and gathered into five-pane lots that are moving to the receiving trays. [Source: *More Than Just a Pretty Face*]

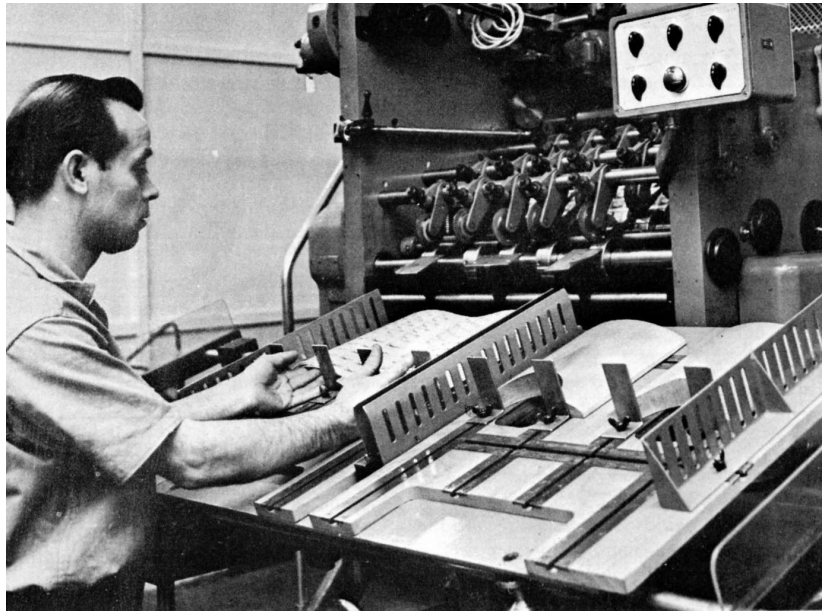

Figure 14. The panes are delivered in lots of five to the receiving trays where the top pane is press-examined. After 20 deliveries, the tray table positions the empty trays to receive the next 100 panes. [Source: *The Postmark*]

The Swedish Post Office created a fourth intaglio colour for their booklets containing a fourth denomination by "double inking" the fourth area to produce a distinct, darker colour. This was never tried on the Goebel press in Canada.

To perforate the stamps on the web, the Goebel press used a double platen system. A lower female platen was precisely drilled with all the necessary holes. The upper platen contained the perforating pins, held in position according to the stamp being printed.

The platens moved together with the printed web in between. While travelling at the exact speed of the web, the upper platen drops and rises, perforating the 2 pane by 100 stamp layout for the small size definitives (the layout was 2 by 50 for the double size commemoratives) in one action. Then the platens accelerated to the press speed again to complete the next block perforation, and on and on (Figure 12). The register, like all printing units, was controlled by print marks checked by "electric eyes".

A change in perforation spacing specification called for an entirely new platen. Initially the Post Office agreed to "perf 10" spacing, but this proved to be unsatisfactory. The gauge was changed to 12 by 12.5 about one year later for easier separation of stamps. Subsequently a perf 13 platen was introduced.

A security control numbering unit applied a number beside each pane in the selvedge area as the web passed through. Besides the security function of keeping track of the panes printed, this allowed the operators to know what quantity had been printed at any given time.

For the low value definitives and double size commemoratives such as the Nonsuch, there were two panes laid out side by side on the web. For the 1972 medium value Landscape definitives and stamps the size of the four 1978 CAPEX commemoratives, there was a single pane (Figure 33). The description that follows applies to stamps with two panes laid out side by side.

The press was designed to deliver stamps in sheet form or in rolls to be incorporated into stamp booklets. For sheet stamps, after printing and perforating, slitter wheels slit the web into two rolls, each the width of a pane, and removed the excess selvedge. The two rolls were then cut into individual panes by chopper blades.

The delivery mechanism at the end of the press gathered five panes from each roll to be delivered as a lot to the receiving trays. The panes were conveyed into the open grippers on the Accumulator. When five panes had accumulated, the grippers closed, and with a 180 degree rotation delivered the panes to trays 1 and 2. At the same time, a second set of grippers began to receive the next two lots of five panes that in turn added to the piles in trays 1 and 2. After the 20th delivery, the receiving trays moved automatically, and piles 21 to 40 went into trays 3 and 4. Then the tray apparatus reversed and trays 1 and 2 began receiving again. There was ample time to remove the 100 pane lots before the next lots were received (Figures 13, 14).

