the proposed reforms that could kill it. I could easily write this book as a critique, focusing attention on the system’s failings, but instead I choose to write it as an appreciation, examining the distinctive institutional dynamics that enable it to be all things to all people. In its organizational complexity, multiple functionality, and breadth of support, the system inspires awe. So let us count the ways.

2

UNPROMISING ROOTS

The Ragtag College System in the Nineteenth Century

The roots of American higher education are extraordinarily local. Unlike the European university, with its aspirations toward universality and its history of cosmopolitanism, the American college of the nineteenth century was a hometown entity. Most often, it was founded to advance the parochial cause of promoting a particular religious denomination rather than to promote higher learning. In a setting where no church was dominant and all had to compete for visibility, stature, and congregants, founding colleges was a valuable way to plant the flag and promote the faith. This was particularly true when the population was rapidly expanding into new territories to the west, which meant that no denomination could afford to cede the new terrain to competitors. Starting a college in Ohio was a way to ensure denominational growth, prepare clergy, and spread the word.

Also, colleges were founded with an eye toward civic boosterism, intended to shore up a community’s claim to be a major cultural and commercial center rather than a sleepy farm town. With a college, a town could claim that it deserved to gain lucrative recognition as a stop on the railroad line, the county seat, or even the state capital. These consequences would elevate the value of land in the town, which would work to the benefit of major landholders. In this sense, the nineteenth-century college, like much of American history, was in
part the product of a land development scheme. More often than not, these two motives combined, as colleges emerged as a way to advance both the interests of particular sects and also the interests of the towns where they were lodged. Better to have multiple rationales and sources of support than just one.1

As a result, church officials and civic leaders around the country scrambled to get a state charter for a college, establish a board of trustees made up of local notables, and install a president. The latter (usually a clergyman) would rent a local building, hire a small and modestly accomplished faculty, and serve as the CEO of a marginal educational enterprise, which sought to draw tuition-paying students from the area in order to make the college a going concern. With colleges arising to meet local and sectarian needs, the result was the birth of a large number of small, parochial, and weakly funded institutions in a very short period of time in the nineteenth century, which meant that most of these colleges faced a difficult struggle to survive in the competition with peer institutions. Having to operate in a time and place when the market was strong, the state weak, and the church divided, these colleges found a way to get by without the kind of robust support from a national government and a national church that universities in most European countries enjoyed at the time.

In this chapter, I examine some of the consequences of the peculiarly dispersed circumstances in which American colleges had their origins. These institutions were not only geographically localized but also quite parochial in intellectual and academic stature. Quantity not quality was the driving force, and supply preceded demand. As a result, enrollments at individual institutions were small, and colleges had to drum up business every way they could. This changed when a broader societal rationale for pursuing higher education began to emerge late in the nineteenth century, arising from the German model of the research university and from middle-class demand for credentials that would provide access to the emerging white-collar occupations. At that point, finally, the system started to realize its potential, as the large number of existing colleges provided a widely distributed and fully operational infrastructure to make a huge expansion in stu-

dent enrollments easy to accomplish. Only then did research begin to emerge as a central part of American colleges and universities.

Rapid Expansion and Dispersion of U.S. Colleges in the Nineteenth Century

In 1790, at the start of the first decade of the new American republic, the United States already had nineteen institutions called colleges or universities. The numbers grew gradually in the first three decades, rising to fifty by 1830, and then started accelerating. They doubled in the 1850s (reaching 250), doubled again in the following decade (565), and by 1880 totaled 811. The growth in colleges vastly exceeded the growth in population, with a total of 4.9 institutions per million population in 1790 rising to 16.4 institutions per million in 1880. As a result, the United States during the nineteenth century had by far the largest number of colleges and universities of any country in the world.2

By contrast, the United Kingdom started the nineteenth century with six institutions and had ten by 1880, while in France the number of universities rose from twelve to twenty-two. In all of Europe, the number of universities rose from 111 to 160 during the same period.3 So in 1880 the United States had five times as many institutions of higher education as all of the countries in Europe combined. Why did this remarkable explosion of college expansion take place in such a short time and in such a cultural backwater?

