

from India and the later use of sodium nitrate from Chile reflect the course which led to the production of blasting and mining products by the 1850's. Correspondence with Philadelphia agents reveals a great dependence upon immigrant labor for the powder mills. Relations with the United States government were important from the outset, and items relating to the many contracts for powder used by the Army and the Navy are a distinctive portion of the records. As company operations expanded, relations with other powder manufacturers became important. There is much on this aspect that relates to prices, tariffs, shipping rates, and marketing. This led to the formation of the Gunpowder Trade Association in 1872. Known popularly as the "Powder Trust", it continued until 1902.

The chronology which follows is a summation of the history of E. I. du Pont de Nemours to the year 1902. Additional chronologies which should be consulted, for particular details, are those for Du Pont de Nemours (1739-1817), Victor du Pont (1767-1827), Eleuthère Irénée du Pont (1771-1834), Lamot du Pont (1831-1884), and Pierre S. du Pont (1870-1954), reported on pp. 2-9, 14-18, 21-25, 106-112, and 766-767 of this Guide. Biographical notes on James Antoine Bidermann (1790-1865), Alfred Victor du Pont (1798-1856), Henry du Pont (1812-1889), and Francis Gurney du Pont (1850-1904) are found on pp. 283, 291-292, 293-294, and 746 of this Guide.

#### Chronology of E. I. du Pont de Nemours & Co.

1801 - 1902

- 1801 Apl 21 - The powder company of E. I. du Pont de Nemours & Co. was organized in Paris, with a capital of \$36, 000 in 18 shares of \$2, 000 each. E. I. du Pont was authorized to construct the mills and administer the business. The original shareholders were: Jacques Antoine Bidermann, a Paris banker; Catoire, Duquesnoy & Cie, a Paris banking house; Louis Necker de Germany, brother of Jacques Necker, the French financier, Archibald McCall, a Philadelphia merchant; Peter Bauduy , a planter from Santo Domingo then residing at Wilmington, Del.; and Du Pont de Nemours, Père et Fils & Cie, a Paris mercantile house.
- Sept 24 - E. I. du Pont visited Delaware to investigate a site on the Brandywine, near Wilmington, as a possible location for the company operations.
- 1802 Apl 27 - Agreement made for the purchase of property of Jacob Broom, on the Brandywine, as the site for the powder manufactory.
- May 2 - Notice of dissolution of Du Pont de Nemours, Père et Fils & Cie, which held 12 of the 18 shares in E. I. du Pont de Nemours & Co.
- June 21 - Deed of purchase by William Hamon from Jacob Broom for the Brandywine site. Hamon, a naturalized Frenchman at Wilmington, held the property for E. I. du Pont until 1804.
- Aug 25 - Agreement between Du Pont de Nemours, Père et Fils & Cie, of Paris, E. I. du Pont, and Peter Bauduy, whereby Bauduy would further operations of the new company.
- summer - Foundations laid for the first powder mill.
- Sept 4 - Peter Bauduy acquired two shares of stock in the company.

