



# TOBACCO

*—a vital U. S. Industry*

Watson



*Hold a leaf of tobacco in your hand and you hold  
important Americana.*

*Tobacco cannot be separated from the record of agricultural growth  
in our country, of our nation's economy and of the  
social customs of our people.*

*Here, briefly told, is the story of a vital industry  
that helped in the growth of our nation.*

*James P. Richards*  
President, The Tobacco Institute, Inc.



From an old engraving  
*A familiar scene in the tobacco colonies . . . leaf in hogsheads about to be shipped abroad*



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THE TOBACCO INSTITUTE, INC.

James P. Richards  
*President and Executive Director*

Edward F. Ragland  
*Vice President and Secretary*

910 Seventeenth Street, N. W., Washington 6, D. C.



## An old American custom

Three and a half centuries have passed since the first great American enterprise began. It began in Virginia with the experimental planting of tobacco. As a direct consequence of that experiment, England's uncertain base in North America was made secure, settlers were encouraged to found new colonies—and a new nation began to grow.

Today, for a great number of Americans—more than half the adult population—the pattern of living includes the use of tobacco.

In order to supply this mass demand for a variety of products, a mammoth industry has been developed.

In 1958, for instance, the tobacco industry produced for domestic use over 436 billion cigarettes, 6¼ billion cigars, 74 million pounds of smoking tobacco, 68 million pounds of chewing tobacco and 34 million pounds of snuff.

The overall total places Americans in the front rank of tobacco consumers. Because of a certain elasticity in the boundaries of taste, it is difficult to obtain an exact count of users in each product area. The estimate of cigarette smokers alone is in the 60 to 65 million range. Yet many in that segment frequently alternate with pipes. Chewers often take to the cigar. Cigar smokers occasionally flirt with cigarettes.

Among the fixed customs of mankind the use of tobacco has a long record of world-wide popularity. That began to develop as soon as leaf of good quality became readily available in the middle 1550's. All forms of using tobacco for relaxation or for relief from tension were widely established long before any brand advertising began.

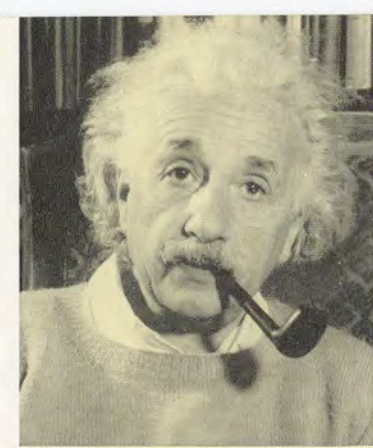
The advance of tobacco to its present economic status was not achieved without difficulties. In many countries during the 16th and 17th centuries smokers particularly were severely restricted by royal edicts or prohibitory laws.

Curiously enough, the original moral objections to tobacco were based on a medical error. The plant was thought to be only a curative herb, long used by Indians. It was recommended by physicians generally for most of mankind's maladies. In consequence of the mistaken belief that tobacco was a medicine, its use for pleasure was condemned.

Smokers and snuffers were not convinced by the opinions of physicians and reformers. Tobacco was finally dropped as a remedial agent.

Over the centuries, meanwhile, the "divine herb" was being championed by notable men and women. There never were class distinctions for tobacco. It has always been as familiar in the peasants' huts as in the palaces of kings.

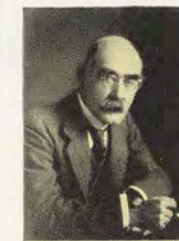
Throughout the periods of opposition consumer demand for tobacco had grown. By the 17th century it was already well established in various national economies.