Two governmental factors helped to foster the founding of colleges. One was a decision by the U.S. Supreme Court. In 1819, the court ruled unconstitutional an effort by the state of New Hampshire to assert control over Dartmouth College, arguing that when a state grants a charter to a public corporation it does not retain the right to meddle in the corporation's affairs. In the long view, the Dartmouth decision established the basis for American corporate law, but it had an immediate impact on the status of the liberal arts college. It confirmed that college trustees owned and governed the institution, and it protected them from state interference. If the state wanted to shape higher education, it would have to create publicly controlled institutions for this
purpose instead of restructuring existing colleges that had corporate charters. This paved the way for the rise of state colleges, but it also spurred a sharp increase in the founding of private colleges, which now had legal autonomy.

The other factor that fostered college growth was a state action that didn’t happen. Despite repeated efforts by supporters of the idea, the federal government never established a national university. The founding fathers favored such a move, and George Washington was particularly keen on the subject; later the Whigs picked up the cause. But it ran into a wall of opposition. The idea of founding such an institution bore the distinctive odor of aristocracy and big government, and it posed a threat to existing state public and private colleges, so a national university never materialized. If it had, however, the history of American higher ed would have taken a very different course. One university with federal backing would have been able to draw the top faculty talent and best students and would have rested on a solid financial footing. Public colleges in the states would not have been able to compete, and the marginal and parochial chartered colleges would have seemed pitiful by comparison. Instead, however, the market for corporate colleges was wide open, with no dominant actors and no state control.

Another reason for the massive number of college foundings in the United States was that the large majority of these institutions were colleges in name only, able to assert but the weakest of claims to being purveyors of higher education. In fact, they were difficult to distinguish from a variety of high schools and academies, which were also arising in abundance across the American landscape. For students, it was often a choice of going to high school or to college rather than seeing one as the feeder institution for the other. As a result, the age range of students attending high schools and colleges overlapped substantially. And some high schools offered a program of studies that was superior to the offerings at many colleges. So, for example, in 1849 the Pennsylvania legislature gave the Central High School of Philadelphia the right to offer its graduates college degrees, including the bachelor of arts and master of arts. Because it was hard for a private college to compete with a publicly funded high school, colleges tended to spring up where high schools were scarce and avoided big cities and areas like New England where high schools were common.

Also these colleges were very small. Because of the dispersed and marginal nature of these institutions, it is hard to determine their size and even their number until the federal government began to collect statistics in 1870. But the figures collected by Colin Burke suggest that the average private liberal arts college (excluding the small number of state universities at the time) had an enrollment of forty-two students in 1850, rising to forty-seven in 1855. This varied widely by region. New England colleges—the earliest institutions, which in turn served the largest population—had an average enrollment of 128 students in 1850, while, in the rapidly expanding educational arena of the Midwest, colleges had an average of only twenty-three students. By 1860, the average institution of higher education had 133 students. In 1870, the first year for which we have data on professors, the average American college faculty had ten members, rising to fourteen in 1880. The total number of degrees granted annually per college was only seventeen in both 1870 and 1880.

Not only were these colleges very small, but also they were widely scattered across the countryside. Burke’s survey of liberal arts colleges showed that in 1850 only 7 percent were in New England and 15 percent in the Middle Atlantic regions, the two centers of population at the time, while 38 percent were in the Southwest and 31 percent in the Midwest, the most sparsely populated sections of the country. On the face of it, this pattern of distribution is puzzling. Why put colleges so far away from concentrations of potential students?

