

The Art of Urban Landscape

1900–1918

The whistle and bell of a locomotive mean far more than the undisturbed trill of a singing bird. The rumble of a freight car is prosperity's favorite music. The rush and din of whirling machinery are the melody that thrills a business man's soul. . . . That which produces is of more importance than that which adorns.¹

There was plenty of rumble, whistle, and bell in Baltimore, in a crescendo from 1900 to 1918. The Pennsylvania Railroad was running four hundred trains a day past Union Station, ten times the number of 1890.² In spite of the priorities suggested by Mayor Preston's comment in 1913, Baltimore managed to achieve an exceptional harmony of planning. In no other period was so much done to acquire woodlands where the trill of the bird and the ripple of the run could still be heard. The city made or captured magnificent investments in port and rail facilities. It hired a forester and grew six hundred thousand goldfish in its parks. City projects were a happy mix of adornment and practicality. The sewage pumping station on Pratt Street and the water filtration plant at Montebello were elegant works of municipal architecture. Several blocks of park on St. Paul Street, all marble and floral display, combined efforts at slum clearance and traffic flow. There was a new awareness of the landscape in three dimensions. The tentacles of asphalt conformed to the contours of the land. There was a powerful exploration of all aspects of "the municipal geography." How does one explain the coherent planning? How does one explain the new sensitivity to the natural landscape, and certain blind spots in perceiving the social landscape?

The interlocking of several projects was already evident in Mayor Hayes's thinking early in 1903, when he announced his "Greater Baltimore" strategy. He had just sold the city's stock in the Western Maryland Railroad for \$5 million. He intended to use the money to build a sewer system. "Following the construction of the sewers in each street, and as fast as it is completed, will come the improved pavement." Paving and street-opening priorities were sketched already in a plan to make the valleys of the Gwynns Falls and Stony Run into parks, and to connect them and the older parks by parkways. The city and federal governments would complete the thirty-five-foot channel. The well-capitalized buyers of the railroad had agreed to complete its route, develop piers near Ferry Branch, and bring down coal from West Virginia and Cumberland for manufacturing development. "Manufacturing industries are the true source of municipal prosperity."³

The mayor's strategy reflected fairly accurately the thinking of the reform government and the national Progressive movement. It also reflected his conception of the municipal government as go-between, brokering investments in the city, ordering and synchronizing a city-building process that had many centers of action and many sources of initiative. The structure of government that had grown up in Baltimore, somewhat streamlined in the reform charter of 1898, favored such a view of the mayoralty. The city still did not possess the home rule powers it desired or the legislative representation it merited on the basis of population. The mayor was further limited by a fragmentation of powers. Agencies such as school board and harbor board had their independence reinforced. Police, elections, and liquor boards were still under state control. The water board and park board were financially independent thanks to privileged revenues from water rents and the streetcar tax. The coordination of municipal energies in this era appears all the more remarkable in such a framework.

The Fire

The agency most rigidly confined in the mayor's fiscal reforms was the fire department, and he was highly pleased with his success at reducing its operating budget over three years. He did not point out that the number of fires had increased and losses reached \$400,000 a year. Ironically, it was fire that interfered with his grand plan. The great Baltimore fire of 1904 destroyed the whole of the town laid out in 1730. The \$5 million fund became the working capital for a swift reconstruction. But even during this interlude Baltimore did not lose sight of its priorities.

The immediate cause of the Baltimore fire is a much-discussed but meaningless detail. What was decisive for its magnitude was the weather—a weekend of high winds and freezing temperatures, like the terrifying fires of the eighteenth century. A catastrophic fire might even seem predestined, the outcome of that procrastination Thomas Buckler railed against. Since the reorganization of a professional fire department before the Civil War and its equipment with steam engines, there had been little new investment. Since Buckler's time the fire department had pleaded, year after year, for resources and regulatory powers to cope with the new building technology and functions of the downtown area: "We cannot deal with two major fires at the same time." The fire chief observed in the 1880s the construction of bulky close-built warehouses where kerosene, cotton, fertilizer chemicals, and grain were stored side by side, and in the 1890s the garment factories, tall buildings, extensive lumber and coal yards, and tiers of electric wires. Horses were housed in multistory stables, and hay was kept in lofts. There was no regulation of floor loadings, elevators, storage of packing boxes, or wiring.⁴

On Sunday morning, 7 February, fire companies were called from Washington and Philadelphia, but found they could not connect their hoses to city hydrants. Individuals of courage, folly, and loyalty tested themselves against the natural enemy. They carried land and probate records out of the courthouse and plats out of city hall, as the fire lapped at Fayette Street. They flooded store roofs with water. Hundreds stamped out cinders and brands falling on their housetops, prayed at the edge of the falls, and bedded down children on the



pavements beyond. The Maryland Trust building, the Continental Trust, the Union Trust, the Atlantic Trust and Guardian Trust, the Calvert Building, the Equitable, all the "fireproof" symbols of finance and power, burned like torches. A number of lower buildings, apparently caught in pockets of lesser draft, survived—the Alexander Brown firm, the Mercantile Bank building, the Safe Deposit and Trust Company. An ice warehouse produced rainbows as it burned.

Over a 140-acre district, 1545 buildings were destroyed. Poles stood in the rubble staking out the streets. The burnt district corresponded roughly to the original 60 acres of Baltimore Town, plus its eastern filled-in margins to the falls. The city immediately launched a relief committee, but there were no deaths, few injuries, and few homeless. The district had become so fully commercial that the personal problems were chiefly those of small business owners. Hundreds lost equipment and inventory. The merchants and bankers had to wait till the safes cooled, so that their bills and contracts wouldn't char instantly when opened.

The reconstruction problem underscores the fundamental importance to the brick-and-mortar city of a legal and financial substructure. The problem of municipal government was to "find" the property lines, to "locate" the street levels, to reconstruct and mark on the landscape those visible tokens of mine

The extent of damage of the 1904 fire is shown by this photograph taken the morning after. The shadow in center right is a building that may have fallen as the time exposure photograph was taken. Note the cast-iron columns in the foreground and the steam fire engine in the center.



The fire-proof station was one of the buildings left intact after the devastating 1904 fire.

and thine. Plats were made of each block, the lines surveyed and marked on the ground with copper bolts five feet from the building line. The surveyors were literally blazing roads and staking claims in a new wilderness. In July ten thousand were at work removing debris.

Meanwhile, private individuals and corporations went after insurance claims and mortgage money to finance the rebuilding of the private spaces. The financial operation is difficult to evaluate. Twenty-nine million dollars in insurance claims was paid. The situation differed sharply from the 1790s and 1820s, when virtually all of the insurance was paid locally. The integration of Baltimore into the national economy meant that the risk had been spread nationwide. Fourteen hundred brick buildings assessed at \$13 million before the fire were replaced by eight hundred buildings assessed at \$25 million—about double. Assessments are generally an understatement, but an updating process might account for a large part of the difference. The city government acquired ten acres of additional street space and twenty-eight acres of docks and markets, and spent over \$7 million on public improvements, rebuilding streets and docks. It took in \$1.1 million from 2200 fronting property owners for the benefits of these improvements.⁵ Land valuation was believed increased by 50 percent. The fire created a capital crisis for numerous central enterprises. United Railways, already hampered by a 45 percent burden of interest since the consolidation deal, needed to borrow huge sums for downtown reconstruction and new rolling stock. A "car trust" was created that issued \$8 million bonds to buy equipment they would lease to United Railways. This mode of financing, modeled on the B&O, has since extended to ships, airplanes, and fleets of trucks and cars. It allowed modernization, but at the price of overextension of credit and greater vulnerability in subsequent financial crises.

Inevitably a prompt response to the great fire was a good deal of fire prevention. The numbers of fire fighters and horses were increased 50 percent. Alarm boxes and hydrants were installed to cover the larger urban territory being developed. A high-pressure water service was brought into operation over seventy acres. The fire insurance business increased dramatically, and recognition of the risk of fire gave a powerful impetus to the adoption of a building code. Even then, it required seventeen nights of hearings and several reviews in council. United Railways, stung by another serious fire in 1906, which demolished the Waverly car barn and fifty cars, built a series of seven steel and concrete carhouses that proved nearly indestructible. The school commissioners began bracing themselves for the idea that it would cost 25 to 30 percent more to build "fireproof" schools. On the west side of Baltimore, the garment factories and department stores still punctuated the skyline with reminders—an ominous rooftop forest of wooden water tanks.

Physically the city was rebuilt much as it was before. As one can see from "before" and "after" skylines, or the bird's-eye views of 1889 and 1911, the changes were discreet. The steel-frame skyscrapers were rebuilt. The major changes in plat were the widening of Pratt and Light streets bordering the inner harbor. The important resculpturing was the cutting down of St. Paul Street between Baltimore and Lexington and a paring off of Fayette Street by five feet

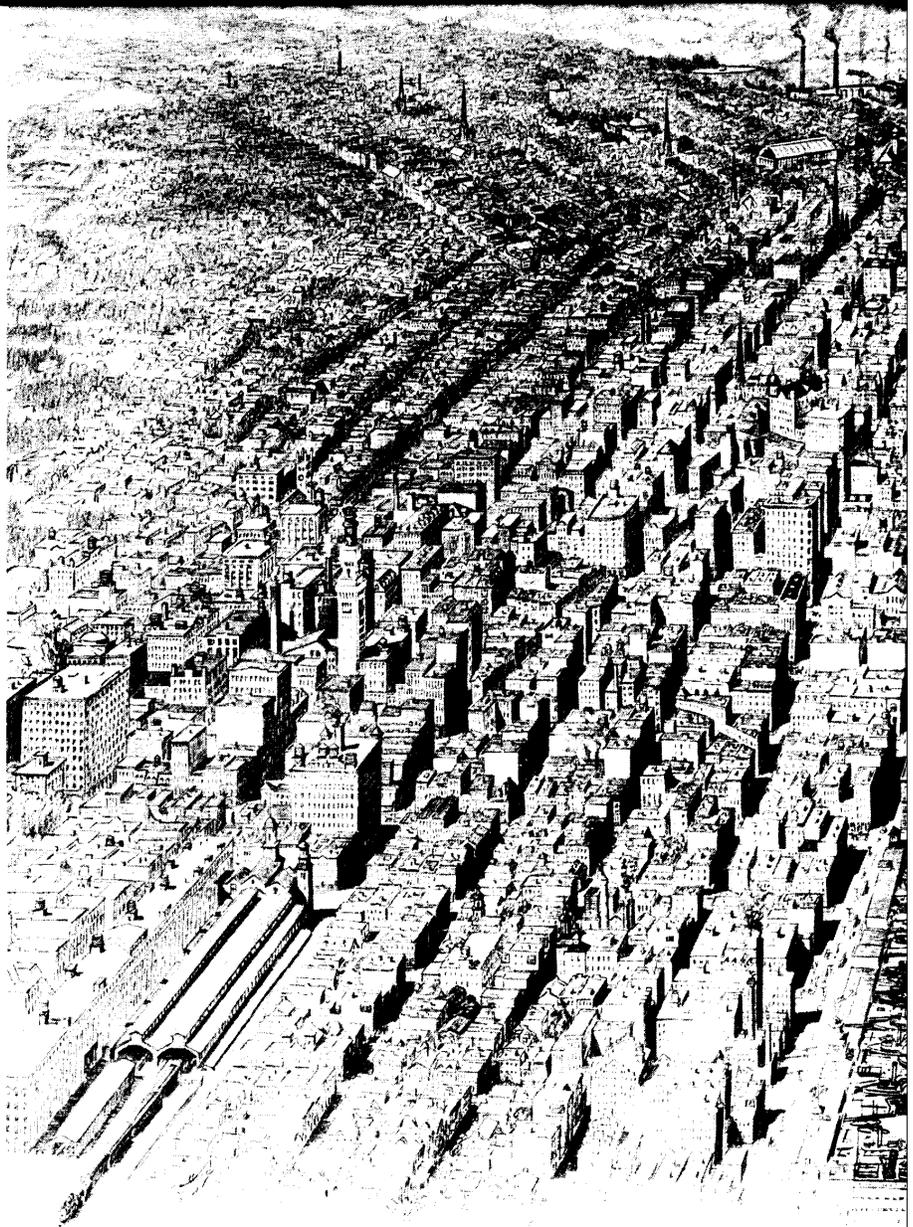
to correspond. Private firms tended to rebuild their business houses on the same sites or to enlarge their sites by throwing together two or three lots. Over half the new buildings were three and four stories high. Both public and private acquisition programs encountered enormous legal obstacles in attempting to clear land titles, because of the old irredeemable ground rents dispersed among many heirs and trustees.

The new buildings aspired to a solid and imposing style, and the new downtown had an ordered appearance, modern and comfortable, but overstuffed. In what is now Charles Center, the core of new buildings created after the fire illustrates a tightening of the web of financial power. On the southeast corner of Lexington and Liberty streets, the newly consolidated gas and electric company built its twenty-story million-dollar landmark, with eight high-speed elevators and showrooms for new appliances. On the four corners where Baltimore Street crosses Charles Street were the *Sun* building, the B&O building, the marble Savings Bank of Baltimore, and the Hub department store. At Light and German streets the C&P Telephone Company built its ten-story headquarters. In the rebuilt Continental Trust Building were the offices of United Railways.

The men who preserved the continuity and interlocking of enterprise in Baltimore in this generation were Alexander Brown II and S. Davies Warfield. Brown was a leading stockholder and broker for Consolidated Gas and United Electric, and a principal bond holder in the Belt Railway Company. He was the fourth generation to preserve the interlocking of his banking house, the board of the B&O, and the Savings Bank of Baltimore. Brown and the Jenkins family owned the largest shares of United Railways, and J. E. Aldred held "the balance of power" between them. Warfield had built Continental Trust and created a holding company of telephone and telegraph. With the Jenkins and Black families, Warfield held local shares of the Consolidated Coal Company. Together, Brown and Warfield engineered the consolidation of United Railways (1899)⁶ and the union of gas and electric companies (1906). The investment of the Savings Bank of Baltimore in the consolidated enterprise rose to \$500 million. The personal fortunes of Brown and Warfield were thus founded upon consolidating and solidifying those natural monopolies Ely had described twenty years before. But they felt the hemming in of Baltimore's political economy. As Baltimore industries were absorbed into the nationwide trusts, all that remained as a power base for the business elite of Baltimore was their local monopoly of land, improvements, and utilities, the physical core of a disarmed city-state.

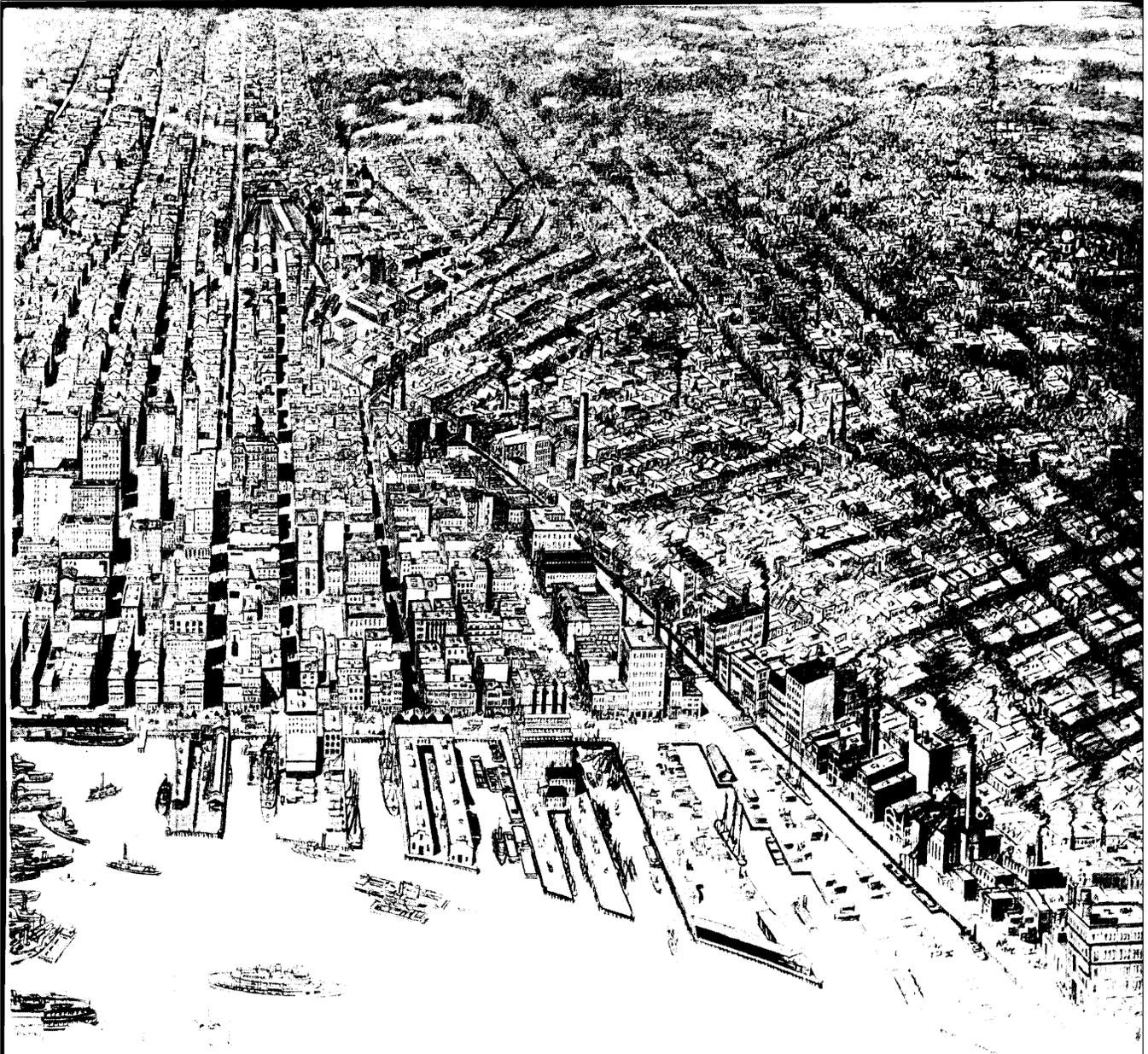
Once reconstruction was under way, the city could get back to its unfinished business—the sewers. If Baltimore was the nation's last city of its size to have proper sewers, it would be the most modern, scientific, and creative in its engineering. Intellectually as well as physically, the operation tied into everything that was done in Baltimore in this generation. As proposed in 1880, and as proposed again with more elaboration in 1893, it was to be a dual system—two complete and independent systems of storm sewers and sanitary sewers. The sanitary (or rather, unsanitary) wastes would be conducted to a treatment plant on Back River (out Eastern Avenue). Its massive stone trickling filters are still

A Work of Art



in use today. The sludge would be dumped into Chesapeake Bay off Moore's Island.

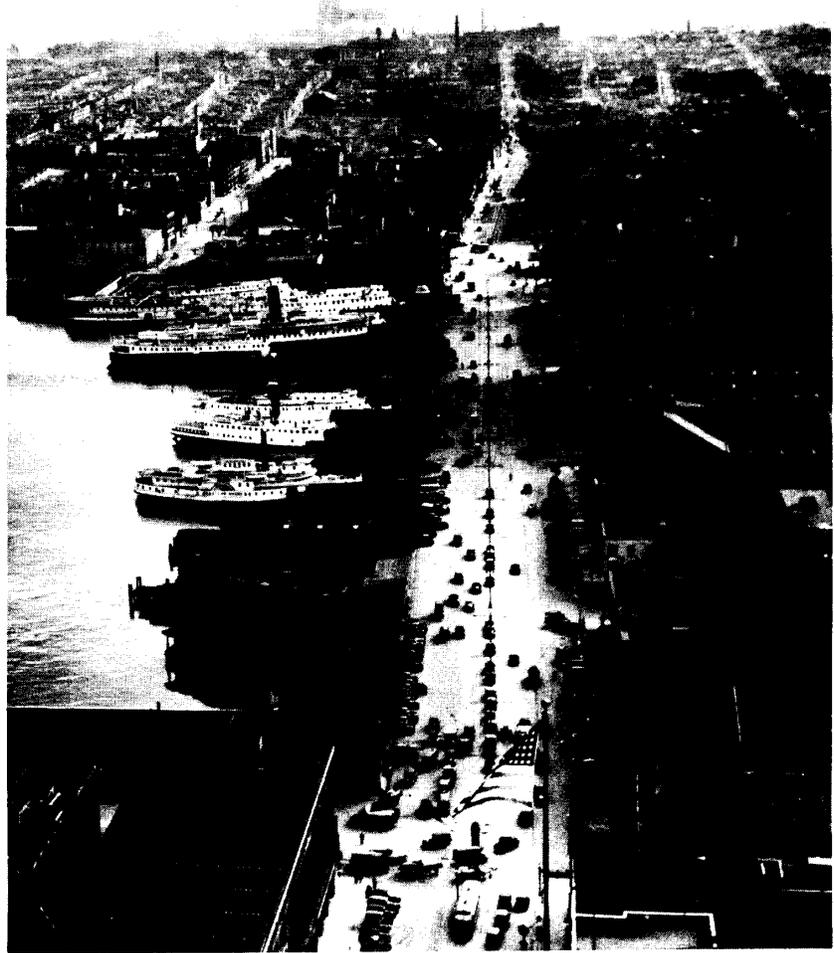
The new sewerage commission made up for lost time. A small pilot plant was built at Walbrook in 1906; in 1909 the full-size Back River plant was functioning and the mayor and city council drove ceremonially through the interceptor sewer in the city's tiny fleet of automobiles.⁷ By the end of 1914 there were twenty-one thousand houses connected, and about that many drop privies were abandoned. There were a like number of washbowls and bathtubs, and twice that many water closets and sinks. Sewering made possible a rapid transformation of urban environments, in particular, the alleys. It put an end to



Edward W. Spofford's
bird's-eye view of Baltimore in
1911 showed the city as it was
rebuilt after the 1904 fire but
before construction of the
Fallsway.

board fences, to bluing and laundry drainage in the alleys. It ended the incredible build-up of ice in alleys, sidewalks, and streets during cold snaps. In the severe winter of 1903/4, for example, cold weather had lasted for a hundred days. Where large amounts of water were used, as in the case of church organ motors, cellar drainers, and beer pumps, ice built up daily four to five feet thick. When ice and snow made the alleys impassable for horses, garbage and trash piled up, amounting to as much as 200 cartloads in a block.⁸ As these nuisances were eliminated, over the next ten years the women's clubs led a movement to pave the alleys, cover the garbage cans, and attack flies and mosquitoes.

