

evaluated from consultant studies to Department of Public Works, 1952, containing maps of older storm drains.

136. Mayor Jerome's messages of January 1850, 20 November 1850, and 19 June 1851. See also the mayor's message of 15 January 1849.

137. Ibid.

138. Charles Frick, *Annual Report of the Physician, Baltimore City Jail*, 1857.

139. Baltimore House of Refuge, "Laying of the Cornerstone," 28 October 1851 (pamphlet, Baltimore, 1851). See also George Brown, "Memorial to State Legislature," 5 February 1852 (pamphlet, Baltimore, 1852).

140. Statistics of inmates are found in House of Refuge annual reports.

141. Antiforeign comments of Mayor Swann can be found in his messages to council, 15 November 1858 and January 1860.

142. Baker, *Continuity*. The American party held a parade and an anti-Catholic meeting, "Eternal Separation of Church and State," when Bishop Kenrick attempted to collaborate with the city council for a reform of public schools and a share for Catholics in the school fund (City Council journal, 1st branch, 1853, p. 545; *Sun*, 19 August 1853).

143. Masakiyo Yanagawa, *The First Japanese Mission to America (1860), Diary*, ed. M. G. Mori, trans. Fukuyama and Jackson (Kobe, 1937).

144. *Sun*, 9 June 1860. On the first steam engine, see *ibid.*, 18 May 1858.

145. Wartime party politics in Maryland can be followed in Baker, *Continuity*, and Charles Wagandt, *The Mighty Revolution: Negro Emancipation in Maryland, 1862-1864* (Baltimore: The Johns Hopkins Press, 1964).

146. J. Thomas Scharf, *History of Baltimore City and County* (Philadelphia: J. H. Everts, 1884), and original newspaper accounts.

147. John Pendleton Kennedy to S. P. Chase, 24 April 1861 (Chase papers, as cited in Wagandt, *Mighty Revolution*, p. 11).

148. Bernard C. Steiner, *Life of Henry Winter Davis* (Baltimore: John Murphy & Co., 1916), p. 195, as cited in Wagandt, *Mighty Revolution*, p. 13.

149. Frederick Bernal, British Consul, to Lord John Russell, 29 April 1861, in Public Record Office, as cited in Wagandt, *Mighty Revolution*, p. 13, n. 34.

150. Thomas Swann to Salmon Chase, 28 January 1861, Chase papers, cited in Baker, *Continuity*, p. 51.

151. Samuel Harrison, journal manuscript, Maryland Historical Society.

152. Hecht, memoir.

153. Harry L. Albrecht, "An Economic History of the Wilkens Hair Factory at Snake Hollow" (paper for Broadus Mitchell, The Johns Hopkins University, 1939, in Enoch Pratt Free Library).

154. Hecht, memoir.

155. The meeting of free colored men was held on 29 February 1864.

156. *Sun*, 24 September 1864.

157. Camp Cattlegrounds was actually Camp Bradford, located on the state fairgrounds at Remington.

158. *Sun*, 31 October 1864.

159. *Ibid.*, 22 September 1864.

160. *Ibid.*, 15 September 1864.

161. *Ibid.*, 24 October 1864.

162. U.S. Christian Commission of Maryland, *4th Report of the Committee* (Baltimore, 1866).

A Rent in the Social Fabric

1866–1877

It is happy for the world that war, its greatest scourge, is not an unmixed evil. It has its compensations. The fact that war comes at all, proves the existence of some stumbling block to progress, which cannot be removed except by violence. . . . The processes of war are destructive, but they develop energy.¹

The editors of the *American* shared their end-of-the-war optimism with others in Baltimore. The energy they mentioned was already at work. The city had not benefited from a wartime boom, but neither did it now suffer from a postwar depression. Construction rose swiftly to a peak in 1870–72 of thirty-five hundred houses a year. Speculative and industrial activity were also on the rise. Baltimore was now a city of some three hundred and fifty thousand people or fifty thousand buildings. These were the seven fat years of Pharaoh's dream. A sharp national business crisis in 1873 signaled the beginning of the seven lean years. Changes in the economic and social structure of Baltimore in this generation depended upon the relative growth of the various sectors, classes, and enterprises during the seven fat years, and upon how they weathered the seven lean years.

The editors proceeded to lay out Baltimore's opportunities on the basis of new markets in the South:

The laboring people of the south will live in real houses, with glass windows, a stove and fixtures, bedsteads and mattresses instead of mud sill, single iron pot, bed of leaves or husks. . . . Gourds will give way to crockery ware. . . . Buttons and pins will be needed for garments of cloth or calico, when a single string was all that was needed to tie the neck hole of the domestic smock frock. They will eat something else beside hog meat and hominy.²

And supposing that the southern laborers, black and white, would become "subject to the wants of civilized men," they proposed a strategy: "Who is to supply their wants? Why the merchants and manufacturers of the North. Baltimore, if she is true to herself, will at once set about supplying them."³ And so she did. Baltimore began making more furniture and stoves, then added overalls and underwear, boots and shoes. Baltimore fed them canned corn and catsup

Portions of this chapter, in an earlier form, appeared in the *Annals* of the Association of American Geographers (December 1979).



In 1874, sixty years after the defense of Baltimore, a commemorative celebration brought together the veterans of the war.

and pickles and jam. To complete the circuit of exchange, Baltimore continued to process and market the South's cotton. To fill the "civilized" needs of the city's own successful merchants and manufacturers, the oyster packers and piano makers pulled down their sheds and built greater.

Growth strategy was coupled with a transport strategy. The people in charge were the merchants, whose object was to increase the turnover of goods, taking a profit on an ever greater circulation and accumulating more capital. It was done by more efficient harnessing of steam power. The B&O built sixty new heavy-duty locomotives at Mount Clare. In September 1865 there were reported eighteen first-class steamers from Baltimore in the coastal trade, and the first regular trips were made to Havana and Liverpool, with one ship on each line. The largest was sixteen hundred tons burthen, 250 feet in length, about double the size of the first-class ships before the war. By spring 1872 the largest was twenty-five hundred tons, and the city boasted eighteen steamships in the foreign trade alone, forty thousand tons aggregate. A steamer of oysters was shipped live to Liverpool in a tanker hold, to be fed on the voyage "by continued inhalation of seawater." The twenty smaller steamships continued to operate in the coastal trade as before, serving Boston, New York, Philadelphia, Savannah, Charleston, Wilmington, and New Orleans. New regular steamboat services connected the city with points on the Chesapeake Bay.

Steam was more than a transport technology. It offered advantages of greater speed, dependability, and larger batches for all kinds of industrial processes. The cotton mills and sugar refineries acquired steam pumps and steam engines. The construction materials for the building boom were manufactured in steam-powered mills. A steam-powered brickmaking machine dropped a hundred bricks a minute on a moving band as fast as half a dozen workers could pile them in a kiln, while two other workers fed dirt from the clay bank into the bucket loader. Steam sawmills sawed stone or lumber faster. At Beaver Dam Run near Cockeysville, a huge smoking, rumbling derrick was worked by steam with wire ropes. "A large two-acre hole resembles the crater of a volcano."⁴ Prewar railroad engines were retired to quarrying there. Scores of

men were at work on ledges 50 to 100 feet down. Each of several steam engines held upright bundles of sharp-pointed steel drills, and each long steel drill was fitted with half a dozen rough diamonds and was fed by a stream of water. In five minutes such a machine could drill a hole an inch in diameter and two feet deep—the equal of three men with hammer and drill for two or three hours. Downtown near Calvert Station, Hugh Sisson had seven gangs of steam saws to perform the next phase in processing marble into mantels and stoops.

The huge block of marble is lifted upon a truck by a crane, and run under a frame by means of a railroad. In these frames, the saws, which are thin pieces of fine soft iron, are fixed at a distance of one, two or three inches apart . . . which in their motion under the soft saw blade perform the part of teeth.⁵

They cut nine to thirteen inches a day, while before the war, two-man teams "of Hibernian or African descent" might manage an inch a day.

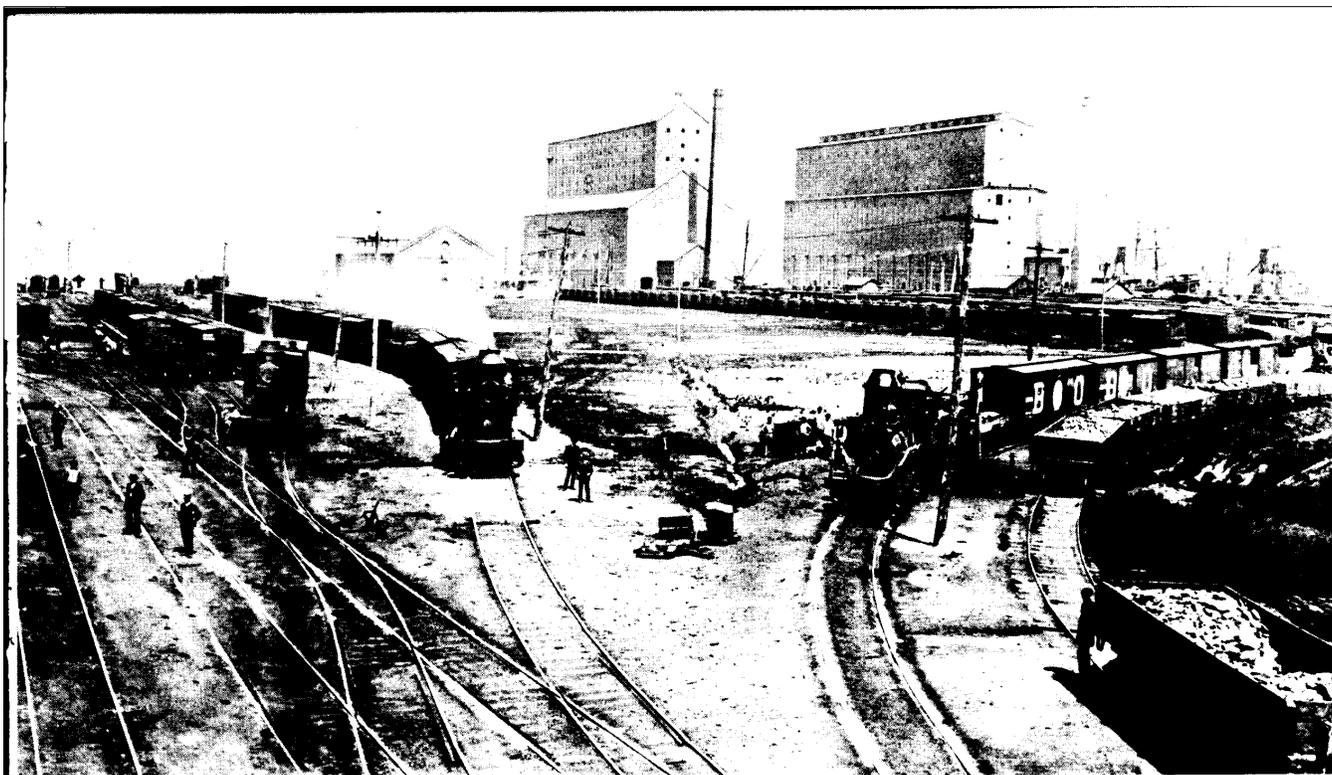
Steam power in the boom summer of 1872 produced an epidemic of industrial accidents.⁶ In six months 150 were killed or mutilated and permanently disabled. There was at least one fatal work-related accident a week, not including the heat strokes. Other than falls, the most common types were related to steam technology—high-speed trains of machinery tended by young rural or immigrant labor. At the pipe factory an employee was mangled to death in belting. An identical accident occurred at the Northern Central machine shop, while at the B&O machine shop a man had his fingers cut off. In the sugar refinery a man was caught in the belting and wounded by his scraping tool. A German worker at a chemical factory had his hand severed. A lad at the steam box factory had his right hand split up the wrist. At Bartlett-Hayward a boiler head fell on a man's knee and hands. The only state regulation of safety in work was the licensing of steam boilers. Nevertheless, boiler explosions caused multiple deaths. At the McCullough rolling mill at North East three were killed and six severely injured. "I have often seen men run from this boiler," said a roller.⁷

The opportunities and the buoyant aims of the fat years encouraged headlong speculation. Faster circulation of goods stimulated land values. The city's growth in population, purchasing power, and bank deposits stoked the construction boom. Big lumps of public investment accelerated the process, while municipal and state franchises created private empires. Everybody bought a piece of the action. Each businessman divided his capital and his risks among a variety of ventures, but in the tradition of Robert Oliver and Samuel Smith he coupled up his ventures to profit from each round of value added. The *American* described how this worked, in making the argument that the management of the new steamship lines should be concentrated in few hands, because of the experience of stockholding corporations in Baltimore: "One man will take stock if he can supply the concern with stores. Another takes shares enough to control the supply of coal. Another must demand the privilege of furnishing meat." By the time the steamer was supplied by its interested shareholders at a generous profit, there was only a small margin left for profit to other shareholders, "and they, for lack of dividends, retire in disgust."⁸ This style could be observed elsewhere, but it was the pattern in Baltimore, where the class of entrepreneurs was

tightly knit and the commercial style was retained among manufacturers. The Merchants and Miners Steamship Company, organized before the war by William Jenkins, Captain William Kennedy, and Benjamin Deford, operated between Baltimore and Boston. They were all in the leather business and the boot and shoe trade with New England. Kennedy also owned cotton mills. George S. Brown (grandson of Alexander) was the founder of the Baltimore and Havana steamship line; he also had an interest in two large sugar refineries supplied from Cuba. Enoch Pratt developed the Maryland Steamboat Co. or "Bay Line."

The most remarkable strategist and one of the most richly rewarded was John Work Garrett, president of the Baltimore and Ohio Railroad Company and Hopkins's heir apparent. Promptly at the end of the war Garrett, with much fanfare, started steamship service to Liverpool by buying war surplus vessels from the government. The service was superseded by long-term agreements with the Allen line and the North German Lloyd line, which brought immigrants from Bremen to Baltimore. At Locust Point the B&O built special piers to off-load the immigrants directly into its passenger trains to the prairies. The steamships took on coal at Locust Point as well. Either personally or through his control of the B&O, Garrett owned coal lands around Cumberland and in West Virginia. The B&O built grain elevators, and the city's exports of grain to Liverpool expanded. During the seven fat years the revenues of the B&O tripled. Garrett was frequently lauded for these contributions to the development of the city, but they were largely limited to ventures that entrenched his geopolitical control, with his railroad as the backbone of the empire. The new state of West Virginia was "a military necessity of the war and really a westward extension of Maryland to the Ohio." Garrett's operation of the B&O as a loyal effort for the Union was repaid by his obtaining strategic control of that new state. "As Virginia had provoked the railroad company in its early struggle to get to the great river (the Ohio), the railroad retaliated during the war, and the new State was so shorn off that not a foot of the main stem of the railroad now runs on its soil."⁹ Garrett's protégé, a poor lad who worked his way up as brakeman, conductor, and storekeeper on the B&O, was made the senator from West Virginia; the senator also had interests in timberland and the lumber trade.

Such financial ingenuity supported a whole network of allies. In Maryland, Garrett was a close ally of bosses Gorman and Rasin in the "regular" Democratic political machine. He influenced appointments to many judgeships in the state. Understandably, no important court cases were decided against the B&O in Maryland. In West Virginia, Garrett acknowledged no obligation to pay taxes: "There was nothing the President of the Company was so averse to as the payment of taxes; it really hurt him." Until his death (1873), Hopkins worked closely with Garrett; he lent large sums to the B&O "but exacted a quid pro quo." Hopkins once told Keyser on receiving such a commission, "The receipt of commissions earned affects me exactly as I imagine a drink must affect a toper; it exhilarates."¹⁰ The Savings Bank of Baltimore had a \$1 million loan secured on its B&O stock (1870). The boards of Hopkins University and hospital were set up to insure that the voting control of their large endowments of B&O stock bequeathed by Hopkins remained in Garrett's hands. The city had



minority representation on the board of directors of the B&O, in the amount of \$3.25 million. The B&O was paying 10 percent dividends to the city in this period, more than enough to pay the 6 percent interest on its municipal bonds (it had borrowed the money in order to invest in the B&O), but the city could not obtain its stake in the accumulated "surplus." The city's share of the surplus was another \$8 million, which the B&O reinvested elsewhere.

Meanwhile, Garrett's son, T. Harrison Garrett, managed the family investment banking house, which held stock in Consolidated, the coal mining subsidiary. He brokered the Consol's crude oil, which the B&O hauled from West Virginia, and on percentage commissions he handled the B&O's major loans—\$4 million in 1868, \$5 million in 1872, consolidation of the \$4 million in 1875, and several millions more in 1877 and 1878—all in close conjunction with J. P. Morgan's London house.¹¹

The lesser millionaires of this generation pursued the same strategies as Garrett, sometimes meshing with his projects, rarely confronting him directly. Their strategies all confirm the importance of manipulation of stocks and bonds to siphon off the increases of productivity and the higher land values associated with urban growth. The impressive financial expansion of the Canton Company, for example, in the seven fat years involved mortgaging first the ground rents, then the entire operation, through Alexander Brown and Co. and the company's London house.¹² The Canton Company used part of the new capital to build the Union Railroad and to promote development on its land by contributing to the capital stock of enterprises such as Gardner's grain elevator, the Baltimore Car Wheel works, the Chesapeake Dredging Company, and the Baltimore Warehouse Company. These operations were as wonderfully incestuous as the steamship companies. At the car wheel works, for example, a former superintendent for Winans and the B&O shops patented a process for making chilled iron car wheels, then sold the wheels to the B&O and other railroads in which Baltimoreans had a financial interest.

This panoramic view of the B&O Railroad's Locust Point terminus illustrates the interrelationships of railroad and port. Arriving immigrants would witness a complex of grain elevators and coal trains. Note that many steamships were still fitted with masts, which are visible in the background.

