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DOWNTOWN: A GOLDEN TRIANGLE



fig. 2.1
THE GOLDEN
TRIANGLE

Of the various claims about who first likened downtown Pittsburgh to a Golden Triangle, one has primacy. After the Great Fire of 1845 ravaged the city's core, Mayor William Howard is said to have declared, "We shall make of this triangle of blackened ruins a golden triangle whose fame will endure as a priceless heritage."

The Golden Triangle nickname was already well established locally by 1914, when an article in the *Saturday Evening Post* gave it national publicity. The nickname was a good fit because the 255 acres bounded by Grant Street and the Allegheny and Monongahela rivers must count among the most gilded in the United States, having generated immense wealth. The Triangle constitutes a city in itself, with retail strips on Wood and Smithfield streets and Forbes and Fifth avenues, a government center on Grant, two churches and the Duquesne Club on Sixth Avenue, and extensive cultural facilities set among the cast-iron fronts and loft buildings on Penn and Liberty avenues.

The compactness of the Golden Triangle is a marvel in its own right: no two of its points are more than a fifteen-minute walk apart. The subway route from Grant Street to Gateway Center is so tiny that its entire length is shorter than the subway platform beneath Times Square in New York.

Being so small, downtown Pittsburgh is the preserve of pedestrians. In winter, they tend to stay indoors by using the subway and the tunnels, atriums, and interior streets of the new buildings. During the other seasons they move outdoors and enjoy Point State Park or Market Square, which has been hosting public gatherings since 1784. At noon every day, lunch crowds descend on Mellon Square, PPG Place, PNC Plaza, or the plazas set around the U.S. Steel tower and 625 Liberty. PPG Place was designed as a contemporary variant of Paris's Place Vendôme, but its main attraction now is a fountain that doubles in winter as an ice-skating rink.

The remaking of the Triangle during the Pittsburgh Renaissance of the 1950s was a closely guarded process, led by Richard King Mellon and Mayor David L. Lawrence with a largely self-taught staff under Park Martin, Wallace Richards, and John Robin. The upgrading of the Triangle in the 1980s (the so-called Renaissance II) was, by contrast, a technocratic rather than an autocratic process, with Mayor Richard Caliguiri and the Urban Redevelopment Authority devising the urban upgrades. The results were nevertheless substantial: the subway, cosmetic improvements to Grant Street, the first Lawrence Convention Center (even though it was a functional and artistic disappointment), Liberty Center, Oxford Centre, Mellon Center, PPG Place, Chatham Center II, Fifth Avenue Place, and 625 Liberty in the Triangle, with spin-off developments in the Strip, the South Side, and the North Side. These renewal efforts involved about five times as much building as in the original Renaissance projects in the 1950s.

fig. 2.2
THE FOUNTAIN
AT THE POINT





fig. 2.3
DOWNTOWN,
LOOKING WEST TO
THE OHIO RIVER

In the twenty-first century the Triangle is undergoing a different kind of change. No longer just a place to which business people commute, it has recently become home to some three thousand residents, with up to five times that number projected to move Downtown in the decade beginning in 2010. Across the whole of Downtown and in the adjacent Strip, dozens of older buildings have been converted to student dormitories, apartments, or condominiums.

Parking remains a hurdle to Downtown redevelopment, not so much in its scarcity as its cost. (However, you can park all day in downtown Pittsburgh for the price of a half hour in midtown Manhattan.) Retail is spotty: the suburban malls get most of the trade, and the only large department store still in Downtown is the Macy's that was Kaufmann's for 135 years. Only one movie theater remains from the dozen of a century ago. Overall, though, entertainment and the arts are flourishing Downtown. The Pittsburgh Cultural Trust now manages five updated theaters and concert halls in the Triangle: Heinz Hall, Benedum Center, the Byham and O'Reilly theaters, and the Harris Theater, an art cinema. Finally diversified from its old state as a purely business center, the Triangle's current health is vigorous: where it leads, the rest of Pittsburgh will follow.



fig. 2.4
THE MONONGAHELA
WATERFRONT

THE POINT AND THE MONONGAHELA RIVERFRONT

In 1868, Boston journalist James Parton wrote of Pittsburgh, “On that low point of land, fringed now with steamboats and covered with grimy houses, scarcely visible in the November fog and smoke, modern history began.” Not everyone would agree with Parton that “modern history” first announced itself in Pittsburgh. Events of some importance also took place in Williamsburg, Boston, and Philadelphia, not to mention Athens, Florence, and Runnymede. But the juncture of the Monongahela and Allegheny rivers—known as the Forks of the Ohio in the eighteenth century—was the setting for three milestones. At that spot in 1758, North America was secured for the British and not the French. In 1875, Andrew Carnegie’s revolutionary steel mill secured the industrial might of the world for the United States and not Europe. In 1945, there began one of the most striking rebirths of any city in the country.

The fifty-nine acres at the Forks of the Ohio are today split between Point State Park and Gateway Center, together encompassing twelve office and residential towers, four bridges over land and water, two military strongholds, and one of the world’s more vivid fountains. The views across the water to the South Side and North Side capture the industrial history of Pittsburgh, while on the land side stands Gateway Center, the starting point for the city’s rebirth in the 1950s. It is not much of an exaggeration to say that without Gateway Center, the city might have withered to an unrecognizable husk of its former glory.

The British intended Fort Pitt to be their stronghold in North America, and its construction became the first great accomplishment in Pittsburgh. When a military engineer, Captain Harry Gordon, devised it in 1759, he had the benefit of three centuries of advancement in the science of fortifications, going all the way back to Renaissance Italy. Gordon gave the fort the shape of a slightly irregular pentagon with five pointed bastions. The bastions minimized cannon fire from direct broadside hits on the long sides and helped pin down enemy troops before they could storm the walls. Two of the bastions had walls nearly fifteen feet high and seven and a half feet thick. Those solid stone walls were faced with 1,244,160 bricks. The fortress walls were keyed to the kinds of attacks the British anticipated: on the land side, from which infantry would attack, the walls were of brick and stone; facing the water, across which cannon would fire, there were earthworks to absorb the blows. Inside the fort was a parade ground with casemates (underground rooms framed in timber), magazines, and housing for a thousand men; outside was





fig. 2.5
FORT PITT BLOCK
HOUSE, THE
OLDEST STRUCTURE
IN PITTSBURGH

a moat with a drawbridge and an earthen embankment. The bricks were made locally, the stone was quarried locally, and the timber was planed at a stream in Pittsburgh's West End that has ever since been known as Saw Mill Run.

Luckily, the greatest fort England ever built in the Western Hemisphere was put to the test only once, in Pontiac's Rebellion of 1763. Despite its elegance, the fort had major problems. The river-oriented earthworks eroded badly in the spring floods, and none of the bastions proved effective against snipers.

In 1764, dismayed by the fort's poor performance, Colonel Henry Bouquet constructed five redoubts outside its walls to catch snipers in cross-fire; one of them survives. Fort Pitt and the other four redoubts were allowed to tumble into ruins just one generation after the French threat ended. When the Grenadier, Music, and Flag bastions were rebuilt in the 1950s, their plans and details were based on archaeological observations. Nonetheless, experts later found fault with the restoration: the Music Bastion was not accurate, the bricks in the walls being mostly modern, and the moat opposite the Hilton Hotel was narrower and shallower than the original. These charges were used as justification for filling in the moat in 2008 in order to expand the area for concerts and other public events.

The Block House, as Colonel Bouquet's surviving pentagonal redoubt is misnamed, still carries his name and the date 1764 inscribed over the door. It retains its original sandstone base, a complete rim of wooden girders, and coursed common-bond brick walls. Iron cranking plates in the walls support the upper floor, and the diminutive building bears a modern pyramidal roof of wooden shingles. This glimpse into American colonial history is the oldest surviving structure in Pittsburgh.

By the first decades of the nineteenth century, Fort Pitt had been so thoroughly vandalized that even the earthen ramparts were gone. A few voices suggested that the Point could be turned into the city's first park, but the fate of the site was sealed in 1854, when the Pennsylvania Railroad built the Duquesne Freight Depot directly over the ruins. It would take nearly a century for the city and state to redevelop the Point for shared use as a historic park and an office complex. In 1947, while the development of Gateway Center was being debated, Edgar J. Kaufmann gave Frank Lloyd Wright a new commission (they had partnered to create Fallingwater a decade earlier). Kaufmann wanted renderings for a circular megastructure thirteen levels high and one-fifth of a mile in diameter, with a helical auto ramp that would have been four and a half miles long. Pittsburgh shied away from this oversized vision of the future, which would have obliterated the historical relics

at the Point, but it did adopt Wright's ideas for a colossal fountain and twin bridges crossing the rivers close by. This episode supports the idea that history repeats itself, since John Augustus Roebling had proposed a double suspension bridge for the Point a century earlier.

