

The Emperor Wears No Clothes

Chapter 4

The Last Days of Legal Cannabis

As you now know, the industrial revolution of the 19th Century was a setback for hemp in world commerce, due to the lack of mechanized harvesting and breaking technology needed for mass production. But this natural resource was far too valuable to be relegated to the back burner of history for very long.

By 1916, USDA Bulletin 404 predicted that a decorticating and harvesting machine would be developed, and hemp would again be America's largest agricultural industry. In 1938, magazines such as Popular Mechanics, and Mechanical Engineering introduced a new generation of investors to fully operational hemp decorticating devices; bringing us to this next bit of history. Because of this machine, both indicated that hemp would soon be America's number-one crop!

Breakthrough in Papermaking

If hemp were legally cultivated using 20th Century technology, it would be the single largest agricultural crop in the United States and world today!

(Popular Mechanics February 1938; Mechanical Engineering, February, 1938; U.S. Department of Agriculture Reports 1903, 1910, 1913.)

In fact, when the preceding two articles were prepared early in 1937, hemp was still legal to grow. And those who predicted billions of dollars in new cannabis businesses did not consider income from medicines, energy (fuel) and food, which would now add another trillion dollars or more annually to our coming "natural" economy (compared to our synthetic, environmentally troubled economy). Recreational smoking would add only a relatively minor amount to this figure.

The most important reason that the 1938 magazine articles projected billions in new income was hemp for "pulp paper" (as opposed to fiber or rag paper). Other reasons were for its fiber, seed and many other pulp uses.

This remarkable new hemp pulp technology for papermaking was invented in 1916 by our own U.S. Department of Agriculture Chief of Scientists, botanist Lyster Dewey and chemist Jason Merrill.

This technology, coupled with the breakthrough of G.W.Schlichten's decorticating machine, patented in 1917, made hemp a viable paper source at less than half the cost of

tree-pulp paper. The new harvesting machinery, along with Schlichten's machine, brought the processing of hemp down from 200 to 300 man-hours per acre to just a couple of hours.* Twenty years later, advancing technology and the building of new access roads made hemp even more valuable. Unfortunately, by then, opposition forces had gathered steam and acted quickly to suppress hemp cultivation.

*See Appendix I.

A Plan to Save Our Forests

Some cannabis plant strains regularly reach tree-like heights of 20 feet or more in one growing season.

The new paper making process used hemp "hurds" - 77% of the hemp stalk's weight - which was then a wasted by-product of the fiber stripping process.

In 1916, USDA Bulletin No. 404 reported that one acre of cannabis hemp, in annual rotation over a 20-year period, would produce as much pulp for paper as 4.1 acres of trees being cut down over the same 20-year period. This process would use only 1/7 to 1/4 as much polluting sulfur-based acid chemicals to break down the glue-like lignin that binds the fibers of the pulp, or even none at all using soda ash. All this lignin must be broken down to make pulp. Hemp pulp is only 4-10% lignin, while trees are 18-30% lignin. The problem of dioxin contamination of rivers is avoided in the hemp papermaking process, which does not need to use chlorine bleach (as the wood pulp papermaking process requires), but instead substitutes safer hydrogen peroxide in the bleaching process.

Thus, hemp provides four times as much pulp with at least four to seven times less pollution.

As we have seen, this hemp pulp paper potential depended on the invention and the engineering of new machines for stripping the hemp by modern technology. This would also lower demand for lumber and reduce the cost of housing while at the same time helping re-oxygenate the planet.¹

As an example: If the new (1916) hemp pulp paper process were in use legally today, it would soon replace about 70% of all wood pulp paper, including computer, printout paper, corrugated boxes and paper bags.

Pulp paper made from 60-100% hemp hurds is stronger and more flexible than paper made from wood pulp. Making paper from wood pulp damages the environment. Hemp papermaking does not.

(Dewey & Merrill, Bulletin #404, USDA, 1916; New Scientist, 1980; Kimberly Clark production from its giant French hemp-fiber paper subsidiary De Mauduit, 1937 through 1984.)