The mini-city at Canton expanded, as in earlier booms. The overall growth of Baltimore raised land values at Canton. The company sent an agent to Europe to sell its bond issue and promote immigration from German-speaking parts of Europe. It offered development sites for working-class housing and complained bitterly of the B&O for shipping immigrants west. "Even he who earns only \$480 a year may own a home," by spending a quarter of his earnings over seven years. He would continue to pay an annual ground rent to the Canton Company. The company conceived of its property in the '70s as twenty-five hundred city lots (twenty by one hundred feet) on avenues already graded and paved or shelled, with water, gas, and service of seventy-two horsecars a day. Farther east, it held nineteen thousand more building lots, and beyond that 900 acres "yet of small value." In the zone of small value the company extended its holdings eastward by buying 235 acres at prices from \$350 to \$1000 an acre. It relocated 200 acres of brickyards to more distant clay lands and doubled the rents. Overall, income growth was not as impressive as the apparent capital growth. The real importance of the rise in land values lay in the development of capital. The Canton Company, on the strength of the prices paid for a few hundred lots a year, could sell stock and bonds and borrow long-term to a vast extent—\$2.3 million in 1873 and \$5 million in 1874—with the "future" land values as security. In other words, it was a pure speculation. Canton still resembled Quodlibet.¹³

The Seaboard pipeline, a short-lived scheme, shows how the largest entrepreneurs kept the lid on new enterprise. In 1875 and 1876 Pennsylvania oil producers, seeking to break John Rockefeller's control of their oil markets, secured and surveyed a 230-mile right of way from the Titusville oil region to tidewater near Baltimore. It passed near Catonsville, down the south side of Middle Branch, and through the land of the Patapsco Company at Brooklyn. A pipeline, they figured, would halve the cost of hauling oil. They planned a refinery and barrel factory on Curtis Creek. Rockefeller, however, reached an understanding with both B&O and Northern Central to continue bringing oil to Baltimore by railroad. He would pay five times the proposed pipeline rate, but less than the published railroad rates. By controlling the hauling of oil, he acquired control of all eight Baltimore oil refineries, through J. N. Camden's United Oil Company. The last holdout was Sylvia C. Hunt, a widow who rebuilt her refinery after it burned in the summer of 1877 and would not sell to Camden. Starved of oil, she was finally forced to lease it for five years. "They crushed her business and her spirit as remorselessly as they would have killed a dog."¹⁴ That first long-distance pipeline was never built. But convinced by the engineering logic, Rockefeller quietly set out to create his own pipelines, and the scene of the struggle shifted to Philadelphia. Baltimore's exporters, refiners, and real estate speculators had been mere pawns in the game of the New York monopolists who aimed to control the national market.

The Trust and the Swindle

About the time the *American* published its glowing preview of economic opportunities, the *Sun* was fulminating against opportunists: "The country is filled with the spirit of speculation. It is infectious, and all professions and

occupations seem to be affected by it. Men's minds are filled with vicious schemes of extravagant gains."¹⁵ *Sun* editors complained of the gambler and horse fancier, shoddy and sharper, taking over the springs and summer places formerly frequented by respectable invalids. They tended to blame paper money and end-of-the-war inflation. "The poor become poorer, the rich grow richer. Money flows in streams; waste and extravagance and parade and ill-taste and bad manners obtrude their random and graceless forms everywhere."¹⁶ In fact, the moral crisis was fundamental. It was not a matter of any basic difference of outlook of the two newspapers. The editors of both papers shared an enthusiasm for enterprise and a horror of speculation, never quite realizing that these were two sides of the same coin. They were at once urging the horse on and reining him in. The development of new wants and the spirit of speculation were part of the same growth process and the same buoyancy. Kirkland, Chase, a long-established firm dealing in sugar and coffee, was owed large sums in the West Indies, while it had advanced something like \$2 million to other firms in Baltimore—grocers, lumber merchants working timberlands along the B&O, manufacturers of barrel staves and shook stuff for the West Indies. This enterprise illustrates the long-cycle behavior of many large firms: in 1870 the company had just finished paying off its debts from the crisis of 1857, as agreed upon by its creditors, seventy-five cents on the dollar, and in the fall of 1872 it again suspended payment, dragging numerous firms into financial reorganization.¹⁷

Another figure, John L. Crawford, was caught up in a succession of speculations characteristic of the seven fat years—chrome, coal and iron, oil, silver, and fertilizer. All his ventures involved a small tangle of Baltimore investors and informants, but resources as distant as Colorado. When dividends did not materialize and he lost money on margins in gold and a fire in a bottling establishment, he could not pay his debts. He had to refinance, borrowing at 15 and 18 percent a year interest, besides commissions. So he went "deeper in," developing each new venture to salvage the losing ones: he added West Virginia coal lands to his iron company, a railroad to open the mine, and a nail factory to provide a market for the iron. To build five miles of railroad from the B&O to his West Virginia coal lands, he proposed a stock lottery—offering additional stock in the coal lands as prizes. He was one of the first to go bankrupt.¹⁸

Through such experiences, the capitalists became obsessed with the problem of trust. Enoch Pratt, together with Henry Walters, S. M. Shoemaker, and Albert Schumacher, had organized the Safe Deposit Company, with an ingenious and magnificent vault, in 1864. By 1876 they had amended it to a "trust company." The object was to lodge "trust" in a corporation and to make relations of trust into objects of profit. The investment and management of the money of widow and orphan, lunatic and prodigal son, formerly handled by the merchant friend and overseen by the Orphans Court, would be handled by a corporation whose life was more permanent than a human being. The corporation's incentive to protect and amass capital would be insured by a rising rate of commission on all accretions to a trust fund. Pratt was also associated with the National Farmers and Planters Bank in Baltimore. He later reorganized his Safe Deposit and Trust Company as a complete financial department store, now part of the

Mercantile Trust Company, one of Baltimore's three largest banks. He was an incorporator of the National Trust and Guarantee Company (1882) and the Maryland Life Insurance Company, which had a remarkably broad charter allowing it to issue bonds and seals, sell at auction, buy and sell real estate and securities, and collect interest. These charters and "instruments of trust" offered breath-taking prospects for the strategic deployment of other people's money.

Meanwhile, the popular press became obsessed with the "swindle." The news columns were full of the alleged Tammany manipulations in New York, and the Baltimore police blotter was full of well-dressed, fast-moving, fast-talking "con men" and shoplifters from Washington and Philadelphia. A Baltimore preacher summed it up:

The swindler is everywhere—on the curbstone, in society, in church, in State, in your parlor. . . . There are genteel swindlers, masculine and feminine; pious swindlers, philanthropic swindlers, splendid swindlers and very mean ones. Every man feels that his gas bill is a swindle, and many think the same of the tax bill.¹⁹

The preacher's reference to the tax bill and the gas bill as swindles stated squarely the problem of municipal growth. What was the relation between municipal enterprise and private speculation? between mercantile morality and the public trust?

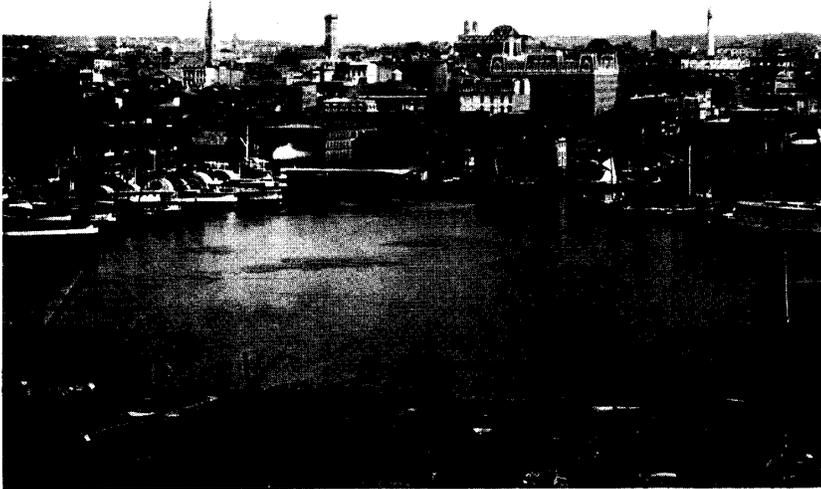
Municipal Enterprise

To compete with other cities, Baltimore's growth strategy was to boost the city's external exchange by new investments in steamships and railroads. But as the city multiplied its exchanges with the outside world, there had to be a comparable boost in internal communications. Within the very center of the city there was once again an intensification of exchange and communications, generating capital values—land values, built capital, corporate capital, and bank capital. In each form of intensification, one must examine the role of public investments.

Public enterprise decidedly grew in scale and complexity in this generation. The growth of the municipal corporation was essential to the growth of the other great corporations, such as the railroads and horsecars. The object of each private corporation was to capture exclusive, legally defensible rights of some kind that would insure it a competitive advantage. Such monopoly rights might be patents, franchises, exclusive rights of way, or ownership of land. Baltimore's businessmen were least effective in using patents. Only the canneries and a few foundries generated significant patents or technological advantages; the other industries depended on patents and machinery developed elsewhere. Their preferred devices were legally defensible rights to advantageous locations. Thus, each entrepreneur was a geographical strategist, and business competition rested upon competition for advantageous sites or routes. Public investments, public franchises, and the public law of real property protected or created values at particular sites, favoring one entrepreneur over another.

External Exchanges

As in former times, channel improvements were public investments, while waterfront land was private property. Private investments in warehouses, wharves, and elevators welded the railroads and steamship lines into an effective



This inner harbor view of post-Civil War Baltimore shows how the old merchant houses had been replaced by larger commercial structures to service the increased port activity.

system of external exchange, at the same time converting the benefit from public investments into private corporate income. The city itself appropriated \$200,000 in November 1872 to deepen the channel. J. Hall Pleasants, John Garrett, and the mayor constituted a commission to lobby Congress for \$1 million more. The engineer, Colonel Craighill, located a new channel to avoid a rocky bottom formation.²⁰ The lobbyists sought money to develop the new Craighill channel and also to deepen the older Brewerton Channel to twenty-four feet, to accommodate the largest type of steamship—three to four thousand tons—that entered New York. They argued that because of the great increase in railroad shipments of grain, coal, and beef from the West for export from Baltimore, it was proper that the West should assist in procuring adequate appropriations for the Baltimore harbor. A tenfold increase in the customs revenue of the city (now about \$10 million a year) made a million-dollar investment appear worthwhile from the federal standpoint. The lobbyists were doubtless correct in this, and they got their million. Garrett in particular was in a position to reap a substantial portion of the yet greater private gains. By 1878 the B&O on Locust Point, Winans at Ferry Bar, the Canton Company, and the Patapsco Company were all reinforced in their monopoly locations by recommendations of Craighill and the Coast Survey. These planners, for sound technical reasons, recommended that no more pier or wharf permits be issued for development along Light Street, Locust Point, or Fells Point, but that development should be allowed on the south side of the basin and in Canton Hollows.

Rivalries for waterfront sites at the key junctions in the new steam transport system explain the railroad development strategy of this period, in particular, the two great tunnel projects. Virtually all the investments were concentrated in 1872 and 1873. They can be simplified somewhat by regarding them as a struggle between Garrett's B&O and the others. The only change in land and lines of the B&O was the acquisition of another forty acres on Locust Point and the Camden

"cutoff," which allowed a more direct routing of passenger trains between Baltimore and Washington. But the B&O made massive investments in its properties to take full advantage of its established situation. By agreement with the PW&B it could transfer freight cars across the harbor from Locust Point to Canton, and save drawing them through Pratt Street.

The privileges of the tax-free, coal-owning B&O Railroad were much resented by major coal users and other waterfront land holders. In 1868 the B&O was charging \$2.58 per ton of coal carried from Cumberland to Locust Point. "The B&O railroad carries coal from Cumberland, at a fixed rate and ample volumes. But it has drawn the utmost farthing."²¹ The Western Maryland Railroad was a Baltimore strategy to create a line to compete with its earlier creation, the B&O, for the coal trade. The city endorsed \$500,000 worth of bonds, contingent on only \$150,000 of private subscriptions; it was to control the board of directors. The line would come in by Owings Mills, cross into the Gwynns Falls valley, then the Jones Falls valley, and reach tidewater at Canton. Progress was exceedingly slow, and private capital did not materialize. The city issued another \$500,000 worth of bonds to finish the road, and two years later it appeared that it would require yet another \$1 million. Local businessmen were annoyed with the B&O for blocking the project and with the "city directors" of the Western Maryland itself: "The city's interests have been carelessly compromised. The road has emphatically become a city work, the city being left to hold the bag pretty much by herself."²² The *Sun* thought it would be better if the city would sell the road, "but—nobody bids." This time the city issued \$1 million of city stock as backing. Altogether, Baltimore in the early '70s invested \$3 million in the Western Maryland Railroad. By 1898 it had paid out on these bonds another \$3.1 million of interest (6 percent), which the railroad had failed to reimburse. The Western Maryland main line was built and a depot was opened on Fulton Street, but it did not yet have its own downtown depot or the tidewater outlet essential to a coal road. It played a role in local real estate development, but it was not yet competitive in the railroad duel.

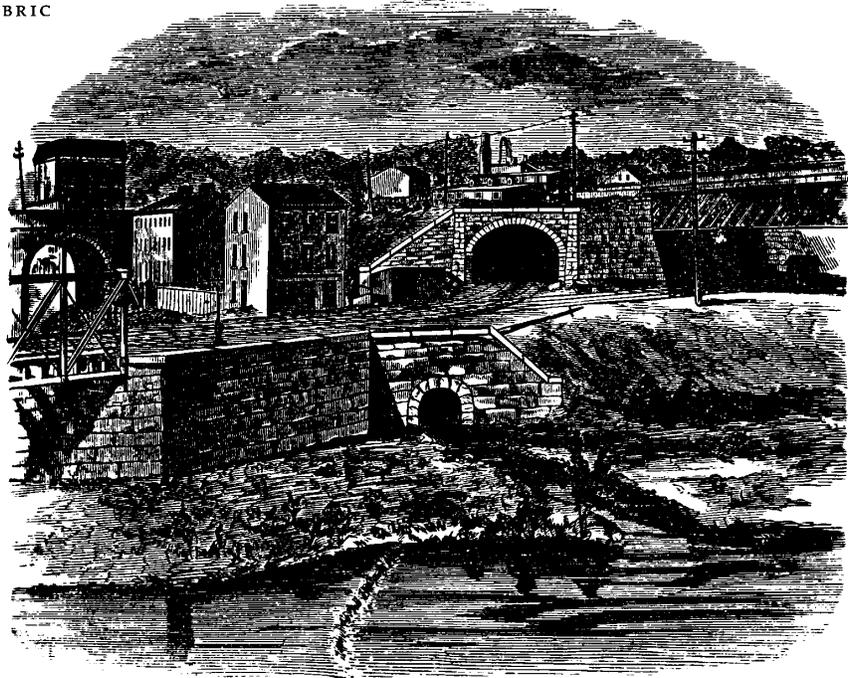
As the Western Maryland Railroad limped along, it was clear that the "Union tunnel," which would connect with tidewater at Canton, was critical to its overall strategy. The Union Railroad Company reorganized several times, but did not succeed in unifying all the railroads. The Canton Company, interested in creating real estate values and industrial opportunities, picked up the ball. In 1871 it subscribed \$590,000 worth of stock to the Union Railroad and endorsed issuance of \$873,000 in twenty-four-year bonds, secured with their own Canton ground rents. This amounted to nearly the whole cost, and the Canton Company took a mortgage on the entire franchise and rights of the Union Railroad. The 5/8-mile tunnel was laid under Hoffman and Greenmount avenues, between Cathedral and Arch streets. The line cut off Belvedere Street and took the old water house and millrace. Together with the Northern Central's work, this represented once again railroad redevelopment of an earlier generation of water supply installations. The company announced in June 1873, "The Union Railroad with its noble tunnel is now completed."²³

One can now see how the noble tunnel fit into place in the more aggressive

strategy of the third major railroad, the Northern Central. At this time, the Northern Central was in the hands of the Pennsylvania Railroad, whose nationwide game was a rude competition with the B&O. Among the geographical advantages that would give the Northern Central an edge in through-passenger and long-haul freight traffic were access to tidewater at Baltimore and entry to Washington. Like the B&O, the Northern Central entrenched itself in its strongholds in Baltimore on land already acquired, raising its productivity and lacing itself into the redevelopment of the Jones Falls valley from Calvert Station to Druid Lake. It bought the city's old stock in the Baltimore & Susquehanna and made \$2 million worth of improvements. It built an uptown depot on the Lanvale mill property (close to the present Pennsylvania Station), laid a new line on the east side of the falls, built a "powerful stone wall" along the Jones Falls as far south as Eager Street, and regraded land in front of the jail for freight yards. The city cooperated by diverting flood control money to street extension and bridges over the falls. The bridges at Charles Street and Decker Street (Maryland Avenue) were a second generation of iron bridges, the height of elegance. They were designed by Charles Latrobe.²⁴ Mount Royal Avenue and its park terraces were intended to join in a most attractive manner the two districts of wealth, Mount Vernon and Bolton Hill. As part of that scheme, the city wanted the Bolton locomotive shops removed. Therefore, it contributed \$100,000 to a land exchange, and the Northern Central located its shops and repair works in a new Bolton yard north of North Avenue. The city also built bridges over the Northern Central at Madison, Monument, Fayette, and John (Preston) streets, further subsidizing the railroad's use of the valley.

The Northern Central was bringing down half a million tons of freight during the war, a million in '67, and over 3 million in '69. In 1873 it finally reached tidewater through the Union tunnel. All railroad companies could use the tunnel, subject to the same rates of toll. Oil shipments, by agreement with Standard Oil, doubled instantly. The Northern Central invested half a million dollars at Canton in a large grain elevator, warehouse, and coal pier. Thus, the Pennsylvania Railroad achieved the greatest advantages from the "Union" tunnel without investing its own capital and without any real threat from rivals.