- 1803 July 20 - *E. I. du Pont* wrote to President Jefferson, seeking government patronage for his new factory.
- July - The first saltpetre was refined at Eleutherian Mills.
- 1804 Mch 1 - William Hamon transferred the Broom property to *E. I. du Pont*.
- Apl 9 - Death of Jacques Necker, a shareholder in Du Pont de Nemours, Père et Fils & Cie; his interests inherited by his daughter, Madame de Staël.
- May 1 - Manufacture of powder commenced at Eleutherian Mills.
- May 16 - First recorded sale of powder by *E. I. du Pont de Nemours & Co.*
- 1804 summer - Death of Louis Necker de Germany, stockholder in *E. I. du Pont de Nemours & Co.*, four months after the death of his brother, Jacques.
- Nov 23 - *E. I. du Pont* received private word from President Jefferson that the Army and Navy would buy Du Pont powder.
- Nov 27 - Patent No. 590 issued to *E. I. du Pont* for a machine to granulate powder.
- The new company produced 38,525 lbs. of powder during 1804.
- 1805 June - Outside agents employed to market powder for the company.
- July 1 - Revision of the agreement between Du Pont de Nemours, Père et Fils & Cie, and *E. I. du Pont de Nemours & Co.*
- Aug - First government order for new powder.
- Volume of business in 1805 amounted to \$46,857.75.
- 1806 May 21 - Tests at Governor's Island, N. Y., by New York state officials revealed the superior quality of Du Pont powder.
- July - *E. I. du Pont* visited Pittsburgh in search of a factory site which would be nearer western supplies of saltpetre; this plan was later abandoned.
- *E. I. du Pont* prepared a resume of accusations by Peter Bauduy regarding company administration.
- 1807 Aug 18 - First explosion at Eleutherian Mills.
- Nov 4 - Contract between Du Pont de Nemours, Père et Fils & Cie, of Paris, and Menestrier (as agent for Talleyrand, then Ministre des Relations Extérieures), for a loan of 100, 000 francs by the minister, part of which was for the firm of *E. I. du Pont de Nemours & Co.*
- Dec 22 - Importation of saltpetre halted by embargo.
- 1808 Mch 4 - The shares held by Archibald McCall in *E. I. du Pont de Nemours & Co.* were transferred to Peter Bauduy.
- Receipt of \$12, 000 during 1808 from Du Pont de Nemours, Pare et Fils & Cie, being part of the loan from Talleyrand.
- Annual production of 198,300 lbs. of powder and gross sales of \$53,863.42 in 1808.
- 1809 Dec 31 - Renewal of the act of association of *E. I. du Pont de Nemours & Co.*
- 1810 - Annual production of 185, 375 lbs. of powder and gross sales of \$86, 614.27 in 1810.
- 1811 Oct 19 - Explosion in the mills.
- Construction of the Upper Hagley Yard began during 1811.
- Received government orders for 50, 000 lbs. of powder during 1811.
- Suit of Charles Munns vs *E. I. du Pont de Nemours & Co.*, charging malicious mischief, tried in the Federal District Court at Philadelphia.

- Munns, a company employee, had been imprisoned in 1809 at New Castle, Del., charged with theft of certain techniques and designs of the company.
- Annual production of 204,056 lbs. of powder and gross sales of \$122,006.25 in 1811.
  - By 1811 the Du Pont mills were the largest in America for the manufacture of gunpowder.
- 1812 - Received government orders for 200, 000 lbs. of powder.
- 1813 Mch 9 - Land (62 acres) purchased from Thomas Lea for \$47, 000 as a site for the Hagley Works, below Eleutherian Mills, on the Brandywine.
- Mch - Received government orders for 500, 000 lbs. of powder.
- May - Fear of attack on the mills by British invaders.
- 1813 - Annual production of 335,677 lbs. of powder and gross sales of \$216,392.39 in 1813.
- 1814 Jan 2 - E. I. du Pont agreed to transfer to Madame Bureaux de Pusy (his stepsister), two shares of stock in E. I. du Pont de Nemours & Co. (representing interests held by her late husband through Du Pont de Nemours, Père et Fils & Cie).
- June 21 - Peter Bauduy appealed to the European stockholders to remove E. I. du Pont from management of the company.
- Aug 14 - James Antoine Bidermann (1790-1865), son of Jacques Bidermann of Paris (an important stockholder in E. I. du Pont de Nemours & Co.), arrived from France to investigate company affairs and to report on the controversy between Bauduy and Du Pont.
- Nov - Madame Bureaux de Pusy demanded settlement of her claims.
- Dec - Bauduy decided to retire from the company.
- 1815 Feb 15 - Bauduy sold his shares and claims to E. I. du Pont.
- Feb 16 - James Antoine Bidermann began his service with the company in the place formerly held by Bauduy. In 1816 he married Evelina, daughter of E. I. du Pont.
- Mch-June - Bidermann traveled through Pennsylvania, Kentucky, Tennessee, and Virginia, for supplies and customers.
- June 8 - Explosion in the mills with a loss of nine lives and \$20,000 damage.
- 1816 Mch 16 - Peter Bauduy filed suit against E. I. du Pont de Nemours & Co. in the Delaware Court of Chancery, in an action to dissolve the firm; this was the beginning of a lengthy suit which was finally settled in Du Pont's favor.
- 1817 July 14 - Death of Madame de Staël, who had inherited the shares of her Father in the Du Pont enterprises.
- July 16 - Death of Jacques Antoine Bidermann, an original stockholder in Du Pont de Nemours, Pare et Fils & Cie, and in E. I. du Pont de Nemours & Co.
- Aug 7 - Death of Du Pont de Nemours.
- Sept 1 - The suit of Bauduy vs E. I. du Pont de Nemours & Co. heard in the Delaware Court of Chancery.
- Dec 16 - Talleyrand requested payment of his loan made to Du Pont de Nemours, Pare et Fils & Cie, in 1807; this was not fully settled until 1829.
- Dec 31 - Company inventory misled claimants by continuance of credits for bankrupt firms and pre-war values.