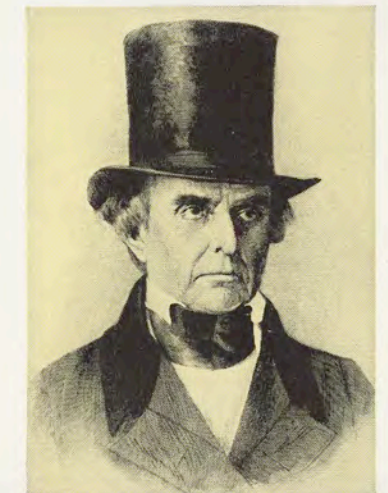
*The discoverer of relativity—and a steady pipe smoker*



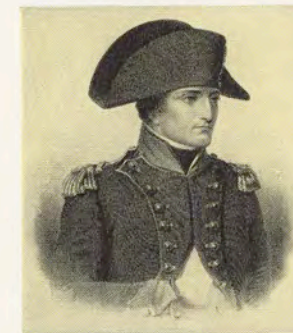
*"Never marry a man who does not smoke."  
Robert Louis Stevenson*



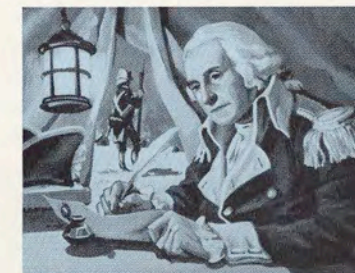
*"... but a good cigar is a smoke!"  
Rudyard Kipling*



*"I have engaged a new auxiliary to support me under disappointments—tobacco." Daniel Webster*



*Snuff-taker—and emperor of France*



*"If you can't send money  
—send tobacco (to my men)."*



*"I find smoking a valuable assistant." Elihu Root*



*Well-known lady cigar smoker  
—the poet, Amy Lowell*



## Economic mainstay

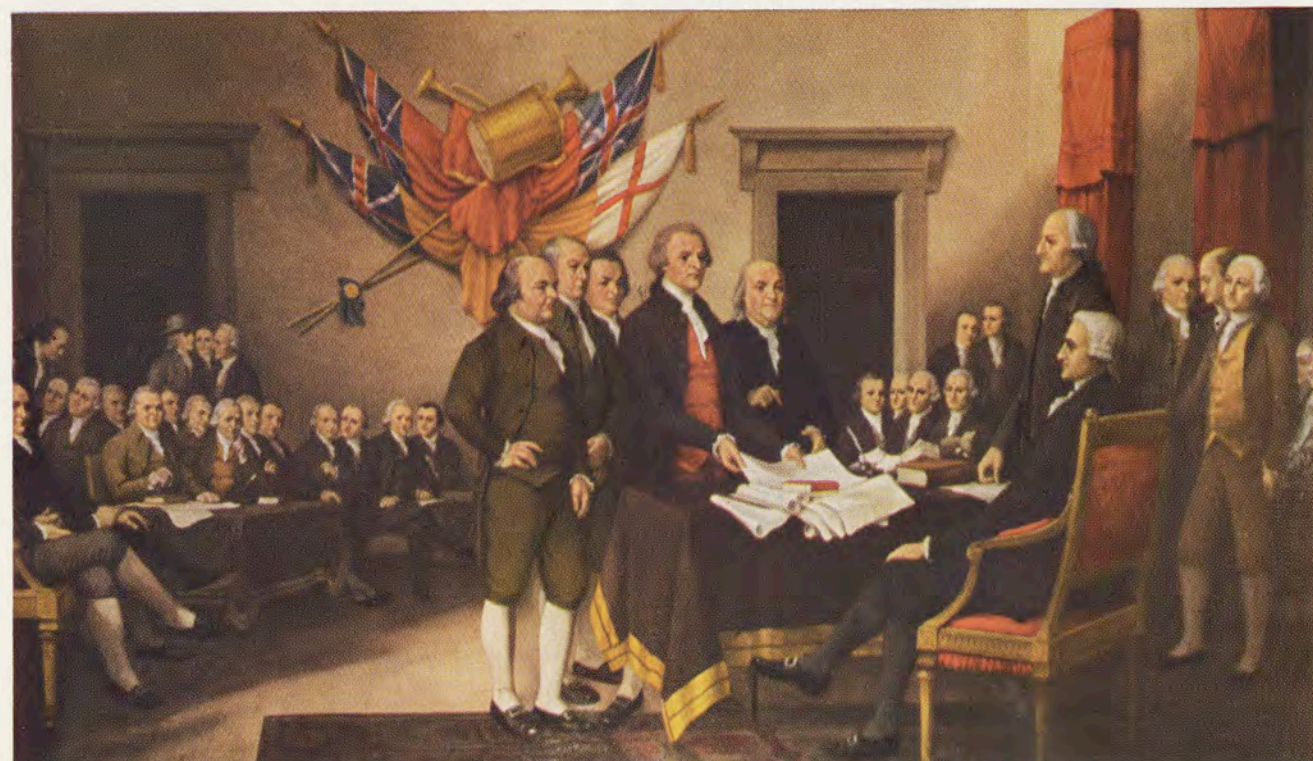
Tobacco grew up with colonial America and it helped America grow. This was particularly true of Virginia. The most important event in the initial years of that colony was the discovery that money crops of tobacco could be grown in its soil. The discovery was made by the Virginia settler, John Rolfe, when he imported seeds from Spanish-American colonies in 1612.

