

By Patrick G. Porter
GRADUATE STUDENT IN HISTORY
JOHNS HOPKINS UNIVERSITY

Origins of the American Tobacco Company

¶ During the 1880's and 1890's, the innovations of James Buchanan Duke first disrupted and then rationalized the American tobacco industry. Duke's career and the early history of his American Tobacco Co. serve as case studies in both the history of business administration and in the coming of "big business" to the United States.

Like many other American industries processing agricultural products for urban, mass consumption, the cigarette business underwent great changes during the 1880's. Innovations in production processes caused supply to outrun demand and drove manufacturers into severe competition. Packaging and advertising became the major competitive weapons as producers vied to market relatively undifferentiated products that were saleable only within a narrow price range. Despite increased advertising and organizational integration, however, the industry's growth rate declined. Then, the man who had initiated most of the revolutionary innovations — James Buchanan Duke — succeeded in leading his industry into combination by founding one of the first great holding companies in American history.¹

When Duke's American Tobacco Co. was listed on the New York Stock Exchange in the summer of 1890, it signaled the combination of the major producers in its industry. Its five constituent companies produced approximately 90 per cent of the cigarettes made that year in the United States, and from this base, the company's growth was phenomenal.² By 1909, its equity capitalization had increased from \$25,000,000 to over \$316,000,000. In the two decades after its founding, American Tobacco absorbed approximately 250 separate companies and came to produce about 80 per cent of the cigarettes, plug tobacco, smoking tobacco, and snuff made in the United States.

Business History Review, Vol. XLIII, No. 1 (Spring, 1969). Copyright © The President and Fellows of Harvard College.

¹ A part of the research for this study was made possible through the financial support of the Institute of Southern History at Johns Hopkins University and the Ford Foundation.

² *Commercial and Financial Chronicle*, September 13, 1890; U.S. Bureau of Corporations, *Report of the Commissioner of Corporations on the Tobacco Industry* (Washington, 1909-1915), I, 64.

Only the cigar industry eluded James Duke.³ By the time of its court-ordered dissolution of 1911, the Duke empire included a vertically integrated network of companies engaged in wholesale and retail distribution of tobacco products, in the production of leaf tobacco, packaging, and various “smokers’ supplies,” as well as a national monopoly in licorice, an important material in the manufacture of cigarettes.⁴ American Tobacco did business in every part of the tobacco industry.

Because Duke combined forces of innovation and amalgamation, he revolutionized the tobacco industry in a decade and influenced its course for many more years. His methods of purchasing, sales, and distribution were forced upon his competitors in the 1880’s. He was the leading factor in the introduction of machine production, an innovation which, more than any other, made for change. In a time of productive overcapacity, high sales costs, declining growth rates as the market leveled off, and brutal competition, he overcame the obstacles to cooperation and succeeded in rationalizing the industry. He is, therefore, of considerable importance in the history of American business administration.

But Duke’s career and the origins of the American Tobacco Co. have significance beyond the history of administration or the isolated story of the tobacco industry. The company’s early history is also an important chapter in the rise of the large corporation in the American economy. Thus, this article presents Duke and his company as a case study in the coming of one such corporation and advances several hypotheses about the firm and the industry. First, that the experience of the cigarette industry exhibited several important differences from the general pattern of combination first developed in the petroleum industry: significant vertical integration occurred in cigarettes prior to combination, unlike the case of Standard Oil; integration proved effective in assuring a reliable flow of raw materials and in rationalizing distribution and marketing, so producers never tried the loose associations which proved so unworkable in the oil industry; overproduction came later in the lifespan of the cigarette industry than in petroleum and not until the experience of other companies — such as the railroads and the oil manufacturers — had shown pools and associations to be too weak an organizational form. Second, that cigarette manufacturers did not utilize the trust because a new legal device, the holding company, had appeared by the time producers were ready for combination. They took advan-

³ Bureau of Corporations, *Report on Tobacco*, I, xxxi.

⁴ Bureau of Corporations, *Report on Tobacco*, I, 13.

tage of the holding company device and of the New Jersey general incorporation law of 1889. Like Standard Oil and other companies, however, the cigarette combination soon turned to increased vertical integration and organizational consolidation. And, again in line with the Standard Oil pattern, the creation of an overproductive capacity in the face of a limited market was the key force in causing consolidation.

I

The dual symbols of American tobacco consumption in 1850 were the cigar and the spittoon. In succeeding decades, however, chewing tobacco and cigars were slowly being supplanted as the dominant forms of tobacco use by the cigarette. For a variety of reasons — its low price, its popularity with women, its advertising, and its role as what one perhaps overwrought observer has termed a “natural accompaniment of the creeping neurasthenia of urban existence” — the cigarette grew enormously in popularity after the Civil War.⁵ American businessmen soon moved to take advantage of this growing market.