There were other less obvious effects of the sewer work. The technical



This is Light Street in 1910 after the completion of an early widening. The view is south from Pratt Street. The site approximates the location of Harborplace, a redevelopment begun in the late 1970s.

demands of building sewers made them a privileged element of the municipal geography. The sanitary sewers had to be essentially one system, watertight. Every dwelling was supposed to be connected. The sewers had to operate as far as possible by gravity flow. A pumping station on Pratt Street forced the drainage of the low-lying land around the inner harbor. (Only small outlying and low-lying areas were neglected.) They were to run under public property, in alleys where possible. In a lyric moment, the engineer described the layout as a tree: "the Disposal Plant being the roots, the Outfall Sewer the trunk, the large intercepting sewers throughout the City the branches, small laterals the twigs, the houses the leaves, and the people the birds in the trees."⁹

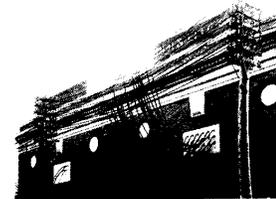
The demands for storm sewers were less rigorous, and the natural stream valleys functioned as trunk lines—the Gwynns Falls, the Jones Falls, and Herring Run. The thirty miles of old sewers and some privately built drains were incorporated into the storm drainage, and the old built-over streams were "tunneled" with concrete arches or conduits.

In the burnt district and surrounding downtown, the combined effort of rebuilding the streets, sewerage, and laying a high-pressure water system and electrical conduits meant total reorganization of the underground. Water and gas mains were often relocated: because they operated under pressure, they could be threaded through greater variations of grade and curvature. The sewer

engineers prepared block by block, as they dug, an underground map of the city. The water department replaced all its six-inch mains with mains ranging from ten inches in diameter up to forty inches in Lombard Street. One hundred and fifty miles of new gas mains were laid, of sizes up to forty-eight inches in diameter, and steam pipes were extended through the business district. The entire city was turned into a construction site. In 1904 the city engineer issued eight thousand permits to dig in the streets to lay pipes, tracks, mains, and poles. In 1914, eight hundred blocks were still "open" and two thousand people were at work on the sewers.

The epitome of the three-dimensional multichannel street was the Fallsway. The mayor, the Municipal Art Society, and the sewer engineer (Calvin Hendricks) began promoting the idea in the summer of 1906. The Jones Falls was canalized in a cement channel or storm sewer, and a road was built on top of it. The "Fallsway" or "tradeway" would take advantage of nature's only graded route for new road transport efficiency, and would add elegance in its proportions and details. The double-decker drainage and transport would lace together the harbor and the Union Station. Woven into this project were the long-nursed memories of the Jones Falls in flood and drought, the long-frustrated schemes for thoroughfares, brought to a focus by debates over the burnt district, the perennial appeals for system-conscious street grading, and the irrepressible idea of a "union" station for the several passenger railroads. Voters approved a loan in 1911. The Jones Falls conduits were ready, and the Fallsway could be built immediately. It was raised on a viaduct, allowing railway tracks to pass under it, and numerous streets that had formerly bridged the Jones Falls joined the Fallsway at grade. But the plans for a union station and an extension of Howard Street once again foundered on the rivalries of the railroads. The B&O was satisfied with its handsome Mount Royal Station uptown and its downtown Camden Station. The Pennsylvania Railroad rebuilt adjacent to its old site in 1912.

The sewer project forced new planning concepts into every part of the municipal territory. The essential engineering prerequisite was the topographical survey. To make water or sewage run downhill, one has to know where the hills are. The long postponement of topographical mapping (notably in 1816 and 1876) had created a thirst for this kind of information. Each street opening, railroad scheme, water or park development, and private subdivision entailed a "survey." The demand of all municipal agencies for maps and surveys placed the Topographical Survey Commission in a key position in municipal administration despite its limited budget for direct spending. Under two successive engineers of imagination, Colonel H. T. Douglas and Major Joseph Shirley, the survey became the broker of ideas, a comprehensive planning agency able to relate all manner of public and private projects.¹⁰ Their conception of the municipal geography as a circulation in three dimensions led them to relate the various interests of a neighborhood, to relate a particular neighborhood to the whole organism, and to formulate priorities and sequences of projects. Out of the Topographical Survey grew the annex street plan, a street paving commission, a factory site commission, and finally a commission on city plan. Although



With its electric power lines Baltimore was linked electrically and financially. The fire alarm telegraph ran over the rooftops to the new city hall in 1876. In 1895 the city was bound down "Gulliver-like" with electric wires. Here in 1911 the Harford Avenue powerhouse was part of the United Railways system.

Developing the
Piedmont

actions were simultaneous on both fronts, one can sort out the development strategies into the two distinctive topographical regions—piedmont and tidewater.

“Digesting” the annex of 1888 was the planning preoccupation for the piedmont landscape of rolling country, steep valleys, and graveled plateaus. A street plan for the annex was prepared by the Topographical Survey and enacted into law in 1898. It was still the conventional grid, piecing together past development. In 1902 the survey began requiring developers to submit plats of proposed subdivisions, which until then had been “entirely isolated, having no interconnections, and devoid of any element allowing a check on their accuracy.” The survey’s next target was the creation of an overall street-grading plan. The logic of street grading and interconnection of subdivisions gradually forced reconsideration of the 1898 plan. By 1908 the survey recommended significant departures and proposed a set of priorities in openings and pavings. It sent forward lists of “grade establishments” consistent with these priorities, as common sense had pleaded a hundred years before.

The logic of street grading in a piedmont landscape forced the abandonment of the “unsightly gridiron method”¹¹ and the substitution of a kind of urban contour plowing. The city had already adopted a policy of expensive “permanent” bridges rather than timber trestle. These structures meant long-run economy of maintenance, but a high capital investment. Street extension implied the extension of all the new understreet utilities. Consequently, the two great valleys were crossed only at a few strategic points: the Gwynns Falls by Edmondson Avenue, Baltimore Street, and Wilkens Avenue, and Stony Run by Huntingdon Avenue and University Parkway (Merryman’s Lane).

Meanwhile, the Olmsted plan fostered a new reading of the landscape. The Municipal Art Society fostered in Baltimore the Progressive nationwide city-planning movement. Carrere & Hastings were invited to submit plans for a plaza, through routes, and traffic circles, and the Olmsted Brothers, consultants at Roland Park, were invited to make a plan for municipal parks and parkways to develop the annex. The Baltimore park commissioners had already introduced romantic European ideas into aristocratic Druid Hill Park and Clifton Park—winding carriage drives and walkways conforming to the topography, alternations of groves and lawns, vistas and copses, cascades and still waters, in a maze of movement offering the inhibited city dweller a sense of freedom and spaciousness. But the application of such ideas to the scale of the annex offered a new perception of overall urban development that changed Baltimore’s vision forever. Olmsted Brothers envisioned all the stream valleys—Gwynns Falls, the Jones Falls, Herring Run, and the Patapsco—as parkland, each with its distinctive relief and its unique forest, meadow, or boulder landscape. These and the older parks would be connected by parkways or landscaped drives through the smaller stream valleys, for example, Ellicott Driveway, Hilton Street, Stony Run Parkway, and Wyman Park Drive. The new parkways were instantly recognizable by their landscaping: Thirty-third Street, Gwynns Falls Parkway, the Alameda. Some had separated drives at different levels, such as University Parkway and Druid Park Drive, which “diverge and converge with the contour of the ground.”



The entire urban landscape of the piedmont would become a park—a labyrinth of drives and walks, a harmony of man and nature.¹²

While the 1851 Boundary Avenue Plan was also a scheme for developing a periphery, combining carriage drive and greenspace, a radical change of perspective had occurred. First, the Olmsted plan of 1903 is all curves. It abhors the straight line, a change apparent in all street making. Second, where the boundary commissioners were enamored of the long vistas and high places dear to chapel builders and the owners of country seats, Olmsted turned the landscape of values inside out, admiring, photographing, and beautifying the streams and valley floors, the vales and glens. For example, to protect the view of the Gwynns Falls meadowland, he recommended relocating the Western Maryland Railroad line and rebuilding the Edmondson Avenue bridge. Third, where the Boundary Avenue Plan was tied to an artificial and short-lived political boundary, Olmsted's idea, rooted in the piedmont landscape, cut across political boundaries. It would be extended to the 1918 annex and ultimately to the six-county metropolitan region.

Most of the parkways were developmental street openings, that is, they prepared new territory for private residential construction and were, therefore, self-financing. This strategy reinforced the power of the Topographical Survey as an intellectual or planning arm of the city. The romantic view of the landscape and the "country life" movement appealed to a community that had always looked back upon the life of the country gentleman with nostalgia.¹³ Masses of people, unable to aspire to servants and trout streams, were nevertheless attracted by countrified environments with city conveniences. In the spring of 1913, the *Sun* featured the Herring Run Valley near Harford Road as "nature's respite." A walking tour, although "not an American exercise," offered "a strenuous and thrilling adventure, over huge boulders, along angled pathways, up and down steep banks." The walker would find swimming holes, mossy rocks, arched passageways, and "the coolth and hum of the breeze."¹⁴ Three years later, Frank Novak had four hundred or five hundred semidetached houses under construction in this section.¹⁵

By cooperation between the Topographical Survey and the new State Roads Commission (Shirley assured the link), the old turnpikes were redeveloped—Reisterstown Road, Washington Boulevard, and Harford Road. Differences of philosophy and planning horizon in the several rings explain present variations

One of the monuments to civic pride was the 1909 sewage pumping station on Eastern Avenue at the mouth of the Jones Falls. Its design included a brass-railed, multifloored central gallery and massive coal-fired, steam-driven pumps.

Sewers were added to an already built-up city at enormous expense, effort, and engineering skill. Officials often formally toured the sewers before completion of the system.



of standards of width, grade, and development along these routes. Park Heights Avenue had been laid out as a development axis by the county (1874), and the city now created Park Circle as a connecting point.

The radial routes and radial stream valley parks structured the development of the annex along a system of wedges like pieces of pie, a pattern that was later extended into the region beyond. As estates changed hands and tracts were subdivided, the social differentiation of the wedges was confirmed. A series of strategic operations defined for several generations to come the boundaries of a Jewish wedge west of Falls Road. The Roland Park Company and the Baltimore Country Club controlled the land on the east and practiced rigorous exclusion. On the west, the Suburban Club of the Jewish elite was located at Park Heights and Slade avenues. Mayor Preston sold his country home, the Colonies, near Pikesville to Mrs. William Levy. The Friedenwalds had a twelve-hundred-acre estate near Glyndon.

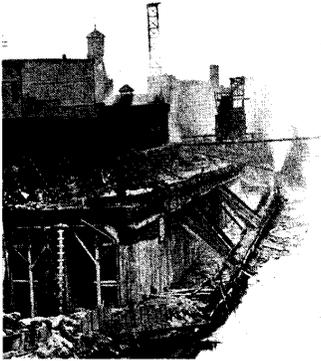
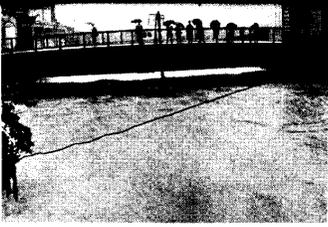
Property transfers occurred within a framework of the social order. The piedmont locus of the elite, together with the new romantic view of the piedmont landscape, matched a social regulation. Instant indignation forced the steel company to resell the Cockey's land in the Worthington Valley, where they had hoped to take limestone for steel making, and the usually arrogant Pennsylvania Railroad backed away quickly from a plan to build a "cut-off" line around Baltimore, cutting across the valleys, through the green wedges and country gentlemen's backyards.¹⁶

The most elaborate weaving together of institutions occurred in the northern wedge. The development axis of Charles Street was planted with lindens and carried to the new city line. Connecting routes were opened to the parks (Thirty-third Street and Twenty-fifth Street), and a paving program knitted over the land of the Peabody Heights Company toward Waverly and Guilford. Meanwhile, the Maryland and Pennsylvania narrow-gauge railroad was built through Stony Run valley, The Johns Hopkins University campus was laid out at Homewood, and the Gilman School was organized in the Homewood mansion. The Olmsted's role as consultant for the development of Hopkins campus, Wyman Park, and Roland Park harmonized these physical plans. It is indicative of the close connection among the parties who generated the green

wedge. When the boundary line between Wyman Park and Hopkins campus was negotiated and surveyed, each tree was mapped and protected, Wyman Park Drive was engineered, and a full-dress debate was staged over the esthetics of the stone bridge that would carry University Parkway across Stony Run. The Guilford Company, a subsidiary of the Roland Park Company, was permitted to modify the street plan on the 1400-acre Abell estate to a "series of reverse curves." It began home building in 1913 with Chancery Square: "twin houses" grouped around a private park, built in an exotic style with a brick first story and half-timber with stucco above. In Homewood the company built a dozen three-story dwellings at \$4000 each, and continued to add tracts to its property along the northern edge of the city.

Among those who took up residence in the green wedge of Guilford and Roland Park were many leaders of the Progressive movement and the Municipal Art Society. Roland Park had 250 homes in 1904 and nearly 500 in 1910. The residents tended to belong to the Baltimore Country Club on Falls Road, and they insured the full integration of the wedge. They worked in its old center near South Street and the courthouse square, they belonged to the clubs near Mount Vernon Place, and they supported the institutions in the new connecting districts: the Woman's College, Sts. Philip and James Church, the university, the Episcopal cathedral, and University Baptist Church. They began to buy cars, and to combine into one suburban life style the dual advantages of the traditional "townhouse" and "country house."

Only for the rich and only in the green wedge were apartment houses built. They cost more per unit than ten-room homes, \$5000 to \$10,000 each, and commanded views of the new parks and access by the new parkways. The apartment-house districts of the city were fixed for several generations. Among the largest was the Marlborough, facing the Eutaw squares. A ten-story apartment was built at Charles and Reed streets. Smaller ones were clustered in Homewood or Peabody Heights; for instance, architect John Forsythe's building at Calvert and Thirtieth streets, where each of the twelve apartments had a jewel safe and a servant's room in the basement. Smaller ones clustered along Druid Lake Drive, Linden, and Eutaw Place at the entrances to Druid Hill Park. The most impressive was the eight-story Emerson Italian Gardens designed by J. E. Sperry. Each of the twenty-eight units had four bedrooms, three baths, three large living rooms (15 by 20 feet), a suite of two rooms and bath for two maids, a walk-in linen room, five porches, and a kitchen balcony. The design was intended to reproduce a vertical image of the suburban home, so it had a "vertical street" with front entrances, porches, and flower boxes, and a "vertical alley," that is, a freight elevator, for servants' entrance, deliveries, and garbage collection. There was a spiral fire escape: "You run, seat yourself inside it, and slide to the ground floor."¹⁷ Its eccentric developer, Captain E. E. Emerson, illustrates the mix of balanced real estate investments, and his creations cover the mix of conveniences and pretensions of his time. In addition to the Bromo-Seltzer Tower, 290 feet tall with a 61-foot blue bottle revolving on top, and the Emerson Italian Gardens, he built the Emerson hotel with five hundred rooms, at



The Jones Falls was finally confined in 1912. Floods such as the one shown here were controlled through a system of conduits. Cofferdams were used during the construction, which employed the most modern equipment and techniques. Ultimately the Falls was buried, the Fallsway developed, and the Fallsway Viaduct constructed over the railyards.

Calvert and Baltimore streets. He bought a glass factory to supply blue bottles, and to supply the hotel with milk and eggs he converted Brooklandwood, his Green Spring Valley estate, into a model dairy and an attraction for the Sunday drive. All worked together to enhance the suburban idyll.

In spite of the effort to conform to the topography, development of the annex demanded large investments and provoked debate over taxation. Although the special tax privilege of the annex was scheduled to cease in 1900, it took nine years more of debate and litigation before the pill was swallowed. The principles that determined the tax status of various properties as "urban," "suburban," or "rural" were density and streeting—that is, the development of at least six houses on a block and the bounding of the block by "improved" streets, properly paved and curbed. Some developers, such as the Park Land and Improvement Company in Mount Royal Avenue, had retained "private" streets to keep the taxes low. The city's street opening priorities were therefore influenced by the need to complete blocks in the annex and insure their transfer to the higher tax rates. Except for the burnt district, most of the growth of municipal revenues in this era came from the reclassification and development of the annex. Once the tax principles were firmly established and development was proceeding at a rapid pace, the matter suddenly ceased to be an issue, and city delegates began submitting bills for a new annexation.

Development on Tidewater

"A man is as old as his arteries," argued the *Municipal Journal*, summarizing the strategy for "rejuvenating" Baltimore.¹⁸ More important than streets as the arteries of the tidewater landscape were ship channels, railroads, pipelines, and power lines. Keeping the arteries healthy demanded coordination among corporate interests—the rival railroads, utility companies, and land developers. Here again, city government functioned as negotiator and broker. The low-relief landscape of tidewater was malleable, a matter of dredging here and filling there. Instead of conforming the streets to the landscape, as in the piedmont hills and valleys, the engineers rearranged the landscape, creating the typical cogged edge of the harbor, with its fans of rail spurs, its long pier warehouses, and its slips angled into the river. The amount of dirt moved in this generation, from 1900 to 1918, was much greater than what Buckler had proposed to move by shoveling Federal Hill into the inner harbor.¹⁹ The federal government invested

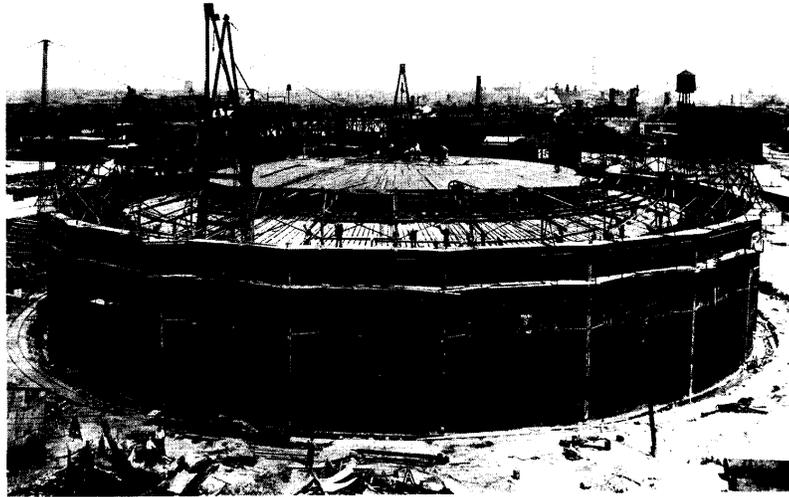
\$3.3 million. River and harbor investment was its chief input to public works and urban competition. In 1905 it developed the 35-foot channel 500 feet wide from the Lazaretto Light down the bay to the Atlantic. It also dredged the Quarantine anchorage, a parking lot for deep-draft ships. The city invested \$16 million for local access to the new channel. In 1901 only the Canton docks and the B&O wharves at Locust Point were served by deep channels (27 to 30 feet), but by 1911 there was deep draft access to the rebuilt inner harbor docks, the old city block, and the south side of Locust Point as well.

