In May 1855 over fifty thousand Philadelphians braved a torrential downpour to watch a contest between muscle and steam that symbolized the broader conflict over the provision of fire protection in the United States. Crowding the streets in front of Dr. Wadsworth’s Church, throngs gathered in windows and on rooftops along Arch and Tenth Streets. They witnessed a philosophical and technological trial arranged by the Philadelphia City Council, pitting a steam engine manufactured in Cincinnati against Philadelphia’s top hand-pumped fire engines. The steam engine was tested first. Viewers waited for over eight minutes, as engineers lit the engine’s furnace, and then were treated to fifty-seven minutes of action. The engine threw continuous streams of water up and down Tenth Street, further drenching the crowd. Twice engineers turned the hose upward to the church steeple, obtaining a height of 120 feet. After the engine had been fully tested, the steam was let off and the “grate skwirt” was taken from the grounds. A hush came over the crowd as thousands of eyes anticipated the work of firefighters. Philadelphians especially turned their eyes toward the Diligent engine, the pride of the city, and they were not disappointed. A full complement of volunteers pumped furiously on the engine’s brakes, quickly developing pressure and expelling a steady stream of water from its pipes. The men worked with great resolve and twice
sent streams of water shooting above the church steeple, attaining a height of 133 feet.¹

The competition exposed conflicts that lay just beneath the surface of American life in the middle of the nineteenth century. Across political, economic, and cultural domains, Americans reconsidered the best methods for organizing society, including the provision of public fire safety. At the broadest level, the debate over firefighting pitted the interests of business and the incipient middle class against the interests of urban working-class and immigrant communities, but the street-level battle to control firefighting reveals a more complex portrait. Although firefighters often emerged victorious in ongoing contests with insurers and the middle class, they ultimately embraced many of the same values espoused by their opponents. Volunteers, for instance, claimed to be specialists in firefighting, with distinctive claims to the public trust. They worked to increase their efficiency and, as firefighters reorganized their labor, they moved inexorably closer to establishing firefighting as one of many specialized occupations in America’s industrializing economy. And, although firefighters sometimes argued with underwriters and merchants about the merits of using new technologies, such as steam fire engines, just as frequently they did not debate the usefulness of innovation. Rather, they debated who would control the new instruments. As a result, steam engines did not remake American fire departments; firefighters did. Ultimately, volunteers dictated the pace of departmental reform. They seized opportunities presented by debates about fire protection to lead and direct fire departments that formally compensated them for what had been an avocation. Then, volunteers deployed new machines and management strategies to assert their authority over the revised organizations.

The newly reorganized fire departments did not jettison the principles that had guided volunteer fire companies, however. Rather, firefighters built upon the previous organizations’ ideals of manhood, technology, and service. They especially continued a trend that volunteers had begun earlier in the century—the process of specializing and reorganizing firefighting. Volunteer firefighters, then, did not fade away simply as a result of some broad shift in community values. To the contrary, firemen led the charge to make public fire safety more bureaucratic and the purview of specialists. They reorganized firefighting as paid labor directed by skilled experts and organized departments under municipal control. This transformation did not signal an end of a mythical era as much as it indicated a revision in how firefighters approached their service to the community.

More broadly, the creation of municipal fire departments reveals how public safety, the expansion of city governments, and the process of urbanization were each shaped by attitudes about manhood and technology. Movement away from
volunteer firefighting occurred at a time when cities began to extend their administrative capacities, to create more specialized programs of public safety, and to employ skilled professionals to provide those services. However, the growth of municipal bureaucracies was not imposed from the top down. Quite the contrary, the demand for and provision of these services, such as firefighting, developed within urban neighborhoods and work communities. Everyday Americans initiated and directed a shift in the process of keeping order in cities. Alongside their neighbors, firefighters played an important role in shaping the functions of city governments in the middle of the nineteenth century.

**Firemen, the Middle Class, and Urban Disorder**

In the middle of the nineteenth century, cities throughout the United States became seething powder kegs as a result of repeated economic crises (like the depression of 1837), the influx of new migrants, sharpening political divides, and rapid spatial change. In Philadelphia, civic unrest was marked by antiabolitionist rioting in 1838 and anti-immigrant turbulence in 1844. Not surprisingly, firefighters and other agents of order came under scrutiny for their role in these disturbances. Intimately connected to their neighborhoods, firefighters shared the same passions as their neighbors, and their demonstrative and rough culture heightened attention to their part in conflicts. As a result, melees between companies received inordinate coverage in local newspapers, which complained of firemen’s riots alongside lurid descriptions of “lower-class” life. Though these battles resulted from the same factors that were destabilizing the society in general, the local judiciary, not surprisingly, singled out firemen for especially stiff punishments. After all, firefighters played a crucial role in keeping order. Firefighters, according to their own claims, did not just preserve physical order, they upheld the moral integrity of cities.²

In particular, the emerging middle class linked firefighters to the crisis of order in mid-nineteenth-century cities. In its quest for greater social and political power, the nascent middle class seized upon and amplified reports of disorder, including violence among firefighters. The middle class expressed concern about the rough physicality of firemen—a portrait that contrasted markedly with the social values that they emphasized. The middle class defined manhood as dispassionate and rational, and saw it in terms of white-collar work, all of which separated middle-class men from the rough-and-tumble world of the streets and the darker impulses of competitive industrial culture. The middle class sought to create a society that was not only more mannered but that also was organized around rational economic
markets and values of sobriety and efficiency. Additionally, the class began to define itself in terms of wealth and income, to which fire threatened to lay waste. As middle-class families placed a greater premium on economic well-being, fire danger intensified. If they were predisposed to finding disorder everywhere, the middle class nonetheless had an ever greater stake in effective fire protection. For this reason, the middle class—not to mention most nineteenth-century urban residents—held legitimate concerns about firefighters’ participation in rioting, especially since it could compromise firemen’s ability to restore order. Thus the concerns of the middle class extended beyond questions of style to substantive material matters. Ineffective fire protection potentially exposed their economic capital, often invested in the built landscape, to dangers beyond the capricious market economy. When they expressed doubts about the organization of fire protection, then, middle-class Americans sought to reform the social and economic order of urban America.

The middle class especially found fault with those communal fire companies that expressed themselves in the idioms of working-class or ethnic communities. The general attitude toward firemen is exemplified by a former Philadelphia newspaper reporter, George G. Foster, writing in the *New York Tribune* in 1848. Foster described firemen as comic caricatures hardly worthy of his attention, but he observed them with fascination nonetheless. Though it was clear to critics that firefighters could not control themselves and exhibited excessive aggressiveness, Foster paradoxically questioned firemen’s manliness—because he believed that their fisticuffs were staged, not real. Such claims about bogus fracases raised issues about the hardness of firemen and, along with firefighters’ elaborate costume, led Foster to describe firemen as being as “vain as women.” He reported, “The minute and detailed notoriety which the reporters (hard run for subjects) conferred upon these riots in the newspapers was exactly the kind of fame they coveted.” Rather than identify violence as the problem, as the citizens’ committee had done, Foster’s curious argument offered an equally, if not more damning critique of firefighters. Whether real or staged, fights raised global questions about firemen’s manhood and, because of their significant role in public order, about the well-being of cities.3

Following a similar strategy, reformers construed volunteers as immoral and menacing by linking fire companies to street gangs. In mid-nineteenth-century Philadelphia, bands of working-class and immigrant youths seemed especially to threaten state authority and the middle-class sensibilities of leading citizens, such as Eli Price and Horace Binney. Although their precise numbers or influence is not clear, Philadelphia “gangs” such as the “Killers” contributed to the sense of chaos
that reigned on frenzied urban streets in antebellum America. However, the political and social criticism stated or implied by these groups of young men vexed citizens more than their audacious attire and expressive style. In particular, the “Killers” came to symbolize the city out of control, no doubt because of the group’s radical political message, which was distributed in a popular novel. Both in the novel and in reality, urban youth appear to have been drawn to the exploits of fire companies. For instance, the “Killers” were connected loosely to the Mynamensing Hose Company (as well as to the Democratic Keystone Club and the infamous political boss Squire McMullin). The link between fire companies and gangs, no matter how distant, tainted the ability of firefighters to keep order, at least in the eyes of the middle class. Indeed, the actual strength or pervasiveness of such connections mattered little in polite parlors, where apprehensions about social and political power appeared in widely read advice books and sensationalist novels. The everyday life of the street mattered less than appearances of impropriety. H. C. Watson’s popular morality novel, Jerry Pratt’s Progress, had made this point clearly. If firemen did not directly corrupt young Jerry, the connection between fire companies and gangs made it possible for incorrigible gang members to ruin the youngster.4

Theaters became symbols of the widening gap between the middle class and workers, and in the case of firefighting this chasm was embodied in a popular character of the 1840s and 1850s. Mose the fireman first appeared on New York stages in the late 1840s in Benjamin Baker and Frank Chanfrau’s A Glance at New York. Chanfrau played Mose in more than a thousand performances in theaters throughout the nation. The performances delighted working-class audiences, who viewed Mose, protecting the community and rescuing damsels in distress, as a neighborhood character to whom they could relate. However, middle-class audiences saw him as an embodiment of serious social unrest and the growing societal power of workers and immigrants, and perhaps as evidence of a noble institution gone bad. In New York and Philadelphia, “respectable” audiences scorned Mose, and when the play toured in Louisville, reformers used Mose as an example of the behavior they wanted to correct. Perhaps middle-class audiences, with their focus on the expanding industrial economy, feared that firefighters like Mose, who focused on protecting people, would become less effective at protecting property from fire—which they viewed as the proper function of specialist firefighters. Either way, as he fueled debates about reforming fire departments, Mose came to symbolize the widening differences between working-class virility and middle-class rationality.5

Just as Mose’s reception suggests, critiques of both firefighters and working-class life cannot be dissociated from broader issues of societal power. Quite sim-
ply, immigrants and workers threatened the social and political capital of economic elites and the middle class. Sidney George Fisher expressed concerns about the growing power of volunteer firemen for just such reasons. Fisher estimated that as many as five thousand made up this “dangerous body of men.” If the large numbers of volunteers troubled Fisher, their personal qualities distressed him more. When Fisher characterized firemen as hardy, young, and vulgar and worried about their brawling, he really expressed concerns about the increasing social clout of Philadelphia’s working-class and immigrant communities. At a time when the political authority of the social elite in central-city Philadelphia had decreased relative to the influence of immigrants and workers, Fisher worried especially that politicians had “cherished” firefighters into “pestilential growth”: “They are incorporated, they have property, they are numerous, are bound together by esprit de corps, they are armed & disciplined, and they have votes.” Fisher used the metaphor of the body—one long used by volunteer firefighters themselves—to underscore the principal issue facing the middle-class and business interests. He asked, per-
haps rhetorically, “How is such a body of men to be controlled by a democratic government?”