Conservation & Source Reduction

Reduction of the source of pollution, usually from manufacturing with petrochemicals or their derivatives, is a cost-cutting waste control method often called for by environmentalists.

Whether the source of pollution is CFCs (chlorofluorocarbons) from refrigeration, spray cans, computers, tritium and plutonium produced for military uses, or the sulfuric acids used by papermakers, the goal is reducing the source of pollution.

In the supermarket, when you are asked to choose paper or plastic for your bags, you are faced with an environmental dilemma; paper from trees that were cut, or plastic bags made from fossil fuel and chemicals. We should be able to choose a biodegradable, durable paper from an annually renewable source - the cannabis hemp plant.

The environmental advantages of harvesting hemp annually - leaving the trees in the ground! - for papermaking, and for replacing fossil fuels as an energy source, have become crucial for the source reduction of pollution.

A Conspiracy to Wipe Out the Natural Competition

In the mid-1930s, when the new mechanical hemp fiber stripping machines and machines to conserve hemp's high-cellulose pulp finally became state-of-the-art, available and affordable, the enormous timber acreage and businesses of the Hearst Paper Manufacturing Division, Kimberly Clark (USA), St. Regis - and virtually all other timber, paper and large newspaper holding companies - stood to lose billions of dollars and perhaps go bankrupt.

Coincidentally, in 1937, DuPont had just patented processes for making plastics from oil and coal, as well as a new sulfate/sulfite process for making paper from wood pulp. According to DuPont's own corporate records and historians,* these processes accounted for over 80% of all the company's railroad car loadings over the next 60 years into the 1990s.

*Author's research and communications with DuPont, 1985-1996.

If hemp had not been made illegal, 80% of DuPont's business would never have materialized and the great majority of the pollution which has poisoned our Northwestern and Southeastern rivers would not have occurred.

In an open marketplace, hemp would have saved the majority of America's vital family farms and would probably have boosted their numbers, despite the Great Depression of the 1930s.

But competing against environmentally-sane hemp paper and natural plastic technology would have jeopardized the lucrative financial schemes of Hearst, DuPont and DuPont's chief financial backer, Andrew Mellon of the Mellon Bank of Pittsburgh.

"Social Reorganization"

A series of secret meetings were held.

In 1931, Mellon, in his role as Hoover's Secretary of the Treasury, appointed his future nephew-in-law, Harry J. Anslinger, to be head of the newly reorganized Federal Bureau of Narcotics and Dangerous Drugs (FBNDD), a post he held for the next 31 years.

These industrial barons and financiers knew that machinery to cut, bale, decorticate (separate the fiber from the high-cellulose hurd), and process hemp into paper or plastics was becoming available in the mid-1930s. Cannabis hemp would have to go.

In DuPont's 1937 Annual Report to its stockholders, the company strongly urged continued investment in its new, but not readily accepted, petrochemical synthetic products. DuPont was anticipating "radical changes" from "the revenue raising power of government. . . converted into an instrument for forcing acceptance of sudden new ideas of industrial and social reorganization."*

*(DuPont Company, annual report, 1937, our emphasis added.)

In the Marijuana Conviction (University of Virginia Press, 1974), Richard Bonnie and Charles Whitebread II detailed this process:

"By the fall of 1936, Herman Oliphant (general counsel to the Treasury Department) had decided to employ the taxing power [of the federal government], but in a statute modeled after the National Firearms Act and wholly unrelated to the 1914 Harrison [narcotics] Act. Oliphant himself was in charge of preparing the bill. Anslinger directed his army to turn its campaign toward Washington.

"The key departure of the marijuana tax scheme from that of the Harrison Act is the notion of the prohibitive tax. Under the Harrison Act, a non-medical user could not legitimately buy or possess narcotics. To the dissenters in the Supreme Court decisions upholding the act, this clearly demonstrated that Congress' motive was to prohibit conduct rather than raise revenue. So in the National Firearms Act, designed to prohibit traffic in machine guns, Congress 'permitted' anyone to buy a machine gun, but required him to pay a \$200 transfer tax* and carry out the purchase on an order form.

