Since 1607

An American Patriot
Yesterday Today and Tomorrow

Cotton: The Perennial Patriot

Cotton is woven into the pattern of American history like no other fiber. Virginia settlers planted it in their first garden in 1607, and latter-day colonists proudly wore "homespun cotton " as a symbol of American independence.

While the first crop failed, attempts to grow cotton successfully continued on a trial-and-error basis. By the late 17th Century, Virginians were cultivating and handspinning it for domestic use and Carolinians were growing enough to allow exports to other colonies. Shortly after the turn of the century, some cotton was being grown in Georgia and in the territory that is now Louisiana, Mississippi, and Alabama.

Interest in cotton was not restricted to the southern colonies, however. It was grown on a garden-scale in Maryland's Chesapeake Bay area as early as 1736, and its cultivation was so well understood in New Jersey, Delaware, and Pennsylvania that cotton was raised in these areas for army use during the Revolutionary War.

While Concord Minutemen faced down a regiment of British soldiers near the Old North Bridge, colonial assemblies of South Carolina and Virginia were appealing to citizens to grow more cotton.

Tench Coxe, a Philadelphian who was to become Assistant Secretary of Treasury, did much to encourage the cultivation and manufacture of cotton. He operated the nation's first spinning jenny and provided jobs in spinning and weaving cotton.

Alexander Hamilton, the nation's first Secretary of the Treasury, was another early believer in cotton's promise as a major crop. Born to a cotton-producing family in the West Indies, he recognized that the southern states were especially suited for cotton cultivation and predicted in 1775 that they would one day "produce enough of the fiber to clothe the whole continent."

Not long after the Revolution, cotton began to emerge as one of America's major crops. Its rise coincided with the mounting tempo of England's industrial revolution and this nation's urgent need for foreign currency.

England had begun manufacturing cotton textiles in 1641, and new developments in textile machinery in the late 1700's created an almost insatiable demand for raw cotton.

The British, however, were slow to recognize the possibility that America could become a major cotton-producing nation. In 1784, eight bags of cotton shipped to England were seized for "fraudulent import" on the grounds that the United States could not produce that much cotton.

Meanwhile, Tench Coxe was continuing his efforts to advance U.S. cotton textile manufacturing. In 1786, he ordered brass models of Richard Arkwright's textile machinery from England but these were seized in accordance with a law prohibiting export of textile equipment.

Three years later, at Coxe's urging, the first U.S. Congress imposed a duty of three cents a pound on foreign-grown cotton. America's cotton production at the time was estimated at 1 million pounds.

The same year, President George Washington expressed hope that it would soon be "fashionable for a gentleman to appear in any other dress except home-spun." And Thomas Jefferson encouraged the move toward domestic cotton manufacture by appearing at a Fourth of July celebration dressed in American-made cloth.

Two events in 1793 set the stage for rapid growth of the U.S. cotton industry and, in turn, an upswing in America's economic growth. Samuel Slater, an apprentice to Jedediah Strutt, who built the Belper and Milford mills in England, defied the British law which prohibited emigration of persons familiar with textile machinery. Disguising himself as a farmer, he came to the U.S. and by 1793 had established the nation's first successful cotton yarn mill at Pawtucket, RI.

Reconstructing textile machines from memory, he harnessed them together and drove them by river power to produce a continuous stream of cotton yarn. Slater not only initiated the practice of keeping an inventory of yarns on hand, but also was the first American industrialist to break the production process into simple component parts, contributing greatly to increased output.

During the same year, another history-making event was taking place in the South. Eli Whitney, a young Yale graduate looking for a teaching job, spent some time on a cotton farm near Savannah, GA, where he learned that it took a full 10 hours of tedious hand labor to separate a pound of cotton fiber from the seed. In little more than a week, Whitney had invented a cotton gin — a hand-turned device with curved wires and brushes that could separate 50 pounds of lint from seed in a single day. As a result of Whitney's work the U.S. cotton industry celebrates the 200th anniversary of the introduction of the cotton gin in 1993.

Whitney patented his invention in 1794, and three years later Hogden Holmes of Augusta, GA, obtained a patent for a similar gin using saws instead of wires.

Gins quickly sprang up, opening the floodgates for cotton production in the South and industrial expansion in New England.

Within a decade, farmers had expanded cotton production from 2 million pounds to almost 50 million. And New England's cotton mills increased from four in 1797 to an estimated 100 by 1810.

Georgia and South Carolina soon became the principal cotton-producing regions, growing more than half the crop as late as 1821. Substantial production gradually began spreading into North Carolina, Virginia, Tennessee, Alabama, Mississippi, and Louisiana.

Advances also were being made on the textile front. At Waltham, MA, in 1813 Francis Cabot Lowell and others established the world's first factory to manufacture cotton yarn and cloth by power machinery under one roof. The first significant textile machinery development credited to the U.S. came in 1828 when John Thorpe invented ring spinning and put in motion the basic method still used today to construct yarn from staple fiber.