In most cases, the firms which later came to dominate the industry began cigarette production as an extension of an already-existing tobacco business. Francis S. Kinney, founder of the Kinney Tobacco Co. of New York, moved into cigarettes in 1869 as an addition to his smoking tobacco business.⁶ William S. Kimball, president of W. S. Kimball & Co. of Rochester, had begun tobacco manufacture during the Civil War and became a cigarette producer in 1876.⁷ The firm which later became the largest manufacturer in the industry, W. Duke, Sons & Co. of Durham, North Carolina, had produced smoking tobacco since 1866, but did not make the move into cigarettes until 1881.⁸

⁵ The quotation is from Jerome E. Brooks, *The Mighty Leaf* (Boston, 1952), 252. The number of cigarettes on which internal revenue taxes were paid jumped from slightly under 20,000,000 in 1865 to over 3,300,000,000 in 1895. See U.S. Bureau of Internal Revenue, *Report of the Commissioner of Internal Revenue* (Washington, 1895), 378–79. The product was apparently introduced into the United States in the 1850's, though this is not entirely clear. Robert K. Heimann, *Tobacco and Americans* (New York, 1960), 204, presents a persuasive case that the cigarette first appeared in the 1850's. Charles D. Barney & Co., *The Tobacco Industry* (New York, 1924), 19, places the date of appearance at about 1860; William W. Young, *The Story of the Cigarette* (New York, 1916), 8, says “about 1866;” and Charles E. Landon, “Tobacco Manufacturing in the South,” in William J. Carson (ed.), *The Coming of Industry to the South* (*Annals of the American Academy of Political and Social Science*, Philadelphia, 1931), 44, asserts that the cigarette was introduced in 1867 from England.

⁶ Testimony of Francis S. Kinney, U.S. Department of Justice MSS relating to the case of *U.S. v. American Tobacco Co.*, U.S. Circuit Court, Southern District of New York, Equity Case Files E 1–126, 1908, Records Group 60, National Archives. Hereafter cited as Circuit Court MSS.

⁷ Blake McKelvey, *Rochester: The Flower City 1855–1890* (Cambridge, Mass., 1949), 236–38; *Tobacco*, February 25, 1887.

⁸ Testimony of James B. Duke, Circuit Court MSS.

All the companies which turned to cigarettes faced a common production problem, and all met it in the same way. The problem was that cigarettes were hand-made by skilled rollers, who were scarce in the United States. The solution which the cigarette companies found was either to import skilled immigrants or to hire away the immigrant laborers already working for New York firms making the expensive Turkish and Egyptian brands.⁹ The Kinney Tobacco Co. induced East European cigarette rollers to immigrate, and the Dukes brought 125 immigrant rollers from New York to Durham.¹⁰ Often these skilled laborers worked at several successive American firms.¹¹ They usually supervised cigarette production and trained large numbers of young women and girls in the art of rolling cigarettes by hand. These factory girls provided a less expensive source of labor than male workers and were the industry's main line of defense against labor unions after they had replaced their instructors in the factories.¹²

Once domestic firms solved the labor problem, they began to expand their markets, driving sales of imports and of the expensive Turkish and Egyptian brands downward by means of lower-priced cigarettes. By the latter part of the 1870's, it was clear that the domestic, bright-leaf tobacco cigarettes were becoming the dominant type. Domestic producers were acquiring an ever-increasing superiority in American markets.¹³

But the cigarette remained a kind of orphan in the family of American tobacco manufacturing. As a trade journal later pointed out: ¹⁴

For about fifteen years . . . the cigarette business did not attract much attention in the trade, nor develop as rapidly [as it did during the decade of the 1880's]. This was due not so much to . . . small profits, as to the fact that established tobacco manufacturers took up the cigarette as a side issue, but, having organized departments for making and selling them,

⁹ The importation of immigrant labor was a common practice for other domestic industries in need of skills. See Edward C. Kirkland, *Industry Comes of Age* (New York, 1961), chapter XVI.

¹⁰ Heimann, *Tobacco and Americans*, 206, 212.

¹¹ For example, J. M. and David Siegel, immigrant brothers from Kovno, Russia, worked for Goodwin & Co. in New York, were hired by the Dukes to supervise the Duke cigarette department in Durham for a time, and later set up their own company. See Hiram V. Paul, *History of the Town of Durham, N.C.* (Raleigh, North Carolina, 1884), 111-12.

¹² In 1878, a trade journal observed that "in the last great strike of segar makers, the cigarette makers did not participate. Three years ago men were generally employed, and a strike took place—women were substituted, and no trouble has since occurred." *U.S. Tobacco Journal*, November 2, 1878. The cigarette industry was an early example of the kind of semi-skilled, industrial labor force which the American Federation of Labor later found so difficult to assimilate. After the advent of machine production in the 1880's the labor skills required in the cigarette industry were further lessened, thereby further diminishing the possibility of unionization.

¹³ See *U.S. Tobacco Journal*, June 19, 1877.

¹⁴ *Tobacco*, January 31, 1890.

found little difficulty in putting them on the market along with a line of smoking tobaccos, and under these conditions the growth and development of the cigarette in its early stages was slow.

The industry in these early years was, thus, relatively small-scale and unimportant. But with the opening of the 1880's, a new competitor appeared on the scene who was to revolutionize the entire industry in a decade — James Buchanan Duke.

II

"Buck" Duke was a shrewd and tough businessman, ambitious and fiercely competitive. He drove W. Duke, Sons & Co. to the top of the cigarette trade in less than a decade. More than any other individual he was responsible for the formation of the American Tobacco Co., and he ran that vast combination for a score of years after its founding. When the courts dissolved the company, the only man who understood the complex interrelationships of the combination well enough to dismantle it rationally was James Duke. His Horatio Alger story is genuine, and his biographers have done him more than justice.¹⁵

James Duke's father, Washington Duke, had founded the business after the close of the Civil War. The Dukes ran their business from the family farm outside Durham until 1875, when they built a factory in the town. In 1878 a five-man partnership was created. Washington Duke, James Duke, James' brother Benjamin N. Duke, Richard H. Wright (a local tobacco manufacturer), and George W. Watts (a Baltimore businessman) each contributed \$14,000. The partnership ended in 1885 and the firm then incorporated under its previous name, W. Duke, Sons & Co.¹⁶