The underlying importance of broader issues of social and political power to the debate about firefighting is underscored by the fact that few ever questioned firefighters’ effectiveness. Even ardent opponents, such as Sidney Fisher, believed firemen defended property with great zeal. Fisher described the scene at a fire in 1841: “In a short time the fire was got under command, six or eight engines playing on it & hoses carried into the building. They managed it very well, the engines throwing the water clear over the house & keeping Coxe’s roof wet on the other side. The fire department here is very energetic and efficient.” Just as the novel Jerry Pratt’s Progress did not challenge the work techniques or efficiency of firemen, neither did the citizens’ committee and other reformers question the effectiveness of firefighters on the fire ground. Nobody asked whether common firefighting strategies, such as throwing water onto or over buildings, were effective at bringing blazes under control. They only questioned the character of the firemen, reflecting their broad concern with how best to protect the nascent industrial social order.

Whatever the validity of such commentary, firefighters felt compelled to restate their commitment to the urban social order, often adopting rhetoric and images similar to those used by their critics. For instance, future mayor and Philadelphia Hose Company veteran Richard Vaux urged his fellow firemen to remain true to the specialized vision of firefighting and manhood that his father had helped to invent fifty years earlier when he formed the company. Like other firefighters, Vaux surely recognized that the economy and cityscape were unstable, and that fire danger seemed to be increasing everywhere. In 1850, a great fire destroyed several hundred structures along the Delaware River, and the year before a massive conflagration had nearly destroyed St. Louis. Also, firefighters certainly worried that, whether or not battles between companies made the city more dangerous, the inability of firemen to discipline themselves diminished their authority as the protectors of community and the social order. In this context, Vaux demanded “public good first, private interest last; but the common honor, fame and usefulness always.” He wanted firemen to bring order to a city in crisis by reaffirming the vision of brotherhood and duty—honed in competition—that had made their specialized service so integral to early-nineteenth-century American culture.

Firefighters attacked the proposals of middle-class merchants and insurers by commissioning prints that depicted the potential consequences of having a paid fire department. One such print, drawn in 1853 as Jerry Pratt’s Progress was being peddled in the city’s bookstalls, showed incompetent firemen whose hats and ap-
Paratus were marked with the label “paid.” The print’s central figures reversed the caricatures made by the committee agitating for a paid fire department and *Jerry Pratt’s Progress*, and it used language with special meaning for urban artisans fearing the degradation of their craft. By depicting paid firefighters as Irish and African American hirelings, it connected firefighters’ impotency (the engines could not even get up a stream of water) to the debasement of wage labor and slavery. This image drew upon the idiom of nativist politics and appealed to the racism that was often implicit in the free labor movement. The message was that volunteer firemen were not depraved immigrants, unskilled wage laborers, or slaves; they were independent native-born men who commanded their own labor and technology.9

Yet, even as firefighters defended themselves, they continued to exhibit great diversity in their approach to their public service. While some urged their peers to sublimate individual interests for the community good, others viewed the expression of local community identity as the basis for active democracy, and fire companies spoke in a cacophony of different voices at parades and in the public space. If extraordinary differences in style and expression gave firefighters’ culture a reputation for disorder, firemen remained steadfast in their battle against environmental risk. The middle class attacked their culture, but only rarely challenged firefighters’ effectiveness as workers. Indeed, although volunteer firefighters found little common ground on which to unite, their job performance remained exemplary. In the face of escalating fire danger, they continued to innovate and control the pace of technological change in their workplaces. If anything, the premium that they placed on physical power and technological competence grew stronger as firefighting work grew more technically complex and physically demanding. Volunteers initiated an increasingly specialized division of labor, embraced organizational complexity, and sought more efficient ways to manage and execute their labor.10

More broadly, the debate about the merits of volunteer firefighting in American cities transcended the critiques of the new middle class. Indeed, creating and preserving order occupied most everyone’s mind, from the industrialists to dockworkers to politicians. Not surprisingly, then, discussions about fire protection occurred at the intersections of broader efforts to quell disorder, especially those concerning municipal administration and political economy. The nature of government—federal, state, and local—was changing in America. At the municipal level, politicians began to form political machines and debated more active administrative control over the provision of daily services, such as police protection, sewers, and public health. Meanwhile, in the nascent industrial economy employers replaced traditional work relations with those mediated by wages and the mar-
ket. When Philadelphia’s citizens’ committee urged hiring wage labor to perform firefighting, it hooked into ideas that were gaining currency elsewhere in the nation. Likewise, volunteer firefighters fed into these broader trends when they emphasized technological change, embraced organizational complexity, and sought more efficient ways to manage their labor. Just as factory floors would become organized into particularized functional units, so too firefighters made fire protection increasingly specialized and bureaucratized. As they refined their methods of controlling fire danger and the city, they offered a vision of order that was increasingly appropriate to industrial society.\(^{11}\)

**Bureaucratic Technologies**

Firefighters in Philadelphia, as well as elsewhere in the nation, defended their service by creating elaborate and more expansive new management structures. Much as they had done in previous decades, Philadelphia volunteers hoped to restore order by initiating bureaucratic reforms. This time, however, they responded in the context of two potent and new external developments. On one side, firefighters felt squeezed by the secretive committee appointed by the city’s economic elites, and on the other side, the region had begun to contemplate “consolidation,” which would join the entire Philadelphia region into a single political and municipal administrative unit. In 1853, in response to these conditions, a “Firemen’s Convention” met and attempted to establish a single administrative body for fire companies throughout the region. Composed of representatives from thirty-nine companies, the convention established a “Board of Directors of the Philadelphia Fire Department.” The convention introduced a new term into firefighters’ vocabulary; for the first time, firemen began to refer to themselves as part of a single “volunteer fire department.” Likewise, the convention signaled a change in how firefighters wielded their political clout. No longer content to exercise it independently, they expressed a unified voice in the polity. Building upon previous failures at forming permanent management associations, firefighters also provided the new governing body with more bureaucratic authority over the department.\(^{12}\)

The board of directors sought to reorganize firefighting by placing fire companies under the command of a central governing body, exempt from the interference of local political life. As a first step, in October 1853, the board asked the state legislature to authorize the expansion of its powers and to exempt it from local political control. It further requested that, although funding for fire companies would continue to emanate from local governmental units, those municipal officials would be barred from intervening in the management of the department.
Rather, control over fire protection, including how companies spent their budgets, would be vested in the board. These provisions enhanced the board’s power relative to the region’s fractured political units. By acquiring financial control over the department, the board effectively prevented local communities from meddling with the association, thus removing what previously had been major obstacles to reform: neighborhood politics, ethnic conflicts, or class disputes. In return for such unprecedented authority, the association formalized the department’s management into a clear hierarchy. The region’s firemen elected officers, including a chief engineer and assistant engineers, to manage the department. Although electing departmental leadership reproduced the power structure evident at the level of company organization, locating final control over the department in the hands of a single official broke with a tradition that had vested authority in the companies independently.13

Of equal significance, the board connected the fire department to the local municipal governments and to the fire insurance industry in an increasingly formal manner. It demanded that the chief engineer (and department more generally) record information about the department’s performance at fires. The chief would furnish “an account of all fires as aforesaid, the number of Companies in service at each fire, the amounts of loss and insurance, which reports shall be printed annually.” Additionally, the board wanted the statistics submitted to the “President of Councils, the Board of Commissioners of the Districts, the Presidents of the Fire Insurance Companies, and the Presidents of each Fire Company in the City and County of Philadelphia.” Whether such rules made the department more efficient is not clear, but they made fire protection more regimented. Public reporting made firefighters accountable to one another, to elected officials, and to economic leaders. Moreover, the association’s plan organized the city’s fire protection in a manner that supported underwriters’ efforts at understanding better the dangers of fire.14

The board of directors also established strict work guidelines that superseded the traditions of volunteer firefighters. For instance, new rules forbade racing to fires and disallowed other informal competitions—emphatically forbidding brawling. In addition, the board made the provision of firefighting more rational by dividing the city into three fire districts. It prohibited companies from attending blazes outside of their districts, and specified work routines to make labor at fires more efficient. Of equal significance, the association established itself as the mediator of disputes between companies, supplanting the longstanding tradition of settling disputes informally. In direct appeals to firemen, it requested that companies adhere to a common set of rules and especially to embrace greater discipline.
The organization experienced many difficulties in trying to reform the fire department. Almost from its inception in 1853, for instance, the board condemned members for making disputes public (in the court system), and expressed dismay at the lack of self-control among firemen. The board's efforts exposed a rift between companies that sought central management and those that preferred using community-based solutions to settle disputes. If many firefighters wanted to create a unified departmental interest, others emphasized local community connections, as had long been customary among firefighters. As volunteers debated how best to settle disputes, a new approach began to emerge. Support for centralized authority took precedence over company autonomy.\textsuperscript{15}