As a result of this delivery mechanism, an examiner could press-examine each fifth pane, and had a good chance of spotting any printing error or movement of the perforations.

The panes were brought from the receiving trays to an examining table where they were examined for defects. They were then cellophane-wrapped in packages of 50 with a cardboard backing and shipped to the Post Office.

For stamp booklet rolls, the rewinding was slit into double booklet format, with the panes on each side in a tête-bêche arrangement. A blank stamp-wide space separated the stamps in the tête-bêche panes. This blank space was eventually slit in half and used to glue the stamps in the booklets. It became the booklet pane selvedge. As one half of the printed roll entered the booklet machine, the other half would be rewound to be in the correct format for it to be used.

The Goebel press did not operate continuously over the entire print run for a stamp issue. Stoppages had to occur to splice on a new roll of printing paper or a new roll of wiping paper before bringing the press back up to speed. Ideally these would be done at the same time.

Post office stock of the early definitives and commemoratives had straight edges on three sides of the pane. As I recall, Canada Post suggested this to eliminate the nuisance of selvedge edges of paper lying around. It was a simple matter to do on the Goebel press. Once the philatelic stock portion of an order with corner block imprints was completed, three outside rows of perforation pins were removed. Then the slitter wheels were relocated to run on those edge lines, and the sheet cutter moved to produce the third straight edge. Eventually, Canada Post asked that all stamps be fully perforated. The first commemorative in this format was the 1971 6¢ Papineau.

The system worked well with complicated layouts like rolls for booklets, but it did limit the size and shape options for designers.

The Early Months

Before accepting the press, we conducted trials at the Goebel plant in Darmstadt. For the press trial, we produced our own engraved cylinder, and shipped it to Germany with our own inks and gummed paper. The cylinder was produced from a vignette called "Baby Sisters" which was based on the painting *Calmady Children*. George Gundersen, our Art Director and Chief Engraver, chose "Baby Sisters" as the design because it has a wide range of light and dark tones, from the heavy hair on the

right to the delicate flesh tones in the face on the left, in a small area.

