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## All That is Solid Bursts into Flame: Capitalism and Fire in the Nineteenth-Century United States

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IN HINDSIGHT, yes, the walls of the whale tank should have been thicker. That was regrettable. So was the construction of the snake cage, which, when the fire started, broke apart and sent its inhabitants slithering down the museum stairs and onto Broadway. The effigy of Jefferson Davis dressed in petticoats flying out the window was, luckily, more distracting than dangerous. Certainly, it was nothing compared to the orangutan at large, the rampaging elephant or the dirty salt water from the burst whale tank flooding the saloon.

And the whales? The whales, reported the *New York Times*, ‘were, of course, burned alive’.<sup>1</sup>

It would be easy to dismiss the 1865 fire that destroyed P. T. Barnum’s American Museum as a freak occurrence—accidents happen, sometimes even to whales. But that wouldn’t explain just how often they happened to Barnum. In his memoirs, the impresario listed five times when his home, museum or circus burned down entirely. And he wasn’t counting near misses, like a blaze that brought his home ‘as near destruction as it well could’ or the failed 1864 attempt by Confederate agents to firebomb his museum. Barnum took perverse glee in the ‘dash & fire which attend my way of living’ and boasted of his readiness to bounce back from disaster.<sup>2</sup> ‘I have been burned out so often’, he reflected, that ‘I am like the singer who was hissed on the stage. “Hiss away”, said he, “I am used to it”’.<sup>3</sup>

Barnum wasn’t the only one used to it. This was a country, as Jill Lepore has written, where ‘daily life was a fire hazard’.<sup>4</sup> The White House famously

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<sup>1</sup> ‘Disastrous Fire’, *New York Times*, 14 July 1865. Other details from P. T. Barnum, *Struggles and Triumphs* (Buffalo, 1889), 242–3.

<sup>2</sup> To George H. Emerson, 21 February 1874, in A. H. Saxon (ed.), *Selected Letters of P. T. Barnum* (New York, 1983), 179.

<sup>3</sup> Barnum, *Struggles and Triumphs*, 287. And see Neil Harris, *Humbug: The Art of P. T. Barnum* (Chicago, 1973).

<sup>4</sup> Jill Lepore, *New York Burning: Liberty, Slavery, and Conspiracy in Eighteenth-Century Manhattan* (New York, 2005), 48.

caught fire in 1814, and, by 1865, so had the Capitol, Mount Vernon, Monticello, the Hermitage, the Confederate White House, the Smithsonian, the Patent Office, the Treasury, the War Department and the New York Stock Exchange. By then, two-thirds of states had suffered fires in their capitols or former capitols, and four had watched their capitols burn down multiple times.<sup>5</sup>

Why did this keep happening? A simple answer leaps out: wood. Whereas much of Eurasia faced acute timber shortages from the early modern period on, the United States contained what Alexis de Tocqueville called an ‘ocean of foliage’, with trees covering its eastern half and western coast.<sup>6</sup> Slack-jawed Europeans regarded its ‘boundless’ forests as ‘sources of ever-fresh wonder’, the poet Emmeline Stuart-Wortley wrote.<sup>7</sup> The British reformer William Cobbett gasped to see New Yorkers felling valuable oaks for firewood, a wastefulness he blamed on an ‘abundance of timber that men knew not how to dispose of’.<sup>8</sup>

Such abundance meant that US material culture, from its architecture to its furnishings, was thoroughly wooden. And, consequently, that it was alarmingly combustible. By around 1900, when statistics were first collected, US fires were eight times costlier per capita than European ones.<sup>9</sup> And those measurements were made at the close of the United States’ wooden age; it was surely even more of a fiery outlier earlier.

In this article, I ask how this important (if understudied) feature of the United States’ nineteenth-century environment relates to an important (and much-studied) feature of its nineteenth-century economy, namely its dramatic adoption of capitalist institutions. Fire isn’t often discussed in the history of capitalism. But it should be, as it connects to a central scholarly debate. One interpretive strain—call this ‘cold capitalism’—sees the market’s spread as

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<sup>5</sup> Counting territorial/colonial capitols. Pre-1900 US urban fire histories, besides studies of individual conflagrations, include John V. Morris, *Fires and Firefighters* (Boston, 1955); Christine Meisner Rosen, *The Limits of Power: Great Fires and the Process of City Growth in America* (Cambridge, Mass., 1986); Margaret Hindle Hazen and Robert M. Hazen, *Keepers of the Flame: The Role of Fire in American Culture, 1775–1925* (Princeton, 1992); Amy S. Greenberg, *Cause for Alarm: The Volunteer Fire Department in the Nineteenth-Century City* (Princeton, 1998); Sara E. Wermiel, *The Fireproof Building: Technology and Public Safety in the Nineteenth-Century American City* (Baltimore, 2000); Mark Tebeau, *Eating Smoke: Fire in Urban America, 1800–1950* (Baltimore, 2003); Scott Gabriel Knowles, *The Disaster Experts: Mastering Risk in Modern America* (Philadelphia, 2011); Jeremy Zallen, *American Lucifers: The Dark History of Artificial Light, 1750–1865* (Chapel Hill, 2019). Although its focus is wildfires, anyone studying fire history accrues an immediate debt to the vast corpus of Stephen J. Pyne.

<sup>6</sup> Oliver Zunz (ed.), *Alexis de Tocqueville and Gustave de Beaumont in America: Their Friendship and Their Travels* (Charlottesville, 2010), 412.

<sup>7</sup> Emmeline Stuart-Wortley, *Travels in the United States, Etc., during 1849 and 1850* (New York, 1851), 113.

<sup>8</sup> William Cobbett, *A Year’s Residence in the United States of America*, 2d edn (London, 1819), 549, 13.

<sup>9</sup> Herbert M. Wilson and John L. Cochrane, *Fire Tax and Waste of Structural Materials in the United States* (Washington, D.C., 1910), tables 1 and 9.

encroaching rationalization. The other, ‘hot capitalism’, instead stresses its volatility.<sup>10</sup>

The question of capitalism’s character has preoccupied students of the nineteenth-century United States. Building on Max Weber’s work, historians working in the ‘cold capitalism’ vein have chronicled the rise of accounting practices, bourgeois values, profit-maximizing mindsets, price convergence, wage labour, standardization, long-distance coordination and calculability. A classic text is William Cronon’s *Nature’s Metropolis*, which describes the grim, machine-like efficiencies introduced by railroads to Chicago and its environs. Recently, the Weberian story has moved south, with historians arguing for slavery’s capitalist nature by pointing to its starkly economic logic, reducing workers to production inputs.<sup>11</sup>

Yet, especially since the 2007–8 financial crisis, historians have emphasized another side of capitalism, the hot side. This work draws on the theorist Karl Polanyi, who noted the unregulated market’s tendency to wreak ‘unprecedented havoc’.<sup>12</sup> The hot capitalism story is one of speculation, calamities, collapses, deadbeats, dubious currencies, get-rich-quick schemes, manias, frauds and panics—sometimes taking the huckster Barnum as a representative figure. ‘At its core, capitalism was little more than a confidence game’, writes Stephen Mihm in *A Nation of Counterfeiters*.<sup>13</sup> Richard White’s *Railroaded*, in a similar tenor, portrays railroads not as inexorable agents of integration, as *Nature’s Metropolis* does, but as mismanaged bastions of corruption.<sup>14</sup>

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<sup>10</sup> On the hot/cold distinction, I’ve been influenced by Stefan Link and Noam Maggor’s ‘three Weberian modes of American history’ in ‘The United States as a Developing Nation: Revisiting the Peculiarities of American History’, *Past and Present*, cclxvi (2020), 281–8.

<sup>11</sup> On slavery: Sven Beckert, *Empire of Cotton: A Global History* (New York, 2014); Edward E. Baptist, *The Half Has Never Been Told: Slavery and the Making of American Capitalism* (New York, 2014); Calvin Schermerhorn, *The Business of Slavery and the Rise of American Capitalism* (New Haven, 2015); Caitlin Rosenthal, *Accounting for Slavery: Masters and Management* (Cambridge, Mass., 2018). Other recent, representative histories of ‘cold capitalism’ include Dan Bouk, *How Our Days Became Numbered: Risk and the Rise of the Statistical Individual* (Chicago, 2015); Eli Cook, *The Pricing of Progress: Economic Indicators and the Capitalization of American Life* (Cambridge, Mass., 2017); Michael Zakim, *Accounting for Capitalism: The World the Clerk Made* (Chicago, 2018); Lukas Rieppel, *Assembling the Dinosaur: Fossil Hunters, Tycoons, and the Making of a Spectacle* (Cambridge, Mass., 2019).

<sup>12</sup> Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (New York, 1944), 39. Joseph A. Schumpeter, more sympathetically, views capitalism’s turbulence as a ‘perennial gale of creative destruction’ in *Capitalism, Socialism, and Democracy* (New York, 1942), 87.

<sup>13</sup> Stephen Mihm, *A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States* (Cambridge, Mass., 2007), 11.

<sup>14</sup> Richard White, *Railroaded: The Transcontinentals and the Making of Modern America* (New York, 2011). Other recent, representative histories of ‘hot capitalism’ include Scott A. Sandage, *Born Losers: A History of Failure in America* (Cambridge, Mass., 2005); Jane Kamensky, *The Exchange Artist: A Tale of High-Flying Speculation and America’s First Banking*



Fig. 1. Hot capitalism. The *Moselle*, one of the Mississippi's fastest steamers, operated for less than a month before exploding in 1838, killing more than 150. (John H. Lovejoy, from the collection of the Cincinnati & Hamilton County Public Library)

Neither Weber nor Polanyi treated capitalism as exclusively hot or cold, and it helps to see the two types not as rival interpretations but as competing trends. Jonathan Levy's *Freaks of Fortune* does just that: the nineteenth-century market generated 'radical uncertainty', Levy writes, but economic leaders successfully staged a 'countermovement' to 'devolatilize American capitalism'.<sup>15</sup> Darren Dochuk's *Anointed with Oil* similarly finds in the petroleum industry a boom-and-bust ethic of chance contending with a managerial ethic of control, with the latter prevailing by the twentieth century.<sup>16</sup>

In this article, I would like to set the 'history of capitalism' literature on fire, not in the sense of rejecting it but of introducing flames to it. I make two related arguments. First, the contest between hot and cold capitalism that Levy and

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*Collapse* (New York, 2008); Scott Reynolds Nelson, *A Nation of Deadbeats: An Uncommon History of America's Financial Disasters* (New York, 2012); Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (Cambridge, Mass., 2013) (though it contains cold-capitalism strains); Jessica M. Lepler, *The Many Panics of 1837: People, Politics, and the Creation of a Transatlantic Financial Crisis* (Cambridge, 2013); Joshua D. Rothman, *Flush Times and Fever Dreams: A Story of Capitalism and Slavery in the Age of Jackson* (Athens, Ga., 2014); Edward J. Balleisen, *Fraud: An American History from Barnum to Madoff* (Princeton, 2017).