When merchants challenged the board of directors regarding the utility of its reform proposals, the board made it clear that it had reconceptualized firefighting service. It admitted what many reformers believed—that firemen were out of control—and it emphasized the importance of management to keeping order and quelling disorder. The board portrayed itself as the solution by using the metaphor of the body, emphasizing the centralization of bureaucratic authority within itself as the “head”; “The simple question for consideration now is the incorporation of a body for the management of a department composed of over ten thousand members that, according to the remonstrance referred to, is without head or management.” While firefighters—including the Philadelphia fire companies that had reinvented volunteer firefighting early in the nineteenth century—had once imagined themselves in terms of the body politic, that ideal gave way before a notion of a body as a system—of bureaucratic management and hierarchy. Of course, the board did not neglect to mention the basic democratic values that firemen embodied nor did it fail to emphasize that firemen protected the public good on behalf of all citizens. Stressing firefighters' performance of public duty, the board claimed a moral high ground, questioning whether the individualistic approach of the business elite was a suitable way to organize society.\textsuperscript{16}

As the board of directors challenged customary firefighting practices and encouraged reform, it altered the debate about fire protection. A growing portion of the department supported the more centralized administrative structure. In unanimously endorsing the board's appeal to the state government and its resolutions demanding greater self-control, firefighters acknowledged a more circumspect notion of brotherhood. By regulating themselves, firefighters reasserted the self-discipline that had always been present in firefighters' culture—at least rhetorically. Additionally, they directly countered the criticisms of insurers and merchants. Indeed, just as the coalition of reformers and property owners had asked firemen to control themselves and pump water on fires more strategically, the
board of directors demanded that volunteers stop participating in both the rough and tumble of community life and many firefighting rituals. If firefighters did not champion reform because they thought it necessary, they may have acted out of expediency. After all, the board promised greater benefits to individual companies in the form of municipal funding and continued legitimacy in the eyes of the state. They may have sensed the growing power of merchants and middle-class citizens, choosing to preserve their organizations rather than lose them altogether. Whatever the reasons for firefighters’ support, the board reoriented the debate about urban firefighting. It knit firemen into a bureaucratic network that diminished company autonomy. It explicitly separated volunteers from the community by replacing informal problem-solving procedures with fixed rules and by quashing expressive competitions. Its scheme also incorporated firemen into underwriters’ efforts to contain the problem of fire through bureaucratic processes. No longer just a communal response to the problem of fire, firefighting was becoming an urban service with a rational bureaucracy and written work rules.17

Much to the board’s surprise, its managerial proposals faced fierce resistance
not from firefighters but from so-called reformers. In promoting its legislative pro-
gram in the state capital, the board utilized the political savvy and clout of firemen. Capita-
zizing on “their influence,” fire companies and board members first can-
vassed local politicians (in both Philadelphia and its districts). After obtaining sig-
ificant support, the board wrote a bill that lawmakers presented to the state legis-
lation. In May 1854, the board watched the “Firemen’s Bill” sail through “several
gradations” and move toward final passage, only to have it stopped as it awaited
the signature of the Speaker of the House. Meanwhile, business interests aligned
against the bill called in their political chits to have it killed, and on the last day of
the legislative session, the bill was reconsidered and postponed indefinitely. Fire-
fighters once again found themselves squaring off against Horace Binney and
Stephen Colwell—two of the city’s most prominent leaders. Earlier in the spring,
Binney and Colwell wrote a scathing letter urging “the abolition of the volunteer
system” and encouraging the state legislature to defeat the bill. If the near success
of the “Firemen’s Bill” validated middle-class fears about firefighters’ influence at
the ballot box, it also showed that firemen had powerful enemies. Once again the
Philadelphia business community questioned whether firefighting should be the
responsibility of volunteer workers.18

Though Philadelphia’s volunteer firemen lost the battle in the state capital, the
legislative proposal that firefighters introduced was part of a broader political strat-
egy designed to ensure that volunteers would control firefighting even as the
Philadelphia region moved toward consolidation into a single municipality. In fact,
as the board shepherded its proposal through the legislature, it kept one eye fo-
cused on Philadelphia, awaiting the outcome of a drawn-out effort to consolidate
the city into a single municipal unit. Modeled after the law that created the mar-
shal’s police in 1850, the board’s proposal was designed to govern the fire depart-
ment only until consolidation passed. Upon consolidation, the issue of a paid fire
department would be placed squarely into the hands of voters. Undoubtedly, vol-
unteers believed that their years of dedicated service, their political clout, and their
support of reform would sway public debate in their favor. Meanwhile, had con-
solidation failed and the firemen’s bill passed, the result would have been the re-
regional fire department desired by the board. Alternately, if both consolidation and
the proposal failed, then the status quo would have been maintained. Firefighters
had orchestrated a crafty strategy, which ultimately helped to preserve the system
of volunteer firefighting when Philadelphia consolidated in 1854. Not only did the
consolidated region not create a paid fire department, but it also generally followed
the board of directors’ plan for organizing the department. However, firemen had
committed to a course of reform that undermined their autonomy and relationship with their urban communities.19

As expected, when Philadelphia consolidated, the fire department experienced a wave of reforms. The municipal government chose not to implement a paid fire department, but it did not involve firefighters in planning the new department. This led to months of contentious debate. By choosing not to consult with the board, the newly consolidated government failed to anticipate the concerns of volunteers. Not surprisingly, the resulting ordinance met with resistance from the majority of fire companies. Only twelve of forty-seven companies liked the ordinance well enough to support it, and the board of directors published its disapproval in local newspapers. Firemen opposed three parts of the ordinance: the creation of seven fire districts with corresponding assistant engineers; making the chief engineer a political appointee; and disallowing contributing members from participating in company life (thereby removing the incentive for their large payments to fire companies). Despite mounting criticism, the municipality reorganized the fire department in January 1855. However, rather than fight the city, the board of directors shifted its position, and decided to become part of the nascent bureaucracy. In March 1855, the board disbanded and reconstituted itself under the auspices of the city government. Next, the board invited “companies accepting” the ordinance to appoint representatives to its ranks. Nearly 70 percent of the newly consolidated city’s fire companies—fifty-two out of about seventy—capitulated to the expansion of municipal power. The majority of firefighters chose to work within the new framework rather than to oppose it.20

Despite widespread acceptance of the new ordinance, there were still many companies opposed, and even accepting companies demanded significant revisions to the ordinance. Twenty companies dissented vociferously. Labeled “non-accepting” companies, they continued to perform service, but they refused to accept both the ordinance and financial contributions from the municipal government. By forming an alternative “Board of Directors,” nonaccepting companies challenged the legitimacy of the municipal government’s decision, as well as the newly organized fire department. However, the protest was short-lived and largely ineffective. Several of them, such as the Northern Liberty Engine Company, quickly petitioned for admission to the department. As nonaccepting companies challenged the new ordinance, accepting companies hoped to see it revised. In particular, firemen wanted candidates for chief engineer to fulfill minimum service requirements and to be directly elected by firemen. Dissension within the department simmered for months, and appeared to be dissipating when it reignited in
September 1855, after the city council named Benjamin Shoemaker as the chief engineer. Fire companies had elected another candidate (by a vote of thirty-two to twenty-nine). In the ensuing controversy, several accepting companies withdrew from active service because of the decision. The Southwark Engine Company even recommended that firemen strike unless the city council gave in to the department’s demands. Responding to the groundswell of protest, the city council met volunteers’ demands and altered the ordinance. The chief engineer would be elected directly by fire companies, and contributing members would be allowed to actively participate in company life. These concessions effectively ended protest against the newly reorganized department, and gradually, between 1857 and 1860, most “non-accepting” companies appealed for admission. The board of directors continued to represent the interests of fire companies, taking an especially active role in recommending new technologies and organizational arrangements. Volunteer firefighters endorsed the new arrangement, but had done so on their own terms.21

As Philadelphia’s fire companies accepted the new order in the 1850s, they became ensnared in the web of municipal bureaucracy, which diminished their autonomy. A well-established and powerful third party now mediated companies’ interactions with one another. Not only did firefighters have to follow rules, but their companies would come to depend upon the state for a measure of their funding and legitimacy, which brought them further under the municipality’s authority. However, even though becoming part of the expanding bureaucracy circumscribed company independence, firefighters benefited from the new organization. Larger budgets meant better equipment; they also allowed volunteers to purchase new costumes, commission artworks, and design elaborate membership certificates. Firefighters also maintained the right to vote for departmental and company leaders, which buttressed their control over their workplaces and work routines. Perhaps most importantly, the new organization united firemen into a formal collective that explicitly defined itself as a fire department.

Although formed by an act of the municipal government, the creation of the Philadelphia Volunteer Fire Department represented the assertion of a common political and social identity. Firefighters tested the boundaries of their new collective by blunting the demands of underwriters and merchants. At the same time, they continued to make firefighting more efficient and specialized, especially in regard to the use of new technologies. Indeed, the way in which Philadelphia’s volunteer firemen confronted the advent of steam engines reveals the degree to which firefighters were intimately involved in remaking the work of firefighting and fire departments at midcentury. Moreover, this technological innovation did not cause the reorganization of firefighting; firefighters were already doing that themselves.
During the 1850s, firemen would continue to negotiate the future of firefighting in Philadelphia and other American cities.