The Pennsylvania's other *coup* was the construction of the Baltimore and Potomac Railroad. Organizers in Anne Arundel, Prince Georges, and Charles counties had been unable to raise the money during the war, so the president, Governor Oden Bowie, went to the Pennsylvania Railroad for capital. The ninety-mile line south from Baltimore to Pope's Creek on the Potomac would open up the coastal plain woods of Anne Arundel County, apparently barren, for truck farms and fruit. It would have a spur from the Bowie junction to Washington. What the B&P offered the Pennsylvania was, in fact, a right of way for a main line between Baltimore and Washington. To enter Baltimore, the B&P built a 1.5-mile tunnel into the Jones Falls valley.²⁵ There the B&P connected with the Northern Central tracks and new depot. It agreed to build bridges across all turnpikes leading into Baltimore to avoid the congestion of crossings at grade. There was quite an outcry when the company evaded the agreement. These points were outside the city limits, beyond the easy reach of city police and



The Baltimore and Potomac Railroad tunnel was in fact the gateway through Baltimore for the Pennsylvania Railroad's connection to Washington, D.C. The view here is of the eastern entrance to the tunnel, at the site of the present North Avenue bridge.

courts. The *Sun*, friendly to the B&O, accused the B&P of "working like an invading force, stealthily entrenching itself by night, so as to be ready for the attack which it anticipates with the dawn. Why should the city allow itself to be choked and blocked, dwarfed and confined?"²⁶ It also accused the B&P and the Northern Central of the same strategy of encircling and besieging the city in order to secure permanence to themselves: "They are both daughters of the same mother."²⁷

All the railroads laid financial siege to the city. B&O property was virtually tax free by its original charter. The new tunnels were also given a tax break: state legislation of 1876 provided that railroad tunnels in Maryland would be assessed, not at their capital cost or appraisal value, but at a rate "no higher than any other equal portion of said road," even a portion through piney woods or old sedge fields.²⁸ Thus, the profits of improved access and centrality were captured for private enterprise, and to a great extent by Philadelphia stockholders.

Internal Exchanges

New urban technologies offered opportunities, and the franchise insured not merely the protection of capital invested, but the protection of any larger stream of future profits. A well-secured geographical monopoly meant that more stock could be sold. It was possible locally, in gas, horsecars, and waste disposal, just as it was nationally in railroad, telegraph, and pipeline companies, to sell stock worth much more than was needed for actual construction. An inner circle of financial agents or managers could then skim off windfall gains before the overcapitalized company even began operating.

The several types of local franchise were smaller arenas than the railroads, and so there appeared a circle of smaller capitalists and engineers involved in many different ventures, often dependent on Philadelphia or New York for financial backing, patents, and construction contracts. They stirred the animosities between city and state, since the state through its chartering power could always overrule the city by facilitating or obstructing its franchises.

Issues of monopoly versus competition were debated. How should prices be

set, and who should receive how much profit? All municipal fixtures were "natural" monopolies, that is, competition offered no long-run solution for the consumer because the larger distributor had lower costs. But each new technical option (borrowed from elsewhere) suggested a possible economy for the consumers, and the city council and the legislature were perennially persuaded to create "competition" to obtain the new technology. The competition was always short lived. The People's Gas Company was built at the foot of Scott Street (1871), but promptly reached a secret agreement with the older Baltimore Gas Company to split the territory along Eutaw and Pennsylvania avenues and to raise the price of gas streetlighting to the city. There were thirty-four hundred gas streetlights and more than eleven thousand customer households. Both companies made profits. In 1877 a new Consumer Gas Company had a \$2.4 million works built on Lancaster Street on land leased from the Canton Company. Frank Hambleton was the engineer, and Thomas Hambleton & Co., bankers, were trustees for the mortgage. The Baltimore interests possessed nothing of value but the franchise, but they managed to take control of it and put it into operation without having paid the New Jersey contractors and patent holders anything.²⁹

Horsecar lines were a feeble imitation of the steam railroad—low-grade power and technology, low-paid labor, inefficient operations, erratic profits. Their real appeal was for use in the development of suburban land values or as adjuncts to railway strategy, connecting the several railway station and steamboat lines. For such aims, the scramble for franchises offered an arena for modest local capitalists who were politically connected; the cast of characters is reminiscent of other public works contracts and public franchises. In 1872 City Passenger was the largest, with 800 horses; among the participants were Henry Tyson, who ran it in the red, Enoch Pratt, and Oden Bowie, who developed it to steady dividends of 10 to 12 percent. Its principal rival, Citizens Railway, had 215 horses and ran between Druid Hill Park and Patterson Park, by way of the Pratt Street wharves and the President Street Station. James L. McLane was the principal in the Frick Lines, whose Park Railway allowed the Western Maryland Railroad to connect its suburban depot (at Fulton and Laurens streets) with the Northern Central Station and the Broadway ferry. Its Baltimore, Peabody Heights, and Waverly line and its Edmondson Avenue line were geared to suburban real estate ventures. A dozen other suburban lines had 15 to 40 horses each. T. E. Hambleton organized the People's Passenger Railway in 1878, about the time the Hambletons launched their gas company.

An epidemic disease of horses, the "epizootic,"³⁰ in the fall of 1872 suggests the extent to which horse-drawn services integrated the circulation system of the city. The Board of Health estimated that there were fifty thousand horses in the urban area. The bronchitis and "hacking cough" of the horses stirred up more attention and concern than the smallpox epidemic a few months earlier. The newspapers were filled for weeks, first with preventives, then remedies, then weekly mortality estimates from Horner's glue factory. "Many poor animals are kept at work, staggering under heavy loads. The smell of burned tar, carbolic acid and other disinfectants about the stables is almost universal." The draymen

and carters were sorely distressed, despite the prices they could suddenly command. Theaters held benefits for the car drivers. The livery stables suffered losses. With the near disappearance of horses from the streets, handcarts and wheelbarrows were in demand around the docks. Men and boys toted bundles on their heads, and milk was delivered by two-wheel pushcarts. The residents of Waverly arranged an hourly street railway car drawn by ten men. "Colored men appeared on the streets regularly hitched to vehicles of different kinds. . . . Such loaded wagons were followed by crowds of volunteer bipeds, to the great amusement of the crowds on the sidewalks." Firefighters, police, and citizens drew the steam fire pumps, "suggestive of the old volunteer days," and the B&O was allowed to use steam locomotives in the streets. At last, after a month-long crisis, "convalescing animals appeared, well wrapped up in blankets, and attended by grooms."

Hydrologic Circulation

Baltimore was suffering in drainage and water supply from the cumulated effects of growth, a lag in public works behind private enterprise, and thinking small in previous years. Nothing much had been done about the basin or about implementing the sewerage plan of 1862. In the absence of civic leadership and collective action, individualism ran rampant. The public wells still in use in Fells Point and other older neighborhoods were often polluted by sewage. The city council had become very lax in issuing all kinds of permits. There were now twelve hundred wooden sheds and stables adding to the fire hazards. Stray dogs could be counted by the thousands. Permits were issued for cellar drains, to many of which were attached water closets, "the drainage of which passes into the basin." Those fortunate enough to have private drains and interior closets now discovered the risk of deadly sewer gas in their homes.

These effects were noticed only in seasons of crisis, when natural variation swung to one extreme or the other—too little or too much water. In 1858, 1866, 1868, and 1869 there were serious floods in the Jones Falls. Most occurred in the thunderstorms of July. July was also the season of prolonged heat waves and drought. Droughts were severe enough in 1866, 1868, 1876, and 1878 to cause shallow wells to dry up. Fells Point was most often affected. Groundwater pollution was aggravated by the lack of rain to flush the streets. In July 1876 150 cases of typhomalarial fever occurred in one block of Fells Point. A week unbroken by storms could result in dozens of deaths from heatstroke and hundreds of cases of heat prostration. During one week in July 1876, for example, deaths reached double the seasonal norm. Heat deaths show the way environmental stress was associated with occupational risk and social assignments. Many of those who died were construction laborers—street pavers, cellar diggers, stone cutters. Most deaths occurred on the job about 5 p.m.—a seventy-year-old man digging at the bottom of a well, a man of fifty heaving coal on the pier, a man of seventy digging dirt in Wilkins Avenue, a sixty-eight-year-old man in the coke pit at the gashouse. There were also young men of twenty—stowing ice in a steamship hold, digging at the ore bank, or firing his father's brick kiln. An Irish man died in the smithy, an Italian fruit vendor on the street, a German

cigar maker on the factory floor, a colored woman doing washing. Even the horses collapsed—three car horses and several “Irishmen’s horses.”

Such crises occurred once or twice in nearly every year, usually in July. But only the exceptional year, the twenty- or fifty-year record event, could wrench public opinion to demand civic action. The events of this generation, which focused attention on the Jones Falls and the basin, were the flood of 1868 and the drought of 1872.

On 24 July 1868, a record “waterspout” washed out all the bridges on the Jones Falls except the one at Eager Street.³¹ Water rose to the top of the lamp-post at Harrison Street and filled two thousand cellars to the ceilings. A horse-car was carried along Gay Street by the current, and two of its passengers were lost. The owners of millraces demanded compensation. Investigations were ordered, consultants hired, and the city’s bevy of railroad engineers resurrected the schemes proposed after the floods of 1817 and 1837. They calculated that it had rained seven inches in twenty-four hours. A plan for diverting the Jones Falls through a tunnel and canal to Back River was estimated at \$5 million to \$6 million. An alternative proposal was a \$3 million urban renewal scheme: the city would borrow the money to buy the entire flooded district, straighten the falls, raise the streets and bridges, and pay off the bonds by reselling the property.

Before any flood control work could start, the other catastrophe struck. The drought of 1872 surpassed all records for twenty-six years. On 13 May the water ceased to flow over the Lake Roland dam. The city was consuming 9 million gallons a day, and extreme conservation measures were taken. “Jones Falls is a failure. This stream, although capable, as the past has proven, of being ram-pagious and uncontrollable during the rainy season, now turns out to be equally unreliable during the dry season . . . an insignificant little brook hardly three feet wide.”³² The wells dried up. A heavy toll of smallpox in 1872 and 1873 may not be sheer coincidence. And the stench from the basin could no longer be ignored: “Every steamboat and little tug that moves about the harbor stirs up the nasty puddle.” The newspapers reported its condition daily, and the grand jury undertook to investigate it.

The two events—flood and drought—crystallized a determination in Baltimore citizens to do something. But nobody agreed what to do or how much it should cost. The financial drought of 1873 postponed action, and ultimately nothing much was done. The walls of the Jones Falls were raised, the lower falls was dredged again, and the long-debated curve near Pleasant Street was straight-ened. Most of the flood control money was spent on fine iron bridges, contracted to the Baltimore Bridge Company and W. Bollman.

With respect to the basin nuisance, old schemes were also dusted off and new imagination was unleashed. F. H. Hambleton, the city engineer, recom-mended a sewer to intercept the sewage going into the falls and conduct it to a point downstream in the Patapsco River. Mayor Vasant wanted to fill the Pratt Street docks, extend Camden Street across them on a heavy stone wall, run a railroad on it, and then deepen the remainder of the basin.³³ Others suggested a



This segment of the Sachse bird's-eye view (1869) details the mouth of the Jones Falls and the harbor.

canal or drain toward Spring Garden, with aerators. Henry Tyson favored a "propelling pump" to create a current in the basin.³⁴ A consulting engineer who had worked on deepening the Danube and irrigating the borders of the Nile was hired from New York to arbitrate, but his proposals for the basin were ignored.³⁵ In fact, little was done for the basin except cheer in 1876 when the fish came back. It was observed that the sugar refineries had closed since the depression of '73. The financial drought had, for the moment, compensated for nature's drought. Federal Hill, having escaped cutting down, was at last acquired for a public park, and the topographic mapping, shoring up, and "greening" were undertaken by Augustus Faul, who had done the topographic survey for the Boundary Avenue Commission in 1851 and the survey for Buckler's plan in 1859.

Asked to comment on the basin, Buckler wrote back from Paris that while he loved the dear old city of Baltimore and its people, "past experience has taught me that, in their collective or municipal capacity, they are the most silly, unreflective, procrastinating, impracticable, and perverse congregation of bipeds to be found anywhere under the sun." He claimed they listened to no advice or common sense. "The result is that City improvements are never, or next to never,

done as they should be at first, and consequently are required often to be done at great cost, again, and sometimes over and over again."³⁶

The waterworks was clearly one of those projects that required redoing at great cost, again. Each new effort bequeathed another lake to the city, and this might be called the generation of lake makers. The Jones Falls water supply was completed as Swann had intended. Lake Roland was finished and began silting up, and the Hampden "high service" reservoir was in operation. Druid Lake was finished soon after the war. At Druid Lake the water engineer, Robert K. Martin, sought "to connect utility to beauty." His dam, 119 feet high, was the largest earth dam built in the country. Mount Royal Avenue was built from the dam, to curve around the new circular Mount Royal reservoir and connect the new terraces facing the new Pennsylvania Railroad Station and bridges with that older kernel of monumentality at Mount Vernon Place. Druid Lake showed an appreciation of topography and monumentality that recalls the 1820s or the 1851 plan for a boundary avenue. It was a success. Yet the Jones Falls was a failure as a water supply. The drought of 1872 convinced the public to approve loans for a new supply, the more generous Gunpowder Falls system recommended by the engineers of the 1830s and 1850s. The magnitude of the new waterworks compared with the new railroad tunnels. They cost \$8 million and were not finished till 1881: Loch Raven Dam and Reservoir, Lake Clifton,³⁷ and Lake Montebello, and connecting them a great tunnel six miles long and seven feet in diameter.³⁸ All the lakes bore the mark of Robert Martin, connecting utility with beauty. Most of the elements are still part of both the water and park systems today.

The massive water projects introduced the city to a new plane of labor management and new opportunities for contractors and politicians. The work was concentrated during the lean years, especially 1877-78. While the city was building the Loch Raven reservoir and the tunnel from Gunpowder Falls to Lake Montebello, two thousand workers were employed on contract, night and day, for more than two years. The stream bed was excavated, and ten miles of roads were built around the reservoir. The principal contractors were L. B. McCabe and John and Charles Donoghue. "Colored men and mules do all this work," except for the building of bridges and a city force of bricklayers to arch the tunnel. "The huts of the laborers are thickly scattered along the riverside, built of logs and mud." The mining crews were also colored. They performed a dynamite demonstration for reporters, three hundred feet underground. These were Baltimore's John Henrys.

One man holds the drill while another strikes, and never misses. Both are stripped to the waist, and dripping with perspiration, and soaked with water, which percolates through the crevices of the rock continually. . . . The miners don't mind that sort of thing. They get their bread out of the wet, hard rock.³⁹

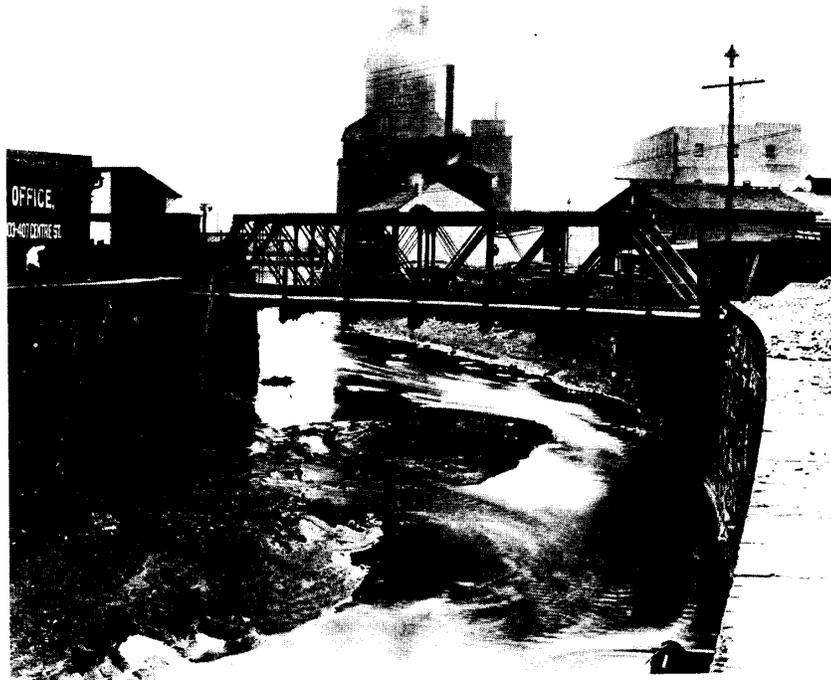
As on the railroad tunnels, some died. When a rope broke, an Irish foreman had his neck broken and a member of his black labor gang was severely injured. Another Irish laborer was permanently disabled when a timber slipped the rope.

The city's routine labor force increased along with its construction labor, and much of the hiring was in the control of the health commissioners. After a snowstorm the health commissioners hired as many as six hundred laborers to clear crossings and drains. Night soil was regularly hauled out of town by two hundred to three hundred private contractors, while a force of over one hundred city employees hauled cartloads of garbage and ashes about two miles out. Volumes of garbage, street dirt, and night soil increased 40 percent over the seven fat years, and a new system was devised, combining the approaches to these problems and establishing new bases for political power. The health commissioner hailed a patent scheme called the Odorless Excavating Apparatus, "one of the greatest blessings of the age,"⁴⁰ with which privies could be suctioned in the daytime. By a plan of C. A. Leas, the various waste products could be mixed in suitable proportions and sold for fertilizer. The absorbent coal ash had a deodorant effect on the night soil from the OEA. The biggest problem was finding sites for the dumps.⁴¹

The Irish, who in the 1850s were the stablemen, draymen, common laborers, and haulers, continued to monopolize the occupations concerned directly with horses, including horse railway work, night-soil contracting, and garbage carts. All city streetcleaners and garbage collectors were white. But their humble participation in the city's fast-growing circulatory system allowed entrepreneurs and technical men to get a foothold. By 1872 Irish-owned livery stables and transfer companies employed up to 100 horses. The fifteen well-recognized horse doctors were mostly Irish. The Irish paving contractors hired black men with their mules and carts. When the city council gave George Padgett's OEA an exclusive municipal franchise, it created a vested interest for the next generation.

All of these systems—gas, horsecars, water, garbage, night soil—involved the use of the streets for collection or distribution. The street provided more and more specialized services, operated by private or public monopolies, and thus the streets themselves were trammelled with servitudes—poles, drains, signs, and tracks. From 1870 on, the mayors complained steadily of the constant breakup of paving, as each company needed to dig up the streets for its own purposes. The first experiments were made with patent asphalt in South Street, and with Belgian block. The cobbled street itself was the classic case of what required to be done over and over again, up to a million square feet a year.