<sup>15</sup> Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge, Mass., 2012), 19, 313. See also the transition from a hot 'Age of Commerce' to a cold 'Age of Capital' described in Jonathan Levy, *Ages of American Capitalism: A History of the United States* (New York, 2021).

<sup>16</sup> Darren Dochuk, *Anointed with Oil: How Christianity and Crude Made Modern America* (New York, 2019). Similarly, see Jackson Lears, *Something for Nothing: Luck in America* (New York, 2003).

Dochuk rightly describe wasn't merely institutional or ideological; it was also environmental. In the combustible United States, fire was a conspicuous sign of economic volatility. Although the whole country was fire-prone, hot capitalism worked as an accelerant, intensifying fires particularly where commodification reached furthest. Flaming cities—and fricasseed whales—illustrated the consequences of an uncontrolled market.

One might expect hot capitalism's spectacular fires to be universally reviled, but they weren't. Some people, like Barnum, welcomed them. They recognized fire's power to disrupt social hierarchies, and they saw opportunity in the ashes. Such pyrophilia was understandably controversial, though, and the richest men of the Gilded Age strenuously opposed it. This article excavates the clash between pyrophiles and pyrophobes over the meaning of fire—and thus over how the economy should operate. That clash, I argue, provides an explanatory context for late-nineteenth-century cultural practices from insurance to architecture to speculative fiction. In one corner economic incumbents, seeking stability, reached for the hoses, while in the other economic insurgents, with an appetite for destruction, fanned the flames.

THAT CAPITALISM takes an environmental toll is no secret. The clearing of forests, overfishing of oceans and fouling of the air are well-known consequences of unchecked profit-seeking. The historical relationship between capitalism and fire, however, is less understood. Although the capitalist economy is based largely on burning things, fire is curiously peripheral to histories of it.<sup>17</sup>

That may be because in Western Europe, the canonical site of capitalist transformation, fire was retreating when high capitalism arrived. Facing painful timber shortages, Europeans switched from forests to mines and quarries—from the living landscape to the dead one—for their materials and fuel. By the eighteenth century, what Eric Jones calls the 'brick frontier' had overspread much of the continent, replacing wooden structures with fire-resistant ones.<sup>18</sup> Industrialization furthered the transition. Coal replaced wood as a fuel, and iron and steel replaced it as a material; a major achievement of the industrial

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<sup>17</sup> The exception is recent writing on climate change that accuses capitalism of setting the planet 'on fire': e.g., Naomi Klein, *On Fire: The (Burning) Case for a Green New Deal* (New York, 2019); Bill McKibben, 'In a World on Fire, Stop Burning Things', *New Yorker*, 18 March 2022. Such writing, however, engages with fire more metaphorically than substantively and misses the crucial fact that fire worldwide is decreasing. Stefan H. Doerr and Cristina Santín, 'Global Trends in Wildfire and Its Impacts: Perceptions versus Realities in a Changing World', *Philosophical Transactions of the Royal Society B*, cclxxi (2016): 20150345, [dx.doi.org/10.1098/rstb.2015.0345](https://doi.org/10.1098/rstb.2015.0345).

<sup>18</sup> Eric Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia*, 3d edn (New York, 2003), 34.

revolution, in fact, was weaning Europeans off wood. Things still burned in industrial Europe, but bottled up in boilers, out of sight.

The United States, by contrast, stuck with wood. ‘It is remarkable what a value is still put upon wood even in this age’, exclaimed Henry David Thoreau in 1854.<sup>19</sup> Whereas timber-starved Europeans substituted coal and iron for wood, North Americans did the opposite, using cheap wood for everything possible. Doors turned on wooden hinges, the poor ate with wooden cutlery and architectural styles imported from Europe were transposed into timber (Tocqueville recorded his disappointment on realizing that the marble columns he’d spotted adorning New York’s classical edifices were just ‘painted wood’).<sup>20</sup> The Atlantic marked a divide in material culture. On one shore, iron, brick and stone. On the other, wood.<sup>21</sup>



Fig. 2. Georgian architecture in the two Cambridges: brick Brook House in Cambridgeshire, U.K., and wooden Longfellow House (site of a famous 1861 fire) in Cambridge, MA. (Michael Trolove/National Park Service)

Even bastions of industrial modernity—machinery, cities and infrastructure—were in the nineteenth-century United States resolutely wooden, most notably the railways. Although known in Britain as ‘iron roads’, railways in the United States relied ‘to an almost unbelievable degree’ on timber, the historian Brooke Hindle has written.<sup>22</sup> Their engines were metal but their ties, cars, telegraph poles, stations, train sheds and brake shoes were wood. So was their fuel; wood-burning locomotives spewed an ‘incessant shower of large sparks’, an alarmed British traveller wrote (she counted thirteen holes in her

<sup>19</sup> Henry David Thoreau, *Walden* (1854; New York, 1904), 201.

<sup>20</sup> Alexis de Tocqueville, *Democracy in America*, 3d edn, 2 vols. (New York, 1840), i, 53.

<sup>21</sup> Brooke Hindle (ed.), *America’s Wooden Age: Aspects of Its Early Technology* (Tarrytown, 1975); Brooke Hindle (ed.), *Material Culture of the Wooden Age* (Tarrytown, 1981); William Cronon, *Changes in the Land: Indians, Colonists, and the Economy of New England* (New York, 1983); Joachim Radkau, *Wood: A History*, trans. Patrick Camiller (Cambridge, 2012); Eric Rutkow, *American Canopy: Trees, Forests, and the Making of a Nation* (New York, 2012).

<sup>22</sup> Hindle, *Material Culture of the Wooden Age*, 9. See, in that volume, John H. White, ‘Railroads: Wood to Burn’.

gown after one trip).<sup>23</sup> Still more dangerous were the omnipresent wooden bridges and, worse, the wooden rails occasionally in use. Their perils were obvious, but in a tree-stuffed country they were tantalizingly cheap.



Fig. 3. Excavated nineteenth-century wooden water mains. (Philadelphia Water Department Historical Collection)

Ubiquitous wood meant unabating fire. This is, in a sense, old news, in that US urban histories are filled with ‘great fires’. Still, it’s bracing to consider them all together. Although fully measuring fire’s toll is impossible, we can tally major fires, large enough to destroy twenty or more structures or cause more than \$200,000 (unadjusted) in damage. Such fires made national news and seared themselves into local memory. In the 1850s, the country endured infernos of that size, on average, at least 1.5 times a month.<sup>24</sup> And they kept coming, including city-wrecking conflagrations in Charleston (1861, 1,300 buildings), Portland (1865, 1,500 buildings), Chicago (1871, 17,450 buildings), Boston (1872, 750 buildings), Galveston (1885, 550 buildings), Seattle (1889, 550 buildings), Bakersfield (1889, 200 buildings), Spokane (1889, 25 blocks), Bismarck (1898, hundreds of buildings), Jacksonville (1901, 1,700 buildings), Baltimore (1904, 2,300 buildings) and San Francisco (1906, 28,150 buildings).

This far outstripped what Western Europeans experienced. If in the 1850s the United States suffered fires destroying twenty or more buildings once every two or three weeks, England, with a similar population size, suffered them in its provincial towns once every two or three *years* (‘provincial’ meaning other than London, though London’s large fires had largely stopped by the 1830s). By the 1880s and 1890s, when the United States was surrendering whole

<sup>23</sup> Harriet Martineau, *Society in America*, 2 vols. (New York, 1837), ii, 8.

<sup>24</sup> Daniel Immerwahr, ‘Large Urban Fires in the 1850s United States’, dataset, <https://arch.library.northwestern.edu/concern/datasets/5t34sk10d>.

neighbourhoods to the flames, researchers couldn't find a single English provincial fire that had destroyed more than ten homes.<sup>25</sup>

In Europe, one can speak of an organic, wooden culture giving way to an industrial, capitalist one.<sup>26</sup> Not so in the United States. That country's wooden age extended throughout the nineteenth century, as did its fires. Capitalism and conflagration were historically separate in Europe; in the United States, they walked arm in arm.<sup>27</sup>

THE ENGLISH LANGUAGE hints at connections between fire and the market. The word *consume*, for centuries, has referred to both burning and purchasing. But new nineteenth-century US phrases—*fire sale* and *fire*, in the sense of dismissing an employee—associated combustion particularly with economic distress. To be *burned out*, before it meant being psychologically overwhelmed, referred to a more literal setback.<sup>28</sup>

These linguistic links between the overheated economy and fiery environment were apt. The theorist Polanyi described the tendency of markets, if left unchecked, to strain social and natural environments to the point of catastrophe.<sup>29</sup> In the nineteenth-century United States, those catastrophes frequently came as conflagrations. This was a country where people lived and worked in combustible structures yet used flames for heat, light, cooking and laundering. A great deal of protective labour—in the form of laws, norms, precautions, surveillance, practical advice and communal sanctions—was required for things *not* to catch fire. Whenever the fast-moving market eroded the basis for that collective action, flames erupted. Fires, William Novak writes, were thus the 'apotheosis of unregulated, disordered society'.<sup>30</sup>

In 1906, a large earthquake struck San Francisco. Buildings tumbled, yet most of the damage came from the resulting three-day blaze. Merely shaking the wooden city for a minute, it turned out, sufficed to undo the careful segregation of flames from combustibles, igniting fires everywhere. Commodification worked similarly. Though it was a social rather than a physical disruption, and

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<sup>25</sup> E. L. Jones, S. Porter and M. Turner, *A Gazetteer of English Urban Fire Disasters, 1500–1900* (Norwich, 1984), 26, 45; David Garrioch, '1666 and London's Fire History: A Re-Evaluation', *The Historical Journal*, xlix (2016), 323.