Steam Technology and Manhood in Philadelphia

As the municipal government and the city’s firemen approached rapprochement, Philadelphia’s mercantile interests ratcheted up their calls for a radical reorganization of the fire department. Merchants and underwriters, reflecting sentiments spreading throughout the nation, advocated hiring paid workers to use steam technology to replace volunteer firemen. The idea received a significant push forward when Cincinnati artisans built what may have been the first effective steam fire engine, which the city’s volunteers tested. Political officials in Cincinnati then selected a prominent local industrialist and volunteer fireman, Miles Greenwood, to lead the creation of a municipally administered fire department that paid a wage to firefighters. Insurance companies, the Cincinnati mayor, and the manufacturers of the steam engine—Abel Shawk and Alexander Latta—euphemistically praised the new department. They reported that, in Cincinnati, a disciplined industrialist and a steam fire engine physically bested disorderly volunteer firefighters and saved the city from being ravaged. Insurers, reformers, and industrial leaders throughout the nation adopted this legend, repeating it again and again, to justify their claims that volunteers should be replaced by steam engines operated by wage laborers.22

In this context the Philadelphia City Council investigated the “subject of steam fire engines” in the spring of 1854. A specially formed committee announced that its purpose was to study the use of steam technology, but not to consider “the organization of the department, though [the joint special committee] believe that very great change is needed in this particular.” Like many cities that considered adopting steam technology, the committee journeyed to Cincinnati to visit with Miles Greenwood. After a practical demonstration, the committee concluded that the Cincinnati Fire Department showed “the most perfect system and arrangement,” but it noted that the system used in Cincinnati was “not attributable to the character of the apparatus.” Even so, it recommended purchasing two for Philadelphia.23

Once again, Philadelphia firemen found themselves struggling against the social and political agenda of Philadelphia’s mercantile community. This time the confrontation took physical form, when the city council arranged the contest between their hand-pumped engines and a steam engine manufactured by Cincinnati’s Abel Shawk. The council invited three engine companies from the volunteer
corps: Assistance, Diligent, and Weccacoe. Those choices were not coincidental. On the streets of Philadelphia, folk wisdom held that firemen from the Diligent Engine Company operated the city’s most effective engine. Patrick Lyon—Philadelphia’s own public-spirited artisan and firemen—had manufactured Diligent’s first apparatus, and John Agnew—the city’s most renowned engine maker in the 1840s—had improved upon Lyon’s handiwork. The company even captured this history of innovation by reproducing John Neagle’s print *Pat Lyon at the Forge* on its membership certificates. In so doing, Diligent linked Lyon’s technical prowess to its own. Not only had Pat Lyon built the company’s first engine, but also his spirit had forged their Fire Company. Philadelphians understood that the company’s apparatus, and by extension its men, embodied the traditions of firefighting in Philadelphia—efficiency, citizenship, physical power, and technological innovation. Local newspapers sensed the dimensions of the contest. They reported, “The respective merits of the steam and hand engines will be fairly tested, as the Old Diligent Engine, the masterpiece of Patrick Lyon, will have her powers displayed at the same time.” As we have seen, Philadelphia’s firemen proved their manhood against the industrialists’ steam fire engine. Local papers reported, “The Diligent was fully manned, a fine stream of water shot with lightning speed from her pipe. The men worked with incredible spirit and strength, and after two efforts succeeded in attaining a height of 133 feet” (besting the steam-engine Young America’s 120 feet).

Although the results seemed to speak for themselves, interpretations of the day’s events varied widely. To many observers, the results demonstrated firemen’s manhood and the folly of underwriters’ plans to purchase a steam engine. One report compiled by the Phoenix Hose Company, which collected newspaper articles published in the days after the event, billed the contest as “the Grand Test of Muscle Against Steam—the Weccacoe (2nd Class Muscle) ahead of the Great Steam Squirt,” in reference to one of the smaller Philadelphia engines. Another account stated that “second-class muscle” had “whipped the great humbug that some thoughtless person would like to see thrown on our citizens at an enormous price.” Indeed, the Weccacoe’s performance especially revealed the limitations of the steam engine because even this small machine with less power—or second-class engine as it was technically called—beat the steam apparatus. In addition, the steam engine had a much larger bore and cylinder than Diligent’s hand-operated apparatus, and in theory, the Young America should have thrown a stream of water “at least double the distance reached by [Diligent’s machine].” Thus, not only had the steam engine failed to best the technique and power of Philadelphia’s firemen, but also its mechanical quality was suspect. Technical competence and phys-
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...ical power had triumphed over the engineering ability of Cincinnati manufacturers. Clearly the manufacturing and design abilities of Philadelphia’s artisan firemen far exceeded those of their rivals elsewhere in the nation. According to all the criteria by which firefighters judged themselves—standards that connected physical strength, technique, and technical innovation—volunteer firemen had vanquished steam technology.  

However, one voice in Philadelphia challenged the dominant view that appeared to be forming about the contest. Although this newspaper too articulated the inevitability that steam would replace hand-operated apparatus, it rejected the methods used to assess firefighting effectiveness. Adopting a derisive headline—"The Grand Aquatic Exhibition," the paper presented a contrary view of the trial: "We do not design giving the number of feet the water was thrown, the size of the nozzles used by different apparatus engaged in the experiment or other facts of similar character." This was a repudiation of the ways volunteer firefighters deter-

*Engine of the Diligent Fire Company, 1852–55, Wagner and McGuigan (printers), G. G. Heiss (lithographer). Originally manufactured by Patrick Lyon in the 1830s and reengineered by renowned engine maker John Agnew in the 1840s, the Diligent Fire Company’s engine was reputed to be the best in the region. This status as well as the engine’s history lent great significance to the contest between “muscle and steam” held in 1855. To the delight of thousands of onlookers, the Diligent outperformed the steam engine. Courtesy, Spruance Library of the Bucks County Historical Society; gift of the Volunteer Fireman’s Association of Philadelphia, 1919*
mined the quality of their manhood, technology, and service. Reversing the argument made by firefighters (and even the citizens’ committee in its allusions to the impotency of the fire department), the paper argued that manhood could not be measured by the length of hose streams. Rather, it claimed that true efficiency lay in the implementation of labor-saving devices and reorganization of labor. Therefore it urged the city to purchase the steam fire engine, whether it had been made in Cincinnati or Philadelphia. The newspaper echoed insurers’ demands for a fire department manned by steam engines and paid labor rather than large numbers of volunteers.26

Curiously, neither the public nor firefighters viewed steam engines negatively, and they embraced the new machines—but on their own terms. In fact, despite the victory, newspapers argued that steam technology inevitably would be used in firefighting. Two of the city’s dailies challenged the city’s artisan firemen to higher standards of innovation, service, and manhood, urging “Philadelphia mechanics” to “put their inventive genius to work” and to produce an engine worthy of the city’s firemen. They further drew a parallel between the manufacture of steam fire engines and steam locomotives: “Philadelphia mechanics who make the best locomotive in the world have not yet tried their hands upon a steam fire engine.” The contest had demonstrated nothing more than the limitations of Cincinnati manufacturers and men. Purchasing a steam engine would not be a mistake, though buying the Young America would be folly because of its technical inferiority.27

Although Philadelphians debated the merits of his engine, for Cincinnati manufacturer Abel Shawk the trial had its desired effect. Convinced that steam technology would “prove invaluable, and a great auxiliary, to our own efficient Fire Department”—especially for large fires along the city’s valuable riverfront—Philadelphia eventually acquired the engine, but it did so through an unusual route. The municipal government could not afford the engine, but it accepted a lease on the machine, courtesy of the largesse of a group of “public-spirited” citizens. A coterie of business leaders raised $10,000 to purchase the Young America. Led by J. Cowperthwait and William Pettit, who also had helped to organize the citizens’ committee, this group leased the engine to the city, but they attached strings. They demanded that the city hire paid employees to operate the engine, and they expected that the company running the Young America would form the backbone of a new type of firefighting organization. This placed the business leaders in conflict with municipal officials, who did not support replacing volunteer firefighters.28

Fire companies’ interest in using the new machine further complicated the situation, in that several vied for the right to operate the engine. The Vigilant Fire
Company offered the most compelling and forceful appeal to use the Young America, and the Committee on Trusts and Fire Department (charged with maintaining the engine) recorded that Vigilant “was very anxious to take charge of the Steam Fire Engine.” The only stipulation that Vigilant placed on the arrangement was a request for the city to “furnish horses, one Engineer and a Fireman.” The Committee on Trusts agreed to put the engine in service for five years with the company and informed business leaders of the decision. Surprised by the volunteers’ request, Joseph Cowperthwait, chairman of the “Trustees of the Steam Fire Engine,” expressed reservations about placing the machine with a volunteer fire company. Concerned that it might be “neglected or perverted” from protecting the “safety of property and general good,” Cowperthwait refused to loan the engine. He gave two reasons. First, the trustees wanted it to be used for more than five years. Second, Cowperthwait repeated his demands that the engine be used efficiently. To the trustees, efficiency meant that it would be operated by “practical and competent hands, under the direction of an intelligent Engineer all of whom shall be in the employ, under the direction of, and responsible to the public authorities.” Echoing the demands made by the citizens’ committee, the trustees would not lease the machine unless paid laborers operated it. They contrived to use steam technology to implement their political agenda—to force the formation of a “paid” fire department.

Cowperthwait’s opposition stymied the municipality’s plan to improve public safety, but the city nonetheless went ahead with its plans. It began to build a house for the steam engine, to purchase horses, and to hire engineers—all of which would be placed under direction of the chief engineer of the fire department. By May 1856, the city council passed an ordinance authorizing payment of workmen to operate the engine. Yet as late as 1860, Fire Marshal Alexander Blackburn reported that “from causes which the Fire Marshal never could comprehend,” the engine remained idle. Technical shortcomings accounted in part, as did the city’s not having procured horses promptly enough. Also the chief engineer, who was elected by a vote of firefighters, may have contributed to the delay by not pushing harder to use the Cincinnati machine. Ultimately, the Young America never saw regular service. The debate, however, exposed the plans of the mercantile interests. They were less interested in efficiency than in replacing the volunteers.

If many firefighters had been skeptical of steam engines, fire companies quickly warmed to the idea of using the technology. Indeed, a small but significant portion of Philadelphia volunteers saw steam engines as an opportunity to enhance their performance as firemen. Moreover, in a culture that valued a man by his equipment, such apparatus offered companies a new opportunity to exhibit their man-
hood. If properly constructed, steam machines would allow fire companies to throw more robust streams of water than ever before. The complex apparatus also offered a technological challenge, in that their operation and maintenance demanded skill. Furthermore, because of its expense the new technology tested the esprit de corps of companies, encouraging them to find more creative ways to finance their operations and sharpening their relations to their communities. Driven by a desire to prove their competence as men and firemen, firefighters continued to innovate, and competed to develop the best steam engines.

