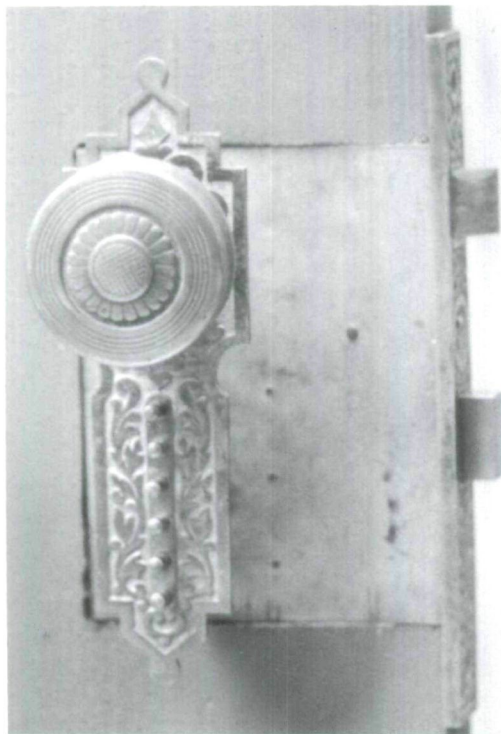


- wheel in the United States was 67 versus 101 horsepower per steam engine. McNally, "Water Power on the Lachine Canal," 72.
25. The wholesale hardware firm of Crathern & Caverhill was founded in Montreal in 1853. It became Caverhill, Learmount & Co. in 1897 and is still in existence. Montreal Business History Project. *A Guide to the History and Records of Selected Montreal Businesses before 1947 / Guide pour l'étude d'entreprises montréalaises et leurs archives avant 1947* (Montreal: McGill University, 1978), 60–61.
  26. There are few sources for the American cut nail industry. One exception is Amos J. Loveday Jr, *The Rise and Decline of the American Cut Nail Industry: A Study of the Interrelationship of Technology, Business Organization and Management Techniques* (Westport, Conn.: Greenwood Press, 1983). This book concerns the industry in Wheeling, W. Va., a cut nail industry centre.
  27. Hersey obtained Canadian patents for a nail machine in 1882 and nail plate feeders in 1886 and 1890. Peter J. Priess and P. Michael Shaughnessy, "An Inventory of Canadian, British and American Nail Patents to 1900," Manuscript Report Series no. 93 (Ottawa: Parks Canada, 1972), 6–8.
  28. Montreal Rolling Mills became part of the Steel Co. of Canada Ltd. merger in 1910.
  29. Hersey had other business interests. In 1889 he helped create Page & Hersey Co. to manufacture iron tubing (pipe). It leased the idle tube mill of J. C. Hodgson along the Lachine Canal, installed new equipment and made it into a prosperous company. Unfortunately, at the end of the lease, Hodgson sold the site to Montreal Rolling Mills, putting Page & Hersey out of business. A new company, Page Hersey & Co. was established in Guelph in 1903. Between 1895 and 1898 Hersey lived in Santa Clara, Calif. where he invested in vineyards and orchards. "Hersey Autobiography," 18–21.

## Revolution Forgotten: The Peters' Combination Lock Co., Moncton, N.B.

CHARLES ALLAIN



Last year, the Moncton Museum installed a push-button combination lock on its storage room doors. An article in the April 1992 issue of the *Security Technician* provides interesting background information on this device:

*In 1964, a commercial locking device was introduced that revolutionized the security industry. The product: a mechanical push-button combination lockset. The concept required that one press a series of buttons on the face of the lock in a correct sequence. A turn knob would then retract the bolt and open the door. Simplex push-button locks proved to offer an immediate and effective solution to key control. Locks did not have to be changed or re-keyed when employees left the company, and restricted areas remained off-limits to unauthorized individuals. Unless one knew the correct code, access was denied. ... If the code were leaked, it could be changed without removal of the lock from the door.<sup>1</sup>*