"The Firearms Act, passed in June 1934, was the first act to hide Congress' motives behind a prohibitive tax. The Supreme Court unanimously upheld the anti-machine gun law on March 29, 1937. Oliphant had undoubtedly been awaiting the Court's decision, and the Treasury Department introduced its marihuana tax bill two weeks later, April 14, 1937."

Thus, DuPont's** decision to invest in new technologies based on "forcing acceptance of sudden new ideas of industrial and social reorganization" makes sense.

* About \$5,000 in 1998 dollars.

** It is interesting to note that on April 29, 1937, two weeks after the Marihuana Tax Act was introduced, DuPont's foremost scientist, Wallace Hume Carothers, the inventor of nylon for DuPont, the world's number one organic chemist, committed suicide by drinking cyanide. Carothers was dead at age 41. . .

A Question of Motive

DuPont's plans were alluded to during the 1937 Senate hearings by Matt Rens, of Rens Hemp Company:

Mr. Rens: Such a tax would put all small producers out of the business of growing hemp, and the proportion of small producers is considerable. . . The real purpose of this bill is not to raise money, is it?

Senator Brown: Well, we're sticking to the proposition that it is.

Mr. Rens: It will cost a million.

Senator Brown: Thank you. (Witness dismissed.)

Hearst, His Hatred and Hysterical Lies

Concern about the effects of hemp smoke had already led to two major governmental studies. The British governor of India released the Report of the Indian Hemp Drugs Commission 1893-1894 on heavy bhang smokers in the subcontinent.

And in 1930, the U.S. government sponsored the Siler Commission study on the effects of off-duty smoking of marijuana by American servicemen in Panama. Both reports concluded that marijuana was not a problem and recommended that no criminal penalties apply to its use.

In early 1937, Assistant U.S. Surgeon General Walter Treadway told the Cannabis Advisory Subcommittee of the League of Nations that, "It may be taken for a relatively long time without social or emotional breakdown. Marihuana is habit-forming. . . in the same sense as. . . sugar or coffee."

But other forces were at work. The war fury that led to the Spanish American War in 1898 was ignited by William Randolph Hearst, through his nationwide chain of newspapers, and marked the beginning of "yellow journalism"* as a force in American politics.

* Webster's Dictionary defines "yellow journalism" as the use of cheaply sensational or unscrupulous methods in newspapers and other media to attract or influence the readers.

In the 1920s and '30s, Hearst's newspapers deliberately manufactured a new threat to America and a new yellow journalism campaign to have hemp outlawed. For example, a story of a car accident in which a "marijuana cigarette" was found would dominate the

headlines for weeks, while alcohol related car accidents (which outnumbered marijuana connected accidents by more than 10,000 to 1) made only the back pages.

This same theme of marijuana leading to car accidents was burned into the minds of Americans over and over again in the late 1930s by showing marijuana related car accident headlines in movies such as "Reefer Madness" and "Marijuana - Assassin of Youth."

Blatant Bigotry

Starting with the 1898 Spanish American War, the Hearst newspaper had denounced Spaniards, Mexican-Americans and Latinos.

After the seizure of 800,000 acres of Hearst's prime Mexican timberland by the "marihuana" smoking army of Pancho Villa,* these slurs intensified.

*The song "La Cucaracha" tells the story of one of Villa's men looking for his stash of "marijuana por fumar!" (to smoke!)

Non-stop for the next three decades, Hearst painted a picture of the lazy, pot-smoking Mexican - still one of our most insidious prejudices. Simultaneously, he waged a similar racist smear campaign against the Chinese, referring to them as the "Yellow Peril."

From 1910 to 1920, Hearst's newspapers would claim that the majority of incidents in which blacks were said to have raped white women, could be traced directly to cocaine. This continued for 10 years until Hearst decided it was not "cocaine-crazed Negroes" raping white women - it was now "marijuana-crazed Negroes" raping white women.

Hearst's and other sensationalistic tabloids ran hysterical headlines atop stories portraying "Negroes" and Mexicans as frenzied beasts who, under the influence of marijuana, would play anti-white "voodoo-satanic" music (jazz) and heap disrespect and "viciousness" upon the predominantly white readership. Other such offenses resulting from this drug-induced "crime wave" included: stepping on white men's shadows, looking white people directly in the eye for three seconds or more, looking at a white woman twice, laughing at a white person, etc.