For the most part the higher concentration of colleges in less populous areas was the result of the factors of denominational competition and civic boosterism that I have already discussed. Areas of new development were a prime opportunity for churches to establish a foothold in fresh territory and position themselves to take advantage of future growth. And the competition was fierce. Burke estimates that 87 percent of the private colleges in 1850 were denominational in origin, with 21 percent Presbyterian, 16 percent Methodist, 14 percent
Baptist, 10 percent Catholic, 8 percent Congregational, 7 percent Episcopal, and the rest scattered across seven additional denominations. In addition, these remote areas were also the places where existing residents in emergent towns were desperate to attract settlers and thus where the cultural cachet of a hometown college would be seen as most advantageous. Established towns that were already economically viable did not need to set up a poor excuse for a college in order to attract residents and promote business. Overall, we need to keep in mind that colleges were not being established in response to overwhelming demand from students, whose numbers were small and whose enrollments were growing only a little more rapidly than the number of colleges seeking to lure them. Instead, the pressure was on the supply side. Colleges were being founded to meet the religious and economic needs of the founders, which helps explain both the glut of institutions and their peculiar locations.

In this sense, the nineteenth-century liberal arts college is a case in point of a much broader theme in American history. From its earliest years and well into the twentieth century, the United States has been a country with too much land and not enough buyers. The federal government was selling it cheap while also giving it away in large blocks to states, railroads, and homesteaders, which meant that every property holder became a prospective real estate speculation. The salient question was how to make your own land valuable when so much other land was available at little or no cost. As always in matters of real estate, location was everything. If you weren't on a river or railroad line, you needed something else to attract buyers. In this situation, being able to offer a school was helpful—better yet a high school, or even better still a college. Each was a way to announce that your town was a prime place to set down roots, raise a family, and start a business. Schools were featured prominently in real estate ads for imagined communities across the American West. In fact, as Matthew Kelly has shown for California, the link between schools and real estate values is a key reason for the creation of school district boundaries, to make sure that the benefits of having a school accrued to the local landowners. And if your town not only had a school but also a college (proudly bearing the town's name), then it really announced itself to the world as worthy of being on the map.

One other reason for the rural bias of college founding in the United States is ideological. Republican theory has a long tradition of warning against the corrupting influences of the city. Republicans need a strong community made up of hardy citizens, whose civic virtue keeps them focused on the public good and protects them from the unfettered pursuit of private gain. But the sad history of republics, from ancient Rome to the Renaissance Italian city-states, shows that the pursuit of power and wealth has tended to undermine republican community and lead to tyranny. Cities, therefore—as centers of commerce where citizens get caught up in the competition for personal gain—had to be regarded with suspicion. For this reason, the American founding fathers deliberately moved the federal capital from the two biggest cities (New York and Philadelphia) to an unpopulated swamp in Maryland where they established the District of Columbia, and states typically located their own capitals in places like Albany and Harrisburg that were in the middle of nowhere. The same logic applied to the founding of colleges. Best to put them in bucolic rural settings, far from the centers of trade and finance on the East Coast, where students would be able to develop good character and spiritual values while they pursued academic studies. This is the root of the American notion of a college campus—which was ideally marked off from its worldly surroundings by a wall, entered by a gate, presenting itself in the form of a monastic quadrangle, with a placid lawn in the middle suitable for contemplation. Most colleges in the nineteenth century were too poor to attain this ideal, but the collegiate movement at the end of the century rapidly shifted the physical layout of the college in line with that model.

Dilemmas of College Founding and Survival

The process of founding colleges in this period was akin to making sausages: better not to examine it too closely. It involved a lot of hustling, unalloyed optimism, and no little amount of dissembling. Since
one major motive was denominational, few colleges were without religious affiliation. In 1854, the president of the nonsectarian University of Nashville complained: "A principal cause of the excessive multiplication and dwarfish dimensions of Western colleges is, no doubt, the diversity of religious denominations among us. Almost every sect will have its college, and generally one at least in each State. . . . Must every state be divided and subdivided into as many college associations as there are religious sects within its limits? And thus, by their mutual jealousy and distrust, effectually prevent the usefulness and prosperity of any one institution?" The other major motive for college founding was civic boosterism. Consider the testimony of one of the major actors, James Stillman, a Yale seminary graduate who moved to the Midwest frontier where he helped found the town of Jacksonville, Illinois, and also the Congregational Illinois College located there. Looking back on the period from the end of the century with a somewhat jaundiced eye, he recalled that