A yet more expensive, technically impressive, and remote channel, the Panama Canal, was also perceived as part of Baltimore's new highway of opportunity. "DO MILLIONS AWAIT US?" ran the front page headline: "each wide-awake American port will endeavour to reap as much benefit for itself as possible."²⁰ The *Sun* advocated a new steamship line to west coast South America, and offered a lesson in the new geography: Baltimore was two thousand nautical miles from the canal, forty-five hundred miles from Valparaiso, and fifty-four hundred miles from Buenos Aires. From these points the Trans-Andean railroads were being built inland to tap areas of South America rich in rubber, tin, and copper. Baltimore already had its railroads into the heartland and the coal land of North America. Since freight would seek "the shortest rail haul and the longest water route," Baltimore was ideally situated.²¹

The threading of new arteries in tidewater Baltimore provides an accurate image of the metabolism of its political economy: coal, steel, gas, and electric power. The industrial revolution was only now stamped into the landscape, visible in the great mountains of coal outside the new electric generating plant at Westport and outside the gas plant at Spring Garden, whose new gasholder was big enough to hold the seven largest downtown buildings. A two-foot-diameter gas pipeline was run twelve miles across Bear Creek. Barges plied the harbor, loaded with coal, and car floats ferried railroad cars across Curtis Bay. The three major railroads all built coal piers and bought several thousand coal hopper cars. The rim of the harbor was studded with coal yards. Production of western Maryland coal peaked in 1907 at 7 million tons a year. Maryland coal provided more heat for the ton than other grades of bituminous coal, so that it was shipped longer distances and came more nearly into competition with anthracite. The U.S. Navy preferred Georges Creek coal and purchased it to fuel Admiral Dewey's fleet at Manila Bay and the new classes of dreadnoughts. It was sold in Canada in competition with Nova Scotia coal, and shipped to the river Plate. This was the clue to the new geographical meaning of Baltimore's location in the world economy: six thousand miners dug Appalachian coal at an elevation of 2000 feet above sea level, while world trade in coal took place at sea level. The link, of course, was the railroad. The rail haul was a much larger item in the cost of coal to the consumer than mining the coal or moving it on the ocean. This was, therefore, the period of peak development of Maryland railroads, their greatest demand for acreage in the city, and their maximum contribution of noise and smoke.

Major components of Baltimore's coal-hauling system changed hands but the New York financiers were still following the basic Garrett strategy: the joint

This Spring Garden gasholder was under construction in 1912. Built by Bartlett-Hayward, it was 222 feet high, 219 feet in diameter, and 6 million cubic feet in capacity.



capture of coal land and railroad right of way. Federal antitrust actions from time to time signaled a reshuffle. The Chicago financial group resold the B&O to the Kuhn-Loeb banking group who owned the Pennsylvania Railroad. Baltimoreans shuddered again at this threat to competition. The state sold its stock in the B&O Washington branch. In 1906, in the face of an investigation, the B&O sold off the Consolidation Coal Company. Who bought? The Rockefeller interests, who had meanwhile acquired control of the Western Maryland Railroad from the Gould group to whom the city had sold it. The Rockefellers bought the Wheeling and Lake Erie Railroad as part of the same grand coal-mining plan. Just as Rockefeller replaced Johns Hopkins and John Garrett in railroad and banking control, his largesse displaced local philanthropy. The Rockefeller Foundation created The Johns Hopkins School of Hygiene and Public Health, endowed the medical school, compensated the university for losses in the fire, and sent a Baltimore builder to Peking and Shanghai to build hospitals on the Johns Hopkins model. In 1909 the Pennsylvania, faced with an antitrust hearing, sold off the B&O to the Union Pacific Railroad. "B&O presidents are made and un-made in New York." The combinations and recombinations generated pressures to keep coal miners' wages down, increase their productivity somewhat, raise the freight rates on coal substantially, and raise the price of coal at tidewater.²²

Looking at tidewater coal users, one can see other dimensions of the network. Production of electricity soared between 1900 and 1914. This growth sector depended on coal. United Railways phased out its powerhouse and purchased its power from the electric company. Another top customer was the electrolytic copper refinery of American Smelting and Refining, the world's largest, solidly in the hands of the Rockefeller interests by 1907. The copper industry was doubly linked with the electric industry: not only did the copper refinery buy lots of electricity, but the copper it produced was used largely to provide copper wire for distributing electricity. In other words, the copper industry had both "backward" and "forward" linkages with the electrical industry. The entire complex of gas, steel, copper, coal, electricity, and streetcars was woven together by these cross products, so that each fed on and nourished the growth of the other.



In 1914 a power crane and steam engine were used for the construction of a power plant.

The Maryland Steel Company, owned by Pennsylvania Steel, which was in turn owned by the Pennsylvania Railroad, was expanding steadily. As its Cuban ores began arriving (1906), the company went into integrated steel making at Sparrows Point. The demand of the steel company and United Railways for electricity grew steadily and justified the introduction of hydroelectric power in 1915. The Holtwood Dam on the Susquehanna was one of the earliest large low-head dams of its type, and the power line led directly to a Highlandtown substation that integrated the steel company power plant and Consolidated's metropolitan system. To fuel the new furnaces, the steel company built rows of beehive coke ovens. The by-products of making steel and coke reinforced the industrial network. By-product tar and slag supplied roofing materials for the building boom and smooth-paving materials for street making. Demand for these materials tripled. In 1913 the steel company again made a \$3 million investment, extended its beehives, and contracted to sell coke oven by-products to the Koppers Company to recover benzol. By-product methane was piped from Sparrows Point to the Consolidated Gas Company works at Canton. By World War I, the steel company was supplying half to two-thirds of the gas that the gas company in turn distributed to the rest of the city. This helps explain why Baltimore politicians resisted several successive schemes for bringing in natural gas. The triangular trade in gas, electricity, and steel also gave more meaning to the consolidation of gas and electric monopolies into a single corporation.

The Consolidated Gas and Electric Company sponsored new enterprises to stimulate demand for its products. It displayed, sold, and financed gas appliances, electric fixtures, and home wiring. It introduced cheap rates for large users, and began publishing a pictorial magazine to highlight uses and users of gas and electricity. The company's backers—Aldred, Griswold, Brown, and the Jenkinses—participated in the Baltimore Gas Appliance Company, which made gas stoves and water heaters. Gas Appliance in turn helped organize the Baltimore Tube Company and the Baltimore Enamel Company. Drawn brass and copper seamless tubing were used for gas fixtures and water heaters. The enamel company used gas in its new techniques of baking enamel finishes on kitchen ranges and water heaters. The gas company bought its ever larger gasholders from Bartlett-Hayward, which was also its largest customer for gas.

Geographically, the coal metabolism and the triangular trade of gas, electricity, and steel defined a potential in Baltimore that would be developed rapidly in World War I. In the local landscape, it confirmed the industrial vocation of tidewater Baltimore, fixing the pattern for seventy-five years. Industrialists, developers, utilities, and the municipal government collaborated to connect the entire waterfront by railroads, to give value to new industrial sites, and to make easy the transfer of intermediate goods—coal, steel, gas, acids, slag—between industries. They looked forward to developing both sides of the whole magnificent Patapsco River.

On the north shore, the Canton Company extended development to the tip of lower Canton, where it built a modern pier warehouse—six stories high, “fireproof,” with loading bays at all levels to load directly from ships on either side. The Pennsylvania Railroad purchased a half-million-dollar site for a terminal and yards in Canton. The Canton Company built a thirty-two mile terminal railroad to connect the three trunk lines (B&O, PRR, and Western Maryland). It also built specialized bulk-shipping facilities—ore pier, sulphur bins, and nitrate shed—and began unloading foreign ores for Pittsburgh. It organized subsidiaries to provide stevedoring and warehousing. The Canton company sold sites for industrial expansion to Electrolytic Zinc, American Agricultural Chemical, and Standard Oil. Most important was Friedenwald’s Crown Cork & Seal, on a backland site close to the Highlandtown and Canton labor force and convenient to the rebuilt packing houses and can makers on the Boston Street waterfront. American Can Company remained very strong, despite antitrust suits. As Judge Rose said, he couldn’t set things back to where they were in 1901; “I am reluctant to destroy so finely tuned an industrial machine.”²³ The hundreds of new jobs stimulated residential building. A thousand houses were put up in Canton in the years 1914–16. The company seized every opportunity: it sold twenty acres to the city for parkland to extend Patterson Park, while selling off its own Canton Park to row-house developers for five hundred homes. It deeded free to the city a right of way for the outfall sewer, but was allowed to lay a road on top, and was given a construction contract for the sewage disposal plant.

To the south, the city was limited by its boundaries to a field of action along the undeveloped south rim of Locust Point, between Fort McHenry and Ferry Bar. When the city sold the Western Maryland Railroad, the negotiations insured development of a tidewater terminal, Port Covington, in this vicinity. The railroad ran a drawbridge across Spring Garden, built a huge grain elevator, an open pier, and a two-million-gallon treacle tank. Baltimore’s \$16 million port loan was a boon to the railroad, and by 1914 the city was already planning a next step, the development of municipal piers along McComas Street east of Port Covington, or on the Patapsco mudflats opposite.

Beyond the city limits, development was modest. At Curtis Bay the B&O, secure in its monopoly of access, built a \$1.5 million mammoth coal pier that would operate by gravity flow and electric controls. The old-fashioned timber pier was replaced with reinforced concrete, the first on such a scale. Davison Chemical built the first sulfuric acid factory of concrete and steel (1909–15). It



The scale of the power plants is reflected in the Westport plant fire room.

used three thousand tons of lead to line its tanks. (Acid plants were formerly built of timber, and were perennially rebuilt.) Davison subsidiaries shipped phosphate rock to Curtis Bay, and other subsidiaries adjoining the acid plant manufactured complete fertilizers. Baltimore remained the fertilizer capital of the nation.

Otherwise, the southern perimeter of the harbor remained a mere alley gate to Baltimore. Traffic under the Light Street drawbridge was large, but it was mostly mud, dirt, ice, manure, and garbage. Of lesser volume were coal, oil, hay, fertilizer, building sand, and brick. These low-grade materials were, however, the stuff of city building and offered opportunities for political enterprise. An informal web of such alliances gave coherence to municipal activity in this generation, despite apparent fragmentation and changes of administration. In the planning of Baltimore the alley-gate entrepreneurs were as essential as the creative engineering imaginations—Olmsted, Shirley, Hendricks, etc.—and the financial elite—Brown, Griswold, Aldred, and Warfield. The alley-gate entrepreneurs managed to bring into collaboration imagination and power, and to harmonize a thousand venal interests, great and petty, national and parochial. Of them all, the most remarkable was Frank Furst. After retiring from a career of forty-five years at the Northern Central grain elevators, Furst launched into political entrepreneurship based on manipulation of the tidewater landscape. His power as political broker in Baltimore rested in large measure on the political muscle of South Baltimore. The working-class coastal plain districts had been neglected as residential neighborhoods: drainage problems were hard to solve on low ground, and the railroads had created irritating bottlenecks to street traffic. By 1909 the public “clamored justly for relief.” Collaboration between working-class voters and manufacturers made South Baltimore the strongest component of a neighborhood improvement movement and a citywide congress of neighborhoods.²⁴ A plan was made to remove the garbage reduction plant and create several new parks in South Baltimore. Isham Randolph was brought from Chicago to reconcile the B&O and the South Baltimore populace with respect

to grade-crossing elimination. Another "arterial" element of the plan was Key Highway. Like the Fallsway, it would be an easy-grade route suitable for industrial hauling. Onto it was grafted a municipal belt railway that, like the Canton Railroad, would connect the B&O, the Western Maryland, and the docks all the way around the Locust Point peninsula.²⁵

Furst built an economic base from the interface of political monopoly and city-building enterprises: dredging, sand, gravel, ballast, and real estate. About 1910 he merged his half-dozen firms into the Arundel Corporation, which held land along the tidewater rim, exploited the sand and gravel deposits, and in the Maryland tradition used its dredging spoils to "make" more land for industrial sites. By 1917 Furst had broken into a larger market. As founder and president of the Atlantic and Gulf Coast Dredge Owners' Association, he arranged the price fixing and assignment of government contracts.²⁶ His company, Maryland Dredging, had contracts at fourteen cents a cubic yard, others at nine cents. He was awarded a navy contract to build at Philadelphia an 1100-foot \$3 million dry dock, large enough to handle dreadnoughts. He also had the dredging contract for the B&O coal pier at Curtis Bay. As the B&O extended its Curtis Bay line from the asphalt plant at Brooklyn to Sea Wall, it crossed four hundred acres owned by Arundel, opening them up as prime industrial sites.²⁷ Arundel had acquired part of the property from the city: the city had walled and filled the old quarantine grounds in the interest of industrial development. Arundel had a city contract to barge downtown street-cleaning refuse from the back basin to this site. Furst was also involved in the Baltimore Sanitary Contracting Company, the night soil contractors. They used the former Pratt Street powerhouse of United Railways as a stable. When the sewer system displaced the night soil men, they shifted into garbage disposal. Taken singly, these enterprises were modest, but they were political franchises, secure monopolies, and they allowed Furst to hand out laboring jobs and fill the coal hods of the poor, reinforcing his political base.

Furst's activities expose the close cooperation between reformers and old-style politicians, between the financial elite and newspaper publishers, between immigrant Catholics and "blue ribbon" Presbyterians. Furst was active in all the local monopolies: he was vice-president of United Railways (1906-19), a director of the Pennsylvania Railroad and the Big Vein Pocahontas Coal Company. He operated from an office in the Continental building, built by Continental Trust. It was the home base of the Warfield interests, the offices of United Railways, Consolidated Coal Company, and Big Vein. Furst was also close to the Fidelity Trust Company, founded by Warfield, in which Van Lear Black was active. The Blacks were involved in the Consolidation Coal Company and the *Sun* papers. Warfield was governor. Fidelity Trust financed the jitney business, Davison Chemical, important tidewater builders Keelty and Knott, and the brewery syndicate. The breweries began to have influence with the state liquor control agency. They controlled most of the saloons in the city through their influence on licenses, the premises they leased, and the beer contracts. The \$100,000 Riverview Park improvements were made jointly by United Railways



The Inner Harbor already sparkled with incandescent illumination by 1915.

and the brewery monopoly. The Fidelity trust enterprises reflect a Catholic social milieu. Furst himself was German born; he immigrated as a young child, and went to school at St. Michaels. Several of the families of original owners of coal, brewery, utility, and streetcar companies were prominent Catholics, and their drivers, miners, carters, and laborers were the original German and Irish labor force whose solidarities offered political capital. The local enterprises—gas, electricity, United Railways, Arundel, and the breweries—continued to hire in Catholic neighborhoods and to recruit managers among Loyola graduates for several generations.

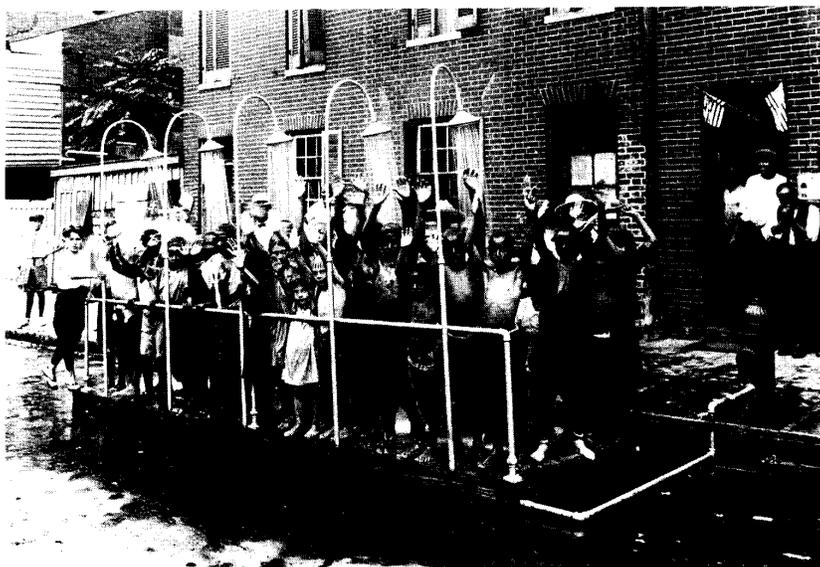
Furst's popular base and his understanding with entrepreneurs extended into Anne Arundel County, and he played a prime role in two of the great landscape-molding operations in tidewater: the sale of ten thousand acres of farmland for Camp Meade (1917) and the annexation of Curtis Bay to Baltimore City (1918).²⁸ When Furst died, he left \$1 million—modest beside Garrett or Abell, but impressive in terms of his beginning from nothing.

Washing the Great
Unwashed

The coordination of municipal energies and the new harmony of planning in both piedmont and tidewater landscapes had been triggered by the building of the sewers. Baltimore's reengineering was essentially composed of sanitary engineering. But it involved new kinds of social engineering, directed toward social goals. The motive that led Baltimoreans to give top priority to sewers affected their perception of the social landscape as well as their perception of the natural landscape. That motive was simply a grasp of germ theory. Chlorination of the water supply was adopted in 1911, the same year the sewers were hooked up. The typhoid fever rate dropped. Introduction of the Gunpowder water had already reduced the incidence of typhoid and cholera somewhat. Declining rates of scarlet fever, whooping cough, and tuberculosis were perceptible, although unexplained. All these factors contributed to a substantial reduction of deaths in this generation, most visibly infant deaths. Once the process was well under way, people began to regard infant survival or "child saving" as feasible and morally compelling.

The disease that demonstrates the day-by-day, year-by-year struggle was tuberculosis, the white plague. Like cholera in 1832, TB was regarded as the disease of the poor, the alcoholic, and the ignorant, the great threat to the rich, the decent, and the well scrubbed. At a public meeting early in 1902, Dr. Osler shook his finger in the mayor's face: "What are we doing for the ten thousand consumptives who are living today in our midst? We are doing, Mr. Mayor and fellow-citizens, not one solitary thing that a modern civilized community should do."²⁹ But by 1916 one could discern that germ theory was affecting social habits, personal self-discipline, and mutual regulation. A modest symbol of the attack on contagion was the Walters Bath. William Walters, who had made his million by rebuilding southern railroads and organizing the Atlantic Coast Line Railroad, was a great traveler and collector. His art collection was already regarded as a public treasure. Impressed with the filth of Egypt while he was on a collecting trip, he made inquiry at home, and discovered that there was filth in Baltimore as well. So he decided to create a system of public bathhouses.³⁰ The idea was extended to add laundry rooms, bubble drinking fountains, public comfort stations in the squares, swimming beaches in the parks, and summer street showers.

That movement matched the thrust of public works—the filtration plant in Montebello Park, the raising of Loch Raven Dam to a new height, and the great revolving fountains of the trickling filters on Back River. Sanitary engineering reached into all aspects of life. The city put litter baskets on the corners and arrested men for spitting in streetcars. Cow stables in the city limits were shut down. Dairies began pasteurizing milk. The industrial school and the jail installed shower baths. Medical students slept on screened porches in winter, and the aseptic shave became popular: "There is nothing in the form of instruments that are not sterilized and given aseptic baths before being applied to the face, and the towels, barbers' coats, and aprons are kept in a glass case, in which a formaldehyde lamp is kept burning, thus thoroughly fumigating them."³¹ The tools of epidemiology were applied to everyday problems. Like the street



In the summertime, the public bathhouse system was augmented with open showers attached to hydrants.

planners, the health authorities began publishing and exhibiting maps of tuberculosis and typhoid.

In 1910 the tuberculosis commission proposed a strategy of prevention based on benefit-cost analysis. Figuring that half the population was under twenty-five and half over, that people's productivity in the work force was fixed by the age of twenty-five, and that the "unfit" were already "marked" by twenty-five, they aimed at a mass target population of the young

which streams through the schools into the city's working population. . . . Above that age, the profits which we are able to foresee will be secured at relatively high cost, by dealing with the *separate instances* and the *declining* values of adult life. Below that age, on the other hand, we may deal with the great numbers and the growing values of childhood.³²

In the fall of 1906 a compulsory school law and child labor law came into effect. Twenty thousand work permits were issued in the first quarter for children twelve to sixteen, and three thousand more were refused: the children were supposed to speak and read simple English. Mount Vernon mills dismissed all children under twelve. Issuing the permits produced dramatic polyglot scenes day after day, underscoring the evidence that it was the children of the foreign born who were working in the factories. School enrollment had leveled off in about 1900, but from 1910 the application of the new laws produced a surge of enrollments that continued into the next generation. Truant officers began raiding the movie matinee parlors.

Public schools, originally designed for mass processing of the poor, rediscovered their vocation. They organized to clean up the unwashed. Annual school medical inspections of sixty-six thousand children were carried out. A third were reported sick and disordered. Inspections in the Catholic schools led to mass vaccinations. Vermin slips were handed out in several languages. In 1911 the doctors reported 381 cases of extreme filth and begged milk and eggs for several dozen cases of malnutrition and debility. In 1912 they tested vision and attempted to survey the scholastically retarded. The compulsory mass operations created shock waves for school personnel. They suddenly had to organize classes for epileptics, a class for "adenoids," in Lombard Street fresh air classes for

children showing signs of TB, and summer schools and night schools for the pottery and glass-house boys of South Baltimore. They attempted to define norms of age and grade, but then had to organize ungraded classes and kindergartens to deal with those who did not fit the norms.