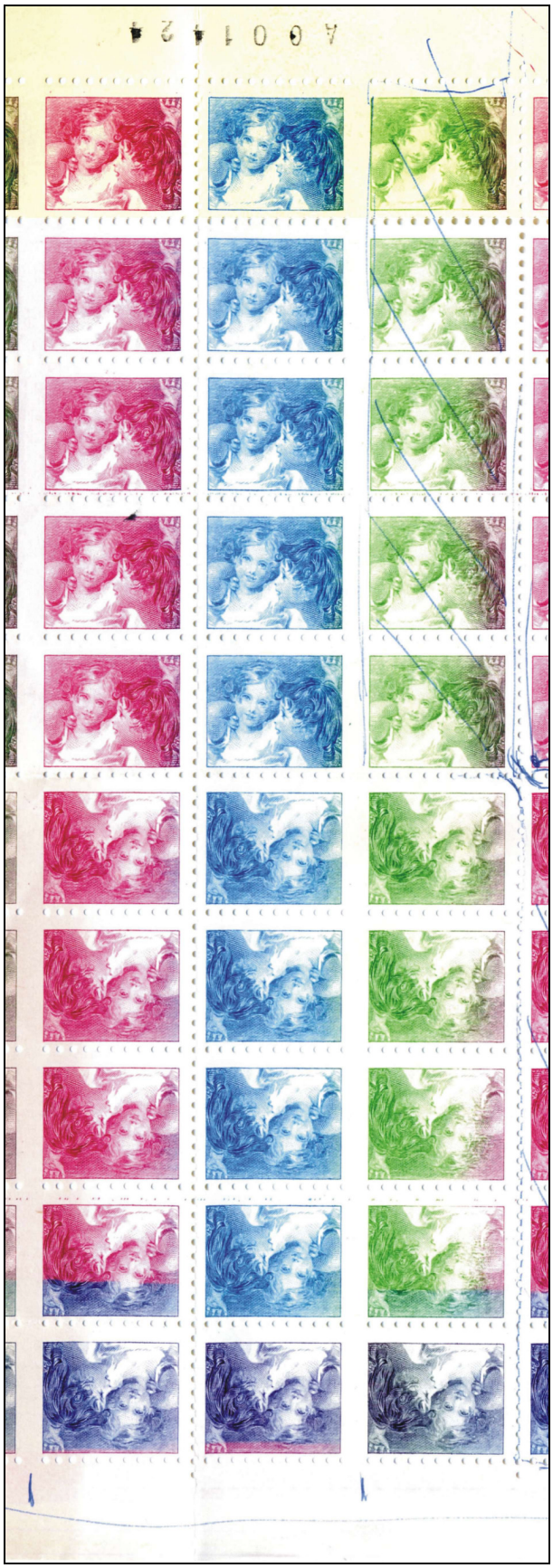

Figure 15. "Baby Sisters" multi-colour intaglio cylinder trial. The labels are laid out in booklet format. A security control number is printed in the top selvedge. [Source: Joel Weiner]

For the trials, we printed the "Baby Sister" labels in booklet format in various colours. We tested the capability of the press to print several colours from the one engraved cylinder. Our tests were done on pregummed paper with both Davac and dextrine gum. These trial printings were not considered to be security items. Although the bulk of the test runs were destroyed, samples in the various colours were retained for further study (Figure 15).

On subsequent tests, we found that Davac gummed paper presented a problem. Small particles of the dry gum detached onto the printing surface as the roll unwound. These particles prevented paper-ink contact in the gravure units so Davac gummed paper was never used on the Goebel press to print stamps.

At the end of the trials in Germany, the machine was accepted for delivery but things were running behind schedule. Very soon after the press was installed in Ottawa, the scheduling problems began to mount. The Post Office had awarded us several commemorative stamps and these were a high priority to them. These could not be scheduled for the Goebel press, and it was agreed the 1968 5¢ Meteorology, Narwhal, and Hydrology issues would be printed by lithography. This we did.

Instead of being able to start up the press on the definitive stamps to gain experience, it was necessary to begin with the attractive, multi-coloured 5¢ Nonsuch issue, using three gravure units and the intaglio unit. However, we got it done. It was also Canada's first die-perforated stamp.

Figure 16. 1968 5¢ Nonsuch – three-colour gravure and one-colour intaglio. Designed by George Fanais and engraved by George Gundersen.

Next we had to print the 1968 5¢ Lacrosse issue which went well, followed by the 5¢ George Brown, a very difficult subject for the new press and its operators (Figure 17, on the next page). All parties would have preferred a slightly stronger image of the Brown portrait which would have required a new set of gravure cylinders and jeopardized the date of issue commitment. Some improvement was made by adjusting inks. For BABN, it was important to get this third commemorative off the press to enable us to produce stamp rolls to get the booklet machine going and to begin supplying definitives for the first class rate.

Figure 17. The other two 1968 Goebel press commemoratives.
5¢ Lacrosse – two-colour gravure and one-colour intaglio.
5¢ George Brown – three-colour gravure and one-colour intaglio.

Multi-colour intaglio printing was first used for multi-denomination booklet stamps and worked well. The first such booklet was a 25¢ booklet with five 1¢ brown and five 4¢ red Centennial definitives issued in September 1968.

Figure 18. 25¢ Centennial booklet. The colour of the 1¢ and 4¢ stamps is different, but they were printed from a single intaglio cylinder. This was the first use of the Goebel press to print stamps with more than one intaglio colour.

The interim supply of panes and booklets fell to CBN under agreement, and I am certain they were delighted to see these orders. A further problem was brought to our attention. Our price for booklets was substantially lower than CBN's, and we were requested to make up the difference on these undelivered booklets. That hurt.

Later Production

In the next few years, several commemorative stamps were produced on the Goebel press. There were six commemoratives in 1969 including the 6¢ Osler and 6¢ Leacock, four in 1970 including the 6¢ Henry Kelsey, three in 1971 including the 6¢ Papineau and 7¢ Laporte (which I feel is one of the finest examples of the art of steel-engraved, single-colour portraiture), and four in 1972 including the 8¢ Frontenac and the 8¢ Native Indians se-tenant pair. The Native Indian series was well suited to the press. The medium value Landscape definitives also appeared in 1972.