"Shipping leaf" helped to develop England's great merchant marine and opened up valuable export outlets. The Anglo-American tobacco colonies continued to supply an ever-expanding market throughout the colonial period.

Shortly after the War of Independence began, tobacco served to underwrite the credit of the Continental Congress. Ben Franklin helped obtain a loan of 2 million *livres* from the French tobacco monopoly. It was to be repaid by 5 million pounds of "best Virginia" leaf.

Through import duties and internal taxation tobacco began to assume importance in European fiscal systems. Its revenue value increased enormously after the middle of the 17th century.

The Continental Congress whose credit was supported by a loan on tobacco leaf



Jamestown, Virginia, scene of the first Anglo-American tobacco farms



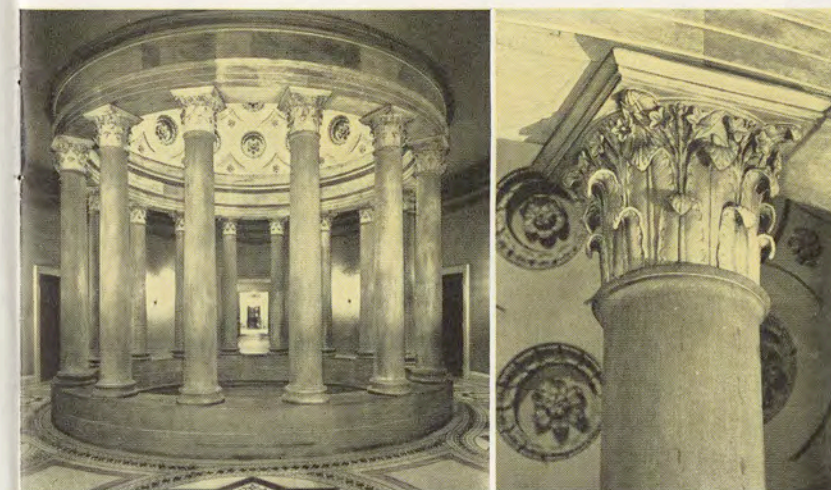
## The big taxpayer

The illustrated table shown here has been called a "graphic proof that smoke rises!"

Prior to the establishment of the income tax in 1913, for many years the second largest return to the Internal Revenue Bureau came from the impost on manufactured tobacco and related taxes.

Today, additional to federal taxes on tobacco, over \$700 million is collected by state and municipal treasuries from tobacco products sold at retail. The federal excise alone is 8 cents on each package of cigarettes. The total of federal and varying state and municipal taxes increases the cost of each package of cigarettes by 48 to 100 percent, paid by the consumer.

Over \$2.5 billion is now collected annually from tobacco taxes. Yet the tobacco users who pay these extra taxes get no extra benefits. The yields from the excise go into roads, schools, hospitals and various services that benefit all Americans.















These columns in the national Capitol have a tobacco-leaf motif from the designs of Francisco Iardella, the sculptor

## FEDERAL REVENUES from excises on Tobacco products

Direct taxes on all Tobacco products were first collected in 1863. Increasing collections are shown for three fiscal years.