George Richardson, who engineered the Fort Pitt Bridge over the Monongahela and the Fort Duquesne Bridge over the Allegheny, was a master of bridge design during his forty-year career in Pittsburgh and Allegheny County. Richardson and his design team transformed what might have been a potentially ugly overpass connecting the two bridges into a luminous portal of three ultrathin stretched barrel vaults. The tensioning of the prestressed reinforcing rods in the concrete vaults was so complex that the final calculations of 1962 were personally overseen by the celebrated French bridge builder Eugène Freyssinet just before his death that same year.

The eye-catching element in Point State Park turned out to be not its fort but its fountain. All of the planners who had eyed the Point for a hundred years imagined some focal element here. For Wright, it was a fountain; for Robert Moses, a shining beacon; for other visionaries it was a colossal sculpture—of a steelworker, an allegorical Meeting of the Waters, or the legendary steelworker Joe Magarac. (Legend holds that Magarac—which is Slovak for “jack-ass”—was the strongest steelworker in Pittsburgh. According to the tale, he would measure the consistency of a ladle of molten steel by tasting it and ended his life by leaping into a blast furnace to upgrade the quality of its iron ore.) What emerged in 1974 was a geyser that normally jets about 150 feet high but can rise—to challenge all aquatic records—to more than 300 feet. It spews 6,000 gallons of water a minute from a 100,000-gallon hidden reservoir fed by an aquifer some 50 feet below ground. (This so-called “fourth river” is a staple of Pittsburgh trivia quizzes.) The fountain was not the only way to accentuate the Point, but since the old Pittsburgh had its columns of fire and smoke, there is some appropriateness to this play of waters as a symbol for the cleaner city of today.

Until the 1990s, Pittsburgh was the only city with structures designed by both of the grand Kahns of American architecture: Albert and Louis. In the 1930s, the industrial architect Albert Kahn put up an important component of the Heinz factories on the North Side, and in 1976, Louis Kahn (no relation) designed the American Wind Symphony's barge *Point-Counterpoint II*, which for several decades was docked on the Allegheny River frontage of the Point. Kahn's barge would float down the Ohio and Mississippi rivers for concert tours in the summer. The floating concert hall and musicians' dormitory was clad in burnished steel, and with its huge portholes, it looked like a



fig. 2.6
FOUR GATEWAY
CENTER

fig. 2.7
UNITED
STEELWORKERS
BUILDING





silver flute gliding over water. Since 1996, the symphony has chosen to sail Kahn's barge in different waters; it now takes music through the heart of North America and as far away as Europe.

Gateway Center, with the earlier Gateway Plaza and later Equitable Plaza, was more than a postwar investment by the Equitable Life Assurance Society; it was a leap of faith in the future of Pittsburgh and—in a way no longer imaginable—a demonstration of the healing power of modern architecture. Conceived in 1947, One, Two, and Three Gateway were among the most talked-about buildings after World War II because, apart from New York's Rockefeller Center, so large a single-blueprint commercial complex could be found nowhere else in the world. Also making the leap of faith were the corporations that signed up as tenants: Jones & Laughlin Steel, PPG Industries, People's Gas, and Westinghouse, which made their commitments on the basis of nothing more than a sketch.

The design of these cruciform towers represented a tug of war between the traditionalists Otto Eggers and Daniel Higgins, both involved with John Russell Pope in the design of the National Gallery and the Jefferson Memorial in Washington, and the progressive Irwin Clavan, who in the same years designed cruciform-tower housing estates in New York. Behind Gateway Center also lies the exemplar of Le Corbusier's towers-in-the-park scheme for Paris in 1922. Between seven and fifteen cruciform towers were originally projected for Pittsburgh, all in traditional brick and limestone. At the last minute the designs were respecified for stainless steel, but scarcities because of the Korean War resulted in the use of chrome-alloyed steel.

When building resumed in Equitable Plaza, across Liberty Avenue, from 1955 to 1968, the landscape architects used a more informal site plan. However, the continuous perimeter podium they created makes this half of Gateway Center more difficult to enter from the adjoining streets. The Verizon Building and the Pennsylvania State Office Building on the plaza are conventional office slabs, but the bold shape of Four Gateway, with its long glass tower and extruded stainless-steel service wing, is a fine expression of mid-century modernism.

One of the criticisms of Gateway Center (especially in Jane Jacobs's *The Death and Life of Great American Cities*) is the way it turned its back on the larger city. Fifth Avenue Place, on the opposite side of Stanwix Street, was the first building in thirty-five years to create a visual link with the Gateway complex rather than standing back from it, as the PPG and Riverfront Center, at 20 Stanwix Street, complexes do.

Opposite Fifth Avenue Place, at the corner of Stanwix and Penn, stands a still fondly remembered remnant of Downtown's retail history. The structure that for a century housed the Joseph Horne Company department store is today Penn Avenue Place and serves not shoppers but the Highmark medical insurance group (also the main tenant in Fifth Avenue Place). The exterior is handsome in a conventional Beaux-Arts way, while the interior was once striking in its high Tuscan Doric columns with gilded moldings—all now stripped away. The elaborate brass window surrounds at ground level are not there just for show: Horne's was devastated by the St. Patrick's Day flood that struck Pittsburgh in 1936. Afterward, these fittings were added so that enormous brass plates can be placed over the windows to keep the Allegheny out, should it rise that high again.

Three important buildings complete Equitable Plaza toward the Monongahela bank. The United Steelworkers Building is the main monument to organized labor in Pittsburgh, the city in which the Iron & Steel Workers Union (predecessor of the American Federation of Labor) was organized in 1876. The union headquarters building, originally constructed for IBM, is also a milestone in skyscraper architecture; it shattered a long-held dogma of skyscraper construction whereby the exterior walls generally did not support any of the load. For this skyscraper, however, U.S. Steel instead fabricated an exterior load-bearing wall in place of a conventional "curtain" wall. During construction, the three different types of steel in the exterior walls were painted red, white, or blue to designate their different structural roles. The midcentury slickness of the design can at times be cloying, but particularly at night the thirteen-story diamond-faceted walls of stainless steel hover alluringly over the heavy concrete base.

The union building faces a mildly Gothic brick-faced St. Mary of Mercy Church on the opposite corner of Boulevard of the Allies and Stanwix. A harmless legend—possibly even true—holds that the church stands just where the first Mass in Pittsburgh was celebrated in 1754. Behind the United Steelworkers' tower, overlooking the Monongahela's bank at Stanwix Street at the corner of Fort Pitt Boulevard, stands the former world headquarters of Westinghouse Electric Corporation. The dark gray anodized aluminum slab for what was then one of Pittsburgh's corporate mainstays was less progressive in design than the same company's research centers built in the 1950s and 1960s at Churchill and Monroeville. Nonetheless, Westinghouse was technically distinguished by its pioneering integration of the lighting, heating, and air-conditioning systems and by having the world's first talking elevators, developed by Westinghouse, of course.



Riverfront Center, at the opposite corner of Stanwix Street and Fort Pitt Boulevard, takes a more informal approach to corporate architecture: a skewed hexagon wrapped in sunscreens of Italian travertine. The appearance of sunscreens in Pittsburgh marked the final confirmation of the efficacy of its stringent pollution controls: in pre-Renaissance Pittsburgh, few people worried about overexposure to the sun.

First Side is a finely scaled district comprising the dozen blocks along the Monongahela waterfront from Stanwix to Grant streets and from Fort Pitt Boulevard to the Boulevard of the Allies. Its western end, between Stanwix and Market streets, follows John Campbell's provisional plan of 1764. The layout of First Side was shaped a second time by the Great Fire of 1845, which leveled most of it, and a third time by the enlargement of Second Avenue into the Boulevard of the Allies, in 1922. The resulting traffic flow cut First Side off from the rest of Downtown, which helped preserve it. Its richly detailed shops and warehouses, with dramatic views of the Monongahela River and Mount Washington, are now being enhanced by 151 FirstSide, an eighteen-story tower on the waterfront that was the first new condominium in the Golden Triangle since the Pittsburgh Renaissance.

Architecturally, the most consistent block remaining from the old Golden Triangle is the 100 block of Market Street between the Boulevard of the Allies and First Avenue. Here, except for two gaps, both sides of the street are packed with commercial structures that have residential lofts on the top floors. The buildings are largely mid- and late nineteenth-century substitutes for shops and warehouses that were lost in the fire of 1845.