Unfortunately, the facilities did not keep up with the surge of enrollment or the new demands made on the schools. Schools were built at the rate of one per year, mostly additions in the annex. Classes of fifty children were common, and none of the older schools could be abandoned, despite the pleas of the health department. Most buildings dated from the 1870s or 1890s, and were out of line with new standards of hygiene.

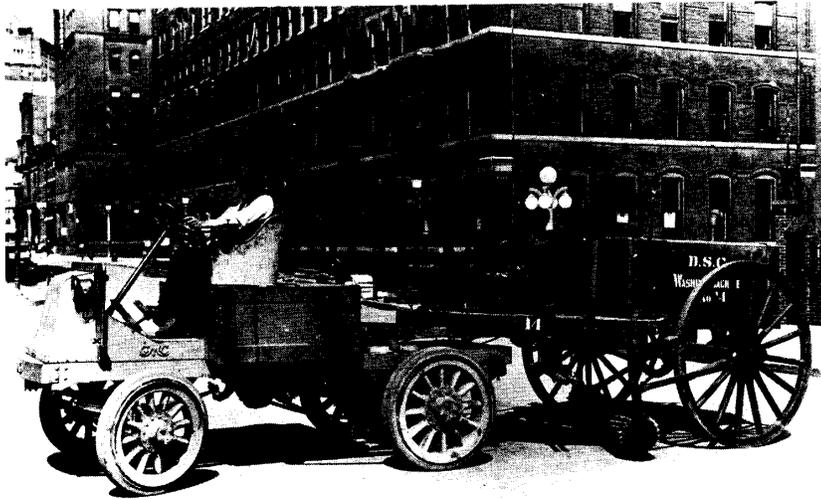
As in earlier generations, mortality had to be politicized. The equations had to be established between tax dollars and personal risks. Whose dollars? Whose risks? In this process, which naturally produced tension and anxiety, H. L. Mencken managed to vent the outrage of the man in the street and to introduce the necessary comic relief.

Laugh, suckers, laugh!
Down goes the tax rate!
Oh, say, can you see —!
Up goes the death rate!
—by the dawn's early light!³³

Mencken regularly published the scores of the National Typhoid League. Baltimore always led, well ahead of Panama. "A million dollars for a new bridge to the Brooklyn poolroom, but not one cent for typhoid!"³⁴ Mencken personified the ambivalence of his generation. He resented the streetcar company and the police for disciplining and regimenting the people of Baltimore. He despised the blue laws. In the Baltimore German tradition he demanded beer and concerts on Sunday. If people wanted to take the streetcar to the resorts in Brooklyn or Back River, where the police were less efficient, why interfere? "Now and then, of course, a drunken man rolls overboard and is drowned—but is the world so idle that it can waste time mourning drunken men who drown?"³⁵

When his own convenience or health was at stake, however, Mencken was prepared to promote discipline. Throughout 1911 and 1912 he inveighed against the carrying of "freight" on the streetcars, and he zealously supported the campaign against the housefly. He reviewed the twenty-five-year history of the antispitting campaign and the current war on the mosquito. "The propagation of any such new and anarchistic idea in Baltimore is always an enormously slow and tedious business." At that rate, the campaign against flies had scarcely begun. By 1914, he reckoned, the city council would begin to discuss the matter. By 1920 "all the humor will be out of it, and a preliminary and ineffective ordinance will be passed." The fly, he supposed, would begin to disappear about 1935.

Swat the fly!
Boil your drinking water!
Throw a rose into the harbor!
Watch the City Council!³⁶



This 1915 street-washing machine, shown near the front of city hall, was pulled by a chain-drive tractor.

A corollary of germ theory was isolation of the contaminated. This was an important aspect of the management of tuberculosis to protect families and the public. A new facility for contagious diseases was built at Bay View. Each bed was in a separate room that opened directly to the outside. Several TB sanatoriums were opened: Sabillasville, Eudowood, the Jewish Home, and a ward at Bay View. Together they had seven hundred beds, for advanced cases, whites only. But since Osler had organized the "immaculately clean" Phipps clinic at Johns Hopkins and introduced home visiting, cases were being diagnosed much earlier, with no place to send them.

The fear of contagion reinforced the old ideology of isolation and classification in the hospitals, jails, and asylums. At Bay View, the City Hospitals held 1700 persons on the average day. In the jail there were 750, while the state was supporting 1200 "city insane." They still amounted to only 1 percent of the population, but as the institutions overflowed, there were always new gaps, new needs discovered that could not be satisfied. "Scores of feeble-minded children disturb whole neighborhoods." In 1913 the state opened a hospital for the colored insane at Crownsville, and agreed to finance a school for feeble-minded (white) children at Owings Mills.

City officials appeared baffled by the perennial increase of "disordered lives." They offered no long-range plan and no integrative thought. The eleven hundred delinquent or dependent minors were largely "contracted" for care in various private and Catholic institutions—St. Elizabeth's, House of the Good Shepherd, St. Mary's, and St. Joseph's industrial schools. Only the large numbers of religious vocations among Catholics made this possible. In 1908 there were three thousand inmates, patients, or pupils in the Catholic charitable institutions, and five hundred religious involved in caring for them. The church received sizeable bequests of land, and by its selfless "cheap labor" and the day-by-day generosity of Catholic market men and mechanics, it fed and housed most of what Alexander Brown called "all that broken wreckage of industrial society."

In spite of official and officious efforts to sort people into appropriate slots, in the public mind the problems fused. Fear of contagion aggravated the horror of the poor and reinforced segregation along lines of income and ethnic group, the traditional interpretations of otherness. Contagion was part of the threat of outsiders, other races, other tongues. The housing investigator of the Charitable Organization Society defined two types of slums: the tenement houses of the recent immigrants and the alley dwellings of the blacks.³⁷ All the ills of society

Isolation Wards

were attributed to these slums. The mayor urged a close watch on such "blotches" or "dark spots":

Debasing environments like these are the ones from which creep forth the pinched bodies and pinched souls which make our criminals and disturbing elements. These wretched abodes are menacing to both health and morals. They are the breeding spots from which issue the discontents and heartburnings that sometimes spread like a contagion through certain ranks of our laboring element.³⁸

The housing investigators found it difficult to distinguish between characteristics of houses and the habits of people who lived in them. They contrasted "a remnant of the colony of clean, hard-working, thrifty Germans" with the black tenants of Biddle Alley and Hughes Street: "It is impossible to observe these gregarious, light-hearted, shiftless, irresponsible alley dwellers without wondering to what extent their failings are the result of their surroundings, and to what extent the inhabitants, in turn, react for evil upon their environment."³⁹ The school doctors reinforced the association: "Among the foreigners and negroes the degree of filth is indescribable. . . . Filth is most marked among Italians, Poles, and negroes."⁴⁰ Race fears were nourished by the new "eugenics" as well as the fear of contagion. The whole ideology of hygiene buttressed a systematic effort to segregate blacks. TB was increasingly defined as a problem of the Negro race, whose death rates were double those of whites. The Municipal Tuberculosis Commission recommended that the city provide a special hospital for blacks with tuberculosis. "The colored population, with its special susceptibility, furnishes the distinctive feature of the local problem of tuberculosis in Baltimore." It argued for "superior as well as separate" facilities because "the colored population carries a larger hazard; the colored consumptive is a more serious menace."⁴¹ The *Sun* commented:

Many negroes are servants for white families and those who suffer with tuberculosis are likely to spread it among the families that give them employment. A State sanatorium for negroes suffering from consumption is demanded not only by considerations of humanity, but as a measure of protection for the white race.⁴²

The argument for solidarity was ambiguous, easily transformed into an argument for segregation. In fact, though, the resources assigned for treatment of tuberculosis remained principally for whites. At City Hospitals there were repeated recommendations that a new building be built for whites and the old one handed to blacks. Every instance of segregation made clear the implicit second-class status. In the general hospitals, the city's subsidy patients received second-class accommodations. Like many hospitals, St. Agnes accepted white patients only. City (Mercy) had a "poorly ventilated" railroad ward, an "absolutely unventilated" ward for immigrants, and for colored patients an old building "inferior" to those. At the homeopathic hospital the colored patients were housed in "a slightly remodeled stable." "Only at Johns Hopkins Hospital and Bay View are the two races treated equally well or badly, as the case may be."⁴³ Mencken unleashed his savage pen on this blind spot.

Why is Baltimore such a pest-hole? . . . The niggero is to blame. Wherever he lives and has his being, there the death rate soars. . . . In brief, more than three per cent of all the darkies in town die every year. And no wonder! But who cares? The negro is an unwelcome citizen. Let him climb his golden stairs.⁴⁴

In the harsh light of self-interest, Mencken pinpointed the consequences:

But who ever heard of a plan for the decent housing of negroes in Baltimore? When the darky tries to move out of his sty and into a human habitation, a policeman now stops him. The law practically insists that he keep on incubating typhoid and tuberculosis—that he keep these infections alive and virulent for the delight and benefit of the whole town.⁴⁵

He even suggested that the "Mount Vernon Place issue" might make as good an election issue as the perennial "nigger issue," and proposed an Association for the Suppression of Prominent Baltimoreans. "Why not a public trial of them one by one?"⁴⁶

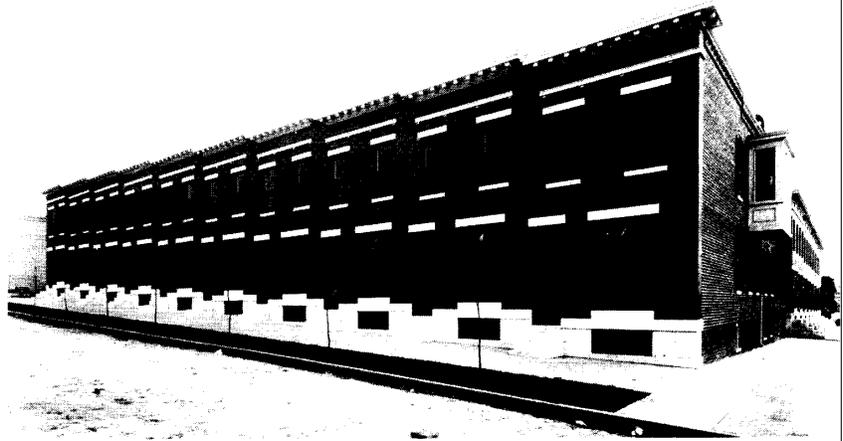
As poverty was defined by filth, working-class success was defined in terms of cleanliness. Scrubbing differentiated the modest but respectable from the unwashed. The goal was to scrub one's own marble steps. In spite of what seemed a great reservoir of the poor, there was a distinct current of movement into a "middle class" of home owners. Construction stayed around a thousand dwellings a year till 1904, when the fire touched off a relatively steady level between two and three thousand. Public-works investment matched closely. Despite the national business crisis of 1907, Baltimore maintained a high rate of sewerage, paving, and home building until World War I brought it down with a wrench to a few hundred homes in 1918.

The overwhelming majority were solid, modest houses, two stories tall, with six rooms—a well-built product for the mass market. As early as 1901, virtually all new houses were being built with hot air furnaces and water in the house. A typical row in Wilkens Avenue had electric wiring, gas, complete plumbing, and full basements. In 1915 the gas company was installing a thousand water heaters a month, and there was a gas range for every building in the city. Layouts became more diverse. Builders contrived to fit in a hall passage and bathroom, and to introduce some light into the center dining room. (The center bedroom could be lighted with a skylight.) Built by the block, on paved streets with concrete sidewalks, they were the image of respectability. Touches of sober elegance were anonymous—the stained glass light in the door and window and the resident's white curtains defiant of coal smoke. The builder signed his work with his personal finial or urn in the parapet. The developers worked hand in hand with the improvement associations. Edward J. Gallagher, for instance, was active in the East End Improvement Association, which promoted street openings and paving projects (Luzerne, Fairmount), demanded a car line on Wolfe Street, the beautification of Patterson Park, a new gym, and the Ogier Run storm sewer.⁴⁷

A somewhat more comfortable class in North and West Baltimore favored porches—the continuous veranda along the row, as on Abell Avenue, Poplar

The Well Scrubbed

E. J. Gallagher built these houses at Linwood Avenue and McElderry Street about 1910. The brown brick houses sold complete with stained glass over the front windows and doors; marble steps, lintels, and sills; tiled entry halls; and imitation fireplaces.



Grove Street, and East Thirty-third Street. Houses in the north and northwest cost about double the houses in East and South Baltimore. By 1917 almost all the new houses were porch fronts. They featured solid cement steps, porches of blue cut stone with pressed brick columns, and mosaic tile floor set in cement. The rage was iron-spotted brick. They had enamel tubs and sinks, hand-painted ceilings, and tiled vestibules. On Park Heights Avenue the fronts were terraced and the lawns made, shrubbery was put in, and the rooms were papered.

The mystique of home ownership was something everybody agreed on—clergy, politicians, employers, and mechanics. It was the solution to heartburnings. After the mayor had described the threat of dark blots, he praised the laboring element of Baltimore:

We have few strikes. We have comparatively no disorder. This I believe is due very largely to the domestic or home qualities of the Baltimore laborer. There is little or no inclination to crowd into large and noxious tenements. The individual home for each individual family is the rule. And the effect is wholesome.⁴⁸

This ideology was associated with many other conservative feelings in Baltimore. The cardinal said a woman's place was in the home. Neighborhood solidarity was identified with the 100 percent home-owned block, the parish, the political club, and the pitcher of beer from the corner saloon.

The agreement on home ownership was the closest the generation came to an integrated social system, but even this idea was bedeviled by inconsistencies. One of them was the ambivalence toward property rights, brought out in an article in the *Municipal Journal* entitled "Should a Man Do as He Pleases with His Own Property?" The broadening of home ownership reinforced the sacredness of property, but the new sensitivity to conflagration and contagion created pressures for regulating "the other fellow." The health department began to quarantine and placard houses for scarlet fever and diphtheria. The fire department demanded regulation of commercial properties as hazardous, and the police counted twelve thousand buildings where people were dwelling over stores. The housing survey photographed chickens roosting in Lombard Street basements and protested the nearly complete coverage of Thames Street lots with buildings. On North Avenue, home owners sued a builder (unsuccessfully) for putting up exceptionally narrow dwellings, on the ground that it would injure their property values. All of these were the issues of zoning regulation and property law, as raised by Richard Ely's book of the same year. He defined property as "a

set of relations between men, defined in terms of the relations between men and things." The editor of the *Municipal Journal* proceeded, like Ely, to argue that while downtown Baltimore was as sterile as the Sahara, it was much more valuable land. "Who wants a thousand acres or even a thousand inches of land in some distant isolated spot? What value is field, mansion or barn if it is standing upon a lonely island with no means of communication?"⁴⁹ This was the "quivering nerve."⁵⁰ Because the community gives value to property, the property owner must consider the rights of the community.

He comes in contact with a seething current of human beings and human rights on all four sides of his property. There is not an inch of it that isn't intertwined with the multifarious relationships of community life. The very market value of the property itself is due to its connections with this community life.⁵¹

The other problem surrounding home ownership as an integrated social strategy was the question of access to home ownership. Who would be the home owners? As one might expect from the mechanisms of the savings and loan associations created in the last generation, a large proportion of the new houses and neighborhoods were sold to householders of German descent—again that "colony of clean, hard-working, thrifty Germans." The Bohemians were able to outrun that track record. Of white families to whom a baby was born in Baltimore in 1915, about a quarter owned their homes; of American-born parents, a third; of German-born parents, half; and of Bohemian-born parents, three-quarters.⁵²

But now from the ranks of the great unwashed there emerged several streams of upward mobility based on the ideology of home ownership and hard scrubbing. Each group—black, Russian Jewish, and Polish Catholic—adopted a distinctive strategy, determined in part by preference and tradition, in part by an economic situation and a matrix of discrimination by other segments of society.

The black community was a hydraulic system that siphoned a very small number into higher income and status. In the competition to enter these higher social circuits, the key strategies were complete economic adaptability, home ownership at any price, and schooling. These were the signs of ambition and status. In each circuit, the white community was able to control the valves regulating the flow and pressures. It is impossible to grasp the situation of black leaders without continual reference to the pressures of a tide of people below. The smallness of the group, the rigors of the competition, and the inconsistencies among these strategies produced conflicts, personal and social, that survive to the present.

Of a thousand successful families, there were the professionals and entrepreneurs—thirty doctors, a few lawyers, more preachers, more teachers, undertakers, an increased number of rental agents and real estate dealers, and wagon owners who did moving and hauling or who dealt in coal, ice, rags, bottles, and junk. The majority of grocers and retailers in the black neighborhoods were, however, whites, often Jewish. Most successful financially were the caterers who

Colored Streets

served the lavish entertainments of the wealthy and suburban residents. Richard Macks, Garrett's former head butler, went into the catering business at this time. Black middlemen also catered to the demands of other classes of society for food, sex, entertainment, and cocaine. At the Marsh Market dance halls the black piano players made their reputations, among them Eubie Blake, Baltimore's great ragtime improviser. Labor recruiting and travel imposed by the job provided large clienteles looking for liquor and women in Baltimore. The dance halls were frequented by sailors, steamboat hands, and cattlemen. On a single night 500 blacks were vaccinated in a mass operation when a recruit from Rochester broke out with smallpox. At Sparrows Point a thousand black men were living, recruited from Virginia without their families. Red-light districts existed in black neighborhoods, such as Raborg Street, certain blocks of Paca Street, and the 700 blocks of Mulberry and Franklin streets, for the convenience of white patrons and traveling salesmen who would not be recognized. Readily exploited were young girls recruited from Virginia by the boatload to work as domestic servants in Baltimore. Among blacks in the city there were perhaps 117 women for each 100 men.

Blacks were continually forced to readjust their vocations. As technological and competitive forces demanded adaptation of the Baltimore economy, the greatest adjustments and risks were shifted onto that part of the labor force with least power. Changes in the assignment of jobs by race involved legislation, violence, or other forms of coercion or exercise of power outside the "free market." Barbers, for example, were forced out by the creation of the barbers examiners board, presumably for sanitary regulation. Alongside the several thousand black laundresses who did washing at home, whites operated the new steam laundries, and the politicians delivered to them the contracts of hospitals and restaurants. Most other black women were servants. The new ten-hour law for women was not applicable to domestic work, where fourteen or sixteen-hour duty was common, for a dollar a day. Employers still gave food and clothing to their servants because they couldn't make ends meet without them, "but many feel the colored should be able to live cheaper, because they don't need new clothes, but can depend on what is given to them."⁵³ Black women, therefore, were eager to get factory work, to escape the more personal form of domination. Some moved into the lowest-paid and filthiest jobs in the cigarette factories, replacing old men and cripples as tobacco strippers. At least one shirt factory, Wise Brothers, organized a separate shop, later a separate floor and entrance to their large factory, with a hundred black women as sewing machine operatives. They were paid less than white workers. Other garment factories used them as pressers, the least-paid job.

In the building trades a caste system was also well entrenched. This was one of the side effects of the collapse of the Knights of Labor and their replacement by Federation craft unions and the Baltimore Labor Council. John Ferguson, organizer for the Labor Council, observed, "The skilled colored worker works largely among his own people, and is willing to work at a lower rate than the white worker. This is a source of feeling against him on the part of the whites."⁵⁴ The largest black union was the stevedores' union, with thirteen hundred mem-

bers. The best paid were the hod carriers who worked with the white bricklayers and plasterers; they earned \$2.50 to \$3.50 in an eight-hour day. But the other building crafts excluded blacks. Relatively mild to employers, their unions effectively protected the masons and carpenters against competition from black craftsmen. Employers continued to exploit ethnic rivalries in labor disputes. When the black cellar diggers and shovellers union of nine hundred went on strike for \$1.50 and a nine-hour day, white scabs were hired on jobs such as Kernan's theater. There is no evidence that the other craft unions expressed solidarity with the cellar diggers. Likewise, when 125 Locust Point drivers, mostly foreign born, struck the B&O, asking \$1.60 plus twenty cents an hour overtime, the B&O brought seventy-five or eighty Negroes from Philadelphia and paid them the extra overtime to break the strike. There is no indication that B&O skilled workers protested.⁵⁵

Job struggles were followed by campaigns to disfranchise colored voters (1903, 1905, and 1908) and impose stricter forms of segregation (1911 and 1913). All the voter campaigns failed because other political groups joined the opposition of black voters. The Colored Law and Order League was assisted by the Foreign Born Voters League, who opposed literacy tests, and by Charles Bonaparte's Progressive organization, which objected to grandfather clauses smacking of "hereditary honors." Bonaparte participated in many aspects of reform in Baltimore, but was by this time attorney general in Teddy Roosevelt's administration. Party bosses also recognized that understanding clauses that required a would-be voter to demonstrate his understanding of the constitution would allow great latitude to state voter registrars and might be used against any party out of power.⁵⁶ Baltimore wholeheartedly voted against the disfranchisement schemes, while the rest of Maryland voted for them. These were mere incidents in the Maryland political tradition, but they sustained inflammatory rhetoric, kept the black community continually on the defensive, and diverted white class frustrations into racial conflicts.