The total for 1958 for the products listed here was  
**\$1,733,316,300**

		1958
		\$1,668,208,300
		\$47,248,000
		\$14,391,000
		\$3,469,000
		1893
		\$15,144,000
		\$14,443,000
		\$1,589,999
		\$714,774
		1863
Chewing and Smoking Tobacco		\$2,579,000
Cigars		\$476,590
Snuff		\$34,466
Cigarettes		included with Cigars



From the earliest illustration  
(London, 1570)  
of commercial tobacco  
—*Nicotiana Tabacum*



Some 3 million people work more than 500,000 tobacco farms in the United States. From the 26 basic tobacco types classified by the Department of Agriculture they harvest around 1 billion 750 million pounds of leaf. It is an important cash crop, collectively worth over \$1 billion to its growers.

The cultural routine applied to various types of tobacco has long been highly specialized. No major crops in annual production are more intensively cultivated. The tobacco plant is sensitive, even temperamental. From the time seed beds are sowed, until the ripened leaves are harvested and cured, the farmer must be a nurse, a watchman and the busiest of laborers.

On an average, tobacco farmers plant only a little more than two acres to tobacco. The total runs to over a million acres. Yet this is but a small part of total crop acreage in the United States: under one-half of one percent.

*Burley tobacco being harvested*



## Two classes of leaf... and three million producers

Domestic tobacco can be grouped into two broad classes of leaf, based on use. First in volume are the types which go chiefly into cigarettes, representing 70 percent of all tobacco consumed. These types will also be the source of smoking tobacco and some of them will be processed into chewing tobacco. The other class of leaf consists of types used chiefly for cigars. Leaf grown for snuff or chewing tobaccos represents less than 10 percent of total production.

Green fields of cigarette tobaccos will be found in Maryland, Virginia, North and South Carolina, Georgia, Florida, Kentucky, Tennessee, Ohio, West Virginia, Indiana, Missouri and Alabama. North Carolina leads in production volume. Cigar-leaf types are grown in Connecticut, Massachusetts, Pennsylvania, Ohio, the Georgia-Florida and Wisconsin-Minnesota areas.

The blend's the thing in domestic cigarettes. A subtle flavor is added to the blend, in small quantities, through leaf imported from Turkey, Greece and elsewhere in the Near East. These tiny leaves are known as Turkish, oriental or aromatic. Small quantities of this type are now being grown in this country.

The origin of tobacco types grown in the States (except for some cigar leaf) can be traced to Rolfe's little field in colonial Virginia. From the tropical seeds that Rolfe imported came Virginia's famed "sweet-scented" and



*First illustration (1622) of native American tobacco cultivation*

Maryland's "Oronoko." In the colonial period both were regarded as the ultimate in quality—and European consumers agreed.

These types have been greatly improved. Modern tobaccos are more flavorful, lighter and better cured. A great advance in quality came through the development of Bright tobacco. This light-colored, fine-textured leaf had been casually grown on thin soils in the border lands of Virginia and North Carolina. Then, around the 1830's, a novel method of applying heat through flues built into barns cured the leaves to a bright-yellow color. After the Civil War this flue-cured type became the world's most widely produced and most valuable tobacco.

Also in the 1830's, Maryland Broadleaf was introduced into the Connecticut Valley. That resulted in a wrapper leaf of superior quality and laid the basis for the American cigar-leaf industry. Later introductions of domestic and foreign seeds broadened cigar-leaf culture in the Connecticut Valley.

A botanical curiosity, which turned up unexpectedly in the seed bed of an Ohio farm in 1864, brought about a most valuable development. The new type was first known as White Burley as, unlike all other Burley types, it had a cream-colored stalk and leaf midrib. Burley is a major ingredient in domestic cigarettes. Kentucky produces the largest quantity of this type.



*Examining leaves of Bright tobacco in the curing barn*

*Bright tobacco ready for harvesting and flue-curing*







*Cured tobacco being removed from the barn*

*Inside a barn of flue-cured tobacco*



## The long farm year

“Tobaccuary” is a thirteenth month in the farmer’s year. This doesn’t mean that he operates under a special calendar. That thirteenth month is made up of the cumulative chores the farmer does in the small morning and late evening hours and sometimes in overnight stretches during the curing period.

Farm needs are met by a number of major industries. These include producers of fertilizers, tools and machinery, construction materials, furnaces and fuels for curing leaf. Tobacco farmers now use up some 800,000 tons of plant nutrients annually. The total cost is about \$50 million. Acres of expensive cheesecloth are required to provide shade for growing cigar wrapper leaf. The same material in lighter weight is used to protect tobacco seed beds.

