

AGE OF EXCESS

*The United States From
1877 to 1914*

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anatomy, without pay, at the Pennsylvania Academy of Fine Arts. There he tried to impart his conviction that art combines honesty with a capacity for taking infinite pains. Many of his practices with students—immediate drawing with a brush (Nature contains no lines, he insisted, “only form and color”), lack of prolonged study of classical busts, use of live models—were unique or almost so among American art schools of the time. A visiting art critic was stunned to learn that Eakins took his advanced classes to a bone-boiling establishment in suburban Philadelphia to dissect horses. When asked if students did not protest at such repugnant work, Eakins answered, “I don’t know of one who doesn’t dislike it. Every fall, for my own part, I feel great reluctance to begin it. It is dirty enough work at the best. . . .” But he defended the practice: “. . . no one dissects to increase his eye for, or his delight in, beauty. He dissects simply to increase his knowledge of how beautiful objects are put together to the end that he may be able to imitate them.” “Distortion,” he insisted, “is ugliness.”

At a lecture on the structure of the leg, the critic scoffed, “Do you imagine that the pupil will be able to draw a leg better for knowing all that?”

Eakins replied, “Knowing all that will enable him to observe more closely, and the closer his observation the better his drawing will be.”

After describing the course in artistic anatomy, which included some 30 lecture-demonstrations, the critic inquired of his readers, “It quite takes one’s breath away, does it not? . . . Must a painter know all this, one asks himself in a kind of awe-struck bewilderment.”

In 1877 Eakins finished a major work, “William Rush Carving His Allegorical Figure of the Schuylkill River.” The central figure was a nude female model on a dais. Nine years later, in demonstrating to a class the action of the human pelvis, he asked a male model to remove his loincloth. Some women students objected. The ensuing scandal persuaded Eakins that he should resign his position, and he did. In 1886, as in 1877, ruling values in the United States placed prudery above art, and money above either.

Chapter 2

MAKING MONEY

“GET MONEY—honestly if you can, but at any rate get money! This is the lesson that society is daily and hourly dinning into the ears of its members,” wrote Henry George in *Progress and Poverty*. Doubtless men tend to think always that an earlier time was a happier time, a more innocent time. But the universality of this apprehension does not prove that it is never true. The Mark Twain who wrote *The Adventures of Huckleberry Finn* was certainly aware of the human evil in the United States before the Civil War. But he recalled that nobody in his youth had worshiped money and that none of the well-to-do men of the neighborhood had been accused of getting rich “by shady methods.” Twain, along with other observers so diverse that they would have agreed about little else—Henry Adams, Willa Cather, William Dean Howells, Edith Wharton, Walt Whitman—thought that the acquisitive spirit increasingly held dominion. Not only was the desire to make money checked by fewer other values, but men were able to make vastly more money by exploiting new products and new techniques.

By 1883, five million pounds of Bull Durham smoking tobacco were being sold, and president Julian S. Carr was spending \$300,000 a year slapping posters of his famous bull on Egyptian

pyramids and elsewhere. The motto of the firm was: "Let buffalo gore buffalo, and the pasture go to the strongest." Less than two decades later, Carr's firm had been swallowed up by the American Tobacco Company of James Buchanan Duke. Buck Duke, a great admirer of John D. Rockefeller, analyzed as follows the policies that had guided his hero to virtual monopoly: "First, you hit your enemies in the pocketbook, hit 'em hard. Then you either buy 'em out or take 'em in with you."

Milton H. Smith, for 38 years the president of the Louisville and Nashville Railroad, said that "society, as created, was for the purpose of one man's getting what the other fellow has, if he can, and keep out of the penitentiary." No personal feeling or humanitarian consideration should be allowed to interfere with the duty of making a profit. Labor relations were not important to the top executives of railroads until the great strikes of 1877 forced such problems on their attention.

State interference was regarded as unjust discrimination. President Charles E. Perkins of the Burlington, disgusted by Iowa regulations, wrote to one of its railroad commissioners in 1885: "Iowa people can make more money in farms and other industries than rrs [railroads]. If this were not true, farmers and merchants and manufacturers and newspapermen, who now put their money into cattle and hogs, manufacturing establishments and business generally would instead invest it in railroads. But they can do better, and it is only the Eastern capitalist, who cannot use his money to advantage at home who is willing to risk it in western railroads and take the low average return which he gets, a return very much lower than the average of other investments in this state."