In the housing market a pattern emerged that was repeated in subsequent waves of black immigration at the end of World War I and World War II. The block-busting pattern was not altogether new, but it was for the first time organized into an effective commercial operation. The handful of blacks siphoned to the top continually pioneered new housing opportunities, while masses pressing on behind them created a "slum" image, which strengthened the resistance of whites to admitting any blacks to their neighborhoods and at the same time strengthened the determination of blacks to escape the ghetto at any price. This vicious circle was profitable to a small group of realtors who operated on the margin of turnover, but it is essential to recognize the total context of supply and demand in a dual housing market to see why such profiteering was possible. The collusion of the community was necessary to block busting.

An essential factor was the rural black immigration of the late 1890s and early 1900s. In addition to insuring the scramble for bottom-of-the-heap jobs, immigration insured an increased demand for housing, the presence of large numbers of the malnourished and illiterate, and a wave of tuberculosis with each wave of immigration. TB is often assumed to be a disease of crowded cities,

but it is associated more precisely with the urban crowding of recent immigrants from the countryside. By 1904 half the black population of the city was living in the northwest. This half still included most of the home owners, the professionals and dealers, and the highest share of literate and youthful. The northwest ghetto, chosen for its healthfulness, became packed close around Pennsylvania Avenue and Dolphin Street. Between 1900 and 1910 this seventeenth ward changed from 8 to 60 percent black, and elected the city's first black council member.

The other essential was the restriction of total housing supply for blacks. No new streets or subdivisions were built for black residents, and no new land was allocated. The only suburb "strictly for colored people" was Patapsco Park. There were also shanties built by industry or tolerated on industrial land adjoining the fertilizer and chemical factories as at Fairfield. But it was virtually impossible for black dealers to buy land or for white developers to buy land to build houses for blacks. The only option was secondhand housing, and any expansion of the total housing supply for blacks depended on some turnover of communities. By containing and manipulating this rate of turnover, realtors could control the total supply and the prices that could be extracted from blacks for housing. The economics of ghetto expansion, as described by a colored real estate dealer for the 1200 block of Druid Hill Avenue are still recognizable sixty years later. As black residents "removed near," values depreciated for whites and houses were rented to whites at nominal rates (phase one). "As soon as the colored tenants came in (phase two) these depreciations did not count for them, and the rates again went up. . . . Houses for colored tenants generally speaking are kept in poorer repair than for whites, and the city takes poorer care of colored streets." Consequently (phase three) the rents went down again "due to general depreciation of the neighborhood. . . . The colored paid less than white people had done in earlier days. Houses in this district which now rent for \$30. had been as high as \$75. a month."⁵⁷ On the ground that the black residents depressed prices, segregation ordinances were passed. They were written with elaborate attention to their "equal" application to whites and Negroes: neither would have the right to buy or rent in a block occupied by the other race. Such ordinances constricted the supply further. In general, whites could rent small houses in all-white working-class neighborhoods for \$2.00 or \$2.50 a week, while blacks had to pay \$3.00 or \$4.00 for larger houses of a middle-upper class who were moving out farther. To pay the rents for houses "too expensive and too large," they had to double up. Subletting suddenly became widespread, and many damp basements were occupied. Demolition aggravated the scarcity. B&O expansions at Camden Station, first the long warehouses on the west, then on the east the widening of tracks, took two hundred black dwellings. The number demolished from the St. Paul Street squares was never reported, but removal of Negro dwellings was an objective of the project. Such property was always regarded as a public nuisance. These additional constraints on supply pushed up rents paid by blacks and ensured a higher return to their landlords. Several slumlord dynasties well known in Baltimore in the 1940s and even the 1970s were initiated by investment in alley

housing during the era when the segregation ordinances were in effect (1913-1917). Three different studies all confirm that black families paid more rent than whites for the same accommodations.⁵⁸ Roughly a third of their earnings went for rent, while the average in the white community was a fifth of the budget.

How did they make the rent? First, mothers and youths continued to work, and families tended to take in country relatives and boarders, so there were more members of the household bringing in some income. They economized on the food budget by eating cornmeal and pig meat, with little beef or dairy products. "Soul food" was an economic strategy as well as a rural southern tradition. As their incomes rose they bought more sweet potatoes. Thus, the lower income of black workers was siphoned off, a third of it directly into the hands of a small class of white property owners who were creating capital assets. The city's upper class depended on the blacks to scrub their marble steps and their new bathrooms and kitchens, while the white working class depended on them to dig the cellars, make the bricks, and mix the mortar and cement for their new homes.

In the schools segregation was complete, and there was no pretense of equal accommodation. The new school and work permit laws were not enforced for black children. There was not a single new colored school built between 1898 and 1915. All were hand-me-downs. At Pennsylvania Avenue and Dolphin Street, a German-English school "unfit for use" was turned over to house the Colored High School, while "the best" colored families on Druid Hill Avenue occupied the homes opposite Western High School, "the best" white-only public girls' school. Overcrowding in the colored schools was severe, and from 1905 most of them held half-time classes. Black teachers and principals were at last given complete control, but they had no proper salary and promotion schedule. In the white schools a civil service had been the basic reform of 1901, and wages had been raised to compete with the jobs offered white women in other sectors of the economy.

In education as in home ownership, advancement was restricted to a small class. There were on the order of eight hundred black home owners in Baltimore in 1904, nine hundred in 1913. Of seventy-three southern cities, Baltimore ranked seventy-second in black home ownership rate.⁵⁹ This is striking in contrast with its top rank for white home ownership. This tiny minority, trying to increase the chances of its children for survival and education, continued to move along the northwest axis. "Dissatisfied in alley homes, they saved their money and purchased nearly the whole length of Druid Hill avenue. . . . Then they began to expand into parallel streets, one of which was McCulloch. They had been told that 'money talks.'"⁶⁰ In these terms W.E.B. Dubois described Druid Hill Avenue as "one of the best colored streets in the world." Amanda Bowen, for example, who grew up in Montgomery County, then taught school in Howard County in the '70s and married Charles Carroll (he had learned to read and write as a slave in the home of the Signer's descendants), in 1903 bought a house at 1134 Druid Hill Avenue. Her seventh child, Lillie, began teaching public school in Baltimore and became the leader of a stubborn generation who saw a relationship among neighborhood improvement, education, and

racial justice. Black home owners had great difficulty defending their neighborhoods against both white commercial interests and the pressure of larger numbers of black tenants for housing. Home owners and churches protested the city's toleration of vice districts and the state's willingness to issue liquor licenses in their neighborhoods. Black home owners were perceived as a threat by white neighbors, but they worked to separate themselves from the contaminating image and habits of other sections of the black community. This reinforced a sharp sense of ambition and achievement, a strong individualism. Their institutions were always caught between the ambitions of their leadership and the needs of large numbers. The Colored YWCA on Druid Hill near Dolphin ran an employment service. A colored teacher training school was founded, later Coppin College. Provident Hospital was organized in the abandoned building of the Union Protestant Infirmary.

A critical initiative to break out of the ghetto of West Baltimore was the move of Morgan College from Edmondson and Fulton avenues to Hillen Road. After several years of effort, the mobilization of the mayor's blue ribbon commission on health problems of the black community, and the patronage of Goucher College, Morgan College managed to obtain the land, sixty-seven acres known as the Ivy Mill tract. The object was to create a community, "scientifically sanitary and with the best conditions for housing some 300 families," adjoining the college. "The mayor said he had made it a meeting of practically all white people because they were, to a large extent, the owners of the property under consideration. . . . It is largely a problem for the property-owning class to solve."⁶¹ He wanted to work along "practical" lines and not attempt "impractical" ones: "Any change in the segregation would meet with very great opposition from our white populations and bring about friction and hostility between the races which would be very much to be deplored."⁶² Despite the mayor's caution, opposition arose. Delegations from Hamilton, Clifton Park, Montebello Park, and beyond gathered to protest. They publicized the names of the realtors, brokers, and attorneys concerned in the deal. "Lauraville has blood in its eye for any invasion of its 99 per cent pure white community by a negro institution, colony or settlement of any kind or character."⁶³ The president of the improvement association concluded with a definite statement "that he preferred to live near a community of ignorant and tractable negroes than one of 'educated' negroes."

The Morgan College episode is one of dozens that show how the threat of violence lay behind all forms of housing discrimination. Rumor was both a symptom of tension and a tool for manipulating people. The segregation ordinance was passed after a "disturbance" on McCulloch Street. Rumors spread that black bidders were "well supplied with money." A black home buyer had his windows broken. In West Baltimore, the Harlem Park Association objected to a colored orphan asylum and spread rumors of other colored bidders on property in the neighborhood. "We will give hundreds or even thousands of dollars for prosecution and defense, but not one cent for tribute."⁶⁴ In Bolton Hill a mass meeting was held to prevent a black family's taking possession of a house they had bought in Eutaw Place near Lanvale Street. The headline read,

"Eutaw Place Threatened by Negro Invasion Now."⁶⁵ Again rumors circulated suggesting a larger threat; money "from Washington" would finance an apartment house for blacks. At Canton rocks were thrown to prevent a black family's moving from Hudson Street a block over to Elliott Street. At Arlington there were rumors of a race riot if more black families moved onto Denmore or Patapsco avenues. Residents expected a repetition of what had happened a few years earlier: "Practically every window in the house was broken and things grew so warm for the occupants that they waved a white tablecloth from a window as a truce signal, and later shook the dust of Arlington from their feet."⁶⁶ In 1915 there was a similar stoning of the first black family in a block of Stricker Street.

These incidents invariably followed publicity of more remote incidents of violence, such as a month-long manhunt for a murderer in Baltimore County, a Christmas morning lynching in Anne Arundel County, or a race riot in Chicago. The *Sun* disapproved of lynchings and riots, but found minor local episodes amusing. Its reporting was consistent with a national image of the black as brute. The Baltimore papers gave wildly enthusiastic reviews of the racist novels *The Clansmen* and *The Leopard's Spots* and the film version of *Birth of a Nation*, whose author, Thomas Dixon, had been a student at Johns Hopkins. Such films were shown, of course, to white-only audiences. Indeed, no first-run pictures were shown in Negro theaters; they obtained worn-out films from the cheapest white theaters. In this context the black churches in Baltimore and a Baltimore woman, Dr. A. W. Marchant, pioneered in creating several films featuring family themes, such as Booker T. Washington's reception in Baltimore and the history of several churches. Dr. Marchant was a homeopathic physician trained in the city. Her two young daughters began acting. From chaperoning her daughters, she moved into producing films, innovative because the actors were colored people "not made by burnt cork, but the real thing."⁶⁷

Jewish immigration continued till the war. The Jewish population of Baltimore rose to sixty-five thousand, half the present population. Most arrived with no property or resources, but by 1915 the income distribution of the Jewish community roughly matched that of the native white population. The basic split remained between the comfortably off "uptown" German Jews who spoke English and whose six synagogues espoused various shades of reform, and the "downtown" East Europeans who spoke Yiddish and whose twenty-five "Russian" shuls were orthodox. But in the course of this generation individuals marked out certain paths of moving up, and the promotion of the whole group was evident. It was a process involving intense conflict within the community, but also a remarkable capacity for containing and resolving conflict. In exploring the nature of their success, one has to look at the interplay of economic and cultural factors, or, more precisely, a cultural economy.

First, the Jewish community was remarkably successful in protecting its children. Environments of Oldtown and South Baltimore were not favorable. Crowding was severe. Thousands worked feverishly at tailoring in poor light and gasoline fumes. Tuberculosis was common. The shul also kept them indoors.

A Strategic Place

Advantageous for the infants were cultural preferences: most of the infants were nursed at the breast, many of their mothers were employed helping in their husband's business rather than in factories, and after the third child, births were spaced farther apart. But the health experts remained mystified: these factors did not adequately explain why Jewish infants had the lowest death rate of any group in the city. Apparently they survived thanks to the orthodox attachment to ancient rules of diet, child raising, and family life.

Second, the Jewish community had a solid economic base. Despite the presence of Bohemian and Lithuanian Catholic sweatshops and Italian workers in the larger firms, the clothing industry was rather solidly Jewish. It employed twenty-three thousand persons, over a quarter of the manufacturing labor force. Perhaps 70 percent of the Jewish community lived directly from the clothing industry, while the rest—the grocers and the carpenters—serviced the clothing workers. For the clothing industry, markets expanded and productivity increased. More power machinery was introduced. This generation made the transition from the sweatshops (450 at the turn of the century) to factories of ever larger size. Schloss, for example, had a thousand employees in a seven-story building at Baltimore and Paca streets, and perhaps twenty-five hundred in a six-story, "perfectly equipped" building near Exeter. The clothiers were tied economically and socially to the department stores who sold to all of Baltimore and to dry goods jobbers and mail order establishments who sold in the southern mass markets. Jacob Epstein's Baltimore Bargain House had a thousand employees and sold in both markets. The Jewish community collectively acquired both the return to labor and the return to capital in this industry. The black community had no comparable economic base.

Third, on this economic base the Jewish community built its own system of recirculation. It captured the profits made from its workers, who hired, rented, bought, and borrowed within the family. They saved and they gave, within the community. It was not uncommon for a twelve-dollar-a-week worker to save a tenth of his earnings. Successful relatives invested in the education of a nephew, or made loans to a brother-in-law's business. Despite the conflicts and exploitation within the community, there was a strong tendency for good times and bad times to be shared, for risks to be spread farther. Giving was phenomenal, widely admired, each as he was able—Jacob Epstein and William Levy in the thousands of dollars, down to the pennies for the strike funds. For these mechanisms of solidarity to succeed in promoting the entire group, the ratio must be reasonable between rich and poor, established and newcomers. The presence of a large, well-established, well-financed, well-educated class of grandchildren of the '48ers meant that a great many problems could be handled and resolved within the community. If the black middle class had shared as fully—giving, saving, lending, investing within the community—it still could not have promoted the whole mass so rapidly in a generation. They were too few.

Fourth, the larger community, strongly German, permitted more upward mobility to the Jewish community, in proportion to its Germanness. German Jews had first passed through the sieve and were, like other Germans, largely assimilated. The Jewish community experienced discrimination, but not in the

same degree as the black community. The effective differences were in property and education. Jews were restricted to buying residential property in specific areas, and were rigorously excluded from certain new developments such as the Roland Park Company suburbs. But prior investments of the Rayners made available considerable land, and a normal range of housing types was developed at a normal rate relative to demand. The wealthiest families continued to filter northwestward, from one block of Eutaw Place to the next, to Lake Drive. Jews were allowed to invest in commercial property and investment shares, and in Negro alley dwellings. The Sunday laws were rigidly discriminatory, and continued to pressure the orthodox to prefer self-employment, the professions, or the Jewish garment factories rather than other trades, reinforcing the cultural economy. Likewise, in the schools, the Jewish community did not have to accept a separate administration and financial starvation as the colored schools. Beginning from the "German-English" schools, Jews could profit from the best of the public high schools. The Johns Hopkins University, thanks to both its German model and the coincidences of its initial staff, was open to Jewish students and had distinguished Jewish faculty members, although it remained nearly impervious to blacks and women. The Jewish community also exercised initiative in creating new institutions in this generation. The Talmud Torah had nine hundred children. Hans Froehlicher's Park School was modeled on a "country day" principle. In this domain also, cultural tradition provided a critical choice of paths. The logic of the law fostered respect for books, teachers, learning, and reasoning, in their deepest, most individual, and most critical forms.

Because both the workers and owners of the garment industry were part of the Jewish community, intense conflict continued within the community. But one should situate the dialogue between the German Jewish owners and the Russian Jewish workers in the context of labor conflict in the city as a whole and in the nation at large. All the important strikes in Baltimore in this generation were part of nationwide movements of labor. The issues are familiar: the eight-hour day and the right to organize. A new aspect was the struggle to solidify national organizations. Disputes between unions complicated the politics. As Baltimore's industry was integrated into the national economy, so naturally the conditions of labor were determined in the national arena, and the need was felt in Baltimore to belong to national organizations of labor. Union activity gathered strength in 1902 and 1903, for the first time since the '80s. All the skilled craft unions flexed their muscles. The Hebrew, Bohemian, and German bakers obtained better working conditions: they were used to working eighteen-hour days in cellars. Building craftsmen made remarkable gains by a strike in 1904 because of the building boom in the wake of the fire. The plumbers, steamfitters, gasfitters, and plasterers all obtained the eight-hour day.⁶⁸ After the nationwide recession of 1907, nationwide strikes followed in which gains were less and repression was more severe. Violence and private police activity were intense on the railroads and the coal mines. In Baltimore the Mount Clare shops were on strike, and newspapers reported a series of bizarre dynamite plots.⁶⁹

The garment workers' struggle involved all these elements. Since Baltimore

had the largest garment industry next to New York and Philadelphia, it was a critical spot for the unionization of the industry nationwide. Within the Baltimore factories, solidarity was imperfect between the cutters—men, often German-American and Jewish, paid by the hour—and the rest of the workers, principally Jewish immigrants from Eastern Europe, paid at piece rates. Most of the employees worked longer and more variable hours and earned less than the cutters. Women were employed most often in the lower grades of labor, as coat basters, finishers, and buttonhole makers. A woman worker averaged \$175 to \$200 a year.

The story can be simplified by noticing that most of the action revolved around the extremes of the largest manufacturers—Sonneborn's and Greif's. Sonneborn's was unionized as an open shop in 1904. Sigmund Sonneborn was himself a '48er and "very advanced" in his ideas. Other firms resisted bitterly. In December 1909, two thousand workers in three large shops went on strike: Sonneborn's, Schloss's, and Silverman's. Schloss had refused to reinstate a union worker charged with spitting in the face of a loyal and faithful employee.⁷⁰ The critical issue was the attempt of the Clothiers' Board of Trade to eliminate union members from the industry. The clothiers created an employment bureau and agreed among themselves not to rehire anyone not registered. Baltimore was one of the first chartered locals of the International Ladies Garment Workers Union (ILGWU), associated with the American Federation of Labor (AFL), and Samuel Gompers arrived to manage the strike. Addresses were made to a thousand strikers at once, in English, German, Hebrew, Italian, and Russian, warning the workers, "The object is to index every garment worker in the city so that union men and labor agitators will be refused positions." The stress was intense, marked by a rash of suicides among strikers. Ultimately their demands were met, and they did not register.

The next breakthrough was Baltimore's selection as "a strategic place" when Sidney Hillman's Amalgamated Clothing Workers seceded from ILGWU in 1913. To organize Baltimore, they strategically selected Sonneborn's, already the best organized and best paid work force. Many of the tailors were socialist Bund members, and the Labor Zionists used to pass the hat at lunchtime. The union and Sonneborn quickly reached an agreement to organize a system of arbitration: they appointed Jacob Moses, judge of the new juvenile courts and Sonneborn's own company legal adviser, as arbitrator. Sonneborn formulated an internal Plan of Organization for his factory that sought to reconcile a patriotic conception of American constitutional democracy and free-enterprise capitalism.⁷¹ The grievance committee drew members from a "cabinet" of owners of the firm, a "senate" of department heads or management, and a "congress" of workers. The employees' mutual association was more democratic than earlier ones such as on the B&O: all employees belonged, voted, and could stand for election. Workers outnumbered management on the grievance committee, and settlements required nearly the unanimity of a Quaker meeting. Sonneborn introduced the best features of the B&O savings and loan and pension plan, ordered fire drills, and a medical department with oculists and a trained nurse on duty at all times. Nevertheless, piece work and a take-home pay of twelve dollars a week remained.

By 1916 the ACWA had 9,000 members in Baltimore, and determined to unionize Greif's. Greif's paid wages as low as \$4.50 a week, and discharged twenty ACWA members. The ILGWU and the ACWA were struggling for control. The ILGWU had the reputation of being easier on management. On 2 February the ACWA called out 2,000 workers from Sonneborn's and 700 from Strouse's for a demonstration at Greif's at Milton and Ashland streets. The crowds poured out from ten blocks around. More than half were women. "Jeering, unfavorable comment and fist-shaking were freely indulged in." The police chief said, "Get these people moving and keep them moving. . . . If any one kicks, take her in." They arrested 87 women, including a houseful of people chanting, "We will never give up." The next week, at Westheimer's factory at Preston and Gay streets, the police arrested 24 Bohemian women who were shouting, "Scab! Scab! Scab!" and following scabs home. Greif's agreed to reinstate the 20 ACWA members, but failed to do so, and trouble broke out again. On 3 March police refused to let 500 Sonneborn workers picket at Greif's. The workers allegedly threw stones at the police, and 111 were arrested.⁷² However, the brutality of the police, whose chief was appointed by the governor, outraged the larger community and stirred the sympathy of Baltimore clergy. John Ferguson, the AF of L representative in Baltimore, tried, unsuccessfully, to split off Bohemian, Lithuanian, and Italian workers. Inside Sonneborn's, the cutters (ILGWU) refused to go out with ACWA, and the hostility resulted in a fight on the floor with cutting shears. But the ACWA won, and attributed its national survival to the courage of the Baltimore tailors. A thousand workers participated in family celebrations of Sonneborn's ninetieth birthday.⁷³ The workings of a labor court or board of arbitration were now extended to the entire industry. Work stoppages were practically eliminated. Jacob Moses settled some 900 cases, and Frank Goodnow, president of The Johns Hopkins University, was frequently involved in the mediation process.