Flue-cured tobacco and shade-grown cigar wrapper are harvested by picking the leaves individually from the stalks. Other cigar tobaccos, Burley and various types grown in Maryland, Tennessee, Kentucky and Virginia are stalk cut.

Harvesting over, the farmer faces a few tense days while he cures his tobacco. Three major processes are in use: flue-curing, air-curing and fire-curing.

Flue-cured tobacco, also known as Bright and Virginia, has the greatest production volume in the States: over a billion pounds in 1958. Flues carry drying-out heat throughout the barn, changing the color of the leaf to bright-lemon or orange-yellow. Flue-cured tobacco is the chief ingredient of blended cigarettes.



*A tobacco plantation of the 17th century*



*Selling tobacco at auction, Louisville, Kentucky, 1880*

## Tobacco goes to market

The effort the farmer has put into his crops is directed to a major annual event: the day he can truck his harvest to auction warehouses. Auction days have the spirit of a county fair. This is pay-day, a time for meeting with old friends—and things to see, things to buy, new farm equipment to inspect.

Nearly 95 percent of domestic tobacco crops is sold at auction. Cigar leaf is bought at farm barn doors. The long-established method of marketing by auction is conducted under conditions which are noisy, speedy and exciting. There will be 50,000 people busy with various duties during the auction seasons. Sales take place on huge floors of some 900 warehouses located in 166

communities. A billion and a half pounds of tobacco will ordinarily be disposed of during the sales seasons which range over several months.

Buyers representing major American and foreign manufacturers, leaf brokers and small dealers move along the rows of baskets, each neatly piled with “hands” of tobacco already graded and weighed. The auctioneer, chanting bids in words incomprehensible to unaccustomed ears, disposes of a lot of flue-cured or Burley tobacco in six to ten seconds. In five minutes or less, a thousand pounds will have been sold. If the farmer doesn’t accept the bid, he “turns” the sale ticket and can then sell his tobacco at another time or place.

*Buyers bidding for tobacco in a modern auction warehouse*







*Conveying tobacco to warehouses in Virginia in the late 1700's*

## The long sleep

Tobacco sold at auction is promptly prepared for aging. Modern procedures, which are orderly, swift and scientific, evolved from an 18th century system.

During the early colonial period imperfect leaf had frequently been exported, sometimes in considerable quantities. This careless practice was curbed through a law passed in Virginia, 1730. Thereafter all export tobacco had to be inspected and warehoused. This legislation proved to be the most important step in agricultural marketing methods to its time.

The warehouses were actually transfer stations. Tobacco was held only long enough to get it on a ship for Europe. But it had to be sound. Warehouse receipts were issued for tobacco deposits. These were used as currency.

Today, the chain of movement on the road to the consumer starts with the delivery of auctioned tobacco to packing houses. There it is inspected and pressed into large hogsheads. The next stop for the packed tobacco is at redrying plants. At this point some manufacturers remove the heavy leaf midrib, a process known as stemming. Whatever the procedure in different plants, the graded tobacco is cleaned, dried and then remoistened. After that, packed into slightly porous, plywood hogsheads holding around 1000 pounds, the leaf goes off to acres of corrugated metal or brick warehouses. There it is put to bed for a long sleep. Meanwhile, huge quantities—around 475 million pounds on an average over the past few years—are exported.

While aging in storage, tobacco undergoes a delicate fermentation. The natural result is that the tobacco becomes milder and acquires an aroma. Leaf in storage is a huge but essential inventory of manufacturers. It sometimes represents two-thirds or more of their assets.



*A cigarette factory in Virginia just before the "making" machines came in around the middle 1880's*

## Adhesives to zip-tape

There will be over 100,000 busy people at work in the huge, complex "making" factories, when in full operation converting tobacco leaf into consumer products. Yet they represent only a fifth of the labor force that produces materials needed by tobacco manufacturers for their products. This larger segment of workers is employed by suppliers—nearly 2400 of them—to the tobacco industry.