The city's financing practices were defective. The mayors overestimated tax collections and made low-rate campaign promises, while the 1867 constitution restricted the city's borrowing power. The "floating debt" was used: perennial borrowing to meet end-of-the-year overruns. Then "funding" loans were approved to turn short-term debt into long-term debt. All in all, the city borrowed about \$13 million in long-term loans in this period, primarily for the water system, the Jones Falls, and the harbor. By 1875 political and financial reform had become a major campaign issue. The *Sun* complained that the press performed the labor of Sisyphus, to interest people in municipal elections: "Each year the same dead weight of indifference and apathy has to be moved, and the cause of municipal reform, like a heavy stone, rolled uphill."⁴²



Iron bridges, designed by Wendel Bollman, provided relatively secure links across the Jones Falls. The Falls often appeared this placid, but spring freshets were recurring problems.

In contrast to the dead weight of apathy toward municipal reform was the momentum developed in real estate. As the tide of urban optimism rose, the city built up a new ring, and beyond that subdivided another ring of real estate. Land values rose a notch. Two features distinguished this new tide, the impact of passenger railways and the constraint of the municipal boundary. For the first time since the annexations of 1816 the city filled its bounds. In 1874 the line of direct taxation and urban services became coextensive with the city limits. The boundary in this generation sharply distinguished the dense urban environment from the rural environment. But a variety of new experiments and small installations spilled beyond the city line and prefigured massive transformations of the next generation and a new conception of an in-between suburban zone.

Real Estate Momentum

As the city filled, not every square inch was built upon, but its layout was wholly structured—in particular, the four “corners” of the city and the northern edge. The new police stations, parks, and depots defined these corners of the city: Druid Hill Park on the northwest, Riverside Park on the south, an extension of Patterson Park on the east. Streets were opened to make them accessible. To connect the new Western Maryland depot, the city opened Fulton Street northward and Stricker Street southward, and improved North Avenue. Horsecar routes that joined the parks and depots also traced in a framework for whole districts. The handsome three-story dwellings that fronted on Franklin Square and Lafayette Square and many of the connecting axes had horsecar service, wide planted streets, and relatively good drainage and ventilation. In Bolton Hill, builders were putting up “first-class dwellings” in groups of five or six—for example, twenty-two-foot fronts along the Eutaw Place squares near McMechen Street, with mansard roofs, bay windows in the rear, and fronts of white marble and finest pressed brick. “The stairways are easy of ascent and massive.” The development of the elegant northwest axis of Madison Avenue was attributed in large part to the Citizens Passenger Railway.⁴³

Filling the City

Farther west, the Frick lines served Edmondson Avenue and Fulton Avenue. Dr. Edmondson's heirs donated Harlem Square, also on a height, as part of their subdivision. They owned all the surrounding land and had high expectations.

Jackson Square, in the east, was developed in much the same way.⁴⁴ The hill called Fairmount was leveled off to the building lines on Broadway and Hampstead (Fairmount Avenue), and wide dwellings were built facing the square or facing Broadway. Two were "on the New York plan," of "imitation brownstone" (a local sandstone), with a circular stairway in the center with ventilator and skylights. The horsecars went as far east as Patterson Park. The Union Railroad viaduct and tunnel laid the curious pattern of crossings and neighborhood distinctions for more modest houses in the northeast. Washington, Chester, and Choptank avenues were the new edge of the built-up city.

The southwest was predominantly a working-class section, where three thousand employees of the B&O lived. Ross Winans took out permits for a row of four-story brick "tenements" on Parkin Street between Pratt and McHenry. His innovation was modeled on the London schemes of dwellings for workers, probably upon George Peabody's pilot projects. But Baltimoreans were determined on single-family housing, and the experiment was not a financial success. More popular in Southwest, South, and Southeast Baltimore were the building associations, which advertised "ready to lend," with weekly dues twenty-five cents a share.

South Baltimore was rapidly built up as working-class housing, even in the lean years.⁴⁵ When the B&O roundhouse for freight locomotives was built next to new Riverside Park, a hundred families of enginemen and conductors moved from Mount Clare to this vicinity. Developers such as Gittings, Frederick, and Cardelin built two-story blocks for working-class home buyers, and a smaller number of three-story houses with rental dwellings over stores. They built rows east of the park along Fort Avenue for laborers and mechanics at the coal oil wharves. J. N. Camden, consolidator of the Baltimore refineries for John Rockefeller, invested \$100,000 to fill marshland and build warehouses. He had several hundred employees working in "the Vineyard" near Ferry Bar. This was an advantage for Thomas Winans, who owned most of the land south of the B&O to Ferry Bar, the southern tip of the peninsula. Winans privately graded and paved several streets through his property, added a dock, and began to build dwellings.

The construction boom was financed by the advance mortgage, vigorously debated in the legislative session of 1872.⁴⁶ Nearly all buildings in 1870 and 1871, over 3000 a year, were built on advances. That is, the landowner sold a leasehold interest to a builder and agreed to advance him working capital in installments as the work progressed. The advances usually amounted to half the cost of the building. This mechanism promoted construction, but captured a lion's share of all profits for the landowner. He or she received an annual ground rent (as in the past), but more important, was able to charge more for the land: "It is a well known fact among builders that when they lease ground and build on advances, they have to pay a much higher rate for the ground, sometimes double what they would have to pay if they would lease without advances being

made." The higher land price was passed on to the consumer, and required building for higher-income people. That helps explain why most of the construction was of three-story houses. "What is the present system doing? It is building all large houses, larger than most people can afford to live in." In addition, the landowner was protected by a mortgage on the property as of the date of the land sale. (The advances came later.) If the builder failed, the landowner foreclosed, getting the whole property for the value of the prior claim, or about half its cost. The mechanics and materials men were left without any security for their outlays, although their investment of labor and materials had supplied the other half of the working capital. "The present law makes the rich man richer and the poor man poorer."

The city remained compact because of the services it could provide directly—paving, water, fire, police, and schools—and indirectly, through franchises for horsecars and gas. Outside the city limits, lesser corporations tried to offer these services in integrated packages, but their success varied. Most proved to be small enterprises, but they had large pieces of land and large ambitions. The horsecar idea was seized upon in the counties by the old turnpike companies and by real estate owners who wanted to develop residential "parks." The village-like nuclei of Baltimore's important inner suburbs were all developed in this era. Waverly is an example. Near the old tollgate on York Road at the end of the Civil War there was a cluster of fifteen dwellings called Huntingdon, "dignified with a post office." On Harford Road opposite that spot, a village scheme called Homestead had failed in the '60s for want of transportation. It was still forested, and on Thanksgiving the sportsmen came out to shoot sparrows. A group of "enterprising gentlemen" purchased all the land between Huntingdon and Homestead, and laid it out in avenues—Huntingdon, Waverly, Washington, Baltimore, Gorsuch. Frame houses were built cottage-style with bay windows and ten to twenty rooms. By 1872 it was described as a neat country town of 250 to 300 dwellings or 2000 persons, spread over thirty or forty acres. It was served by the Peabody Heights and Waverly horse railway via Charles Street. Another line ran double-decker horsecars along the York turnpike from city hall to Towson, and the Hall's Spring line ran out Harford Road and Homestead Avenue. Contemporary estimates of the land values in Waverly give some idea of the mainspring of this process. In 1866 land could be bought at \$450 to \$600 an acre; once the avenues were built (1869) it cost \$4000 an acre, and with the horse railway service (1872) it was \$16,000 an acre. The total property value, including improvements, increased over the seven fat years from \$600,000 or \$800,000 to \$3 million or \$4 million.⁴⁷

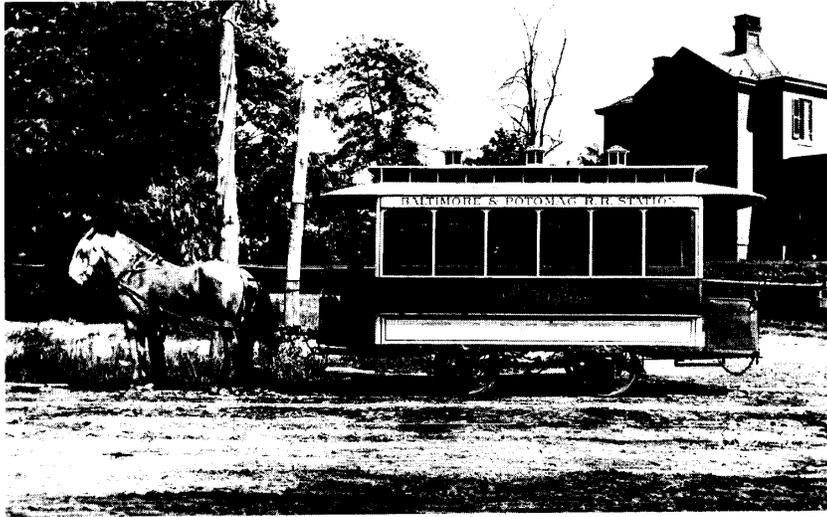
Land values rose likewise along other suburban railways. Before the Powhatan Railway was built, land between the Baltimore, Liberty, and Franklin turnpikes could not find a purchaser at \$500 an acre, but George Appold now bought 144 acres at \$1500 an acre, another sale was made at \$2000 an acre, and these buyers in turn sold building lots at \$2 a front foot, or over \$8000 an acre.⁴⁸ The development corporation for Highland Park resembled the steamboat enterprises—a cut for the landowner, the loan company, and the savings bank.

Suburban Nuclei

Two miles of avenues were graded and planted, a gasworks built, and a dozen villas sold before the bubble burst. Walbrook, served by several horsecar lines, was more successful. Suburban horsecar lines permitted growth spurts in Highlandtown, Catonsville, Pimlico, Arlington, Pikesville, and Hampden. Country seats about the same distance out of town (seven or eight miles) not part of villages or on horsecar lines continued to bring only \$350 to \$1000 an acre. Consequently, development schemes were rampant in Baltimore County. A narrow-gauge railroad was projected along Stony Run, through the property of the Hampden Association, past Lake Roland, out to the Sheppard Asylum beyond Towson. The landowners signed free rights of way and subscribed \$35,000 to extend Green Spring Avenue six miles from Rogers Avenue to the Green Spring Valley and Rogers Station on the Western Maryland Railroad.

Suburban industrial development also depended on the new transport. The cotton mill villages grew but remained rural in character. Industries began to come to the railroads. Among them were the slaughterhouses, responding to competition from western stockyards (Chicago, Cincinnati, Kansas City) and western railroads. The B&O purchased a piece of land on the Gwynns Falls from Ross Winans, and another group of investors bought a nearby site on Gwynns Run and the B&P Railroad. The by-product industries developed close by (Wilkens' hair factory, Lipps's glycerine and soap works, and Appold's new location for hide, oil, and leather works). Still another group of slaughterhouses expanded at the junction of Pennsylvania Avenue, North Avenue, and Fulton Street. They were at their most prosperous in this era, and all the owners were involved in suburban residential speculation. All these industries drained into Gwynns Run, Gwynns Falls, or Chatsworth Run, and eventually into Middle Branch. They illustrate the significance of the city boundary in defining a locus for dirty industries outside the city. The old city boundary, where it touched waterfront or stream valley, was marked out on the landscape in ways that could not be erased after later annexations—by the siting of the slaughterhouses and the horse barns of the street railways. The car lines were either city or county franchises, not both, and their operating logic placed barns at the ends of the lines, that is, near the city boundary. Once organized, these sites have persisted, even though the boundary has been removed twice, the corporate identity of the car lines has disappeared, the transit vehicles have been converted to electricity and then diesel fuel, and the barns have been rebuilt of concrete and steel.

As construction proceeded, inside the city and out, people gradually adjusted to a sense of inexorable movement toward annexation of a belt around the city. The mayor complained that the "disgraceful condition" of North Avenue was owing to joint party ownership. The city's inability to implement its boundary avenue plan still rankled. In this period the city had to buy land in the county for its parks and water system. Druid Hill Park, Lake Roland, the Bay View almshouse, Loch Raven, and the right of way for the new water tunnel were all outside the city proper. The purchases did not produce much conflict, but there were complications, such as the inadequate horsecar service to Druid Hill Park because of the different jurisdictions for franchises. The city had trouble, as I



The horsecar was a key element in the rapid suburban growth of Baltimore in the 1870s, as it allowed a radical increase in the available residential building space. The Canton line was one of the last to continue in use.

have said, exercising its contract rights over the B&P Railroad grade crossings, which choked city-bound traffic. It had to make a complicated deal to rebuild and subsidize the Long Bridge from Ferry Bar into Anne Arundel County, to get rid of a toll on goods coming to Baltimore. Baltimore County resisted the city's attempt to find new depots for garbage and night soil. County citizens succeeded in 1874 and 1875 in getting injunctions to close all four dumps that the city had leased.

In addition to those immediate problems, the city saw annexation as inevitable and recognized the problems it would inherit from a want of planning in the counties. It therefore sought to impose a planning process on the surrounding belt. In 1868 the mayor ordered the city commissioner to prepare a map in relation to extending the line on the north "to promote the architectural beauty and symmetry of future improvements." A survey and a map were made showing the future locations of streets and building lines. Over five years (1871-76) the Baltimore County commissioners, under an act of the legislature, planted and recorded hundreds of stones to mark the corners of future streets, most laid out as extensions of the city's street grid. In November 1874, the city passed an ordinance for a trigonometric survey of "the interior topography of the city, and that part of the county which must at some time, not far distant, be absorbed in the limits of Baltimore," a district six miles on the north and two miles to the east and west of the city. Council members argued that this was the zone of "metropolitan" dimensions, and the city ordinance offered to pay up to \$2000 a square mile in the city and \$1000 a square mile in the county. The proposed map would show topographic contours at five-foot intervals, widths of streets and sidewalks, the direction of flow of surface drainage, and elevations of street corners. It would establish the grades of streets not yet open "with a view to the establishment of a general and uniform system of underground sewers . . . and water supply." It would be consistent with the topographic work of the U.S. Coast Survey, which was preparing new maps of the harbor and channel improvements.⁴⁹ The objectives were rooted in the city's own experience of its growth onto higher ground and the deficiencies of Poppleton's plat.

The outcome also recalls 1816. The plan did not go forward because of the costs. Maps were finally ordered from William Shipley, but instead of topographic maps, these were mere location surveys like Poppleton's. The sections returned in 1876 were "regularizing." Like Poppleton's, they tended to disregard natural relief. From buildings or fixed features, the surveyors fixed streets.

Sometimes they straightened them slightly, as in the case of Woodberry Avenue. Where there were as yet no buildings, they redesigned odd grids, as in Waverley and Homestead, to conform to an overall rectangular grid of north-south alignment.

There was so little initiative in Baltimore County government that the proposed through streets approved by the street commissioners were never developed. Some would have been difficult over hilly land. For example, a grid lying north of and parallel to Woodberry Avenue (Druid Park Drive) would have crossed through the rugged slopes and quarries at Cold Spring. Such plats were disregarded by the county. They frequently retained the angled rural roads that the plan recommended suppressing, such as Merryman's Lane (now University Parkway) and Joppa Road. The exceptions were the corporate ventures—the Canton Company and the Patapsco Company—who through this exercise shifted into a truly urban style of planning consistent with Baltimore's urban experience. The Canton Company in 1872 employed Simon Martenet to review all its land records and prepare an atlas showing the grades and drainage for all future improvements on a thousand acres. He ran the levels for forty-four miles of streets and avenues and drew profiles showing the depth of fill or cut. The city engineers later admired the fact that the Canton Company had proceeded to carry out its own plans.

As with the Poppleton plat, the results contributed chiefly to marketing of land. Three sections on the west were returned in April 1872, showing Edmondson Avenue 100 feet wide, through land A. S. Abell had recently purchased, and other lands of Charles Shipley, Hugh Gelston, and Thomas Winans.

The work of the street commissioners is now producing something tangible for those who have been croaking. There is scarce any doubt but these plats will have a marked influence in the sale of property in their limits, as those who buy will very likely have in view these streets as laid down . . . and this fact ought to have a considerable influence also upon the price of land.⁵⁰

A Centerpiece

As the city built up its "inside" land on advances and "belt" landowners speculated in a future market, new expectations also ripened for the downtown area. In the center, reconstruction was undertaken to match the new intensities of exchange. The intensification of commercial activity increased the market values of downtown property. Less spectacular than on the fringe, they were, nevertheless, an impressive amount, roughly proportioned to the city's total growth. At the height of the boom, the *Sun* reported discussions of the lease of a plot of land in London at a value that would be capitalized at \$7.5 million an acre. The *Sun* reporter figured that the highest valued land in New York, on Broadway, might bring under half that, or \$3.2 million, and the best situated lot on Baltimore Street would bring about \$1.2 million an acre.