<sup>26</sup> Influential articulations of that narrative are Werner Sombart, *Der moderne Kapitalismus*, 3 vols. (1902; Munich, 1917), esp. chap. 71, and Lewis Mumford, *Technics and Civilization* (New York, 1934).

<sup>27</sup> A valuable reflection on a similar case is Gregory Clancey, 'Seeing Timber for the Forest: The Wood in Japanese Capitalism', in Greg Bankoff and Peter Boomgaard, *A History of Natural Resources in Asia: The Wealth of Nations* (New York, 2007), 123–42.

<sup>28</sup> *Oxford English Dictionary*, [www.oed.com](http://www.oed.com).

<sup>29</sup> Polanyi, *Great Transformation*.

<sup>30</sup> William J. Novak, *The People's Welfare: Law and Regulation in Nineteenth-Century America* (Chapel Hill, 1996), 55. Similarly, Stephen J. Pyne links rapid social change to wildfire in *Fire in America: A Cultural History of Wildland and Rural Fire* (Princeton, 1982), 136.



though it was chronic rather than acute, it had the same jostling effect as earthquakes.

In *The Great Transformation*, Polanyi calls land, labour and money ‘fictitious commodities’.<sup>31</sup> By this he means that they are complex phenomena that cannot be bought and sold as commodities without courting disaster. Conveniently, Polanyi’s three fictitious commodities correspond well to the nineteenth century’s chief fire hazards.

IN THE CASE of land, capitalism’s link to fire is clear. The growing towns of the settler republic were communities, yet they were also commodities, parcelled up, mortgaged and speculated upon. Rapid property transfers and speedy settlement militated against the social protections that kept fires at bay. Slapdash wooden construction, crowded neighbourhoods, primitive government, underdeveloped infrastructure and lax or unenforced building regulations all made combustion a perpetual threat.

So it went in the most famously flame-stricken city on the map, the lumber-processing hub of Chicago. The city had shot up in a fury of speculation, with migrants arriving before buildings existed to house them. One visitor stepping ashore from Lake Michigan in 1833 recalled facing a barrage of questions: ‘Are you a carpenter?’ ‘Are there any carpenters on board?’<sup>32</sup> Few were, and so Chicago’s homes—commonly built in a week—were hasty hammer-and-nail jobs with timber frames and plank walls. Whereas European homes required joiners, carvers and masons, Chicagoans honed a folk form: the ‘balloon frame’, a simple cage that nearly anyone could erect. Such buildings, however, lacked fire stops. ‘In the event that any part of the structure started to burn, the walls quickly began to act as flues, and the building became an inferno’, William Cronon writes. ‘Chicagoans would learn this lesson all too well during the Great Fire’.<sup>33</sup>

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<sup>31</sup> Polanyi, *Great Transformation*, chap. 6.

<sup>32</sup> Paul E. Sprague, ‘The Origin of Balloon Framing’, *Journal of the American Society of Architectural Historians*, xl (1981), 318.

<sup>33</sup> Cronon, *Nature’s Metropolis*, 179.

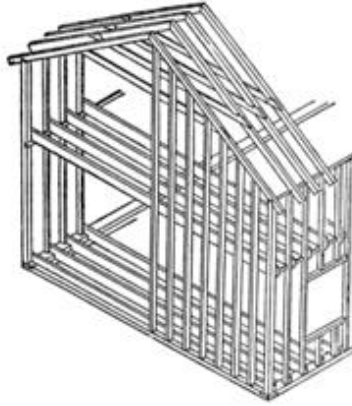


Fig. 4. Built for Speed. Chicagoans mastered light stud frame construction, ideal for when materials were cheap and skilled labour was expensive. The famous balloon frame, substituting nails for joinery, could be hammered quickly together by unskilled men. (George E. Woodward, *The Country Gentleman*, 1860)

Chicagoans also went in for wooden roads, which, in hindsight, appear the height of ramshackle, combustible folly. In 1844, New York legislators chartered a plank road connecting Syracuse to its rural environs. The Syracuse road, made of hemlock planks placed over wooden tracks—without even nails to secure them—started a national craze. Cheap plank roads promised to hypercharge local economies, and fifteen states chartered more than 1,300 roads within a few years.<sup>34</sup>

They should have waited to see how Syracuse’s road turned out. Plank roads deteriorated quickly—far faster than predicted. Yet even the bursting of this timber bubble didn’t prevent two more misbegotten manias for wooden paving from fizzing up: creosote-impregnated wood pavement blocks in the 1860s and cedar blocks in the 1880s. Awash in lumber, Chicago was particularly susceptible. During its 1871 fire, miles of wooden streets and especially sidewalks carried the flames from block to block.<sup>35</sup> ‘It was as if’, the historian Carl Smith writes, ‘Chicagoans had purposely intended to construct a city they wished to burn down’.<sup>36</sup>

Still, Chicago was a paragon of careful planning compared to the instant towns built around mineral discoveries. California’s started when landowner John Sutter hired the carpenter James Marshall to make a sawmill, and Marshall uncovered gold while building it. So frenzied was the ensuing rush that incoming ships, rather than turning around, were abandoned, dismantled and drawn to

<sup>34</sup> Daniel B. Klein and John Majewski, ‘Plank Road Fever in Antebellum America: New York State Origins’, *New York History*, January 1994, 48.

<sup>35</sup> See Don H. Berkebile, ‘Wooden Roads’, in Hindle (ed.), *Material Culture of the Wooden Age*, 129–58; Carl Abbott, ‘Plank Roads and Wood-Block Pavements’, *Journal of Forest History*, xxv (1981), 216–8; and *ibid.*

<sup>36</sup> Carl Smith, *Chicago’s Great Fire: The Destruction and Resurrection of an Iconic American City* (New York, 2020), 223.

shore as impromptu stores, hotels and saloons. Lean-tos and wigwams eventually gave way to flimsy wooden sheds, sometimes built from tobacco boxes or repurposed ship's planks.

The largest individual find, the 54-pound 'Dogtown Nugget', was named for a nearby shantytown. Yet in the dizzying days of the gold rush, *every* town was essentially a shantytown. One visitor described San Francisco as 'a mass of wooden and canvass buildings, the very look of which suggested the idea of a conflagration'.<sup>37</sup>



Fig. 5. Sutter's Mill, with carpenter James Marshall standing outside it, exemplifies the hasty wooden construction favoured by nineteenth-century settlers. (Library of Congress)

Did it burn? Reader, it burned. On Christmas Eve, 1849, a fire in a gambling den spread and incinerated a large portion of the young city. Then came three major fires in 1850, each torching the bulk of San Francisco's shanties (the plank roads didn't help). In 1851, on the anniversary of one of the 1850 blazes, a three-day fire burned 1,500 structures. The next month, another destroyed the city hall and city hospital. Still, the scorched settlers were dauntless. 'New buildings were begun to be erected while the sites of the old were hot with smoking ashes', wrote an observer. 'While even one extremity of the old tenement was still blazing, people were planning the nature of the new erection,

<sup>37</sup> J. D. Borthwick, *Three Years in California* (Edinburgh, 1857), 86.

and clearing away the embers and rubbish from the other scarcely extinguished end'.<sup>38</sup>

The miner who found the Dogtown Nugget built a hotel—an improvement on the slipshod construction after which his nugget was named. That hotel, however, burned down. Twice.<sup>39</sup>

Such was life in mining towns. Punishing fires wracked San Francisco, Sacramento, Stockton, Nevadaville, Denver, Central City, Mineral Point, Galena, Truckee, Marysville, Placerville, Georgetown, Sonora, Grass Valley and their ilk—often multiple times. The pattern held in the Pennsylvania oil patch, where, reformer Ida Tarbell noted, fires were a 'regular feature of the business'.<sup>40</sup> Part of the problem was hurried construction, but residents also suspected that cash-grab spirit might be motivating arsonists intent on plunder. Either way, it's not surprising that both James Marshall's and John Sutter's homes burned down.

POLANYI'S SECOND 'fictitious commodity', labour, is more complicated. In a fire-prone land, all shared a duty to prevent, extinguish and refrain from setting fires. Yet as workers became proletarians, losing social standing and autonomy, their sense of communal responsibility waned, too.

Would they contemplate arson? They occasionally did in Europe. English farmworkers protesting deteriorating labour conditions set their employers' haystacks, barns and sometimes houses alight. The Captain Swing uprising in 1830 was the most famous episode, but arson extended from the 1820s to the 1850s. In Paris in 1871, communards staged a working-class rebellion, seized the city and, before surrendering, burned major buildings. They destroyed the Tuileries Palace and started fires in the Louvre, Palais-Royal and Notre-Dame cathedral.

There were flickers of similar incendiarism among US wage workers. The massive railroad strikes of 1877 and 1894 saw hundreds of boxcars burned, though strikers insisted that these were false-flag operations instigated by railroad owners.<sup>41</sup> In 1886, during a rally for strikers in Haymarket Square in Chicago, someone threw a bomb at the police. Before being sentenced to death for inciting that lethal explosion, the labour agitator August Spies warned Chicago's authorities that a 'subterranean fire' of rebellion would soon 'blaze up'.<sup>42</sup> It was

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<sup>38</sup> H. W. Brands, *The Age of Gold: The California Gold Rush and the New American Dream* (New York, 2002), 255.

<sup>39</sup> Alastair Gee and Dani Anguiano, *Fire in Paradise: An American Tragedy* (New York, 2020), 16.