For such "crimes", hundreds of thousands of Mexicans and blacks spent, in aggregate, millions of years in jails, prisons and on chain gangs, under brutal segregation laws that remained in effect throughout the U.S. until the 1950s and '60s. Hearst, through pervasive and repetitive use, pounded the obscure Mexican slang word "marijuana" into the English-speaking American consciousness. Meanwhile, the word "hemp" was discarded and "cannabis," the scientific term, was ignored and buried.

The actual Spanish word for hemp is "canamo." But using a Mexican "Sonoran" colloquialism - marijuana, often Americanized as "marihuana" - guaranteed that few would realize that the proper terms for one of the chief natural medicines, "cannabis," and for the premiere industrial resource, "hemp," had been pushed out of the language.

The Prohibitive Marijuana Tax

In the secret Treasury Department meetings conducted between 1935 and 1937, prohibitive tax laws were drafted and strategies plotted. "Marijuana" was not banned outright; the law called for an "occupational excise tax upon dealers, and a transfer tax upon dealings in marijuana."

Importers, manufacturers, sellers and distributors were required to register with the Secretary of the Treasury and pay the occupational tax. Transfers were taxed at \$1 an ounce; \$100 an ounce if the dealer was unregistered. The new tax doubled the price of the legal "raw drug" cannabis which at the time sold for one dollar an ounce.² The year was 1937. New York State had exactly one narcotics officer.*

* New York currently has a network of thousands of narcotics officers, agents, spies and paid informants - and 20 times the penal capacity it had in 1937, although the state's population has only doubled since then.

After the Supreme Court decision of March 29, 1937, upholding the prohibition of machine guns through taxation, Herman Oliphant made his move. On April 14, 1937 he introduced the bill directly to the House Ways and Means Committee instead of to other appropriate committees such as food and drug, agriculture, textiles, commerce, etc.

His reason may have been that "Ways and Means" is the only committee that can send its bills directly to the House floor without being subject to debate by other committees. Ways and Means Chairman Robert L. Doughton,* a key DuPont ally, quickly rubber-stamped the secret Treasury bill and sent it sailing through Congress to the President.

* Colby Jerry, *The DuPont Dynasties*, Lyle Stewart, 1984.

"Did Anyone Consult the AMA?"

However, even within his controlled Committee hearings, many expert witnesses spoke out against the passage of these unusual tax laws.

Dr. William G. Woodward, for instance, who was both a physician and an attorney for the American Medical Association, testified on behalf of the AMA.

He said, in effect, the entire fabric of federal testimony was tabloid sensationalism! No real testimony had been heard! This law, passed in ignorance, could possibly deny the world a potential medicine, especially now that the medical world was just beginning to find which ingredients in cannabis were active.

Woodward told the committee that the only reason the AMA hadn't come out against the marijuana tax law sooner was that marijuana had been described in the press for 20 years as "killer weed from Mexico."

The AMA doctors had just realized "two days before" these spring 1937 hearings, that the plant Congress intended to outlaw was known medically as cannabis, the benign

substance used in America with perfect safety in scores of illnesses for over one hundred years.

"We cannot understand yet, Mr. Chairman," Woodward protested, "why this bill should have been prepared in secret for two years without any intimation, even to the profession, that it was being prepared." He and the AMA" were quickly denounced by Anslinger and the entire congressional committee, and curtly excused.³

*The AMA and the Roosevelt Administration were strong antagonists in 1937.

When the Marijuana Tax Act bill came up for oral report, discussion, and vote on the floor of Congress, only one pertinent question was asked from the floor: "Did anyone consult with the AMA and get their opinion?"

Representative Vinson, answering for the Ways and Means Committee replied, "Yes, we have. A Dr. Wharton [mistaken pronunciation of Woodward?] and {the AMA} are in complete agreement!"

