



*The*  
**DU PONT**  
**LEGACY**

Today's industrial giant got its start as a gunpowder mill on the banks of Delaware's Brandywine River, thanks to enterprising Frenchman E.I. du Pont

# T

BY SUE DE PASQUALE

HE AIR WAS CRISP ONE AUTUMN DAY IN 1800, WHEN ELEUTHÈRE IRÉNÉE “E.I.” DU PONT AND HIS HUNTING COMPANION, THE FORMER FRENCH PATRIOT MAJ. LOUIS DE TOUSARD, TOOK A BREAK FROM HUNTING. THEY’D RUN OUT OF AMMUNITION. SO THE DUO MADE A QUICK TRIP TO THE COUNTRY STORE NEAR TOUSARD’S FARM IN WILMINGTON, DEL., TO BUY MORE GUNPOWDER.

Du Pont was dismayed by the high price and low quality of the gunpowder he found. Tousard was nonplused. Everyone knew that quality gunpowder had to be imported from England, he told his young companion, who had just arrived in the United States from his native France.

E.I. du Pont sensed an opportunity. He asked to tour an American powder plant and Tousard soon obliged, with a visit to the Lane-Decatur factory in Frankford, Pa. The 29-year-old du Pont had trained at the side of renowned chemist Antoine Lavoisier at Essonnes, France’s national powder works. It didn’t take him long to find problems with every aspect of the American manufacturing process—from refining saltpeter, to its mixing with charcoal, to the pressing and glazing of the various ingredients.

For the enterprising E.I. du Pont, the future was clear. America was an



up-and-coming nation where gunpowder was essential—for everything from keeping wild animals at bay to blasting out roads, to supplying the fledgling military with munitions. Irénée (whose name means “peace”) approached his father, Pierre Samuel, and elder brother, Victor, with a recommendation: The du Pont family should stake its fortunes on becoming the finest producer of gunpowder

in their newly adopted nation.

Today, more than 200 years after E.I. du Pont de Nemours and Co. established its first gunpowder mill on the banks of Delaware’s Brandywine River, the DuPont name is synonymous with one of the most successful industrial enterprises in the world. The company that E. I. du Pont started with a single gunpowder mill went on to grow exponentially and to diversify—to plastics, dyes and synthetic materials (leading the 20th-century polymer revolution with such products as nylon, neoprene, Teflon, Mylar and Lycra). Today DuPont operates in more than 70 countries, employing more than 5,000 scientists and engineers and generating \$31.8 billion in annual revenues.

Portrait of E.I. du Pont, far left. Above, the historical Du Pont seal; during the company’s first century, the U.S. military was a leading customer.





Prized for its high quality, Du Pont gunpowder quickly proved popular among hunters, left. Above, an early photograph of the Du Pont corporate headquarters in Wilmington, Del. E.I. du Pont's passion for raising sheep, below right, also proved profitable, through a woolen mill constructed on his brother's side of the Brandywine.

AS A CHILD GROWING UP IN PRE-revolutionary France, Eleuthère Irénée seemed unlikely to achieve great things—at least to his father, an outspoken and influential intellectual and government economist. Young Irénée, marred by a red birthmark on his left cheek, was quiet and introspective, the exact opposite of his larger-than-life father and charming brother Victor, who would serve in the diplomatic corps in New York.

The compliant Irénée did defy his father at age 20, however, when he fell in love with Sophie Madeleine Dalmas, the 16-year-old daughter of a Paris shopkeeper. The elder du Pont was horrified: he had risen from toiling as the son of a watchmaker to being an adviser to the king of France; his son could not marry so far beneath his station! But his youngest son persisted, even fighting two duels for Sophie's hand, and eventually Pierre Samuel relented. Irénée and Sophie were married on Oct. 26, 1791. Their marriage would prove to be a loving and productive union, yielding seven children.

The post-revolutionary years were politically volatile and dangerous for

Pierre Samuel (he was imprisoned at one point and narrowly avoided the guillotine); so, on Oct. 2, 1799, the elder du Pont, Irénée, Victor and their young families set sail for a new life in the United States aboard the ill-equipped *American Eagle*. The journey, which stretched on for nearly three months, was harrowing; the ravenous travelers reportedly dined on rats on more than one occasion. But once they reached land on Jan. 1, 1800, the dawn of a new century, the family's fortunes quickly improved.

After scouting a variety of locations for his Eleutherian Mills, Irénée wisely opted to set up shop on Delaware's Brandywine River. The river's rapidly moving waters (averaging a flow of 4,500 gallons per second) would offer an ideal source of power, the area's plentiful willow trees could be harvested for charcoal, key to black powder, and the site was sparsely populated (five miles north of Wilmington, De.), highly desirable for a business where explosions posed a daily threat.

From the outset, Irénée proved an innovator. Rather than constructing the then-customary single building for his

powder works, he puzzled the locals by erecting a series of trapezoidal buildings along the riverbank. Each had heavy stone walls, a thin wooden roof (constructed without nails, lest they create a spark), and a lower front side that fronted the river. Separating the buildings prevented the potential for a chain reaction in the event of an explosion, he reasoned—and the force of a blast would be channeled out over the water.