- 1818 Mch 19 - Explosion in the Upper Yard at Brandywine Mill-9, with a loss of thirty six lives and five mills, and a loss of \$ 30, 000.
- Alfred Victor du Pont (1798-1856) began employment with the company after the March explosion.
- Aug 17 - Cross-bill filed by E. I. du Pont, James Antoine Bidermann, and Madame Bureaux de Pusy in their suit with Peter Bauduy.
- Aug 19 - Madame Bureaux de Pusy advertised her withdrawal from the company; this was followed by her suit against Du Pont in the Delaware courts.
- Aug 28 - Public reply issued by E. I. du Pont de Nemours & Co. to the withdrawal of Madame Bureaux de Pusy.
- Aug-Sept - Continuation of the suit of Bauduy vs E. I. du Pont de Nemours & Co. in the Delaware Court of Chancery.
- 1819 Apl 14 - Bauduy's petition for a commission denied by the Delaware Court of Chancery in the suit of Bauduy vs E. I. du Pont de Nemours & Co.
- 1819 Aug 19 - James R. Black, agent of the Delaware Court of Chancery, filed an account of powder sales, in the suit of Bauduy vs E. I. du Pont de Nemours & Co.
- Aug 30 - Delaware Court of Chancery ruled for Madame Bureaux de Pusy, requiring an account from the defendants.
- Dec 15 - The company purchased Gardiner Fulton's patent for the granulation of powder.
- 1820 Apl 18 - Bauduy's suit against the company continued in the Delaware Court of Chancery.
- June - Delaware High Court of Errors and Appeals affirmed a decree out of the Delaware Court of Chancery in the suit of Madame Bureaux de Pusy against the company.
- 1821 Aug 29-31- Delaware Court of Chancery ruled on exceptions to James R. Black's accounts in the suit of Bauduy vs E. I. du Pont de Nemours & Co.
- Sept 3 - Cross-bill of E. I. du Pont and others against Bauduy heard in the Delaware Court of Chancery.
- 1823 Apl 14 - Cross-bill of E. I. du Pont and others against Bauduy heard in the Delaware Court of Chancery.
- 1824 Oct 18 - Explosion of the Eagle Powder Mill of E. I. du Pont de Nemours & Co.
- 1825 Sept 6 - E. I. du Pont prepared a memorandum on the history of company operations.
- 1826 Nov 10 - Claims of the heirs of Jacques Antoine Bidermann were transferred to his son, James Antoine Bidermann, a member of E. I. Du Pont de Nemours & Co.
- 1827 Aug 27 - The company had 140 employees.
- Oct 1 - James Antoine Bidermann sailed for France, on company business. He hoped to have Du Pont powder tested by French officials.
- Annual production of 708,923 lbs. of powder and gross sales of \$143,817.69 in 1827.
- 1828 - Construction of the Lower Hagley Yard.