The talent for containing conflict was a remarkable example to Baltimore. Jewish culture had embodied the tug of war between faith and reason, the law and the spirit, individualism and solidarity. The European Jews had struggled for centuries already with the moral problems posed by the coexistence of rich and poor. Therefore, in spite of the argument and agitation on the surface, there was beneath it a process of reflection and a cultural foundation that could embrace contradiction and survive conflict. Tradition provided mechanisms for labor mediation; they were outgrowths of millennial effort to keep disputes within the Jewish community and within the framework of Jewish law. In Baltimore, a Jewish Court of Arbitration was functioning by 1912 for a wide range of criminal, civil, and domestic cases.

Simultaneous with the labor conflicts, and closely related, there had appeared a variety of other conflicts. In 1915 the number of domestic cases brought before the courts increased. The pressures of poverty on the lives of families and children were severely felt. The community expressed anxiety about the number of delinquent Jewish children, pickpockets, wayward girls, drug habits, and boys committed to the Maryland Training school. Again they exercised imagination and deployed their resources. They founded a Big Brothers League, a home for

girls, a street club for boys, and the Jewish Educational Alliance (JEA), which offered "settlement house" programs—dances, recreation, and club activities in the heart of Oldtown.

The educational and charitable organizations remained paternalistic, consistent with both Jewish tradition and Baltimore tradition. William and Julius Levy built the JEA building on East Baltimore Street (1914), and the "uptown" Jews maintained and largely staffed it. Charity was proportionate to wealth, and certainly Levy, Epstein, and Friedenwald were generous beyond measure. They were Baltimore's greatest philanthropists in their generation. They reveal once again how philanthropy was linked with capital: theirs were among the last remaining home-owned industries. "There was, naturally, a great deal of unhappiness among the immigrants, because the charities were in the hands of the German Jews, and at the same time the German Jews were also their employers."⁷⁴ The "uptown" organization, the Federated charities, adopted a new style of "efficient" giving, with "the application of skilled intelligence and thorough-going business methods" of the older Charity Organization Society. They gave up bazaars and ticket peddling. The "downtown" community organized the United charities, and proceeded to assert their identity. In politics, East Baltimore refused absolutely to have a *goy* candidate imposed upon it with the support of uptown Jews. Instead, it elected Seidenman to the city council (1903), which had the effect of sensitizing the political parties to the "Jewish vote." Through the cooperation of both uptown and downtown, Jacob Moses was elected to the state senate.

The very things that separated the Jewish community also drew it together. Divided with respect to the kind of adaptation they would make to non-Jewish society, Baltimore Jews were united by the discrimination they experienced. The terrible import of the Russian pogroms and the revolutions in Russia reverberated in Baltimore, raising the question of a home for the Jewish nation. Zionist associations, active in Baltimore since the '90s, committed to the creation of a Jewish state in Palestine, came into conflict with the socialists (the Bund and the Workman's Circle). The Labor Zionists (Poalei Zion) reconciled the two sets of ideas by proposing a workers' state in Palestine. The young Labor Zionists, like Dr. Herman Seidel, stood on a soapbox at Baltimore and Exeter streets on Friday nights, arguing the cause. Their youth organization, in white uniforms with the Star of David, periodically marched down Front Street. They, too, considered Baltimore a strategic place.⁷⁵ These little organizations, scrapping and speaking in tongues, opened Baltimore to currents of thought and international events. The people who looked so parochial, so out of date and out of step, were tuned into the current of ideas and had antennas for the world. In the anguish of their response to the Kishinev massacre and the Easter massacre in Russia, in their outpouring of relief for the starving in Poland in 1915, even in their confrontations with the Baltimore police, they alerted the clergy and the Christian establishment of Baltimore to the labor movement in New York City and to the Russian revolution, to French domestic politics, and to British military affairs in the Middle East. In many ways the Jewish community—Russian and German Jews together—had picked up roles played earlier in Baltimore by the Germans

—German Catholics and German Jews together. They were the conduit for new ideas from the Old World; they asserted the cultural ties of family, religion, and language, and made them the basis for reclaiming justice for workers and individual human rights.

The cardinal reported in 1912 that his twenty thousand Poles, eight thousand Bohemians, and twenty-five hundred Lithuanians were all easy to care for because they lived in compact parishes. The two thousand Italians caused him more trouble because they were scattered. He regarded the Germans and the Irish as assimilated, and their schools were English speaking.⁷⁶ Like the Jewish immigrants, the Catholic immigrants—Polish, Bohemian, and Lithuanian—maintained a rather ambivalent relation with the older German community of Baltimore. For the Italians, there was a similar relation to the Irish community. They inherited jobs, neighborhoods, and institutions, and, most important, they observed a model of the aspiration and strategy of home ownership.

Polish homes and neighborhoods were notorious in this generation for being the most crowded and filthiest, and for having the highest infant mortality. Of the Polish mothers of newborns in 1915, half had already borne four children, a quarter seven or more. Like the Italian and Lithuanian mothers, many of the Polish mothers could not speak English or read, and many worked outside the home. The mixed family labor force of the canneries became solidly Polish. The men often took German forms of their names, and those who spoke German found it easier to get jobs, working for the shippers and the fertilizer companies. "Responsible posts" were filled by politically well-connected German and Irish, while the unskilled and dirty jobs were done by the Polish and blacks. The Polish fathers' incomes averaged \$500 to \$550 a year, comparable to that of the Italians and Lithuanians. But their infants died in numbers not explained even by the handicaps of low income and crowding.

However, a careful reading of school medical reports and other studies suggests that signs of changes were already apparent by 1911. In Fells Point and Canton, by 1914 the school doctors reported a smaller proportion of "defects" in both public and parochial schools. Although Locust Point was still described as "isolated and filthy," there was rapid response to parent education and the translation of hygiene into Polish. The community adopted gymnastics and sports from the neighboring Turnvereins and Sokols, and took advantage of the new Patterson Park facilities. A tradition of neighborhood sports teams was launched. The Polish community had economized stringently on housing in the first generation—Poles paid only a third of the rents most people paid. Then they pooled their savings and bought themselves whole neighborhoods, some old, some spanking new. They spent the second generation working overtime, and working their wives and children, to pay for them. Mortgages were generally written for five-year terms. Through a building and loan association a family could undertake a variable number of shares, paying a quarter a week on each outstanding \$100 share, plus the 6 percent interest, taxes, and ground rent. By 1914 there were twenty Polish building and loan associations, notably the Polish National and the White Eagle. Most were located on Eastern Avenue. (In 1970

Catholic Communities

there remained seven of them, distinctly Polish, with over \$25 million in assets.) In Canton they took advantage of the new districts of solid working-class housing, and the new job base, and founded St. Casimir's parish. In South Baltimore, Holy Cross Church became a Polish National Catholic parish, and a Polish Presbyterian chapel was across the street. There was a Polish parish in Curtis Bay, St. Aloysius.⁷⁷

The other nationalities followed much the same pattern of solidarity focused on the parish, but with variations of their job base, location, and child-raising habits. The purchase of new homes by German families and the settlement of German and Italian families at Calverton and of Bohemian and Italian families in the northeast led to the creation of several new suburban parishes: St. Ambrose, Blessed Sacrament, St. Cecilia, and St. Katherine of Sienna. Building and loan associations were still being organized at the rate of thirty-five a year.

A large portion of the Italians were from Cefalù, and had come recently. There were communities living near all of the markets, quarries, stoneyards, and cemeteries, as well as in St. Leo's parish, once an Irish neighborhood where the cathedral had first been proposed. St. Leo's had undergone an "unparalleled and wonderful transformation."⁷⁸ The cardinal considered his Italians hard to educate, and doctors at the public schools at Fayette and Green streets (near Lexington Market) noted many problems of malnutrition and debility. More infants survived because the mothers nursed their babies and by taking boarders managed to work at home while the babies were young. In this generation were formed numerous social corporations among Italians—saving and loan associations, the society of fruit vendors (*die Mutuo Socorro*), and a protective association for manufacturers of ice cream waffles. Skilled masons and stone cutters often worked for the Irish contractors and pavers and rapidly became independent in contracting. Italian produce vendors associated themselves with the butchers in the city market stalls. Contractors and market men were part of a well-buffered network of Irish and German Catholic politicians.

The Individual Home

Each community in Baltimore sought to develop home ownership as a means of protecting its children and its identity. Compared with other cities in the United States and elsewhere, Baltimore homes were cheaper, and more workers owned homes. British investigators of working-class living conditions were impressed with the savings and loan societies and the neighborhoods they had built, with streetcars, well-distributed parks, and low rents. But they noted the weakness of the trade unions, and their interviews fill in the details of working hours and family budgets. When these are matched with the infant mortality study, one finds a more complete and consistent picture of the pecking order of work and survival.

Of the infants born in 1915, 6 percent were from homes with over \$1050 a year income—professionals, public officials, manufacturers, proprietors, contractors. Altogether, a third were from homes that earned over \$850. Printers, skilled building craftsmen, brewery workers, and public service employees were in this "aristocracy of labor." They worked forty-eight hours a week or less. All were strongly unionized. Half owned their homes—a figure as high as the

professional and business class. Six percent of their infants died in the first year. In the next third were the infants of boiler makers and clothing cutters, who worked fifty-four hours a week and earned between \$650 and \$850. A quarter owned homes. Brickmakers, drivers, shipping labor, and waiters worked sixty hours and earned around \$600. Ten percent of their infants died. In the bottom third were the oyster shuckers, cannery workers, coal stokers, and servants, who worked seventy or seventy-two hours a week and earned less than \$550 a year. Only 7 percent owned homes. Fifteen percent of their infants died.

In other words, those with the longest hours earned least money and were more often laid off for bad weather or hard times. They had less housing space and ate less meat. It was more often their infants who died, and the surviving children went to work at twelve or thirteen. Those differences of class were so matched with differences of color and language that they were easily confused. Most blacks were in the bottom third, a plurality of recent immigrants in the middle third, and more native-born whites and people of German origin in the top third. Even the imperfections of the caste system—the individual exceptions—undermined solidarities by individual competition. Many thoughtful people in Baltimore perceived the vicious circle of poverty and ethnic status, as did the tuberculosis commission. But there was no way to integrate human relationships within the context of the competitive economy and the extreme range of economic inequality. Physical planning could be harmonious—the circulation of drainage and vehicles could be coordinated—but there was no such easy reconciliation in the circulation of income. The infant mortality study of 1915 (not published until after World War I) was the best attempt to untangle numerous factors of habit and way of life, and therefore the interplay of labor force and ethnic group. From ten thousand interviews, they concluded:

Isolation of a group from the life of the community as a whole, may or may not affect the physical welfare of the babies of the group. If it deprives men of economic opportunity, because they cannot pass barriers of language or of color, the babies born into their homes will pay with a high mortality the price of the fathers' poverty.⁷⁹

On the eve of World War I Baltimore still did not give the impression of a highly mechanized city. Introduction of dozens of mechanical, electrical, and automobile devices excited a sense of futuristic changes and visions of comfort, speed, and youth. But the quality of urban life, for better and for worse, was essentially human and animal, rather than mechanical. It was this quality—the human tempo—that after the war became the object of nostalgia.

Labor was still mainly muscle power, and the rhythm of human teamwork structured the job, however inhuman the pressures. The million-dollar payroll for stevedoring was assisted only by the old-fashioned steam hoists. The Canton Company introduced its first electric crane on the piers in 1913. The massive labor of public works and home building was still handled by pick and shovel, man and mule. In 1899 there were only four steam rollers in the state. By 1915 the city had introduced a snowplow and weed killer, and the city engineer designed and built 150 mechanical trench diggers, which cut excavating costs by

Mechanization and the Future



Hand labor was still used exclusively in this 1923 cable-laying operation.

two-thirds. (They were copied by the Russian ordnance department.) One of the biggest builders in town, McCullough, described how they excavated the basements for the long block on Wilkens Avenue: A line of men with spade-tipped steel bars broke off chunks of earth; a line of men with picks broke up the chunks; behind them were teams of three men shoveling left-handed, three right-handed—"scoop and pitch, scoop and pitch." From ten feet down the workers heaved earth to the five-foot level; another team pitched it up to the surface. This was ten-hour, \$1.65 a day labor. Mortar was mixed in the street bed.⁸⁰ McCullough bought his first steam cement mixer after 1913. The gas and electric company introduced a steam shovel and air compressor on its 1913 construction site, and celebrated the completion of the project with an oyster roast. The company brass and city fathers attended in a fleet of thirty-three sidecar motorcycles. The city introduced several experimental motor vehicles as well as a dozen ceremonial automobiles: the Bay View ambulance, the first garbage truck in the nation, and a \$5,000 electric truck. The fire engine fleet was rapidly built up to thirty-five electric and gasoline vehicles.

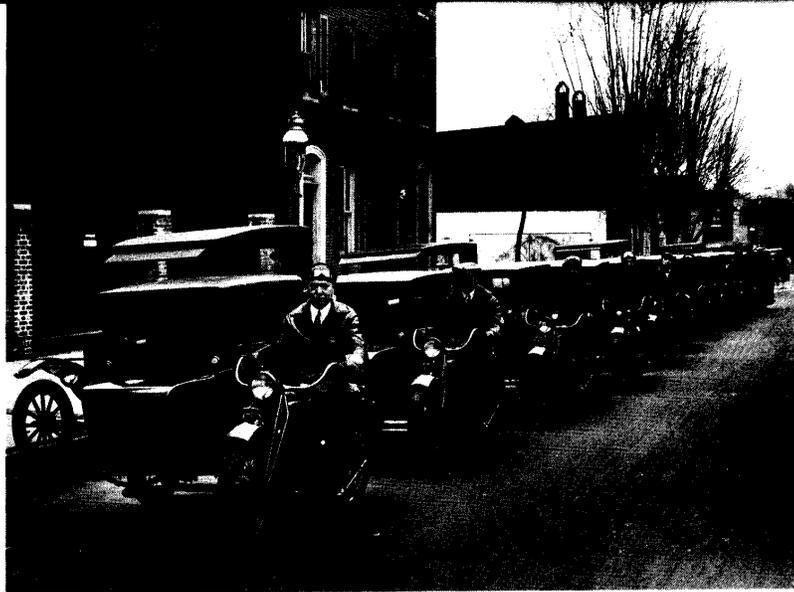
Despite those previews of things to come, Baltimore was still a horsey town. Five thousand buildings were used as stables, and seventeen thousand horse-drawn vehicles were licensed. The B&O Railroad was still using horses in Pratt Street. Sixteen hundred teams a day drove over the Light Street bridge, four hundred over the Block Street drawbridge. As late as 1910 the city built a central stable at Pratt Street and Central Avenue for 350 horses and vehicles, and leased a thirty-acre farm out Liberty Road for their sick, run-down, or overworked horses. The gypsies camped every year near Brooklyn to sell horses and mules. Catholic children's societies took a special interest in the protection of horses from cruelty, and the grand event for Baltimore youngsters in May 1913—while their elders buzzed about the women's suffrage marches—was the workhorse parade.

While the horses still did the work, the automobile was gaining rapidly as the vehicle of luxury and pleasure, and auto owners began redesigning the city. Baltimore's first auto show was held in 1906, and the 700 auto owners in the

city were invited to participate. On the great day twenty cars were in line, mostly dealers'. "Honk! honk! honk! The cars all behaved beautifully." That night the mayor bought a Rambler touring car. A car owner not only had to lay out in cold cash for a car (\$650 to \$3,500), he had also to maintain a chauffeur at \$15 a week and a mechanic at \$25.⁸¹ The 1906 crowd was enthusiastic because the speed limit had been raised from six to twelve miles per hour and the governor announced plans for a new cement boulevard to Washington (Route 1). By 1910 there were four thousand cars in Maryland, by 1917 fifty-five thousand, plus four thousand motor trucks. The "truck farmers" began buying motor trucks, and Consolidated began selling and using electric trucks. Accidents were reported every day. In 1916 20,000 new operators were licensed, 1,700 drivers were arrested, and 150 had their licenses revoked for driving under the influence.⁸² A cabaret performer and party joy riding in a seven-passenger rented car drove into the harbor. Police commandeered a car and a taxi to chase a stolen car through the downtown streets. Mass transit began to feel competition. Unlicensed automobile "jitneys" forced United Railways into experimenting with a motorbus service and its own subsidiary jitney service. The Maryland and Pennsylvania commuter railroad complained of competition from private automobiles but reassured its stockholders, "We are confident that the bottom has been reached."⁸³

Sharp entrepreneurs began adapting the urban landscape to the new form of locomotion. Charles Street, Cathedral Street, and Mt. Royal Avenue, convenient to the elite of Mount Vernon Place and Bolton Hill instantly became an auto-oriented district, and the dealers created new types of display. Mount Royal Avenue featured Peerless, Chalmers, the Hupmobile, the Locomobile, the Riordan, Hudson, Pathfinder, the Kissel-Kar, Packard, and Cadillac. Shopping for less swell models was better along North Avenue. By 1917 fifty dealers handled sixty-five different makes. The most elegant Automobile Club in the nation—it cost \$100,000—confirmed the auto dealers' hub at Mount Royal and Cathedral streets. The fire department chafed at the presence of three thousand gas pumps on the sidewalks in front of grocery stores. Jacob Blaustein, who had begun delivering kerosene in a horse-drawn tank cart, now created the first drive-in filling station, the Lord Baltimore, on Cathedral Street. He set the ten-gallon glass jar on top of the pump: "You see what you get. You get what you see." Robert Garrett's banking firm underwrote Grimes and Duncan's creation of the Commercial Credit Corporation, a financial adaptation to the auto age. They offered working capital to manufacturers and dealers, and bought "open accounts receivable" on the "confidential nonnotification plan." That meant you didn't know your overdue bill was now owed to Commercial Credit instead of your dealer. When the corporation began financing installment sales of pleasure cars, their business began its swift climb to national rank.

The rural landscape, too, began its transformation. At the beginning of the century, the Maryland Geological Survey, the State Roads Commission, and the Federal Bureau of Roads made Maryland the pioneer for experiments with road materials nears Kingsville, Baltimore County. The county had a thousand miles of road, only a third of which was graveled or shelled, the rest dirt.⁸⁴ Hauling



Officials and notables attended an oyster roast at the dedication of the Woodbrook Electric Station. A fleet of "dainty taxicabs" brought many of the honoraries to the celebration.



costs were no different from a century earlier. By 1917 the county was spending half a million a year to grade, gravel, and oil the roads, and had hired an engineer to reorganize the operation, but the public was still dissatisfied. At the state level, with the Automobile Club and the "good roads movement" behind him, Governor Austin Crothers initiated a \$5 million program, acquired the private turnpikes, and built Route 1 to Washington. As in all aspects of state politics, the ambiguity remained between private and public enterprise. In 1904, when the Pennsylvania Railroad built a double-track bridge across the Susquehanna, it offered its obsolete 1873 single-track bridge at Havre de Grace (thirteen feet wide and thirty-three hundred feet long) free to any taker, so the company would not have to remove it. A group of seven private citizens accepted the offer and put in \$100 each to convert it to a highway bridge. They were, in fact, all connected with state politics (e.g., the governor's brother, Omar). Over thir-

teen years they made \$370,000 profit from tolls, then in 1923 sold the bridge to the state for \$585,000. It became known as the gold mine bridge.⁸⁵

Excitement over the "auto-picking" season of January 1917 shows how completely the pattern was set for automobile civilization, and the euphoria with which it was viewed.⁸⁶ By means of thousands of electric lights and hundreds of powerful nitrogen lamps "the grim armory was magically changed from a big void to a huge bower of beauty. An orange sky, soft and mellow, covered all, and big canopies of brilliant white and black and yellow fluttered from the walls." Columns surmounted by palms, smilax, and chrysanthemums marked off the floor into booths "wherein a wealth of mechanical beauty—a king's ransom in motorcars—lay gleaming, glowing, fairly blooming in prismatic splendor." The auto show was a society event and fashion show as well. Women in décolleté wore strings of pearls, diamond lavalieres, and their "favorite flashing ear pendants." They danced the waltz and the one-step, patronized the ice cream parlor, or sat and chatted, finding an "irresistible lure in the comfy seats of the cars." Apparently the wealthy and the influential in Baltimore agreed with *Sun* editorial writer, "Art and utility have met together, science and grace have kissed each other, in the latest realization of the auto-mechanic's dreams. . . . May the day soon come when no well-regulated family can afford to do without one!"