<sup>40</sup> Ida M. Tarbell, *The History of the Standard Oil Company*, 2 vols. (New York, 1904), i, 26.

<sup>41</sup> Louis Adamic, *Dynamite: The Story of Class Violence in America* (New York, 1931), 32, 120–1.

<sup>42</sup> William Holmes (ed.), *The Chicago Martyrs: The Famous Speeches of the Eight Anarchists in Judge Gray's Court* (San Francisco, 1899), 7.

a fitting metaphor. In 1884, striking miners in New Straitsville, Ohio, had pushed burning mine cars down into a mine, igniting an underground coal seam fire that was still burning two years later when Spies made his speech (astonishingly, it continues to smolder today).

Nevertheless, these were just flickers; there's no evidence that strikers ever set a large fire. They had the means and opportunity yet don't appear to have committed the crime. Perhaps they took the view that people in wooden houses shouldn't play with matches, especially not in a country where a burning building could easily start a conflagration. Whatever the reason, the historian Beverly Gage has noted the 'remarkable infrequency' with which late-nineteenth-century wage workers resorted to spectacular violence.<sup>43</sup> When the anarchist Alexander Berkman shot Carnegie Steel's chairman, Henry Clay Frick, during the 1892 Homestead Strike, he described the assassination attempt as 'the first terrorist act in America'.<sup>44</sup>

Yet Berkman, in his grandiose sense of his own historical significance, overlooked something important. For centuries, enslaved workers had set fires. And unlike the European arsonists who torched individual buildings, they burned whole neighbourhoods. Free workers might have held back out of concern for the consequences, but not all enslaved ones did. For people owned as property, commodification corroded even that fundamental social pact.

In 1820, Thomas Jefferson famously described debates over slavery as a 'fire bell in the night', which 'filled me with terror'.<sup>45</sup> It was a terror he knew all too well. The year before, he'd been injured in a suspicious, two-day rash of plantation fires around Charlottesville that had killed three people and burned his primary estate, Monticello. Nor was Jefferson alone. Leading slaveholders George Washington, Andrew Jackson and John C. Calhoun all faced fires in their homes that were blamed on slaves. In 1864, Jefferson Davis's enslaved servants lit a fire in the Confederate White House—while the Davises were inside.<sup>46</sup>

It didn't stop there. Nearly every major slave conspiracy or revolt—the New York City Revolt (1712), Stono Rebellion (1739), New York Conspiracy (1741), Pointe Coupée Conspiracy (1792), Gabriel Prosser Rebellion (1800), German Coast Uprising (1811), Denmark Vesey Conspiracy (1822) and Civil War's

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<sup>43</sup> Beverly Gage, *The Day Wall Street Exploded: A Story of America in Its First Age of Terror* (New York, 2009), 5.

<sup>44</sup> Alexander Berkman, *Prison Memoirs of an Anarchist* (New York, 1912), 59.

<sup>45</sup> To John Holmes, 22 April 22 1820, *Founders Online*, [founders.archives.gov](http://founders.archives.gov).

<sup>46</sup> This and following paragraphs from Daniel Immerwahr, 'Burning Down the House: Slavery and Arson in America', *Journal of American History*, forthcoming. Also, rural arsonists set wildfires in response to elite conservation measures. Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley, 2001), chap. 3.

uprisings (1861–65)—involved arson. The sole exception, Nat Turner’s 1831 rebellion, can be partly explained by Turner’s commitment to stealth.

The real damage, however, wasn’t from the notorious revolts but the harrowing fires that tormented slave cities, especially ports where slaves were sold. The suspicion that the formerly enslaved carpenter Denmark Vesey had conspired to torch Charleston led nervous officials to hang him and more than thirty of his alleged co-conspirators. They had reason to be nervous. Charleston, the antebellum city with the largest proportion of slaves, incurred four times the damage from large fires than its peer cities with few or no slaves, suggesting that numerous unknown Veseyes actually did set fires. New Orleans, the antebellum city with the largest number of slaves, endured three times the damage from large fires as its non-slaveholding peers. Statistics such as these prompted the American Fire Insurance Company, in 1820, to stop issuing policies in slave states.

POLANYI NAMED money as his third fictitious commodity. This seems counterintuitive—isn’t money inherently commodified? Yes, but Polanyi’s worry was that the instruments of exchange would become instruments of speculation. This was an acute possibility in the nineteenth-century United States, as its ‘facts-on-the-ground’ economy transformed into a ‘facts-on-paper’ one, Michael Zakim writes. Zakim notes the ‘infrastructure of pens and paper’ made that abstract new economy possible: bills, deeds, receipts, inventories, letterbooks, insurance policies, credit reports and fee schedules.<sup>47</sup>

All that burns. And the more the economy became numbers on paper, the greater the temptation to set that paper alight. The market’s winners had little use for arson, but its losers—shackled in what the novelist Edward Bellamy called ‘parchment bondage’—sometimes did.<sup>48</sup>

Repositories for deeds were especially inviting targets. Genealogical researchers use the term ‘burned counties’ to refer to places where official documents have been lost. Such counties are legion; for example, one third of Arkansas counties suffered large, records-destroying courthouse fires in the nineteenth century.<sup>49</sup> In 1845, New Yorkers bent on document destruction—quite likely bankrupts seeking to eradicate records of their debts—tried to torch the clerk’s office in the US State Court three times.<sup>50</sup> In 1833, a clerk set the US Treasury Building alight to erase evidence implicating him in pension fraud; the

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<sup>47</sup> Michael Zakim, ‘Paperwork’, *Raritan*, xxxiii (2014), 37, 56.

<sup>48</sup> Edward Bellamy, *Equality* (New York, 1897), 102.

<sup>49</sup> Jeff Svare, ‘United States Counties with Records Loss’, [user.xmission.com/~jsvare/record\\_coverage/US\\_County\\_Records\\_Loss.html](http://user.xmission.com/~jsvare/record_coverage/US_County_Records_Loss.html).

<sup>50</sup> ‘Attempt to Fire the United States State Courts’, *New York Herald*, 9 July 1845.

flames consumed nearly the whole building, propelling charred paper and wood over the city.<sup>51</sup>

Insurance fraud was a more common motive. Property owners could unburden themselves of bad investments by staging ‘accidental’ fires. Symbolically, this was one of the purest economic acts possible: complex, hard-to-monetize objects were released from their physical forms to become abstract value. The head of a fire insurance company described arson as ‘the shadow of the mercantile spirit, which walks upward and onward on embers’.<sup>52</sup>

That shadowy spirit suffused the financial capital, New York. The city endured massive fires in 1835 and 1845, each centring on the financial district and destroying hundreds of buildings. It also suffered smaller fires constantly. ‘Every traveller who has visited this city has spoken of the numerous fires’, wrote Frederick Marryat. Many, he learned, stemmed from insurance fraud.<sup>53</sup> Charles Dickens, noting New York’s incessant fires, reported them to be a form of ‘speculation and enterprise’.<sup>54</sup> An 1840s commission estimated that about half were intentionally set.<sup>55</sup> In the early twentieth century, the chief of New York’s fire department put that fraction at a quarter. At the end of fashion season, he noted, warehouses containing obsolete stock regularly burned down.<sup>56</sup> Arson, in other words, was a way of cashing out.

One might think that insurance companies wouldn’t abide fraud. Certainly, they sought to underwrite properties for no more than their market values, thus preventing policyholders from profiting by fire. But the insurance market offered too many opportunities for illicit entrepreneurship. Premium-seeking agents, placers and brokers found ways to load insurers up with bad risks. ‘The torch of the incendiary is kindled in the office of the underwriter’, explained a journalist.<sup>57</sup> With overinsurance rampant, policyholders had powerful incentives to incinerate unprofitable investments.<sup>58</sup>

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<sup>51</sup> John A. Munroe, *Louis McLane: Federalist and Jacksonian* (New Brunswick, 1973), 382.

<sup>52</sup> Thomas S. Chard, ‘Morals and Moral Hazard as Related to Underwriting’, *Proceedings of the Sixth Annual Meeting of the Fire Underwriters’ Association of the Northeast* (Chicago, 1875), 31.

<sup>53</sup> Frederick Marryat, *Diary in America*, 2 vols. (Philadelphia: Carey and Hart, 1839), i, 37–8.

<sup>54</sup> Charles Dickens, *Works*, ed. Andrew Long, 32 vols. (New York, 1898), xxviii, 108.

<sup>55</sup> J. S. Buckingham, *The Eastern and Western States of America*, 2 vols. (London, 1842) i, 559.

<sup>56</sup> John Kenlon, *Fires and Fire-Fighters: A History of Modern Fire-Fighting* (New York, 1913), 106, 95.

<sup>57</sup> Victor Jew, ‘The “Meanest Man in the World”: Arson in the United States, a History of Legal and Social Responses to Incendiarism, 1870–1920’ (Univ. of Wisconsin–Madison Ph.D. thesis, 1994), 69.

<sup>58</sup> Andrew P. Peabody, *Fires in American Cities* (Boston, c. 1874); Harry Chase Brearley, *The History of the National Board of Fire Underwriters: Fifty Years of a Civilizing Force* (New York, 1916); Jew, ‘Meanest Man’.

Such cash grabs illustrated the dangers profit-seeking posed. Unsurprisingly, insurance arson was widely blamed on the bogeymen of unrestrained capitalism: Jews. The historian Jenna Weissman Joselit found that, in the 1890s, nearly half of the *New York Times*'s arson stories named Jewish perpetrators.<sup>59</sup> The antisemitic trope of Jews as arsonists, now forgotten, was once pervasive, with the popular press making incendiary puns on Jewish names: *Burnheimer*, *Smokenstein*, *Flameski* or *Dr. Burnupsky*. Even within the literal-minded insurance industry, 'Jew risk' was a technical term for properties presenting a danger of arson. Such stereotypes were corrosive, but they were also expressive. What they expressed was a popular association between the hazards of the market and those of the environment.<sup>60</sup>



Fig. 6. J. S. Pughe's antisemitic portrayal of an arsonist defrauding insurers (*Puck*, 1895; Library of Congress)

FIRE COUNTRY was not an easy place to live. The poet Henry Wadsworth Longfellow suffered injuries and lost his wife, Fanny, in an 1861 fire. 'How I am alive after what my eyes have seen, I know not', he mourned.<sup>61</sup> The story—plausible though uncertain—is that he grew his famous beard to cover his facial scars from the fire. The poem he wrote eighteen years after Fanny's 'martyrdom

<sup>59</sup> Jenna Weissman Joselit, *Our Gang: Jewish Crime and the New York Jewish Community, 1900–1940* (Bloomington, 1983), 37.