- 1829 June 9 - Appeal of E. I. du Pont and others from the Delaware Court of Chancery to the Delaware High Court of Errors and Appeals sustained in the suit with Bauduy.
- Bankruptcy of the tanning business of A. Cardon & Co., with E. I. Du Pont de Nemours & Co. assuming the debt, which amounted to \$55,148.92.
- 1832 - At the request of the Treasury Department E. I. du Pont reported to Congress that the value of the equipment and plant of E. I. du Pont de Nemours & Co. was \$80, 000, working capital placed at \$100,000, and annual production at 850, 000 lbs. of powder (about one-seventh of all in America).
- Annual production of 910,931 lbs. of powder and gross sales of \$179,697.02 in 1832.
- 1834 June 20 - Explosion in the graining mill.
- June - Henry du Pont (1812-1889) entered the service of the company.
- Oct 31 - Death of E. I. du Pont, founder of the company. At this time the company was producing a million pounds of powder a year.
- Nov I - James Antoine Bidermann (1790-1865) took control of the company, with Alfred Victor du Pont (1798-1856) as partner and Alexis Irénée du Pont (1816-1857) as superintendent.
- 1837 Apl 1 - James Antoine Bidermann retired as senior partner. He was succeeded by Alfred Victor du Pont, with Alexis I. du Pont and Henry du Pont as junior partners.
- 1837 - The last debts to the company's French shareholders were paid in 1837.
- 1838 - The Brandywine Mills of the company began operation.
- 1846 - Alfred Victor du Pont tested guncotton samples supplied by the government and reported on them. Guncotton had been invented in 1845 by Frederick Schoenbein.
- 1847 Apl 14 - Explosion in the Upper Yard, with a loss of eighteen lives and the worst property loss to that date.
- 1849 - Company agency established in California.
- 1850 Apl 1 - Lamot du Pont (1831-1884) commenced employment with the company.
- 1851 Jan 1 - Alfred Victor du Pont retired as senior partner and was succeeded by Henry du Pont, with Alexis I. du Pont and Eleuthère Irénée du Pont (1829-1877) as junior partners.
- Contracts with foreign governments for powder during the Crimean War. These were the first foreign ones, by direct order, negotiated by E. I. du Pont de Nemours & Co.
- 1854 May 31 - Explosion of three wagons loaded with 450 kegs of powder while being moved through the streets of Wilmington, Del.
- 1856 Oct 4 - Death of Alfred Victor du Pont.
- 1857 May 19 - Lamot du Pont received Patent No. 17,321 for "Improvement in Gunpowder", a formula for blasting powder made with sodium nitrate.
- Aug 22 - Explosion in the mills. Alexis I. du Pont was fatally injured and died the next day.