Whatever fate held in store for Pittsburgh in 1784, surveyor George Woods was sure it would be linked to the Monongahela, so he drew most of his 490 lots as narrow strips on the numbered avenues parallel to the Monongahela. In consequence, scores of First Side's towers have double façades that stretch from one avenue to another. This feature is particularly evident in the 200 block of Fort Pitt Boulevard, between Market and Wood streets, where a dozen of the best old commercial buildings front on both the Monongahela and First Avenue. For a hundred years, until 1955, the riverbank was a single broad levee, where steamboats would pick up and disgorge passengers and freight. The steamboat and barge trade was so voluminous at Pittsburgh that for a century the city claimed to be the world's busiest inland port; in some quarters that claim persists.

The Conestoga Building at the corner of Fort Pitt Boulevard and Wood Street got its name from the westward pioneers who bought covered wagons in the Conestoga Valley of Lancaster County and then brought them across the

Alleghenies to Pittsburgh, where they embarked by boat for the West. Though shorn of its elaborate cornice, the Conestoga Building survives as one of the oldest steel-frame buildings in town.

Most of the nearby structures on the riverfront predate the Conestoga by a generation, and several feature cast-iron fronts. Two examples of the latter are 235 and 239 Fort Pitt, where iron elements were bolted over traditional brick and wood façades. Closer to the Point, at number 231, is an elegantly restored Italianate brick and stone façade. The old four-story warehouse at 227 Fort Pitt Boulevard now stands as a contemporary evocation of the oriel fronts or narrow bay windows that once overlooked many of Pittsburgh's streets a century ago.

Wood Street unfolds its architectural character block by block from the Monongahela to Liberty Avenue, offering excellent examples of architectural styles popular after the Great Fire of 1845. One block in from the river, at the corner of Wood Street and First Avenue, stand four Beaux-Arts skyscrapers (two with matching façades on the Boulevard of the Allies), which in their *gravitas* suggest Pittsburgh's consciousness of being midway between Chicago and New York, with the power of the first tempered by the urbanity of the second. At 101–103 Wood Street there survives another of Pittsburgh's cast-iron fronts, this one from about 1860. Despite a lifeless retrofitting in the 1980s, the iron-stamped Gothic façade provided some inspiration for the design of the neighboring Wood-Allies Garage on the Boulevard of the Allies. That nine-level steel-deck cage begins with a red neo-Romanesque brick base and ends as a parody of the fake Gothic pinnacles of PPG down the block.

After two blocks that are predominantly Beaux-Arts in character, Wood Street switches its architectural code at the intersection with Boulevard of the Allies to Art Deco in the twenty-one-story main building of Point Park University (the university uses Wood Street as the central promenade of its urban campus). What failed once as an athletic club and again as a hotel today succeeds as a leading center for the performing arts. With thirty-five hundred students, Point Park University is a major component of the Golden Triangle educational offerings. An estimated forty thousand students can be found Downtown on weekdays, a projection that is accurate if it also encompasses Duquesne University, on the edge of Downtown.

The blocks farther inland introduce other architectural styles: late international style for the YWCA at Third Avenue, and mid-Victorian for a set of storefronts beyond Fourth Avenue at 409, 411, 413–415, and 417 Wood Street. The second to last of these has been the home of Weldin's stationers since 1883; the current classically inspired façade is a redesign from 1905.



PPG PLACE, FOURTH AND FIFTH AVENUES,
AND MARKET SQUARE

54

PITTSBURGH:
A NEW
PORTRAIT

The construction in 1979–1984 of a world headquarters for PPG Industries had significant impact not just on the lower blocks of Third and Fourth avenues but for the whole of Downtown. PPG Place occupies five and a half acres in a complex of eight elements that occupy or touch six city blocks. The central element is the half-acre open plaza, with a forty-story glass tower in the center and five uniformly detailed low-rise structures around it. Between the tower and the Gateway Center complex on Stanwix Street lies the three-story Wintergarden atrium, while a second atrium below Two PPG Place is home to restaurants and specialty shops. Everything is sheathed in uniform mirror glass, with twenty thousand pieces of silver PPG Solarban in the tower alone. In winter, the outdoor plaza becomes a skating rink; the rest of the year children enjoy the user-friendly “water feature” fountains around the central obelisk.

The creation of PPG Place in 1984 was an American corporation’s outstanding act of generosity toward its home city. Pittsburgh Plate Glass was founded half a block away in 1883 by John Pitcairn and John B. Ford. Today, it is the largest producer of glass in the world, as well as a giant in paints, plastics, and chemicals. When the company considered building a headquarters tower near its birthplace on Market Street, it knew that it would be relatively easy to buy only the half acre it needed. But what PPG really wanted was to upgrade the whole district in the manner of Rockefeller Center, so it purchased an area ten times larger than needed for its own building. It was a daring move, considering the financial and political risks involved. Another daring move was the selection of Philip Johnson’s unconventional Post-modern Gothic design for the PPG office tower. It marked only the second time in the postwar era (after Johnson’s design for the AT&T headquarters in New York) that an American corporation had chosen fantasy over the staid International School Style for its public image.

The obvious precedent of the PPG design is the Victoria Tower at the Houses of Parliament in London, though it is only about half the height of PPG’s 635 feet. There was also a local model: the Cathedral of Learning at the University of Pittsburgh. PPG’s tower is a brilliant apparition when seen from outside the Triangle, for example, from West Park on the North Side. Unlike the Cathedral of Learning, which has a rich variety of surface and texture, the PPG tower tends to the monotonous at close range. The interior, with its soaring lobby and repetitive arches, is visually unyielding, although handsome with its deep-red glass paneling. Despite these blemishes, PPG Place



fig. 2.8
PPG PLACE



fig. 2.9
OBELISK AND
FOUNTAIN AT
PPG PLACE



was one of the best twentieth-century additions to the Pittsburgh skyline. Those few who are truly unhappy with the glass tower should not throw stones, especially inside the lobby, where closed-circuit television cameras watch from behind one-way glass.

In the last three decades of the nineteenth century, profits from oil, iron, glass, coal, coke, and steel made Pittsburgh second only to New York in terms of amassed capital. The two-block stretch of Fourth Avenue from PPG Place up to Smithfield Street, intersected by Wood Street, was once home to the dozen banks that stored this capital. Pittsburgh still has high importance as a financial center, but the oil and stock exchanges and most of the banks that made Fourth Avenue an erstwhile rival to Wall Street were torn down years ago. The most distinguished of these vanished structures was Frank Furness's quirky but lovable Farmers' Deposit National Bank as well as the Bank of Pittsburgh, the latter a close approximation of the New York Stock Exchange. Constructed in 1896, the Bank of Pittsburgh came down in the 1940s, although its columns survive in Jefferson Memorial Cemetery in suburban Pleasant Hills.

As the oldest commercial building and the only externally intact Greek Revival structure in Downtown today, the Burke Building at 209 Fourth Avenue has seen it all. Built in 1836, and for a time serving as a bank, it stood for a decade before the Great Fire skirted it by a few feet in 1845. The building's owners were the Irish-born lawyers Robert and Andrew Burke; their architect, John Chislett, was born in England in 1800 and schooled himself in the Neoclassical traditions seen in the buildings of Bath. Chislett came to Pittsburgh around 1833 and was the city's dominant architect during the mid-nineteenth century. The Burke Building today resembles a domestic more than a commercial design: a brick structure faced in sandstone, Doric columns at the door, and a four-square plan with fireplaces and a central stair hall. With windows elongated almost to doors in the manner popularized by Thomas Jefferson, it is uncompromisingly elegant.

The trio of the Benedum-Trees, Investment, and Arrott buildings on Fourth Avenue just below Wood might recall the fortified towers of medieval Bologna or San Gimignano. The rhythm for the group was set by the Arrott, at the corner of Fourth and Wood. Its designer, Frederick Osterling (1865–1934), was both prolific and quarrelsome, but he was a generally brilliant designer in Pittsburgh for nearly half a century. His range of styles included Romanesque, Classical Revival, and modern Gothic. Osterling's design for an insurance magnate demonstrates the usual academic sequence of a large-scale base intended for retail purposes, then a shaft of office floors in rusticated brick patterning, and a cap of four stories with tall arched

windows and an exuberant copper cornice. The lobby is an equally impressive mix of marble, mosaic, and brass.