An increasing number of fire companies that sought to use the new technology did so independently of the municipal government. There were several reasons: the city lacked funds, mercantile interests continued to haggle with the municipality over the conditions under which the Young America might be used, and firefighters questioned the quality of the machine manufactured in Cincinnati. The Philadelphia Hose Company, which had introduced hose technologies to the city, began to experiment with steam engines first. They had even helped test the Young America, seeing its potential value. Following their experience operating that machine, the Philadelphia Hose Company actively pursued acquiring steam technology. Fulfilling its “reputation” and “fame” for innovation, in 1857 the company asked local manufacturers and mechanics to submit plans for a steam engine. It adopted the plans of Joseph L. Parry, a local mechanic and fireman, and a local manufacturer, Reaney & Co., constructed Parry’s plan. In January 1858, the engine went into active service; later in the same year, the company won a contest between steam engines that was held on Boston Common.31

The Philadelphia Hose Company’s acceptance of the new technology signaled a shift in how the city’s firemen perceived themselves and worked at fires. When it “manfully bore the brunt of opposition” to its steam engine, Philadelphia Hose instigated a new point of competition among the city’s fire companies. In this “spirit of laudable rivalry,” according to Fire Marshal Blackburn, the city’s most powerful hand engine company, the company that had vanquished the Young America—the Diligent Engine Company—asked to use the engine. Finally the city’s mercantile interests relented. After having a local mechanic significantly alter it, Diligent placed the Young America in service in 1859. In short order, Hope Hose, Hibernia Engine, Good Will Engine, Weccacoe Engine, and Delaware Engine all procured steam apparatus. By 1860, nineteen fire companies had bought such machines—some even purchasing a second. Not only did these acquisitions represent a renewed devotion to efficiency, but they also reflected firemen’s strong commitment to protecting the city’s economic interest. Indeed, companies located nearest to property of especially high commercial value adopted steam technology
earlier than those companies located primarily in residential districts. For instance, Fire Marshal Blackburn noted that Hope Hose had “resolved to obtain a steamer for the special protection of the immense amount of valuable property along the Delaware front in the south-eastern portion of the city.”

As volunteer firemen began to use steam engines, they continued to denounce the plans of the city’s mercantile interests to replace volunteer fire companies with paid laborers. Once again, they commissioned a print to critique middle-class manhood and the division of labor recommended by businessmen. Titled “A Paid Fire Department As It Is Likely to Be under the Contract System,” the print expanded on the earlier caricature. At its center, it depicts a steam fire engine surrounded by laconic, disinterested, and underfed men. The steam engine stands idle as Philadelphia burns and as well-dressed and fat middle-class men watch, helpless to stop the destruction. Not only did the image symbolically criticize middle-class men for their lack of action, but it commented on the actions of Cowperthwait and other merchants who refused to allow the Young America to see service. The print made equally clear that no technology—steam or otherwise—could protect the city if it was operated by lazy, inept laborers. In depicting paid firemen as degraded Irish and African American workers, it drew upon two highly charged and popular political and social beliefs of the period—nativist’s xenophobia and concerns about the impact of freed slaves on northern labor markets. Speech bubbles underscored the caricature, revealing that the paid workers spoke the patois of the urban immigrant working class and southern migrants/slaves:

“O! I’ll sing you a lottle song;
And it shant be very long,
Bout some good people in de town of Boston,
Dey got up a paid Department,
When our councils set dere hearts on’t.
Soon day wish’d em to de toder side of Jordan,
Tuck in de trousers, an roll up de sleaves,
Jordan am a hard road to trabbell,
Loaf bout de Injinehouse, do as de please,
Jordan, am a hard road to trabell, I believe.”

Another figure, clearly drunk and with a full bottle in his hand, considered:

“To be, or not to be, is not
the Question, wether tis
nobler in the mind to take
several good square drinks
and then put out the fire,
or to put out the fire first,
and take several numerous
drinks afterwards, that
is the question."

The print’s imagery, language, and sentiments capitalized on the worst fears of working Philadelphians, who were buffeted by extraordinary societal change. Appealing to their anti-immigrant beliefs and their racism, the print criticized the new division of labor proposed by industrialists. Firefighting service, the image suggested, should not be performed by wage laborers without a stake in community life.³³

Strikingly, the print did not impugn steam technology. To the contrary, it depicted a beautifully rendered steam engine that bore striking resemblance to the machine that the Philadelphia Hose Company had commissioned from local artisans, and which the company had celebrated in its own laudatory print. The caricature argued that effective new technologies, such as steam engines, were useless unless manned by firefighters with technical prowess, dedication to community and efficiency, and esprit de corps. Ironically, however, as firemen enacted their competence as innovators, they furthered the goals of reformers and the fire insurance industry. Firemen explicitly chose to make their labor more specialized and to reorient it around the power of steam apparatus, continuing a century-long trend of innovating and improving efficiency. However, adopting new technology had unintended consequences. It wove firemen more tightly into Philadelphia’s municipal bureaucracy. Gradually, fire companies became dependent upon the specialized and costly expertise of engineers and/or stewards to operate and care for the equipment. Maintaining and purchasing steam engines increased fire company costs dramatically, sending them scurrying for additional income. They found the municipal government willing to exchange financial support for bureaucratic control. In fact, the city refused to support fire companies unless they became part of its administrative umbrella.³⁴

Although its impact was great, steam technology did not suddenly change the nature of firefighting work. Rather, it accelerated long-term trends in its organization, especially in the development of specialized levels of service. It particularly reinforced a trend evident as early as the 1840s, in which firefighters established different levels of commitment that devolved responsibility for firefighting labor into the hands of fewer men. Over time, an increasingly smaller number of fire-
men performed active service for the broader communal safety. When companies introduced grades of membership and service—active, honorary, and contributing—a new set of responsibilities defined firefighters’ relationships to their brothers. Over time, the proportion of active members declined precipitously. In 1842 the number of men active in the department nearly equaled the combined number of honorary and contributing members. By the 1860s, honorary and contributing members outnumbered active company members by a ratio of four to one. This trend was more pronounced in companies that adopted steam fire engines. In the 1860s, the ratio of contributing members to active members was roughly 3:1 in companies operating hand engines, but almost 3:1 in companies with steam fire engines. Companies not only sought additional revenues from the municipal government to operate steam engines, but also accepted a greater num-

“Phoenix Hose” work group, albumen print, ca. 1860s. Over time, fire companies wore increasingly similar costumes, bordering on uniforms, as the differences between fire companies diminished because of common departmental management associations, close bureaucratic and financial ties to municipal governments, and new technologies. Courtesy, Spruance Library of the Bucks County Historical Society; gift of the Volunteer Fireman’s Association of Philadelphia, 1919
ber of contributing members in order to support their use of the new equipment. More importantly, perhaps, the actual performance of firefighting labor became the purview of men with a taste for danger and excitement, or those who could not buy their way out of serving.\textsuperscript{35}

Volunteer firemen also enmeshed themselves in the web of the municipal bureaucracy by adopting other new technologies in addition to steam engines. The fire alarm telegraph, for instance, helped to tie them more tightly to the authority of the municipal government. By networking the city, the telegraph wove the built environment into a system that connected evenly dispersed alarm boxes with firehouses and an organized system of labor. At the same time, the network regularized the signaling of alarms and improved departmental response time. According to municipal officials, it also removed the moral and economic dangers of false alarms. In other words, municipal leaders hoped that the telegraph would decrease informal expressions of firefighting culture, such as racing. If the telegraph brought greater discipline to firefighters, it nonetheless helped to make them more self-consciously unified. Rather than being an agglomeration of individual companies, volunteers became members of a single fire department, sharing common goals, work rules, and connected workplaces.\textsuperscript{36}

As firefighters changed the terms of their service, they also expressed themselves differently in the artwork and costumes that they purchased and in their rituals. As firemen chose to emphasize efficiency and departmental unity rather than company autonomy and neighborhood, the expression of political and social differences became less pronounced and provocative. Between 1840 and 1860—as companies accepted greater numbers of contributing members and as municipal funds became more generous—firemen produced an increasing amount of material culture. At regularly held parades, balls, and other scheduled events, firefighters showed off more detailed and ornate costumes, membership certificates, and engine decorations. The choice of symbols grew less controversial, and these artistic expressions became more standard and stylized as well. Companies more often employed common symbolic language and depicted more neutral subjects, such as tools, apparatus, and fire scenes. Of course, contentious symbols did not disappear altogether, as is evidenced by the municipal government’s ban on the use of “provocative” symbols in 1857. However, this prohibition, as well as firefighters’ continued attempts to forge a unified identity, fostered both the shift toward greater decorum and the decline in spontaneity. A shared expressive palette replaced the cacophony of difference.\textsuperscript{37}

Simultaneously, firemen replaced informal competitions, such as races and fisticuffs, with formally scheduled events, such as footraces and attendance con-
tests. Those rituals that the middle class labeled as inefficient and morally suspect grew into events sanctioned by the department hierarchy. Although rioting diminished, department leaders still punished companies participating in melees, as in January 1869, when department leaders swiftly suspended the Niagara Hose Company and Franklin Steam Engine Company for fighting. The nature of firefighters’ parades demonstrated a similar shift, becoming more restrained and more carefully orchestrated to demonstrate departmental unity. Firemen paraded triennially from 1843 to 1852, but did not celebrate their service in 1855, probably because of all the controversy surrounding the department. Parades were held again in 1857 and in 1865. Over time, these processions grew less discordant and kinetic, and later parades acquired a formal protocol. More broadly, firefighters expressed their ethnic, political, and class affiliations less prominently and certainly less provocatively after the 1850s. Although demographic differences between fire companies likely had not diminished, firefighters had begun to view themselves as members of a single department rather than a collection of different associations. Firemen’s identities increasingly centered on their labor, equipment, and service. In the 1850s, volunteer firefighters in Philadelphia had thwarted outside efforts to reorganize firefighting. However, in the process, they created a unified fire department that embraced an increasingly stratified and specialized division of labor resembling the plans laid out by critics. Activists—especially mercantile interests—nudged firefighters forward, but volunteers stood at the vanguard of change, taking those first tentative steps toward creating a new occupation themselves. As firefighters embraced efficiency, technological solutions led them to implement a more complex and formal network of safety. Moreover, as firemen unified into a single brotherhood, they gradually disconnected their service from the metaphor of a body politic and their connections to their urban neighborhoods grew more distanced. Performing public service became an increasingly specialized task, an end in itself as “every man adhered to his own.”