- 1858 Jan 1 - New partnership went into effect, with Henry du Pont as senior partner, and Eleuthère Irénée du Pont and Lammot du Pont as junior partners.
- Feb 17 - Lammot du Pont sailed for Europe on company business and returned to New York on 20 May. He visited England, France, Prussia, and Belgium to study methods and operations in the manufacture of powder.
- 1859 - Purchase of the mills of Parish, Silver & Co., on Big Wapwallopen Creek, Luzerne Co., Pa. These mills, which were rebuilt for the production of blasting powder, were the first ones owned by the company outside of Delaware. They were rebuilt under the supervision of Lammot du Pont and later managed by him.
- 1860 - There were four powder yards on the Brandywine operated by the company in 1860, and the mills and land which they embraced were valued at nearly \$500, 000. There were fifty-seven company agencies throughout the United States by 1860.
- 1861 Apl - The company declined to make shipments to its agent in Richmond, Va.
- Oct 14 - Furman L. Kneeland (1824-1884) became General Agent for Sales in New York. He had commenced his association as an agent in 1849.
- Nov 19 - Lammot du Pont arrived in London to negotiate the purchase of three million pounds of saltpetre for government use; this was after consultations with the Secretary of State at Washington.
- Dec 26 - Lammot du Pont returned to Washington to report on his mission to England.
- Eugene du Pont (1840-1902), eldest son of Alexis I. du Pont, commenced employment with the company.
- 1861 - Total sales amounted to \$1,007,444, with \$191,022 to the Navy, \$213,383 to the Army, and the balance in regular trade.
- Accounts at the end of 1861 showed that nearly 650,000 lbs. of powder and fuse, valued at \$110,670, had been seized from nineteen company agents by state and Confederate officials in the South.
- 1862 Jan 1 - Lammot du Pont sailed for England to complete negotiations for the purchase of saltpetre.
- Sept - Fear of invasion of Delaware and destruction of the Du Pont mills at the time of the Battle of Antietam. Delaware and Pennsylvania troops encamped nearby to protect the yards.
- Total sales amounted to \$1,531,347, with \$494,983 to the Navy, \$675,593 to the Army, and the balance in regular trade.
- 1863 Feb 25 - Explosion of 10, 000 lbs. of cannon powder in the Hagley Yard, with loss of thirteen lives.
- Total sales amounted to \$1,372,169, with \$247,315 to the Navy, \$779,201 to the Army, and the balance in regular trade.
- New partnership to replace that of 1858 went into effect, with Henry du Pont as senior partner and his nephews, Eleuthère Irénée du Pont, Lammot du Pont, and Eugene du Pont, as junior partners.
- Total sales amounted to \$1,625,395, with \$170,721 to the Navy, \$550,793 to the Army, and the balance in regular trade.

- 1865 Sept 26 - Lammot du Pont received Patent No. 50,104 for hard rubber plates used in compression of powder.
- Oct 24 - Lammot du Pont received Patent No. 50, 568 for the horizontal press box used in the compression of powder.
- Total sales amounted to \$1, 325, 657, with \$180,834 to the Navy, \$431,750 to the Army, and the balance in regular trade.
- 1866 - Sales of surplus powder offered by the government commenced in 1866 and continued to 1874.
- 1868 May 26 - Alfred Nobel patented dynamite in the United States.
- The company purchased a substantial interest in the California Powder Works.
- The company purchased four mills in Pennsylvania, and also the control of H. A. Weldy & Co., of Tamaqua, Pa.
- Francis Gurney du Pont (1850-1904) commenced employment with the company.
- 1872 Apl - The Gunpowder Trade Association was formed in New York, with Henry du Pont and Lammot du Pont as leaders in the movement.
- Apl 29 - Lammot du Pont was elected president of the Gunpowder Trade Association.
- Aug 6 - Charles Irénée du Pont, Jr. (1830-1873) received Patent No. 130,113 for an improvement in rotary pumps.
- Dec 3 - Lammot du Pont and Eugene du Pont received Patent No. 133,522 or compressing powder in sheets between ribbed plates; this made possible the production of sphero-hexagonal cannon powder.
- 1873 - The company purchased a large interest in the Sycamore Powder Mills in Tennessee.
- 1874 - Francis Gurney du Pont became a junior partner.
- 1876 - The company made extensive purchases: controlling interest in the Hazard Powder Co.; 43-1/ 3 per cent interest in the California Powder Works; the Confederate Powder Works at Atlanta, Ga.; and a partial interest in the lake Superior Powder Co.
- 1894 - The company acquired a partial interest in the Tallapoosa Powder Mills of the Southern Powder Co. in Georgia.
- 1895 - Formation of the Eastern Dynamite Co. by the Repauno, Hercules, Atlantic, and Dittmar companies.
- The company acquired a partial interest in the Graceland plant of the Enterprise Powder Manufacturing Co.
- 1896 - The company acquired a partial interest in the Phoenix, Southern, Chamberlin Cartridge, and Equitable powder companies.
- The company took over the plant and business of the American Smokeless Powder Co.
- The company acquired an interest in the American Ordnance Co. and in the Maxim Powder and Torpedo Co.
- The company purchased from Hudson Maxim his patent for smokeless powder, paying him \$400 a month for seventeen years.

