

Paper in the Making

MARLENE CHAN investigates a proud family tradition at Montreal's Papeterie Saint-Armand, steps from the historic Lachine Canal.

A HEAVY METAL door painted bright yellow marks the entrance to La Papeterie Saint-Armand, the legendary Montreal paper mill that David Carruthers launched in 1979. Situated in the heart of what was one of Canada's primary manufacturing centres from the mid-19th century until the end of the Second World War, the mill faces rue Saint-Patrick and the historic Lachine Canal.

Opened in 1825, the canal linked the Old Port of Montreal with Lake Saint Louis and played a critical role in the industrial development of this part of Montreal. It was an essential link in the network that allowed ships to make their way to the heart of the continent before 1959, when the St. Lawrence Seaway opened.

The rapids that made locks necessary for the passage of ships also provided a source of hydraulic power for local factories, including the Dominion Oil Cloth & Linoleum Co.—premises where Saint-Armand now occupies 15,000 square feet.

History and tradition are as integral to the firm's name as they are to the location and day-to-day operations of the *papeterie*. Saint-Armand takes its name from a town in Quebec's Eastern Townships that has been a key gateway to Quebec since the 18th century, when it welcomed thousands of United Empire Loyalists following the American Revolution.

A mile north of the U.S. border, the town was also an entry point for slaves travelling the Underground Railroad to freedom in Canada. The town's name spoke to Carruthers of fresh starts as he decided to sell his shares in a local dairy farm, resign his administrative position with the Pulp and Paper Technical Association of Canada, and follow in the steps of his forebears by establishing Saint-Armand.

THREE GENERATION OF PAPERMAKERS
Carruthers' grandfather George Carruthers established the Interlake paper mill in

St. Catharines, Ontario at the beginning of the 20th century. (The mill still operates today, as part of Dunn Paper Co., producing specialty tissue and machine-glazed papers.) George was also a dedicated machinist who authored *Paper in the Making* (Garden City Press Co-operative, 1947), a history of machine-made papers and papermaking in Canada.

David Carruthers' father, Hugh, marketed and sold paper for the family firm, imaginatively thinking of new ways to compensate for the vagaries of the market. David recalls an extreme, humorous example when sales of red cap paper for cap guns declined and his father proposed production of red toilet paper, trademarked The Hunter's Pack. "Don't get shot with your pants down!" ran the pitch, promising a safer squat than white tissue, which could be mistaken for a deer's tail by trigger-happy hunters.

David has inherited a storyteller's flair for constructing a compelling narrative as well as the intellectual rigour and business acumen required to operate and sustain Papeterie Saint-Armand. Complementing his own skills are those of his wife, the fine art printmaker, printer and artist Denise Lapointe, who has been co-owner of the business since 1991.¹

Carruthers admits that Saint-Armand could not thrive or even continue to exist without her initiative, encouragement, tenacity and drive. She has assumed responsibility for aspects of the business related to accounting, marketing and sales. She is a skilled communicator who understands the needs of artists, a cornerstone of the business.

ANCIENT PROCESSES & MODERN INNOVATIONS

The sprawling, loft-style interior of the mill is a forest of papers drying on stylized trees and racks constructed and designed by Carruthers. On entering, depending on the season, visitors are greeted by bags containing varieties of potatoes or other garden produce and jars of



*An assistant helps David Carruthers (right) at Papeterie Saint-Armand.
(Photo courtesy of Papeterie Saint-Armand)*

honey. While Carruthers' extensive knowledge and expertise as a papermaker are legendary, his interests extend to the outdoor environment as an avid cyclist, canoeist, gardener, beekeeper and outdoor cook, his favourite pastime. Lapointe is also an enthusiastic gardener and inventive cook.

The physically exacting process Carruthers and Lapointe employ in making paper at Saint-Armand involves no chemical or bleaching agents. Cotton offcuts from clothing manufacturers and recycled rags form the basis of the pulp. Linen, flax, straw, jute and sisal are also used. Under the trade name of Old Master, the mill has revived techniques dating back to the 17th century that used linen to produce the paper used for ancient manuscripts. Old Master paper has been used in many restorations of books, wallpaper and other commissions, such as for the proclamation of the Constitution of Canada and Quebec's *Charte des droits et libertés de la personne*.

Saint-Armand also makes paper on a vintage Fourdrinier Machine imported from Scotland and installed in 1992. This paper uses the rags from offcuts of white T-shirts and blue denim combined with flax straw from local farmers. The machine-made paper is turned into a wide variety of pads and books.

The company also produces Sabretooth, an archival sanded pastel paper in many colours that is ideal for pastel, but can be used for charcoal and oil too. It has enough resistance to be sanded down to remove some of the

texture and scratched to reveal underlying layers and colours to produce works of *sgraffiti*.

Original customers Steve Steinberg (New York Central Art Supply) and Ben Woolfitt (Woolfitt's Art Supplies) are among the over 200 retailers and prestigious art supply outlets in North America that purchase Saint-Armand paper today. Always up for experimentation, designing and developing new grades of paper, Saint-Armand has a reputation for innovation. Carruthers developed a linen paper from which artist Alex MacKay fashioned his *Treaty Canoe* (1999), launched on the Thames River in London; John Heward painted a 400-foot-long scroll from Saint-Armand that was spread in front of the Imperial Palace in Beijing.

At McGill University, Robert Lang—physicist, mathematician and one of the world's leading experts in the art of origami—worked in situ to produce a life-size model of a giant Pteranodon. It was folded from a single sheet of 4.23-metre-square paper made from the largest mould ever made at the mill. The sculpture was magnificently installed in the cupola ceiling of the Redpath Museum. Lang's demonstration project, art installation and scientific public lectures drew attention to the wide range of practical applications for computational origami, from monumental paper sculptures and space telescopes to automotive applications like folded airbags, medical applications such as heart valve stents, and consumer electronics.

