

Genius Lights the Way by Wade Gorla

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EIRNS/Sylvia Spaniolo
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It's the job of good government to harness the energies, the entrepreneurship, the intellect of great people in order to achieve great things. Going to the Moon, going to Mars—what does this have to do with lighthouses? It's not because they look like rockets. It's because lighthouses light the way to the sea.

Let's look at two great geniuses. First, Alexander Hamilton, a guiding light of American commerce. Alexander Hamilton is one of those great people who was able to fashion one of the greatest countries in the history of the planet. Hamilton grew up on the island of Nevis and would later live on St. Croix. He was a very sensitive, very engaging child. Most people who knew him as a young boy described him as a very kind and understanding young man. He did not come from the poor struggling background that a lot of people would like to fashion that he did. He had difficulties, but had an extraordinarily gifted mother, who came from a French Huguenot background, who taught him fluent French.

The Marquis de Lafayette was very complimentary of Hamilton's French. Hamilton learned all about French culture, the French economy, and he learned all about the business of Beekman and Cruger. At 14 he was literally running an accounting house involved in every imaginable activity. There is no founding father that had this kind of background. He had intimate knowledge of the business of rope, lime, cattle, timber, bread, flour, rice, pork, black-eyed peas, corn, porter, cider, pine, oak, hops, shingles and lampblack, which is a resin that was used in ink. He knew all about these products, where they came from, what they did in the economy.

As Secretary of Treasury, he issued a series of reports that I'll briefly summarize here. One was his

report on credit. The others were on banking and manufacturing. One of the things he understood is that credit is one of the most important things not only for a person but for a nation. And unless we had good credit, we would not be able to borrow money at low prices, there would not be trust, there would not be the kind of conditions that would create entrepreneurship and trade and commerce. So he wanted to make sure he restored our credit, he wanted to give the country a solid banking foundation. He created a mint so that we could have a unified currency. And his Report on Manufactures is really a very important thing.

Hamilton also became the Superintendent of the U.S. Lighthouse Establishment created on August 7, 1789, a full month and a half before he became Secretary of Treasury.

The lighthouse bill created the first infrastructure in America. At the same time, Hamilton's creation of the Society for Establishing Useful Manufactures was critical to the establishment of Paterson, New Jersey, which became the embodiment of manufacturing and industry that Hamilton brought forward in the United States.

Fresnel's Revolutionary Lights, 1841

Members of the Navy and Coast Guard were constantly complaining in the early 18th century, "We can't see those lights, they're invisible, what are you going to do about it?" The solution came from French genius Augustin Fresnel, a true embodiment of the Renaissance. Fresnel recognized that improvements could be made. Isaac Newton had relied on a particle theory of light. It was Fresnel's wave theory of light that revolutionized our concept of light, and his breakthrough—and the invention of the Fresnel lens—made possible the power of the lighthouse in Navesink, New Jersey.

It produced a light equivalent of 900,000 candles, and can be seen 75 miles away. It made nautical entry into New York Harbor safe and very operational. The Fresnel light would open up new sea lanes never before used. The concomitant invention of steam technology, along with the screw propeller, saved the Union in the Civil war. These developments created a global system of tremendous wealth and power, and it is that wealth and power that would eventually allow a man to land on the moon 50 years ago, which is why we're here today.

So I think we all owe a great debt of gratitude to Alexander Hamilton and to Augustin Fresnel, because they were true geniuses who helped to make all this all happen.