Even movements to end political corruption in a town were motivated by a belief that a reputation for good government would increase the value of local real estate. To make a town better meant to make it more prosperous, and the essence of the program lay in the hope: "The more prosperous my beloved city, the more prosperous Beloved I!" A town eager to have its own college might want a rise in real-estate prices rather than a rise in civilization locally. Students too were pushed chiefly by commercial considerations. County teacher institutes in the Midwest, inexpensive though they were, were seldom attended for

reasons of idle curiosity. An institute usually ran for two weeks or a month in July and August, so as to precede the exams for renewal of rural teaching certificates.

From the Southern Methodist Publishing House in 1885 came William S. Speer's *The Law of Success*. It instructed readers on how to pick wives who would help them get ahead. It stressed "the commercial value of the Ten Commandments and a righteous life." The author, himself an educator, theorized: "The educator of the future will teach his pupils what will pay best. He will teach them the art of thinking, which, for the purpose at hand, I may define to be the art of turning one's brains into money."

A master of this art was Joseph Cook, graduate of Harvard and of Andover Theological Seminary. He was started on the road to fame as a public lecturer when the YMCA in Boston asked him to conduct noon-hour prayer meetings for the benefit of clergymen. In 1876 these became the Boston Monday Noon-Hour Lectures. Cook was a prominent if ignorant participant in the swelling debate about the relations of theology and evolution. The flavor surrounding his ecclesiastical and educational activities can be gleaned from letters written him by his father, William H. Cook, an aging but still diligent farmer in the Lake George region of New York. On 15 January 1877: "I like the ring of your last Letter. No more Lectures Short of fifty Dollars. It ought to of been Seventy five dollars, or one hundred occasionally. I dont want you to become a misor or Seek after money. The time is coming that you will want means to do good. I do not forget for a moment the worth of Souls. . . ." Two months later: "If half the Press Says about you is tru you ought to have Ten thousand for your next year. Say Eight for the Noon lectures, and Two for outside labours. Anything less than this I shall not be Satisfide with. . . . Take care of your means, keep your Surplus on interest and go right Straight ahead. . . ."

It was assumed that a clergyman, so far from being the lifelong shepherd of any specific flock, would harken to the call of a more affluent congregation and a larger salary. The Reverend Jacob van der Meulen joined the Dutch farming colony in Campbell County, South Dakota, in 1889, as pastor of the Reformed Church; only 14 months later he retreated from frontier hard-

ships to a church at Baldwin, Wisconsin. The instability arising from American attitudes contrasts sharply with the example of the Swiss colony at New Glarus, Wisconsin, where in 1884 both the minister and the schoolteacher had held their positions for 18 years. And what of Gallatin, Missouri, which in that year had 6 churches but only 1,250 people? Doctrinal differences were doubtless involved in such splintering, but so was more than one theological imperialist who set out to capture his share of the market.

"Main Street's poor record in the arts," writes Lewis Atherton, "contrasted sharply with its encouragement of some professions. Banking was the outstanding example." It was fitting that so many banks had classic columns and pediments, like temples—the shrine where Americans came to worship.

Those who, in the 16 years after 1877, visited their banks often and deposited large sums were likely to be men who grasped one or more of three crucial developments of the time. The first was the national market, particularly in the growing cities, created by the expanding railroad network. The second was the coordinated nationwide sales force, made possible by railroad, telegraph, and then telephone, often making heavy use of advertising. The third was the augmented power of Federal and state governments, which could be bent to private commercial uses.

The railroad revolutionized farming in Bell County, Texas, some 115 miles northwest of Houston. In 1879, farmers there grew all their own breadstuffs, including 84,267 bushels of wheat, which they took to numerous small local mills for conversion into flour. They grew feed for the stock that did not graze on the open range. They grew little cotton, only 9,217 bales in 1879, for it cost too much to haul cotton by wagon to Gulf ports. But the first patent for the manufacture of barbed wire had been issued in 1875, and it was becoming much cheaper to fence a field to keep livestock out. And, after 1880, railroads entered Bell County. They brought flour of higher purity and reliable quality, ground by mass-production methods in the Minnesota mills of Charles A. Pillsbury or Cadwallader C. Washburn from grain grown in the burgeoning wheat belt on the Western Great Plains, from Kansas or Dakota. By 1889 Bell County was producing only 20,936 bushels of wheat, a decline of 75 per cent in a decade. Cotton, now

shipped to market or to the Gulf ports by rail, had become the cash crop. The county's output was 37,473 bales in 1889, four times what it had been a decade earlier. Improved acreage in the county in 1889 was 13 times as great as in 1869. As a greater area was brought under cultivation, more machinery was likely to be necessary. This machinery was often bought on credit, and the farmer relied on the proceeds of his cotton crop to pay his debts. He counted on it too to buy his flour, and Rio coffee, and occasional cans of Columbia River salmon or Boston baked beans, and store-bought pants.

