

# The Empty Century

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The streams were called *Felles* or *Fells* by Governor Smith of Virginia, who first explored the Chesapeake Bay, probably because the waters fell over rocks or precipices until they met the tide, where they became and are called Rivers. The points of land stretching into the Bay and divide them, have been and are still called *Necks*. Among us the West or upper part of the Harbor is called *Basin*, because it is a pond open on one side only and surrounded by hills which preserve much stillness on the surface of the water.<sup>1</sup>

The features belonged to a town site of magnificent potential. The place was a natural haven for ships. It possessed streams with plenty of fall for turning mills, and also admirable timber on the necks, a generous agricultural climate, a great variety of soils, an abundance of fine springs of water, and a long ridge of excellent red brick clays, called the bolus by John Smith, but later known as the minebank for its nuggets of iron ore.<sup>2</sup>

Yet for a hundred years no city grew. Unlike Boston, New York, Philadelphia, or Charleston, Baltimore was never a significant center of colonial trade, enterprise, government, or culture. Laid out in 1730, it was still a mere village of twenty-five houses in 1752, and at the onset of the Revolution it was a small town of six thousand persons and ten churches, and it had just acquired its first newspaper. The failure to develop a colonial city on the Patapsco cannot be blamed on a strong rival. Colonial Maryland had no truly urban life, and its economy required no system of market towns. The town of Annapolis revolved around the personal presence of the governor and the sessions of the assembly and general court; it was a political environment and a seasonal place of social life and leisure among the large landowners.

This long gestation has never been a particular source of pride for Baltimore, and its citizens have preferred to direct their attention to its sudden remarkable growth with national independence. Nevertheless, the empty century was formative. For a hundred years before the village was laid out, and for another generation of village life whose traces are all but gone, influences combined that would subsequently forge the identity of Baltimore. The citizens came to define themselves as a people struggling against the past, resisting the oppressive institutions of the state, surviving in a political environment hostile to cities. At times the struggle was clearly directed against some outside enemy—twice they repelled

the British on the battlefield, and scores of times they renewed their demand for representation in the state legislature and for municipal powers of self-determination. In part, the struggle was internalized, built into conflicts of class, race, generation, and party within the city and its institutions. The struggle extended into the very conscience of the individual citizen. Conflicts arising from the economic and social system of Baltimore's empty century have continued to find expression, generation after generation, in the design and redesign of the city and in its monuments, symbols, and celebrations, in virulent journalism, pamphleteering, and electioneering, and in epidemics of arson and mob violence. Each new surge of growth, each new influx of strangers, reopened all the questions, revealed buried anxieties, and brought again and again to a focus the question of identity—how shall we come to terms with our past?

### The Tobacco Economy

The Chesapeake Bay and its rivers had been explored by Captain John Smith in 1609, a colony had been organized by Leonard Calvert in 1634, and by 1650 the proprietor, Lord Baltimore, had issued to favored persons scores of patents or land grants averaging a thousand acres. With the land, these people received the privileges of local justice, collection of taxes and fees, and control over the further subdivision or resale of the land; thus, the essential developmental power of selecting and promoting sites of trade, mills, landings, tenements (for tenant farmers), and quarters (for slave labor). Early settlements were concentrated in the accessible tidewater region. The sandy soils of the plain were suitable for growing tobacco south of the Patuxent River, on the Western Shore, and on the Eastern Shore in Kent and Talbot counties. Purchase money, quit rents, and alienation fees were commonly priced and paid in tobacco.

The tobacco economy required no towns. Large planters produced foodstuffs for their slaves and made garments from imported "negro cloth." English middlemen lightered tobacco from the planters' river landings to ships in the bay. They also extended credit and supplied imports of necessities such as nails and paper and luxuries such as glassware, wine, and furniture. The large planters retailed supplies and extended credit to small farmers, at high prices.

Agricultural settlement of the lands in the piedmont was even slower, and urban settlement was nonexistent. A number of patents were issued in Baltimore County in the 1650s, and the first on the present site of the city were carved out of the woods in the early 1660s: fifty acres on Whetstone Point and Mountenay's Neck, two hundred acres of bottom or glade along either side of Harford Run. At first, it was the practice, "while there were few competitors," to portion off a bit of the best land and take up but little "waste." But by the end of the decade the taking-up accelerated, and larger contiguous grants were made, with generous possibilities for fraudulent surveying, "overrun," and future litigation. The colony's legislative assembly instructed Baltimore County to build a courthouse and a record vault, then a jail and a road to the courthouse. The vast size of the territory, the sparseness of settlement, the absence of roads, and the limited navigable waterways into the rolling piedmont lands encouraged endless disputation over the location of a "county town."

Slow transport, communications, and settlement, as well as the beautiful, elegantly furnished manors now restored, lead visitors to imagine a conservative, traditional, and gracious way of life in colonial Maryland and to idealize it as a time of great stability. This is misleading. Baltimore's "empty century" was one of rapid transformations, reflecting the fast pace of change and development in the affairs of Europe and Britain.