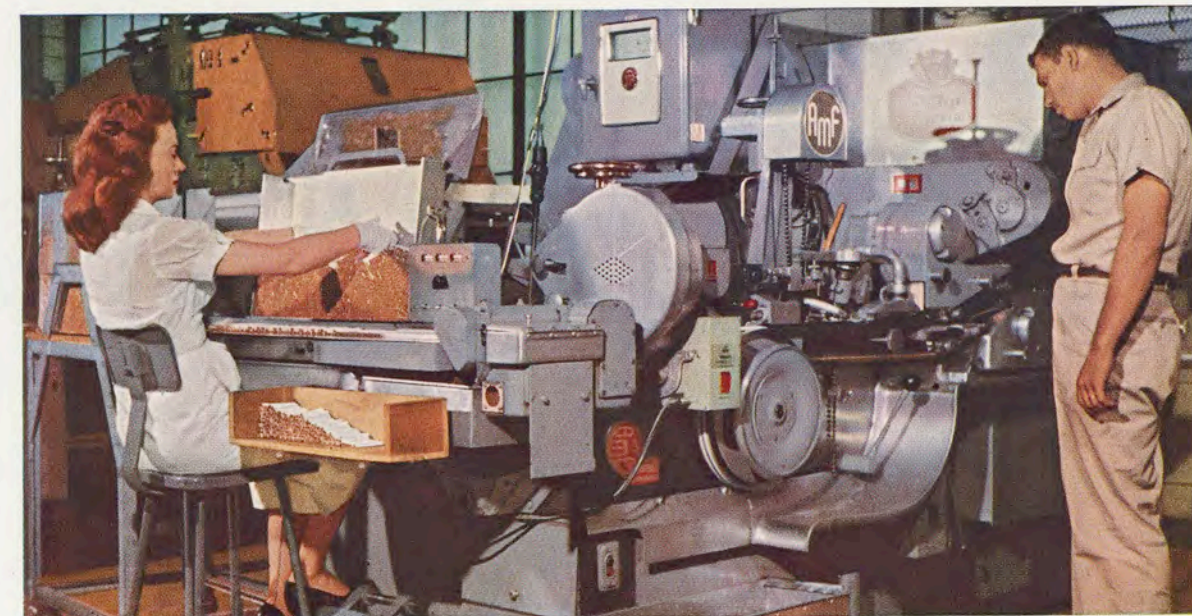
The requirements of the industry call for such major apparatus as trucks, freight and flat cars, materials handling equipment, elaborate production and packaging machinery, and delicate laboratory paraphernalia, weighing and measuring instruments, electronic devices and

other quality control appliances.

All this is but part of the essential supplies. The trades servicing tobacco manufacturers cut clear across the industrial map of America. In various parts of the States, flax straw is being produced for cigarette paper; factories are turning out metals and glass, converting milk or starch into cigarette paper adhesive, building complex machines for various essential treatments of leaf to be converted into cigarettes, cigars, chewing and smoking tobaccos and snuff, producing enormous quantities of cellophane for wrappers and tape to "zip" it off, printing labels and packagings and otherwise producing for the vital tobacco industry of America.



*Modern redrying plant. Leaf removed from hogsheads for treatment before storage*