If New York is to become another London, as her citizens fondly believe, in magnitude, in commerce and in population, there is ample room for appreciation in city real estate. And it will also be observed that when Baltimore shall become another New York—a

consummation which may be accomplished before the end of this century—the concurrent advance in the highest present values of city property will be nearly in proportion to the increase in population.⁵¹

The new values and expectations of rents were translated into new architectural forms. New specialized buildings, new functional concentrations, and new monumental clusters were aligned on the arteries leading directly from the heart. Along Baltimore Street a large number of business houses were rebuilt. The *American* commented on the novelty of the “pretensions to architectural beauty” in business houses: “Let anyone call to mind the appearance of Baltimore street five years ago, and then take a stand at the Eutaw House and look down as far as the Maryland Institute. He will be amazed at the change.”⁵² The *American* took some of the credit, having built for itself a five-story “graceful grouping of iron columns, pediments, and arches.” Howard Street was also rebuilt with new pretensions. It was no longer a mere workaday street of millers and farmers, but a shopping street with a wide range of goods, thanks to the pull of Camden Station, which attracted the wholesale buyers from the south, regular customers from Washington, and visitors from the West. At the north end of Howard Street the combined market and armory was rebuilt “attractive and solid-looking,” with three-foot-thick walls, four rows of immense iron columns, and novel latticed trusses to support its arched roof. The hall of the armory, over the market, was designed for either drilling exercises or large soirées, the peacetime functions of the gallant Fifth. Nearby were the new City College at Howard and Centre and the Academy of Music, the city’s most massive hall. It seated three thousand. This building, like others that remain on lower Howard Street, proclaimed the taste of the moment by a stripped effect of red brick and white marble or granite trim and an eclectic solid geometry of ornament. Lexington Market continued as a magnet attracting customers from North and Northwest Baltimore into the Lexington Street and Howard Street axes. The Great New York Tea Company cultivated a merchandising strategy still new in Baltimore, selling on a narrow margin with a large turnover. It opened its third “large and elegant” Baltimore branch store on Eutaw Street opposite the Lexington Market. “The entire front is painted green and fancifully ornamented with red, yellow, orange and blue, making it decidedly unique and imposing.”⁵³

The increase of railroad travel and Baltimore’s role as purveyor to the South also fostered a new generation of hotels and banks. The most substantial was the Carrollton Hotel on Light Street. Enoch Pratt and William Keyser were among the original backers, with Niernsee and Nielson as architects. The new banking houses were also built in the original mercantile district, but with a new lavishness and a new solidity. A good example was the Safe Deposit Company of Baltimore in South Street at the east end of German Street (Redwood). The National Farmers and Planters Bank, with which Enoch Pratt was also associated, was at South Street and Lovely Lane. The Savings Bank of Baltimore was renovated. The United German Bank moved out of Raine’s Hall, leaving it to the societies of workers, and built a modern banking house opposite, in Baltimore Street. Uphill near St. Paul’s other monumental groups were planned. A new



In a role similar to that of the Lexington market, the Broadway market was the centerpiece of commercial life for Fells Point. The market structure included a meeting hall on the second floor.

U.S. courthouse was built at the end of the war, and a Gothic turreted post office in 1875. The Garretts and the Browns contributed heavily for a triangular YMCA building (Niernsee and Nielson, architects) at the northwest corner of Charles and Saratoga streets. A Masonic hall was built opposite, and A. S. Abell built the Morse Building.

Most important, most expensive, and longest in gestation was the city hall. Projected soon after the city's rechartering and divorce from the county (1851), but stalled by the civil war, it was finally dedicated with great fanfare in 1875. It cost a quarter of a million dollars. Streets were opened to improve access to it: Park Street was put through from Saratoga to Fayette, Liberty Street was sewerred, and Lexington Street was opened eastward. New hotels, the Rennert House and the Lavelle House, moved in close to city hall. The fire alarm telegraph was completely redeveloped, and the wires connecting the engine houses and street corners with its city hall switchboard were signs of municipal efficiency extended to the municipal limits. The architect, George Frederick, designed a work to rival the handsome public buildings of the federal government. Washington had suddenly swelled to half the size of Baltimore, with a good deal of help from Baltimore builders, materials men, and mechanics. Just as the Smithsonian and the Treasury building symbolized the centralization of the national government, the mass and the dome of city hall provided Baltimore with an

urban centerpiece. Reporters were taken through the construction site under a ponderous derrick worked by steam engines. They found themselves "within the subterranean depths of a huge pile of stone and bricks." They climbed a temporary staircase to admire the magnificent view from the half-finished dome—the shipping and trains "fluttering about," marked by the smoke trail of the engines. "Workmen seem as careless tramping around as on terra firma. A gang of colored hodcarriers marches around the wall in single file, singing in a cheery voice, 'Tramp, Tramp, Tramp.'"⁵⁴

The boom economy, with its new technology and new scale of enterprise, required a reorganization of work and produced a host of social problems. Successive labor crises were geared to the Biblical succession of seven fat years and seven lean years. As the boom swelled in 1872, skilled workers organized to reduce competition among themselves and the competition of new machinery that was sapping their bargaining positions. All the growth industries were in the throes of technological change—shoes, clothing, oyster packing, cigar making. All experienced "movements" of labor. The horse shoers for the horsecar companies met "to induce the company to maintain the prices they agreed to some weeks ago." The draymen, white and black, sought to arrange a scale of prices like the hackmen. A Workingmen's Assembly was formed from delegations of other associations, including the caulkers. But the depression that set in the next year stifled the combinations of labor. In each industry the competitive position of Baltimore workers was related to the competitive position of their employers in the national economy.

Thousands of workers described themselves for the 1870 census as tailors and shoemakers. Many were still running their own shops, but a majority were skilled workers in factories. In both industries the factory work had already been subdivided into a vast array of specific tasks. It was already dull and very different from the older crafts. The range of weekly wages in a shoe factory was wide, from \$4 to \$40. The average wage was \$22 for men, \$12 for women, ten hours a day, eleven months a year.

But a rapid introduction of machinery now changed the workers' situation. Clark, Perry & Co., the largest firm, installed the McKay sewer and cabler at the end of the war, and by 1873 twenty-six shoe factories in town were using it. The same company also introduced the McKay heeler, which allowed a man and boy to do the work of five heel nailers. The net effect of a large number of different machines was concentration and a decline in the numbers employed. The more skilled machine operators obtained slightly higher wages than before, but they were fewer, while the boys and women were more numerous and remained at the lowest wage level (fifty to seventy-five cents a day). The boys were no longer apprentices who could expect promotion in the firm. In 1873 thirty shoe factories in Baltimore employed 4000 hands; in 1890 eighteen factories employed 846 hands. The value of their output remained about the same, but other cities were capturing the growth in the national market. The full impact of the mechanization of the fat years can only be seen at the end of the lean years.

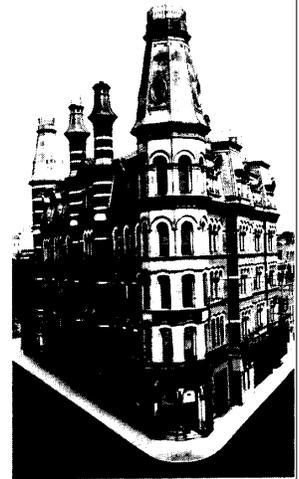
The timing of labor's effort to organize was governed by the business cycle

Social Adjustment

squeeze. The shoemaker Knights of St. Crispin had a lodge in Baltimore by 1868 and eight hundred members by 1871.⁵⁵ In April 1871 the women shoe fitters organized a branch. The seventy-five proprietors of the shoe establishments objected and formed an association, the Shoe and Leather Board of Trade, which locked the workers out and fired the union members. They offered to rehire them on probation if they promised not to join any society. As the employers saw it, the "superabundance of female labor rendering it procurable at very low wages," the women had no right to "exclude" others. Twelve hundred shoe workers went on strike. One employer agreed to the society so long as they would not "exclude him from controlling his own work room," and within a week the strike was settled: the employers agreed they had anticipated events, and recognized the union without making any other concessions to it. In 1872 the Knights claimed a thousand members in five lodges. But the economic crisis of 1873 produced layoffs and wage cuts. Resistance collapsed and the organization disappeared. In 1877 they reorganized with only two hundred or three hundred members.

Cigar making was becoming a sizeable industry in Baltimore, and the introduction of machinery, as in shoemaking, favored the employment of more women and young boys, and raised questions about the meaning of apprenticeship. Female workers—sorters and strippers—and boys and girls in the packing rooms were paid fifty to sixty cents a day (sometimes dropping as low as eighteen cents in hard times), while the men cutters, casers, and laborers were paid \$1.20 to \$1.60, and packers \$1.00, varying with the state of the economy. The men and boys also received a ration of smoking tobacco. In 1873 one hundred out of the seven hundred men workers in the city formed a union "to correct the evil of admitting apprentices as breakers and fillers of cigars for the packing machines." But the trend continued, nevertheless. The long stogee that was formerly made on southern plantations had become popular in Hungary and was preferred by the Kaiser. To manufacture the stogees in Baltimore, Kremelberg imported his factory superintendent directly from Vienna, and one hundred teenage Bohemian girls adept at the work. They produced fifteen thousand cigars a day.⁵⁶

The crisis in the garment industry resembled that in the shoe industry. Clothing cutters were the most skilled and the highest paid group in the industry, and they had the closest communication among themselves because theirs was "in house" work. (Much of the other work was subcontracted to small shops or homes.) They organized the Germania Lodge, with two hundred members, of the National Order of the Sons of Adam, and they consulted the Crispins on their experience. The clothing cutters felt that as skilled journeymen who had done long apprenticeships, they had the right to unite, to say who had learned the trade, and—a crucial issue—how much cutting should be regarded as a day's work. The clothiers (Wiesefeld, Hamburger, Sonneborn, Gutman, Strauss, Greif) responded just as the shoemakers had, by organizing a Clothiers' Board of Trade and discharging all union members. The clothiers, like the shoe manufacturers, were immigrant entrepreneurs who had learned the trade as craftsmen, come up through tough competition and hard work, and were prepared to exact the same of their employees. Their employees could not, however, expect to



The YMCA and the city hall were two ornate Victorian symbols of civic pride. The towers on the YMCA were so elaborate that they had to be removed to accommodate the flow of traffic on Charles and Saratoga streets. Both structures have been substantially renovated and continue in use today as office buildings.

become factory owners. The cutters resisted and obtained gifts of \$1000 from their fellows in New York and a strike benefit tithe from Philadelphia cutters. They objected that the employers had formed an association, yet refused the cutters the right to do so. "Capital is always aggressive against labor, and how are we to meet it? By combination." Nevertheless, little by little, the workers drifted back, and in 1873 the union collapsed.⁵⁷ The competition was ferocious among the immigrant workers, among the several firms, and between Baltimore and other manufacturing centers.

The cotton mills were different.⁵⁸ All were rebuilt or refitted with machinery within a year or two after the war. (The *Sun* figured the investment at \$8 million in the region.) The population of Woodberry tripled in the seven fat years.⁵⁹ Mr. Hooper doubled the capacity of his Clipper mill, had an investment of \$200,000 and an annual product of about four times that. He rebuilt Mill No. 1 in 1873 (after a fire), and built the Meadow mill in '77. Gambrill built Druid mill in '65 and enlarged it in '73. Using steam power, he processed twenty-five bales of cotton a day, producing a million-dollar yearly output of duck, seine netting, and other cottons. He also built seventy-five neat frame cottages for his 400 operatives and a boardinghouse for 250 girls. Poole and Hunt, the machinists at Woodberry benefited from the expansion. They reequipped the local cotton mills and exported similar equipment: engines, Leffel's patent water wheels, and equipment for cotton mills, linseed oil works, and white lead works elsewhere in the nation.

Baltimore's mills continued to dominate the national markets for duck and netting. The entrepreneurs and managers of those firms were the same people as in the 1850s. The same families had been involved as owners, managers, and foremen since the late 1830s—the Hoopers, the Carrolls, the Gambrills, and the Kennedys. Despite faster machinery and a higher throughput, the work was essentially more of the same, and there were few changes in the way of life or work organization of these villages, except the greater ease of going to town or

to Sunday school picnics by the horsecars. The lowest paid were women and children, who minded the locally designed spooling machines that cleaned cotton and wrapped it on bobbins. They earned about fifty cents per ten-hour day. Children six to twelve years old worked as long as twelve or thirteen hours a day. Pickers, warpers, dressers, and balers earned \$1.50 to \$1.75 a day, and the carpenters and machinists or "outside men" earned more. The industry experienced cyclical demand and cut wages at least 10 percent in 1875 and again 10 percent in 1878. James Hooper publicly opposed child labor, and legislation limited children to a ten-hour day. But the employees were housed, and the mechanical inventions did not disturb the traditional division of labor or ranking among the groups in the mill village.

The oyster-packing industry presents a still different pattern. Baltimore was the only big oyster-packing port of the country, and by its geographic advantages Baltimore canners could aspire to national monopoly. This was the generation of its greatest growth. The packing sheds became the dominant feature of the landscape in Fells Point, and overshadowed shipbuilding in Canton and around the inner rim of Locust Point. Other industries became close woven with the canneries: can making, bottles and glass, wood packing boxes, the fitting and repair of small boats, and the operation of the coastal steamers. Baltimore firms patented important innovations in cooking and canning vegetables as well as oysters. The most important was the use of calcium chloride to shorten the time of cooking and increase the throughput.⁶⁰ The work system became finely tuned to the seasonal rotation of truck crops and shellfish. The packers even introduced a fleet of small schooners to bring pineapple from the Bahamas to fill one slack period.

In 1868 Baltimore packers associated to fix prices of canned oysters. They made handsome profits for about a year "until outsiders secretly began to enter." Meanwhile, the Can Makers Mutual Protective Association pressed to get its share of the windfall. The can makers, like other workers who organized unions, were the best paid, most skilled craftsmen in their industry; their strikes could bring the entire packing industry to a halt. Their wages moved up from \$2.50 to \$5.00 a day. Some men cut their work week to three days, while others made remarkable weekly wages. The employers tried combination again in 1878, and again their stock organization, estimated at \$25 million capital, made 100 percent profits but broke up after a year.⁶¹ This phenomenon resembled the pooling strategies of the railroads and oil men. It gives some idea of the powerful incentives to combination and the value of geographic concentration to combination.

The harvest of the oysters and fish packed in Baltimore was sometimes romanticized: "Like the fruits of tropical regions we have only to wait for the seasons, nature has done everything—only the fruit has to be gathered."⁶² In fact, the expansion of the industry aggravated its viciously competitive character. There were six hundred or seven hundred oyster boats on the Chesapeake in 1872, possibly double this in 1880 if one counts the smaller log canoes not required to register at customs.⁶³ It was possible to translate years of experience on the bay into the small capital necessary; half the boats were built by their owners or by very small builders on the necks. This encouraged strong in-

dividualism and new entrepreneurship. A number of blacks became large owners of oyster boats. Improved machinery "for taking the greatest quantity of oysters from the beds in the least possible time" began to have effects on the ecology of the oyster, and conservation legislation was debated, inhibited by the rivalry between Virginia and Maryland. The state established an oyster police with an iron sidewheel steamboat of five feet draw so that it could enter the shallow creeks and rivers of the bay to enforce the season of seven months and regulations requiring small oysters to be thrown back. The *Sun* interpreted the conservation problem as a conflict between the educated and the uneducated, and described the oystermen as hardy and daring but unintelligent and improvident.⁶⁴ In fact, the oystermen, like the clothiers, were in the grip of structural competition. In the competitive struggle, cheap labor, black and immigrant, was shanghaied and often swindled of wages. Their isolation on small bay craft in winter contrasts with the cooperation possible among can makers or clothing cutters.

A similar ecologic crisis occurred at the same time in the bay fisheries. The new technology of the gill net, which was drifted behind a boat, provided an opportunity for the small entrepreneur, by the hundreds, to move in "and with his boat and net to follow the fish as they travel in search of food or to spawn." But while the fishermen increased in numbers and the demand increased, the catch did not. This produced a fierce political struggle with the long-established seine haulers. Seine nets were stretched across a river at a fixed location, and had always been controlled by "the wealthy riparian proprietors," that is, the land holders. A seine fishery was worth several thousand dollars a year. "The seine hauler cannot fish each his own shore; the giller cannot drift on one side of the river only, but follow the current."⁶⁵ The competition between them was, therefore, reflected in the geopolitics of the Potomac River boundary between Maryland and Virginia.

Such technological reorganizations affected all social groups and the relations among them. One can try to unravel these relations among the various classes of workers and ethnic groups by looking at the situation of the large German and black communities.

This was the heyday of German Baltimore. Nearly all the immigrants coming through the city by the new steamship lines were German-speaking, and their numbers exceeded all earlier rates, reaching twelve thousand in 1868. Perhaps two-thirds went west, but those who stayed nourished German language and traditions. The traditional Bremen-Baltimore ties in shipping and tobacco were maintained. Baltimore was represented at the great target-shooting festivals at Bremen, while the Bremeners were represented at the annual target-shooting in Baltimore. But the German community in Baltimore was much broader, and immigrants came from all parts of the new German union and the Austro-Hungarian empire. Bavarian Catholics began coming in 1871 to flee Bismarck's Kulturkampf. Polish Catholics arrived in modest numbers about 1870. The Bohemian Catholic community grew suddenly, and the Redemptorists through their Vienna headquarters were able to supply Bohemian and Polish priests.



Even though modern techniques could increase food-processing production, oyster shucking remained a hand labor trade.

Germania Enfolds Baltimore

Reports of the persecution of Jews in Rumania and Poland occurred simultaneously with the founding of the first Litvak, Pekroer, and Bialystok congregations in Baltimore. They were later referred to as the "Russian Hebrews." Benjamin Szold, rabbi to a decidedly German congregation, Oheb Shalom, in Hanover Street, was born in Hungary and educated in Russia. All of these groups were initially regarded as peripheral elements of a core German community.

Meanwhile, the earlier generations of German immigrants to Baltimore had become firmly established, with a complete cross section of social classes, including entrepreneurs, industrialists, schoolmasters, and doctors. Albert Schumacher, Baltimore representative for North German Lloyd, agent of the Allen line and a crony of Garrett on the board of the B&O, was also a director of the four German banks and the Zion school. He lived on Mount Vernon Place and left an estate of \$1 million. The clubs marked out class alignments. In West Lombard Street the wealthy tobacco men from Bremen played billiards and chess at the Germania Club, while the Concordia produced its greatest cultural performances and operas in this generation and gradually became identified more as a Jewish club. The Eden Street schul was enlarged and renovated with a hundred gas chandeliers; the Hanover Street synagogue vied with it for elegance. The proliferation of societies and associations among the Germans even outdid the old American tendency Tocqueville had observed a generation earlier. There were the Schiller Grove of Druids, the Red Men's Saengerbund, and the Osceola tribe of German "Red Men." "Of late years, however, the numbers, wealth, and importance of our German fellow citizens have increased to such proportions that their institutions and influences are sensibly felt by the community at large."⁶⁶

The most important influence, perhaps, was that the German community introduced new enjoyments and popular festivals. The great events of the Christmas season of 1872 were Mozart's Twelfth Mass at the Cathedral and Haydn's Mass no. 2 at St. Vincent's, the huge "Christmas Bush" at the German Orphan Home, and the dancing and prize shooting at the Schuetzen associations.⁶⁷ The other months were marked off by their masquerades, picnics, operas, gymnastic contests, and singing contests. The Liederkranz at their masked ball in January 1869 carried pasteboard towers and a bridge between, "the dance representing a manner of saving people from any further overflow of the Falls."⁶⁸ The Germania Maennerchor ball in February 1872 programmed a Grand National Bottle Dance—a quadrille of French champagne bottle and glass, German Rhine wine, Swabian white wine, and Irish whiskey.⁶⁹ In June the Maennerchor triumphantly brought home to Lombard Street a grand piano they had won in New York. At their August picnic the fifteen hundred employees of Knabe's piano factory applauded poems about pianos, lager beer, music, and limburger. The Schuetzen tournament lasted several days and featured German brass bands, dancing to string orchestras, street organs, and flying horses. The young men climbed greased poles. There was scissor cutting, crock breaking, and ten-pin rolling. The chief event was the rifle marksman competition: one man would be king for a year.