Steam Technology and Administrative Reform in St. Louis

The 1850s witnessed similar public conversations about the organization of firefighting across America. In the wake of the horrific conflagration that nearly destroyed St. Louis in 1849, residents reexamined the question of how best to protect their city. Widely heralded for their labor at the blaze, firemen initiated the public debate and created a plan for reorganizing the city’s fire defenses, culminating in a new organization. The Fire Association (FA) signaled a shift in how firefighters sought to manage their labor at fires. They abandoned more informal
relations, in which they forged authority anew at each blaze, in favor of more centralized control. The new organization unified the city’s diverse and independent fire companies into a common “fire department,” complete with administrative rules, within a formal management hierarchy. By forming the FA, the city’s fire companies created a mechanism for demanding more regular and greater financial support from the municipal government. Firefighters traded the independence of neighborhood organizations for the collective strength of a management association; they did so to improve the quality of fire protection but also to enhance their ability to press their claims for public authority and recognition. As firefighters reformed their service, they articulated a new collective identity.

The FA launched a sweeping critique of the city’s fire protection. Led by prominent St. Louis business leader Hiram Shaw, the FA celebrated firefighters and scolded the municipal government and St. Louis’s citizens for insufficient support of the city’s fire companies. Shaw recalled a record of public service by firefighters, producing a narrative of collective heroism and altruistic service that he contrasted with the behavior of the city and its residents. Yet, even as he looked backward to a mythic past, Shaw began to subtly reconfigure the relation between the city, its citizens, and its firefighters. Shaw raised questions about how best to conquer the problem of fire in a world in which support for firefighters came only reluctantly. As he began to work out alternatives, he produced a plan that reshaped fire protection in St. Louis, and reflected the direction of change in fire protection throughout the United States.

At the heart of Shaw’s appeal stood the long-standing belief that firefighters shared a reciprocal relationship with the community. Firefighters protected their fellow citizens, who supplied fire companies with moral and financial support. Shaw argued that firemen “give our services, in winter’s cold and summer’s heat, at midnight and at mid-day, at a moment’s warning.” With Thomas Targee’s death fresh in the minds of his neighbors, Shaw did not need to restate that firefighting was physically arduous and dangerous work. He did, however, feel compelled to reassure his fellow citizens that firefighters were invested in the community; they were not simply men who loved adventure. Perhaps spurred by concerns about conflict among fire companies, Shaw assured the community of the department’s character. He wrote that it was “composed of men who have some stake in the welfare of the city; they have cast their lot here with the intention of making it their permanent home, and having warm hearts and able hands they are disposed to render aid to their fellow-citizens.”

Despite firemen’s commitment, Shaw told his neighbors, neither the community nor the municipality upheld its end of the social contract with firemen. In par-
ticular, he complained that, in its lack of support, the city was failing to fulfill its responsibility not only to firemen but also to its residents. Although the municipal government had paid more than half of the department’s expenses between 1838 and 1850, Shaw argued that the city’s fire companies were ill equipped. In particular, he reported that the firefighters did not have enough hose. Such laxity, according to Shaw, could have dire consequences and potentially threatened the foundations of the social order. His contentions surely resonated in the wake of the recent disaster. Was the blaze and the disorder in its wake a result of inadequate municipal support? More generally, Shaw questioned the city’s long-term commitment to firemen and public safety by criticizing the methods through which fire companies obtained financing from the municipality, which he described as “begging.” The unmanliness implied by begging only underscored how the city demeaned firemen, violated the social contract between fire companies and the community, and endangered public safety. Shaw demanded unquestioned, regular pecuniary backing. This support, he told the city council, would “do away with the necessity on our part of begging, and of the disagreeable annoyance of having a firemen’s begging committee calling on you once or twice a week.”

Shaw’s critique continued, with an interesting twist. He argued that the state’s approach to funding shifted the burden of preserving the social order onto the community in an unequal fashion. When he stated that an especially “heavy burden” was placed on a small portion of the community, Shaw did not mean firefighters. Rather, his point was that “the merchants of Water and Main streets pay a large proportion of what is collected.” Although Shaw did not document precisely how much St. Louis’s merchants offered to fire companies, he and other FA delegates undoubtedly were aware of the amount, because most of the FA delegates were business leaders, engaged in commerce along the city’s waterfront. Likewise, Shaw certainly knew that merchants benefited far more than most citizens from firefighters’ exertions. After all, in the first half of the nineteenth century, volunteer firefighters focused not on saving lives but on protecting property—and the increasing wealth of the business community certainly exposed it to greater jeopardy. Shaw had begun to shift the terrain of arguments about fire protection. Instead of evaluating fire danger in terms of the entire community’s well being, he imagined it as primarily a threat to the middle class and the nascent industrial social order. He assuaged growing middle-class concerns about urban disorder and immorality by underscoring that firemen had “a stake in the community” and “owned property.” In so doing, Shaw connected firemen’s culture to that of the middle class. Nevertheless, he also expressed apprehension that the department could “fall into the hands of those whose principal delight is in riot and fight-
ing” if his “fellow citizens” were not vigilant at demanding greater support from the city council.44

Shaw also introduced to the city a new formulation of the connections between communities and firefighters. He argued that the relationship between firefighters and the community should be governed less by benevolence and more by economic self-interest. He did not appeal to an abstract notion of community or idealized civic virtue; he argued that preserving property was the reason that citizens should support firefighters. In a subtle but important way, Shaw remade the equation between firefighters, communities, and cities. Representing not just himself but St. Louis firemen through the FA, Shaw argued that communal service bounded by a culture of manhood was not sufficient to protect the city’s property. Firefighters required additional and regular financial support to provide an increasingly specialized and expensive public service. Through Shaw, volunteer firefighters singled out economic risk as a principal element in the danger that fire posed to community. Shaw’s letter provides the first indications that, at least in St. Louis, the language of the market was gaining ascendancy in defining firemen’s relationship to the community.45

Just as Shaw’s letter began to remake the rhetorical connections between firemen and their neighbors in St. Louis, so too the Fire Association restructured the institutional relationship between firefighters and the municipality. This transformation began in the spring of 1850, when the FA petitioned the city council on behalf of the city’s fire companies for $1,500 per annum, per company, and up to two thousand feet of new hose per company, as well as free heating gas for each company. The petition further requested that if any company’s apparatus was destroyed, the city would agree to pay for its replacement. The association recommended that its members take up a “subscription paper” to improve their financial situations. By May, the FA’s plea had an effect. The city council promised a $1,000 appropriation for each fire company (paid quarterly), provided up to one thousand feet of new hose per company, and agreed to pay each company’s debt. The delegation reported that this new financial relationship would be acceptable to the municipal government provided that “an inspector appointed by the city” could examine each of the companies quarterly. The Fire Association accepted the city’s proposal with one modification. The organization would appoint the inspector, who would be “confirmed by the City Council.” This adjustment guaranteed the FA institutional independence from the municipal government.46

When the city council had not yet appropriated the funds in July, the FA became militant, precipitating a crisis in the city’s fire department. The association petitioned the council for the money needed to “place [the companies] in an effi-
cient situation,” and it threatened to strike if these funds were not forthcoming. In “twenty days” the organization would “recommend to each company to close doors until such time as the city council comes to some financial determination.” Such militant language emphasized that firemen had defined a new and common interest as a fire department, and it also brought a swift reaction from the municipal government. Mayor Luther Kennett, a member of the Missouri Fire Company and generally sympathetic to firefighters’ demands, replied sternly. He expressed confidence that the city would help the department, but he also bristled at the FA’s threat. According to Kennett, the city council “would lose sight of the respect due to the position they [firemen] occupy if they are in any way influenced by the threat of closing doors.” Kennett asked for the association’s assistance in quickly appointing an inspector and requested patience vis-à-vis the appropriation for the department. The controversy ended abruptly with the former volunteer’s

Philadelphia Hose Company steam fire engine, ca. 1858–60, Wagner and McGuigan (printers), G. G. Heiss (lithographer). The Philadelphia Hose Company set the standard for nineteenth-century volunteer firefighters by regularly introducing new firefighting innovations, including the use of hose, grades of membership, and steam engines. In the 1850s, when the company acquired a steam fire engine, it and other like-minded volunteers created the basis for the city’s professional fire department. Courtesy, CIGNA Museum and Art Collection
rebuke, although the organization appears to have retained the right to name the inspector. Shortly thereafter, the city’s fire companies elected Edward Brooks—a member of the Central Fire Company and an insurance agent—as inspector. At the same time, the FA bolstered its position at the head of the body of firemen by establishing regulations to “prevent difficulties” and to “restore and preserve . . . efficiency.”