a mania of college building, which was the combined result of the prevalent speculation in land and the zeal for denominational aggrandizement, had spread all over the state. It was generally believed that one of the surest ways to promote the growth of a young city was to make it the seat of a college. It was easy to appropriate some of the best lots in the new town site to the new university, to ornament the plat with an elegant picture of the buildings "soon to be erected," and to induce the ambitious leaders of some religious body to have a college of its own, to accept a land grant, adopt the institution, and pledge to it the resources of their denomination.

Then there was the never-say-die case of land speculator and college founder Jesse Fell. A leading citizen of Bloomington, Illinois, he served on the board of trustees of the newborn Illinois Wesleyan University until that institution chose to make its permanent campus in Bloomington instead of North Bloomington, where he had extensive land holdings. He promptly resigned from the board and turned his attention to attracting the new federal land-grant institution, the future University of Illinois, but this time he lost out to the town of Urbana, which was located on land owned by the Illinois Central Railroad. (Railroads in midcentury received large amounts of land in return for building rail lines, so they had a major interest in promoting towns on their property and saw college founding as a major resource in the effort.) But this didn't slow him down. Instead, he refocused his efforts toward attracting the state's first normal school, which he finally succeeded in locating in North Bloomington, which was subsequently renamed Normal. The school evolved into the present Illinois State University, which today has a dormitory named Fell Hall.

Founding a college was one thing; keeping it afloat was another. If you delve into the histories of individual American colleges during the mid-nineteenth century, you find tales of woe: students rioting because of bad food, faculty salaries in arrears, no books in the library, and the poor beleaguered president trying to keep the whole shaky enterprise afloat. Take the case of Middlebury College. A Congregational institution founded in 1800, which has now become one of the premier liberal arts colleges in the country, considered one of the "little Ivies." But in 1840, when its new president arrived on campus (a Presbyterian minister named Benjamin Labaree), he found an institution that was struggling to survive, and in his twenty-five-year tenure as president, this situation did not seem to change much for the better. In letters to the board of trustees, he detailed a list of woes that afflicted the small college president of his era. Hired for a salary of $1,200 a year, he found that the trustees could not afford to pay it and so he immediately set out to raise money for the college, the first of eight fund-raising campaigns that he engaged in, making a $1,000 contribution of his own and soliciting gifts from the small faculty. Money worries are the biggest theme in his letters (struggling to recruit and pay faculty, mortgaging his house to make up for his own unpaid salary, and perpetually seeking donations), but he also complained about the inevitable problems that come from trying to offer a full college curriculum with a small number of professors.
I accepted the presidency of Middlebury College, gentlemen, with a full understanding that your faculty was small and that in consequence a large amount of instruction would devolve upon the President—that I should be desired to promote the financial interests of the Institution, as convenience and the duties of instruction would permit, was naturally to be expected, but I could not have anticipated that the task of relieving the College from pecuniary embarrassment, and the labor and responsibility of procuring funds for endowment for books, for buildings etc., etc., would devolve on me. Could I have foreseen what you would demand of me, I should never have engaged in your service.  

At one place in the correspondence he listed all of the courses he had to teach as president: "Intellectual and Moral Philosophy, Political Economy, International Law, Evidences of Christianity, History of Civilization, and Butler's Analogy."  

The point is that these rapidly proliferating American colleges in the nineteenth century were much more concerned about surviving than they were about attaining academic eminence. Unlike the situation in the old world, where a small number of institutions could count on the support of a strong state and a unified church, they had to scramble to acquire financial resources and social legitimacy from a motley mix of small denominations and small towns scattered across a lightly populated terrain. This does not sound like a formula for success in building a world-class system of higher education. But that, in the twentieth century, is exactly what happened. It turned out that these unimpressive origins contained central elements that enabled the system's later climb to distinction.  