<sup>60</sup> Michael N. Dobkowski, *The Tarnished Dream: The Basis of American Anti-Semitism* (Westport, Conn., 1979), 59–63; Jew, 'Meanest Man', chap. 4; Britt Tevis, 'Racial Capitalism and U.S. Jewry: The Nineteenth-Century Fire Insurance Industry's Mythical Jewish Arsonist', manuscript.

<sup>61</sup> Nicholas A. Basbanes, *Cross of Snow: A Life of Henry Wadsworth Longfellow* (New York, 2020), 329.



of fire’, ‘The Cross of Snow’, lives on as one of the era’s most heart-wrenching expressions of loss.<sup>62</sup>

Yet sorrow wasn’t the dominant cultural response. What’s striking, rather, is how untroubled—almost enthusiastic—many fire victims seemed. A British traveller watching Albany merrily rebuild after six hundred structures burned was astonished by the ‘striking trait in the American character, to “try again”’.<sup>63</sup> Perhaps it was this trait that led the *Chicago Tribune*, after losing its office in the 1871 inferno, to enjoin Chicagoans in its next issue to ‘Cheer Up’. The fire—destroying nearly 18,000 buildings—was just ‘another sign of Chicago’s greatness’.<sup>64</sup>

Chicagoans took strange pride in having endured what was hitherto the largest urban fire in American history. The city’s much-admired flag has four stars, one representing the 1871 fire. It may seem curious for a city to vexillologically honour its worst day, yet it’s not uncommon. Atlanta, Lawrence, San Francisco and Portland, Maine, all have flags featuring phoenixes, representing their refusal to flinch in the face of their own great fires (there are today 27 populated US places with *Phoenix* in their names).<sup>65</sup> Detroit’s flag, less subtle, depicts a woman in front of a burning city beside the words *Speramus meliora, resurget cineribus*—‘We hope for better things; it shall arise from the ashes’. And the national anthem, ‘The Star-Spangled Banner’ (1814), celebrates a fort that improbably survived an incendiary bombardment.



Fig. 7. One star on Chicago’s flag represents its 1871 fire. The others represent Fort Dearborn (destroyed by fire), the World’s Columbian Exposition of 1893 (also destroyed by fire) and the Chicago World’s Fair of 1933–34. Three of the four stars thus reference fires.

The most popular novel to emerge from the fires—indeed, ‘one of the top bestsellers of the late nineteenth century’, according to Carl Smith—was E. P.

<sup>62</sup> Charles C. Calhoun, *Longfellow: A Rediscovered Life* (Boston, 2004), 221–2, 230.

<sup>63</sup> Charles Casey, *Two Years on the Farm of Uncle Sam* (London, 1852), 60.

<sup>64</sup> Smith, *Chicago’s Great Fire*, 136.

<sup>65</sup> US Geological Survey, Geographic Names Information System, [edits.nationalmap.gov/apps/gaz-domestic/public/search/names](https://edits.nationalmap.gov/apps/gaz-domestic/public/search/names).

Roe's *Barriers Burned Away* (1872).<sup>66</sup> Written after Chicago's 1871 fire, it suggests why Chicagoans were so upbeat. The story focuses on Dennis Fleet, a penniless farmer's son who moves to Chicago to seek his fortune. Starting with menial jobs, he soon rises in his firm, falling in love with his boss's daughter, Christine Ludolph. Yet however hard he works, he cannot marry her, as she is aristocratic, with ancestral estates in Germany and a plan to marry a baron. The 'most impassable barriers' separate the two, Roe writes. Dennis's rise is hopelessly blocked.<sup>67</sup>

Or, it would be, were it not for fire. The novel culminates in the Great Fire of 1871, destroying Chicago's business district and many of its lavish homes. The fire not only lets Dennis play the hero, it incinerates Christine's family assets. As 'a simple American girl', she is finally eligible for marriage. For Dennis, she exclaims, falling into his arms, 'now EVERY BARRIER IS BURNED AWAY'.<sup>68</sup>

There is, as they say, a lot to unpack here. That Roe would respond to a catastrophe with a cheery romance was bizarre. Still more bizarre, the romance was a runaway bestseller; Smith reports that it sold an astonishing one million copies.<sup>69</sup> The book's cheer derives from two factors: Dennis's rise and Chicago's fall. *Barriers Burned Away* is at once a bourgeois plea for honest hard work and a diabolical dance on the smoldering ruins of landed wealth. The two are, in fact, tied. It's precisely the humbling of the city's propertied class that opens the way—romantically and economically—for Dennis to take his rightful place.

*Barriers Burned Away* may seem like a fiendish response to the sermonizing rags-to-riches stories that Horatio Alger Jr. was publishing. Yet even Alger recognized fire's possibilities. Although his previous novels had spurned fire as the result of neglect, malice or greed, in the aftermath of Chicago's conflagration, Alger wrote his own paean to fire, *Slow and Sure*. It appeared in 1872, the same year as *Barriers Burned Away*.

*Slow and Sure* starts with the young hero, Paul, visiting P. T. Barnum's museum. Alger had written Barnum into his novels before; the hoaxer appears in Alger's breakout book, *Ragged Dick* (1868), and in twelve subsequent works—always positively. In *Slow and Sure*, Barnum's fire-prone museum functions as foreshadowing, for, upon returning from it, Paul finds his own 'large tenement house' aflame. Paul, however, is unfazed. 'We can get another home at once', he announces instantly. He spends the night 'celebrating the fire', and rightly so. The fire spurs him on, inaugurating a spate of 'remarkable good luck' that whisks his family out of poverty.<sup>70</sup>

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<sup>66</sup> Smith, *Chicago's Great Fire*, 119.

<sup>67</sup> E. P. Roe, *Barriers Burned Away* (London, 1874), 15, 108.

<sup>68</sup> *Ibid.*, 486.

<sup>69</sup> Smith, *Chicago's Great Fire*, 119.

<sup>70</sup> Horatio Alger Jr., *Slow and Sure* (Philadelphia, 1872), 28, 27, 34, 67.

Alger's *Slow and Sure* differs from Roe's *Barriers Burned Away* in that what burns is a tenement, not mansions. Yet both novels understand fire as generating economic churn, shaking things up enough to propel strivers like Paul or Dennis Fleet to higher stations. Barnum recognized this possibility, too. Though famous for his lecture, 'The Art of Money-Getting', Barnum acknowledged that he was equally competent to speak on 'The Art of Money-Losing'. What distinguished Barnum wasn't his wealth but his ability to recover from setbacks. In his telling, they hardly ruffled him; he learned of his devastating 1865 fire by a telegram delivered as he was addressing the Connecticut legislature, and he boasted that he 'calmly continued my speech as if nothing had happened'. Summing up his life, he asked, 'Have I not lost a million dollars by fires?' No matter. To 'men who mean right and try to do right', he reflected, such misfortunes are 'blessings in disguise'.<sup>71</sup>

*Blessings in disguise.* It was the same phrase the *Chicago Evening Journal's* editor used to describe Chicago's great fire.<sup>72</sup> And San Francisco's devastating 1906 inferno, was, in the eyes of the *New York Times*, potentially 'as much a blessing in disguise as the great fire of Chicago'.<sup>73</sup>

IT'S HARD to fathom such blithe cheeriness. Yet I'd like to suggest that, in it, the outlines of a vernacular economic theory are visible. Pyrophilic thinking isn't far from that of the twenty-first-century economist Thomas Piketty. In *Capital in the Twenty-First Century*, Piketty warns of what happens when the rate of return on capital outpaces the economy's growth rate. This allows the idle rich to increase their share of wealth simply by investing it, creating abiding inequalities. By contrast, an economy where the growth rate exceeds capital's rate of return is more democratic. That can happen, Piketty explains, when the economy grows quickly or when capital's profits are brought down by progressive taxation or war. Or, one might add, by fire.<sup>74</sup>

Piketty isn't distinguishing between capitalism and socialism but between market economies that favour incumbents and those that favour insurgents. When the rate of return on investments is comparatively high, the rich easily stay rich, an oligarchy of inherited wealth coalesces and society devolves in 'an endless

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<sup>71</sup> Barnum, *Struggles and Triumphs*, 168, 344.

<sup>72</sup> Carl Smith, *Urban Disorder and the Shape of Belief: The Great Chicago Fire, the Haymarket Bomb, and the Model Town of Pullman*, 2d edn (Chicago, 2007), 37–8.

<sup>73</sup> 'San Francisco', *New York Times*, 19 April 1906. On catastrophism: Kevin Rozario, *The Culture of Calamity: Disaster and the Making of Modern America* (Chicago, 2007); Gareth Davies, 'Dealing with Disaster: The Politics of Catastrophe in the United States, 1789–1861', *American Nineteenth Century History*, xiv (2013), 53–72.

<sup>74</sup> Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, Mass., 2014).

inegalitarian spiral'.<sup>75</sup> When it's low, the rich face competition, durable inequalities falter and the market's rewards spread more widely.

Pyrophiles like Roe, Alger and Barnum shared a sense that, for self-made men, upheaval was necessary. A smooth economy would only make the rich richer, whereas a bumpy one might fling plutocrats from their perches. And what better to dislodge them than fires, which reversed fortunes suddenly and spectacularly? The journalist W. T. Stead observed that Chicago's 1871 fire had helped stymie the 'idle, frivolous and vicious rich' by obliterating 'much of the realized wealth of the community'.<sup>76</sup>

In the era of low-slung buildings, fires weren't especially deadly—those not at a fire's origin could usually escape, and even infernos destroying hundreds of buildings rarely claimed more than five lives. But such fires wreaked absolute havoc on capital, torching warehouses, shops, hotels, factories, mansions, financial records and cash. In the aftermath, the wealthy struggled to regain all they'd lost. But for talented men on the make, it was an opportunity—a reshuffling of the deck.

