Hemphasis

America's Harried Hemp History

by John Dvorak
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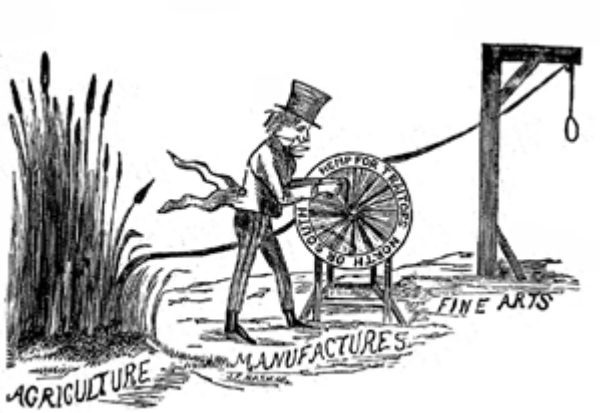
See the Hempology website



"Hemp for Traitors, North or South"
Civil War-era envelope politics.
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In 1619, because hemp was such an important resource, it was illegal not to grow hemp in Jamestown, Virginia. Massachusetts and Connecticut had similar laws. During the 1700's, subsidies and bounties were granted in Virginia, Pennsylvania, New York, New Jersey, North & South Carolina, and the New England states to encourage hemp cultivation and the manufacturing of cordage and canvas. Unfortunately, these actions failed to establish a permanent hemp industry in any of these states.

Most hemp used for naval purposes was imported. During the first six months of 1770, the colonies imported over 400 tons of hemp from Great Britain, 3,400 tons in 1800, and about 5,000 tons were imported each year between 1820 and 1840, which compares to the domestic production in the 1800's, usually in the 5,000-10,000 ton range, except in the 1840s and '50s when 30,000-plus tons of hemp were annually produced.

In 1839, the Navy's showcase ropewalk in Charlestown, Mass., used 2,733 tons of hemp: 2,500 tons Russian hemp, 200 tons Manila hemp, 33 tons American hemp. This quarter-mile ropewalk was constructed of granite walls and a slate roof that still stands strong. **[Editor's note: "ropewalk" = a long, covered walk, or a low, level building, where ropes are manufactured]**

Kentucky first planted hemp near Danville in 1775. In 1790, hemp fiber was first advertised for sale in local papers. The hemp industry rapidly expanded and Kentucky became the industry center for the next 100 years. Most of Kentucky's hemp was grown in the "bluegrass" region that includes Fayette, Woodford, Jessamine, Garrard, Clark, Bourbon,

Boyle, Scott and Shelby counties. In 1811, there were almost 60 ropewalks in Kentucky, and by the late 1850's, more than one-third of the 400 bagging, bale rope and cordage factories in America were located there. Later in the century, the production of cordage and bagging did not prove to be profitable using domestic hemp, so production was ceased as imported Manila and jute fibers were substituted.

Postcard scene from 1800s. ***Hemphasis*** collection

Hemp was first grown in Missouri in 1835. By 1840, the "Show Me" state produced 12,500 tons. During the Civil War, Confederate Missouri State Guardsmen advanced behind mobile breastworks made of hemp to defeat the Union troops entrenched at the Masonic College, in Lexington, Missouri. The battlefield grounds can still be toured, and every three years in September, a reenactment is held.

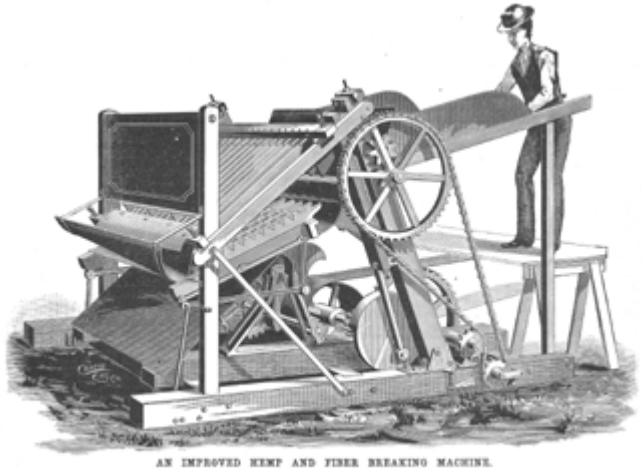
Hemp was grown in the eastern part of Illinois near Champaign and Rantoul from 1875 to 1902. Trial crops were grown successfully near Houston, Texas in 1899 and 1900. Nebraska's hemp industry existed between 1887 and 1910 near Fremont and Havelock. In 1910, the areas of hemp cultivation outside of Kentucky included fields near Lincoln, Nebraska, Kouts and North Liberty, Indiana, and Hanover, Pa. It was also being grown experimentally in Michigan, Minnesota, Iowa and Arkansas.