Most of the cotton and flour and other agricultural products flowed into the maw of Northern cities. Chicago, growing from 503,000 in 1880 to 1,100,000 in 1890, was only one dramatic instance of the swelling mass market provided by the cities. In the same decade, the number of people in places of at least 2,500 population went from 14 million to 22 million, of whom nearly 10 million lived in cities with more than 100,000 inhabitants. Meanwhile the rural population, although nearly twice as great as the urban population in 1890, went from 36 million to only 41 million.

And yet, some of the growth in rural population was due to migration from the cities. This happened especially during depression years, such as 1876, when immigrant workers might dream of starting a farming town and returning to the peasant existence most of them had lived in the Old Country. Some dreams came true. Catholic priests serving the 20,000 Poles in Chicago started the colony of New Posen, Nebraska. Intending to move there themselves, they negotiated well for the land. Such little towns, with their own churches and parochial schools, resembled towns in Poland. Farmers planted potatoes and sowed wheat as they had done in Poland. A peasant on the Nebraska prairie might weep as he struck his scythe on the whetstone, reminded by the sound of his native village.

But for the most part the frontier was settled by farmers from farther east, whether originally from New York State or from Europe. Hollanders had crossed the ocean in 1847 to find religious liberty, but after 1879 they left the Great Lakes and crossed the prairies into Dakota "to secure farming land, to get rich quickly." Perhaps 5,000 Hollanders, stimulated by propa-

ganda from the railroads and from Dakota Territory, set up four farming colonies in South Dakota. Each settler could get 480 acres of public lands: 160 acres each from a Homestead Act entry, a pre-emption claim, and a claim under the Timber Culture Act. If he had a mother-in-law or an aged parent, he could claim another 480 acres. There were no trees in Dakota to cut down, flax was worth \$1.50 a bushel, wheat \$1 a bushel. Men gladly borrowed money to buy teams and machinery, paying as high as 60 per cent interest a year on chattel security. Why not? They expected to be rich in a few years.

They weren't. Consider the group that moved in 1885 from Greenleaf, Minnesota, to northern South Dakota. In 1886 only a little ground was planted, and the crop was just fair. That winter, a blizzard. The next spring seed grain and horse feed were scarce. The Chicago, Milwaukee & St. Paul railroad promised free seed grain, but when it came, it was foul with mustard and cockle. They got seed grain from the Northern Pacific, to be repaid in the fall with 10 per cent interest. The crop that year was good, but the winter was very severe, and the crop in 1888 was a total failure. Many people had to apply to friends back east for help. The next three years the crops were partial failures. In 1892, as threshing was going on, lightning set fire to the prairie, and a swath 12 miles wide was burned out—grain, buildings, stock, machinery. Everybody suffered, and some were left destitute. Again they got help from back east. The next year crops were fair, but prices were so low that the farmer made little or nothing after he counted the cost of hauling the crop 40 miles to market. In 1894 the same story: fair crops, low prices. But the smarter men began to catch on. They learned that dent corn would not ripen in Dakota, but flint corn or squaw corn would yield up to 40 bushels an acre. They fattened hogs on the corn, and began shipping them to Eastern markets. They also turned to raising beeves. The next two winters were mild, so that stock could subsist on the open range, and cattle prices were rising in 1895 and 1896. The Hollanders learned that selling milk to creameries and raising cattle, sheep, and hogs were more profitable than growing wheat and other small grains. It had taken 12 years—plus luck and substantial amounts of aid from back east—to find out how to make money farming the plains in Dakota.

Many men had been wiped out and crushed before they had time to learn how to get ahead.

Gustavus Swift learned quicker, in large measure because he saw the transformation that the railroads were working. Unlike the automobile, which tends to erode cities away because it can be used to link together an infinite number of points, the railroad tends to concentrate population in a few places. No matter how many stations are strung along its route, no matter how many branches are built, the railroad works to depopulate the countryside while building up swelling cities. Swift, a native of Massachusetts, saw with his own eyes the growing market for food in the cities of the East. He also knew that the settlement of the plains would mean a constantly growing supply of meat.