Sources of Promise in a Humble Collection of Colleges  

By 1850, the United States had a large array of colleges that constituted a loosely defined system of higher education. Constructed without an overall plan, this system was characterized by wide geographical dispersion, radically localized governance, and the absence of guaran-
case of Middlebury College, the job involved a constant struggle to keep the institution financially afloat. This meant the president had to attract and retain credible faculty who would work cheap and to attract and retain tuition-paying students, while at the same time raising donations and teaching a large number of classes. In the absence of steady streams of funding from church or state, these colleges had to depend heavily on the tuition dollars brought in by students. This was never enough to pay all the bills, so fund-raising from the local and denominational donor constituencies was critical, and occasionally colleges would appeal for and receive funds from the state. But tuition was the bedrock on which the college’s financial survival depended.

This competitive environment produced a system of colleges that by the 1850s had managed to survive if not thrive in the struggle for survival. They were lean and highly adaptable organizations, led by entrepreneurial presidents who kept a tight focus on the college’s position in the market while keeping an eye peeled for potential threats and opportunities on the horizon. Presidents, trustees, and faculty knew they had to keep student-consumers happy with the educational product or they would attend college in the town down the road. Likewise, colleges had to keep the loyalty of local boosters, denominational sponsors, and alumni if they were going to maintain an ongoing flow of donations.

Building New Capacity and Complexity into the System

On this landscape of numerous and widely scattered colleges in the mid-nineteenth century grew three new kinds of institutions of higher education, which came to comprise the major sources of growth in the number of colleges and enrollments: state universities, land-grant colleges, and normal schools.

State Universities: First to arise was the state university. Initially, the distinction between public and private institutions was unclear, since all of them received corporate charters from individual states and some of the “private” ones (such as Harvard, from its earliest days in the colonial period) received state subsidies. But gradually a new kind of institution emerged, which was legally constituted under the control of state government and was not affiliated with a particular religious denomination. The first was University of Georgia, founded in 1785. There were five such universities by 1800, twelve by 1830, and twenty-one by 1860. At the latter point, twenty states had established at least one state university while fourteen others had not.

These institutions received more state funds and were subject to more state control than their private counterparts, but otherwise they were not very different. Deliberately located at a distance from major population centers, they continued the pattern of geographic dispersion. Landing one of these institutions was a major plum for town fathers, and there is much lore about the chicanery that often determined which town won the prize. These state universities generally were rather small, sometimes dwarfed by the preexisting private colleges. James Astell discovered that in 1886 only twenty-six of the 881 institutions of higher education had an enrollment of more than 200 students. “Amherst was as large as Wisconsin and Virginia, Williams was larger than Cornell and Indiana, and Bowdoin was near the size of Johns Hopkins and Minnesota. Yale, with 687 students, was much larger than Michigan, Missouri, or the City College of New York.”

State universities were similar to their private counterparts in another way as well. They were often the object of competitive pressures. States were reluctant to get behind in the race with other states in establishing a state university. Much like the kind of local boosterism that motivated small towns and religious denominations to support the founding of colleges, states saw the establishment of a public university as a way to support their claims to be considered an equal to their counterparts in the union, as centers of culture, commerce, and learning and as beacons of progressive public policy. Also, it helped that a state university provided a venue for doling out political patronage. For the most part, state universities developed outside New England and the Middle Atlantic states, where existing private colleges were already serving many of the same functions and effectively lobbied to head off state-subsidized competition.”
Land-Grant Colleges: Another form of higher education institution was arising only slightly later than the state university: the land-grant college. This uniquely American invention began as an outgrowth of efforts by the federal government to promote the sale of public lands in the new territories and states of the expanding nation. The Northwest Ordinance in 1787 set aside blocks of land in the new Northwest Territory (now the American Upper Midwest) for the support of public schools. This procedure became standard practice for new states and was extended to the support of higher education. Between 1796 and 1861, Congress made land grants for higher education to seventeen new states. These grants ranged from 46,000 to 100,000 acres per state. The state was permitted to sell, lease, or donate these lands for the purpose of developing higher education. State governments frequently followed suit by donating public land to colleges instead of providing cash appropriations.