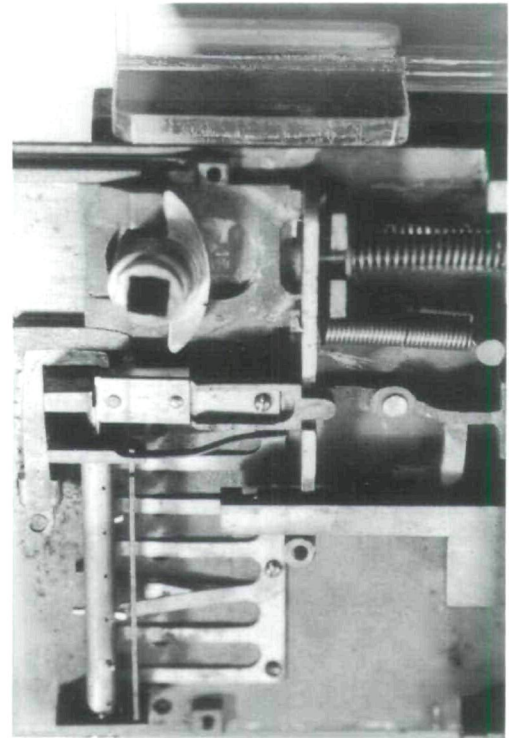
It is perhaps a little ironic that this modern lockset was installed to help guard a small collection of artifacts that "revolutionized" the security industry over 115 years ago.<sup>2</sup> Unfortunately, changes in Canadian tariffs and poor

◀  
**Fig. 1**  
Door assembly of Peters' combination lock. The lock is activated by pushing the buttons below the knob in predetermined sequence. (All photography by Lina Richard)

business management crushed a young man's dreams of manufacturing this invention. His "revolution" is now largely forgotten, its fragments displayed in the Moncton Museum's gallery.

Alfred E. Peters was a man with an idea and a desire to succeed. While living in Moncton, he invented a keyless combination lock that opened by pressing buttons in a predetermined sequence (Fig. 1). Peters received his Canadian patent in July 1875. The inventor described the mechanism as consisting:

*... of a spring acted roller with changeable pins, that are acted upon by springbars depressed by a pin inserted through perforations of the face plate. The springs are engaged by a sliding toothed springbar and allows thereby the return of the spring acted roller except when the correct combination is set in regular succession which prevents the return of the roller and allows the throwing of the bolt.*<sup>3</sup>



**Fig. 2**  
Interior view of the lock's mechanism.

Peters also secured patents in the United States, England, France and Germany and hoped to eventually sell his lock throughout the world (Fig. 2).<sup>4</sup>

According to Canadian Patent Office records, this invention was not the first push-button lock patented in Canada. In 1872, Mr George H. Pencock of Webster, New York, registered a similar device.<sup>5</sup> According to the *Canadian Patent Office Record*, this lock worked by connecting the bolt, lever and finger bars in such a manner as to allow the bolt to be shot back by a proper manipulation of the finger bars.<sup>6</sup> Preliminary research has yet to determine whether the Pencock lock was ever manufactured. However, Peters boasted that his device was "constructed upon a principle which [had] never before been applied to such a purpose."<sup>7</sup> The inventor obviously believed that his idea would revolutionize the security industry of his day.

Alfred Peters quickly pursued his dream of manufacturing his new lock. With the help of New Brunswick and Prince Edward Island financiers, the young inventor opened a factory in Waterbury, Connecticut.<sup>8</sup> In 1877, the small company started marketing its products on both sides of the border.

Simplicity and security became the lock's chief selling features. Ordinary devices could not compare to the new invention. As the *Saint John News* pointed out, "Any person with a good sized bunch of keys can go through half the doors, desks and trunks in the town, and an expert will open them all with a pen knife,

a nail or a piece of wire."<sup>9</sup> For \$2 to \$7, a family could ensure perfect safety from servants or boarders "who had been once entrusted with keys but had subsequently left the household."<sup>10</sup> Agents boasted that the lock could not be successfully tampered with and that "the immense number of possible combinations renders the discovery of the 'open sesame' almost impossible."<sup>11</sup> Its combination could be easily changed without removing the device and the mechanism offered a staggering number of possible variations.