Figure 19. Two of the six 1969 commemoratives.
6¢ Osler – two-colour gravure and one-colour intaglio. Designed by George Fanais and engraved by Gordon Yorke.
6¢ Leacock – three-colour gravure and one-colour intaglio. Designed by George Fanais and engraved by George Gundersen.

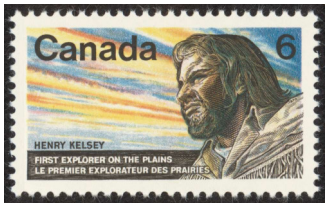

Figure 20. One of the four 1970 commemoratives.
6¢ Kelsey – three-colour gravure and one-colour intaglio. Engraved by George Gundersen.

Figure 21. Two of the three 1971 commemoratives.
6¢ Papineau – three-colour gravure and one-colour intaglio. Engraved by George Gundersen.
6¢ Laporte – one-colour intaglio. Designed and engraved by George Gundersen.

Figure 22. Three of the four 1972 commemoratives. Part of the print run of the 1972 commemoratives had phosphor bar tagging. This required an extra gravure cylinder.
8¢ Frontenac – two-colour gravure and one-colour intaglio.
8¢ Plains Indians (dress and thunderbird) – three-colour gravure and two-colour intaglio for the se-tenant pair.
Engraved by George Gundersen.

For the Henry Kelsey commemorative, apparently there was no photo or image of the explorer. But when the designer visited our plant to view the production, it was obvious this was a self-portrait. When asked about this, Mr. Burton just smiled.

The first stamps to use three-colour gravure (four-colour with the tagging) and three-colour intaglio were the 8¢ Coastal Ships quartet issued on 24 September 1975.

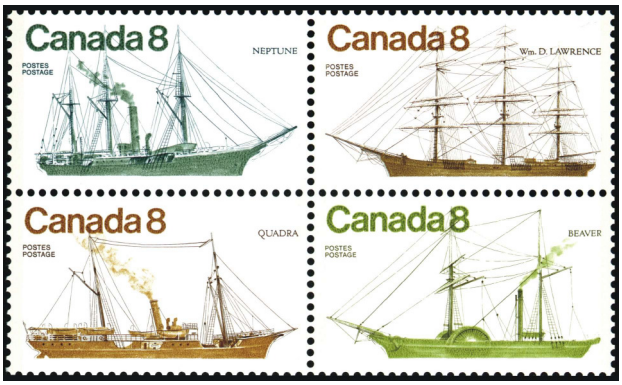

Figure 23. 1975 8¢ Coastal Ships quartet – three-colour gravure plus tagging and three-colour intaglio for the se-tenant block of four. Engraved by Gordon Yorke.

In 1976, Canada and the United States commemorated the US bicentennial with a joint issue featuring common design elements, a map of the eastern seaboard and a portrait of Benjamin Franklin. BABN printed the stamp on the Goebel press using three-colour gravure and one-colour engraving. The master die for the engraved part of the design was a joint Canada-US production. We were working in metric and the US had to be in inches. The American engraver visiting Ottawa commented that if the Lord had wanted stamps to be in metric, He would have had 10 disciples instead of 12.

Aerogrammes of the Canada Goose design were produced on the press using two gravure units with the patterned gumming applied on a third unit. They were sheeted out 4-on with the die cutting carried out in a separate bindery operation.

Figure 24. 1976 10¢ US Bicentennial – three-colour gravure plus tagging and one-colour intaglio.

Overall, the Goebel press was a very efficient machine, and returned reasonable profits on the investment. It could produce stamps quickly if needed, like the two-colour gravure 6¢ Louis Riel which was an afterthought in the 1970 stamp program. We even did a rush job on a three-colour gravure stamp for Zaire when encouraged to do so by the Canadian government.

The stamp booklet operation went well, and was very profitable. Incidentally, the Booklet Criss-Cross machine was never used. We found that by using a small jig-holder device, our staff could do it faster than the machine.

To see a roll of plain, gummed paper enter into the press at one end and come out with combined gravure and intaglio prints, tagged, die-perforated, dried, sheeted, examined, and counted ready for packaging was a sight to behold. All visitors were impressed. We displayed some of the cylinders at the RA Stamp Show in Ottawa (ORAPEX) in the 1970s, and this was appreciated by collectors.

Looking back now, over forty years later, in spite of all the early problems, it seems fitting that the first stamp printed on the Goebel press was the beautiful Nonsuch commemorative which included an engraving by George Gundersen. In 1986, nearly twenty years later, the final Goebel commemoratives would be the EXPO 86 stamps.