The department’s status remained unsettled, however, because the municipality wanted greater authority in exchange for its heightened financial role. By February 1851, Kennett had agreed to a yearly appropriation, but the city had not yet settled the companies’ debts. When the FA asked the city about the matter—this time in a demure, nonthreatening letter—the mayor replied quickly and with bluntness. Kennett took Shaw’s rhetorical arguments for an exchange relationship to their logical conclusion. He wrote that the city would not “pay the debts of the Department and never will, until the companies one and all come under the supreme control of the City Government.” Company independence had long been central to firefighters’ cultural discourse, and Kennett’s edict slapped directly at firemen’s control over their service. Edward Brooks, who had assumed the presidency of the Fire Association, announced that the city council had “proposed to adopt a paid department in place of the present volunteer system.” Although the FA did not accede to such a dramatic transformation, the association ultimately acquiesced to the city’s demand. More tellingly, perhaps, a small but vocal minority of the FA—led by Edward Brooks and several economically prominent members—supported the motion to increase the power of the municipal government. These sympathies became especially evident when he stepped out of the president’s chair temporarily in an attempt to table the FA’s opposition to the city council’s “supreme control.” In St. Louis, discussions about the provision of firefighting had changed.

Although the prospect of a “paid” fire department disappeared as quickly as it had materialized, the ensuing compromise transformed the relationship between St. Louis’s fire companies and the city forever. In a compromise engineered by Edward Brooks, the Fire Association approved a new ordinance that invested final authority over the department firmly in the hands of the state. The FA retained administrative power over the day-to-day operations in exchange for a generous one-time donation to each company. The ordinance allowed the organization to investigate difficulties between companies, but the city council and mayor retained final administrative authority over fiduciary matters, disciplinary actions, and selection of the department inspector. Claims of reciprocity and autonomy took a different hue under the new arrangement. If men fought fires as part of their ob-
ligation as citizens, firemen became implicated in the growing authority of the state and served with its approval. The relationships between fire companies and their communities was now mediated by an intermediary bureaucracy. The change mirrored the broader shift in nineteenth-century social relationships. Legal contracts replaced social contracts.  

Of course, not all fire companies adhered to or approved of the new order. The Union Fire Company especially sensed that the new ties prefigured a transformation in firefighting, and decided to disband. Composed of many of St. Louis’s most respected citizens, the company operated the city’s most effective and revered engine. During the 1840s and 1850s, the “Emperor” and the Union company reigned supreme. Even though Union could not abide the new system, it appears to have supported the shift toward more specialized firefighting. It embraced radical change in 1854, when it initiated the next wave of fire department reform. The company quit the volunteer fire department, sold its assets, and donated a steam engine to the city on the condition that a paid fire department be formed. Just as had happened in Philadelphia, volunteer firemen’s approach to technological innovation predicted the reorganization of firefighting, albeit with much different results.  

Union’s decision reflected the first step in the process that firefighters set in motion as they developed more formal contractual relations with municipal governments and continued to create specialized labor. Following the recommendations of the Union Fire Company and other leading firefighters, St. Louis established a municipally controlled fire department in 1857. The pace of reform sped forward in 1858, as the city’s insurance and business community became involved, supporting the change with a concrete assessment of its economic impact. When in 1858 a committee of local insurance companies made their visit to Cincinnati, it returned with glowing accounts of steam engines, noting that the machines helped firefighters to confine blazes to a single structure and that Cincinnati’s business community felt more secure because of their use. It recommended that St. Louis acquire the machines because “the people of St. Louis will regard $3000 per annum as a trifling change to secure the efficient aid of six such machines.” Even better, insurance rates would lower and “two or three hundred thousand dollars worth of property can be saved from fire each year.” Even before they had returned to St. Louis, the insurance committee contracted with Cincinnati manufacturers for two steam engines.  

Metaphorically, Union’s decision to disband symbolized the transformation of fire departments from 1850 to 1870. At one time, the company, its engine—the Emperor—and its motto IN UNION THERE IS STRENGTH had expressed the possibil-
ities of unified male action and celebrated the political order of the nation. By relinquishing its separate identity, the company repudiated the community organization of fire protection. It also challenged the concept of the collective male body as an appropriate organizing principle for an industrial society. By casting its collective body aside in favor of a new division of labor, Union embraced the increasing role that specialization and individualism would play in the expanding market economy. In many ways, this decision foreshadowed the social and political fragmentation that wrenched the nation during industrialization and the Civil War.

Volunteers, Innovation, and a New Occupation

Too narrow a focus on methods of remunerating firefighters or on steam engines fails to explain adequately the transformation of firefighting during the middle decades of the nineteenth century. It mischaracterizes the change, conceals the dynamic role that volunteers played in the transition, and especially obscures the degree to which firefighters invented their own occupation. Firefighters had been in the process of transforming firefighting from a broad community endeavor to a specialized public service from the earliest days of the nineteenth century. Gradually, they had been reorganizing their work, their relation to one another, and their association to the local municipality. With the creation of municipally administered fire departments, the role of volunteers in firefighting did not diminish; in many cases, volunteer firefighters actually organized, operated, and directed the new departments. Likewise the organization of firefighters’ work did not change fundamentally or abruptly. Quite often, city-operated departments employed hand-pumped engines as well as part-time laborers to extinguish fires. For instance, in Cincinnati, which is typically labeled the first “paid” fire department, volunteers initiated the transition to a professional department by publishing a letter in a local newspaper suggesting just such a shift. Afterwards, a former volunteer fireman and prominent industrialist worked with a cadre other former volunteers to structure the new department’s organization and work rules.52

As firefighters pushed forward with department reform, volunteers faced a critical decision: should they give up their current employment and take up a new occupation—as firefighters? Although relatively few volunteers joined the new organizations, those who did supplied both the labor and leadership so critical to the restructured fire departments. In Philadelphia less than 5 percent of the city’s approximately three thousand firemen chose to or were given the opportunity to earn wages as firefighters in 1871. However, that small crew wielded an extraordinary amount of influence in the development of the department. In fact, approximately
40 percent of the members of that new institution—165 of approximately 400 men—had been listed in the city’s enumeration of volunteer firemen in 1868. Likewise, in St. Louis former volunteers performed a vital role in the new department. Though their prevalence is difficult to quantify with precision, evidence suggests that about one-third of the firefighters in the municipally administered organization had previously served with the volunteer department. More importantly, though, former volunteers occupied nearly all of the skilled positions in the newly created St. Louis Fire Department.  

When St. Louis firefighters created a municipal fire department, they not only assumed key leadership positions but also provided skills essential to the operation of the city’s first steam fire engine, which represented the department’s future. As the city continued to move toward reforming its fire department, it relied on the expertise of four volunteer firemen who served on the city council and had nominated themselves to the Board of Fire Commissioners. The fire commissioners appointed Henry Clay Sexton, former president of the Mound Fire Company, as the chief engineer. In turn, Sexton appointed Richard Beggs and John Bame, former officers of the Franklin and Phoenix fire companies and leaders of the Fire Association, as assistant engineers. With volunteer firefighters placed in prominent leadership roles, the newly appointed Board of Fire Commissioners acquired equipment, infrastructure, and labor from volunteer fire companies. Almost immediately, at least three of the city’s ten volunteer companies—the Franklin, Washington, and Mound fire companies—supported the new organization. They complied with the ordinance establishing the paid department, disbanded, and sold their equipment and property to the municipal government. Equipment from these companies supplemented new purchases (of steam apparatus) and helped to provision the department.  

In its final step toward reorganizing firefighting, the St. Louis Board of Fire Commissioners obtained the most valuable commodity—the skilled labor of former volunteer firemen. Although the numbers varied by company, many volunteers joined the organization. The records of the Franklin Fire Company, the volunteer company for which there is the most information on membership, indicate that approximately one-third of its men joined the paid organization, and most signed on with the new department’s Franklin Fire Company. More importantly, of the (municipal) Franklin Fire Company’s eight full-time employees, all but the engineer were affiliated with the earlier volunteer organization. Twenty-one of Franklin’s members—over 75 percent—had served as volunteers. Former volunteers also occupied at least 60 percent of the new department’s most responsible jobs, and they commanded all of the department’s six engine companies. By con-
trast, men without previous experience served as part-time laborers—or “call men”—on hand engines.  

The organization of firefighting in St. Louis showed continuity with its preceding form, but the former volunteers who led the department remade the division of labor in important ways. Departmental pay stubs demonstrate that operating hand-pumped engines—once a marker of manliness—became less valued as firefighters transformed their beliefs about technology, skill, and physical labor. Indeed, the vast majority of employees in the department occupied part-time, low-wage positions as physical laborers operating hand-pumped apparatus. By the winter of 1857, approximately 80 of the 130 men employed by the department worked as “privates” in the four hand-engine companies—the Jefferson, Washington, Mound, and South St. Louis fire companies—which employed twenty privates each. Privates, or call men, were allowed to hold outside jobs, but they were required to attend fires when called. Privates earned a fixed salary of about $2.27 daily, just over $8 monthly. However, if they did not appear at fires, they were fined as much as $1. In January 1858 one firefighter accumulated $2 in fines, more than 25 percent of his salary.  

Skilled workers earned significantly higher salaries and won greater privileges than physical laborers. Each fire company, whether operating a hand-pumped or steam-pumped apparatus, usually employed seven “stewards.” Disproportionately drawn from the ranks of the volunteers, stewards maintained the apparatus, directed the horse-drawn engine to the blaze, and manned the hoses. Stewards earned five times as much as call men, but were prohibited from holding a position outside the department. They took home $1.33 daily, $40 monthly, and $480 yearly, which did not vary according to the type of equipment their company operated. Captains occupied the space between stewards and call men. Fire company leaders received lower pay than full-time stewards did, but their salary of approximately $250 to $300 yearly does not tell the full story. Like the department’s part-time employees, captains could hold jobs outside the department. This arrangement suggests that the department may have had difficulty prying the most skilled, or at least the most respected, volunteer firemen away from their other careers.  