Initially the support was for higher education in general, but quickly the pattern developed that these land-grant institutions were to focus on a particular form of learning that was in support of "the useful arts." This pattern was codified in the enormously influential Morrill Land Grant Act of 1862, which specified that the proceeds of the land should be used to support such practical programs of study as agriculture, engineering, military science, and mining. Several land-grant laws followed the initial model of the Morrill Act, expanding this process of infusing resources into practical education. The number of institutions created by the Morrill Acts and their successors, not including the various land grants before 1862, totaled seventy-six. Much of this money went to support existing universities, but often the money went to new land-grant schools, which signaled their practical focus by including "agricultural" or "agricultural and mechanical" in their titles.

These land-grant schools were public institutions, but they had a different orientation from the existing private colleges and state universities, whose curriculum was a traditional mix of liberal arts subjects. The new institutions sought less to prepare people for the clergy and high professions than to provide students with practical training in the skills needed to promote growth in the agricultural and industrial sectors of the economy. And outside the classroom, the faculty at these institutions focused their energies on providing support to the state's farmers and industrial enterprises—patenting inventions, solving mechanical problems, and setting up systems of agricultural extension agents throughout the state.

Normal Schools: A third group of institutions that emerged in the middle of the nineteenth century were initially more like high schools than colleges: normal schools. Although many of these were private institutions, most were established by state governments (and others by local municipalities and school districts) to prepare teachers for the public schools, driven by the rapid expansion of universal public schooling between 1850 and 1880 and the subsequent demand for new teachers. The first state normal school emerged in Massachusetts in 1839, but by 1870 there were thirty-nine and by 1880 there were seventy-six. These institutions focused initially on preparing students to become elementary teachers, and their course of studies included both pedagogy and instruction in the core school subjects. They functioned as vocational high schools for teachers, and during most of the nineteenth century they were not considered institutions of higher education. As a result, their numbers are not included in the counts of such institutions that I provided earlier.

But the reason for including them here is that by the end of the century they had started evolving into colleges. By the 1890s, some of them were beginning to become teachers colleges, with the right to grant bachelor's degrees. By the 1920s and 1930s, they were beginning to drop the word "teachers" in the titles and to substitute the word "state." By the 1960s and 1970s, they were becoming regional state universities. So, for example, one such institution in Pennsylvania was founded in 1839 as Millersville State Normal School; in 1927 it became Millersville State Teachers College; in 1959 Millersville State College, and in 1965 Millersville University of Pennsylvania. In 100 years of so, these institutions rose from being high schools for training teachers to regional state universities offering a comprehensive range of university degrees.
As a result of this remarkable evolution, normal schools became a central part of the American system of higher education. And their history shows how the patterns established in the mid-nineteenth century shaped the subsequent development of the system. Like their predecessors—private colleges, state universities, and land-grant colleges—they were located mostly in small towns and were scattered widely across the countryside, so they were geographically close to a large number of students. And like the others, they were the objects of contention among civic boosters seeking to attract this valuable prize. Also like the others, admission was easy and costs were low. And because their number was so large (Michigan and Minnesota had four each; California had eight), these institutions were markedly more dispersed and accessible than state universities or land-grant colleges. Like the latter two, they were state subsidized but relied on tuition, donations, and other sources of income in order to keep afloat. Their dependence on student tuition, and the consequent need to attract and retain student consumers, explains why they were so quick to move up the hierarchy to the status of university. This is what the students demanded. They saw the normal school less as a place to get trained as a teacher than as a more accessible form of higher education. As such, it would serve their purposes in opening up a broad array of social opportunities if it was able to grant college degrees, then offer programs in areas other than teaching, and eventually offer a full array of university degrees.