Figure 25. EXPO 86, the last commemoratives printed on the Goebel press – three-colour gravure plus tagging and one-colour intaglio.

The very last stamps printed on the Goebel press were from a booklet pane issued on 18 January 1989. The pane consisted of three 2¢, one 6¢, and one 38¢ stamp showing the Parliament buildings.

People Behind the Goebel Press and its Stamps

While I headed up the Goebel project, assisted by Elwood Girling who dealt with all the mechanical aspects in designing the press, it was the designers, engravers, siderographers, and plate printers who were responsible for making the Goebel press a success at BABN.

Figure 26. 1989 50¢ booklet pane, the last stamps printed on the Goebel press – one-colour gravure (the green bars at the top) plus tagging and three-colour intaglio. Engraved by Robert Couture.

George Gundersen (Figure 27) was a highly talented individual, a top-notch engraver who took a businesslike approach to his work. Engraving to a deadline did not bother George. He had left BABN to work at the Bureau of Engraving and Printing in Washington, but returned in the early 1950's to become our Art Director and Chief Engraver.

BABN hired Keith Smith directly from the Ontario College of Art in Toronto. He became a skilled engraver, and had management skills too. He became Art Director when George Gundersen retired.

George Fanais was a quiet man and an exceptionally talented artist and a designer. His first connection with BABN was as a freelancer, but he was persuaded to join our Engraving and Design department. The 8 to 4 routine wasn't easy for George but he adjusted to it. His skill was to be able to take a drawing or sketch and convert it to the black and white tones for the engraver to do his work.

Gordon Yorke (Figure 28) engraved several stamps for the Goebel press, notably the 1975 8¢ multi-colour Coastal Ships se-tenant quartet. Like George Gundersen and Keith Smith, he studied at the Ontario College of Art. He joined BABN in 1935, and trained under Harry P. Dawson.

Robert Couture did a lot of jewelry engraving before joining BABN. For most of his career, he was a lettering and script engraver. Bob loved his craft, and I would bring visitors to him for a good description of the process. After George Gundersen retired and Keith Smith and Gordon Yorke died, Robert stepped up and did some vignette engraving. He engraved several stamps printed on the Goebel press including the 1977 12¢ Joseph-Elzéar Bernier and Sir Sandford Fleming se-tenant pair, the four 1978 CAPEX stamps, and the views of the Parliamentary buildings that graced several booklet panes including the last one from the Goebel press.