Meat was cured in the West—salted or smoked or canned—before it was shipped eastward. But if the new refrigerator cars on the railroads could be improved so that a man could deliver fresh meat to New York or Boston, what limit could there be to his profits? Swift went to Chicago, where he had been preceded in the packing business by Philip D. Armour and others. But Swift set up a packing firm and made his first experimental shipment of refrigerated beef in 1878. The next decade saw his essential effort—the creation of a nationwide sales force built around a network of branch houses, each with its own storage plant and marketing organization. Having created this network, Swift had to make use of his sales force, so he gave up his exclusive concern with beef and instituted a "full line" policy: beef, lamb, mutton, pork, and, later, poultry, eggs, and dairy products. To break down consumer bias against eating meat that had been slaughtered weeks earlier and half a continent away, Swift turned to advertising.

His firm grew rapidly, and the marketing network needed more meat to sell. He set up new packing plants in Kansas City, Omaha, and St. Louis. By 1893 he had built up a giant company based on vertical integration: handling the product at every stage from raw material to the final sale to the retailer. The chief departments—purchasing of livestock, killing and dressing it, sales, and accounting—were all held tightly in the fist of the main office in Chicago. Swift was the archetype of the age, a systematizer, an organizer, a man who left nothing to chance.

A few men made fortunes by the opposite tactics, by being lone wolves and gamblers. Such a man was Ed Schieffelin, a wanderer and prospector from boyhood. On April Fool's Day in 1877 he reached the Huachuca Mountains in southern Arizona, and he spent the summer canvassing the hills along the San Pedro River. He found the Tombstone claim and the Graveyard claim, but the ore samples he carried back to Tucson did not impress anybody there. The next winter Schieffelin was back on the San Pedro with his brother and a mining engineer named Richard Gird. Staked by the governor of Arizona and by a Tucson gunsmith, the three men found silver ore that assayed as high as \$9,000 a ton. They located the Tough Nut mine, the Lucky Cuss, the Contention, and others. Their backers got two brothers named Corbin, way off in New Britain, Connecticut, to put up \$80,000 to build a ten-stamp quartz mill, in exchange for a 12½ per cent interest in the claims. The mill began operation in June 1879, and for the next 27 months the company paid dividends of \$50,000 a month.

Long before that period ended, Ed Schieffelin had sold out; he was a prospector, not a mine operator. He and his brother got \$600,000 for their half share in the mill and in the Tough Nut Mine. Among the buyers was a Philadelphian named Disston, who had inherited a big saw factory from his father and who was engaged in giant operations in Florida real estate as well as in Arizona silver mines.

Another silver mine was the Anaconda, up in the Butte district of Montana, and Marcus H. Daly took charge of it in 1882 for a syndicate consisting of himself and three other men. (One was George Hearst, whose mining fortune would be diverted by his son William Randolph to newspaper publishing.) In that silver mine, Daly hit the richest vein of copper sulphide yet found, 50 to 100 feet wide, assaying in places 55 per cent copper.

The discovery was perfectly timed. Since the Crime of '73, the Act of Congress that stopped coinage of the standard silver dollar, the market for silver at the U. S. mints had contracted. But a whole congeries of industries based on electricity would form a swelling market for copper. Telegraph wires were following the railroads everywhere. In 1876 Alexander Graham Bell had first transmitted speech through a copper wire; in 1880 Thomas Alva

Edison had patented the incandescent light; in 1882 the first electric generating plant to light the streets of New York was opened. Meanwhile, copper production in Great Britain, 16,000 tons in 1860, was 3,800 tons in 1881; Chile's output was also declining; production of the United States in 1882 was only 44,000 tons.

Butte in 1882 had no railroad, and proper facilities to reduce the ore did not exist anywhere in this country. Daly shipped the ore by ox team to Corinne, Utah, thence by rail to Atlantic ports, and by ship to Swansea, Wales. Five years later the Great Northern reached Butte, and thereafter it hauled ore to the smelter and refinery at Great Falls, and copper to the Midwest.

The copper and silver mine became the basis of an empire. Daly bought coal lands and coal mines. He bought forests in northwestern Montana to provide timbering for the mines. He set up the Blackfoot Land & Development Company to settle farmers on the land that was logged out. In 1891 the Anaconda syndicate bought the Butte City Water Company from another big mine operator and future United States Senator, William A. Clark. The next year Anaconda produced 100 million pounds of copper, more than the whole country had produced a decade earlier.

With his firm the world's biggest copper company, Daly undertook to provide a comfortable home for himself in Butte. He built the Montana Hotel, equipped it lavishly, kept it fully staffed. Often he was the only guest, and ate alone in a dining room that sometimes accommodated 500 guests at a banquet. It was the Dalys and the Clarks and men like them who financed and tried to manipulate two political parties, the Democrats and the Populists, in their effort to recapture the Federal mints as a market for their silver.

