

Hecla Powder Company

Blasting Cap Tins and Related Ephemera

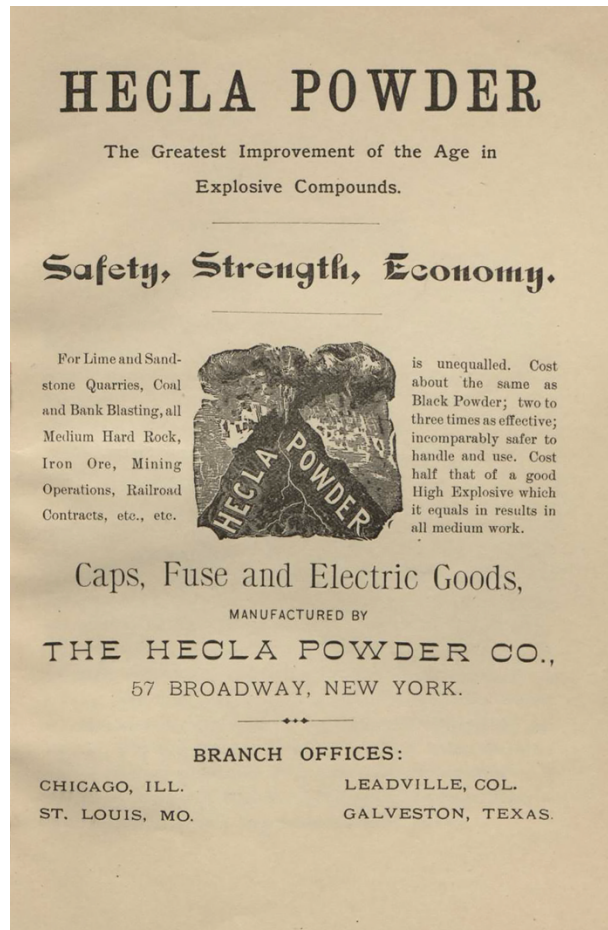
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May 1, 2025

Hecla Powder Company was a relatively small dynamite manufacturer situated in the Northeast. It operated between 1880 and 1905. Its artifacts are rare and difficult to date. However, I have constructed a timeline for Hecla's artifacts using the business addresses of Hecla's principal offices over time and the dates of various publications in which these addresses appeared. The earliest of these addresses is 57 Broadway, New York. This address was used in an 1882 publication regarding the history of Union and Middlesex Counties, New Jersey.¹ Hecla had been formed two years earlier, in 1880, by Charles A. Morse and his older brother George Franklin Morse, together with a cousin, Jerome Edward Morse. George Franklin Morse was elected President; Jerome Edward Morse, Treasurer and Manager; and Charles A. Morse became plant superintendent. When Charles Morse died of typhoid fever in 1882, he was succeeded as superintendent by John Ward, a nitroglycerine maker.²

The company was incorporated in New York and began its operations with paid up capital of \$100,000. It established a business office in New York City and purchased a small factory site near Rahway, New Jersey. An 1882 trade catalogue for Hecla Powder Co. lists Hecla's business address as 57 Broadway, New York, with branch offices in Chicago, Ill., St. Louis, Mo., Leadville, Col., Galveston, Texas.³ The catalogue describes Hecla Powder as "The Greatest Improvement of the Age in Explosive Compounds."⁴

This catalogue vaguely describes the original proprietary formula for Hecla Powder as something of a cross between traditional black powder and dynamite. It was sold in cartridges that resembled sticks of dynamite, but the catalogue claims that these cartridges could be disassembled,



¹ W. Woodford Clayton, *History of Union and Middlesex Counties, New Jersey, With Biographical Sketches of Many of Their Pioneers and Prominent Men* (Philadelphia: Everts & Peck, 1882), 411.

² Arthur Pine Van Gelder and Hugo Schlatter, *History of the Explosives Industry in America* (New York: Columbia University Press, 1927), 658–59.

³ Hecla Powder Company, *Hecla Powder, The Greatest Improvement of the Age in Explosive Compound* (New York: Gazlay Brothers Printers, 1882). Hagley Museum and Library, Digital Collections, https://digital.hagley.org/I091111_hecla, accessed April 30, 2025.