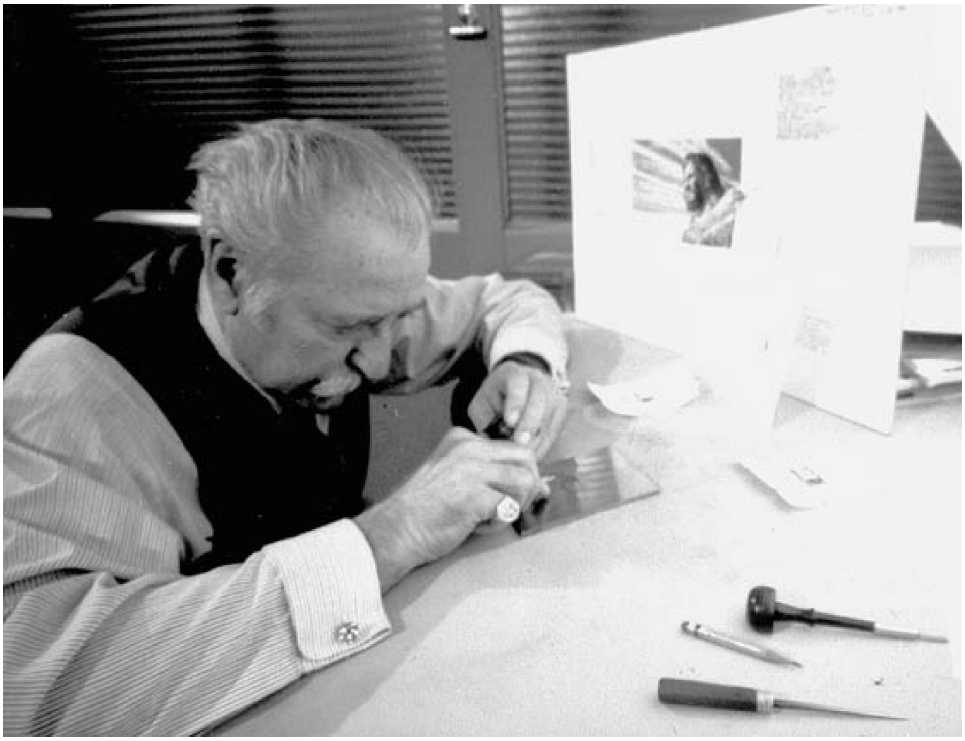

Figure 27. George Gundersen engraving the 1970 6¢ Kelsey commemorative shown in Figure 20. [Source: Library and Archives Canada, s003558]

In the early 1980s, an Ottawa designer and engraver, Gregory Prosser, joined BABN as Art Director and played a role in engraving stamps printed on the Goebel press.

Figure 28. Gordon Yorke engraving a banknote. [Source: *The Art and Design of Canadian Bank Notes*]

Figure 29. Art Ponting engraving the 1974 8¢ Cycling commemorative. [Source: *More Than Just a Pretty Face*]

Vignette and letter engraving are two separate disciplines. Art Ponting (Figure 29) was a letter engraver. However, he did the entire engraving for the 1974 8¢ World Cycling Championships commemorative, it being such a simple design.

Murdo Stewart (Figure 4) and Tony St. Denis (Figure 5) were siderographers. They operated the Rotary Transfer Machine to produce the intaglio cylinders. Graham Martin did the camera work and Stirling McElerhan (Figure 30) made the gravure cylinders. George Cody and Kenny Peterson did the chromium plating. Duncan Beardsley supervised all the examining and finishing of stamps as well as the Booklet Machine. Chemist Geoff Wright made sure the inks were perfect for the job.

It is important to note that the printers and other craftsmen at BABN were up to the task of operating and servicing the Goebel press and contributed immensely to the successful fulfillment of the postage contract. Among the plate printers were Keith Atkinson (Figure 31), Donnie Armstrong (Figure 31), and Eddie Major (Figure 8), all now deceased. Keith Atkinson and Donnie Armstrong were the first two trained on the press.

A Word About Spoilage and Production Approval

One can imagine that in starting up print trials on a complex web-fed machine there would be much spoilage of off-register prints before all units are in perfect register. This is much more complex than sheet production where exact counts can be made of all spoilage. The solution was a large collector basket for all waste as it came off, which would be burned under double custody in a nearby incinerator. Very few "misprints" of stamps from the Goebel press ever appeared.

With such a complex press structure, production approvals were required on a timely basis, much more so than on a sheet-fed press. Canada Post officials were very co-operative in this regard to minimize down time and spoilage.

Figure 30. Stirling McElerhan preparing one of the gravure cylinders for the 1970 6¢ Kelsey commemorative. [Source: *Something Canadian*]

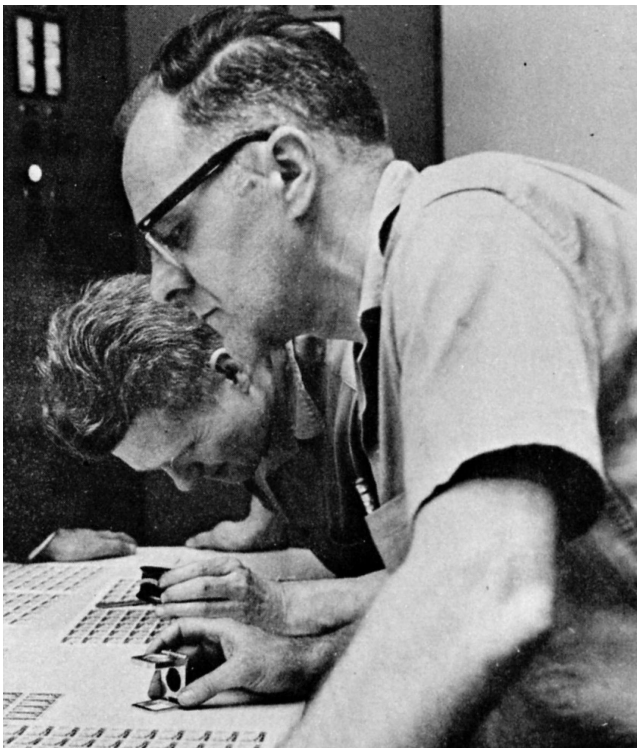

Figure 31. Keith Atkinson (foreground) and Donnie Armstrong examining the 1968 5¢ Nonsuch commemorative just off the press. [Source: *The Postmark*]