Conquer those markets was the watchword, and, then as now, advertising played a part. As early as the 1790's, manufacturers of patent medicines had begun to turn out standardized bottles with a brand name and to advertise their wares widely. The nostrum-makers were true social pioneers pointing toward our own day: the first manufacturers to advertise directly to consumers and to aim for a national market, the first merchandisers to experiment at manipulating psychology. During the Civil War the heavy

excise taxes on whiskey gave them a new opportunity, and such products as Drake's Plantation Bitters appeared. Soon its slogan—"S.T. 1860-X"—was appearing in newspapers, on fences, on barns, on billboards, on rocks. It was painted in letters 400 feet high on a mountainside, and then a forest was cut down so the letters could be seen by passengers on the Pennsylvania Railroad. After Drake retired, very wealthy, about 1890, he explained that the slogan meant "Started trade in 1860 with \$10."

Some of the consequences of these methods of getting rich can be seen in an entry of 1889 in a diary in Muncie, Indiana: "Elixir of life is all the talk. Claims to make old people feel young, etc. Great many have experienced bad effects of it, sore arms, abscesses, erysipelas, and blood poisoning." But medicine shows continued to tour the country in wagons, and millions of farmers and their wives continued to pay a dollar or so for a bottle of patent medicine (often alcoholic) plus blackface that was played, sung, and joked off the tailgate.

Other manufacturers and retailers were slow to follow the lead of the patent medicine kings, but when Jacques Offenbach made a triumphal tour of the United States he was amazed by the passion for advertising. Everywhere the composer came upon the word "Sozodont," the name of a dentifrice. In an almost inaccessible spot at Niagara Falls he saw a sign:

Gargling Oil
Good for man and beast

In Philadelphia he watched the parade of a voluntary organization. The bass drummer in the band was pounding his instrument as hard as he could while trying simultaneously to hold it so that spectators could read, in fine black lettering on the skin, an ad for a drugstore. "Decidedly," Offenbach concluded, "the American advertising men play upon the human mind as a musician plays on his piano."

By 1880, manufacturers of durable goods—sewing machines, farm machinery, pianos—were advertising their brands, offering goods on trial to customers, hiring local salesmen, offering agencies to local stores, and otherwise bypassing the retailers. Even so, shopkeepers were glad to see them assume advertising costs, and country editors welcomed them as a source of revenue that

would compensate for the decline in political advertising. And customers liked the standardization of quality: as the railroads expanded and thus lowered the transportation costs on flour, Pillsbury and other big manufacturers conquered one market after another by means of advertising and good quality. In less than 50 years they knocked the village flour mills out of business.

Standard Oil, Chase and Sanborn coffee, Bayer aspirin, Wrigley's chewing gum, Postum, Grape Nuts—all were perfecting their sales techniques. But it was tobacco men like Buck Duke who worked on the frontiers of promotion.

His father, Washington Duke, had started a tobacco factory in a log shack near Durham, North Carolina, after the Civil War, and James Buchanan Duke became the father's right-hand man. Although cigarettes in 1881 were still hand-rolled in factories, more than 240 million a year were being sold, and Duke decided to gamble on them. He brought ten Russian and Polish Jews from New York City to roll them. His key salesman Edward F. Small, trying desperately to create a market, got the idea in Atlanta of asking a touring French actress, who was currently the rage there, to endorse Duke cigarettes. She did, and he slapped her picture with the smokes on billboards all over town. He hired lady salesmen to visit tobacco dealers. The chief element in creating trade, he said, was "judicious advertising, especially if the same is novel and astounding in magnitude."

Meanwhile Duke was experimenting with the tobacco machine invented by a young Virginian, James Bonsack. By 1884 they had two machines working well in Durham, each turning out 200 or more cigarettes a minute. They figured they could produce 250,000 cigarettes a day, and the cost should fall from 80¢ per thousand to 30¢. Even more important, Congress in 1883 had cut the revenue tax from \$1.75 to 50¢ per thousand. A thousand cigarettes took 3½ pounds of tobacco at 25¢ a pound, and the cost of packing and shipping brought the total cost per thousand to about \$1.85. Price to jobber, \$4, less a 10 per cent discount. With that sort of margin, Duke could afford to spend money to convince smokers that cigarettes were not effeminate.

He sent his partner to Europe, and in the spring of 1884 Duke went to New York City and started plastering posters and billboards. He offered premiums to retail dealers for selling his

product—camp chairs, clocks, crayon drawings. A master stroke was to put a picture of a famous actress or an athlete or a national flag in each pack. The pictures came in numbered sets, and children started pestering their fathers for them. Duke opened a loft factory in New York, installed four Bonsack machines, and jumped his capacity to 500,000 cigarettes a day.