The richest individuals in the Gilded Age knew this firsthand, as many of their own ascents had been hastened by fires. John D. Rockefeller's family moved, when he was around twelve, to Owego, New York, after a massive fire. The recovering city, his biographer has written, was a 'scene of bustling activity', with new buildings rising and 'a spirit of confident hope everywhere'.<sup>77</sup> Andrew Carnegie, similarly, arrived as a youth in Pittsburgh when it had 'not yet recovered from the great fire which destroyed the entire business portion of the city', he recalled.<sup>78</sup> Both men found, in these moments of economic shake-up, that the path from rags to riches was short.

Call men like Rockefeller and Carnegie 'salamander capitalists', after the amphibians long believed to be born in fire (in fact, salamanders live in decaying logs; when those logs are set aflame, the salamanders dash out). The group name is necessary, because Rockefeller and Carnegie weren't the only examples. John Jacob Astor's biographer attributed Astor's success to his arrival in New York City 'at the precise moment' of its rebound from two devastating fires.<sup>79</sup> Joseph Morgan started as a farmer but moved into fire insurance and credited his fortune an 1835 New York fire that wiped out his competitors; eventually his grandson, J. P. Morgan, would be one of the world's richest men. Or consider

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<sup>75</sup> *Ibid.*, 471.

<sup>76</sup> W. T. Stead, *If Christ Came to Chicago: A Plea for the Union of All Who Love in the Service of All Who Suffer* (Chicago, 1894), 111.

<sup>77</sup> Allan Nevins, *John D. Rockefeller: The Heroic Age of American Enterprise*, 2 vols. (New York, 1940), i, 60.

<sup>78</sup> *The Autobiography of Andrew Carnegie* (London, 1920), 39.

<sup>79</sup> John D. Haeger, *John Jacob Astor: Business and Finance in the Early Republic* (Detroit, 1991), 45-6.

Thomas Mellon, who lived in a log cabin before becoming a Pittsburgh lawyer. The 1845 fire that levelled the city, he observed, ‘gave an impetus to every kind of business, especially everything in the building line’.<sup>80</sup> Mellon snapped up cheap properties, left law and founded a banking dynasty.

On the large scale, big fires were economic disasters, wrecking insurance firms and straining the international financial system. It’s notable that major fires were often followed by major crashes: the Panic of 1837 after New York’s 1835 fire, the Panic of 1873 after Chicago’s 1871 and Boston’s 1872 fires, the Panic of 1907 after San Francisco’s 1906 fire.<sup>81</sup> Yet on the local scale, economic historians have found that nineteenth-century fires brought benefits. Just as wildfires clear out dead wood and make room for new life, urban fires, by disencumbering land, removed economic obstacles. Richard Hornbeck and Daniel Keniston note that Boston’s 1872 fire drove land and building values up as ‘substantial barriers to urban growth’ burned away.<sup>82</sup> Christine Meier Rosen and James Siodla, respectively studying Chicago’s and San Francisco’s largest fires, argue that they offered businesses a ‘clean slate’. Working families, Rosen adds, also benefited from raised wages, new jobs and cheap lots. In fires’ aftermaths, business districts expanded, migrants rushed in, firms relocated—and the past hung less heavily over the future.<sup>83</sup>

THE ACTIVIST Naomi Klein has influentially described the relationship between catastrophes and the market as ‘disaster capitalism’. Capitalism promises peace, Klein argues, yet proceeds by shocks—floods, wars, terrorist attacks. Such traumas leave people ‘psychologically unmoored and physically uprooted’, Klein writes, allowing the powerful to impose their will.<sup>84</sup>

Did fire function that way in the nineteenth century? It was certainly an agent of violent transformation, prized by pyrophiles for precisely that reason. Yet those pyrophiles weren’t the elite. The most enthusiastic agents of hot capitalism were rather economic insurgents: strivers, debtors, long-shot speculators, argonauts and defrauders pursuing riskier strategies on the margins.

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<sup>80</sup> Thomas Mellon, *Thomas Mellon and His Times* (1885; New York, 1969), 313.

<sup>81</sup> Mechanism described in Kerry A. Odell and Marc D. Weidenmier, ‘Real Shock, Monetary Aftershock: The 1906 San Francisco Earthquake and the Panic of 1907’, *Journal of Economic History*, lxiv (2004): 1002–27.

<sup>82</sup> Richard Hornbeck and Daniel Keniston, ‘Creative Destruction: Barriers to Urban Growth and the Great Boston Fire of 1872’, National Bureau of Economic Research Working Paper 20467, 2014, [www.nber.org/papers/w20467](http://www.nber.org/papers/w20467), 5.

<sup>83</sup> Rosen, *The Limits of Power*; James Siodla, ‘Razing San Francisco: The 1906 Disaster as a Natural Experiment in Urban Redevelopment’, *Journal of Urban Economics*, xxvii (2015), 48–61; James Siodla, ‘Clean Slate: Land-Use Changes in San Francisco after the 1906 Disaster’, *Explorations in Economic History*, lxv (2017), 1–16.

<sup>84</sup> Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (New York, 2007), 6, 21.

They welcomed the flaming, high-churn economy because it might improve their standing.

The richest, as economic incumbents, felt differently. They preferred a colder capitalism—the less turbulent the market, the safer their positions. The Gilded Age titans thus weren't agitators but 'frantic system builders' striving to 'bring the constant mayhem of commodity exchange under control', observes Michael Zakim.<sup>85</sup> They 'first and foremost desired stability and predictability', agrees Sven Beckert, and they shunned 'disruption of any kind'.<sup>86</sup> A distinctive feature of this upper class, by the late nineteenth century, was its obsession with fire control.

For Andrew Carnegie, a salamander capitalist whose fortune had fiery origins, pyrophobia came as a conversion. His early riches were from finance, and his prospects there were bright. Yet after amassing wealth he 'wished to make something tangible', and in his memoirs he cited a catastrophic fire on one of the Pennsylvania Railroad's wooden bridges as what convinced him that 'iron was the thing'. Carnegie started an iron railroad bridge company—'the first company of its kind', he boasted—and from there moved to steelmaking.<sup>87</sup> Jonathan Levy has highlighted Carnegie's switch to manufacturing as an example of how capitalists were guided by more than profit-seeking.<sup>88</sup> For Carnegie it felt important, for not-entirely-economic reasons, to reject the fiery impermanence of finance for a career making incombustible metal.

Carnegie's peers found other ways to extinguish fires. Many sold fire insurance; Andrew Mellon and John D. Rockefeller both directed fire insurance firms, and J. P. Morgan's fortune sprang from one of the largest firms, Aetna. In the early nineteenth century, such firms acted essentially as bookies, taking bets on whether buildings would burn. But by the late nineteenth century they became determined champions of economic control.

The late-nineteenth-century 'managerial revolution', as historian Alfred Chandler called it, created bureaucracies that allowed small enterprises to grow into vast corporations.<sup>89</sup> Fire insurers were on its leading edge—cold capitalism's avant garde. Faced with the perpetual danger of not just buildings but whole cities catching fire, they learned to spread their policies widely, so Hartford firms could cover risks in Cincinnati. With railroads, they became innovators in long-distance coordination.

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<sup>85</sup> Zakim, *Accounting for Capitalism*, 7.

<sup>86</sup> Sven Beckert, *The Monied Metropolis: New York City and the Consolidation of the American Bourgeoisie, 1850–1896* (New York, 2001), 69.

<sup>87</sup> *Autobiography of Carnegie*, 176, 116.

<sup>88</sup> Levy, *Ages of American Capitalism*, xviii–xix.

<sup>89</sup> Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, Mass., 1977)

To oversee their far-flung agents, insurers developed elaborate regulations. The famous ‘Aetna Bible’, 529 pages in its 1867 first edition, provided representatives with comprehensive direction on matters from setting rates for ax factories to assessing hazards in flour mills. Most important, the Aetna Bible inculcated a godlike spirit of mastery. ‘From a lofty height’, it explained, insurance ‘surveys and protects the commerce of the world. It scans the heavens; it consults the seasons; it interrogates the oceans’.<sup>90</sup> Aetna’s more than two thousand local agents received special cabinets for storing ‘Aetna books and papers *only*’. These came with a placard reading ‘Order is Heaven’s first law’.<sup>91</sup>

Order meant, above all, taming the market. The managers of fire insurance firms formed a close-knit community, and by the end of the nineteenth century they sought to use their network to set rates collectively rather than competitively, turning their sector into a trust. Its scale was enormous, given that by the early twentieth century the industry had some thirty million policies and \$60 billion of insurance in force.<sup>92</sup> Fire insurance didn’t stand far behind the banking and railroad sectors, and in the brief moments when it managed to set rates through the National Board of Fire Underwriters (NBFU), its trade association acted as ‘the largest and most powerful business organization’ in the country, its historian has written.<sup>93</sup> Even when the NBFU failed to coordinate rates nationally, late-nineteenth-century insurers often operated regional trusts, subordinating the market to the largest firms.

Nothing expressed insurers’ quest for control better than their maps. Historians have long known that insurance maps, not governmental ones, are the best source for understanding late-nineteenth-century urban space. Specifically, those made by the Sanborn Map Company, founded in 1867, show cities in astonishing detail. To assess risk from a distance, Sanborn saw, insurers would need to know not only the location of buildings but their heights, materials, windows, stairways, water access and special hazards. The firm sent forth an army of ‘striders’ to document all this and, by the 1930s, had mapped more than 13,000 US towns and cities.<sup>94</sup> ‘We photograph it all, day by day’, boasted two insurers. ‘And we sit here, like a spider in a web, drawing all the world’.<sup>95</sup> It took decades for underwriters to convert this granular information

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<sup>90</sup> J. B. Bennett, *Aetna Guide to Fire Insurance* (Cincinnati, 1867), 131.

