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Corning Inc.

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Introduction

For more than 170 years, Corning Inc. has stood as one of America's most innovative and resilient companies, quietly transforming the world through mastery of glass, ceramics, and materials science. From humble beginnings in the mid-nineteenth century, the company has evolved into a global powerhouse, leaving its mark on industries as diverse as consumer electronics, telecommunications, aerospace, life sciences, and automotive manufacturing. The story of Corning is not only a narrative of technological achievement, but also a reflection of American ingenuity, adaptability, and the relentless pursuit of “what’s next.”

Founded in 1851 by Amory Houghton as the Bay State Glass Co., Corning’s journey mirrors the industrial rise of the United States itself. Strategic moves—from Massachusetts to the banks of the Chemung River in upstate New York—set the stage for over a century of invention. From manufacturing glass bulbs for Thomas Edison’s revolutionary lightbulb, to producing mirrors for observatories that peered into the far reaches of the universe, Corning’s early decades established a legacy of making the impossible, possible.

Corning’s strength has always rested on its commitment to research-driven innovation and calculated risk-taking. The creation of Pyrex transformed both laboratory science and American kitchens. CorningWare’s accidental invention changed the way families cooked and ate. In the latter half of the twentieth century, Corning’s breakthroughs in television glass and optical fiber would make it indispensable to new waves of information and communication technologies, unlocking the potential of the digital age.

Yet, Corning’s story is as much about reinvention as invention. Through turbulent periods of economic uncertainty, industry upheaval, and shifting global markets, the company continually refocused its strategy, shedding its reliance on consumer products to double down on advanced technologies. The twenty-first century saw Corning firmly establish itself at the heart of the smartphones and modern displays that define how people connect and learn today. Its relentless prioritization of R&D, led from the vast Sullivan Park campus and its global network of labs, ensures it is always poised to disrupt with the next material or process that will open new possibilities.

Corning Inc. is also a community institution—devoted to the city of Corning, NY, investing in the Corning Museum of Glass, and fostering a culture of civic engagement and stewardship. Through booms, depressions, technological revolutions, and global shifts, its leadership has aimed not only for financial success, but for positive impact

on society and the environment.

This book traces the enduring legacy and future aspirations of Corning Inc., exploring how a small glassworks grew into a vital, forward-thinking enterprise. By examining its remarkable products, its science-driven culture, its remarkable people, and its vision for tomorrow, “Corning Inc.: The Story of An American Company” tells the story of transformation—of one company, of technology, and of modern America itself.

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CHAPTER ONE: The Birth of Corning: 1851 and the Houghton Legacy

The year is 1851. America is a nation on the cusp of profound change, with industrialization rapidly reshaping its landscape and economy. In Somerville, Massachusetts, a new enterprise quietly takes root, one that would, over the next century and a half, become a titan of American industry and a vanguard of innovation. This was the year Amory Houghton, a businessman with a keen eye for opportunity and a growing fascination with glassmaking, laid the foundation for what would eventually become Corning Inc. He began by investing in the Bay State Glass Co., a fledgling glassworks in Somerville.

Houghton, though not initially a glassmaker himself, quickly became captivated by the intricate processes and endless possibilities of the material. He was, by all accounts, a man who believed in constant experimentation, always seeking to refine compositions and manufacturing techniques. This inherent drive for improvement and exploration would become a hallmark of the company he founded. His initial foray with Bay State Glass Co. was just the beginning of a journey that would see his company move, evolve, and ultimately flourish, leaving an indelible mark on the world.

The Bay State Glass Company, where Houghton first invested, focused on producing flint glassware, a type of leaded glass known for its brilliance, used in everything from lamps to bottles and tableware. This early exposure to the practical applications of glass manufacturing surely fueled Houghton's ambition. His involvement in this initial venture was relatively brief, however, as he soon decided to strike out on his own.

By January 1854, Amory Houghton had liquidated his interest in Bay State Glass and, demonstrating his entrepreneurial spirit, established his own flint glass factory in Somerville. He named this new venture the Union Glass Company. The Union Glass Company was a more ambitious undertaking, housing two nine-pot furnaces, each capable of holding over three thousand pounds of molten glass. These crown furnaces, fueled by coal, produced a diverse array of flint glass products, including lamps, lamp trimmings, bottles, windows, lenses, and tableware.

The early years of the Union Glass Company were not without their challenges. The financial panic that swept across the nation in the winter of 1857-1858 hit the company hard, leading to a period of severe struggle. By 1860-1861, the company faced insolvency, a common plight for many businesses in the volatile economic climate of the mid-19th century. However, demonstrating a resilience that would also become a defining characteristic of the future Corning Inc., the Union Glass Company

was reorganized and managed to reopen, albeit as The Union Glass Works.

The Houghton family's direct involvement with Union Glass concluded in August 1864 when they sold their entire interest in the company. Their gaze, however, had already turned southward, towards new opportunities in the bustling state of New York. This westward, or rather, southward, migration was indicative of the dynamic nature of American industry during this period, with entrepreneurs constantly seeking optimal locations for resources, transportation, and market access.

Their next acquisition was the Brooklyn Flint Glass Works, located in Williamsburg, Brooklyn, New York. This move marked a significant step in the company's evolution, placing it in a major urban center with a growing population and increasing demand for glass products. The Brooklyn Flint Glass Works was already a reputable name in the glass industry, and its acquisition by the Houghtons signaled their intent to expand their influence and capabilities.

However, the Brooklyn venture, like its predecessor in Somerville, also faced its share of difficulties. The competitive landscape of New York City and various operational challenges meant that the Brooklyn Flint Glass Works did not prove to be the runaway financial success the Houghtons might have envisioned. Indeed, some accounts suggest the factory was destroyed in a fire, pushing the company to the brink of bankruptcy once more.

It was this series of challenges, coupled with a forward-thinking vision for the future, that ultimately led to the pivotal decision that would forever link the Houghton legacy with a small town in upstate New York. The stage was set for another relocation, one that would redefine the company's identity and lay the groundwork for its lasting success. The decision to move again was not made lightly, but it was a testament to the Houghtons' unwavering determination and their belief in the potential of their glassmaking enterprise.

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