Push that product! Small, directing sales in the Midwest, sponsored a polo club that played on roller skates. He placed street urchins in front of tobacco shops to give a free pack to each person entering the store. Duke topped that by putting men at the Immigration Station in New York to hand out samples to every immigrant. "These people will take our cigarettes all over the country. It's whopping good advertising," he claimed.

He was right. In 1889 the United States consumed 2.1 billion cigarettes, and Duke sold nearly half of them. His gross sales were more than \$4 million, and net earnings were 10 per cent of that. He was spending \$800,000 a year on promotion, twice his net earnings. He gave secret rebates and cash bonuses to key retailers. He extended his system of premiums to consumers, giving coupons that could be exchanged for prizes ranging from floor mops to gaudy stickpins. And he brought his competitors to the wall. In 1890 he got together with four of them to form the American Tobacco Company, which controlled 90 per cent of the cigarette market.

By guaranteeing to Bonsack's company an annual royalty of \$250,000, Duke got exclusive right to use its cigarette machine. He welded the five companies into one. Concentrating manufacture in three plants, New York, Durham, and Richmond, he drove labor costs down to less than 10¢ a thousand cigarettes. Now a virtual monopoly, he could cut promotion costs, and he did, by more than \$1 million a year. He bound wholesalers and retailers by contract to maintain the prices he set. Just as Gustavus Swift had moved to set up a full product line, so did Buck Duke, buying a large plug factory, a cigar plant, two manufacturers of chewing and smoking tobacco. The full line cut sales expenses. Duke explained further: "I wanted to make every style of tobacco the public might demand. . . . And I wanted him to take our kind in place of the other fellow's." In 1894, in the midst of the worst depression in the United States up to that time, American Tobacco showed a net profit of \$5 million.

Money could be made by using the railroads to reach unexploited raw materials in the West. Money could be made by tapping the urban markets created by railroads in the East and Midwest. Money could also be made by using the power of government to further your own purposes. Milton H. Smith claimed: "The only inducement for railroad companies to enter politics—become parties to the dirty work—is to protect their property." But companies might also enter politics to extend their property, to take money out of other pockets and put it into their own, to, in Smith's words again, "get what the other fellow has, if you can. . . ."

The tariff was a good example. In 1865 the import duty on kerosene—the chief product of Standard Oil two decades later—was fixed at 40¢ a gallon, and domestic producers of kerosene enjoyed tariff protection continuously until 1909. And what protection: The wholesale price of illuminating oil at New York City in 1860 was less than 10¢ a gallon. Or consider steel, in which Andrew Carnegie was piling up his colossal fortune. An act of 1870 fixed the tariff on steel rails at \$28 per gross ton. When railroad expansion jumped upward in 1879, American steel men could kick the price of rails sky high without fear that foreign mills would take their customers. In 1881 the price of steel rails in England was about \$31 a ton, and a man could pay the import duty of \$28 a ton and still make money shipping rails here because the American price was more than double the price in England; it reached as high as \$67 a ton. Men like Carnegie were earning net profits of 100 per cent a year and more on the capital invested in their plants. It was not just the tariff, of course: Carnegie and a few others got added help from the government, for they controlled the American patents on the Bessemer process for making steel.

So Carnegie owed a considerable part of his fortune to the generosity of Congressmen who were giving him somebody else's money. It came from the users of steel, from the railroads, from the makers of farm equipment. They priced their products accordingly, raising their freight rates, charging more for a reaper or a plow. So, finally, the consumer paid and the Carnegies got fat. Especially did the farmers pay. The United States had an export surplus in wheat and in cotton and in other farm products, and farmers got no protection from the tariff. It served rather for

decades to siphon income and wealth out of the rural areas and into the cities, into the bank accounts of a few men in the cities.

Influence in Washington was good, influence in states and cities could also be good. In 1881 Chicago journalist and reformer Henry Demarest Lloyd commented: "The Standard has done everything with the Pennsylvania legislature, except refine it." But the agents of Standard Oil were not deterred by such remarks. In order to protect its control of the pathways from the oil wells in Pennsylvania to the railroads, Standard Oil opposed the right of eminent domain for pipelines, thus virtually insuring that no competing pipeline could be built. The company reportedly used venal methods in this effort, and successfully so. Pennsylvania in 1882 failed in its effort to collect taxes from Standard Oil of Ohio on the property it owned outside the state; the man who had collected much of the material on the tax case for the state ceased his attacks on Standard Oil. The Billingsley Bill in the Pennsylvania legislature sought to make pipelines into common carriers and to force sharp reductions in their rates for carrying and storing oil. It was defeated in the state senate in April 1887. Its supporters accused Standard Oil of having bribed at least five senators. The following month another Standard Oil executive wrote to Rockefeller that while their firm had met with "unparalleled success in commercial history" its public reputation was "not to be envied."