With this memorable lie, the bill passed, and became law in December 1937. Federal and state police forces were created, which have incarcerated hundreds of thousands of Americans, adding up to more than 14 million wasted years in jails and prisons - even contributing to their deaths - all for the sake of poisonous, polluting industries, prison guard unions and to reinforce some white politicians' policies of racial hatred.

(Mikuriya, Tod, M.C., Marijuana Medical Papers, 1972; Sloman, Larry, Reefer Madness, Grove Press, 1979; Lindsmith, Alfred, The Addict and the Law, Indiana U. Press; Bonnie & Whitebread; The Marijuana Conviction, U. of VA Press; U.S. Cong. Records; et al.)

Others Spoke Out, Too

Also lobbying against the Tax Act with all its energy was the National Oil Seed Institute, representing the high-quality machine lubrication producers, as well as paint manufacturers. Speaking to the House Ways and Means Committee in 1937, their general counsel, Ralph Loziers, testified eloquently about the hempseed oil that was to be, in effect, outlawed:

"Respectable authorities tell us that in the Orient, at least 200 million people use this drug; and when we take into consideration that for hundreds, yes, thousands of years, practically that number of people have been using this drug. It is significant that in Asia and elsewhere in the Orient, where poverty stalks abroad on every hand and where they draw on all the plant resources which a bountiful nature has given that domain - it is significant that none of those 200 million people has ever, since the dawn of civilization, been found using the seed of this plant or using the oil as a drug.

"Now, if there were any deleterious properties or principles in the seed or oil, it is reasonable to suppose that these Orientals, who have been reaching out in their poverty for something that would satisfy their morbid appetite, would have discovered it. . .

"If the committee please, the hempseed, or the seed of the cannabis sativa l., is used in all the Oriental nations and also in a part of Russia as food. It is grown in their fields and used as oatmeal. Millions of people every day are using hempseed in the Orient as food. They have been doing that for many generations, especially in periods of famine. . . The point I make is this - that this bill is too all inclusive. This bill is a world encircling measure. This bill brings the activities - the crushing of this great industry under the supervision of a bureau - which may mean its suppression. Last year, there was imported into the U.S. 62,813,000 pounds of hempseed. In 1935 there was imported 116 million pounds. . ."

Protecting Special Interests

As the AMA's Dr. Woodward had asserted, the government's testimony before Congress in 1937 had in fact consisted almost entirely of Hearst's and other sensational and racist newspaper articles read aloud by Harry J. Anslinger,* director of the Federal Bureau of Narcotics (FBN). (This agency has since evolved into the Drug Enforcement Administration [DEA]).

*Harry J. Anslinger was director of the new Federal Bureau of Narcotics from its inception in 1931 for the next 31 years, and was only forced into retirement in 1962 by President John F. Kennedy after Anslinger tried to censor the publications and publishers of Professor Alfred Lindsmith (*The Addict and the Law*, Washington Post, 1961) and to blackmail and harass his employer, Indiana University. Anslinger had come under attack for racist remarks as early as 1934 by a U.S. senator from Pennsylvania, Joseph Guffey, for such things as referring to "ginger-colored niggers" in letters circulated to his department heads on FBN stationery.

Prior to 1931, Anslinger was Assistant U.S. Commissioner for Prohibition. Anslinger, remember, was hand-picked to head the new Federal Bureau of Narcotics by his uncle-in-law, Andrew Mellon, Secretary of the Treasury under President Herbert Hoover. The same Andrew Mellon was also the owner and largest stockholder of the sixth largest bank (in 1937) in the United States, the Mellon Bank in Pittsburgh, one of only two bankers for DuPont* from 1928 to the present.

* DuPont has borrowed money from banks only twice in its entire 190-year history, once to buy control of General Motors in the 1920s. Its banking business is the prestigious plum of the financial world.

In 1937, Anslinger testified before Congress saying, "Marijuana is the most violence-causing drug in the history of mankind."

This, along with Anslinger's outrageous racist statements and beliefs, was made to the southern dominated congressional committee and is now an embarrassment to read in its entirety.

For instance, Anslinger kept a "Gore File," culled almost entirely from Hearst and other sensational tabloids - e.g., stories of axe murders, where one of the participants reportedly smoked a joint four days before committing the crime.