The System's Strengths in 1880

By 1880, the American system of higher education was extraordinarily large and spatially dispersed, with decentralized governance and a remarkable degree of institutional complexity. This system without a plan had established a distinctive structure early in the century and then elaborated on it over the succeeding decades. As noted earlier, with over 800 colleges and universities, the United States had five times as many institutions as all of the countries in Europe. They consisted of a heterogeneous array of institution types, including private denominational and non-denominational colleges, state universities, and land-grant colleges. In addition, there were seventy-six normal schools that were already on a trajectory to become colleges.

Of course, the large majority of these colleges were neither academically elevated nor large in scale. Recall that the average institution in 1880 had fourteen faculty and 123 students and granted seventeen degrees. Only twenty-six of the 811 colleges had more than 200 students. The system had enormous capacity, but only a tiny part of this capacity was being put to use. At 16.3 colleges per million of population, it is safe to say that no country in the world has ever had a higher ratio of institutions of higher education to population than the United States had in 1880. This was a system that was all promise and no product, but the promise was indeed extraordinary. Let me summarize the strengths that this system embodied at the moment its overcapacity was greatest and the boom era of the university was dawnning.

Capacity in Place: One strength of the system was that it contained nearly all the elements needed for a rapid expansion of student enrollments. It had the necessary physical infrastructure: land, classrooms, libraries, faculty offices, administration buildings, and the rest. And this physical presence was not concentrated in a few population centers but scattered across the thinly populated landsmass of a continental country. It had faculty and administration already in place, with programs of study, course offerings, and charters granting colleges the ability to award degrees. It had an established governance structure and a process for maintaining multiple streams of revenue to support the enterprise. And it had established a base of support in the local community and in the broader religious community. All it needed was students.

A Handful of Survivors: Another source of strength was that this motley collection of largely undistinguished colleges and universities had succeeded in surviving a Darwinian process of natural selection in a fiercely competitive environment. Since they could not rely on steady streams of funding from church and state, they had learned to survive by hustling for dollars from prospective donors and marketing themselves to prospective students who could pay tuition. And since
they were deeply rooted in isolated towns across the country; they were particularly adept at representing themselves as institutions that educated local leaders and served as cultural centers for their communities. Often the college’s name contained the name of the town where it was located (Middlebury College, Millersville State Normal School), and this close identification with people and place was a major source of strength when there were so many alternatives in other towns. If they had succeeded in surviving in the mid-nineteenth century, when the number of colleges was growing so much faster than the population and funds were scarce, then they were well poised to take advantage of the coming surge of student interest, new sources of funding, and new rationales for attending college.

Consumer Sensitivity: These colleges were market-based institutions that had never enjoyed the luxury of guaranteed appropriations, so they had become adept at meeting the demands of the main constituencies in their individual markets. In particular, they had to be sensitive to what prospective students were seeking in a college experience, since these consumers were paying a major part of the bills. This meant that they did not have the ability to impose a traditional curriculum, which would be self-destructive if they sensed that students wanted something different. So when the land-grant colleges grew in popularity, other colleges quickly adopted elements of the new practical curriculum in order to keep from being squeezed out of the market. Even publicly supported institutions, such as state universities and land-grant colleges, had to be sensitive to consumers because their appropriations were often proportional to enrollment numbers. And colleges also had a strong incentive to build longstanding ties with their graduates, who would become a prime source for new students and the largest source for donations.

Adaptable Enterprises: The structure of the college—with its lay board, strong president, geographical isolation, and stand-alone finances—made it a remarkably adaptable institution. These colleges could make changes without seeking permission from the education minister or the bishop. The president was the CEO of the enterprise, and his clear mission was to maintain the viability and expand the prospects for the college. So presidents had to become adept at reading trends in the market, sensing shifts in demand, anticipating the concerns of alumni and other constituencies, and heading off threats to their mission and intrusions into their educational terrain. They had to make the most of the advantages offered to them by geography and religious affiliation and to adapt quickly to shifts in their position relative to competitors concerning such central institutional matters as program, price, and prestige. The alternative was to go out of business. Burke estimates that, between 1800 and 1850, forty liberal arts colleges closed, 17 percent of the total.