Three years after Osterling designed the Arrott, the Machesney tower rose at 221 Fourth Avenue; it was later renamed the Benedum-Trees Building after the oilmen Michael Benedum and Joseph Trees bought it. At nineteen stories, Benedum-Trees was only slightly lower than the Arrott, and it clearly responded both to the Arrott and to the now-vanished Bank of Pittsburgh in its dramatic base of Corinthian columns and oriel windows, an aggressively vertical terra-cotta shaft, and an enormous overhanging entablature complete with lions and florid curved brackets. The Investment Building at 239 Fourth Avenue went up in the 1920s, making it a generation younger than the towers left and right of it. Its brick shaft is a total abstraction without ornament, but at the top the corners are sliced away to reveal a set of elegant obelisks, powerful enough to catch the eye of Philip Johnson when he designed his Neoclassical obelisk for PPG Place down the block.

Point Park University Center is an adaptive reuse of a group of six banks that once clustered together in the 400 block of Wood and up Fourth and Forbes avenues. The first two banks were the Freehold Building and the Real Estate Trust Company on Fourth Avenue, both from the 1890s. These were joined at the corner of Fourth and Wood in 1901 by the People's Savings Bank, a fifteen-story tower that mirrors the Arrott tower across Wood Street. It might be called competent rather than remarkable except for the brilliantly handled semi-circular stairwell inside and the raised brick panels that are randomly scattered on the exterior, giving the building the appearance of a decaying Roman ruin. The bank's most delicious feature is its two dramatic reliefs of industrious bees, easily inspected from the sidewalk.

In 1902, the Colonial Trust Company cut sideways through the block to create a fourth building, with twin Renaissance-style façades on Fourth and Forbes avenues; what was supposedly the world's longest bank lobby ran in between. In 1926, the dual façades became a trio when the lobby was extended as a T-shape and fronted with a severe Ionic pediment at 414 Wood. The sixth and last piece of the puzzle fell into place the next year, when a new building linked the Wood Street façades of the People's Bank tower to the Colonial Trust. In 1976, prominent Argentina-born designer Rodolfo Machado, who was working for the IKM Partnership and taught at Carnegie Mellon, came up with a cool, minimalist design for a shopping mall project that would amalgamate these buildings. The design scheme was widely praised but underfunded, and an inexpensive alternative design was used instead. When that mall went bankrupt, the complex underwent a final renovation in 1997 and





fig. 2.10
BURKE BUILDING

fig. 2.11
PEOPLE'S SAVINGS BANK

fig. 2.12
DOLLAR BANK

fig. 2.13
ARROTT BUILDING

fig. 2.14
TIMES BUILDING

2.10
2.11 2.13
2.12 2.14

emerged as the Point Park University Center. What sounds like a depressing chronicle has ended on an uplifting note: the interior columns and the lilting volumes of the interior are just short of breathtaking. A grand staircase on the right enables viewers to inspect the magnificent gold-paneled ceiling.

Fourth Avenue is marked by a particularly pleasing visual consistency today. Because of that quality, twenty-four of its buildings were incorporated into a National Register of Historic Places district in 1985. The south side of the 300 block of Fourth, from Wood to Smithfield streets, originally had a sequence of four banks and a newspaper office. The three turn-of-the-century banks at 306, 312, and 324 Fourth were the Union National Bank, the Commonwealth Trust, and Keystone Bank—all predictably sober except for the beautifully articulated Keystone Bank, where a light court was recessed in the façade and garlanded above by a bridgelike arch. The three towers were eventually amalgamated into the Union National Bank, whose core structure was converted into the Carlyle, a luxury condominium residence, in 2007. The first fourteen floors of standard units and four top floors of double-sized apartments sold at such a satisfying rate that the developers purchased the Commonwealth Building for conversion into an additional sixty residences.

The upper end of the same Fourth Avenue block is considerably less sober. The evolving social and business attitudes in mid- and late nineteenth-century America can be discerned by comparing the efflorescence of the earlier Dollar Bank, at the upper corner intersecting Smithfield Street, to the straitlaced Union National, at the lower corner intersecting Wood. Dollar Bank, dating from 1871, with wings added in 1906, is the ultimate in public relations architecture; it is a building that is all doorway. The red sandstone façade features a sumptuous pair of double columns guarding the door with the help of two dozing lions. Its designer, Isaac Hobbs, was a fashionable Philadelphia architect and architectural publisher whose conception of the bank shows at once what was both splendid and hopeless in Victorian architecture. The ornament is vigorous, learned, and delightful, but the essential lines of the façade are drowned by the Baroque and Italianate details.

The imbalance of the part and the whole, so characteristic of American architecture after the Civil War, was the problem that would occupy H. H. Richardson, who was just beginning his architectural career when Dollar Bank went up. Frederick Osterling, Richardson's long-distance pupil (there is no indication the two designers ever met), captured the simplifying ability of his "master" reasonably well in the four-story Times Building alongside Dollar Bank, at 336 Fourth Avenue. The patron here was the publisher, civic powerhouse, and GOP political boss Christopher Lyman Magee, for his



newspaper, the *Pittsburgh Times*. Now sensitively restored inside, this eight-story Romanesque Revival tower has façades on both Fourth and Third avenues, with the former enlivened by particularly fine grotesque carvings that are replicated in the dimly lit interior of the building.

What was once a solid line of buildings on the north side of the 300 block of Fourth Avenue is now broken by a parking lot, but even so, this view shows how good architects can make their structures distinctive without destroying the wider unity of a city block. The flagship of this upper block is the Standard Life Building at 345 Fourth Avenue, dressed in deep red Roman bricks and terracotta plaques. The Standard Life skyscraper “talks” to People’s Savings at the lower end of the block with its exaggerated detail on the upper floors, particularly the colossal arch stones set over the top windows. To the left of Standard Life is the earliest building of this cluster, the Fidelity Trust Building from 1889, at 341 Fourth. It begins well with a base of two massive arched doors and a dwarf mezzanine of three rectangular openings with colonettes, but in the upper floors the façade changes rhythm at almost every level, as though slices of a half dozen different buildings had been stacked atop one another.

In 1898, a decade after the construction of the Fidelity Trust Building, Henry Clay Frick summoned the dean of American architects, Daniel Burnham, to build the small Union Trust Company (now the Engineers’ Society) at 337 Fourth, immediately next door. This little Greek temple, with a podium of deeply channeled blocks below and severe Doric columns above, was the first of eleven projects that Burnham drew up for Pittsburgh—more than he created for any city except his native Chicago. Next door to Burnham’s monument, local architect Charles M. Bartberger built a considerably more accomplished structure for his Industrial Bank, at 333 Fourth Avenue. Bartberger was the German-trained son of the prolific German-born Charles F. Bartberger, who in terms of volume was one of Pittsburgh’s top architects from the 1850s to the 1880s. Charles M. in turn trained his own son, Edward W. Bartberger, who lived until 1968. Thus, three Bartberger generations practiced architecture in Pittsburgh for well over a century.

Charles M. Bartberger appears to have thought carefully about eighteenth-century Neoclassical precedents before crafting a Beaux-Arts synthesis for the Industrial Bank. The architectural languages of the Englishman Nicholas Hawksmoor, the Frenchman Claude-Nicholas Ledoux, and the German Peter Speeth seem to predominate. For dramatic effect, Bartberger capriciously overscaled elements like the triglyphs, some of which suddenly and irrationally droop down onto the masonry surface. Every element of the façade “speaks” as well as looks the part it was meant to play: the public banking hall

below is marked by the two-story sweep of the entrance arch, and the boardroom above is denoted by fat colonettes. Finally, Bartberger was subtle and amusing in his contextual references. The single perky acroterion (stylized plant leaf) on his pediment mimics the five that Burnham used with dour seriousness next door, while the combination of arch below and dwarf mezzanine above is a tribute to the same feature in the Fidelity Trust, two doors away. The Industrial Bank design was Bartberger's finest hour. Perhaps he knew it; at any rate, when the opportunity came, he seized it.