Access to governmental power was of special importance in the South, where the desperate poverty of the region posed special problems for men seeking their fortunes. But even the general poverty could create glittering opportunities for men who had the political influence to seize them. For instance, poverty made farmers and businessmen receptive to any measure that promised to reduce the taxes they paid. One consequence was the deterioration of the public schools in many Southern states. Another was to make taxpayers amenable to proposals that offered not only to remove from their backs the burden of supporting the state penitentiary but also to convert the prisoners into a source of revenue for the state. Thus arose the convict-lease system—the practice of hiring out the state's convicts to private companies as a conscript labor force.

The larger the conscript labor force, the greater the revenue to

the state, and appropriate changes in the criminal laws were made. In 1874 there were 272 prisoners in Mississippi. Then the "pig law" was enacted, defining as grand larceny the theft of any property worth \$10 or of any cattle or hogs regardless of their value. Violations brought a prison term up to 5 years. At the end of 1877 the state had 1,072 prisoners—an increase of nearly 400 per cent in 4 years. In Georgia, where the number of convicts rose from 432 in 1872 to 1,441 in 1877, Senator Joseph E. Brown had a 20-year lease that guaranteed him 300 able-bodied convicts to work in his Dade Coal Mines. He paid the state about 8¢ per man per day.

The deal that the Tennessee Coal, Iron, and Railroad Company got from Tennessee was not so good. In 1883 the company leased the entire penitentiary, holding some 1,300 convicts, for \$101,000—over 20¢ a man per day. The company, if not nonpolitical, was certainly nonpartisan: its president was Thomas C. Platt, Republican leader of New York; its general counsel was Arthur S. Colyar, Democratic leader of Tennessee. Colyar explained that his firm had turned to the convict-lease system in large part because of "the great chance which it seemed to present for overcoming strikes."

Considering that the tariff gave Colyar's firm an artificially high price for its output of pig iron, and that the convict-lease system gave it artificially low labor costs, the Tennessee Coal, Iron, and Railroad Company derived much of its profit from these governmental beneficences. Perhaps it even owed to them its survival.

Among the founders of Colyar's company was James H. Inman, who was also president of the largest railroad system in the South, the Richmond and West Point Terminal Railroad. Along with four other directors of Richmond Terminal, including two brothers who were grandsons of the revered John C. Calhoun, Inman bought stock in the Central of Georgia. In 1889 they sold it to Richmond Terminal for \$7,500,000—about double what they had paid for it. Less than five years later, Richmond Terminal was bankrupt.

The tactic of looting your own company was no more reprehensible than the various types of industrial blackmail. Such railroads as the West Shore or the Toledo, Peoria, and Warsaw were

built not so that their owners could try to operate them at a profit—but so that existing lines would buy them out at an exorbitant price to avoid the threatened competition. The work of launching the construction of telegraph lines so that the partially completed line could be sold to Western Union grew to be an industry in itself. As William H. Forbes, president of the National Bell Telephone Company, explained it: “The Western Union is composed of many companies which have successively been brought forward as competitors. Each of these companies has posed for a time as a public benefactor, organized to fight the Western Union. Under this plea, each has demanded and obtained rights of way and other privileges throughout the country. The footsteps of all lead into the Western Union cave; not one has ever returned.”

Businesses whose profits depended on the maintenance of a monopoly position were preyed upon by politicians as well as by other businessmen, and many was the nuisance bill introduced into city councils and state legislatures by men who had no intention of passing it but who wanted to be paid for not passing it.

Although other business strategies might lead to quicker results and more spectacular ones, perhaps the most common route to workaday reputability was that followed by Asa Call in Algona, Iowa, trading in real estate. The United States was growing, and as local communities grew in size, real-estate values moved upward. In Muncie, Indiana, for instance, when natural gas was brought in at local wells in 1886, real estate began to change hands at amazing speed. In 1888 a man hesitated to pay \$1,600 for an 8-acre tract on the outskirts of town. He bought instead a 60-day option on the property. Before the option expired, the piece of land was sold 5 times. The last time it brought \$3,200.