The Duke firm did make some profits, mostly in granulated smoking tobacco, but not enough to satisfy the ambitious James Duke. He felt that as long as the company stayed in the production of smoking tobacco it had no real future. The predominance of the "Bull Durham" brand, manufactured by W. T. Blackwell & Co., also of Durham, was apparently unshakeable. Duke allegedly remarked, "my company is up against a stone wall. It can't compete with Bull Durham. Something has to be done and that quick. I am going into the cigarette business." The other partners were less certain of the

¹⁵ See John Wilber Jenkins, *James B. Duke: Master Builder* (New York, 1927); John K. Winkler, *Tobacco Tycoon: The Story of James Buchanan Duke* (New York, 1942); and Watson S. Rankin's pamphlet, *James Buchanan Duke (1865-1925): A Great Pattern of Hard Work, Wisdom, and Benevolence* (New York, 1952).

¹⁶ Testimony of James B. Duke, Circuit Court MSS.

wisdom of the decision, but Duke ultimately persuaded them. In 1881, the company began the production of cigarettes.¹⁷

For the first two years after the shift into cigarettes, the older partners had good reason to regret their decision, for the move had all the earmarks of a rousing disaster. The Duke firm made little headway because the government at that time was considering a reduction of the cigarette tax from \$1.75 to 50 cents per thousand.¹⁸ The bill was not passed until March 1883, the reduction to take place the following May. The Duke brands were not established in the market and many dealers refused to buy them and take the chance of losing the difference in tax, should the tax be lowered. Duke thus found himself in a very unenviable position: his factory was forced to close, his warehouse bulged with unsold cigarettes, and his brands made little progress.¹⁹

When the government finally reduced the tax in March 1883, Duke made the first in a long chain of bold decisions. He immediately reduced the price of his cigarettes from 10 cents to 5 cents per pack of ten cigarettes. He declared that jobbers' orders would be filled at the lower price, provided that at least three-quarters of the goods were delivered after the tax reduction in May.

The Duke products became the lowest priced ones on the market, and in the two months before the tax reduction went into effect, Duke sold his backlog of cigarettes, though at a loss. His factory reopened. He firmly established his brands in the trade through a combination of low prices and advertising.²⁰ He had caught his competitors napping.

Duke's increased advertising at the time of the tax reduction taught him a lesson he did not forget. He continued to use advertising to stimulate sales so that he could keep production costs down.²¹ He established offices and a factory in New York to be nearer his markets and to secure better advertising facilities.²² That same year he bought 380,000 chairs and had painted on the back of each an advertisement for his "Cameo" brand cigarettes. The chairs were placed in cigar stores throughout the nation. Duke "was an aggressive advertiser, devising new and startling methods which dismayed his competitors; and [he was] always willing to spend a proportion

¹⁷ Jenkins, *James B. Duke*, 65.

¹⁸ Excise taxes on tobacco products originated during the Civil War.

¹⁹ Testimony of James B. Duke, Circuit Court MSS.

²⁰ Testimony of James B. Duke, Circuit Court MSS; Neil H. Borden, *The Economic Effects of Advertising* (Chicago, 1942), 221; and Jenkins, *James B. Duke*, 70-72.

²¹ Borden, *Economic Effects of Advertising*, 221.

²² Alfred D. Chandler, Jr., *Strategy and Structure* (Cambridge, Mass., 1962), 27; American Tobacco Co., "Sold American!" (n.p., 1953), 20.

of his profits which seemed appalling to more conservative manufacturers.”²³

Duke showed a consistent willingness to innovate and to move quickly in order to obtain the maximum benefit from innovations in the industry. An interesting example of this can be seen in his handling of packaging. One of the problems in increasing the market for cigarettes was that they were sold in loose, fragile paper packages which caused the cigarettes to break readily. Duke introduced a stiff, sliding box for cigarettes, and when another inventor produced a better version, Duke immediately ordered 50,000 of them.²⁴

It is hard to avoid the conclusion that James Duke was the leading innovator in the American cigarette business during the 1880's. He made entrepreneurial contributions in marketing, in purchasing, and in production which were the driving forces for change. In other industries supplying either new or established consumer goods for the expanding urban markets, innovation often came through the entry of a competitor who had little previous experience in the business, like Gustavus Swift in meat-packing and John D. Rockefeller in petroleum.²⁵ Duke's fulfillment of the entrepreneurial function fits the same pattern — that of economic change wrought by an innovator not thoroughly grounded in the previous competitive methods within an industry.²⁶

Duke's vigorous, imaginative merchandising put his company among the five dominant cigarette producers during the 1880's. The others were Allen & Ginter of Richmond, W. S. Kimball & Co. of Rochester, and the Kinney Tobacco Co. and Goodwin & Co., both of New York. These five companies followed the same basic pattern in production, in distribution, and in the means of acquiring their leaf tobacco. In each area, however, the Duke company appeared to achieve greater efficiency and to display more interest in innovation.

This was apparent in Duke's handling of his firm's purchasing problems. The major producers obtained most of their leaf tobacco through tobacco brokerage houses in the bright-leaf belts of the South. These brokers purchased the leaf at warehouse auctions, stored and dried it in their own warehouses, and then resold it to the manufacturers.²⁷ This situation made it possible, especially in years

²³ "The Beginnings of a Trust," *Collier's* XXXIX (August 10, 1907), 15-16.

²⁴ Jenkins, *James B. Duke*, 68; "The Beginnings of a Trust," 15.