*Part of a modern factory showing a cigarette making machine*

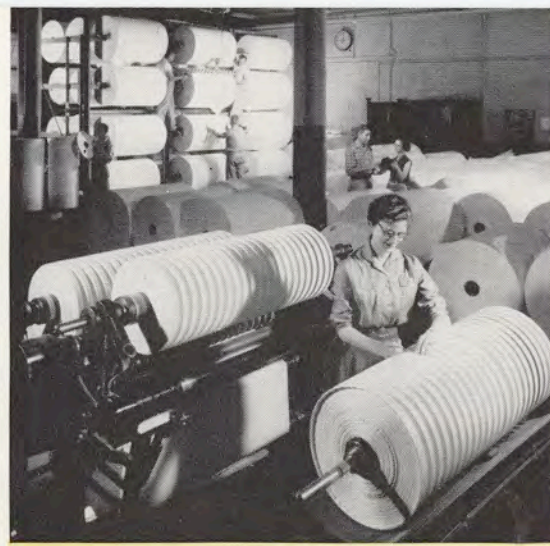


## Leaf into products

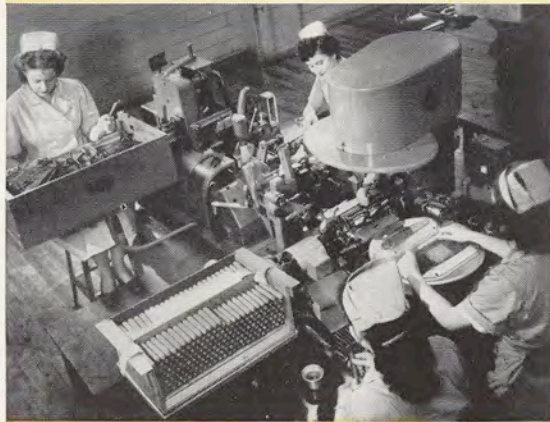
Tobacco manufacturing in the States was a late development. Colonial planters crudely processed smoking tobacco for their own family requirements but all other leaf was sent abroad, chiefly to England and Scotland, to be manufactured. A number of one-man plants were established in Virginia in the 1730's and a snuff mill was set up in Rhode Island in the 1750's.

It was not until the post-Civil War period that tobacco machinery supplemented handcraft. The most conspicuous and important development was the invention of a practical cigarette machine in 1881. By 1884 this mechanism had been improved to a point where it was delivering 200 cigarettes a minute, most of them perfect. Expert hand rollers had been turning out four or five in the same time. Today's smooth-running machines can roll out twenty to twenty-five perfect cigarettes each second.

The cigar-making machine, long regarded as an impossibility because of the varying shapes of leaves and numerous technical difficulties, was in practical operation by 1918. Modern machines wrap a leaf around filler and binder at the rate of 780 to 900 an hour, depending upon cigar size.



*Rolls of processed flax being cut into hobbins of cigarette paper size*



*Leaf of varying sizes is rolled into perfect cigars by this machine*

*High-speed packaging machine in operation*



## Products onto counters

New York City was the locale of the earliest colonial retail snuff shop and factory, opened in 1760. The first cigar store in the Colonies was set up at Lancaster, Pennsylvania, in 1770.

Today, around 1,400,000 retail stores sell cigarettes and other tobacco products. Additionally, cigarettes are available through many thousands of vending machines, clubs and elsewhere. Except for currency nothing passes more frequently across retail counters than do cigarettes. The distribution, servicing, promotion and selling of tobacco products provide a livelihood in whole or in part for millions of Americans.

Consumers today may make a choice from a wide selection of all types of tobacco products. There are many dozen brands of cigarettes, smoking and chewing tobaccos and snuff. The number of different kinds of cigars runs to many hundreds.

The number of brands has decreased greatly since the early 1900's. In 1903, for instance, a standard trade directory registered 9,005 brands of plug and twist tobacco, 3,625 fine-cut chewing tobaccos, 7,046 smoking tobaccos, snuffs of 3,646 different sorts, and 2,124 tobacco items catalogued as "cigarettes, cigarros and cheroots."



*Late 19th century tobacco-vending machine, predecessor of today's cigarette dispenser*







Tobacco leaves are being twisted into long, thin rolls in this early 18th century European factory

## Product variety

As the multiplicity of brands began to narrow in the early decades of this century, many colorful and frequently illogical brand names went too. No more may one find such labels as *Catch Me Willie*, *Darling Fanny Pan Cake* on chewing tobaccos or *Pin Head*, *Old Rip*, *Hunkidori*, *Scalping Knife*, *Battle Ax* cigarettes or *Bejoe de War* cheroot or a smoking tobacco called *Ham Bone Granulated* and a stogie called *Mayer Rat Tail*.

Several million times a day the names of today's brands, usually shortened, are spoken by customers in retail shops. Many of the names are familiar in far-off places. During and after World War II particularly, the cigarettes of American troops proved to be ambassadors of good will around the world. Their value was such that they were often used in place of money.