The politics of religion was one area of swift change. The Catholic proprietors and circle of wealthy Catholic planters formulated the Toleration Act of 1649, for their protection in a society of accelerating Puritan immigration.

That noe person or psons whatsoever within this Province or the Islands Ports Harbors Creeks or Havens therevnto belonging professing to believe in Jesus Christ shall from henceforth bee any waies troubled molested or discontenaced for or in respect of his or her religion nor in the free exercise thereof.<sup>3</sup>

It was for the protection of varieties of Christians only, and ordered death and confiscation or forfeiture of lands and goods as the punishment for any person who blasphemed God, denied the holy Trinity, or profaned the Lord's Day. Toleration did not extend to the Jews. The only person reported sentenced to death under the act was a "Jew Doctor," Jacob Lumbrozo, in 1658, for blasphemy. (He was released in a general political amnesty of the mother country.) The immigration of Jews into Maryland was rare before the Revolution. Members of the Society of Friends were also persecuted in the years immediately following the Act of Toleration. In 1650 the governor and council accused "Idle persons known by the name of Quakers" of "diswading the People from Complying with Military Discipline in this time of Danger as also from giving testimony or being Jurors." Some dozens were fined or whipped.<sup>4</sup> In spite of persecution, there was a considerable development in Maryland of Quaker missions and conversions. Between 1665 and 1677 communities of Friends were established in the more populous tobacco counties. Smaller meetings were organized along the Great Falls of the Gunpowder and in Anne Arundel County. Some land was taken up in the Patapsco region by Quaker families, notably Gorsuch and Fell.

Religious disputes reverberated across the Atlantic. In 1689, at the time of the Glorious Revolution in England, Protestants deposed the Catholic proprietor. In 1702 the Catholics in Maryland were disfranchised. They were allowed to worship only in their homes. A special tax was laid on the importation of Irish servants "being Papists," and a test or oath of loyalty was required to determine tax liability. Religious tests were obstacles to the civil participation of Jews, Quakers, and Puritans, as well as Catholics. The transformation of the wealthy, landed Catholic elite into a self-conscious political minority persecuted for their religion encouraged their interest in foreign education, their refuge in a tight-woven circle of families, and their connections with French Catholic culture. In 1694, partly in order to separate the government from Catholic ties, Maryland's seat of government was removed from St. Mary's City to Annapolis,

### The Limits of Toleration

a more central location. Annapolis became the only town with urban amenities such as newspapers and theaters. It was "hailed, as the rising sun, as 'the bright particular star', of the state."<sup>5</sup>

### Slaves and Servants

A second set of changes involved the settlement of a labor force to give value to the land grants. Small capital was needed to begin tobacco farming, and land was cheap, but the crop demanded much labor and close management. Consequently, the extension of tobacco farming could proceed only as the labor force expanded. There is very little information about servitude in Maryland before 1640, but the evidence is substantial that over the 1640s the distinction was being made between Negro slavery for life and white service for a term.<sup>6</sup> White servants were often indentured for a term of seven years for payment of their ship passage, while some were sold into servitude as penalty for crimes, including the crime of indigence. When his term was finished, the servant was given fifty acres to farm. Over a few years, he might even accumulate the price of one or two slaves, to extend his scale of operation. In contrast, it was extremely difficult for a black slave to obtain his freedom, and still more difficult for him to purchase land. Benjamin Banneker's was such a family; they managed to survive as independent tobacco farmers, to create and protect a family of free persons, and to get some education in a neighborhood of rural isolation at Oella, near Elk Ridge. Banneker was assistant surveyor to Major Andrew Ellicott in laying out the District of Columbia in 1791.<sup>7</sup>

The legal degradation of blacks became more definite over the years, as their numbers increased. Africans were imported at a high rate between 1698 and 1707. From contemporary estimates, in 1715 a quarter of the slaves in Maryland were imported in that decade. In that year the assembly formalized the status of their children: they should henceforth be *born* slaves. Blacks could not testify against whites, could not serve on a jury or in the military, and could not strike a white even in self-defense, so that they had no recourse whatever against a master. Over the eighteenth century it was gradually made more difficult legally to manumit or free slaves, although it was done, notably by Quaker masters in the 1760s and 1770s.

In 1715, Baltimore County still held only three thousand people all told, or fewer than eight hundred "masters and taxable men," in an area that today includes nearly the whole metropolitan region of five counties. Blacks were one-fifth to one-sixth of the population, as in the rest of the province. After the surge of slave importation, the slave population grew by natural increase, approximately doubling in each generation until about 1800. The proportion of blacks in the population probably peaked at 30 percent in 1754, then fell back to 20 or 25 percent as the importation of white servants and tenants increased. This demographic rhythm is characteristic of every major immigration, whether slave, indentured, or wholly voluntary, since the age groups of high mobility and high economic productivity are also the age groups of high fertility. It implies that at the time Baltimore began to grow rapidly, the black population of the state retained a vivid memory of the experience of enslavement, and its age

structure was young, vigorous, and—to the race of masters—threatening. In 1665 a slave who murdered his master was convicted of petit treason. It is not possible to estimate how frequently such an event occurred, or how often slaves were caned to death, raped, or sold out of state, or how often they cut their own throats or burned their masters' houses. Nor is it possible to estimate how great was the proportion of decent masters, well-ordered plantations, or mutual care. However generous the estimate, at the heart there was always mutual terror—the inexorable nightmare of Maryland.