²⁵ See Alfred D. Chandler, Jr., "The Beginnings of 'Big Business' in American Industry," *Business History Review*, XXXIII (Spring, 1959), 6-9.

²⁶ For an excellent analysis of the entrepreneurial function, see Joseph A. Schumpeter, *The Theory of Economic Development* (Cambridge, Mass. 1934), chapter II.

²⁷ On the warehouse system, see Nannie M. Tilley, *The Bright-Tobacco Industry 1860-1929* (Chapel Hill, North Carolina, 1948), 191-308.

when there was a shortage of crops, for speculators and rehandlers to make handsome profits.²⁸ Some of the manufacturers began in the 1880's to create their own purchasing departments in a half-hearted attempt to reduce these raw material costs. Only the Duke company, however, made a really successful effort to eliminate the middleman. Duke, as he later testified, appreciated the value of reducing the role of the "speculator who had been . . . buying and selling to the manufacturers, with the exception of Duke's Sons and Co. We had been buying a good part of our tobacco in the loose warehouses direct from the farmer."²⁹ The Dukes had their own warehousing facilities almost from the beginning of their business. The warehousing and the use of company-employed leaf buyers marked important steps toward vertical integration in purchasing, well in advance of the combination of the leading producers. The middleman was a costly liability for the manufacturers, and Duke led the way in his elimination even before the creation of the American Tobacco Co.

Here an important difference from the experience of Standard Oil is clear: vertical integration backward into an extensive purchasing network occurred before the combination in cigarettes and not in petroleum. Overproduction of petroleum came very early, and manufacturers tried associations in an attempt to rationalize the flow of crude oil to the refineries. Overproduction of leaf tobacco did not occur so rapidly, and the leaf markets did not join in unwieldy associations, as did producers of crude. Consequently, Duke could assure a steady and less costly flow of raw materials for cigarettes by integration through company buyers and warehouses.

Significant vertical integration also appeared in the means of distribution, as well as purchasing. From its earliest years, the cigarette industry sold its products by means of traveling salesmen. The drummer was the means through which the companies made potential consumers and retailers aware of their product. These drummers traveled all over the United States and abroad, attempting to stimulate demand for cigarettes. They took orders from wholesalers and retailers, wholesalers probably taking the larger share. Even company officials sometimes acted as drummers.

James Duke had been an effective salesman from the beginning of the Duke company, and continued to serve in that capacity from time to time until about 1885.³⁰ During the sales push at the time of

²⁸ U.S. Bureau of Corporations MSS relating to its investigation of the tobacco industry, File 4766, sections 1 and 2, Record Group 122, National Archives. Hereafter cited as Bureau of Corporations MSS. See also testimony of tobacco broker John B. Cobb, Circuit Court MSS.

²⁹ Testimony of James B. Duke, Circuit Court MSS.

³⁰ See Jenkins, *James B. Duke*, chapters III and IV.

the cigarette tax reduction, Duke worked hard to drum up sales: "Packing a bag with samples, he made one of his dashing trips through the country, taking orders everywhere . . . practically every keeper of a tobacco shop ordered in large quantities."³¹ This basic method of distribution to jobbers and retailers through drummers continued until the formation of the American Tobacco Co. in 1890.

During the 1880's, however, significant organizational advances occurred in the distribution system. Each of the five leading producers continued to sell its products by having its traveling salesmen take orders for goods, title passing to purchaser on delivery.³² But, with the Dukes again in the forefront, manufacturers organized and maintained a system of independent distributing centers in the principal cities in order to expand the market. Connected with these sales agencies were generally a manager, a city salesman, and one or two traveling agents. This organizational innovation was another indication of vertical integration, this time forward into sales and distribution. The cigarette found no ready market; it was a relatively new product of no intrinsic value to the consumer. Producers therefore had to devise a system of sales and distribution to make consumers aware of their products and to see that wholesalers and retailers stocked them. There is a clear contrast with the petroleum industry which, in its early years, utilized established marketing channels for coal oil to meet a ready market.³³

In production, as in purchasing and distribution, the major firms followed similar patterns, patterns usually set by the Duke company. Until the 1880's, they produced all cigarettes by hand labor. The factory girls were virtually human machines, but the manufacturers sought a reliable mechanical means of mass producing the cigarettes. Like many another American invention, the cigarette machine was an example of induced innovation, called forth by the needs and rewards for machine production. During the 1870's, a wave of more or less useless contraptions designed to make cigarettes appeared.³⁴ A young Virginian, James Bonsack, invented the earliest practical machine in America. He patented his device in 1881 and improved it during the next two years. The newly-formed Bonsack Machine

³¹ "The Beginnings of a Trust," 15.

³² Defense stipulation marked Government Exhibit A, Circuit Court MSS.

³³ *Western Tobacco Journal*, July 15, 1889, cited in Bureau of Corporations MSS, File 4766, sections 1 and 2. See Chandler, "Rise of 'Big Business,'" 8. On petroleum, see Harold F. Williamson, Arnold Daum, and others, *American Petroleum Industry: Age of Illumination 1859-1899* (Evanston, Illinois, 1959), chapter 13.

³⁴ *Tobacco News and Prices Current*, May 24, 1879; *U.S. Tobacco Journal*, June 7, 1879. See also statement by J. E. Bonsack on the invention of a cigarette machine by his uncle, James Bonsack, J. E. Bonsack MSS, Duke University Library.