That extraordinary blend of village fair and urban spectacle was an Old

World style. One could scarcely distinguish between the patriotic holiday, the annual factory outing, the saint's day or Sunday school picnic, the camp meeting, or the family reunion. It permitted a very powerful welding of solidarities of experience and ethnic recognition that cut across and humanized the hostilities of class, politics, and religion. Theological debates subsided somewhat in all groups, and religion became more intensely sociable, a matter of kinship and shared emotional experiences. Politics, too, became more sociable, reverting to bull roasts and parades. The Germans were less tortured by the Civil War: they had espoused the winning causes earlier and more consistently, and the martial enthusiasms of parade and target practice matched the rediscovery of Germanic mythology. German-American zeal, well lagered, smothered the contradictions that divided Europeans. At the national Saengerfest held here on Bastille Day 1869 the prize composition sung by the nine Baltimore choirs concluded, "Give us, O Wodan for leaders such men, and Germania the world will enfold." They then sang the Marseillaise, and the orators praised Wodan and Charlemagne, Luther and Cromwell, Franklin and Jefferson.

Despite the incongruities, the German community added a deep current to contemporary social thought. The first aspect was a practical solidarity, broadening the sense of responsibility. The entertainments were increasingly a means of providing secular support for homes for the aged and orphans. The pattern was imitated by the Oblate Sisters, the Boys' Home, and other non-German societies. The German Workingmen's Relief Association had an annual budget of \$50,000 and the Hebrew Benevolent \$7500. The Jewish community founded Sinai Hospital on Wolfe Street and a Hebrew orphans home. When a new city paupers' grave was proposed, Rabbi Szold objected from the pulpit. Rich and poor, he said, ought not to be separated for eternity.

The solidarity of Knabe's or Wilkens's employees was easily translated into the solidarity of employees' relief and protective associations. The Germans were at the core of most of the organizations of labor—the Crispins, the clothing cutters, the can makers, and the cigar makers. Mechanics' Hall on Fayette Street near Eutaw, the Arbeiter Hall on Frederick Street, and the Vorwaerts Hall on Fayette near Frederick were meeting places for both German societies and other trade unions. Ethnic solidarities cemented bonds between the skilled craftsmen and the unskilled. In other generations the "aristocracy of labor" had been divided from the newcomers by ethnic differences as well as work-force position. The German shops also received an infusion of European ideas on the working-class struggle.

A second influence was German resistance to the temperance movement and the Sunday laws. The Turners, in particular, with their tradition of '48ers, opposed both Catholic and Methodist strategies for imposing their morals on the community. While the Germans danced and bowled at Darley Park, the Sunday school movement was singing, "The Temperance Ball is Rolling." The Redemptorists and the Passionists ran parish missions much like the Methodist camp meetings. But while the Sunday schools, including the German United Brethren, contemplated a picture of a felon on the gallows and sang "Away with the Wine Cup," other Germans were consuming their lager beer and limburger.

These philosophical differences occasionally burst into political rows over Sunday concerts and Sunday beer. In February 1872 the Arion Singing Society was prosecuted for its Sunday evening entertainments at Arbeiter Hall. The incident led to massive demonstrations of German groups "to uphold their social rights." Their stubborn cultural streak persisted, preparing Baltimore to become a national center of resistance to prohibition.

Having planted their institutions close to the center—the four German-American banks, the German newspapers, the clubs and halls and opera houses—the Germans also built and developed German neighborhoods in new sections of the city and expanded old nuclei of German settlement. The breweries illustrated on Sachse's 1869 map had sought good water and country sites on good wagon roads. Their beer garden entertainment and the coming of the horsecar lines fixed this locus of German settlement. Highlandtown was one such center, where the Redemptorists from St. Michael's now founded the parish of the Most Sacred Heart of Jesus. The strongest thrusts were toward the northeast and the southwest, along the old farmers market routes toward Belair and Frederick. To the northeast, St. Joseph's hospital was built at Caroline and Hoffman streets by the four original Redemptorist parishes. Nearby at St. James a new church and school were built. Farther out, the Schuetzen bought Darley Park on Harford Road, with ten acres and some of the grandest old trees in the state, beyond city taxes and firearms laws, on a horsecar line, and close to a group of breweries. The Redemptorists founded St. Joseph's parish for settlers from Hesse-Darmstadt, along Belair Road, and St. Bernard's on Hillen Road. For the Bohemians they organized the parish of St. Wenceslaus; its first home was a secondhand German Lutheran church on Central Avenue above Baltimore Street.

Toward the southwest, the new German parish of Fourteen Holy Martyrs was founded at Mount Street near Lombard. It was another offshoot of St. Alphonsus. West Baltimore Germans purchased the Carroll estate for a second Schuetzen park. William Rayner's fiefdom—his personal estate, real estate subdivisions, building activities, and gift of land to the Hebrew Orphan Asylum—created a suburban German Jewish community. Adjacent was the factory of William Wilkens, who employed hundreds of German immigrants. "You don't start to be an American till you've worked at the hair factory."⁷⁰ He built housing for worker families, donated land for churches, and subdivided real estate, in particular, Wilkens Avenue between Gwynns Run and Gwynns Falls.

The outward mobility represented a process of Americanizing the Germans and at the same time Germanizing Baltimore. The churches were often bilingual in their services, and so were the schools. The schools of the Redemptorists and Notre Dame Sisters reached their peak at three thousand pupils. Two German Protestant schools built new buildings: Scheib had over eight hundred pupils, and Knapp seven hundred, with a complete gymnasium. Knapp's pupils marched to class in military style. The synagogues also had day schools. But the success of the German educational institutions ironically produced their decline: by popular demand, the city in 1872 added to its public schools a network of "German-English" schools. German culture achieved recognition. Each young

hyphenated American would live out his own inner tug of war between the two cultures and make his own personal compromise. The public German-English schools tended to secularize education, contributing to greater tensions between the Old World religious tradition and the New World way of life, but contributing also to a mutual acceptance and perhaps the period of least hostility among religious groups. The experience of the Szolds, who had come expecting to stay a few years and go back, was the experience of many: they found they could not uproot themselves from either of their two worlds. Henrietta Szold attended Western High School and moved directly from her graduating class to the role of acting principal. Like good beer and limburger, German-American identity had ripened in Baltimore to a brief, heady perfection.

For the black community, the sense of crisis continued after the war. Emancipation was insured, but the content and meaning of freedom were yet to be determined—rights to vote, to work, to go to school, to be heard in court. As I shall demonstrate, each of these rights depended on the others, and on them all hinged the struggle for economic survival. "My friends, the present is a critical moment for the colored people of this country; our fate for weal or for woe, it may be yet for many generations, trembles now in the balance. No man can tell which way the scale will turn."⁷¹ With those words, Frederick Douglass, once a slave child and caulker in Baltimore, dedicated the Douglass Institute, organized in the old Newton University building, to the "intellectual advancement of the colored portion of the community." On that homecoming Douglass declared that he had modified his earlier views and that he recognized the usefulness of associations and institutions that would express black pride and solidarity.

The colored boy and girl now, as they walk your streets, will hold themselves in higher estimation and assume a prouder and more elastic step as they look up to the fine proportions of this ample and elegant building and remember that from foundation to roof, from cornerstone to coping, in purpose and in value, in spirit and in aspiration, it is all the property of the colored citizens of Baltimore.⁷²

The swiftness with which Baltimore's black citizens organized new institutions was impressive, indicating a readiness of zeal and an urgency of needs that awaited only the enabling laws to free the energy. Nearly all the projects discussed here had their groundwork laid, the money raised, and buildings secured in 1865, all in spite of a wall of hostility from most of the white community. These included free neighborhood schools, a high school, the institute, an orphan asylum, an aged women's home, a seminary, a teacher's college, and, most remarkable, a cooperative shipyard.

No sooner was the war over than the white caulkers of South Baltimore undertook to move in again on the Fells Point black caulkers. The episode was strategic in the development of the position of black labor in the nation. It demonstrated the continuity of black experience, as well as the perennial connection between economic competition and issues of race. Over one hundred black caulkers were army volunteers, in addition to those who worked at the U.S.

"We Have No
Prejudice"

Navy yard. As men returned from the war and wartime demand dropped off, there was a notable labor surplus in the industry, even without any direct effects of emancipation. The employers, Abrahams and Henderson's wharf, refused to fire their black caulkers, who were known for their management, workmanship, and dispatch. ("Vessels come from all ports to have their caulking done in Baltimore.") The black caulkers received some support from the police when the white caulkers tried to intimidate them. Two alley homes burned down in Fells Point on the same day, "supposed to be accidental in origin." Then the white caulkers persuaded the white joiners and ship carpenters to go on strike, and their unions resolved on stiff twenty-dollar fines for any who worked with the blacks. On 27 September 1865, the black caulkers were at work, while the white carpenters were "sitting idly by, every white workman refusing to take a tool in hand while the blacks are employed."⁷³ The position of the whites was, "All we ask of our employers is that they will give the white man the preference." The newspapers tended to line up behind the black caulkers, since the employers' right to hire was threatened. The black caulkers argued that "they must support themselves or become a burthen upon the community" and rebuked the whites, who threatened to "send wafting on a sea of prejudice the business interests of Baltimore to other ports, because a few colored men in this little corner of creation have a little business to themselves." Four hundred of them signed a statement appealing "at the bar of a just and impartial public opinion, trusting in the great Dispenser of Justice, that He will work out the evil purposes of men to the accomplishment of results beneficial to all mankind."⁷⁴

The issues of 1858 were rehashed. Frederick Douglass's visit that very week must have recalled for the blacks how violence and outrage against the caulkers had marked every generation, whenever work was scarce. Now out of the ranks of the Baltimore caulkers came another leader of national stature, Isaac Myers. The trouble spread to the dock workers. By winter the employers began to cave in and hire white caulkers. Myers, together with other black caulkers and businessmen, organized a cooperative stock company, leased a \$40,000 lot at the foot of Philpot Street, and started the Chesapeake Marine Railway and Dry Dock Company.⁷⁵ In four months they raised \$10,000 from the black community, in \$5 shares. Effective organization and the early success of this effort were part of a perceptive strategy for black workers. In July 1869 Myers called a meeting of mechanics at the Douglass Institute. Twenty-three crafts were represented, including the Colored Moulders, the Colored Engineers, painters, brickmakers, and longshoremen. They proposed to participate in the national union movement, but at the same time to organize their own local, state, and national labor organizations alongside the white unions, because they saw that they were being excluded. "If citizenship means anything at all, it means the freedom of labor, as broad and as universal as the freedom of the ballot." Nevertheless, blacks were excluded from the cigar makers, the brick layers, the railroad workers, and the Sons of Vulcan. In August, Myers, representing the caulkers, spoke to the third convention of the National Labor Union in Philadelphia. He spoke for the 9 black delegates among 128. "The whole Convention listened . . . with the most profound attention."

The white laboring men of the country have nothing to fear from the colored laboring man. We desire to see labor elevated and made respectable; we desire to have the highest rate of wages that our labor is worth; we desire to have the hours of labor regulated, as well as the interest of the laborer and the capitalist.

He struck a strong argument for all forms of cooperation by recounting the experience of the Baltimore caulkers:

After we were kicked completely out and cast upon the cold charity of the world, we formed a cooperative union, got it incorporated, raised \$40,000, gave employment to all our men and now pay them, outside of their wages, fifty per cent on their investment. And is that all? No. We give employment to a large number of the men of your race, without regard to their political creed, and to the very men who once sought to do us injury. So you see, gentlemen, we have no prejudice.⁷⁶

But Myers's cooperative enterprise, like his strategic hope for interracial cooperation in the labor movement, foundered. The wooden shipbuilding industry was in the doldrums. The black caulkers had defended their little corner of creation only to find it was an economic backwash. In the lean years after 1873 the business declined, and their lease expired. By 1880 it had only seventy employees and was mostly hauling out boats for repairs. Few such enterprises, black or white, survived ten years.

Was there a more general direct impact of emancipation on the labor market in Baltimore? Wages for unskilled heavy labor remained about the same, with the race differential unchanged. Most Baltimore blacks were already free before the war. There was some return of blacks who had once lived in Maryland, and there was some immigration from the Maryland countryside to the city. New arrivals included more men and youths, who tended to concentrate in the wards near the docks and Camden Station. But the influx was moderate, certainly less than expected. The Freedmen's Association helped sixteen hundred persons to return home to counties farther south.

A more important economic factor was fear. Slaves in Maryland were mainly agricultural laborers. Releasing a pool of black rural labor threatened to rebalance the labor system and affect the urban labor market indirectly. Former slave owners feared a shortage of labor, while the former slaves feared a shortage of job opportunities, and the rest of the labor force, black and white, skilled and unskilled, were nervous about competition for their jobs. The management of Negro labor, therefore, posed the most difficult ethical questions and evoked the meanest and the most noble responses. Farmers and landholders in Prince George's County, for example, tried to reach an agreement to hire free Negroes only by the year, at a maximum yearly wage of \$120, \$60 for a boy or woman. This kind of device failed in a competitive economy. A more effective mechanism was control of land, and it remained very difficult for blacks to buy land in most counties. General trends in Maryland agriculture were favorable to the employment and self-employment of free black labor. Demand for the planter crops was stagnant, while the demands of Baltimore's consumer markets and canning industry stimulated market gardening, fishing, and chicken farming along the railroad lines and waterfronts in Anne Arundel County. Many present-day small

black settlements in the metropolitan area made the transition in the '60s and '70s from slave quarter to dirt-road village by gardening and marketing their produce. All the varied talents and enterprise Parkinson had observed seventy years earlier were brought into play. By building a boat, wagon, or cart, and buying a mule or horse, a man could develop considerable flexibility: he could carry his own produce to market, he could fish, he could work as a marketman or retail produce door to door, or he could sell his labor with the outfit for excavating or hauling, at about twice the wage he could earn alone. A web of personal connections allowed black entrepreneurs in several sectors to reinforce each other—the market gardeners, the marketmen, the caterers, and the skilled personal servants, butlers, cooks, and waiters in the clubs, hotels, and homes of the wealthy.

The slave labor force had always been a young population: field labor was done in large measure by young men, and the fetch and carry and chop and polish by children. Moreover, for a given current capacity for work, youth was a value that could be capitalized, the true capital asset of the slave. Therefore, the struggle over the freedman as a labor force was waged in terms of control over black youth. Slave holders attempted through the legislature and the courts to manipulate the apprenticeship laws, to have the children of their former slaves bound out to them as apprentices. Several thousand minors were in question. By the old laws, Negro children could be bound only to whites. Unlike white apprentices, they could be transferred with an estate, or sold if they ran away, without the consent of their parents. The crucial efforts of the Freedmen's Bureau in Maryland and of the committed emancipationists—Hugh Bond, Henry Stockbridge, and Richard Bowie among them—were directed for three years to the civil rights issues raised by apprenticeship. Their vital tools were the right of habeas corpus and the right of black persons to give court testimony. Bond, as a judge of the Criminal Court of Baltimore, repeatedly released "bound" youths, and used the right of habeas corpus to insure the supervisory right of parents and courts. The legislature aimed restraining laws at Bond, but wartime experiences had given Marylanders of all political persuasions an appreciation of the courts' right to order persons to be produced or freed. The state constitution of 1867 restrained the legislature: the general assembly could not take away the power of habeas corpus from the judiciary.

Entwined with the apprenticeship issue was the need for a system of free schools for black children. Parents claimed their children because they wanted them educated. The old form of apprenticeship did not require that Negro apprentices be taught the three Rs or any trade useful in later life. Here again, Baltimore citizens pressed the issue, while resistance was lodged in the countryside. The Baltimore Association for the Moral and Educational Advancement of the Colored People brought into full operation seven schools in the city, with an average attendance of three thousand children in 1865. The city council gave \$10,000 to the effort. Black citizens and Friends (Quakers) in Baltimore gave \$5000, and Friends in England sent £750. The participation of families such as the Stirlings, Needles, Chestons, Cushings, and Tysons recalls the founding of the first black schools and the first civil rights cases in Baltimore in the 1790s.

The state legislature refused to contribute, and none of the Christian churches responded to the appeal. Two rabbis forwarded donations from their congregations: Rabbi Szold, "mindful of the captivity of our people in Egypt," and Rabbi Hochheimer, who wrote: "Though you appeal in your circular to 'every Christian man's benevolence and kindness', you may rest assured that no true Israelite will stand back in supporting this or any other cause of benevolence and kindness."⁷⁷ In the counties seventeen schools were organized by the Baltimore Association, but they encountered much resistance. Black churches were burned. Children were stoned in Easton, teachers "blackened" at Cambridge. As Douglass said, "I expect to see the Rebels consistent with their whole past." Just as the association was collapsing for want of funds, the state constitutional convention (1867) ordered the founding of colored schools statewide on the same basis as for whites. This provided an institutional guarantee for a public school system for black children, but in a way that insured a marginal operation. The "colored schools" were to be entirely separate—buildings, budgets, wage levels, and regulations. White teachers were hired. The idea, designed to sound fair on the surface, was that the school taxes paid by whites should be allocated to the white schools and the school taxes paid by black citizens to the colored schools. This ensured that the low incomes and the lack of property among a people who were themselves yesterday property would be perpetuated by impoverished education. Even in Baltimore City, the white schools in this generation spent 50 percent more per pupil in both operating and capital outlays. A building lot rejected as inadequate for a white high school was denied to the Colored Grammar School on the grounds that it was too valuable.