SMITHFIELD STREET AND DOWNTOWN RETAIL

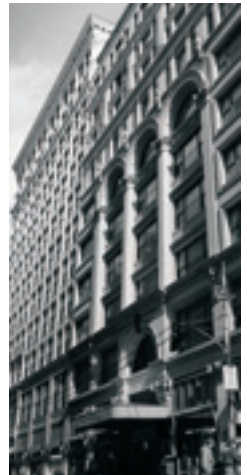
The name Smithfield Street constitutes a tribute to the little-remembered Revolutionary War captain Devereux Smith (1735–1799), who was a personal friend of George Washington and operated a successful Indian trading firm with Ephriam Douglass. Smithfield began as an ordinary cross-street like Wood, but when a bridge connected it to the South Side in 1818 it became richer and larger in scale, and its small, early buildings were cannibalized by bigger ones. There are, nonetheless, some worthy survivors. One is the elegant Adam-style Americus Club (now the Pitt Building) at the corner of Allies and Smithfield. Built in 1918 in the English Neoclassical Style of the late eighteenth century, the clubhouse's left side was amputated four years later when the narrow old Second Avenue was transformed into the Boulevard of the Allies. Two other lively survivors stand at 110 and 112 Smithfield. The first is a High Victorian Gothic commercial block, dated 1881, which presents itself with all the pugnacity of a piece of Eastlake furniture. It is a marvelous sight in the sparkle of its blue, red, and light brown tiles. The second standout is the L-shaped former home of Engine Company No. 2, a former firehouse from 1900 that introduces an Art Nouveau flavor to the neighborhood. It stands three stories tall, with a bleached white granite base and two stories of beautifully dressed sandstone.

The intersection of Smithfield Street and Fifth Avenue is the busiest in town and is among the most significant for its architecture. The prime building here is Macy's Department Store (Kaufmann's until 2006), while on the three other corners stand the old Mellon Bank headquarters, the early high-rise Park Building, and the Swindall-Rust headquarters, formerly the Frank & Seder Department Store, which provides a Classical counterweight to some of its more architecturally unruly neighbors. The elaborate clock at the Macy's corner proclaims the importance of the store: at close to a million square feet, its significance is not merely architectural but social and even cultural.



fig. 2.15
KAUFMANN'S CLOCK

fig. 2.16
MACY'S, FORMERLY
KAUFMANN'S



The Macy's store offers a prime recollection of three figures tightly woven into the fabric of Pittsburgh: Edgar Kaufmann Sr., Benno Janssen, and Frank Lloyd Wright. Brothers Morris, Henry, Jacob, and Isaac Kaufmann arrived in Pittsburgh from Germany in the years after 1860, and by 1871, they had a flourishing trade on the South Side. Around 1877, the Kaufmanns moved their store to this prestigious corner, and in 1885, the year Morris's son Edgar was born, they enlarged it into the "Big Store." The corner of the store now standing at Smithfield and Forbes was built for the Kaufmanns in 1898 by Charles Bickel and borrows motifs from the Romanesque and Classical Revivals, as well as from the Chicago school of Louis Henry Sullivan and his colleagues.

Edgar Kaufmann Sr. (1885–1955), universally known as E.J., took charge of the firm in 1913 and had the socially prominent architect Benno Janssen design a new terra-cotta block to replace the store built in 1885 at the corner of Smithfield and Fifth. A few years later Kaufmann purchased the first of fifteen hundred acres for a country retreat near Pittsburgh that Frank Lloyd Wright made world famous as Fallingwater. Janssen designed an extension of the store on Forbes Avenue at Cherry Way a few years later. In 1930, he modernized its ground floor interior in Art Deco Style, with piers of black Carrara glass and murals by Boardman Robinson. Critics regarded it as the most beautiful store in America—and the most profitable. It marked Kaufmann's first step toward Modernism.

The glass and murals are long gone from Kaufmann's/Macy's, and so is the office that Wright built for Kaufmann in 1936 and 1937 (contemporary with Fallingwater) on the store's tenth floor. Wright designed the furniture and paneling for this sumptuous suite, including a cypress plywood mural, and he selected the wall fabrics himself. The office served Kaufmann for twenty years, until his death in 1955, after which his son Edgar Jr. had it dismantled and shipped to London's Victoria and Albert Museum, where it is a star attraction.

Architect Benno Janssen (1874–1964) is undeservedly forgotten today, even though a recent biography offers excellent coverage of his body of work. Janssen was born to a German-American family in St. Louis, enrolled at the *École des Beaux-Arts* in Paris in 1902, and soon after came to work in Pittsburgh. He was the best academic designer Pittsburgh ever had, on a par with or superior to Carrère & Hastings, Horace Trumbauer, David Adler, Charles Platt, and the host of others who took care of wealthy Americans' architectural needs before and after World War I. Kaufmann was Janssen's most loyal client. He gave him nearly a dozen commissions and even lived in

Janssen's own home in Squirrel Hill before ordering a new house from him in Fox Chapel.

Janssen's career reminds us of Kaufmann's importance as a patron of architecture for many years before he built Fallingwater. Kaufmann commissioned buildings from Janssen, Wright, the Bauhaus-associated Richard Neutra (for Kaufmann's Palm Springs winter retreat, the outstanding example of American midcentury modernism), Joseph Urban (a swimming pool at the Irene Kaufmann Settlement on the Hill), and the important Pittsburgh architects Mitchell & Ritchey (for the Civic Arena in the lower Hill District). After Janssen retired in the 1930s, Kaufmann switched his architectural allegiance to Wright, and together the two men planned Fallingwater in 1934 and 1935.

Kaufmann's architectural patronage reminds us in turn of how important Frank Lloyd Wright (1867–1959) was to Pittsburgh and vice versa. Kaufmann was Wright's outstanding patron. Their partnership lasted twenty years and yielded nearly a dozen uncompleted projects in addition to those that were realized. The unfinished projects included Kaufmann's sponsorship of Wright's Broadacre City model, which was exhibited at Kaufmann's immediately after being shown in 1935 at Rockefeller Center; Wright's extensive sketches for a megastructure at the Point; the Rhododendron Chapel, meant to rise on the grounds of Fallingwater; another winter house (Wright intended it to outshine the one already built by Neutra); a hillside apartment on Mount Washington; and a planetarium and parking garage next to Kaufmann's store. Though disappointingly little came of it, the partnership of Wright and Kaufmann was one of the most intense collaborations of artist and patron in the history of American art.

AN ARCHITECTURAL PARADE ON FIFTH AVENUE

Fifth Avenue was for years Downtown's primary retail and entertainment corridor, but the free parking offered by the suburban shopping malls and theaters forced the street into decay. The throngs seen in old photographs of Fifth Avenue will never return, but in the meantime, there is heartening progress, with several excellent buildings waiting to be reutilized. The Park Building, at the corner of Fifth Avenue and Smithfield, is a design triumph by the then-dean of American architects, George B. Post. Completed in 1896, it was the third or fourth of Pittsburgh's steel-frame skyscrapers. Post's local patrons were David and William Park, operators of the Black Diamond Steel Works and major investors in Pittsburgh real estate. The site was appropriate; the Pittsburgh Iron Foundry went up at this intersection in



1805, and soon thereafter it cast the cannons that Commodore Perry fired on Lake Erie during the War of 1812 as well as the ones Andrew Jackson used at the Battle of New Orleans in 1815.

For the Parks, Post recast the design for his earlier Havemeyer Building in New York, but the Pittsburgh variant was substantially more interesting. The base is simplified and strong, and the nine identical middle floors are well articulated through corner windows. But the joy of the Park Building is in the thirty *telemones* or Atlases that are (seemingly) crushed by the weight of the top cornice. The telemones are cast in terra cotta and were originally polychromed. Pittsburgh has always loved them, perhaps because these mythological creatures straining at their work symbolize the hard physical labor that for so long characterized the city's work force.

The 300 block of Fifth Avenue, from Smithfield down to Wood Street, was for a century home to another of Pittsburgh's innovative skyscrapers. At 335 Fifth Avenue master piano salesman Samuel Hamilton erected the ten-story Hamilton Building in 1889 to a height of 125 feet. The building was a traditional masonry structure, not steel frame, but it was the last word in late Victorian commercial expression. A few doors down from where the "piano" skyscraper once stood is the structure that ate it up: Piatt Place, at the corner of Fifth Avenue and Wood Street. This was originally the Lazarus Department Store. When it went up in 1998, it was the first new American downtown department store in decades, though it failed almost immediately. The adaptive reuse given the structure in 2007 yielded another sixty-five luxury condominiums to house a growing Downtown population. The rest of the complex features street-level boutiques and restaurants.

fig. 2.17
PARK BUILDING



The final blocks of Fifth Avenue, from Wood Street to Liberty, offer an intriguing mix of late nineteenth- and late twentieth-century Pittsburgh. On the street's south side are arrayed a number of hearty survivors from the early retail days. The double-unit commercial structure at 214–218 Fifth Avenue is an Italianate cast-iron front from the 1860s or 1870s, with large glass panes and interlacing floral designs stamped out in iron molds. Farther down the street stand two particularly good examples of retail and office blocks from the early twentieth century: the Buhl Building at 205 Fifth Avenue from 1913, decked out in ebullient blue and cream terra-cotta plaques, and the Diamond Building (formerly the Diamond National Bank), from 1904, at the intersection of Fifth Avenue and Liberty. The latter rises twelve stories high and is topped by the most dramatic Beaux-Arts copper cornice in the city. The handsome block bends backward from its central entrance to fit into one of the triangular lots embodied in the quirky city plan of 1784.