Co. had its machines tried commercially in 1883.³⁵ Allen & Ginter received the first of the Bonsack machines for their factory at Richmond. They tried the device for a short time but soon decided against using it. There was, they apparently thought, a strong public prejudice against machine-produced cigarettes, and besides the machine did not function perfectly.

James Duke leased some of the Bonsack machines later that same year. Duke ignored the reasons for which Allen & Ginter had rejected the machines. He put his mechanics to work to improve the operation of the machines and brushed aside the question of consumer prejudice.³⁶ As he later stated: ³⁷

We commenced to use the machines . . . largely earlier than any other manufacturer. The others could not make them go and they were also afraid that the cigarettes made on the machines the public would be prejudiced against them because they were machine-made. . . .

I think Allen and Ginter started — Allen and Ginter had had the machine . . . as early as 1883 . . . but they did not do much with them; were afraid of them, but after they saw we had made a success of them in 1887 they took them up. The Kinney Tobacco Company took them up in 1888.

By the time the other manufacturers saw the error of their ways, Duke had stolen a long and quiet march on them. His use of the machines had put the Bonsack Co. in his debt, since he was willing to take the risk of trying full-scale production when others would not. In 1885, Duke secured a very favorable contract with the Bonsack company. The contract noted that: ³⁸

the manufacturers of cigarettes who use the Bonsack machines . . . have so far declined to put the machines on their fine brands, for the reason that they fear that there may be a prejudice against machine-made work which might injure the sales of their goods, and . . . W. Duke, Sons & Co. are willing to put the machines on their best brands, and to do all their plain work on the Bonsack machines.

In return for this, the contract provided that Duke should get the use of the machines at a rate of 24 cents per thousand cigarettes rather than the usual rate of 30 or 33 cents per thousand. Duke was to get his discount through rebate checks. Further, the arrangement was to be permanent unless the Dukes divulged the provisions of the contract or unless they failed to use the machines on their better brands.³⁹ Just over six months later, an addition to the con-

³⁵ Paul, *History of the Town of Durham*, 207–208.

³⁶ Heimann, *Tobacco and Americans*, 212.

³⁷ Testimony of James B. Duke, Circuit Court MSS.

³⁸ *Bonsack Machine Co. v. S. F. Hess & Co.*, 68 F. 125 (1895).

³⁹ *Ibid.*

tract provided that W. Duke, Sons & Co. should always get the machines at a rate 25 per cent below that given any other manufacturer.⁴⁰

The Duke company began to produce most of its cigarettes by machine in 1885, encountering little of the consumer resistance its rivals had anticipated. Duke's application of the Bonsack machines revolutionized the business of making cigarettes, and the profits of the Duke company rose during subsequent years.⁴¹

The machines brought about a tremendous reduction in the cost of manufacturing. By 1884, the Bonsack machine was producing from 100,000 to 120,000 cigarettes per day, the equivalent of the production of forty to fifty hand workers. The exact amount by which production costs fell is unclear, but one scholar estimates that the cost of manufacture was reduced from 80 cents per thousand to 30 cents.⁴² Government estimates do not include the 1880's, but they do show the labor cost differentials from the handmade products of the 1870's to the machine-made ones of the 1890's. In 1876, labor costs were about 96 cents per thousand; by 1895, labor costs for the same cigarette were slightly over 8 cents per thousand.⁴³ Duke, like other producers, initially overcame any popular prejudice against the machines in a very simple way: he used them in the greatest secrecy and the public remained unaware of their widespread application for years.⁴⁴

The machines played a key role in bringing about a high degree of concentration and eventual combination in the cigarette industry. Duke's introduction of machine production was clearly the most significant innovation he made in the industry. A few men controlled the best machines through patents, which led to concentration of production in a few large companies.⁴⁵ The machines meant that these few companies could produce at relatively equal costs tre-

⁴⁰ *Wright v. Duke*, 36 N.Y. Supp. 855 (1895).

⁴¹ See deposition by William H. Butler of the Kinney Co., *Bonsack Machine Co. v. S. F. Hess & Co.*, 68 F. 126 (1895) and *Wright v. Duke*, 36 N.Y. Supp. 856 (1895).

⁴² Borden, *Economic Effects of Advertising*, 493.

⁴³ Bureau of Corporations, *Report on Tobacco*, I, 63.

⁴⁴ The feared prejudice may have been overestimated by the manufacturers. This prejudice is a bit difficult to understand. Perhaps the consumer would have regarded a machine-made cigarette as too artificial, as somehow not genuine. There was also a constant clamor by anti-tobacco leagues that the product was poisonous, particularly the paste used to hold the cigarette together, though paste was used in the hand-rolled products as well. The manufacturers may well have contributed to public fears through the nature of some of their advertising: Goodwin & Co., in pushing one of its brands, claimed a great advance in the kind of rice paper used to enclose the tobacco, and stated that smokers "have heretofore . . . been inhaling one of the deadliest poisons known." *Tobacco News and Prices Current*, February 15, 1879; *U.S. Tobacco Journal*, September 7, 1878. Such maneuvers were hardly calculated to inspire public confidence. On the secrecy of the use of machines, see *Tobacco*, February 25 and June 10, 1887, June 8, 1888, January 17 and January 31, 1890.

⁴⁵ Bureau of Corporations, *Report on Tobacco*, I, 63.

mendously increased numbers of what were basically similar products. Because the products usually came to the consumer in a pack of ten cigarettes for 5 cents, even an advantage like Duke's rebates from the Bonsack Co. could make no significant inroad in price to the consumer. Reduced costs even of about 10 cents per thousand in the cost of leasing machines, and slightly reduced leaf costs could not cause price competition since the price for consumers was already at such a low level. Overcapacity also became a real problem as soon as machine production was introduced, and the manufacturers fought fiercely to preserve or enlarge their share of the limited market.