World War I differed in tempo from Baltimore's previous experiences of war. For two and a half years America remained neutral while war in Europe continued on an unprecedented scale. This allowed a build-up of the Baltimore economy and a deepening but many-sided emotional involvement. The city climbed back to its rank as the nation's seventh largest industrial center and stayed there. The climate remained one of tolerance. Then there followed a year and a half of full participation in the war—short, total, intolerant. The war became a crucible in which intense heat and pressure hastened all chemical reactions. Gradual social and economic changes were accelerated. The processing of the great unwashed was intensified. National patriotic symbols were elevated, hastening a destruction of some elements of a Baltimore identity. The opportunities and sacrifices of war fueled antagonism between classes, while the logic of defense contained its expression. One can look at the war effort first in terms of the economic expansion of Baltimore, then in terms of its social meaning, always bearing in mind that over six or eight weeks early in 1917 there was a great wrenching of ideas and feelings from neutrality to total participation. This critical period is most revealing.

In 1915 and 1916 the city responded to constant appeals for aid. Paderewski played the piano for starving Poland, Mischa Elman fiddled for tubercular French soldiers, and the Mary Magdalen of Oberammergau sang for German war relief. The cardinal appealed in the churches for Ireland, while the United solicited the garment workers, "Bread for the Living, Shrouds for the Dead," and "We Have Our Own Belgium." Jacob Epstein offered a thousand dollars a month for the duration of the war, and Yiddish East Baltimore brought nine thousand dollars to a sobbing rally at the Academy of Music. Twenty-five Lithuanian organizations representing ten thousand people in the neighborhood of the

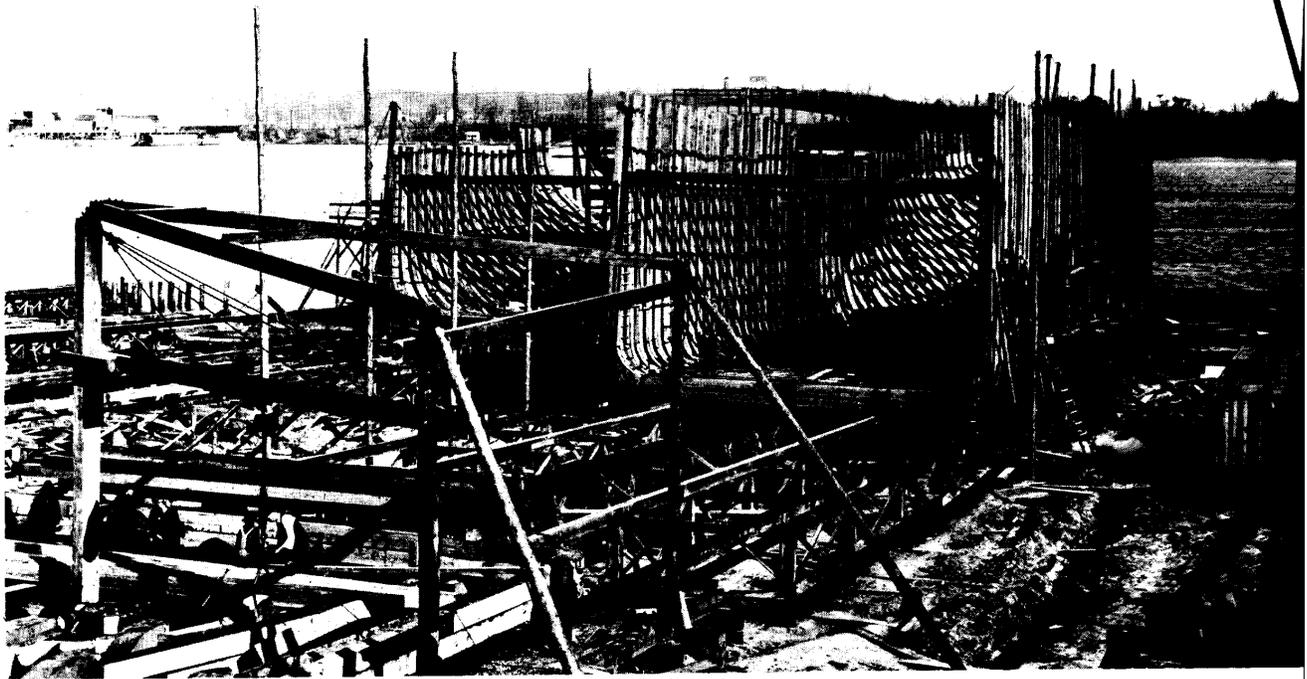
Torpedoes and Thunderbolts

Hollins Market joined hands to send aid to the old country. The largest effort was the "Allied Bazaar" at the Fifth Regiment armory. The prominent socialites and business leadership of the city were by mid-January 1917 publicly committed to the Allied cause. They promised that along with a monkey and pony circus, Serbian and Bohemian folk dancers, "healthful and innocent amusements" would be provided such as moving pictures of the great battles of the Marne, Verdun, and the Somme. Laborers spent a month digging two hundred feet of trenches on the Preston Street lawn of the armory. In the trenches a visitor, "having left the brilliantly lighted, music-filled bazaar behind," would come upon an officers' dugout, a Red Cross station, a wicked-looking machine gun, an ominous stretch of barbed wire entanglement, and a twenty-foot British caterpillar.⁸⁷

Covering all those diverse sympathies with a cloak of unity, the fourths of July were celebrated with all the zeal of Spanish-American War days. Children were spangled with stars, stripes, gold buttons, and sailor collars; backyards were decked with tables of steamed crabs and beer kegs; and the red brick and white marble neighborhoods of Canton, Highlandtown, South Baltimore, and the point were spread with bunting. The German bands played brassy music. The kids put "torpedoes" on the streetcar tracks and tossed "thunderbolts" into the storm sewers.

The War Economy

The closer America came to entering the war, the more clearly industrial and financial leaders recognized the value of Baltimore as a location for steel making and shipbuilding. It was well placed for labor, fuel, and freight rates. The harbor's superb, thirty- and thirty-five-foot channels were adequate; its industrial rim was elastic. Close to Europe by sea and close to the U.S. heartland by rail, it also had the unique advantage of being 100 miles west of the seacoast and relatively defensible against submarines. Charles Schwab, the tough financial collaborator of Andrew Carnegie and J. P. Morgan (he managed to outwit them in succession), acquired the Sparrows Point plant for his Bethlehem Steel Company. The real prize of this \$25 million maneuver was the company's holdings of Cuban iron ore. Bethlehem Steel promptly undertook massive expansion at Sparrows Point. It built a tin-plate mill (by taking over Aldred's plant) and invested \$15 million in a mill for rolling steel plate for tanks and battleships. The Cunard line ordered two big freighters from it, the first orders of British companies to American shipyards in fifty years. The U.S. Navy contracted for fifty steamers. To fill these orders, Bethlehem Steel bought the 535-acre Numsen property on Humphrey's Creek, and built a second big shipyard adjoining: "Ship-building is more of a money-maker now than steel-making." Other new shipbuilding ventures selected Baltimore. Baltimore Drydock and Shipbuilding bought the McLean property next to Fort McHenry on the south side of Locust Point, for a \$3 million plant. (McLean contractors moved to a site at Canton.) The Maryland Shipbuilding Company, incorporated locally by Aldred, Jenkins, and Griswold, acquired a million-dollar 1800-acre site on Marley Neck. It planned to hire two thousand employees and make steel. The steel and shipbuilding investments had the stunning virtue of offering an industrial base with



Wooden shipbuilding was revived briefly in 1918 at Fairfield.

potential for generating future peacetime industrial growth. Bethlehem Steel became the kingpin of the regional economy.

Bartlett-Hayward founded its extraordinary expansion on industries geared more exclusively to war needs. It had several early million-dollar ammunition contracts for the Russian and French governments. When America entered the war, its employees swelled from four thousand to twenty-two thousand, a scale of operation never seen in Baltimore. Experienced in the swift erection of huge gasholders, the company put up industrial buildings with astonishing speed. On fifty-five acres at Sollers Point (Turner Station) it built fifty-nine buildings and hired six thousand workers, mostly women, girls, and country boys, for manufacturing munitions and processing toluol and light oils from methane for high explosives. On Washington Boulevard it redeveloped a forty-nine-acre dump. On Bush Street it built a plant for shell loading and steam blowers (now the Koppers piston ring plant). It rebuilt and expanded its original Mount Clare site by removing dwellings on Ramsay Street.⁸⁸

Poole Engineering, owned in Delaware, expanded along the same lines. It had several million dollars worth of Allied contracts for mine cars, gun carriages, and aircraft guns before the United States entered the war. As the war approached, hundreds of special police were sworn in, and a detail was assigned to guard the Prospect Hill overlook in Druid Hill Park, which gave a view of the Poole plant at Woodberry. It doubled its labor force and built a long cold-frame

type factory back into the valley; it also tested shrapnel at Texas, Maryland, and manufactured airplanes at Hagerstown.

The prime locus of investment was the outer harbor: Curtis Bay, Canton, and Patapsco Neck. Military installations and utilities complemented the investments of private industry in each district. Consolidated Gas and Electric enlarged the Westport plant and introduced natural gas by pipeline. The Pennsylvania Railroad invested \$10 million, the B&O \$4 million. At Curtis Bay, on the site of the old sugar refinery, U.S. Industrial Alcohol created a \$5 million enterprise, a vinegar factory and the world's largest alcohol factory. American Refractories built a plant on twenty acres, near Brooklyn, to supply Bethlehem Steel with firebrick. Davison Chemical added a machine shop. There were soon five thousand workers at Curtis Bay, and a large Ordnance Department storage depot. At Canton an acid plant was built for Baugh Chemical, and the Quartermaster built rows of warehouses for shipping war material to France. On Sollers Point the Aldred group developed a \$3 million aluminum ore company on the former site of the McShane foundry, adjoining the Bartlett-Hayward munitions plant. Beyond the Sparrows Point steel mill and shipyard, the military invested \$4 million in Fort Howard defense works at North Point.

The outlying industrial locations required a vast labor force. United Railways improved its service to Curtis Bay and Sparrows Point. Real estate values soared. On Patapsco Neck over five years the prices rose from \$30 to \$1000 an acre. During the fifteen months before the United States came into the war, 90 percent of the land changed hands. The largest single development was a \$5 million project of the Eastern Land Company on a thousand acres. It had the financial backing of Frederick Wood of Bethlehem Steel and the management expertise of E. H. Bouton of the Roland Park Company. They translated the curves of Roland Park into a working-class model neighborhood and projected it onto the coastal plain landscape of Dundalk, Gracelands, and Schwab City. Formulas for ground rent financing and home ownership were borrowed from the Canton experience. Cheap, instant, and institutional housing was built on Sollers Point for workers of the munitions and aluminum plants. The Emergency Fleet Corporation bought back some Eastern Land Company property on St. Helena to put up "convertible" houses for shipyard workers.

Industrial development began to threaten the vulnerable tidewater environment, but this attracted less attention. Beginning in March 1917, frequent fish poisonings were recorded at Curtis Creek: "Hundreds of fish have taken three gulps and died." There were complaints of smells and air pollution in the same district, and the city experienced an invasion of rats. Even in the '90s, industry at outlying sites depended entirely on ground water from the Patapsco formation, a geologic layer of sand and gravel underlain by clay. Rain falling on outcrops adjacent to the piedmont trickled down under Baltimore, and around the rim of the harbor two hundred wells were sunk. The volume pumped has been estimated at 5 or 10 million gallons a day in 1900, 15 million in 1915. Acid contamination of the wells resulted from surface pollution, especially seepage through the stockpiles of copper ores, sulfur, and slag. A drop was noticed in artesian head in the '90s. The drop in pressure of the mass of ground water

resulted from too high a rate of pumping, and it allowed brackish water from the harbor to move in. Deep dredging in the harbor may also have contributed to salty water entering the geologic fresh-water layer. These problems were not troublesome during the sluggish period between 1900 and 1914, but were aggravated by wartime industrial production. Where acid or salt content was too high, wells were abandoned, and the abandoned wells acted as sources of further pollution of the ground water.

Baltimore's industrial recovery was achieved by a great leap of productivity: "The city has put on seven-league boots." Over five years (1914-19), the labor force in manufacturing increased by a third, manufacturing capital doubled, and the value of manufactured products and exports tripled. The war effort demanded that everyone get the greatest possible output from each hour of labor, each square foot of space, each pound of steel or cotton. Wartime labor shortage tended to overcome the old tendency of Baltimore manufacturers to be wasteful of labor because it had been relatively cheap. Bethlehem introduced the bonus system that Frederick Taylor had designed at the Bethlehem, Pennsylvania plant, pushing up the productivity of labor at numerous tasks. In fields already unionized, the labor force won its goal of an eight-hour day. The clothing industry, making uniforms for the U.S. and Italian armies, went on an eight-hour basis and obtained a pay raise of 7 to 15 percent. The shorter work day was associated with an intensification of labor—a faster pace, piece-work pressure, a more complete adaptation to the machine, accelerated mechanization, and also a longer trip to work.

Labor shortages had other effects on social behavior and ideas. In the first month of the war three thousand Marylanders enlisted in the navy. By the end of the war sixty-two thousand were serving in some branch of the armed forces. This produced exceptional labor force turnover. Ten percent of B&O employees enlisted, and perhaps a quarter of the employees of city government. The outflow to the military meant the city had to draw in newcomers. Bartlett-Hayward sought to recruit country boys, and Bethlehem continued to absorb black workers from its Virginia recruiting grounds. The shortage of labor hastened the acceptance of women into new types of work, a trend already under way with the mechanization of clerical tasks: the typewriter, the telephone, and stenography. Seventy-five daughters of the elite bobbed their hair and went to Chevy Chase to learn first aid. The gas company hired women to clean and repair stove parts and gas fixtures, United Railways hired 150 women to drive streetcars, and the B&O Locust Point shops hired women in "men's jobs" such as laborer, foreman, dope reclaimer, or operator of the pipe-threading machine and drill press. Some picked up old iron or swept the shops. The crisis gave social value to rather meaningless jobs because the women workers released men for more important jobs "over there." The color line was more strict than sex roles; it hardly budged. There was no apparent visible change in the black participation in the civilian labor force, although within the black community symbolic importance was attached to military participation.

The official idea was that everyone pulled together. The entire population

The Social Economy



World War I created a shortage of traditional male factory labor and led to expanded opportunities for training and employing women.

was being processed, young and old, rich and poor, to conform to the moral discipline of war. Fifteen thousand public school children weeded their home gardens. The women's clubs canned vegetables. The young men at Hopkins learned to handle Krag rifles. The Goucher women gave up between-meal snacks and plowed up their tennis courts at Twenty-fourth and St. Paul streets. A cadet corps of two hundred boys drilled twice a week at St. Mary's industrial school. "Brother Paul, the director, is intensely patriotic; he is constantly impressing upon the minds and hearts of the boys that religion and patriotism are inseparable."⁸⁹ In May 1917, two hundred men of Baltimore's elite were selected for officer training at Fort Myer and began raising mustaches and learning to use brooms and sew on buttons. On the weekly society page in the *Sun* "Betsy Patterson" wrote to "Dearest Girl":

Eleanor Sweringen, who binds books so exquisitely, is getting up a shooting club. We will practice at the Maryland Rifle Range at one-half cent a shot. . . . Perhaps you know that there are already more women than men in Baltimore, but, gracious me! pretty soon there won't be any men at all. They're all going off to Fort Myer and they seem so horribly cheerful about it . . . a real masculine lark.⁹⁰

Other people had other concerns. Staple food shortages appeared, not based on "real" scarcity like the scarcity of labor. Grain prices were rising. Gambrill shipped 500,000 bushels of wheat from Minneapolis to Baltimore to forward to the Allies, and reportedly made \$500,000 profit. There were 3.5 million bushels of grain in Baltimore elevators. Because they didn't move into the market, people jumped to the conclusion that they had been purchased by the Germans. Potatoes and onions disappeared from the markets. The "onion special," a thirty-six-car train from St. Louis destined for Baltimore, simply vanished. The Salvation Army hadn't put an onion in its soups for six weeks. The price of admission to the Purim ball for Jewish War Relief at the Phoenix Club was three potatoes, to be distributed in East Baltimore. The price of greens soared, yet the newly built cold storage warehouses were full. What did they hold? What was the turnover? Who was hoarding? Nobody knew. A car shortage was blamed: railroad cars hauling material eastward for shipment to Europe "piled up" in the yards, docks, and factory sidings in the east. As prices rose, the whole newly developed and finely tuned system of circulation was being used as a holding system by speculators. They were "making a warehouse of the cars." Goods were "consigned and reconsigned a dozen times to different places without being unloaded, the owners or consignees finding it more profitable to pay the freight charges and the car demurrage than to unload and sell their contents. Railroad officials say they are powerless."⁹¹ Money circulated faster than goods, and profits were generated while others tightened their belts. Farmers began calling the mayor to tell him about potatoes "hid in the city." At last he sent twenty-five city trucks to buy potatoes direct from the farmers and sell them in the city markets at cost. Potato prices fell. "On some dining-room tables in Baltimore last night there were sights that have not been seen for two months. Potatoes were there, mashed, fried, boiled, barbecued, garbed in gravy, with jackets and without jackets. But there was no potato salad. You need onions for potato salad."⁹²

Despite the mayor's gesture, the family budget squeeze continued. Wages had not yet begun to rise. For the first time since '94, steady workers were standing in bread lines. The Salvation Army was distributing a thousand loaves a day in South Baltimore. In Pigtown, the Volunteers of America began offering breakfasts to five hundred school children who had only coffee and hard bread. Workers who earned \$10 to \$12 a week—carpenters, teamsters, longshoremen, clothing workers, factory hands, laborers—were spending a quarter of their budget for rent. A 50 percent increase in the price of coal,⁹³ the highest price ever experienced in Baltimore, was forcing them to cut back their food budget by 30 percent, while food prices rose. They were substituting hominy, rice, and cornbread for potatoes and bread, molasses for sugar. White folks were turning to soul food. "Eggs and meat have been wiped clear from the small wage-earner's board." Meat was a little liver or tripe or soup. "Fish has become more expensive than meat." Their luxuries were fruit pies and cabbage on Sunday. A federal grand jury indicted a West Virginia coal combine that had arranged to double the price of soft coal again. A thirteen-year-old girl was killed by a passenger train while she and her sister were picking bits of waste coal from the tracks between West and Ostend streets. A hard winter pushed the cost of fuel still higher in the family budget. Factories shut down, electricity was cut off frequently, people burned furniture.

Initial propositions for financing the war also presented the image of people tightening their belts together: there would be munitions taxes, excess profits taxes (8 percent on profits above 8 percent of capitalization), income taxes ranging up to 50 percent for millionaires, and estate taxes up to 15 percent for estates over \$5 million. The instant plan to borrow a staggering \$7 billion was, however, intended at "passing a part of the burden along to the next generation."⁹⁴ To make the bonds easier to sell, they were tax free. The new government tax bite plus the huge tax-free bond issues produced a reshuffling of financial assets among various classes of people.⁹⁵ The *Sun* emphasized that the government needed the small man: "The small men are coming in grandly in Baltimore."⁹⁶ A Bohemian delegation from Curtis Bay brought in \$500, the boys at St. Vincent's orphan asylum \$200, and the children at Friends School—once it was explained to them—\$3,000. Nevertheless, the bulk came from the big men. People with incomes over \$4,000 were interested in tax shelters, and the larger their incomes the more appealing were Liberty bonds. When Henry Walters died in 1931, his estate included \$2 million worth of first Liberty loan bonds. In addition to the tax advantages of the Liberty loans, the federal government agreed to redeposit all the money used to buy bonds in the coffers of the banks where it lay. The banks were allowed to relend these sums (until the government needed them), not subject to the usual 18 percent reserve requirements. Therefore, the money correctly channeled would pay 3.5 percent interest—tax free—from the federal government plus 5 or 6 percent from short-term loans, often more. This situation, coupled with the urgency of war contracts, offered remarkable profits on short-term financing. Bethlehem, in March 1917, to fill its contracts for British ships issued \$15 million in new stock and \$50 million in twenty-five-year 5 percent notes, which in turn were "secured" on \$37 million

worth of British government notes due in two years. American investors bought in notes of the British investors in American railroads, utilities, and real estate. With the cooperation of the Marines, they replaced German investors in the Dominican Republic. "Quick turn" was the strategy of the hour. The land sales in Patapsco Neck were known as quick turn. "New high-priced automobiles are appearing all over the peninsula, and the old buggies and daytons have been sent to the discard."⁹⁷ Davison Chemical was sued by certain stockholders for having issued new stock, manipulating its price to make \$5 million worth of assets appear worth \$12 million, and reducing the subsequent market value of their shares.⁹⁸

A climate of uncertainty and swift change also created special opportunities for short-term speculation. For example, as prohibition gained counties and then whole states and the national temperance lobby gained ground, fantastic ups and downs could be generated in the price of shares of U.S. Industrial Alcohol. At the time the company was building its \$5 million plant in Baltimore, the stock had never paid a dividend, but through manipulation of the market, the "Standard Oil crowd" was believed to have made "a killing on the long side."⁹⁹ Baltimore opened up a lucrative mail-order business in monthly quarts of "horn," "third-rail," and "fourth dimensional distillation." A hundred firms were organized, most of which simply wrapped up the goods, stuck tags on them, mailed them to Virginia or West Virginia, and cashed postal money orders. Wholesale liquor dealers were moving their headquarters to Baltimore.¹⁰⁰ After a debate as strenuous as the defense bill, Congress passed a "bone dry" bill that forbade use of the mails for shipping liquor from wet into dry states.¹⁰¹ But this was a challenge Baltimore entrepreneurs relished. Baltimoreans were solidly in favor of prohibition—everywhere except in Baltimore. The city would be an oasis in the desert. The watermen turned from the dwindling oyster catch to new activities. Captain Ike Bozeman, a seventy-year-old oysterman from Somerset County, and his Negro mate, Horace Jones, were notorious. They loaded 250 cases of whiskey in Baltimore and made the rounds of the wharves in the dry counties of Virginia. Bozemen was eventually cornered by the state cutter in the Rappahannock; he was shot by the "revenueurs" and died in jail.¹⁰²

Eliminate the Germans

In late January 1917, as German U-boats began attacking shipping in wider areas of the seas, a sharp wrenching of public opinion began. Maryland's prominent leaders petitioned the president for universal military training: "No people who have preserved their sanity will neglect to provide itself with adequate means of defense. We have practically no army at this time available for our defense."¹⁰³ They were rebuked by the president for their "intemperate" language. A panic period of two months followed. The level of anxiety can be gauged by the level of rumor. The rumors allowed people to test their ideas against all sorts of "unthinkable" possibilities. Three steamers supposedly cleared for the river Plate ports and took out several million dollars in gold, in American coined eagles and half-eagles. The gold was rumored destined for Germany, as German raiders were operating off the coast of South America. But it was later learned that the gold was shipped by Allied and American wool manufacturers

to pay for South American wool.¹⁰⁴ A week later, three German steamers lay in port, unable to sail for fear of raiders. It was rumored that their crew had wrecked the machinery so the vessels would be useless to the United States if seized. "Locust Point was highly excited." In fact, the crew were "scattered around the Point saloons drinking their beer and trying to be cheerful."¹⁰⁵

Anxiety in the face of rumor and uncertainty allowed buried hostilities to surface. The regimentation and bending of social efforts to wartime goals tended to smash other values and to curb deviations savagely. The primacy of national goals fit the trend of diminishing Baltimorean identity.