<sup>91</sup> Robert S. Critchell, *Recollections of a Fire Insurance Man* (Chicago, 1909), 13.

<sup>92</sup> Harry Chase Brearley, *The History of the National Board of Fire Underwriters: Fifty Years of a Civilizing Force* (New York, 1916), v. Generally, see Dalit Baranoff, ‘Shaped by Risk: The American Fire Insurance Industry, 1790–1920’ (Johns Hopkins Univ. Ph.D. thesis, 2003).

<sup>93</sup> Brearley, *History of the NBFU*, 70.

<sup>94</sup> Walter W. Ristow, ‘United States Fire Insurance and Underwriters Maps, 1852–1968’, *Quarterly Journal of the Library of Congress*, xxv (1968), 211.

<sup>95</sup> Sidney R. Kennedy and Alden C. Noble, *White Ashes* (New York, 1912), 161, 163.

into sensible rates, but, even before they could, the feeling of control was by all accounts intoxicating.



Fig. 8. Detail from a Sanborn map of Brooklyn, 1887 (New York Public Library)

SANBORN MAPS had a clear politics: they were against wooden buildings and for fireproof ones. The urge to fortify buildings against flame wasn't new; US architects had been trying since the country's start. Such buildings, however, were expensive and initially rare. The first 'fireproof' structures (the descriptor was aspirational) were penitentiaries, designed to prevent inmates from burning their way to freedom. Urban slaveholders, fearing arson, also took an early interest in fire resistance. The practice was most closely associated, however, with finance. The Bank of Pennsylvania, a wing of the Treasury Department, the Bank of Philadelphia and the Second Bank of the United States were among the first high-profile structures billed as fireproof.<sup>96</sup>

We're now so accustomed to seeing financial institutions housed in conspicuously sturdy structures that we don't think to ask *why* such institutions needed fire protection more than did theatres, hotels, hospitals, orphanages or courthouses—places where fires also spelled catastrophe. It seems that financial fireproofing was as much performance as precaution, an assurance of the solidity of a market that might otherwise seem distressingly anarchic. Vanquishing flame was a way of symbolically conquering capitalism's hazards.

<sup>96</sup> Wermiel, *Fireproof Building*; Jonah Rowen, 'Building Fears of Fire: Architecture and the Suppression of Black Insurrection in the U.S. Antebellum South', *Journal of the Society of Architectural Historians*, lxxxi (2022), 476–94.



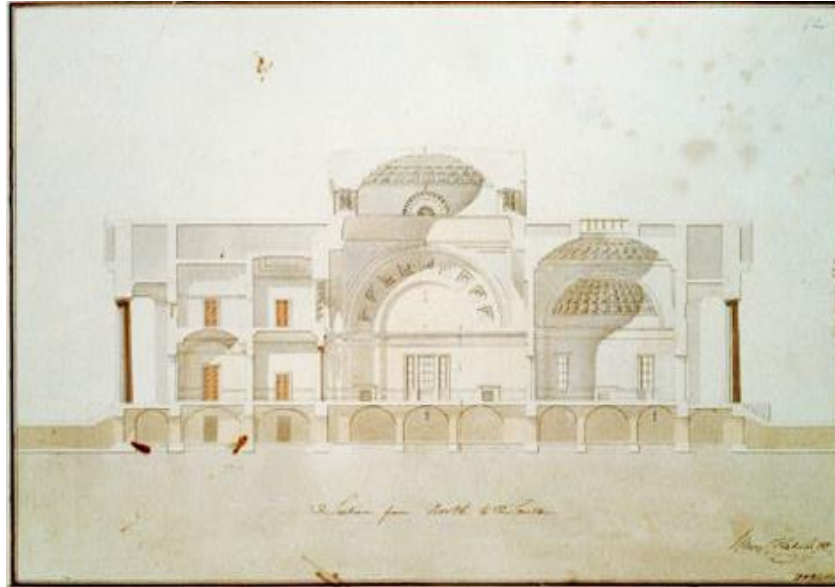


Fig. 9. Benjamin Latrobe, Second Bank of the United States, 1818. Latrobe and his students were the chief early-republic designers of fireproof financial institutions. (Library of Congress)

Fireproofing—at first experimental and limited to prestige buildings—became in the late nineteenth century a mania among the rich, transforming Newport, Rhode Island, the summer retreat of the Gilded Age worthies. Architects inspired by the town’s colonial legacy had initially constructed timbered mansions in the ‘stick’ and ‘shingle’ styles—Richard Morris Hunt’s home for John N. A. Griswold (1862) exemplifies the former. Yet by the century’s end, those same architects, now turning for inspiration to ancient Rome and Renaissance Europe, were working in stone, brick, tile and terracotta. Hunt’s Marble House (1882), built for the Vanderbilt family, illustrates the turn. The famed firm McKim, Mead and White also started out working in wood on Newport, only to leave it behind (in 1892, Stanford White pronounced himself reluctant ever to build in wood again) for a monumental, Beaux-Arts style in which homes resembled banks.<sup>97</sup>

<sup>97</sup> Mosette Broderick, *Triumvirate: McKim, Mead and White: Art, Architecture, Scandal, and Class in America’s Gilded Age* (New York, 2010), 412. Generally, see Lewis Mumford, *Sticks and Stones: A Study of American Architecture and Civilization* (New York, 1924); Vincent J. Scully Jr., *The Shingle Style and the Stick Style: Architectural Theory and Design from Downing of the Origins of Wright*, rev. edn (New Haven, 1971); Richard Guy Wilson, ‘The Early Work of Charles F. McKim: Country House Commissions’, *Winterthur Portfolio*, xiv (1979), 235–67; H. Horatio Joyce (ed.), ‘Special Issue: Rethinking the American Renaissance’, *Architectural History*, lxiv (2021), 1–186.



Fig. 10. The waning of wood. Two iconic Newport mansions by Richard Morris Hunt, the John N. A. Griswold House (1862) and Marble House (1882), typify the turn from stick to stone. (Ajay Suresh/David Chelyadnik)

The architectural ‘American Renaissance’ had many origins, including a new elite’s attempt to claim legitimacy through symbolic association with the distant past. Controlling fire, however, was a central part of the story. Its importance could be seen through the career of the builder Rafael Guastavino and his son Rafael Jr. The Guastavinos weren’t well known—they were subcontractors for famous architects like Hunt or McKim, Mead and White—but they were nevertheless ubiquitous. Inspired by Chicago’s 1871 fire, Rafael Sr. had developed a proprietary tiled vault system to withstand flames.<sup>98</sup> That expertise made the Guastavino Fireproof Construction Company the indispensable builder of the Gilded Age. The Guastavinos worked on Grand Central Station, Carnegie Hall, Ellis Island, Pennsylvania Station, the Boston Public Library, Riverside Church and the Cathedral of St. John the Divine. And they helped build homes for the country’s richest families: the Vanderbilts, Morgans, Astors, Rockefellers and Mellons.<sup>99</sup>

<sup>98</sup> Rafael Guastavino, *Essay on the Theory and History of Cohesive Construction*, 2d edn (Boston, 1893), 17.

<sup>99</sup> George R. Collins, ‘The Transfer of Thin Masonry Vaulting from Spain to America’, *Journal of the Society of Architectural Historians*, xvii (1968), 176–201; John Ochsendorf, *Guastavino Vaulting: The Art of Structural Tile* (New York, 2010).



Fig. 11. Advertisement for the Guastavino Fireproof Construction Company, a mainstay of Gilded Age architecture. (Guastavino Fireproof Construction Company architectural records, 1866–1985, Avery Architectural and Fine Arts Library, Columbia University)

The Guastavinos also built museums. These were the ‘leading pillars of bourgeois self-definition’, Sven Beckert writes, holding special significance in the clash over fire.<sup>100</sup> Barnum had famously operated a dime museum—an ‘ill-looking ungainly, rambling structure’ in the *New York Times*’ judgment—of use mainly, Barnum boasted, ‘for rapidly making money’.<sup>101</sup> He’d placed his ramshackle temple of commerce at a busy intersection, festooned it with banners and used it to fleece paying customers. By contrast—and in response—Gilded Age grandees sought to create permanent shrines to culture, sited far from commerce and funded by donors, not customers.

There was a temporal alchemy at play: Gilded Age museums naturalized new wealth by funneling it into classical buildings filled with European masters and archaeological treasures. As one of the Metropolitan Museum of Art’s founders explained, millionaires could obtain ‘glory’ by converting ‘pork into porcelain, grain and produce into priceless pottery, the rude ores of commerce into sculpted marble’.<sup>102</sup> Porcelain, pottery and marble were, of course, fireproof, as were the structures built to hold them. By crafting a stone environment filled with centuries-old objects, the rich proclaimed immunity from the market’s flames.

<sup>100</sup> Beckert, *Monied Metropolis*, 48.

<sup>101</sup> ‘Disastrous Fire’, *New York Times*, 14 July 1865; Barnum, *Struggles and Triumphs*, 63.

<sup>102</sup> Rieppel, *Assembling the Dinosaur*, 50.



Fig. 12. Conspicuous Noncombustion: Vanderbilt Mansion, Hyde Park (McKim, Mead and White, late 1890s). Its steel and concrete skeleton and stone facing were costly yet powerful signifiers of the Vanderbilts' invulnerability to fire. (Patrick Stahl)

It was one thing to erect a museum, another to remake a city. After Chicago's 1871 conflagration, the city's elite discarded partisan affiliations to form a coalition, the Fire-Proof Party, with newspaperman Joseph Medill as its successful mayoral candidate. Medill's *Chicago Tribune* deemed frame buildings a threat to property values, and Medill sought to forbid them. Yet poor families depended on wooden construction and feared that a prohibition would price them out of the city. Shouting 'Down with the nabobs' and 'Equal rights and equal property', protestors stormed City Hall.<sup>103</sup> Recoiling, fireproofers reined in their plans. And even the laws they passed were ignored by developers who, responding to market demand, hastily filled the burned district with frame houses.<sup>104</sup>

Still, fireproofers held tight to their dream. They glimpsed what was possible at the 1893 World's Columbian Exposition in Chicago, housed in the 'White City', an ensemble of white faux-stone edifices (Richard Morris Hunt and McKim, Mead and White contributed buildings). After visiting, Katharine Lee Bates wrote a poem—the basis for the anthem 'America the Beautiful'—envisioning a land gleaming with 'alabaster cities'. 'City Beautiful' is what the urban planner Charles Mulford Robinson called the vision. He imagined

<sup>103</sup> Margaret Garb, *City of American Dreams: A History of Home Ownership and Housing Reform in Chicago, 1871–1919* (Chicago, 2005), 21, 11–15.