The same attitude was apparent in other institutions, both private and public. Churches became more rigorously segregated than ever. The larger denominations were deeply split by the Civil War as well as older theological disputes, and their reorganizations created the opportunity for separating black brethren. One Anglican church, Mount Calvary, determined to hew to its "free for all" signs on the pews: "Gentlemen, let our religion be before our politics." But the overall trend was toward separation. The Second Plenary Council of the Catholic Church in the United States (1866), impressed with the Baltimore successes of the Sisters of Providence, their new orphanage, and the parish of St. Francis Xavier, opted to develop colored parishes and schools nationwide. The archbishop invited the Mill Hill fathers from England as missionaries to work among blacks. They founded the Josephites, who within a few years opened a seminary to train priests for black parishes.⁷⁸ Father Vaughan wrote back to Mill Hill from Baltimore, "I can give you no idea of the dislike of the Americans, Southerners as well as Northerners, to the Negroes. It far exceeds in intensity and subtlety anything I had expected. I assure you it makes my blood run cold."⁷⁹ The Methodists participated in organizing Centenary Biblical Institute (Morgan College), for the ministry. The Anglicans imitated the Catholic model, sending the All Saints Sisters of the Poor from England to Biddle Street; they soon took their first black novices.

The new institutions like Douglass Institute, Colored Public School No. 1, and the Centenary Biblical Institute were centrally located near the older

churches (Bethel AME Church and St. James Episcopal) at Saratoga and Calvert streets. But the black churches were also hiving off neighborhood parishes from the old central locations, just as the white churches had done in the generation before the war. The new schools and churches were located in five ghetto nuclei: Hill Street, the Orchard-Biddle district, the neighborhood west of Camden Station, Oldtown (Chestnut and East streets), and the district west of Lexington Market. The Baptist extension society (white) helped found the South Baltimore Colored Baptist Church on Hill Street. St. Mary the Virgin, an offshoot of St. James Episcopal, first occupied a hall over a feed store on Howard Street, and later a former Swedenborgian church on Pennsylvania Avenue near Orchard. The black neighborhoods were complex, and within small areas one finds great social distinctions. On Orchard and St. Mary's, on Centre and Hamilton, and on Hill and South Howard streets were respected families, among them substantial provision storekeepers, barbers, caterers, sextons, and undertakers. On New Year's Day they called on one another, some in full dress, white vests, kid gloves, and canes. These were all narrow short streets with fifty- to seventy-five-year-old houses, but in health and prestige they were a world away from the adjoining alleys. In Biddle Alley, for example, typhus broke out in 1866. Cholera in '66 and smallpox in '72 and '73 struck chiefly at the poorest of the black population in the alleys around Camden Station.

In spite of the trials and the failures, sacrificing some children and salvaging others, the black community nevertheless rejoiced in new freedoms. Although there had been few slaves in Baltimore, the city's free blacks had lived under the "black code" that treated all blacks as slaves in some respects. The constitution of '67 permitted black testimony, essential for the survival of the new institutions and for a greater degree of protection of private persons. New rights of assembly and movement were expressed in ways sometimes decorous, sometimes disastrous. The black churches began holding Sunday school picnics at the beach and camp meetings of four or five thousand people in Haslup's Grove near Annapolis Junction, in Chew's Woods near Towson, and at Oakington in Harford County. The caulkers had their own meeting hall. The black veterans, Oddfellows, and the Lincoln Zouaves could parade in uniform to their hearts' content. Even in the penitentiary the black prisoners celebrated the Fourth by making ice cream, parading with fife and drum, playing baseball, and performing plantation jigs. By 1872 black voters were being courted and integrated into the customary rowdy politics of Baltimore. Their Grant and Wilson clubs escorted veterans through Baltimore with bands and transparencies. A rival torchlight procession in honor of Greeley's visit marked the first appearance of a black political club in that party. As usual, the parades ended in a fracas, but in court black witnesses were heard, and little white boys who threw stones and bottles at blacks were ordered flogged by their fathers. Like the German community, the black community knew how to enjoy itself. All that high purpose of moral advancement was joined with sheer fun, nourishing the sweet taste of freedom and an inner tug of war between the philosophy of the individual pulling himself up by his bootstraps and the philosophy of mutual assistance and cooperation.

Social Problems and
Social Institutions

The drastic changes in labor force management implied a host of new social problems. The decline of slavery, apprenticeship, and long-term contracts freed the employer from responsibilities of training a young labor force, from feeding and supporting his men in seasons of poor weather, poor markets, or poor health, and from governing the more troublesome elements—bailing his apprentice out of jail, paying damages, or fetching him back when he got drunk or ran away. Yet all of these social problems continued to exist, inherent in human nature or in the economic system. The incentive to substitute cheaper labor of youths and women created certain problems when they were employed and other problems whenever they became unemployed. This long-run change in the economy aggravated the problems that always accompanied the rhythm of construction: immigration, crowding, and accidents.

In the last winter of the war it was estimated there were three thousand vagrant children in the city. Delinquency was much talked about. In South Baltimore the Forty Thieves, a gang of white boys nine to thirteen years old, entered new houses at night and on Sundays. "They completely strip them of lead pipe, keys, locks, bell hangings, gas and water fixtures."⁸⁰ Police recovered a wheelbarrow load of chandeliers and shower baths. A well-organized gang of black youths lounged about the Lexington Market, ostensibly to carry baskets, but alert to opportunities for theft. A sharp rise in the jail population in 1868 was attributed to the large number of black children committed "for trivial offenses, no other means of restraint being as yet provided."

Problems acute in the fat years reflected a rapid increase in population, together with overcrowding and special problems of immigrants. In 1868 there was a great increase in police station lodgers, mostly homeless men. There were more and more fires, especially in woodworking and other factories. Coal oil lamp explosions became very common. These figures are closely correlated with mortality: high in 1868 and in 1873. A high wartime and postwar murder rate gave way in 1870 to a high rate of suicides. The number of houses of ill fame apparently increased: the police estimated there were two hundred houses, or about eight hundred women involved. Little Sharp Street, Crooked Lane, and New Church Street were "inhabited by colored courtesans" and "thickly studded with drinking houses of low degree."

When the downturn came, police station lodgers increased again and stayed high from 1873 to 1877. The number committed to the jail and admitted to Bay View rose likewise. "The whole country began to swarm with tramps, until in many sections, and especially along the lines of the great railways they became a veritable plague. . . . Freight trains were infested with them."⁸¹

The problems naturally called for innovation. As I have discussed with respect to the black and German communities, this was a period of hiving off new and more specialized social institutions, extending social services to new neighborhoods and new elements of society. Consistent with trends in business and technology, technical development in medicine favored a division of labor and more complex organization of hospitals. A new people's dispensary in Oldtown offered clinics with specialists for the eyes, female complaints, etc., at

different hours. Two eye and ear hospitals were founded (three hundred cataract operations were performed in one year), and also a lying-in hospital and an inebriate asylum.

Numerous ventures were undertaken for "saving" the children and women on the margins of the labor force and family structures. The Henry Watson Children's Aid Society in a single year placed a hundred children in country homes, operated a home for working girls, and trained a hundred girls in the sewing machine department and fifty more in cutting and fitting. Church societies organized sewing classes, a Home of the Friendless, a girls' industrial school at Orange Grove, a House of the Good Shepherd, and a Home for Fallen Women.

In wartime and postwar crises, the city began subsidizing all manner of private institutions to care for its orphans, alcoholics, and sick or insane poor, and the per diem costs continued to rise even after the courts and legislature ordered the city not to extend the practice to any new institutions (1875). The large taxpayers once again felt that charity was costing too much. State government was pressed to pick up the tab for dependent populations, and founded certain new institutions. All were specialized and adhered to strict racial segregation. An innovative \$100,000 state school was organized for the deaf mute at Frederick, and a handsome school for the blind on North Avenue stood out "in its unsullied whiteness." For blacks who were deaf, dumb, or blind, a \$12,000 mansion was purchased on Broadway. A magnificent Gothic pile was built on Lafayette Square for the Maryland Normal School (white), while the Baltimore Normal School (colored) occupied a secondhand building. A land grant college for whites was developed at College Park, and a college for blacks at Bowie. To respond to the crowding of jail and police stations with lodgers, the state built a house of correction at Jessup. Baltimore citizens organized a house of refuge for black children, to match the white institution founded by George Brown, and the state contributed to its support. The archdiocese also created colored orphanages and training schools to match its white institutions. Altogether, there were four or five hundred black children in these institutions at any one moment, and about a thousand white children. They were all removed from the city to an artificially sustained agricultural environment, as the alternative to the former systems of apprenticeship or slavery.

Institutions for public dependents readily lapsed into neglect or budget starvation. The grand jury of '78 described the House of Refuge as "a cheerless, dreary, uncomfortable prison." The boys were taken like cattle to watering troughs where twelve bathed in the same water. The House of Refuge for Colored Children was instantly overcrowded and had great difficulty with typhoma, an eye infection. At Spring Grove hospital for the insane, three quarters of a million dollars was spent by the time it opened (with 250 patients) but the elaborate heating system didn't work. Per capita operating cost was sliced by half. Treatment objectives were thwarted because the county almshouses would not send those "most susceptible to treatment," but preferred to send "only the most filthy, violent and refractory."

The institutional structures of social class were most evident in the schools and churches, as before. As Baltimore society became more complex, generation by generation, these two systems were elaborated. The piecemeal growth of the public schools illustrates the interdependency of the facilities for various classes of people. The total number of schools doubled. By '78 there were seventy, with seven hundred classrooms and thirty-six thousand pupils. The Germans and colored schools were installed in the old buildings of the 1840s and '50s or in rented property, while a middle-class clientele occupied most of the new buildings. Thus, the creation of the new colored schools (14 percent of all pupils) and the German-English schools (9 percent) allowed a distinct upgrading and modernization of the system for its initial user groups. The newer three-story buildings had wider stairways and half-basements, with wrought iron beams and galvanized iron cornices instead of wood. Their brick facades were slightly embellished.

To service so many distinctive clienteles there were often clusters of several schools near each other, for example, near Druid Hill and Biddle, near Fremont and Waesche, near Fulton and Hollins, and around Camden Station. To economize on land, the school board paid ground rents rather than buy in fee, and the paved schoolyards were barely large enough to assemble their pupils standing tightly packed. The average investment in a new school building rose to \$15,000 or \$20,000 (a total of \$1.5 million in assets), but City College and Eastern Female High School were built as great monuments at over \$100,000 each. Together with Western Female High School, built before the war, they defined another distinct system—the elite high schools. About 30 percent of all school-age children were enrolled in the public schools; of those enrolled, only 4 percent passed into the high schools. Even compared with other cities at the time, the Baltimore schools had a low efficiency of retention and promotion.

Among private institutions, the churches became somewhat less innovative. Their major investments were houses of worship and assembly. The number of churches increased by 50 percent, an investment of at least \$2 million, and the range of spending was comparable to the public schoolhouses. The more modest churches near sea level ran \$10,000 to \$20,000 apiece, for example, the Welsh church built by Welsh employees at the Canton copper smelter, the Church of the United Brethren in Christ, the new Episcopal missions, and the Colored Baptist Church on Hill Street. On higher ground in West Baltimore and surrounding the site of Hopkins Hospital (near Jackson Place) the average was \$45,000. On Lexington Street, for example, an Independent Methodist congregation moved from a stone chapel into a unique building of galvanized corrugated iron. The outside, with iron tower and spire, was to be painted white, the interior some color to suit "the dim religious light of churches." On the hilltop sites of Mount Vernon Place, Lafayette Square, Harlem Park, Franklin Square, and Bolton Hill were built the most expensive churches. The Presbyterians were decidedly concentrated in Bolton Hill and Mount Vernon Place. In 1872 they raised the brownstone steeple of First Presbyterian Church. The most elegant of all was Mount Vernon Place Methodist Church, built of Maryland serpentine or

Upon completion, the Peabody Institute library and school of music was the most elegant philanthropic gift to the city. It accordingly became the center of spectacular cultural events.



greenstone. It cost \$325,000, and had the largest organ in the city, "a house within itself." A "brilliantly lit up" nighttime auction was held for the choice of pews.

This was a magnificent era for Baltimore in private philanthropy. The wealthiest of Baltimore's businessmen competed with each other in seeking to provide solutions and to crown the city's cheap public institutions with nobler creations. No other Baltimore generation was ever so lavish, so individualistic, or so hard nosed in its giving. Enoch Pratt endowed a public library and located it across the street from the cathedral and a block from his home. He continued until his death to supervise personally its collections and its courtesies. He also contributed to Moses Sheppard's private hospital for the insane, whose object was to cure, not merely to shelter. He gave 752 acres at Cheltenham for the house of refuge for colored children. William Rayner, once a peddler, gave the land for the Hebrew Orphan Asylum. George Peabody founded the Peabody Institute library and school of music on Mount Vernon Place. Peabody had made his first million in Baltimore, then gone to England and become very rich indeed by selling U.S. bond issues in Britain and Europe during the Civil War. Henry Walters began his magnificent art collection and operated it as a private museum (now the Walters Art Gallery), a block from his old home. Johns Hopkins, at the time he was memorializing the legislature against public subsidy of charitable institutions, himself gave \$7 million in B&O railroad stock, as well as his Light Street warehouses, for a hospital and a university. His planning detail was characteristic of that generation of philanthropists, consistent with their rather limited faith in those who might come after them. Hopkins created his boards of trustees before his death. He sent Franklin T. King to Europe to examine their famous hospitals. In a masterful stroke, killing two birds with one stone, he acquired the site of the old Maryland Hospital for the Insane. By paying cash in advance, he got it at a discount price (\$123,000). The cash allowed the state to finish its new buildings at Spring Grove and move out, leaving the property at Broadway and Orleans for the new Johns Hopkins Hospital. He assumed that upon his death, his own estate, Clifton, would become the site of the university.

The new philanthropic institutions were highly specific in their aims, open to people of all religious faiths but somewhat more ambiguous with respect to serving both races and sexes. All provided services to the deserving poor and more substantial services to the deserving rich. All were located on high ground, on the properties of families that were dying out. Their location and design con-

firmed the Charles Street and Monument Street axes of monumentality. The newly rich crowded close around the old Establishment.

Despite problems and divisions, Baltimore gave itself seriously to having fun. There was a carnival quality to the '70s in Baltimore, perhaps more so than ever before. In addition to the traditional adaptation to Maryland summers and the enthusiasm of the German and black communities, there seems to have been a deep response to new means of travel and media of information. Fun was being part of a crowd. Steam railroads, steamboats, and horsecars made all-day mass excursions the most popular escape—camp meetings, picnic at the shore, a day in the new park. What the *Sun* called bad taste extended to all classes and took the form of sensationalism and melodrama. The *Sun* objected to lynchings (there were several in the environs), but thrilled to a legal manhunt and assigned its best reporters to trials of middle-class poisoner and lower-class knife wielder. The Holliday Street Theater was playing *Bertha, the Sewing Machine Girl*, "full of excitement, of rugged beauty and great situations," while the Front Street Theater offered Ethiopian comicalities, a fairy ballet, and feats of strength by the man with the iron jaw and the female Hercules. Baseball grounds were organized on the horsecar lines, on Pennsylvania Avenue near Chapell Street with stands for two thousand spectators, and near Waverley. The oriole black and yellow of Lord Baltimore added color to the parades and circuses of all classes of people. In the summer of 1872 the new \$12,000 baseball nine were outfitted in "black and yellow striped stockings, yellow pants, white shirts, with the escutcheon of Lord Baltimore on the left breast, a black and yellow cap, and a belt of the same colors."⁸² Meanwhile, the elite gathered "under the flag of Lord Baltimore" for jousting at Brooklandwood. A dozen knights contended for solid gold and silver spurs on Mr. Alexander D. Brown's well-rolled track. A "very large and brilliant crowd" arrived in hundreds of carriages and unpacked lunch baskets with much "popping of champagne corks and gay laughter of the charming divinities who presided."⁸³

Each year had its spectacular. Following 1875, the dedication of city hall, with its parades and grandstands, came the year of the nation's centennial. The bunting and banners, illuminations and bell ringing, picked out the whole shape of the city—its new outlying parks, its center, and the substantial institutions that studded its surrounding hills. They announced in lights and colors the people's common aspirations, and at the same time their thousand competitions and rivalries. On the Fourth of July 1876,

Big Sam, the City Hall bell struck midnight, all the other bells of the city, including the fire bells, took up the note and reproclaimed the old liberty to all the people—The ringing was probably as vigorous for a hot summer midnight as one could wish and lasted fifteen or twenty minutes. It is not known that any of the bells were cracked.⁸⁴

Thousands of people celebrated all night and breakfasted at dawn under the trees in Patterson Park and Druid Hill Park. Other thousands made excursions. Four hundred factory workers from Woodberry, together with their employers, took their lunch baskets on a special train, to spend the day at the Philadelphia

July 1876

Centennial Exhibition. William Keyser took a party of gentlemen up to Deer Park in his special railroad car. Downtown, the *Sun* and the *American* vied with each other in lighting up their buildings. The *American* illuminated its statues and fired off Roman candles. The Sun Iron Building was lit by calcium lights.

eliciting general expressions of delight as the colors changed from white to crimson, pink or other tints produced by the intervention of gelatine sheets . . . while the whole of Baltimore street was at intervals aflame with burning nitrate of strontia, casting a lurid glare on all surrounding objects.⁸⁵

In East Baltimore the Hebrew Orphan Asylum and the Colored Monumental Singing Club had flags in every window. The penitentiary was studded with flags at every corner and angle of the walls. On the west side, the Concordia and the Germania competed for decorations with German and American flags. The political clubs outdid themselves. Residents of Harlem Park put Chinese lanterns in the trees. "The whole city was a rage of color." South Baltimore organized a torchlight parade, street choruses, and the reading of the Declaration in Riverside Park. The babies were crying for flags. Five or six thousand persons watched a balloon ascension and pole climbing contests at Greenwood Park or aerial gymnastics at Holly Grove. The day came to a close with an illumination of the harbor:

Schooners at the wharves displayed their large signal lights of red, green and blue, and square rigged vessels of large tonnage lying at anchor off Canton and Locust Point showed hundreds of colored lanterns dangling from their yard-arms and rigging, while their projecting colored lights sent rainbow streaks of color into the darkness.⁸⁶

July 1877

It was, perhaps, foreseeable that this period should end in a crisis of labor, its management and mismanagement. Accidents rose and machines displaced or demoted skilled labor during the fat years. The onset of the lean years swiftly suppressed unions; wages were cut and hours shortened. The colored grain carriers in Commerce Street experienced it, as well as the shoe and clothing cutters. It all ended in a bitter crisis that recalled 1861. Again trains and marching regiments were stoned in Baltimore. Again its streets were "flecked with gore" and occupied by federal troops. This time, however, the language was not of sectional strife but class warfare, "A War on the Railroad."⁸⁷

Railroad men had suffered all the pressures. In the best of times the firemen and brakemen received \$3.00 a day (engineers and conductors more), and by overtime they could make ten or eleven days a week. Accidents had, however, reached a terrible toll. In addition to the mangled hands and amputated fingers at the railroad shops and the landslides on tunnel construction, four B&O employees died in the summer of '72 on separate accidents of routine work in the yards at Mount Clare and Locust Point. Three were coupling cars, and the fourth, a youth, was unloading cars. When the lean years set in (1873), overtime ceased. A day's pay was reduced to \$2.25, then to \$1.75. Layoffs of brakemen made the accident risk even greater. On the road the men had to pay thirty cents a meal. The company itself appeared to be making money. It had borrowed a great deal "on short date, a dangerous mode of financeering," but paid its interest to J. P.