The types of cigarettes now available to consumers are regular, long and king size, filter-tip or mouthpiece, and mentholated. Cigars come in many sizes and styles. They range in size from large (regular) to small. Scrap (meaning leaf fragments), plug, twist, and fine-cut are the trade names for chewing tobaccos. Snuffs come in three basic types: dry (commonly known as scotch), moist and semi-moist. Smoking tobaccos prepared for pipes or for those who prefer to roll their own, vary in degrees of granulation. The standard varieties are granulated, plug-, long-, rough- or fine-cut. Most smoking tobaccos come from types also used in the manufacture of cigarettes.



## The blending years

The current forms of using tobacco are inherited from the American Indians of old. Yet the modern terms by which tobacco products and their uses are described are not Indian. "Cigar," for instance, has a Spanish source. We do not know what the original Indian word was for "tobacco." The earliest writers may possibly have recorded a phonetic variation of a West Indian term. But various early accounts associate "tobacco," among other meanings, with the leaf, the cigar, the act of smoking, a forked snuffing-tube and the reed-cigarette.

Over the past four and a half centuries of tobacco's use there have been some startling and unexpected swings in taste. When the changes came they represented mass movements. All of them but one—chewing in 19th century America—spread throughout the world.

During the first period of tobacco consumption, and for more than two centuries, the cigar remained fairly localized in Spain and her American colonies. Pipe smoking was, from the middle

1500's on, very largely a Portuguese custom. Then, in the 17th century, the pipe began its circumnavigation of the globe, carried by seamen and explorers of Portugal, England and France. Its popularity spread. Pipe smoking holds the record for sustained consumer loyalty.

Snuffing became the mode in the 1700's and held on among Western Europeans for a century and more. In the 1830's the cigar was "discovered" in England. Its use spread rapidly to a good part of Europe and was taken up by a considerable number of enthusiasts in the States.

Tobacco chewing really took hold in America during the cigar revival abroad. Virile frontiersmen, traders and scouts—heroes to urban residents—were chewers. From the time that Andrew Jackson was president, almost everyone seemed committed to chewing tobacco. European visitors frequently commented with astonishment on the extent of its use.

The cigarette, so much in evidence today, had a limited popularity until the first decades



*Earliest known illustration (1667) showing the manufacture of tobacco in the form then standard. The West Indian natives depicted are removing air-cured leaf from the shed, stripping it and twisting it into rolls called "carottes"*

of the 20th century has passed. Its growth since then has been spectacular.

There was (and is) nothing new about any of the tobacco fashions. In a sense, there is nothing new about modern tobacco products. Only their physical forms and content have been altered from their Indian originals—and their quality fully improved.

Take, for instance, the domestic cigarette. Its various blends make it the most widely-popular tobacco product. Individual brands differ but the composition is around 55 percent flue-cured, about 35 percent Burley, 2 to 3 percent Maryland and from 5 to 10 percent aromatic tobaccos.

Yet blended cigarettes had long been familiar to the Aztecs by the time the first Europeans came to Mexico. Tobacco mixed with aromatic herbs and liquidambar was packed into a reed which was fitted with a mouthpiece. From this ancient type evolved, first, the crude paper-covered cigarette which became fairly popular in Spain around the 1630's. The cigarette developed slowly thereafter, going through numerous changes in size, shape and mouthpiece.

American Indians blended their pipe tobaccos. Sometimes, for economy's sake or to provide a milder smoke, the ingredients included

common herbs and leaves of the forests. The Algonquians had a name for their special blend: "kinnikinnick," meaning "that which is mixed." Modern pipe tobaccos have gotten away from the Indian formula but many of them are blended.

No tobacco products were, in their heyday, more thoroughly blended than snuffs. All sorts of essences and perfumes found their way into those pulverized tobaccos. That can hardly be said about modern snuffs.

The full story of the tobacco industry is itself a blend in which some dramatic phases of the past are fused with the dynamic present. It is a rich compound of the works of literature, of agricultural science, of industrial engineering, of continuing research. It is a composite of men and women engaged in social amenities, of soldiers in action, of workers in fields, factories and offices.

The ingredients of the story are a blend of billions of pounds of tobacco leaves and millions of productive farmers, of billions of dollars combined in taxes and the payrolls of hundreds of thousands of workers and of the large-scale merchandising which supplies the daily needs of many million tobacco users.

These are the ingredients that make tobacco a vital United States industry.



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