<sup>104</sup> Smith, *Chicago's Great Fire*, chap. 13; Rosen, *Limits of Power*, chap. 6.

‘clearing out’ urban ‘rookeries’ to make room for large vistas and ‘important’ structures—replacing impermanent wood with enduring stone.<sup>105</sup>

The White City was, however, only a mock-up of an incombustible metropolis. Its ‘stone’ was a cheap plaster mixture painted white. Months after the fair’s end, it burned down. The enormous fire, it was said, could be seen from Milwaukee.



Fig. 13. City Burnable: The White City, a faux-stone micrometropolis, on fire (H. W. Brewer, *The Graphic*).

UNBURNABLE CITIES, were far from fact, but they thrived in fiction. Edward Bellamy’s influential 1888 novel, *Looking Backward*, starts with a rich Bostonian falling into a hypnotic sleep. Ensnared in a flameproof vault made of iron, asbestos and stone, he sleeps through a fire that destroys his house and stays asleep for more than a century. On awakening, he learns that corporations have grown so large that they’ve replaced the unruly market with a thoroughly managed economy, and that nothing burns anymore. Fires were a consequence of capitalism, he’s told in a sequel; with its demise they are gone.<sup>106</sup>

Bellamy’s writing unleashed a torrent of speculative fiction, a surprisingly large part of which discussed fire. Dystopian novels forecasting workers’ uprisings, like Ignatius Donnelly’s *Caesar’s Column*, usually climaxed in conflagrations (‘God’s way of wiping off the blackboard’, Donnelly felt).<sup>107</sup> The utopias, by contrast, spun out fantasies of control that often envisioned

<sup>105</sup> Charles Mulford Robinson, *The Improvement of Towns and Cities*, 3d edn (New York, 1901), 208.

<sup>106</sup> Edward Bellamy, *Looking Backward, 2000–1887* (Boston, 1888); Bellamy, *Equality*, 94.

<sup>107</sup> Ignatius Donnelly, *Caesar’s Column* (Chicago, 1890), 297. Similarly, W. W. Satterlee, *Looking Backward and What I Saw* (Minneapolis, 1890) and J. W. Roberts, *Looking Within* (New York, 1893).

abolishing wood. Alvarado Fuller imagined ‘absolutely fire-proof’ buildings of metal and improved glass.<sup>108</sup> Solomon Schindler foresaw that ‘smoke, cinders, and ashes’ would be ‘unknown’ in a future made of lacquered aluminum, glass and ‘stone-pudding’.<sup>109</sup> Most telling was the multimillionaire John Jacob Astor IV’s *A Journey in Other Worlds*, in which the magnate fantasized about smokeless cities, glass/aluminum sidewalks and metal streets.<sup>110</sup>

Such fireproof futures stood in clear contrast to British speculative writing. There, Lewis Carroll’s *Through the Looking-Glass*, Samuel Butler’s *Erewhon*, William Morris’s *News from Nowhere* and J. M. Barrie’s Peter Pan tales described generously timbered neverlands, which traded on European associations between fantasy and forests (J. R. R. Tolkien continued this tradition in his 1954–55 trilogy, *The Lord of the Rings*).<sup>111</sup> US writers, however, were less wowed by trees. Instead, they conjured up woodless cities of aluminum, glass, synthetics, enamel and ‘phosphorated cement’—all safe from the flames.

These dreamworlds provide context for the United States’ most enduring fantasy novel, L. Frank Baum’s 1900 *The Wonderful Wizard of Oz*. Baum (his name means *tree*) had sprung from a thoroughly wooden milieu. His father made barrels, and his first home was ‘built of tree trunks pegged together; the bark hadn’t been stripped off’, writes his biographer Rebecca Loncraine.<sup>112</sup> His family’s fortunes grew when his father joined the Pennsylvania oil rush, establishing a refinery and a string of oil-town theatres. The Baums then moved into a three-storey wooden mansion outside Syracuse, right on the famed Syracuse Plank Road.

Living amid wood, Baum was hounded by fires. His play, *Matches* (in three acts: ‘Brimstone’, ‘Ignition’ and ‘Fire!’), in which he starred as the striver Jack Hazard, suffered a fire at its opening. A more destructive fire during another of his plays destroyed the Baum opera house in the Pennsylvania oil patch. Burned out, Baum journeyed west to the newly established settler town of Aberdeen in Dakota Territory. But drought and prairie fires drove him out of there, too. He next tried Chicago, which, he noted, was ‘very busy and energetic after rebuilding

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<sup>108</sup> Alvarado M. Fuller, *A. D. 2000* (Chicago, 1890), 306.

<sup>109</sup> Solomon Schindler, *Young West* (Boston, 1894), 45, 91.

<sup>110</sup> John Jacob Astor IV, *A Journey in Other Worlds* (New York, 1894), 65, 68. Other fireproof utopias: John Macnie, *The Diothas* (New York, 1883); [J. Bachelder], *A. D. 2050: Electrical Development at Atlantis* (San Francisco, 1890); Thomas Fitch and Anna M. Fitch, *Better Days* (San Francisco, 1891); Robert Grimshaw, *Fifty Years Hence* (New York, 1892); James Cowan, *Daybreak* (New York, 1896); Arthur Bird, *Looking Forward* (Utica, 1899); Milan C. Edson, *Solaris Farm* (Washington, D.C., 1900).

<sup>111</sup> Lewis Carroll, *Through the Looking-Glass* (London, 1871); Samuel Butler, *Erewhon* (London, 1872); William Morris, *News from Nowhere* (London, 1890); J. M. Barrie, *Peter and Wendy* (London, 1911).

<sup>112</sup> Rebecca Loncraine, *The Real Wizard of Oz: The Life and Times of L. Frank Baum* (New York, 2009), 19. Details from Loncraine, who is wonderfully attentive to materials, unless otherwise noted.

from the great fire'.<sup>113</sup> Baum took up residence in Humboldt Park, a neighborhood beyond the reach of the city's fire regulations, where frame buildings were still permitted. The area filled with migrants seeking cheap homes, who flocked to Chicago's wooden edge while civic leaders haltingly fireproofed its brick, stone, iron and steel core.

Baum composed *The Wonderful Wizard of Oz* from his wooden Humboldt Park house, and the novel is obsessed with materials. Its second sentence discusses the lumber used to build the house where the hero, Dorothy, lives. The first companion she meets after travelling to Oz is a scarecrow made of straw who dreads only 'a lighted match'. He needn't fear, though. Oz proves to be a land of notably fireproof substances: a tin woodman, an Emerald City, marble pavements, silver shoes and china houses. It's not hard to connect the famous yellow brick road leading to the Emerald City to the famous (and, due to its hemlock boards, yellowish) plank road that had led from Baum's childhood home to Syracuse.<sup>114</sup>

Baum's novel showcases curious materials yet, unlike the other speculative novels of its day, it doesn't fully endorse them. Oz is spectacular but not paradisaical, its wizard turns out to be a Barnum-style humbugger and Dorothy's unbending wish is to leave. Perhaps the book's popularity reflected hesitancy about the country's recent transformation. In 1900, as the Emerald City on Lake Michigan grew tall, readers could imagine following a yellow brick road from a familiar combustible landscape to a fireproof one—and yet wanting to go home.



<sup>113</sup> Katharine M. Rogers, *L. Frank Baum: Creator of Oz* (New York, 2002), 10.

<sup>114</sup> L. Frank Baum, *The Wonderful Wizard of Oz* (Chicago, 1900), 11, 40. Some argue that the brick road in Peekskill, where Baum briefly attended military academy, inspired him. Evan I. Schwartz, *Finding Oz: How L. Frank Baum Discovered the Great American Story* (Boston, 2009), 13.

Fig. 14. *The Wonderful Wizard of Oz's* Dorothy in the fireproof settings of Oz. Original illustrations by W. W. Denslow. (New York Public Library)

THEY COULDN'T, in the end, go home. Nineteen hundred was nearly the end of the United States' wooden age, and its age of infernos. Safer materials, slower urban growth, better firefighting, more comprehensive precautions, electrical illumination and stronger building codes extinguished the flames. San Francisco's 1906 fire was one of the last great urban conflagrations.

Fires still broke out, but the most damaging twentieth-century ones—like the 1903 Iroquois Theatre fire in Chicago that killed twice as many as Chicago's 1871 Great Fire—burned individual structures rather than neighbourhoods. The same fire-resistant materials that stopped flames from spreading between buildings also enabled buildings to grow taller and more liable to trap people inside, ironically making single-structure fires deadlier. New York City's worst nineteenth-century fire, in 1835, destroyed six hundred buildings but killed only two people. Its worst twentieth-century fire, the 1911 Triangle Shirtwaist Factory Fire, was confined to part of a ten-storey 'fireproof' structure and didn't even destroy the building (which still stands as part of New York University's campus). But it took 146 lives.

Progressive-era reformers ultimately succeeded in making the built environment more durable. In doing so, they spared their compatriots the horror of flames consuming whole blocks, of the overheated market incinerating everything it touched. Yet as property lost its precarious quality, a chaotic, insurgent form of politics lost its purchase, too. No longer could strivers look to conflagrations to upend the economy and clear their paths. The fires of hot capitalism burned down, leaving the country, for better or worse, a colder place.