I recall one occasion with the large 1973 8¢ silver and 15¢ gold Queen's Visit issue driving with George Gundersen to the summer cottage of Frank Flatters, a Post Office employee, on a weekend to get the approval to proceed to print those stamps. This issue was intended and designed for two large size commemoratives se-tenant with the portrait on one and the script lettering on the other. At the last minute, after both were engraved, the design was changed to two double-large stamps of two denominations. The new larger designs were a collaboration of George Gundersen, who engraved the Queen portrait, and the original designer, Allan Fleming, a noted Toronto graphic consultant.

Figure 32. 1973 8¢ Royal Visit commemorative – two-colour gravure plus tagging and two-colour intaglio. Engraved by George Gundersen.

A Few Afterthoughts

Soon after our Goebel start-up, Pierre Trudeau appointed Eric Kierans Postmaster General. Kierans called for a full study of Canadian stamps and appointed a blue-ribbon committee of Canadian artists and graphic designers. They recommended a new Stamp Advisory Committee, and this would be the beginning of a major change in the printing of Canadian stamps, from the traditional steel engraving issues to predominantly lithographed stamps.

They liked the instant proofing of a litho issue rather than the several weeks delay to see the results of engraving a portrait. Inevitably, engraving would be reduced to lettering and objects, and then disappear from both definitives and commemoratives. The Goebel press would become redundant.

At one point, Canada Post needed a commercial litho printer, and Ashton-Potter of Toronto was chosen. I was asked to meet with them to give advice on stamp production, and reluctantly agreed. They opened the meeting stating they needed no advice from us on litho printing (which was true), and only wanted to discuss perforation and examining of stamps. By doing this, we brought a third supplier into the field of Canadian stamps. My feeling was that, with the majority views of the Stamp Advisory Committee, this would be inevitable and I accepted that.

I recall that George Gundersen predicted our traditional engraved designs of Canadian stamps would be reduced to "litho labels", and he was right.

In 1984, BABN became a wholly owned subsidiary of BCE Inc. As part of the sale of BCE PubliTech in 1988, the

business was transferred to Quebecor Printing Inc. It was subsequently known as the BA Banknote Division of Quebecor Printing Inc. In 1999, BA Banknote was acquired by Munich-based German banknote printer Giesecke & Devrient, and now operates as BA International.

Goebel stopped making printing presses several years ago. They are now part of a Dutch firm specializing in slitters and rewinders.

The last I heard, the Goebel press had been purchased by Canadian Bank Note Co., and it was located in their Ogdensburg, NY, plant.

Most of the information in this article regarding the press is the result of memory only, with no access to files or to the press itself. I was able to consult two short videos by Canada Post that showed the Goebel press in operation, *Something Canadian* and *More Than Just a Pretty Face*.

The purpose of this article is to put on record as much information as possible on this particular era of Canada's philatelic history. Soon no one will be alive who might tell this story.

Acknowledgements

I would like to thank Joel Weiner for providing the illustration of the "Baby Sisters" labels, Robin Harris for the reconstruction of the 1972 10¢ Landscape definitive plate proof, and Cimon Morin who helped with several illustrations. Thanks also to Ian Kimmerly for encouraging me to write this article. Finally, I would like to thank Leopold Beaudet who provided many suggestions and brought his editorial skills to bear.

References

1. Bank of Canada, *The Art and Design of Canadian Bank Notes*.
2. Canada Post Office, *Something Canadian*. Video describes the steps in the production of the 1970 6¢ Kelsey commemorative.
3. Canada Post Office, *More Than Just a Pretty Face*, National Film Board, 1974. Video describes the lithographic, intaglio, and gravure printing processes.
4. Elizabeth Carey, "'Nonsuch' Makes History Again", *The Postmark*, Sept. 1968, pp. 4-7. Describes the printing of the 5¢ Nonsuch commemorative.
5. Swedish Post Office, *A Stamp Is Made*, 1985. Describes the processes used to produce Swedish stamps.