While cotton was feeding the industrial revolution in New England, it also was contributing to rapid settlement of the Upper Mississippi Valley. The South's concentration on staple crops made it largely dependent on wheat, flour, pork, and lard from Ohio, Indiana, and Illinois. And trade through the southern gateway gave Midwesterners the exchange they needed for purchasing eastern goods like hardware and clothing, and paying off land debts.

By 1830, the U.S. was second only to England in the amount of cotton it consumed. A decade later, New England mills were producing three-fourths of all cotton goods used in this country.

Cotton production crossed the Mississippi River into the Arkansas territory ... the Republic of Texas ... and Oklahoma.

With the Gold Rush on in California, a fellow named Strauss struck it rich by creating the world's first cotton Levis. Back East, cotton helped speed communications by providing insulation for the telegraph invented by Samuel Morse. And a silversmith and jeweler named William Gregg proved that large-scale textile manufacturing was feasible in the South by establishing a successful cotton mill in Graniteville, SC.

By 1860 America's cotton crop reached almost a billion pounds or about two-thirds of the world's total supply. Cotton exports were financing 60 percent of total U.S. expenditures for imports of manufactured goods, sugar, coffee, railroad iron, and other products.

But then the Civil War erupted. By its fourth and final year, cotton production fell to only 300,000 bales. But 12 months after the war, cotton exports rebounded to an unprecedented $200 million. And by 1880, cotton production was 2 million bales greater than its pre-war high of 4.5 million bales.

In the meantime, cotton increased its contributions to the nation's economy through four important new by-products from its seed — oil, meal, hulls, and linters.

While cottonseed oil had been produced largely on an experimental basis up until the Civil War, an improved huller invented by William Fee of Cincinnati, OH, played an important part in expanding cottonseed crushing after the war. By 1869, cottonseed products valued at more than $2 million were being produced by 26 oil mills. And in 1875 cottonseed oil was being exported to Mediterranean ports where it was often sold as olive oil.

As America moved toward the 20th Century, cotton played a key role in numerous new products. Thomas Edison — after trying more than a thousand materials — found that charred cotton made the ideal filament for the world's first electric light. The Wright Brothers used cotton muslin to cover the wings of their first plane ... and cotton provided the magic cord for tires that helped put America on wheels.

Meanwhile, the boll weevil was accidentally brought into South Texas from Mexico. Farmers fought the pest with a variety of weapons, but it destroyed thousands of acres of cotton as it moved eastward across the Cotton Belt over the next two decades.

As the weevil advanced to the east, commercial cotton production moved into the Far West. Arizona, New Mexico, and California joined the ranks of cotton-producing states.

Textile mill development in the South, meanwhile, had begun to gain momentum. By 1905, southern mills were using more cotton than those in New England.

Exports of raw cotton continued to be an important factor in the nation's economy. By 1911, revenue from cotton exports exceeded the nation's next four largest groups of exports — wheat and wheat flour, meat and dairy products, iron and steel manufactures, and copper — by $53 million. In addition, exports of cotton textile products accounted for another $29 million.

While the cotton industry was making vital contributions to the nation in peacetime, it proved indispensable to the national defense in time of international conflict. In World War I, cotton linters — the residual fiber left on cottonseed after ginning — emerged as an important source of cellulose for making smokeless gun powder. And in World War II, cotton moved swiftly to meet the nation's needs for expanded quantities of food, feed, and fiber. Six months after the U.S. entered the war, the cotton textile industry had turned 69 percent of its equipment to producing items essential to the nation's war effort. In all, more than 11,000 cotton products appeared on the Army Quartermaster Corps' procurement list.

By 1943, priority demands were taking more cotton than the total average American consumption before the war. And yet, with almost a third fewer spindles than in World War I, the U.S. cotton industry turned out nearly twice as much goods. Besides helping feed, equip, and clothe the military, cotton continued to meet essential clothing requirements of 130 million civilians.

In the post-war years, mechanical cotton harvesting became a reality after nearly a century of effort and more than 1,800 patents. Cotton emerged as California's most valuable field crop, and the state of Texas produced a record-breaking crop in excess of 6 million bales.

In the intervening years, cotton has continued to make important contributions to the nation. It provided biological isolation suits for astronauts on their return from the moon ... glandless cottonseed flour for high-protein foods ... fire-retardant uniforms for firemen, steel workers, the U.S. Navy, the astronauts, and others ... plus denim for just about everybody.

Today, more than 300,000 Americans are employed on cotton farms ... in gins and oil mills ... cooperatives and warehouses ... cotton merchandising firms ... and textile plants. Tens of thousands of other Americans work in cotton-related industries and businesses.

Altogether the U.S. cotton industry supplies more than $20 billion in products and services, and contributes better than $50 billion to the nation's economy.

Through the years, cotton has helped America grow. And through the years to come, cotton will continue to be America's perennial patriot.