A Populist Role: As I noted in the last chapter, the American university is an amalgam of the English undergraduate college, the American land-grant college, and the German research university. The first two were firmly in place by 1880 and the third was on its way. The undergraduate college was the populist element, which started with the residential and rural college experience developed in Britain and added to it some distinctively American components that opened it up to a larger array of students. By locating these colleges in small towns all across the country and placing them in a competitive market that made them more concerned about survival than academic standards, the American system took on a middle-class rather than upper-class character. Poor families did not send their children to college, but ordinary middle-class families could, if they chose. Admission was easy, the academic challenge of the curriculum was moderate, and the cost of tuition was manageable. These elements created a broad popular foundation for the college that saved it, for the most part, from Oxbridge-style elitism. The college was an extension of the community and the religious denomination, a familiar local presence, a source of civic pride, and a cultural avatar representing the town to the world. Citizens did not have to have a family member connected with the school to feel that the college was theirs. This kind of populist base of support came to be enormously important when higher education enrollments started to skyrocket.

A Practical Role: Another major characteristic of the American model of higher education was its practicality. As Richard Hof-
stader shows, the United States has had a long tradition of anti-intellectualism.\textsuperscript{26} Overwhelmingly, Americans have given more attention to those who make things and make money than to those who play with ideas. Its central figures of admiration and aspiration have been inventor-engineers like Thomas Edison and self-made businessmen like Andrew Carnegie rather than academic intellectuals like William James, who were considered "European" (not a compliment). The American system of higher education, as it developed in the mid-nineteenth century, incorporated this practical orientation into the structure and function of the standard-model college. The land-grant college was both an effect and a cause of this cultural preference for usefulness. The focus on the useful arts was written into the DNA of these institutions, as an expression of the American effort to turn a college for gentlemen or intellectuals into a school for practical pursuits, with an emphasis on making things and making a living more than on gaining social polish or exploring the cultural heights. And this model, which was quite popular with consumers, spread widely to the other parts of the system. The result was not just the inclusion of subjects like engineering and applied science into the curriculum but also the orientation of the college itself as a problem solver for the businessmen and policy makers in the community. The message was: "This is your college, working for you. We produce the engineers who design your bridges, the teachers who teach your children, and the farmers who produce your food. We develop better construction methods, better schoolbooks, and better crops." So in addition to the system's broad populist base of support, there was also a practical rationale that made the system of higher education a valued contributor to the community, which earned support even from people whose children were never going to enroll in it.

The Pieces Come Together with the Emergence of the Research University

When the German research university burst onto the American educational scene in the 1880s, the last piece of Kerr's three-part vision of American higher education fell into place. In this emerging model, the university was a place that produced cutting-edge scientific research and that provided graduate-level training for the intellectual elite. This supplied a path out of the doldrums that had settled on the once-vibrant university structure in Europe, which had become irrelevant as major scientific work was being done elsewhere. And American scholars started flocking to Germany to acquire the union card of the new research-oriented scholar, the doctorate in philosophy, and to learn about the elements of the German model for transporting back to the states. Johns Hopkins University, founded in 1876, was the first American institution designed around this model, but other newcomers quickly followed (Chicago, Clark, Stanford), and the existing institutions scrambled to adapt.

The new research model gave the institutionally overbuilt and academically underwhelming American system of higher education an infusion of scholarly credibility, which it had been so clearly lacking. For the first time, the system could begin to make the claim of being the locus of learning at the highest level. At the same time, colleges received a large influx of enrollments, which remedied another problem with the old model—the chronic shortage of students.

In the next chapter I explore the causes and effects of the rise of the research university at the turn of the century. I also show how the American system adopted the elements of the German model that served its needs while discarding the rest, thus complicating and rounding out the system rather than transforming it. The veneer of research made the college more respectable, while the core elements of the peculiar nineteenth-century structure of American higher education provided key sources of strength for the system, allowing it to enter the twentieth century with a roar.