⁴ Hecla Powder Company.

and their contents used in bulk like black powder. When I first posted an article about this to the Blasting Cap Tin Collectors Facebook page in July 2023, Jerry Cestkowski responded that he believed that Hecla's powder originally "was nearly identical to Judson Powder (mostly black powder with up to ten percent nitroglycerin)." Jerry is the author of the excellent book *American Dynamite: An Illustrated History*.⁵ Unlike black powder, Hecla's proprietary Hecla Powder required the use of conventional or electric blasting caps to detonate the explosive. Hecla sold what it called "SPECIAL HECLA EXPLODERS" for this purpose.⁶ We don't know what these were, but I assume that they were conventional blasting caps. The trade catalogue does not designate the strength of these exploders, but describes them as more powerful than single, double, or triple strength sold by others. Van Gelder and Schlatter write that Hecla Powder was not used to any extent, and that the company was soon supplying conventional dynamite under the name "Miners' Friend."⁷

In 1883, the price of 40% dynamite was about 27-30 cents a pound, and the large profits the organizers of Hecla were hoping for failed to materialize. Lamott DuPont secured an interest in the company with the purchase of 112 shares of company stock. A year or two later when additional capital was needed, William DuPont invested an additional \$100,000 in the company on behalf of Repauno Chemical Company and acquired a majority interest in Hecla. As a consequence, William DuPont became president of Hecla Powder Company in 1885. In 1886, manufacturing ceased at Rahway, and the plant was dismantled after the Repauno interests acquired the balance of the Hecla stock. The company name was changed to Hecla Dynamite Company and operated as a selling concern until the corporation was dissolved on September 30, 1905, and the plant site at Rahway was sold.⁸

The output of Hecla's Rahway plant probably did not exceed 5,000 pounds a day at peak production. However, the company supplied large quantities of dynamite to Chateaugay Iron Ore Company at Lion Mountain, Plattsburg, New York during 1883 and 1884. The French Panama Canal Company also purchased large amounts of Miners' Friend dynamite. On October 10, 1885, the United States government used 48,537 pounds of Hecla's 75% dynamite for "the celebrated Hell Gate blast . . . when Flood Rock was removed."⁹ The Hell Gate rocks at the entrance from New York harbor into Long Island Sound had been a hindrance to navigation since the settlement of Manhattan Island. Their removal made it possible for the ships of the day to use this passage safely. At the time, the Hell Gate blasts were the largest ever fired for peaceful purposes.¹⁰

Very few artifacts from Hecla Powder Company are known to exist, but they include two blasting cap tins. Both are plain, unpainted tin boxes with tabbed corners and paper labels. One tin is in the collection of John Kynor, Sr., and two tins are in the collection of Jack Purson. I described two of these tins in a brief article posted to the Blasting Cap Tin Collectors Facebook page on July 10, 2023.

⁵ Gerald P. Cestkowski, *American Dynamite: An Illustrated History* (Atglen: Schiffer Publishing, 2024).

⁶ Hecla Powder Company, *Hecla Powder, The Greatest Improvement of the Age in Explosive Compound* (New York: Gazlay Brothers Printers, 1882). Hagley Museum and Library, Digital Collections, https://digital.hagley.org/1091111_hecla, accessed July 8, 2023.

⁷ Arthur Pine Van Gelder and Hugo Schlatter, *History of the Explosives Industry in America* (New York: Columbia University Press, 1927), 659–60.

⁸ Arthur Pine Van Gelder and Hugo Schlatter, 659–60.

⁹ Arthur Pine Van Gelder and Hugo Schlatter, 660.

¹⁰ "Brig. General Henry L. Abbot," *The Explosives Engineer*, April 1923.



Jack Purson's Hecla Tin



John Kynor's Hecla Tin

Jerry Cestkowski noticed that the two tins are different from one another. Among other things, each has a different business address for Hecla Powder Company. Each paper label is also printed in a different font. John's tin also has a decorated border around the edge of the paper label. Jack's does not.

Jack's tin reads:	John's tin reads:
100 HECLA Quadruple Force BLASTING CAPS THE HECLA POWDER CO 239 BROADWAY NEW YORK	100 HECLA Quadruple Force BLASTING CAPS THE HECLA POWDER CO. 96 LIBERTY STREET NEW YORK

When I saw Jack at the Mining Artifact Collectors show in Tucson in February of this year, he asked me to photograph several tins for him. I took them home with me to Phoenix, and photographed his Hecla tins, among others. Here are the results.





The label on the top shows an address for Hecla of 239 Broadway, New York. This is the same address shown in this 1892 advertisement for Miners' Friend dynamite.



Advertisement for Hecla Powder Co.¹¹

¹¹ *School of Mines Quarterly, A Journal of Applied Science* XIII (1892): 15.

The other Hecla tin in Jack's collection is this one.



The label on the top of this tin is very difficult to read; however, it appears to read “100 Hecla Quadruple Force Blasting Caps, The Hecla Powder Co., __Liberty St., New York.” An 1899 directory of manufacturers and products of American companies published by Seeger and Guernsey lists Hecla Powder Co. as a maker of dynamite and safety fuse and gives the company’s business address as 96 Liberty Street, New York.¹² It’s safe to assume that this is the address on the top of this tin. It is also the same tin that is found in John Kynor’s collection.

If the addresses on the two styles of tins are a clue to the dates of the tins, the tin with the 239 Broadway address (ca. 1890) predates the tin with the 96 Liberty St. address (ca. 1899) by as much as nine years.