For the latest equipment and trade secrets, and to raise capital, Irénée returned to France in 1801, where Napoleon (eager to decrease U.S. dependence on England's exports as the new French leader) was only too happy to supply whatever the du Pont family needed, at cost. The first barrel of "Brandywine Powder" was sold in spring 1804. Thanks in part to a laudatory letter from Thomas Jefferson, requesting the gunpowder for the War Department, sales of du Pont gunpowder (renamed Du Pont in 1808) quickly took off. In less than a decade, with the advent of the War of 1812, annual sales jumped to \$148,597 (more than \$2 million in today's market).

Despite E.I. du Pont's taciturn nature

and constant concern about safety (he posted a sign on New Year's Day 1811 reading, "All kind of play or disorderly fun is prohibited!"), he came to be widely respected by his workers for being fair and generous. He was among the first leaders of industry in the U.S. who saw the value in building and training a work force. In 1811, Irénée instituted a system of overtime and night pay, previously unheard of, and two years later he set up a savings plan for his employees; for every \$100 they saved, the company would pay 6 percent interest, notes author Adrian Kinnane in a bicentennial history of the company. To help employees go on to establish homesteads, he purchased a large tract of land in Western Pennsylvania, offering credit to former employees who wanted to transition to farming.

## As the years passed, fathers handed down their steady and well-paying jobs to their sons, assuring a loyalty to the Du Pont company that paved the way for financial success.

E.I. du Pont also believed strongly in education. He incorporated the Brandywine Manufacturers' Sunday School at the Eleutherian Mills, where employees could learn the 3Rs on their day off each week. In the days before public education, the school also offered classes to workers' children, and Irénée's daughter Victorine was an especially popular and steadfast teacher there; between 1817 and her death in 1861, she touched the lives of nearly 2,000 children and teens at the white clapboard school.

Company employees, whose homes were at the mills, appreciated the fact that the du Pont family was willing to share in the danger of the industry. E.I. du Pont's sprawling family home was perched atop a hill on one side of the Brandywine River, and Victor du Pont's house sat across the water. Tragedy struck on March 19, 1818, with one of the worst accidents in the company's history. A series of explosions (reportedly felt all the way to Lancaster, Pa., 47 miles away) leveled the mill works, killing 40 workers, and severely damaging the E.I. du Pont family home.

Irénée and his family were away in Philadelphia at the time. He hurried

home to survey the damage and comfort the grieving families of his workers. Rebuilding quickly commenced (the process ultimately took a year) and Irénée set up a monthly pension system for the families who had lost breadwinners in the accident. All but two of the workmen who survived the blasts agreed to come back to work, reports historian Joseph Frazier Wall. As the years passed, fathers handed down their steady and well-paying jobs to their sons, assuring a continuity and loyalty to the Du Pont company that paved the way for financial success.

Irénée's strategy of constantly re-investing profits into the company to fuel growth didn't meet with approval from investors—or even his father—early on, but it ultimately proved savvy. In 1822, ever the innovator, Irénée replaced the

company's up-and-down stamping method with less dangerous and more efficient rolling mills—large, 4-ton iron wheels that mixed the powders—the first rolling mills in the nation.

When he wasn't in business meetings, touring the company's new mills that sprang up around the region or relaxing with Sophie and his children, Irénée was a gentleman scientist who enjoyed toiling in his garden (in fact, he'd listed "botanist" as his profession on his passport). While a young man in France, he frequently visited le Jardin des Plantes, and he brought a variety of seeds and plants across the Atlantic for his gardens at Eleutherian Mills. He also sent samples from his gardens back to colleagues in France.

Another of Irénée's passions, raising sheep for wool, proved quite profitable. In 1805 he purchased "Don Pedro," a prize ram, for \$60. Before long he had enough livestock to support a thriving woolen mill, which was constructed on Victor du Pont's side of the Brandywine. When Don Pedro died in 1811, the du

Ponts reportedly received cards of condolence from across the country—most notably from Thomas Jefferson.

Throughout his life, Irénée du Pont suffered bouts of depression, "habitual dullness and melancholy," as he wrote at one point to his brother-in-law. His melancholy became all-consuming when the unexpected death of his brother Victor, in January 1827, was followed 21 months later by the demise of his beloved Sophie in November 1828. For months after her passing, he could be found seated on a rock, staring forlornly out at the flowing waters of the Brandywine, reports author Wall.

Eventually, the love of his children and grandchildren, and the demands of business, helped him rally, and he returned to his involvement with the family company. But the strain of con-

stant worry and sadness took its toll. On Oct. 30, 1834, while in Philadelphia on business, E.I. du Pont suffered a heart attack on a street corner. He died shortly after, at the age of 63.

The forward-thinking native of France—scientist, innovator, philanthropist, family man—who had set the standard for American industry and launched a multibillion-dollar family business, was buried along the flowing waters of his beloved Brandywine, in the Du Pont family plot. ■