California, too, grew hemp in many areas from around 1900 to around 1920, including Gridley in Butte County, the Courtland in the lower Sacramento Valley, Rio Vista in Solano County, and Lerdo near Bakersfield.

The Wisconsin hemp industry began in 1908, when nine acres were grown in Mendota and Waupun. By 1915, 400 acres were grown and 7,000 acres in 1917. The leading hemp producing counties in Wisconsin in 1918 were Fond du Lac, Green Lake, Dodge and Racine. Matt Rens, later known as the "Hemp King," started growing hemp in Wisconsin in

1914, and continued until 1958. Rens built several hemp processing mills, and rented equipment to the farmers to sow and harvest their crops.

From 1804 through 1929, the average price paid for hemp fiber was close to or below the farmer's break-even point. Sharp increases in demand and price occurred, usually in conjunction with wars; in European in the early 1800s, the American Civil War, and the two World Wars. In 1915, 8,400 acreage of hemp grew in the U.S.: 6,500 acres in Kentucky, 2,000 acres cumulatively in Ohio, Indiana, Wisconsin and California. Because of the fiber shortage of WWI, Minnesota, South Dakota, Michigan, Kansas, Iowa and Illinois, increased domestic production of hemp to 41,200 acres in 1917.



The Shely Fiber Breaker (*Scientific American*, June 25, 1892)
"Designed to break six to eight thousand pounds of hemp or similar fiber per day.
Takes up to nine people to assist with processing."
Courtesy John Dvorak, hempology.org

Hemp rapidly declined in the 1920's. By 1929, only b600 acres of hemp were being grown in the United States, 140 acres in 1933, and no more than 2,000
acres were grown in any year throughout the 1930's. It wasn't until World War II's Hemp For Victory campaign that domestic hemp fiber was once again in demand as 146,200 acres were harvested in 1943.

From 1892-1916, America used an average of 11,000 tons a year of hemp fiber, evenly divided between imports at 5,555 tons/year, and domestic production at 5,549 tons/year. This is 4% of the average of 254,462 tons of other imported "hemps" (jute, Manila and sisal).

Now, let's compare the hemp figures to "king cotton." In 1892, 15,911,000 acres of cotton were grown in America; this increased to 34,985,000 acres in 1916. From 1892-1916 2.7 million tons/yr of cotton were produced, 10 times the amount of all other hemp fibers. Economies of scale gave cotton a price advantage over field retted, hand broken hemp fiber. Today, farming cotton uses from 25-50% of the worlds crop chemicals.

The dominance of the cotton industry is often cited as a factor in the demise of the hemp industry. In 1829, the Navy started making its sailcloth out of cotton. Ironically, though, 15 pounds of hemp were needed to properly wrap each 500 pound bale of cotton. Unfortunately demand disappeared as cheaper jute and metal hoops became commonplace for wrapping cotton bales. Several botanical prints of the era recognize the importance of hemp and cotton.

1903 USDA Yearbook shows that the hemp grown in Gridley CA was well over 10 feet tall.
Courtesy John Dvorak, hempology.org

The need for "naval grade" (i.e., water retted) hemp was apparent because mildew and rot-proof hemp was desirable. As early as 1730, Pennsylvania statutes required the use of water-retted hemp for cordage. In 1808, the Secretary of the Navy asked for sealed bids to supply the Navy with water-retted cordage. In 1810, American Ambassador and future president, John Quincy Adams, wrote a detailed description of how high quality water-retted hemp was produced in Russia.