Anslinger pushed on Congress as a factual statement that about 50% of all violent crimes committed in the U.S. were committed by Spaniards, Mexican-Americans, Latin Americans, Filipinos, African-Americans and Greeks, and these crimes could be traced directly to marijuana.

(From Anslinger's own records given to Pennsylvania State University, ref.; Li Cata Murders, etc.)

Not one of Anslinger's marijuana "Gore Files" of the 1930s is believed to be true by scholars who have painstakingly checked the facts.⁴

Self-Perpetuating Lies

In fact, FBI statistics, had Anslinger bothered to check, showed at least 65-75% of all murders in the U.S. were then - and still are - alcohol related. As an example of his racist statements, Anslinger read into U.S. Congressional testimony (without objection) stories about "coloreds" with big lips, luring white women with jazz music and marijuana.

He read an account of two black students at the University of Minnesota doing this to a white coed "with the result of pregnancy." The congressmen of 1937 gasped at this and at the fact that this drug seemingly caused white women to touch or even look at a "Negro."

Virtually no one in America other than a handful of rich industrialists and their hired cops knew that their chief potential competitor - hemp - was being outlawed under the name "marijuana."

That's right. Marijuana was most likely just a pretext for hemp prohibition and economic suppression.

The water was further muddied by the confusion of marijuana with "loco weed" (Jimson Weed). The situation was not clarified by the press, which continued to print the misinformation into the 1960s.

At the dawn of the 1990s, the most extravagant and ridiculous attacks on the hemp plant drew national media attention - such as a study widely reported by health journals* in 1989 that claimed marijuana smokers put on about a half a pound of weight per day. Now in 1998, they just want to duck the issue.

*American Health, July/August 1989.

Meanwhile, serious discussions of the health, civil liberties and economic aspects of the hemp issue are frequently dismissed as being nothing but an "excuse so that people can smoke pot" - as if people need an excuse to state the facts about any matter.

One must concede that, as a tactic, lying to the public about the beneficial nature of hemp and confusing them as to its relationship with "marijuana" has been very successful.

Footnotes:

1. Dewey & Merrill, Bulletin 404, US Department of Agriculture 1916; "Billion-Dollar Crop," Popular Mechanics, 1938; U.S. Agricultural Indexes, 1916 through 1982; New Scientist, November 13, 1980.
2. Uelmen & Haddax, Drug Abuse and the Law, 1974.
3. Bonnie, Richard & Whitebread, Charles, The Marijuana Conviction, Univ. of Virginia Press, 1974; Congressional testimony, 1937 (See full testimony in Appendix); et al.
4. Sloman, Larry; Reefer Madness, 1979; Bonnie and Whitebread, The Marijuana Conviction, Univ. of Virginia Press, 1974.

Man-Made Fiber. . .

The Toxic Alternative to Natural Fibers

The late 1920s and 1930s saw continuing consolidation of power into the hands of a few large steel, oil and chemical (munitions) companies. The U.S. federal government placed much of the textile production for the domestic economy in the hands of its chief munitions maker, DuPont.

The processing of nitrating cellulose into explosives is very similar to the process for nitrating cellulose into synthetic fibers and plastics. Rayon, the first synthetic fiber, is simply stabilized guncotton, or nitrated cloth, the basic explosive of the 19th Century.

"Synthetic plastics find application in fabricating a wide variety of articles, many of which in the past were made from natural products,"* beamed Lamot DuPont (Popular Mechanics, June 1939, pg. 805).

"Consider our natural resources," the president of DuPont continued, "The chemist has aided in conserving natural resources by developing synthetic products to supplement or wholly replace natural products."

DuPont's scientists were the world's leading researchers into the processes of nitrating cellulose and were in fact the largest processor of cellulose in the nation in this era.

The February 1938 Popular Mechanics article stated "Thousands of tons of hemp hurds are used every year by one large powder company for the manufacture of dynamite and TNT." History shows that DuPont had largely cornered the market in explosives by buying up and consolidating the smaller blasting companies in the late 1800s. By 1902 it controlled about two-thirds of industry output.