As happened in fire departments throughout the country, steam engines became a critical element in the organization of firefighting in St. Louis. Even before the city assumed complete control of the fire department, the municipal government began operating the steam engine that had been donated by the Union Fire Company, and within two years the city had acquired six additional steam apparatus. In 1857, the city hired a volunteer firefighter with the Phoenix Fire Company, Richard
Mawdsley, to serve as “superintendent” of the engine. Mawdsley directed a labor gang composed of eight workmen plus horses; for his expertise he earned $75 monthly. The crew—two drivers, two firemen, three “pipemen,” and a watchman—were each paid $40 monthly. All told, the city spent approximately $470 each month to operate its steam fire engine. Similarly, after the new department had been organized, those men operating steam equipment continued to receive higher salaries, underscoring the importance of steam technology to the new organization. For example, by 1865, as the principal operators of the city’s expensive and sometimes temperamental steam fire engines, engineers received $2.74 daily, over $80 monthly, and $1,000 yearly. Meanwhile, men who led hand-engine companies earned nearly 33 percent less than the captains of steam engine companies. They received about $17 daily and $200 monthly, while their counterparts earned $25 monthly, and $300 yearly. The pay disparity suggests the relative scarcity of the technical skills held by steam engineers in the 1850s, even as it points to the
value of steam engines within the department. The department considered these machines its most important resource and viewed the ability to operate them as a most critical skill. Once again, firefighters and municipal leaders emphasized a man’s specialized ability in the use of technology as the organizing principle for firefighting.\textsuperscript{58}

Departments compensated engineers so well because they possessed both diagnostic and practical technical skills. Most obviously, engineers operated the steam apparatus at fires, which involved stoking them to full steam and sustaining adequate pressure. In addition, engineers’ expertise extended to the nuts and bolts of keeping the engine in running order. Many early steam operators maintained their apparatus, although local machinists performed the most serious repairs; by the twentieth century, departmental machine shops would typically perform most maintenance activities. In 1874 at the annual meeting of fire department leaders, St. Louis Fire Chief Henry Clay Sexton recommended hiring engineers who were “practical machinists.” Firefighting handbooks argued that engineers should possess broad knowledge of the science of steam engines, including knowledge of hydraulics. Although wage differences between steam engineers and rank-and-file firefighters eventually diminished, they nonetheless reflected the degree to which steam engines were the backbone of newly reorganized departments.\textsuperscript{59}

As firefighters constructed the new occupation, many customs carried over from volunteer to municipal fire departments. For example, firefighters continued to emphasize speed and efficiency in transmitting water from city mains onto a fire. Just as volunteer firemen had measured their manhood and service by arriving quickly at fires and by spewing as much water as possible, so too paid firefighters construed their headlong dashes as markers of virility, and reveled in playful competition. In fact, long after firefighting had become a well-established occupation in large metropolitan areas, firemen competed so ferociously that departments issued orders to prevent racing to fires. So strong was this impulse that, at late as 1915, Philadelphia’s training manual for firemen admonished companies to work together. “It is a natural and proper thing for a company to take pride in being the first to play a stream on the fire,” the manual stated, “but at times it is necessary to forego such personal glory to help another company.”\textsuperscript{60}

The drive behind the desire to arrive early and to play first water was manifest even in firemen’s battles over departmental reorganization. In fact, this competitive streak structured the contest for power between volunteers and professionals during the 1850s. In St. Louis, the municipal department’s ability to control the city’s water supply played both a symbolic and a practical role in establishing its authority. In 1857, a number of independent volunteer companies remained active
in the city, challenging the hegemony of the new fire department. The volunteers believed that acquiring hose connections first might discredit the municipal organization because custom dictated that the first company to control a hydrant commanded the fire scene. And, the independent companies held a critical advantage; they were located near to the city center and the business district, whereas the engine houses of the paid department were situated further away. With a geographical edge, the independent companies often gained charge of all the plugs near to a fire. Rather than seeking legal remedy, the city’s municipal firemen engaged the independent volunteers on their own terms. Taunted as “hirelings” by men with whom they had once worked side by side, the wage-earning firefighters competed for control over the water supply. They converted a four-wheel hose tender into an apparatus that could be horse drawn, and two firemen (Dressell and Marquis) patrolled the business portion of the city, especially at night, awaiting alarm of fire. Using the superior speed of the horses, Dressell and Marquis would take possession of as many fire plugs as possible before the independent volunteer fire companies arrived; they had “outwitted” the volunteers.61

This contest underscored the ongoing importance of innovation in firefighting culture and outlines the connections between early municipal firefighting organizations and their predecessors. In their continued emphasis on technological skill, paid firefighters defined their occupation by drawing upon the cultural legacy created by the specialized corps of volunteer firefighters. Just as volunteers altered their work and culture by inventing and/or appropriating technologies, wage-earning firemen developed and implemented a variety of new workplace tools. The use of horses to gain an edge in the contest over hose connections was just the first in a series of innovations undertaken by successive generations of firefighters that later resulted in technologies such as the “quick-hitch” harness, chemical fire engines, and aerial ladders.62

More broadly, when they reorganized fire protection, firefighters created a new occupation that was grounded in ideals of manly control and service. They took command of fire protection by asserting their control over nature and the city. By literally wresting control of the city’s hydrants from their competitors, they established their mastery of water and the infrastructure—tools of signal importance in the battle against an environment run amok. Even more striking, St. Louis’s firefighters did not establish their authority through state mandate. Rather, they displayed manly competence—signaled through their use of superior technology and their extraordinary dedication to public service. The same principles guided the new firefighters’ activities, and eventually would propel them deeper into burning buildings and into more dangerous situations.
Conclusion: Constructing Technology and Identity

Changes in the provision of firefighting paralleled, if not preceded, the growth of other municipal services at midcentury, such as police departments, public health departments, and sewer and water systems. No single event precipitated the expansion of such services, although their extension certainly derived from a heightening sense of danger and hazard—of human disorder, fires, disease, and accidents. Urban populations and political leaders developed the belief that cities had an obligation to provide for public safety, which became more pronounced as municipalities took more responsibility. The growth of urban firefighting services depended upon a confluence of factors: the development of a labor force of specialists, the activism of a middle class, the support of business and mercantile interests, and the willingness and financial ability of local municipalities to become more bureaucratic and service oriented.63

In this context, volunteer firefighters initiated and led the transformation of their service. From early in the century, firefighters frequently remade their labor and adopted new technologies, making their service more efficient and bureaucratic. Volunteers claimed to be noble public servants and to possess a special expertise in fighting fires. Gradually, firefighters’ developed a collective interest and identity that undermined the communal origins of their service. The emphasis on innovation and efficiency embodied the spirit of the industrial era, compelled firefighters into a more formal relation with municipal governments, and propelled them toward an organization of labor that resembled the proposals favored by the fire insurance industry. However, the particular trajectory of change and the shape of firefighting reform efforts varied widely, depending upon locale. For instance, in Philadelphia, with its long tradition of voluntarism, firemen incorporated steam technology into their companies, created an administrative bureaucracy, and established paid positions for department leaders and skilled steam engineers. In St. Louis, however, volunteers first changed their relation to the municipal government and later moved to adopt steam engines, which paved the way for, but did not cause, the transition to a municipally administered fire department. In other cities—Boston, Chicago, New York, and Cincinnati—volunteers played equally prominent roles and were deeply engaged in creating paid fire departments.64

Although paying firefighters wages and using steam engines mattered to the reorganization of fire departments, these factors reflected a larger process through which firefighters were crafting a new occupation. Becoming a firefighter meant possessing and exhibiting a special set of skills and attitudes, embodied in a new
division of labor. In St. Louis a group of specialist firemen, almost all of them former volunteers, directed a fire department composed of volunteers and “call men”—ordinary laborers with other occupations—for several years after the city reorganized the department in 1857. Likewise, Cincinnati’s fire department did not employ full-time firefighters other than departmental leaders until the 1870s. For twenty years, the city paid workers in the department a wage, but still expected them to earn their livelihoods from other jobs. Gradually, the department raised wages to discourage firefighters from taking outside employment, but it did not prohibit such employment until 1873. Strikingly, although preindustrial traditions slowed the shift toward the creation of paid firefighting forces in New York and Philadelphia, in most respects those departments resembled St. Louis and Cincinnati more than they differed from them in the 1860s. In Philadelphia volunteer firemen entered into a contractual relationship with the municipal government, initiated the use of steam technology, encouraged a telegraphic alarm system, and adopted strict work rules and a bureaucratic hierarchy to manage the department. A coterie of skilled workers directed the operation of the fire department, and each individual company received a government appropriation to pay its bills, which included hiring specialists to operate steam engines. The new division of labor, with formal bureaucratic routines and wages for departmental leaders, represented a significant departure from the informal culture of neighborhood fire companies. Firefighting in American cities had begun to show striking similarities in organization, which were advanced more quickly by the shift toward using expensive new machine technologies. By the 1880s, steam engine manufacturers—Amoskeag, Ahrens, Silsby, and LaFrance were the most prominent—had sold thousands of the machines to departments nationwide. Widespread use of steam apparatus reflected how firefighters had begun to remake their service from an avocation into an occupation, with common tools, formal work rules, hierarchical leadership, and well-defined skills.65

More broadly, as firemen and underwriters debated how best to control fire, both groups contributed to the reorientation of the American society around the values of industrial capitalism. Indeed, even as they argued about the nature of fire protection in newspapers, on broadsides, in art, on the streets, and at fire scenes, insurers and firefighters adopted an approach to the environmental hazard that placed authority over the problem into fewer hands. Fire insurers made containing the economic damages caused by fire their central business concern, providing individuals an opportunity to protect themselves financially. At the same time, firefighters had established themselves as the first and only line of defense against the fire’s physical hazards, filling a critical functional niche within the urban industrial
world. As they worked to make fire protection more effective in the first half of the nineteenth century, firemen forged a brotherhood built around physical and technical competence, in which the performance of efficient duty gradually eclipsed a man’s connections to his local community. Interestingly, even as firefighters and underwriters narrowed the responsibility for fire protection, the risk of fire nonetheless remained a collective problem—represented by firemen’s bodies and insurer’s economic portfolios—but one increasingly managed by specialists.