As was the case in some other industries, such as patent medicines, the competition expressed itself chiefly in the form of expensive and sometimes elaborate advertising. Advertising and sales costs became almost identical. The advertising grew more bizarre as the decade progressed.⁴⁶ As competition came to center around packaging and gimmickry, advertising costs rose. Profits were squeezed as the major companies spent huge sums to outdo each other. In 1889, the last year before the companies combined, the Duke company spent \$800,000 on advertising. This amounted to 20 per cent of gross sales and provided one impetus toward combination.⁴⁷

The advertising flood represented, of course, a desperate struggle among the leading firms for a share in a market in which supply had outrun demand. Machine production came at a time when the industry's growth rate was declining. Although the demand for cigarettes grew almost every year, the rate of increase fell off sharply in the 1880's and 1890's. In the five years from 1879 through 1884, the number of cigarettes on which internal revenue taxes were paid increased by 281 per cent. In the following five years, 1884-1889, the figure rose by only 137 percent, indicating a trend which was confirmed by the increase of only 48 per cent in the period 1889-1894.⁴⁸ The market clearly was leveling off (see Figure 1). As a result, the dominant firms were running out of maneuvering room and competed all the more fiercely.

III

As the industry moved toward the end of the 1880's, producers faced overcapacity in production, increasingly costly and wasteful

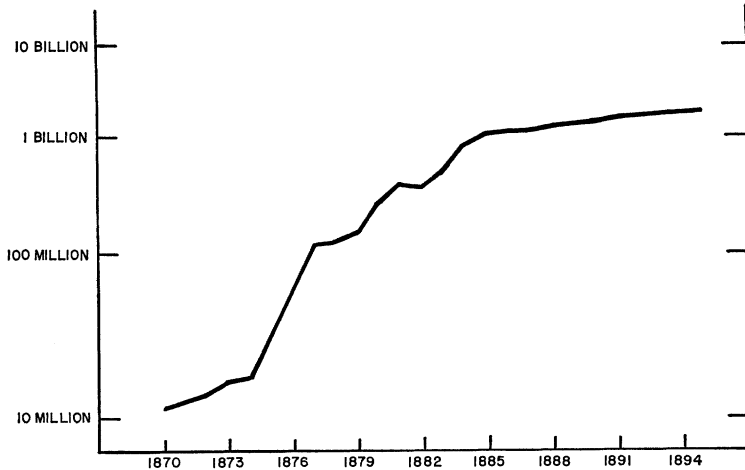
⁴⁶ For an indication of the strange and wondrous advertising, see *Tobacco*, May 13 and December 23, 1887, January 20, April 6, and August 10, 1888.

⁴⁷ Testimony of James B. Duke, Circuit Court MSS.

⁴⁸ These data are drawn from the *Report of the Commissioner of Internal Revenue for 1895*, pp. 378-379. Figure 1 is derived from information in the same source.

Figure 1

NUMBER OF CIGARETTES ON WHICH INTERNAL REVENUE TAXES WERE PAID, 1870-1895
(Semi-Logarithmic Scale 1 x 60)



competition through packaging and gimmickry, and, perhaps most important of all, a leveling off of demand for their product. Co-operation became an ever more appealing and logical solution, and, once more, James Duke led the way.

Duke tried to effect a loose combination between his company, Allen & Ginter, and the Bonsack Co. early in 1888. He sought to keep the Bonsack Co. from leasing its machines to the Kinney Co. and wanted a contract giving his firm and Allen & Ginter exclusive use of the machines. A large stockholder in Bonsack wrote Francis S. Kinney: "Whether Duke is paying enough to prevent . . . further efforts to put the machines in your factory and secure his determined effort to form this monopoly I do not undertake to say and firmly believe that unless you take some action soon you will be too late."⁴⁹ The attempt to keep the machines out of Kinney's hands failed, though some kind of agreement was signed that year between Duke, Allen & Ginter, and the Bonsack Co.⁵⁰

By the summer of 1888, however, the forces of combination were gathering in earnest.⁵¹ In that year, the Bonsack Co. bought the

⁴⁹ Richard H. Wright to Francis S. Kinney, March 30, 1888, Richard H. Wright MSS, Duke University Library. See also Wright to James A. Bonsack, May 11, 1888 and May 28, 1888, Wright MSS.

⁵⁰ James B. Duke to D. B. Strouse (president of the Bonsack Co.), December 12, 1889, James B. Duke MSS, Duke University Library.

⁵¹ Combination was discussed as early as 1885 at a meeting in Florida, and Duke and

patents of one of the two other machines in use — the Emery machine used by Goodwin & Company.⁵² The Bonsack Co. tried to effect a compromise with the owners of the other machine, the Allison.⁵³ The Allison patents were secured late in 1889, when final arrangements were under way for the organization of the American Tobacco Co.

A pooling agreement on leaf purchases reached in 1889 by four of the big five manufacturers paralleled the combination built around the machines. The old informal system of each company purchasing most of its leaf in different markets was formalized and more rigidly pursued. Cooperation between the manufacturers grew, and the efforts to effect a combination increased.⁵⁴

The producers held a series of meetings at the end of the 1880's in an attempt to work out a combination, but the clash of personalities and the wounds remaining from previous fierce competition made negotiations difficult. As a participant later commented, "there were some pretty stormy times . . . they would meet and break up and wouldn't speak, and then they would get together again . . . there was a great deal of friction among these men and they were very difficult to keep talking any length of time together."⁵⁵

In addition to the personal relations involved, the negotiators faced other difficult problems. These problems lay in three main areas: the reluctance of the individual companies to give up their identities and join a combination; the recurrent doubts about the legality of forming a trust; and disagreements about how to divide the combination's stock among the companies forming it.