Who made the blasting caps and tins of Hecla Powder Company? I believe it was almost certainly Metallic Cap Manufacturing Company. The 1899 Seeger and Guernsey catalogue of manufacturers and products of American companies lists California Cap Co. and Metallic Cap. Mfg. Co. as manufacturers of blasting caps, but not Hecla Powder Co.¹³ Even so, Hecla Powder Co. sold blasting caps from early on. An advertisement appearing in the *Engineering and Mining Journal* in 1882 lists caps and fuse among the products sold by Hecla Powder Co.¹⁴ At one time, Hecla Powder Co. had an office in Boston as well as New York. An advertisement in the 1896 Boston Directory says that in addition to dynamite, Hecla Powder Co. was a dealer in “caps, fuse, and electric goods for blasting.”¹⁵ In a 1995 Cap Tin Update, Andy Martin reported on John Kynor’s tin.¹⁶ Andy also believes that the maker of Hecla’s blasting caps was probably Metallic Cap Mfg. Co. Andy summarizes the company history and writes that DuPont bought the balance of the Hecla stock in 1896 and changed the company name to Hecla Dynamite Co. He concludes that John’s tin dates roughly to the 16-year period from 1890-1896. I believe based on the research summarized here that the Liberty St. tin (John Kynor’s tin) is the later tin (ca. 1899) and that the 239 Broadway tin (Jack Purson’s tin) is earlier (ca. 1890).

¹² *Seeger and Guernsey’s Cyclopædia of the Manufactures and Products of the United States* (New York: The Seeger and Guernsey Company, 1899), 130.

¹³ *Seeger and Guernsey’s Cyclopædia of the Manufactures and Products of the United States*, 129.

¹⁴ *The Engineering and Mining Journal* XXXIII, no. 1 (January 7, 1882): 14.

¹⁵ *The Boston Directory*, XCII (Boston: Sampson, Murdock, & Company, 1896), 2187.

¹⁶ Andy Martin, “1995 Cap Tin Update,” *Eureka! The Journal of Mining Collectibles*, April 1995, 6–7.

Van Gelder and Schlatter also write that Hecla's dynamite plant near Rahway was dismantled in 1886 and imply that the company's name was changed to Hecla Dynamite Company at that time. However, I found ample evidence that the company continued to operate under the name Hecla Powder Co. for some time after 1886. The Liberty tin and 1899 Liberty St., New York, business address of Hecla Powder Co. attest to that.

Two other artifacts are worth talking about again. These are two trade cards I first wrote about in an article I posted to the Cap Tin Collectors Facebook page in July, 2023. I found these two trade cards on WorthPoint. They advertise Miners' Friend Dynamite.



This is the later of the two cards, since it bears the 96 Liberty St. address.¹⁷ There is nothing on the back of this card. The earlier of the two cards, bearing the 239 Broadway address is shown on the next page. It is much more interesting. It states that Hecla Powder Co. sold blasting caps in Triple, Quadruple, and Quintuple Force strengths.¹⁸ So far, the only Hecla cap tins that have been found are Quadruple Force tins.

¹⁷; "Hecla Powder Co. - Dynamite - Explosives - NY - Trade Card," 5.25 x 3 inches, <https://www.worthpoint.com/worthopedia/hecla-powder-co-dynamite-explosives-1728647877>, accessed April 28, 2025.

¹⁸ "The Hecla Powder Company Dynamite, Caps, Fuse Trade Card, New York, NY," 5.25 x 3 inches, WorthPoint, <https://www.worthpoint.com/worthopedia/hecla-powder-company-dynamite-caps-2021015979>, accessed April 28, 2025

The Hecla Powder Co.

* MANUFACTURERS OF *

MINERS' FRIEND DYNAMITE.

DEALERS IN CAPS, FUSE & ELECTRIC
* GOODS FOR BLASTING. *

239 BROADWAY.

New York.

E. B. McDUFFEE,
General Eastern Agent,
113 Devonshire Street,
Boston, Mass.

Telephone, No. 3874.

GOODS MANUFACTURED.

Miners' Friend Dynamite,

ALL GRADES. ALL SIZES.

HECLA GELATINE DYNAMITE,
Specially Suited for Tunnel Work.

Double Tape Fuse.
Single " "
Cotton Fuse.
Hemp "
Triple Force Caps.
Quadruple Force Caps.
Quintuple Force Caps.

MAGNETO BATTERIES FOR BLASTING,
PLATINUM FUSES, ALL LENGTHS,
LEADING WIRE, COTTON COVERED.
CONNECTING WIRE, COTTON COVERED.

One more fun artifact should be mentioned, this well used Hecla Powder Co. playing card. It's impossible to date this card, but the back of the card shows an image of the Hecla gnomes with their blasting machine. The same image is included in an advertisement for Miners' Friend dynamite that appeared in the *School of Mines Quarterly* in 1892 (see footnote 11).



Hecla Playing Card
Collection of Todd Mitchel