The lock company received orders from both Canada and the United States. Peters set up an office in Boston and began contacting prospective clients. In the Maritime provinces, many post offices took advantage of the new device.<sup>12</sup> This seemed to be an important application for the new product: in March 1878, for example, Peters participated in the Paris exposition where, along with examples of his locks, was a display of 70 post office boxes.<sup>13</sup> The mechanism received a medal and was one of the few American lock companies recognized that year.<sup>14</sup>

Peters' future looked very bright and his success assured. Sales increased steadily, and Canada became the company's principal market. However, the inventor had sailed relatively smooth waters compared to what lay

ahead. Protectionism, poor business decisions – and perhaps even industrial sabotage – eventually stymied plans to profit from this invention.

The introduction of federal protectionist policies in 1878 made it difficult for Peters to sell his American-manufactured locks in Canada. MacDonald's National Policy encouraged the development of Canadian enterprise through the use of tariffs. Because these taxes increased the price of Peters' locks, the company built a second factory in Moncton, New Brunswick, to remain competitive.

The plans to build a second plant elated local conservatives. Moncton's Intercolonial shops had recently laid off a large number of workers and the party's popularity was declining rapidly. H. T. Stevens, editor of the conservative newspaper *Moncton Daily Times*, strongly supported the company and encouraged local people to purchase shares. The newspaper editor took great pride in pointing out that Peters' move to Canada proved the National Pol-

icy's effectiveness. Stevens became a major shareholder and eventually served on the company's executive. His paper regularly boosted the enterprise and praised its success.

Thanks to the newspaper articles, Moncton strongly supported the new venture: the company received free land and tax concessions to help ensure its success. Peters built an impressive three-storey brick structure, which was completed in 1880.<sup>15</sup> The initial staff of 30 employees grew to approximately 150 in 1883. Peters produced his locks, but also manufactured a wide range of brass building hardware and specialized in gold and silver plating. Between 1880 and 1883, shareholders received three, half-yearly dividends of five per cent signalling the company's prosperity.

The company was anything but sound, however, and in April 1884, its shareholders met to discuss liquidation. The news of the company's failure rocked the community. How could a business that had always reported a profit close up with so little notice?

In his book *A History of Moncton Town and City, 1855–1965*, Lloyd Machum attributed the failure to a story claiming that a large lock manufacturing company had sent experts around the country demonstrating how easily the locks could be picked.<sup>16</sup> Machum does not document the source of his information; it was probably handed down orally two or three generations before finding its way into written history. The story might have its roots in an incident that occurred before the company came to Moncton, however. According to articles in the *Saint John Telegraph* and the *Saint John Sun*, "A lad was observed on Saturday last tampering with the Peters' Combination Locks on the Post Office boxes, and those who observed him operating on the locks said he could pick any of the combinations he tried and open the boxes."<sup>17</sup>

The Peters family responded by offering a two-hundred dollar reward to "any boy or man in Saint John or elsewhere who will pick one of said locks."<sup>18</sup> The lock's security remained a sensitive issue. Future advertisements not only offered the reward, but stressed that officers of the Massachusetts Detective Force recommended the device as "the most perfectly secure lock they had ever seen."<sup>19</sup> While the company continued production of its keyless locks after moving to Moncton, newspaper advertisements stressed all of the plant's goods and services. The keyless lock eventually received little fanfare and soon Peters began



◀  
**Fig. 3**  
Decorative face plate of  
Peters' lock.

**Fig. 4**  
A. E. Peters' house,  
Highfield Street,  
Moncton, New  
Brunswick.



manufacturing a standard key type lock. Had the combination lock been discredited or was the company simply diversifying its production to profit from opportunities created by the National Policy?

The reason for Peters' closure is perhaps slightly less romantic and far more complex than Machum's story. To open its Moncton operation, the lock company sold approximately \$100 000 worth of shares, largely to local businesspeople. The \$70 000 of capital stock of the Connecticut operation was admitted into the new company. The Waterbury operation failed after the company began in Moncton. The old factory's land and buildings could not be sold and were essentially valueless, but the company's executive kept the old plant on its books as an asset worth over \$70 000.<sup>20</sup>

The company was loaded from the start with a large amount of stock for which nothing of value had been contributed to the new enterprise. To maintain the shareholder's confidence, the company declared dividends regardless of its debt load. Because almost a full year was spent in preparing moulds and setting up machinery, actual production in Moncton started in 1881 only. Yet the corporation paid three, half-yearly dividends of five per cent and declared a fourth one in 1883, which it could not pay. That same year the New Brunswick government granted the Peters' Combination Lock Company permission to issue yet

more stocks. The company argued that ever-increasing orders required the purchase of more equipment, but this move was more an effort to increase the company's liquidity. Eventually, one of the shareholders blew the whistle and, against management's wishes, applied to have the company put in liquidation.