Each of these businessmen took pride in his own company and was hesitant to see it subsumed into a combination.⁵⁶ As a result, it was necessary to work out a compromise which allowed the constituent companies to maintain the facade of individuality for a time. There was an interregnum of two or three years after the founding of American Tobacco, during which the companies used their old names, styling themselves the branches of the American Tobacco Co. Until firm lines of authority and control were established in American Tobacco's New York headquarters, the different firms operated independently as separate branches.⁵⁷

Kinney had considered an amalgamation in 1887. Testimony of Charles G. Emery, digest of evidence in the case of *John P. Stockton v. American Tobacco Co.*, 55 N.J. Eq. 352 (1895), File 3017, Bureau of Corporations MSS.

⁵² Richard H. Wright to Charles Watkins, June 30, 1888, Wright MSS.

⁵³ Richard H. Wright to James A. Bonsack, May 11, 1888, Wright MSS.

⁵⁴ *Western Tobacco Journal*, October 28, 1889, December 23, 1889, cited in File 4766, Bureau of Corporations MSS.

⁵⁵ Testimony of Francis S. Kinney, Circuit Court MSS.

⁵⁶ Statement by James B. Duke, File 3077, Bureau of Corporations MSS.

⁵⁷ File 4766, Bureau of Corporations MSS; *Tobacco*, March 21, 1890. Company

The second problem was the manufacturers' reluctance to form a trust because they feared this organizational form might soon be declared illegal. All parties to the negotiations except James Duke expressed such doubts.⁵⁸ Lewis Ginter especially was opposed to the trust. The manufacturers discussed the alternative of a pool, but rejected it because it was too weak a form of combination and left each producer free to violate any agreements under a pool.⁵⁹ The recently developed device, the holding company, was finally selected as the most sensible form, despite its possible legal complications. American Tobacco was one of the first giant holding companies in American industry.

The last remaining problem was the determination of how the stock of American was to be divided among the five constituent companies. This, understandably enough, was the source of much contention among the negotiators. They finally broke the logjam and made the decision. A participant later reported that: ⁶⁰

This was arranged by each gentleman writing on a slip of paper what proportion he thought each party should have. To this he signed his initials and they were all put in a hat. They were then spread on the table and all read and the average was taken from the ballots. An agreement was reached, the major difference being between Mr. Duke and Major Ginter. Major Ginter claimed a little more than he finally got and Mr. Duke claimed that he should get as much as the Ginter interests. Another ballot was taken, with slight variation . . . Finally [Charles G. Emery of Goodwin and Company], said: "Major, I believe this thing. We all seem able to agree upon it, all but you here. Now let Duke have his way about it."

In that way a satisfactory division was reached.

As a result of these negotiations, the American Tobacco Co. was incorporated early in 1890. After an unsuccessful attempt to organize the company in Virginia, a charter was secured in New Jersey.⁶¹ American Tobacco was capitalized at \$25,000,000 — \$10,000,000 in preferred and \$15,000,000 in common stock. W. Duke, Sons & Co. and the Allan & Ginter firm each received \$3,000,000 in preferred and \$4,500,000 in common. The Kinney Co. got \$2,000,000 in preferred and \$3,000,000 in common; W. S. Kimball & Co. and Goodwin & Co. each received \$1,000,000 in preferred and \$1,500,000 in common.

reluctance to sink identity into a combination was a common problem, and an interregnum often occurred between combination and consolidation. For example, see the description of the formation of International Harvester in John A. Garraty, *Right-Hand Man* (New York, 1960), chapter VII.

⁵⁸ Testimony of James B. Duke, File 3017, Bureau of Corporations MSS.

⁵⁹ Testimony of Charles G. Emery, File 3017, Bureau of Corporations MSS.

⁶⁰ *Ibid.*

⁶¹ The recently passed New Jersey general incorporation law made the acquisition of a charter in that state very easy.

James Duke was elected president, and central offices were located in New York.⁶²

Savings accrued immediately from the combination's exclusive contract with the Bonsack Co., secured when final arrangements about the amalgamation were made at the end of 1889. That agreement effected a reduction in the costs of production to the various firms of 15 to 25 cents per thousand cigarettes.⁶³ In 1893, the secretary of the American Tobacco Co. estimated that the costs of making cigarettes with the machines had fallen to around 5 cents a thousand.⁶⁴

The cigarette companies soon moved to secure the advantages for which they had effected the combination. The need for a more rational organizational structure, which had been felt especially by Duke, was met in the following few years. Duke installed an elaborate system of cost accounting in 1890; less profitable brands were abandoned and small, less efficient factories closed. After the interregnum between incorporation and centralization had passed, advertising and sales were coordinated from the New York office. Through consolidation the company achieved reduced costs per unit sold during the early 1890's.⁶⁵

IV

In the years after 1890, American Tobacco began the policy of expansion which ultimately led to the court-ordered dissolution of the firm. Producers of plug and smoking tobacco were acquired (usually through exchanges of stock and occasionally through cash purchases) and the company started the so-called "Plug Wars" of the 1890's. American Tobacco used its economic size to full advantage by selling various "fighting brands" of plug below cost, sacrificing "several millions" of their cigarette profits in order to force a combination of plug manufacturers with the company.⁶⁶ In December 1898, an agreement was reached with the major independent plug producers, and their firms were joined with the plug businesses of American Tobacco to form the Continental Tobacco Co. The largest competitor brought into the Continental was the Union Tobacco Co., owned by a group of financiers including P. A. B. Widener,

⁶² Bureau of Corporations, *Report on Tobacco*, I, 66.