They were the largest powder company, supplying 40% of the munitions for the allies in WWI. As cellulose and fiber researchers, DuPont's chemists knew hemp's true value

better than anyone else. The value of hemp goes far beyond linen fibers; although recognized for linen, canvas, netting and cordage, these long fibers are only 20% of the hemp stalk's weight. Eighty percent of the hemp is in the 77% cellulose hurd, and this was the most abundant, cleanest resource of cellulose (fiber) for paper, plastics and even rayon.

The empirical evidence in this book shows that the federal government - through the 1937 Marijuana Tax Act - allowed this munitions maker to supply synthetic fibers for the domestic economy without competition. The proof of a successful conspiracy among these corporate and governing interests is simply this: in 1997 DuPont was still the largest producer of man-made fibers, while no American citizen has legally harvested a single acre of textile grade hemp in over 60 years (except during the period of WWII).

An almost unlimited tonnage of natural fiber and cellulose would have become available to the American farmer in 1937, the year DuPont patented nylon and the polluting wood-pulp paper sulfide process. All of hemp's potential value was lost.

Simple plastics of the early 1900s were made of nitrated cellulose, directly related to DuPont's munitions-making process. Celluloid, acetate and rayon were the simple plastics of that era, and hemp was well known to cellulose researchers as the premier resource for this new industry to use. Worldwide, the raw material of simple plastics, rayon and paper could be best supplied by hemp hurds.

Nylon fibers were developed between 1926-1937 by the noted Harvard chemist Wallace Carothers, working from German patents. These polyamides are long fibers based on observed natural products. Carothers, supplied with an open-ended research grant from DuPont, made a comprehensive study of natural cellulose fibers. He duplicated natural fibers in his labs and polyamides - long fibers of a specific chemical process - were developed. (Curiously, Wallace Carothers committed suicide one week after the House Ways and Means Committee, in April of 1937, had the hearings on cannabis and created the bill that would eventually outlaw hemp.)

Coal tar and petroleum-based chemicals were employed, and different devices, spinnerets and processes were patented. This new type of textile, nylon, was to be controlled from the raw material stage, as coal, to the completed product: a patented chemical product. The chemical company centralized the production and profits of the new "miracle" fiber. The introduction of nylon, the introduction of high-volume machinery to separate hemp's long fiber from the cellulose hurd, and the outlawing of hemp as "marijuana" all occurred simultaneously.

The new man-made fibers (MMFs) can best be described as war material. The fiber-making process has become one based on big factories, smokestacks, coolants and hazardous chemicals, rather than one of stripping out the abundant, naturally available fibers.

Coming from a history of making explosives and munitions, the old "chemical dye plants" now produce hosiery, mock linens, mock canvas, latex paint and synthetic carpets. Their polluting factories make imitation leather, upholstery and wood surfaces, while an important part of the natural cycle stands outlawed.

The standard fiber of world history, America's traditional crop, hemp, could provide our textiles and paper and be the premier source for cellulose. The war industries - DuPont, Allied Chemical, Monsanto, etc., - are protected from competition by the marijuana laws. They make war on the natural cycle and the common farmer.

- Shan Clark

Sources:

Encyclopedia of Textiles 3rd Edition by the editors of American Fabrics and Fashions Magazine, William C. Legal, Publisher Prentice-Hall, Inc. Englewood Cliffs, NJ 1980; The Emergence of Industrial America Strategic Factors in American Economic Growth Since 1870, Peter George State University, NY; DuPont (a corporate autobiography published periodically by E.I. DuPont DeNemours and Co., Inc. Wilmington, DE); The Blasting Handbook, E.I. DuPont DeNemours and Co., Inc., Wilmington, DE; Mechanical Engineering Magazine, Feb. 1938; Popular Mechanics, Feb 1938; Journal of Applied Polymer Science, Vol. 47, 1984; Polyamides, the Chemistry of Long Molecules (author unknown) U.S. Patent #2,071,250 (Feb. 16, 1937), W.H. Carothers, DuPont Dynasties, Jerry Colby; The American Peoples Encyclopedia, the Sponsor Press, Chicago, 1953.