About the author

Ken Sargent received a B. Sc. in Chemical Engineering from the University of Saskatchewan. In 1947, he came to BABN and began a 38-year career in the security printing industry. At the time of the Goebel press acquisition, he was Vice-President and General Manager. Ken was President of the Company for seven years prior to his retirement in 1985. He was a friend and supporter of the philatelic community as evidenced by a letter from Richard Malott on the occasion of his retirement.

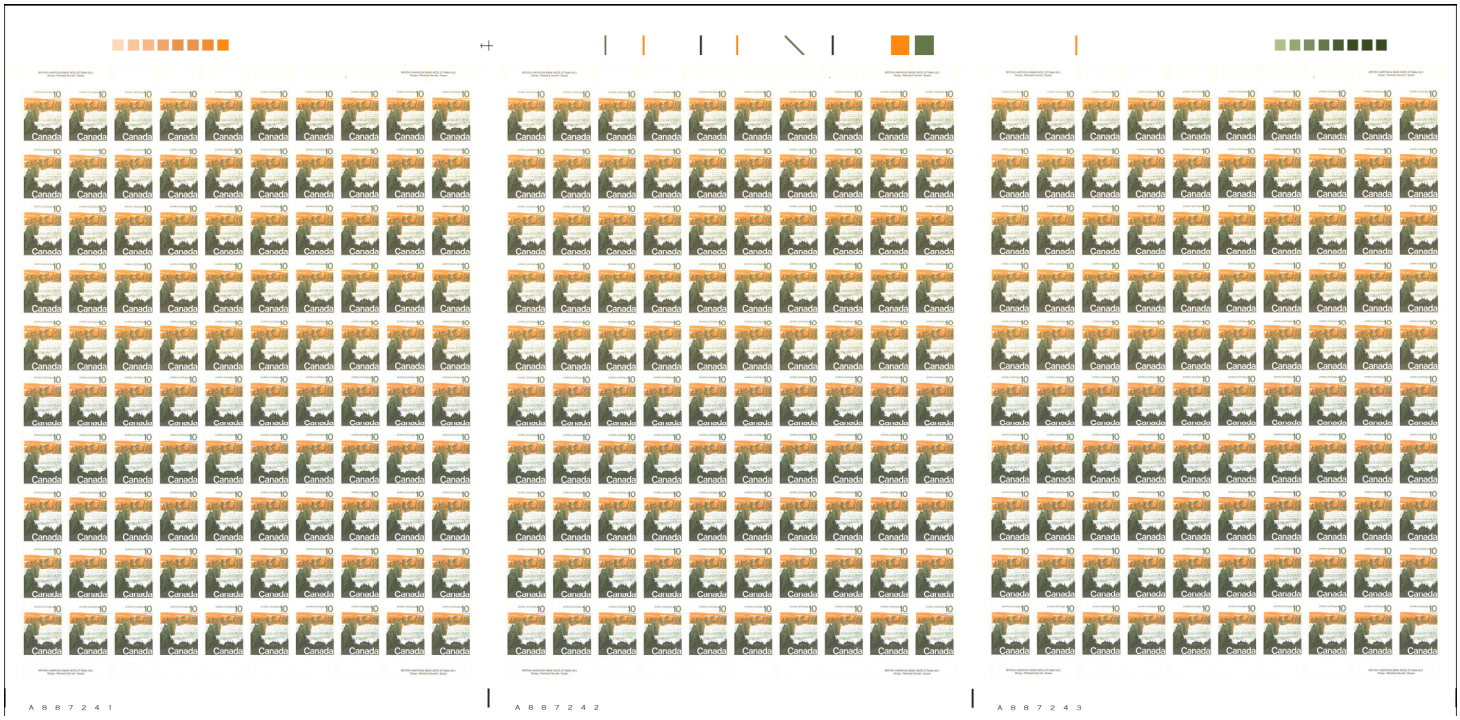

Figure 33. Digital reconstruction of the plate proof of the 1972 10¢ Landscape definitive. The low value definitives had two panes side by side on the web, but the 1972 Landscape medium value definitives had just a single pane. Note the marginal markings in the selvedge that was cut away by the slitters. A security control number appears in the bottom selvedge below the left side of each pane. [Source: Robin Harris]