Chapter 3

HOW THE STRUGGLE FOR WEALTH RESHAPED THE ECONOMY

ADAM SMITH contended that competition will act as an “invisible hand” to convert the self-seeking activities of individual men into general if unforeseen consequences that promote the well-being of all. Competition among producers will force them to be efficient and will drive their prices down to reasonable levels.

In the labor markets of the United States, employers competed not only with each other but with the large quantities of unoccupied and cheap land. Although relatively few city laborers had the specialized knowledge and the thousand dollars or so in capital that were needed to succeed as a farmer, there can be no doubt that the frontier kept the general level of wages higher than it would have been otherwise, and far higher than it was anywhere in Europe. This fact had two crucial results. First, it encouraged manufacturers to substitute machinery for labor whenever possible. Although their purpose was to reduce their costs of production, the fruit of their efforts was an increase in the output per man-hour, an increase in efficiency. Since this in turn facilitated increases in wages, the process was self-reinforcing. Second, the relatively high level of wages meant a wide dispersion of purchasing power. Whereas in Europe buying

power was in the hands of an aristocracy that wanted individualized and often hand-made goods, the mass market in the United States called for standardized goods turned out by mass production using labor-saving methods. Out of this situation came the industrial supremacy of the United States, which was clearly established by 1892.

From 1877 to 1892 the United States grew—in population, in wealth, in output per man-hour, in the value of real estate. In these years the economy became industrial. The society became urban. Vast corporate bureaucracies were forged. Power was caught up into the hands of a few men as never before in this country. The men in government were increasingly housebroken, until to many contemporaries they seemed lap-dogs to the barons of business.

The population of the country was 47 million in 1877; 67 million in 1893. The rate of growth was just over 1 million per year in the late 1870's; thereafter until 1893 it was about 1.3 million per year. In most years from a third to a half of the population increase was due to immigration, and much of the growth of the American economy can be attributed to this flow of immigrants. Children were born in Great Britain or Germany or Scandinavia (or increasingly after 1880 in Italy or Eastern Europe), supported and fattened in the land of their birth until they were old enough to go to work, when they would obligingly cross the Atlantic and present themselves at the employment offices of American railroads and factories. Year after year more than 60 per cent of the immigrants were male and more than two thirds of them were age 15 to 40.

Many of the Scandinavian and German immigrants brought not only their skill as farmers but also modest amounts of wealth with which to establish themselves on the prairies. In the anthracite region of Pennsylvania and other mine fields, many of the foremen and skilled miners had learned their trade in England or Wales. The Farr Alpaca Company had only followed a common practice in the textile industries in importing its skilled workers from Canada and England. Nor was it the only company to immigrate here, lock, stock, and barrel, because of the tariff. After the McKinley Act of 1890 imposed import duties on tinplate coming from South Wales, thousands of workers there were sud-

denly without work. Large groups came here, and Welsh manufacturers moved all or part of their factories to such towns as New Castle, Pennsylvania.

Many immigrants were attracted by the unrelenting propaganda of railroads eager to populate the countryside along their recently extended lines. In 1877 the Union Pacific-Central Pacific complex was the only railroad to reach the West Coast. The Great Northern, running out of St. Paul, reached Everett, Washington, in 1893, and by that time the Northern Pacific also had touched the Pacific Ocean. The Southern Pacific, running east from San Francisco, reached New Orleans in 1882. Railroad construction had continued on a small scale throughout the depression of the 1870's, but after 1879 it zoomed ahead. In 1880 10,000 miles of track was opened; the following year, even more; in 1887, a record 13,000 miles. The miles of track in operation doubled from 1877 to 1892.

While the railroad network was being extended, it was also being integrated physically. Most of the railroads in the East before the Civil War were built as short lines to serve the commercial interests of one or two cities. Gradually ownership of several short lines came into a single set of hands, and the lines were integrated into trunk lines such as the New York Central. But each of the three railroad systems serving New York City in 1861 had its rails set a different distance apart. Since rolling stock could not pass from one system to another, goods often had to be transshipped from one freight car to another at great cost in time and money. Similar variations pertained elsewhere: the gauge of a railroad might be 6 feet or it might be 4 feet 8½ inches. But Eastern interests, their eye on the possible carrying trade in grain from the plains, had decreed the latter as "standard gauge" for the first transcontinental railroad. One railroad after another made the conversion, until by 1880 four fifths of the railroad track in the country was standard gauge. The chief deviants were the railroads of the Southeast, which made the change in 1886.

As the railroads pushed into unsettled regions, millions of acres were opened to cultivation. While the population of the country increased about 40 per cent, the number of cattle increased 60 per cent and their average value declined 10 per cent. The output of wheat rose more than 50 per cent, and the price of wheat per