OLIVER PLAZA AND PNC PLAZA

The closing of the tail end of Oliver Avenue between Wood and Liberty in the 1960s created a trapezoid block on which now rise four tall towers. The earliest of these was One Oliver Plaza, a thirty-eight-story glass-and-steel box standing on a base of dark granite at the Sixth Avenue angle of the trapezoid. At the Fifth Avenue end of the block stands One PNC Plaza, built as the Pittsburgh National Bank Building in 1972. This replaced an Italian Renaissance tower that Daniel Burnham erected for the predecessor First National Bank. One PNC Plaza was conceived as a glass slab, with a service core that is clad in pearl-gray granite. It does its job well, but at thirty stories, the current building is merely three floors higher than the 1912 tower it replaced, leading one to question the notion of architectural obsolescence.

Two PNC Plaza was squeezed between the One Oliver and One PNC Plaza towers in 1976. Although handicapped by weak linkage to the streets in front and behind them, the two interlocking mirror-glass octagons of Two PNC manage an elegant solution to an overbuilt site. The octagonal geometry of these twin towers relates well to the polygonal shape of the former Meyer and Jonasson department store, the low-rise neighbor at 606 Liberty Avenue. Meyer and Jonasson got its odd shape because it conformed to the old course of Oliver Avenue before it was filled in below Wood Street.

The technologically advanced Three PNC Plaza was Downtown's first high-rise in a generation. Its environmentally friendly materials and energy-efficient cooling and heating systems won it a LEED (Leadership in Energy



fig. 2.18
THREE PNC PLAZA

and Environmental Design) certificate from the U.S. Green Building Council. The bank's twenty-three stories encompass residential condominiums, an underground parking garage, office space (mainly for the venerable Reed Smith law firm), and a hotel. Construction of the tower is one more indication of the modest resurgence of Pittsburgh's business community.



MARKET SQUARE

The history of Pittsburgh is written out in buildings in every part of the Golden Triangle, as seen in First Side and in the palatial skyscrapers on Fourth Avenue that still speak of Pittsburgh's wealth in the early twentieth century. Visitors nonetheless get their best feel for old Pittsburgh in and around Market Square. Much of the square's pedestrian traffic comes from its utility as a walkway between PNC Plaza, a block to the north, and PPG Place, a block to the south. But even in its current weakened state—we can always hope for a better one—Market Square can still claim to be the heart of Downtown.

The square was the sole open space in George Woods's 1784 street plan. Over the years it was the site of a courthouse, a city hall, and a sequence of market buildings that came down only in 1961. Historically the square (western Pennsylvanians traditionally call a space like this a diamond) was always meant to be paved and built on, not green and open as the present pseudo-restoration has it. A better alternative would be to get rid of the quadrants, cover the central square with glass over a gigantic neon map of Pittsburgh, and invite citizens to dance there every night.

The diamond's perimeter buildings pretty much summarize Pittsburgh's architectural history: Gallagher's Pub and Ryan's Ale House (2 and 3 Market Place) from the Civil War era, a fragment of glassy PPG Place at the southwest quadrant, and a restaurant decked out in Tudor Revival. Two of the better citizens of the square are Nicholas Coffee and the Landmark Tavern, which dates to 1902. The former displays a tall Chippendale front crowned by a neon coffee cup with steam wafting out; this joking reference to Philip Johnson's Chippendale-topped Sony Building in New York serves also as an efficient device to give height to the façade and elegance to an urban gathering place that sorely needs it.

The best recent news for Market Square is the Downtown YMCA (along with apartments overhead) taking over the shuttered G. C. Murphy store where Market Square fronts on Forbes Avenue (the rebuilt complex goes by the redundant name of Market Square Place). Like the new housing and dining



fig. 2.19
MARKET SQUARE

opportunities for the pioneers who are moving Downtown, the Y's move to put exercise facilities at the heart of the Golden Triangle may be the tipping point in decades of effort to get Pittsburghers to move Downtown.

MELLON SQUARE AND THE SIXTH-OLIVER CORRIDOR

The creation of Mellon Square (bounded by Smithfield Street, William Penn Place, and Oliver and Sixth avenues) was an inspired mix of altruism and self-interest. The Mellons had been a presence in Downtown since Judge Thomas Mellon resigned from the bench in 1869 and opened a bank, saying that any man who could not get rich in Pittsburgh within ten years was a fool. Mellon's first bank was a masonry building at 514 Smithfield Street, roughly opposite what is now the square, but in 1873, the judge put up a more imposing cast-iron front that featured a statue of his hero, Benjamin Franklin.

Serene and majestic on the outside, Mellon Bank has covered the block of Smithfield between Fifth Avenue and Mellon Square since 1924, but it has been destroyed inside. The long and airy banking hall, one of Pittsburgh's prime architectural and social spaces, vanished in 1999 when its short-sighted owners and an overeager city hall let Lord and Taylor rebuild it as a *faux*-Manhattan emporium. Fifteen tons of Italian marble in each of the Ionic columns was smashed and hauled away, leaving just their steel cores. Gone was the vast basilicalike space of the hall, sixty-five feet tall and two hundred feet long; gone were the aisles coffered and painted deep blue with speckles of gold leaf; gone was any hint that the world's earliest venture capitalists once operated out of Pittsburgh. Befitting its place as the heart of Mellon operations, the hall commemorated A. W. and R. B. Mellon with portraits and inscriptions on the walls of the vault. After Lord and Taylor's quick demise a few years later, the now banal interior awaits some new use.

Banking was always just the visible tip of the Mellon money machine. Their investments in coal, coke, steel and its chemical by-products, oil, aluminum, real estate, and transportation were far more lucrative than what they earned as bankers. Until the appearance of megabillionaires in computers and securities in the 1980s and 1990s, the Mellons of Pittsburgh were among the wealthiest families in the world, in a league with the Fords, the Rockefellers, and the du Ponts.

The family headquartered its business ventures on Smithfield Street until three of those firms required their own headquarters. At the end of the 1920s, Gulf and Koppers moved two blocks away, to Seventh Avenue. Alcoa

tried to bolt from the family circle and build in New York after World War II, but Richard King Mellon had not backed the Pittsburgh Renaissance only to see it scorned at home. He quashed the move to New York, and he and his more worldly cousin Paul Mellon conceived a grand complex that would house Alcoa and the expanded bank operations in twin towers facing each other across a park. Construction of Mellon Square and its underground parking garage required demolition of a full city block, but it paid off handsomely in sight lines to all the surrounding buildings. Apart from creating a place in which its perimeter buildings might preen, Mellon Square holds up well as a period piece from the mid-1950s, when “organic” and “modern” were words architects could still use without stumbling. The design in Venetian terrazzo appears today somewhat thin in the manner of the Eisenhower years, but the trees and fountains have aged well, and Kenneth Snelson’s *Forest Devil* sculpture in stainless-steel pipes provides welcome animation.

Around Mellon Square rises a particularly impressive grouping of twentieth-century skyscrapers. On the Oliver Avenue or southern edge of the square rise the Mellon Bank of the 1920s, described above, and Citizens (originally Mellon) Bank, a postwar financial tower on the upper edge of the square. On the square’s western edge stands the Oliver Building, from 1910, and at its northwest corner the Heinz 57 Center, headquarters for Heinz North America. The structure was for decades a Gimbel’s department store, and before that Kaufmann & Baer’s, originally built by some breakaway Kaufmann cousins to rival the main Kaufmann store. At the corresponding northeast corner stands what was for years the Philadelphia Traction Company block, put up in 1902 by the transportation mogul P. A. B. Widener.