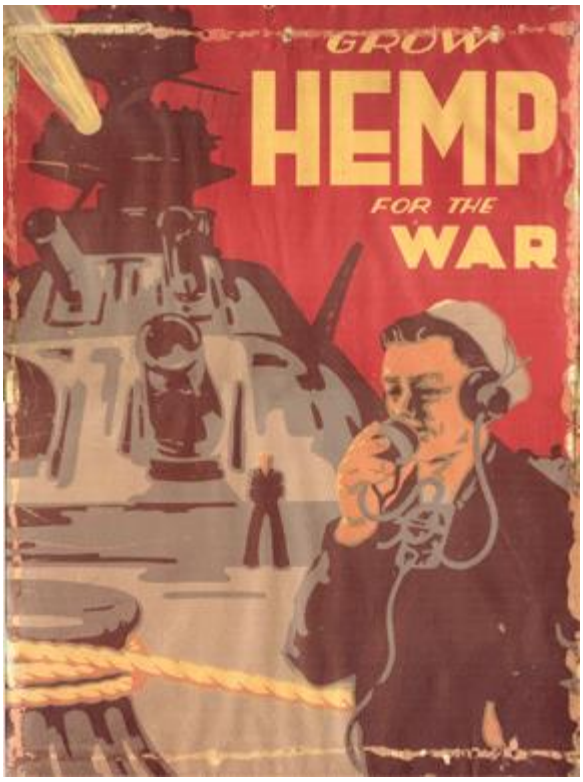
Despite the prevailing knowledge that water-retted hemp was better suited for naval cordage and the fact that it generally drew a higher price on the market than dew retted hemp, few American hemp farmers adopted the practice. As late as 1913, Dewey noted that "dew retting is practiced almost exclusively". While a higher price could be received for water-retted hemp, there was a limited market for it. For American farmers of that time, there was a bigger market for dew retted hemp.

All the hempseed available in the U. S. is stacked in this Kentucky warehouse under armed guard. Next year, USDA hopes, there'll be enough to grow 350,000 acres.

June, 1942, *Farm Journal* and *Farmer's Wife*;
"All the hempseed available in the U.S. is stacked
in this Kentucky warehouse under armed guard.
Next year, USDA hopes, there'll be enough
to grow 350,000 acres."
Courtesy John Dvorak, hempology.org

The methods used to harvest and process hemp had a major effect on the cost of producing hemp. In general, mechanical breaking and processing machines were not used, resulting in higher cost per acre and lower quality fiber. In 1824, the Hines and Baines Machine for breaking flax and hemp was being used with great success in Ohio. In 1828, this machine was used in conjunction with water-retting to produce hemp fiber "fully equal if not superior in quality to the best of Russian Hemp." This machine only needed half of its hurd by-product to power its steam engine, saving "two cords of wood a day."

While inventions relating to cotton were continually modified and improved, the evolution of hemp machinery lagged. In 1913, Lyster Dewey reported for the USDA that "more than three-fourths of the hemp fiber produced in Kentucky is broken out on the hand break". This lack of progress unquestionably stunted the growth of America's hemp industry.



This poster (17"x22") was widely distributed in agricultural areas of the U.S. during WWII.
Hemphasis collection

Another factor affecting the demand for hemp was a lack of markets. Cordage, twine, and bagging were the primary items for which hemp was used. As late as 1916, hemp hurds were considered a waste product and hemp seed was only used as birdseed, not as food. Jason L. Merrill wrote in a USDA circular that "Our forests are being cut three times as fast as they grow." Dewey (his co-researcher) and Merrill knew that using hemp for paper could prevent deforestation and help save the environment. Despite the knowledge that hemp produced a more efficient superior grade of paper, wood pulp continued as the primary source of paper.

The hemp industry operated under the well known principles of a capitalist society where supply and demand determined price. People decided to grow or process hemp based on the amount of money that they could receive for it.

But the laws of supply and demand were effectively thrown out the window starting in the 1930's when the market wrecking pogrom that is Reefer Madness was unleashed on an unsuspecting populace. Hemp's association with marijuana undoubtedly caused reluctance in farmers to grow it, while the bureaucratic red tape surrounding the enforcement of

the Marihuana Tax Act of 1937 effectively regulated the hemp industry out of existence, destroying a huge money market in the process!

A map published by the USDA in 1970 shows that hemp can be grown in almost every state of continental America. Courtesy John Dvorak, hempology.org

The current demand for hemp fiber is still relatively low, although new uses for it continue to be developed. The energy crisis is shining new light on renewable crops, such as hemp, as a source of energy. The value of the cellulose rich hemp hurds as a source of paper, building materials, fuel and animal bedding is now universally recognized, and the multitude of nutritional benefits contained in the hempseed are manifesting themselves in numerous foods and health care products. However, until hemp can once again operate in the free market it will not even be given the chance to succeed.

John Dvorak is the founder of the Boston Hemp Co-op, curator and webmaster of the Hemp History Library and Museum (hempology.org). He is also the Internet Editor for the Journal of Industrial Hemp.

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