Morgan and annual 10 percent dividends, and reported a fictional "surplus" of millions. When the wage cut provoked protest at Cumberland, John Garrett, president and controlling stockholder, sent William Keyser, the vice-president, with a posse to arrest the ringleaders in their beds.

I confess, when I think of the poor, almost squalid cabins and the justness of the ground of the complaint, I should feel ashamed of the whole transaction, were it not that I was solely governed by a sense of duty, and the knowledge that it only required a single spark . . . to start an explosion.⁸⁸

The spark was a second 10 percent wage cut. Wages were down to \$1.58. The men were working only fourteen to eighteen days a month. This meant, all told, that their monthly wage was now only one-quarter of what it had been in 1873. The firemen refused to take out their trains. The Pennsylvania Railroad workers followed suit. Problems were nationwide. The initiation of violence in Chicago, Pittsburgh, Grafton, and Martinsburg remains controversial, although popular opinion blamed the railroad's hired guards. But what happened in Baltimore, less obscure, was a capsule form of the whole affair. Two founding generations of the B&O, Alexander Brown and Johns Hopkins, were dead. But in the city of its origin the B&O continued to cast up both riches and poverty. In its ownership, its management, and its tragedy, the B&O still belonged to Baltimore. On 20 July the newspapers were calling the nationwide strike illegal and vicious. The strikers were attempting to "coerce the company," and were "in conflict with the federal power as well as the governor of West Virginia."⁸⁹ At Grafton, Keyser had dismissed all the striking firemen, but in Baltimore the striking firemen were reported to be quiet, orderly and sober. They had succeeded in stopping all B&O freight in Maryland, with pecuniary loss to the B&O and to the coal and petroleum business, which were controlled by the same men. John Garrett wanted the governor of Maryland to send Baltimore's own Fifth and Sixth regiments to Cumberland, where a train had been stoned. Governor Carroll came in from his country place in Howard County to meet Garrett at the B&O's Camden Station offices. When the militia captain arrived with only 150 men, he and Garrett persuaded the governor to order the general alarm, a fire emergency call never before sounded in Baltimore. This was done at 6:25 p.m., the very hour when workers were leaving the factories. Crowds immediately gathered around the armories.

In East Baltimore, at the Sixth Regiment armory opposite the shot tower, the soldiers slipped into their upstairs hall. Occasionally a man in uniform was roughly handled. Toward dark, brickbats were thrown, ready to hand since the streets were torn up for laying gas pipes. When the 220 soldiers had answered the roll and started to leave the building, the crowd turned them back. The crowd sent up cheer after cheer for the strikers. "It was not the purpose of the officers to fire on the crowd, but after the first recoil . . . the soldiers seemed to lose control of themselves so far as to think only of their own defense. Firing began at the door."⁹⁰ Nine citizens were killed, sixteen severely wounded.

Meanwhile, at the Fifth Regiment armory over the Richmond Market, in a more middle-class neighborhood, two hundred men marched onto Linden Avenue

with eleven drummers, and a good-humored crowd had "many pleasant by-byes for the boys going to the wars." But as they reached Camden Street, packed with people, they were assaulted with stones and bricks. They refrained from using their weapons.

By the time both regiments reached the depot, the crowd had forced the engineer and fireman to desert the train that was waiting with steam up. They stoned and disabled the engine at the Barre Street crossing. Retreating southward, they forced the telegraph operators out of the dispatcher's office at Lee Street, burned the office, set a train going, and tore up the track along Ohio Avenue to Cross Street. Several other sections of track were breached between the depot and Gwynns Falls. To prevent the firemen from going to work, they cut the hoses and put out the fire engine.

"It being impossible to proceed," the mayor, the governor, and the railroad president decided to keep the soldiers in Baltimore. They telegraphed the president that the soldiers were more needed in Baltimore than in Cumberland, and the governor issued a proclamation deploring "a spirit of lawlessness which, if not suppressed, must end in the ruin of vast interests and the destruction of large amounts of the property of our citizens."⁹¹ The *Sun* discerned, even sympathized with, the sense of outrage in Baltimore. The editors urged "a patient acquiescence, however, in the efficacy of legal proceedings as methods of redress." The only legal proceedings that followed were the prompt arraignments of 195 rioters in the southern district.

On Saturday everything was perfectly quiet. Two thousand federal troops arrived. Five hundred marines came on warships. A federal revenue cutter with thirty men guarded the bonded warehouses on Locust Point. That night a crowd stoned and tried to burn the foundry at Mount Clare. Dispersed, they gathered again at 2 a.m., three hundred strong, and set fire to a coal oil train belonging to the Consolidated Coal Oil Company, then attacked police and firemen from the hill above, near the Carey Street bridge.

Within the week the strike weakened in all quarters. The Baltimore workers caucused at Cross Street Market, then met for two hours at Camden Station with William Keyser. Keyser was also prominent in the control and management of the Consolidated Coal Company (a B&O subsidiary) and its coal oil company, as well as the copper smelter and the iron rolling mill at Canton. Keyser's speech to the assembly of 250 strikers and the press added insult to injury: "It will be our pleasure, after you return to work, to investigate your minor grievances." The company made no concessions and stuck to its 10 percent wage cut. He assured the workers, "that order reached the president in its effects as well as the humblest subordinate on the road." Keyser attributed the short hours and previous wage cuts to "the retention of too many men of your class in the service, thereby lessening the ability of each man to earn a competency." This he proposed to remedy by layoffs. He accused the men of having deserted their posts. As for allowing none to take their places, if that principle were accepted, he said, "all discipline, all law, and all order would be sapped at their very foundations. . . . You men whom I see before me have been the cause of this great disturbance. The whole foundation of the social fabric has been shaken

. . . and (you) will be held rigidly accountable for it."⁹² The strikers listened respectfully. Some objected and cheered their leaders. Some were said to have shaken hands with Keyser. On 20 July traffic was resumed under military escorts, while the last holdouts among the strikers watched at Riverside Park.

The final episode, as in 1812, 1834, and 1861, occurred six months later, when the governor requested the legislature to tax the city to pay for the suppression. He had borrowed \$85,000 at 6 percent from Alex. Brown & Co. and the Farmers and Merchants Bank to equip and pay off the troops and stores. He had also ordered a regiment to Hancock to deal with a strike of boatmen on the C&O Canal. He took the opportunity to advise workers that the only way to revive business was economy in government and policies such as would attract capital. "No political platforms can be of any use to the working man or furnish him with work. In a free country like ours, the relations of capital and labor must always adjust themselves, and are regulated by conditions which politicians cannot control."⁹³

A Rent in the Social Fabric

Newspaper sources used are the *Sun* and the *American*. The best all-around document on demography, schools, and labor in this period is Charles Hirschfeld, *Baltimore, 1870-1900: Studies in Social History*, Johns Hopkins Studies 54, no. 2 (Baltimore: The Johns Hopkins

Press, 1941). See also William Keyser, "Recollections of a Busy Life," 3 vols., Maryland Historical Society, Baltimore, Md.

1. *American*, 26 September 1865.
2. *Ibid.*
3. *Ibid.*
4. *Sun*, 14 August 1872.
5. *Ibid.*, 15 November 1872.
6. Industrial accidents compiled from the *Sun*, summer of 1872.
7. *Ibid.*, 10 September 1872.
8. *American*, 27 September 1865.
9. *Sun*, 19 July 1876. On Garrett's operations, see Sister Mary Anne Dunn, "The Life of Isaac Freeman Rasin" (M.A. thesis, Catholic University of America, 1949), and Keyser, "Busy Life," pp. 228, 330.
10. Keyser, "Busy Life," p. 250.
11. Loans and purchases of the B&O Railroad Company are documented from B&O annual reports.
12. Canton Company annual reports.
13. *Quodlibet*, a satire by John Pendleton Kennedy (Philadelphia: Lea & Blanchard, 1840) (see chapter 5).
14. Col. Joseph D. Potts, President of the Empire Transportation Co., cited in Ida M. Tarbell, *The History of the Standard Oil Company* (1925; reprint ed. New York: P. Smith, 1950), p. 199. On pipeline objectives and survey, see Hermann Haupt papers, box 17, Sterling Memorial Library, Yale University, and Haupt's letter, *American*, 13 February 1878.
15. *Sun*, 16 August 1865.
16. *Ibid.*
17. *Ibid.*, 13 September 1872.
18. *Ibid.*, 11 March 1872.
19. *Ibid.*, 11 December 1871.
20. *American*, 9 January 1869; *Sun*, 27 November 1872; *Baltimore Engineer* (February 1976), pp. 4-5, 15.
21. *Sun*.
22. *Ibid.*, 14 December 1871. See also *American*, 9 January 1869.
23. Canton Company, *Annual Report*, 1872. The Union Railroad embankment and tunnel are now part of the usual approach of Amtrak trains to Baltimore station from Wilmington. The Baltimore and Potomac tunnel is part of the usual approach to Baltimore station from Washington. They were long operated as part of the Pennsylvania Railroad, now the Penn Central, and are a bottleneck to modern rail traffic. The B&O Howard Street tunnel, through which trains passed between Camden and Mount Royal station, is now rarely used for passenger trains. Its construction is discussed in chapter 8.
24. Charles Latrobe was the son of Benjamin H. Latrobe, Jr., and the nephew of John H. B. Latrobe.
25. *American*, 11 August 1871 and 26 and 27 June and 4 September 1872.
26. *Sun*, 23 February 1872.
27. *Ibid.*
28. *Ibid.*, 10 January 1890; Maryland legislature 1876, ch. 159.
29. *American*, 15 January 1878.
30. *Sun*, 30 October-5 December 1872, *passim*.
31. Richard H. Townsend, Diary, transcribed by Works Progress Administration of Maryland, 1937, in Enoch Pratt Free Library, Baltimore, Md.; *Report of the Joint Standing Committee on Jones Falls to the First Branch of the City Council of Baltimore*, 7 October 1870 (Baltimore: Kelly, Piet & Co., 1870).
32. *Sun*, 25 July 1872.
33. Mayor Joshua Vansant, message, 3 September 1872. See also the mayor's message, January 1876, and Baltimore City Council journal, 1st branch, 8 February 1876.

34. "The Plan for the Improvement of the Channel of the Jones Falls," 8 April 1869; "Report of the Engineers upon Changing the Course of the Jones Falls," Baltimore, 1868.

35. The disagreements of the engineers over the Jones Falls improvements appear to reflect their business rivalries and personal alliances more accurately than any engineering logic. Bollman was involved in the Western Maryland Railway project and was earlier in business with J. H. Tegmeyer, City Commissioner and member of the Jones Falls Improvement Commission. Henry Tyson, their consultant, also President of City Passenger Railway and former head of the Sewerage Commission, was determined to manage the flood control operation and supervise contracts personally. Ross Winans kept the controversy alive. He urged filling or raising the flooded district instead of dredging out the falls. His son, Thomas Winans, had participated in Buckler's 1859 plan to fill the basin. Tyson was aligned with Tom Winan's brother-in-law, Hutton, on the plan to create a current in the basin. (Ross Winans, *The Jones Falls Improvement* [Baltimore, 1872].)

36. Thomas Buckler, *Baltimore, Its Interests, Past, Present, and Future, A Letter*, 12 September 1873 (Baltimore, 1873).

37. Lake Clifton has been filled and is presently the site of a high school. The churchlike pumphouse has been preserved.

38. *Sun*, 22 November 1877.

39. *Ibid.*

40. City Health Commissioners, annual reports; Board of Health, *Annual Report*, 1875; Baltimore City Council journal, 2d branch, 25 January 1875; Mayor's message, 21 January 1878.

41. C. A. Leas, "On the Sanitary Care and Utilization of Refuse in Cities" (Address to the American Public Health Association, 1872), reprinted in Donald Worster, ed., *American Environmentalism: The Formative Period, 1860-1915* (New York: John Wiley, 1973), pp. 150-61.

42. *Sun*, 9 September 1872.

43. *Ibid.*, 31 July 1872. On improvements in northwest Baltimore, see *ibid.*, 9 August 1865 and 4 December 1872.

44. *Ibid.*, 17 June 1867.

45. *Ibid.*, 14 June and 8 July 1876.

46. *Ibid.*, January 1872, *passim*.

47. *Ibid.*, 27 July 1872.

48. *Ibid.*, 1 May 1872.

49. *Ibid.*, 17 November 1874; City Council journal, 2d branch, June 1875.

50. *Sun*, 30 January 1872.

51. *Ibid.*

52. *American*, 24 January 1878.

53. *Sun*, 20 December 1871. It was later the Atlantic and Pacific Tea Company, or A&P.

54. *Ibid.*, 22 November 1872; see also 23 July.

55. Hirschfeld, *Baltimore*, p. 66. See also *Sun*, 6 March and 13, 17, 18, and 19 April 1871; 7 March and August 1872; and 22 November 1877.

56. *Sun*, 9 October 1872 and 24 March 1873.

57. *Ibid.*, 15, 22, and 25 October 1872. See also Hirschfeld, *Baltimore*.

58. George W. Howard, *The Monumental City: Its Past History and Present Resources* (Baltimore, J. D. Ehlers & Co., 1873, with addenda to 1889).

59. *Sun*, 29 July and 8 August 1872.

60. Baltimore patents for canning include Isaac Solomon's use of calcium chloride in 1860 and A. K. Shriver's kettle in 1874.

61. *Sun*, 5 January 1872 and 25 March 1869. H. F. Going, canmaker, testimony in *Report of U.S. Industrial Commission* (Washington, D.C.: Government Printing Office, 1900), vol. 1.

62. *Sun*, 5 January 1872.

63. Henry Hall, "Report on the Ship Building Industry of the United States," in U.S., Bureau of the Census, *Tenth Census* (Washington, D.C.: Government Printing Office, 1880), p. viii.

64. *Sun*, 5 January 1872.
65. *Ibid.*
66. *American*, 22 August 1865.
67. *Ibid.*, 16 August 1865.
68. *Sun*, 26 January 1869.
69. *Ibid.*, 21 February 1872.
70. Harry L. Albrecht, "An Economic History of the Wilkens Hair Factory at Snake Hollow" (Paper for Broadus Mitchell, The Johns Hopkins University, 1939, in Enoch Pratt Free Library).
71. *American*, 30 September 1865.
72. *Ibid.*
73. *Ibid.*, 2 October 1865.
74. The conflict of the white and black caulkers can be followed blow by blow in the *American*, 28 September-2 October 1865.
75. Bettye C. Thomas, "A Nineteenth Century Black Operated Shipyard, 1866-1884: Reflections upon Its Inception and Ownership," *Journal of Negro History* 59 (1974): 1-12.
76. *New York Times*, 19 August 1869, cited in Philip Foner, ed., *Organized Labor and the Black Worker, 1619-1973* (New York: Praeger, 1974), p. 26.
77. "First Annual Report of the Baltimore Association for Education and Moral Advancement of the Colored People," 6 November 1865. See also Richard Paul Fuke, "The Baltimore Association for the Moral and Educational Improvement of the Colored People, 1864-1870," *Maryland Historical Magazine* 66 (1971).
78. John T. Gillard, *Colored Catholics in the United States* (Baltimore: The Josephite Press, 1941). See also John M. Slattery, "Twenty Years Growth of the Colored People in Baltimore," *Catholic World* (January 1878).
79. Father Vaughan, letter of Christmas 1871, cited in Peter Edward Hogan, *Catholic Mission Efforts for the Negro before the Coming of the Josephites* (1974), p. 60.
80. *Sun*, 24 March 1869.
81. Keyser, "Busy Life," p. 270.
82. *Sun*, 4 April 1872.
83. *Ibid.*, 26 and 27 September 1872.
84. *Ibid.*, coverage of 4 July 1876.
85. *Ibid.*
86. *Ibid.*
87. *Ibid.*, headline, 20 July 1877.
88. Keyser, "Busy Life," p. 253.
89. The account of the mob is from *Sun*, 21, 22, 23, 28, and 30 July 1877.
90. *Ibid.*, 21 July 1877.
91. *Ibid.*, 28 July 1877.
92. *Ibid.* See also Keyser, "Busy Life," p. 276.
93. *American*, 3 January 1878.