All of these perimeter buildings carry architectural distinction, but the most successful and renowned of them is the Regional Enterprise Tower, erected in 1953 as the Alcoa Building (the corporation handed it over in 1998 to a consortium of nonprofit organizations). Using aluminum wherever possible, Alcoa’s thirty-story tower is radically lighter and more efficient than buildings of comparable size. Its curtain wall was not constructed piece by piece but prefabricated in aluminum sheets that contained both windows and the floor zone. The windows swing open in special rubber gaskets, so the building’s exterior requires minimal cleaning and maintenance. Inside, the same spirit of radical innovation prevailed: aluminum furniture, aluminum piping and wiring, aluminum air-conditioning ducts, and an airy and fanciful lobby. This list of distinctions briefly propelled Alcoa to top rank among postwar skyscrapers, but it was evidently too futuristic for the national design community, which shunned it for thirty years until Richard Meier returned





fig. 2.20
REGIONAL
ENTERPRISE TOWER,
MELLON SQUARE



fig. 2.21
ALUMINUM SPIRE,
SMITHFIELD UNITED
CHURCH

to the prefabricated aluminum skin for his high-tech style in the 1980s and 1990s. Even locally, later building designs ignored Alcoa's precedent, except for the Porter Building. Half a block uphill on Grant Street, it looks (as the cliché goes), like the box Alcoa was shipped in.

NORTH OF MELLON SQUARE

The four blocks north of Mellon Square, marked by several narrow eighteenth-century streets, encompass an eclectic mix of architectural survivors. The most gracious of these is the Allegheny H-Y-P Club (formerly the Harvard-Yale-Princeton Club) on William Penn Place at the corner of Strawberry Way. It occupies one of the two plain brick rectangles that were built in 1894 as worker housing, then remodeled in High-style Georgian in 1930 by the academic classicist Edward B. Lee. The H-Y-P Club uses only the right block for its clubhouse; the left block houses nonprofit organizations linked to the adjoining Regional Enterprise Tower.

The end wall of the tiny court that separates the two blocks incorporates relics from schools back East: two columns salvaged from Appleton Chapel at Harvard and six stones of uncertain provenance from Princeton and Yale. Overhead is the fantastic sight of the rose window and aluminum spire of Smithfield United Church. Until women were admitted to the club in 1980, only two female guests had been officially entertained there. The actress Cornelia Otis Skinner was one, Mae West the other. West remarked on the occasion, "It's rather difficult for me to think up things to say to Harvard-Yale-Princeton men collectively. Of course, I can think of plenty to say to men individually."

Neighboring the club and a little downhill from it, at the corner of 620 Smithfield Street and Strawberry Way, stands Smithfield United Church of Christ, the sixth home of a congregation founded in 1782. This highly successful example of a modern inner-city church stands only a few hundred feet from the original site granted it by the Penns in 1787. Smithfield United is one of three Downtown works—another two dozen are in Oakland—by Pittsburgh's outstanding local architect, Henry Hornbostel (1867–1961). A New Yorker who came to Pittsburgh in 1904 to build the campus of the Carnegie Technical Schools, predecessor to Carnegie Mellon, Hornbostel stayed thirty years as a designer and sometimes dean of the Carnegie Tech School of Applied Design. Hornbostel had excellent credentials: he graduated from Columbia University in 1891, spent four years at the *École des Beaux-Arts* (where he was known as *l'homme perspectif* for his brilliant drawings),



taught at Columbia, worked for Stanford White, and was runner-up in the competition to design the campus of the University of California at Berkeley. Though Pittsburgh was his main base, Hornbostel continued as an active architect in New York through the 1920s. The Hell Gate, Queensboro, and Manhattan bridges are his most prominent monuments there, but he also created a campus for Emory University in Atlanta and did civic buildings in Albany, New York, and on the West Coast.

The contrast of spiritual and mundane values is the key to understanding Hornbostel's approach to the design of the Smithfield Church. He placed the church hard against the sidewalk to integrate it uncompromisingly with the city and used standard industrial materials to erect it: steel, limestone, and poured and cast concrete. The main floor, right off the street, is not a sanctuary but a gym, complete with showers and locker rooms. The congregation has used it for various purposes over the years, including a daycare center and a dormitory for the homeless. The sanctuary, one floor up, is rich in its wood trim, stained glass, and lavish plaster fan vaults. Higher still, on the roof, Hornbostel used aluminum for his filigree spire—an early use of that material for structural purposes and an unforgettable vision that parallels the contemporary Watts Tower in Los Angeles.

A newcomer to Smithfield Street, at number 612, is the Downtown branch of Carnegie Library, a facility that gives new life to a neglected block. This small but always crowded library speaks volumes, with “Library” in oversized letters that span the entire height and width of the glass façade. What animates this end of Smithfield Street even better is a droll mural, painted in 2006 by Sarah Zeffiro and Tom Mosser, at the intersection of Smithfield and the narrow Strawberry Way, above the Wiener World hot-dog shop. *The Two Andys* presents civic heroes Andy Warhol and Andy Carnegie under hairdryers, in the most striking of the two dozen murals put up around Pittsburgh in recent years by the Sprout Fund.

THE SIXTH-OLIVER CORRIDOR

Three corridors have left their imprint on the Golden Triangle: the nine blocks of the Cultural District, along Penn and Liberty avenues; the collection of government and corporate entities along Grant Street; and the three-block stretch of Sixth and Oliver avenues that connects the Mellon and PNC banking powerhouses. This last corridor is august: it preserves memories of the Mellons and the Olivers, the Duquesne Club, two of Pittsburgh's oldest churches, a Brooks Brothers, and a Saks Fifth Avenue.

It is also perfect in its symmetry, with Mellon Square to the east and PNC Plaza to the west, two Daniel Burnham skyscrapers at the ends of the district, two venerable churches in the middle, and an Indian burial ground along its central axis.

The Trinity Church burial ground originated in a small hillock that must have been one of the few dry spots in the Triangle when the Allegheny River flooded it each spring. The French, knowing that American Indians had used it, took the hillock over for their own burials from 1754 to 1758, the years in which they held Fort Duquesne at the Point. The British and Americans added more graves, and by the time of the last burial in 1854, about four thousand recorded bodies and far more unrecorded ones rested there. The graveyard left its mark on the toponymy of Pittsburgh, too. The French called the processional way leading to the cemetery the *Allée de la Vierge*, for the Blessed Virgin Mary, but the name “Virgin Alley” caused sufficient embarrassment that it was changed in 1904 to Oliver Avenue.

Henry W. Oliver (1840–1904) was one of the Scots-Irish capitalists who led Pittsburgh to dominance in the age of industry. His initial firm, founded in 1863, manufactured nuts and bolts. He reincorporated that firm in 1888 as the Oliver Iron & Steel Company, and he eventually controlled much of the rich Mesabi iron ore range in northern Minnesota. Oliver reaped millions from J. P. Morgan’s buyout of Carnegie Steel in 1901, and he proceeded to invest it Downtown. Before he died in 1904, he commissioned Daniel Burnham to build a department store at the lower end of this block. A few years later, Oliver’s heirs commissioned the Oliver Building from Burnham as a memorial to the industrialist. Burnham produced a wider, deeper, taller version of his building for H. C. Frick of a few years earlier. Its base of grayish pink granite Doric columns is well if coldly handled, while the main façade above is a mass of cream terra cotta covering a full acre and a half on the Smithfield Street façade alone. The cap to the building consists of three stories of banded Corinthian pilasters and an exuberant cornice line 347 feet in the air.

The interior decoration of the Oliver Building is carried out with similar élan: white marble with dark splashes of bronzework in the lobby and Honduras mahogany trim in the offices upstairs. The heirs were satisfied enough to ask Burnham for still more buildings, including a memorial bathhouse next to the Oliver ironworks on the South Side (still standing, but in the end designed by another firm). These properties were later capitalized into the realty holding company that built Oliver Plaza (now absorbed into PNC Plaza) sixty years later.



fig. 2.22
TRINITY CATHEDRAL
AND GRAVEYARD

When the Penn heirs carved up the town in 1784, the sacredness attached to the burial ground on Sixth Avenue made it the obvious choice for the three free lots they doled out to the Episcopal, Presbyterian, and German-Evangelist congregations. The Presbyterians and Episcopalians are still on the block; the German and Evangelist congregations are only a few hundred feet away.

Sixth Avenue's Trinity Episcopal Cathedral and First Presbyterian Church are both monuments with impeccable design pedigrees. Trinity's first and second churches of 1787 and 1805 were farther down the block, on Liberty Avenue; the third church was built on this site in 1824 by the rector, John Henry Hopkins, who published an engraving of his design locally in 1826, then nationally in his *Essay on Gothic Architecture* in 1836. The present Trinity Cathedral was designed forty years later by Gordon Lloyd, an English-born architect from Detroit who had been trained both in the archaeological and rhetorical variants of the Gothic Revival. The latter taste manifests itself in the bold massing of the octagonal spire over the Trinity tower. Inside, the feeling is not English but decidedly American, and the interior assimilates several features of the late style of Richard Upjohn, to whom the church has occasionally been attributed. Trinity is a ravishingly austere building inside, with compound piers and archivolt of gray stone standing out against the cream white walls, and deep brown diaphragm arches soar across the nave. If Gordon Lloyd was this good (not even his obituary suggested he was), all honor to him!