A subsequent investigation revealed that the company was indebted for approximately \$60 000, against \$8000 worth of manufactured and unmanufactured goods. After a long deliberation the plant was sold at auction for a mere \$8000. The shareholders, many of them from Moncton, lost their investments.

Some people began pointing fingers while others tried to make political hay of the situation. The liberal paper *Moncton Transcript* delighted in pointing out just what great and glorious results the National Policy was having in Moncton. Angry letters attacked both A. E. Peters and H. T. Stevens. One article accused some executive members of quietly unloading their stocks in anticipation of future problems. Both Peters and Stevens diversified their business dealings in 1881 when they became part-owners of the Record Foundry.<sup>21</sup> However, both men suffered substantial financial losses in the lock factory's bankruptcy.<sup>22</sup>

A. E. Peters continued to do business in the community and, under his management, the Record Foundry became one of Moncton's most successful companies and one of the region's largest stove manufacturers. There is nothing



documenting how the inventor viewed the disaster. It must have been a very hard blow to a man who had revolutionized the security industry before his 21st birthday and saw the collapse of his dreams barely 10 years after.

Perhaps because of his youth, or because of his eventual success at the Record Foundry, Moncton quickly forgave the young Peters. In 1902–03, after years of hard work, Alfred E.

**Fig. 5**  
The shape of the dormer  
of A. E. Peters' Moncton  
house is very similar to  
that of the lock's face  
plate (Fig. 3).

Peters built his retirement house on Moncton's Highfield Street. (Fig. 4) Judging by the similarity between the dormer's decorative detailing and the shape of the combination lock's face

plate (Fig. 5), perhaps the old gentleman was still proud of his first foray in the business world.

#### NOTES

1. "Simplex Locks in the Residential Market," *Security Technician*, April 1992, 49.
2. The Moncton Museum has approximately eight locks and various pieces of lock hardware in its collection.
3. A. E. Peters, "Application for Patent," 12 July 1875, patent number 5001.
4. "United States Trade Journal" as seen in the *Moncton Daily Times*, 7 June 1880.
5. *The Canadian Patent Office Record*, March 1873, 3.
6. *Ibid.*
7. "United States Trade Journal" as seen in the *Moncton Daily Times*, 7 June 1880.
8. Connecticut was the home of most early American lock firms. See Thomas F. Hennessy, *Early Locks & Lockmakers of America* (Des Plaines: Nickerson & Collins, 1976). Hennessy makes no mention of the Peters' lock.
9. As seen in the *Moncton Daily Times*, 6 October 1877.
10. *Ibid.*
11. *Ibid.*
12. Newspaper reports indicate that the Peters' locks were installed in Truro Acadia Mines; New Glasgow, Nova Scotia; Petitcodiac, Saint John, and Fredericton, New Brunswick.
13. "Waterbury American" as reported in the *Moncton Daily Times*, 21 March 1878.
14. *Moncton Daily Times*, 13 September 1878. The article does not specify the nature of the award.
15. The building is located on Church Street behind present-day Moncton High School.
16. Lloyd Machum, *A History of Moncton Town and City, 1855-1965* (Moncton: City of Moncton, 1965), 103-104.
17. *Moncton Daily Times*, 16 October 1878.
18. *Ibid.*
19. *Moncton Daily Times*, 7 June 1880, reprinted from the *United States Trade Journal*, date not indicated.
20. For a further discussion, see *Moncton Daily Times*, 25, 26 and 29 April 1884.
21. C. B. Record started his foundry in 1857 and passed it on to his son upon retirement in 1880. Unfortunate business dealings forced the family to sell the foundry at auction in 1881. It was purchased by a joint company consisting of Alfred E. Peters, his brother Joshua, H. T. Stevens, G. F. Atkinson and C. B. Record. The operation finally closed in 1966.
22. According to the *Moncton Daily Times*, 23 July 1884, H. T. Stevens lost \$1748.94 and A. E. Peters was out \$2154.16.