In addition to supplying artists, Saint-Armand

regularly entertains requests to reproduce historic 19th-century North American wallpapers for various heritage home restoration projects. Spadina House in Toronto is one such example, which specified a paper of much tooth that was dyed four times to meet the project's requirements.

"Living history" battle re-enactments also seek authenticity, ordering paper that can be impregnated with casein to caulk boats or cartridge paper for guns. Saint-Armand was commissioned by the Vasa Museum to play a role in the firing and creation of a replica of the cannon and one side of the iconic Swedish warship *Vasa* in the interest of science. The *papeterie* developed a recipe likely used in the 16th century for grey linen cartridge paper incorporating wool that impedes smouldering.

A "LONG TAIL" BUSINESS ALL ABOUT HORNIFICATION

Carruthers and Lapointe oversee all aspects of running the paper mill themselves. They are no strangers to the risks and pitfalls of the industry. They particularly enjoy the challenge of collaborating directly with artists, curators, archivists, other suppliers and retailers either on the premises, on the Internet, or through participation at local, national or international conferences, exhibitions and trade shows. For example, Saint-Armand is regularly represented at the CODEX Book Fair & Symposium in Berkeley, California, founded by Peter Koch

and his wife, Susan Filter, a paper conservator.

Blogger Barry Welford explains the endurance and longevity of Saint-Armand through the "long tail" business model.² The former *Wired* magazine editor Chris Anderson popularized the concept in his book *The Long Tail* (2006), which describes the market for any product as a series of microniches (the tail) rather than a monolithic mass market (the head): "In an era without the constraints of physical shelf space and other bottlenecks of distribution, narrowly targeted goods and services can be as economically attractive as mainstream fare."³

In avoiding large and indiscriminate marketplaces, Saint-Armand, in Welford's view, has expertly cultivated a series of opportunities for itself rather than become dependent on any one market. This has been a complex process involving spontaneity, scarcity, word of mouth and passion as much as any deliberate marketing scheme.

Carruthers jokingly says that he's been known to determine the extent of a person's interest in the subject of papermaking by trying to conduct a conversation on the phenomenon of hornification as a kind of litmus test. Technically, hornification is a term used in wood pulp and paper research literature that "refers to the stiffening of the polymer structure that takes place in lignocellulosic materials upon drying or water removal."⁴ To a papermaker, it is a physical property related to hydration or swelling and of endless fascination.

Construction of the moulds that form the



Sheets of Saint-Armand paper hang on trees to dry. (Photo courtesy of Papeterie Saint-Armand)

paper is especially crucial in determining the quality of the paper and affect the process of hornification. An appreciation of hornification translates into the look and feel of the paper, its aesthetic appeal. Many book designers and publishers participating in the Alcuin Society Awards for Excellence in Book Design implicitly understand the role of hornification in the papermaking process, and Saint-Armand paper is often utilized to advantage. Gaspereau Press in Wolfville, Nova Scotia, and Barbarian Press in Steelhead, British Columbia, are but two examples of presses using Saint-Armand paper extensively for bookmaking and bookbinding.

Sometimes the designer will specify the use of Saint-Armand paper, especially in the category of limited editions. Their handmade paper is coveted by artists and has earned an esteemed reputation in the field of art and design internationally. This alone is reason enough to ensure that handling paper made in the tradition of ages past continues to make Carruthers' heart sing on a daily basis.

The only one of its kind in Canada, La Papeterie Saint-Armand, like its owners and the handmade paper they make, is a rarity and a national treasure.

1. Lapointe has a working artist's studio within Saint-Armand's vast expanse of floor space that contains several printing presses, including Vandercook, platen and etching presses. Drawers of wood and lead type are shared with Pierre Fillion, editor and publisher of *Éditions du Silence*, who operates his own printing presses in a workspace next to Denise. Clement Roger operates a letterpress in another part of the shop for wide-ranging jobs such as labels and business cards.
2. Barry Welford, "An Ideal Long Tail Paper Maker in Montreal," *The Other Blokes Blog* (Oct. 2005), <http://www.otherbb.com/2005/10/ideal-long-tail-paper-maker-in.html> (accessed August 5, 2016).
3. Chris Anderson, *The Long Tail: Why the Future of Business Is Selling Less of More* (New York: Hyperion, 2006), 52.
4. J.M.B. Fernandes Diniz et al., "Hornification—Its Origin and Interpretation in Wood Pulps," *Wood Science and Technology* 37.6 (April 2004): 489.

.....
 ~ Marlene Chan is a contributing editor of *Amphora* and a board member *ex officio* of the Alcuin Society. She recently received a master of research degree in the History of the Book from the University of London.

WELCOME NEW MEMBERS!

The Alcuin Society wishes to welcome the following new members:

Emily Carr University of Art and Design, Vancouver, BC
Kat McGrath, Vancouver, BC
Jack Page, Burnaby, BC



Alcuin Society membership is open to any individual, institution or organization with an interest in the book arts, the history of books, book collecting and reading. An individual membership is \$50 a year, while institutional membership is \$75 a year. Students may join at the rate of \$25 a year for up to three years. A patron membership is available at the rate of \$125.

Society members within Canada pay in Canadian dollars; foreign memberships must be paid in U.S. dollars. Payment may be made online using PayPal or via cheque or money order made payable to The Alcuin Society, P.O. Box 3216, Vancouver, British Columbia V6B 3X8.