- 1899 Jan - Pierre S. du Pont reached his decision to retire from the company. He assumed his new duties as president of the Johnson Co., of Lorain, Ohio, on 1 Mch.
- Oct 23 - Certificate of incorporation of E. I. du Pont de Nemours & Co., of Wilmington, Del., was filed at Dover, Del., with Eugene du Pont as president. This incorporation lasted until 1902.
- 1900 - The company bought a partial interest in the Birmingham Powder Co. and helped to organize the Mahoning Powder Co.
- 1902 Jan 28 - Death of Eugene du Pont, president of the company.  
- The presidency of the company was offered to Henry A. du Pont, who declined it.
- Feb 26 - New incorporation of E. I. du Pont de Nemours & Co.; dissolved 14 Nov 1912.

BIBLIOGRAPHICAL NOTE: Certain works included in the Bibliographical Notes for Du Pont de Nemours and E. I. du Pont, pp. 9-10, 26 of this Guide, contain material on the early history of E. I. du Pont de Nemours & Co. Those by William H. A. Carr, Ernest Dale, Max Dorian, William S. Dutton, George H. Kerr, Marquis James, Charles Wertenbaker, and John K. Winkler, cited in the Bibliographical Note for Pierre S. du Pont, p. 114 of this Guide, all reach beyond the year 1902. Published company histories include: Charles F. Rideal and Albert W. Atwood, The history of E. I. du Pont de Nemours Powder Company, a century of success (New York, 1912); Bessie G. du Pont, E. I. du Pont de Nemours and Company, a history, 1802-1902 (Boston and New York, 1920); and A history of the Du Pont company's relations with the United States government, 1802-1927 (Wilmington, Del., 1928), prepared and published by the Smokeless Powder Department of E. I. du Pont de Nemours & Co., Inc. Additional works with important chapters on company history include: Arthur P. Van Gelder and Hugo Schlatter, History of the explosives industry in America (New York, 1927), 176-218; and Stewart H. Holbrook, The age of the moguls (New York, 1953), 247-277.

Studies on special aspects of company history include: an unsigned essay, "A century of success", in Business America, XII (1912), 53-67, possibly by Rideal and Atwood, whose history is cited above; Muriel Bailey, "An intimate history of the E. I. du Pont de Nemours Powder Company", in The Delaware magazine, IV (1912), 799-804; William H. S. Stevens, "The powder trust, 1872-1912", in The quarterly journal of economics, XXVI (1912), 444-481; Charles Joe Reese, "E. I. du Pont de Nemours and Company", in Industrial and engineering chemistry, XVII (1925), 1093-1100; Alfred D. Chandler, Jr., "Du Pont, Dahlgren, and the Civil War nitre shortage", Military affairs, XIII (1949), 142-149; Harold B. Hancock and Norman B. Wilkinson, "The Devil to pay! saltpeter and the Trent Affair", in Civil War history, X (1964), 20-32; Norman B. Wilkinson, "In anticipation of Frederick W. Taylor: a study of work by Lamont du Pont, 1872", in Technology and culture, VI (1965), 208-221; Lucius F. Ellsworth, "Strategy and structure: the Du Pont company's sales organization, 1870-1903", in Papers presented at the annual Business History Conference, February 26-27, 1965, Kent State University (Kent, Ohio, 1965) 107-112; and Harold B. Hancock and Norman B. Wilkinson, "A manufacturer in wartime: Du Pont, 1860-1865", in The business history review, XL (1966), 213-236.