⁶³ File 4766, sections 1 and 2, Bureau of Corporations MSS. See also the agreement of November 11, 1889 between the Bonsack Machine Co. and the constituent firms of American Tobacco, United Cigarette Machine Co. MSS, Duke University Library.

⁶⁴ File 4766, sections 1 and 2, and File 4711, Bureau of Corporations MSS.

⁶⁵ Testimony of James B. Duke, Circuit Court MSS; Files 4711 and 4766, sections 1 and 2, Bureau of Corporations MSS.

⁶⁶ Bureau of Corporations, *Report on Tobacco*, I, 2.

Thomas F. Ryan, William C. Whitney, A. N. Brady, and Thomas Dolan.⁶⁷

The formation of the Continental Co. led to a shift in the membership of the board of directors of American Tobacco; the financiers acquired positions on the board, and all the original founders of the company except James B. Duke left the board. Duke had backed the policy of expansion wholeheartedly, but the others were less eager to venture beyond cigarettes; they disposed of most of their holdings and had all retired from the board by the end of 1898. This shift of control from the manufacturers to financiers occurred in other industries as well at the turn of the century — the role of investment bankers in the history of such firms as United States Steel, International Harvester, and U.S. Shipbuilding is well known. In the case of American Tobacco, the financiers apparently shared the goals of James Duke, for he remained president of the firm. The strategy of increasing control over all branches of the tobacco industry continued.

The purchase of independent concerns (often in secrecy) and the competitive practice of selling below cost brought more and more companies into the tobacco combination. The same competitive methods which succeeded in centralizing a majority of the plug and smoking tobacco output worked equally well in the case of snuff, culminating in the formation of the American Snuff Co. in 1900. In addition, American Tobacco acquired control of the majority of licorice output in the United States and achieved a near monopoly in tin foil through its subsidiary, MacAndrews Forbes. The cigar industry proved more difficult to dominate, but the effort was made through the creation of the American Cigar Co. in 1901.⁶⁸ That same year brought a further cementing of the union between American Tobacco and Continental through the formation of a holding company, the Consolidated Tobacco Co., which acquired nearly the entire amount of the common stock of both.⁶⁹

The strategy of expansion was pursued in foreign markets as well as in the United States. In 1901, American Tobacco bought Ogden's, Ltd., a leading British manufacturer, and initiated competitive warfare in the English market. Thirteen large British producers responded to the American challenge by uniting to form the Imperial

⁶⁷ This group of financiers had formed the Union Tobacco Co. through purchase of major producers of plug (such as Liggett & Meyers) and smoking tobacco (such as Blackwell's Durham Tobacco Co.).

⁶⁸ Cigars were produced in very simple machines in small lots and could not be mass-produced by machine as could cigarettes. The cigar industry was characterized by many relatively small competitors, which made the task of acquiring a majority of output very difficult.

⁶⁹ Bureau of Corporations, *Report on Tobacco*, I, part 1.

Tobacco Co. After two years of costly competition, James Duke went to London to negotiate a settlement. The deal was completed in the fall of 1902 and provided that Imperial Tobacco would have exclusive manufacturing and sales rights in Great Britain and that American Tobacco would enjoy similar sway in American and Cuban markets. In addition, the companies agreed to form the British-American Tobacco Co. (with two-thirds of the stock controlled by the Americans, one-third by the British), and the British-American would conduct operations in the rest of the world's markets.⁷⁰ Expansion proceeded apace.

The growth and the competitive tactics of American Tobacco brought it increasingly under the scrutiny of the Bureau of Corporations and the Department of Justice. The company was, naturally, acutely aware of this problem and paid close attention to the workings of the antitrust division. After the Northern Securities Co. case of 1904, the holding company (Consolidated Tobacco) was scrapped and Consolidated, American, and Continental were all merged under the name American Tobacco Co. This failed, however, to bring the desired immunity from prosecution, and the Department of Justice brought suit against the company on July 19, 1907, asserting that American Tobacco was in violation of the Sherman Act. After lengthy trials and appeals, the Supreme Court, shortly after its ruling against Standard Oil, ordered the dissolution of American Tobacco in 1911 in an effort to restore competition in the tobacco industry.⁷¹ After several years the old combination was divided into several separate companies. These firms, created as a result of the court actions, include the (new) American Tobacco Co., R. J. Reynolds, Liggett & Meyers, and P. Lorillard. The antitrust action destroyed the near monopoly built from the base of the original American Tobacco Co. and replaced it with the oligopolistic competition which continues to characterize the modern tobacco industry.

⁷⁰ Duke wrote Oliver H. Payne (a financier and a member of the board of directors) from London after the completion of the agreement, saying he had made "a great deal with British manufacturers covering the world." Duke to Payne, September 26, 1902. James Duke MSS, Duke University Library.

⁷¹ See *U.S. v. American Tobacco Co.*, 164 F. 700 (1908), 164 F. 1024 (1908), 221 U.S. 106 (1911), 191 F. 371 (1911), and *Federal Anti-Trust Decisions 1890-1917* (Washington, 1917), IV, 168-251.