The first target was, of course, the sense of identity of the German community. The war put an end to the German-American era in Baltimore. The schools were already "Americanized." Pledges to the flag and patriotic singing had been introduced during the Spanish-American War. The connection between Catholic faith and German language was no longer an issue, since the parochial schools were all English speaking. The public "German-English" schools had become less German and were reputed chiefly for their strong college preparatory orientation and high intellectual standards; they were frequented by many Jewish children. But America's entry into the war dramatized the heartbreak of hyphenation. "U.S. Eye on Hyphens," shouted the *Sun*. Frank Furst, "in many respects the first citizen of Maryland, a native of Germany," was quoted, "The hour has come when every American must be an American to the exclusion of all else."¹⁰⁶ Other prominent citizens such as Judge Rose and the editorialists called for understanding: "The German elements will be loyal, although their hearts will bleed." German-born persons rushed to take out citizenship papers. In the schools, confusion and tension broke out. Youths acted out the apprehensions of their elders and played games with old-fashioned signs of authority. The German teacher at Poly was accused of having given vent to unpatriotic utterings. The girls at Western High School refused to sing "Deutschland Uber Alles," and the German Club disappeared. The Sons of the Revolution mistakenly protested against compulsory German, although, in fact, the courses had not been compulsory for some years. Again rumors circulated. Mystery ships were reported. The German consul's car was stolen. An unnamed "John Doe," fertilizer expert and music lover, was arrested as an agent for German chemical firms. Telegraph wires "to the north" were reported cut by saboteurs. A Russian agent was mysteriously shot in his room at the Baltimore Country Club. The first official act of war in Baltimore was staged as a cloak and dagger affair. The three German merchant ships that had been lying off Locust Point for two months were taken as contraband. Deputies with high-powered rifles and hand lanterns full of oil sat by the telephone, awaiting a flash from the custom house to go get 'em. When the word came from the *Sun* at 3 a.m. that Congress had voted the declaration of war, off went the collector of the port and the surveyor of customs in big sightseeing cars. Streetcars carried a company of the fourth regiment, eighteen city police, and a Coast Guard platoon of twenty. They took the twenty German officers to the Hotel Junker, and marched the sixty-one sailors through the early morning crowds on Locust Point to the police station: "The Germans' heads were bowed and the crowd was silent. Not

a comment was heard, not a cheer, not a greeting. It was almost an American tribute to an American enemy."¹⁰⁷

Unnaturalized Germans were now classed as enemy aliens. The police searched their homes for wireless equipment, cipher code, weapons, and explosives. They were excluded from within a half-mile of defense plants and military installations. Levi Goldenberg, for example, a department store owner for thirty-five years, was under \$10,000 bond and allowed to move about only in the vicinity of his home or his store, and to make the trips between only by streetcar. Little by little, German symbols were rooted out. German Street was renamed Redwood. The German-American Bank retitled itself simply "The American Bank." The Concordia opera house was turned into a straw hat factory. In 1918 the last touch was the prohibition on drinking beer.

In sharp contrast, the identity of the Polish community was reinforced. Poles had immigrated to Baltimore in large numbers just before the war and established organizations such as the Polish Falcons, which expressed fierce loyalty to both Poland and America and considerable militarism. Several hundred had already gone to Canada to enlist in the British army, along with a hundred Baltimore Labor Zionists who had joined to wrest Palestine from the Turks.

In addition to anti-German feelings, there was a resurgence of antipacifist, antiinternationalist, antforeign, and antisocialist feelings. On the eve of the president's asking Congress to declare war, a pacifist meeting in the academy was broken up by a "great patriotic demonstration" of several thousand people of all ages led by a number of prominent citizens.¹⁰⁸ Outside the hall Miss Gill, a Baltimore socialite, mounted a soapbox and called for three cheers for the president, then led the singing of "The Star-Spangled Banner" and "Hang Billy Bryan to a sour-apple tree." Jacob France mounted the wall and recited a patriotic poem. Then the crowd rushed forward into the hall, up to the orchestra pit, and shoved the flag in the face of the speaker. Forty police swept toward the crowd outside with clubs. They beat several wealthy persons. In the papers, the pacifists, including clergy, Quakers, and internationalists, were described as frightened specimens, corpulent and ashy pale, the police as brutes or at best "country constables." The cartoons showed "pacifist and pacifistess" running away from Uncle Sam piping "Yankee Doodle." On Sunday the preaching in the churches was everywhere on the Prince of Peace. "The Divine call," said the Episcopal bishop, "has been most clearly revealed to us by the medium of human wrath." The German pastors came out "like men, honest and unflinching." In the Irish parish of St. John's at Valley and Eager streets, eight hundred men of the Holy Name Society went to early communion to prove their "manhood, their Americanism, their Catholicism." Five boys who refused to salute the flag, "a high and holy symbol," and one who left the room during the singing of "The Star-Spangled Banner," were suspended from school, and their parents brought before the school board. The newspapers published long poems on flags in churches. "What seems most singular . . . is that three of the five boys who do not consider the American flag good enough for them were born in Russia."¹⁰⁹ The *Sun* commented,

We are not advising persecution, but it is essential that we should be vigilant, that we should know where we stand. To believe in certain economic and political theories is not treason, if they do not involve disloyalty. But socialism which is in conflict with patriotism is only another way of spelling treason.¹¹⁰

Next day a cartoon appeared of Columbia as a young lady in her nightie, a Secret Service candle in her hand, searching, while the feet of Foreign Plotter stuck out from under the bed—"They're Lurking Everywhere."¹¹¹

Every ancient nightmare or protest suddenly appeared in the garb of treason and every repressive tradition took on a patriotic aura. A black man from Georgia was arrested in a fertilizer plant in Curtis Bay, suspected of working with German agents to stir up Georgia Negroes to refuse to serve.¹¹² A federal court test of the segregation ordinance was blamed on a Minnesota senator whose speech "stirred them up," and who had been delaying the vote to defend American rights at sea. The city solicitor claimed, "there probably would not have been any test case brought if our colored people in Baltimore had been left to themselves."¹¹³ The president of the B&O, faced with a strike for an eight-hour day, raised the question, "I hope it will never be said that B&O employees at a time like this took any action which gave satisfaction, aid and comfort to those opposed to the welfare of the United States."¹¹⁴ The next day's cartoon showed the railroad workers striking "A Foul Blow" at Uncle Sam. At Canton, where two hundred longshoremen of the IWW and one hundred freight handlers on the PRR were on strike, the police department dispatched a like number of officers for fear of sabotage, and an incident followed promptly in which a black striker was shot.¹¹⁵

Once war was declared, the processing of the population became very thorough. People were scrubbed, vaccinated, registered, pledged, and drilled. A thorough cleansing was moral and ideological as well as physical. At the telephone company, twenty-three hundred employees were asked to sign a pledge of patriotism. Ten refused. A law was finally passed against spitting. Dr. Howard argued that pointing a cough or a sneeze at someone was just like pointing a revolver at him. Mencken had always deplored the United Railways as an instrument of discipline invented for the regimentation of everyone. This discipline was heightened: thousands were moved daily on hour-long trips to Curtis Bay or Sparrows Point, and the unpopular "skip-stop" service was introduced to make the flow smoother. During the flu epidemic the streetcar tokens were bathed daily in antiseptic solution. Regular bathing was urged: "It will better fit the men to eliminate the Germans as a menace to the world—because cleanliness certainly improves efficiency."¹¹⁶ The final step was registration of the fifty-five thousand young men of Baltimore.¹¹⁷ By order of the mayor, the city hall bell was to boom out one hundred times at 7 a.m., and be taken up by all the church bells and steamboat and factory whistles. Each man after registration was decorated with a khaki band on his left arm.

The Art of Urban Landscape

Newspaper sources are the *Sun* and the *American*; the *News* is also useful. Citations from H. L. Mencken are largely from the *Evening Sun*, but come directly from manuscripts in the Mencken Room of the Enoch Pratt Free Library, Baltimore, Md., not from the published papers. Municipal reports of special value include annual reports of the Topographical Survey and police censuses of housing, school attendance, and special population groups by age or race.

Isaac Fein placed valuable interview manuscripts in the Jewish Historical Society in Baltimore while preparing his book. Leonard Rea, "The Financial History of Baltimore, 1900–1926" (Ph.D. diss., The Johns Hopkins University, 1928), picks up where Jacob Hollander stopped.

An essential source that situates Baltimore in a nationwide political and intellectual movement is James B. Crooks, *Politics and Progress: The Rise of Urban Progressivism in Baltimore, 1895 to 1911* (Baton Rouge: Louisiana State University Press, 1968). It is usefully supplemented by Eleanor S. Bruchey, "The Business Elite in Baltimore, 1880–1914" (Ph.D. diss., The Johns Hopkins University, 1967).

Useful sources on living standards and health are Janet Kemp, *Housing Conditions in Baltimore* (Baltimore: Charity Organization Society, 1907), and U.S., Department of Labor, Bureau of Children, *Report on Infant Mortality in Baltimore* (Washington, D.C.: Government Printing Office, 1922). This remarkable sociological study is based on the total population of infants born in Baltimore in 1915. The original documents, in the U.S. National Archives, Record Group 102, boxes 216 and 220, contain a wealth of reports on social and housing conditions of the black community. Baltimore was chosen for the study because it contained a population large enough to permit statistical analysis of infant mortality rates by race.

Many details of industrial ownership and enterprise are found in *A History of the City of Baltimore, Its Men and Institutions* (Baltimore: American, 1902), and E. V. Illmer, *Industrial Survey of Baltimore: Report of Industries Located within the Baltimore Metropolitan District* (Baltimore, 1914).

1. *Municipal Journal*, 11 April 1913.
2. *American*, 14 December 1905; *Sun*, 7 June 1909.
3. Mayor's message, 1 February 1903.
4. *Fire Department, Annual Report*. Clarence H. Forrest, *Official History of the Fire Department of the City of Baltimore* (Baltimore, 1898). Harold A. Williams, *Baltimore Afire* (Baltimore, 1954).
5. Burnt District Commission reports, 11 September 1904 and 11 March 1905. Records and memorabilia exist at the Equitable Fire Insurance Society, Baltimore, Md.
6. Michael R. Farrell, *Who Made All Our Streetcars Go?* (Baltimore: NRHS Publications, 1973); *Sun*, 1 and 25 March and 5 April 1906, 4 February 1916, and 29 January 1917.
7. Calvin W. Hendricks, "Colossal Work in Baltimore," *National Geographic* 20 (April 1909): 365–73.
8. Commissioner of Street Cleaning, *Annual Report*, 1904.
9. Sewer Commission, *Annual Report*, 1911.
10. A similar connection was created among doctors and public health agencies through the medical and chirurgical faculty of The Johns Hopkins University Medical School.
11. Topographical Survey, *Annual Report*, 1910.

12. Olmsted Brothers, *Report on the Development of Public Grounds for Greater Baltimore* (Baltimore: The Lord Baltimore Press, 1904).
13. Peter J. Schmitt, *Back to Nature: The Arcadian Myth in Urban America* (New York: Oxford University Press, 1969).
14. *Sun*, 18 May 1913.
15. *Ibid.*, January 1916 and 1 February 1916.
16. *Ibid.*, 17, 20, and 28 March 1906 and 25 May 1917.
17. *Ibid.*, 8 February 1916.
18. *Municipal Journal*, 19 June 1914.
19. Buckler and Latrobe had proposed moving 3 million cubic yards (see chapter 6).
20. *Sun*, 15 December 1909.
21. *Ibid.*
22. *Ibid.*, 16 and 29 December 1909 and 5 January 1910; Katherine Harvey, *The Best Dressed Miners: Life and Labor in the Maryland Coal Region* (Ithaca: Cornell University Press, 1969), pp. 60, 62. Reorganization of Pennsylvania Railroad property within the central part of the city was the subject of perennial study and negotiation throughout this period. See *Sun*, 29 and 30 May 1913 and 26, 27, and 28 February and 1 March 1917; *Municipal Journal*, 27 April, 11 May, and 9 November 1917. On the taxation of the Pennsylvania Railroad, see *Sun*, 23, 24, 27, and 28 February and 13 and 18 March 1906.
23. *Sun*, 4 February 1916.
24. See *Addresses Delivered at the First City-Wide Congress of Baltimore, Maryland, March 8-11, 1911* (Baltimore, 1911).
25. *Municipal Journal*, 14 March 1913, 3 September 1915, 11 August 1916.
26. *Sun*, 23 January 1917.
27. *Ibid.*, 27 January 1917.
28. *Ibid.*, 2 June 1917, and 4 February 1916.
29. Harvey Cushing, *The Life of Sir William Osler* (Oxford: Oxford University Press, 1925).
30. Free Public Bath Commission, *Annual Report*, 1901.
31. *American*, 1 December 1905.
32. Municipal Tuberculosis Commission, *Annual Report*, 1910.
33. Mencken, 9 December 1911.
34. *Ibid.*, 9 April 1912.
35. *Ibid.*, 19 July 1911.
36. *Ibid.*, 16 June 1911.
37. Kemp, *Housing Conditions*.
38. Mayor's Message.
39. Kemp, *Housing Conditions*.
40. School inspectors, Health Department, *Annual Report*, 1906, 1908, and 1911.
41. Municipal Tuberculosis Commission, *Annual Report*, 1910.
42. *Sun*, 6 August 1911.
43. Supervisors of City Charities, *Annual Report*, 1907, p. 27.
44. Mencken, 7 December 1911.
45. *Ibid.*, 26 October 1911.
46. *Ibid.*, 4 October 1911.
47. *Evening Sun*, 3 March 1906.
48. Mayor's message.
49. *Municipal Journal*, 3 December 1915.
50. *Ibid.*
51. *Ibid.* See also Richard T. Ely, *Property and Contract in their Relation to the Distribution of Wealth*, 2 vols. (New York: Lord, 1914).
52. U.S., Department of Labor, Bureau of Children, *Infant Mortality*.
53. National Archives, Record Group 102, boxes 216 and 220, records relating to *Infant Mortality*, interview with Anna Herkimer, 28 June 1916.
54. *Ibid.*, interview with John Ferguson, 28 June 1916.

55. Maryland Bureau of Industrial Statistics, *12th Annual Report, 1903-1904*.
56. On Progressivism in Baltimore, see James B. Crooks, *Politics and Progress*.
57. National Archives, Record Group 102, boxes 216 and 220, records relating to *Infant Mortality*, Interview with William L. Fitzgerald, 28 June 1916.
58. Kemp, *Housing Conditions*; U.S., Department of Labor, Bureau of Children, *Infant Mortality*; Great Britain, Board of Trade, *Cost of Living in American Towns: Report of an Enquiry by the Board of Trade into Working Class Rents, Housing and Retail Prices* (London, 1911), pp. 73-84.
59. Police Census of Negroes, 1904, published in Maryland Bureau of Industrial Statistics, *13th Annual Report, 1905*; and Police Housing Census, 1913.
60. W.E.B. Dubois in *The Crisis* 1 (1910), as cited in Aptheker's documentary history, *The Negro People in the United States, 1910-1932* (New York: The Citadel Press, 1951).
61. *Sun*, 22 and 24 February 1917.
62. *Ibid.*, 3 March 1917.
63. *Ibid.*, 1 May 1917.
64. *Ibid.*, 5 April 1906.
65. *Ibid.*, 12 and 15 May 1913.
66. *Ibid.*, 2 February 1917.
67. *Sunday Sun*, 4 March 1917.
68. Maryland Bureau of Industrial Statistics, *Annual Report*.
69. *Sun*, 1, 2, 3, and 5 January 1910.
70. *Ibid.*, 15 December 1909.
71. Manuscript memoir at Jewish Historical Society.
72. *Sun*, 2, 4, 15, and 24 February and 3, 6, and 10 March 1916. *Official Souvenir*, Third Biennial Convention of the Amalgamated Clothing Workers of America, Baltimore, Md., 13 and 19 May 1918.
73. *Sun*, 17 February 1916.
74. Jacob Moses, interview by Isaac M. Fein in Jewish Historical Society.
75. Herman Seidel, interview by Isaac M. Fein, in Jewish Historical Society.
76. Cardinal Gibbons, Report to the Holy See, 1912, in John Tracy Ellis, *The Life of James Cardinal Gibbons, Archbishop of Baltimore, 1834-1921*, 2 vols. (Milwaukee: Bruce Publishing Co., 1952).
77. Mary L. Swanson, "A Study of the Polish Organizations of Baltimore" (M.A. thesis, The Johns Hopkins University, 1925).
78. Sara Jean Reilly, "The Italian Immigrants, 1920-1930, in Baltimore" (M.A. thesis, The Johns Hopkins University, 1962).
79. U.S., Department of Labor, Bureau of Children, *Infant Mortality*.
80. *Sun Magazine*, 3 June 1973, p. 2.
81. *Sun*, 5 April 1906.
82. *Ibid.*, 21 January 1917.
83. *Ibid.*, 2 March 1917.
84. *Maryland Geological Survey* 3 (Baltimore, 1899).
85. Maryland, State Roads Commission, *A History of Road Building in Maryland* (1958), p. 132.
86. *Sun*, 20, 24, and 26 January 1917.
87. *Ibid.*, 24 January 1917.
88. Ferdinand C. Latrobe, *Iron Men and Their Dogs: A History of Bartlett, Hayward* (Baltimore: I. R. Drechsler, 1914). The industrial might of Baltimore in World War I can be traced in its geographical location by the official restricted areas (*Sun*, 9 May 1917) and by the volumes of ground water used and problems of ground water contamination (John C. Geyer, "Groundwater in the Baltimore Industrial Area" [Ph.D. diss., The Johns Hopkins University, 1944]).
89. *Sun*, 26 March 1917.
90. *Sun*.

91. Ibid., 26 February 1917.
92. Ibid., 2 March 1917.
93. Ibid., 21 February 1915.
94. Ibid., 4 April 1917.
95. Ibid., 21 February and 4 and 30 April 1917.
96. Ibid., 22 May 1917.
97. Ibid., 16 March 1917.
98. Ibid., 24 March 1917.
99. Ibid., 20 February 1916 and 17 May 1917.
100. Ibid., 5 March 1917.
101. Ibid., 4 March 1917.
102. Ibid., 2 March 1917.
103. Ibid., 26 January 1917.
104. Ibid., 24, 28, and 29 January 1917.
105. Ibid., 2 February 1917.
106. Ibid.
107. Ibid., 5 April 1917.
108. Ibid., 1 April 1917.
109. Ibid., 1, 9, and 10 March 1917.
110. Ibid., 10 March 1917.
111. Ibid., 11 March 1917.
112. Ibid., 16 May 1917.
113. Ibid., 9 March 1917.
114. Ibid., 16 March 1917.
115. Ibid., 7 March 1917.
116. Ibid., 24 May 1918.
117. Ibid., 31 May 1917.