First Presbyterian Church, on the opposite side of Trinity's graveyard, is the successor church to one that was redesigned and expanded by Benjamin Henry Latrobe in 1812 and to a later Gothic Revival design by Charles F. Bartberger at midcentury. The designer of the present building, Theophilus P. Chandler Jr., was a practiced Philadelphia architect with excellent social connections both in that city and in Boston. In Pittsburgh he was the favored architect of the Thaw family, which resulted in commissions to erect three Presbyterian churches. The challenge to Chandler in 1905 was that the church must look good against the backdrop of Trinity while upholding Presbyterianism in the most intensely Presbyterian city in the country. His response was a much more showy design than Trinity's, with double towers in front and a fantastic march of gables and pinnacles on the side aisle flanking the cemetery. The interior is distinguished by rich and structurally daring woodwork and by fourteen stained-glass windows by Tiffany—outstanding even in a city that abounds in some of the best stained glass in the country. Remarkable, too, is what looks to be an apse behind the altar but operates as a pair of enormous doors that swing open to provide additional space.

The two churches on Sixth Avenue have a host of architecturally pleasing neighbors. The open-air pulpit in front of First Presbyterian, an unusual Medieval feature, points directly across the street to the most powerful of these neighbors, the Duquesne Club. The club moved to this location in 1879, six years after its founding, and a decade later erected its present Richardsonian Romanesque brownstone façade. Inside the Duquesne Club are scattered fifty-four dining rooms, mainly private suites maintained by major Pittsburgh corporations. The role played by the club in the development of Pittsburgh since 1873 can be exaggerated, but not by much. One explanation offered for the peculiar bunching of skyscrapers in certain parts of the Triangle is that the corporate CEOs prefer not to build too far from the Duquesne clubhouse on Sixth Avenue. In a study of civic leadership in Pittsburgh in 1958, Arnold J. Auerbach polled the executive committee of the Allegheny Conference on Community Development, with these results: twenty-four of the twenty-five members belonged to the Duquesne Club, nineteen to the Mellon-centered Rolling Rock Club at Ligonier, and thirteen to the Fox Chapel Golf Club.

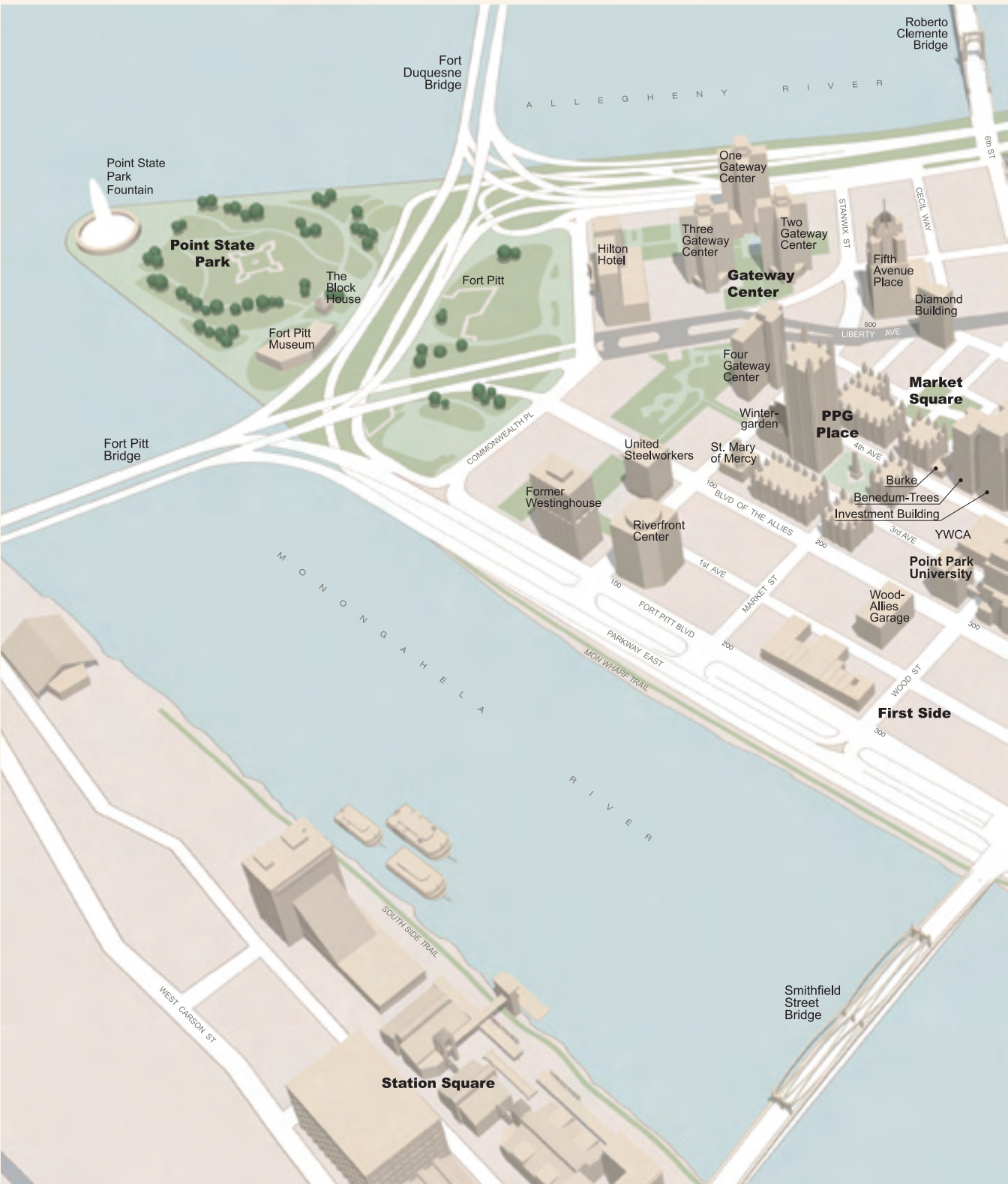
Next door to the Duquesne Club is the former German Savings and Deposit Bank, now the Granite Building. This Romanesque Revival bank has to be accounted among the most sumptuously textured buildings in Pittsburgh, though in the end it becomes a fairly tedious catalogue of all the shapes and textures granite can assume.

The 300 Sixth Avenue Building, at the corner of Wood, completes the Sixth Avenue sequence as the counterpart terra-cotta slab to the Oliver Building at the top of the block. It served for a generation as McCreery's Department Store, then from the 1940s to the 1960s as the Spear & Company store. Not having a particularly strong design to begin with, the building was further compromised by an unsympathetic rehabilitation. The new base did, however, include one superb feature: *The Puddler*, an illuminated stained-glass mural of an ironworker. It was installed in 1942 and today is one of the prime icons of the city.



fig. 2.23
THE PUDDLER







Downtown

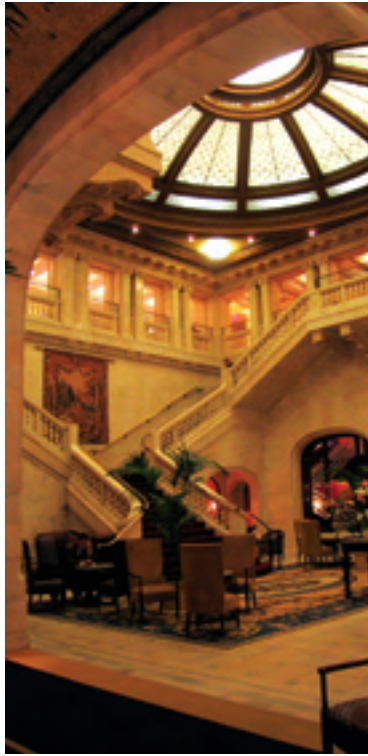


fig. 2.24
ALLEGHENY RIVER
VIEW OF THE ROBERTO
CLEMENTE BRIDGE
AND THE RENAISSANCE
PITTSBURGH HOTEL

fig. 2.25
INTERIOR, HEINZ HALL

fig. 2.26
LOBBY OF THE
RENAISSANCE
PITTSBURGH HOTEL

fig. 2.27
RICHARD HAAS MURAL
ON FORT DUQUESNE
BOULEVARD

2.24
2.25 2.26
2.27