A third set of changes began twenty years before the actual layout of Baltimore in 1730 and continued twenty years afterward. It involved the increase and concentration of wealth, the diversification of enterprise, and the acceleration of investment—in other words, the process of economic development.

In 1732, the European tobacco market was entering a long period of depressed prices, severe enough in Maryland to cause rioting and the destruction of many acres of the crop.<sup>8</sup> New demands were developing in England for iron as a strategic material and for grain to feed the highly specialized sugar colonies of the West Indies. The changed market demands in the Old World shifted the relative advantages of differently endowed regions of Maryland. The stagnant tobacco economy of coastal plain Maryland and the growth economy of wheat and iron in the piedmont were politically and socially antagonistic. Contrasts in labor conditions in the two regions also generated conflicts of interest between Baltimore City and the state of Maryland. Hostility between regions and hostility between the city and state governments were most intense during the Civil War, but are evident to the present day.

Baltimore, situated on the fall line, at the junction of piedmont and tidewater, was an offspring of the growth economy of the piedmont. It was an economy of the north, of the Delaware, Brandywine, and Susquehanna valleys. Flour mills and iron furnaces were being built in Delaware and Pennsylvania, and a frontier of wheat farming was moving southward, in conjunction with the immigration and settlement of the Germans and the Scotch-Irish. In the Baltimore region, mill seats began to be established, such as Jonathan Hansen's mill in 1711, on the Jones Falls. The streams that ran down from piedmont Baltimore County—Jones Falls, Gwynns Falls, Gwynns Run, Great Gunpowder, and Little Gunpowder—offered numerous sites for water-driven mills. Such a "fall" or "run" provided several hundred feet of head before it reached tidewater. The oldest iron furnace in Maryland, Principio, on the Great Falls of the Gunpowder near North East, was producing iron in 1715. Because John Moale had hopes for developing ore on Locust Point, he withheld his land from a town-site venture, affecting the settlement of Baltimore.

In order to seize such opportunities to build mills and furnaces, for which the central piedmont of Maryland had the natural resources, capital was wanted. By the 1720s the planters had begun to accumulate large fortunes, which could be turned to the cause of further economic development. Families like the Carrolls, the Dulanys, and the Ridgelys had reached a point at which they could

## Grain and Iron

afford to hold large blocs of land long enough to profit from their gradually rising value.<sup>9</sup> They had assets of hundreds of slaves whose labor could be re-allocated. They recruited servants directly from Ireland and Germany to be tenant farmers on their back lands in Frederick County. In 1733 the assembly chartered the Baltimore Company, which acquired 100 acres and built a furnace and forge on Gwynns Falls. Dr. Charles Carroll of Annapolis had shares in the Baltimore Company venture; he also acquired the tract called Mount Royal for iron ore, the plantation Georgia between Gwynns Falls and Maiden's Choice Run, and a plantation at The Caves in the limestone region of Baltimore County. His letters to his sons evaluate the economy of the Baltimore region in 1752, when he was about to build Mount Clare mansion and to develop his surrounding Georgia plantation. He had sold an interest in an iron furnace at North East and lost by fire a warehouse and bakehouse. He had sent one son to London to study law and seek new capital, and another to Philadelphia to learn surveying and bookkeeping. His advice is revealing: "I cannot see that by making Tobacco I should better my own Yours or Your Bros Fortunes & that induces me to go upon the Iron Business and making Grain to Support it."<sup>10</sup> Dr. Carroll developed a merchant mill at Elk Ridge Landing with a bakery for ship bread. The mill utilized material from a furnace venture he had scrapped. The mill and bakery would create a market for wheat, which would allow settlers to pay off the back lands he had sold them near Frederick. He planned an iron furnace sixty miles away on several thousand acres of charcoal timber, a forge at a site twelve miles nearer, with another six thousand acres of woods, and close to Elk Ridge a quarter, or settlement, for the slave labor force. He figured he would need £700 for four or five years to put this scheme into operation, and that he could pay off the total capital and interest in another five years.

In conjunction with the attempt to develop farming and tillage, mills and iron exports, and also to control shipping more effectively, attempts were made to found towns. Most of them failed. The colonial legislature in 1706 had authorized the founding of ten riverine towns planned as public landings for seagoing craft and as markets with storehouses, ship repair, and provisioning. The extension of agricultural settlement contributed to the siltation of their harbors and to the eventual abandonment of several of the town sites, including Joppa and Elk Ridge Landing. In 1753, the assembly ordered an end to dumping earth and sand into the Patapsco and its tributaries. Persons digging ironstone were told to adopt erosion control measures.<sup>11</sup>

Corporate private enterprise, such as the Baltimore Company, did not differ greatly from corporate public enterprise at that time. The Baltimore Company obtained from the assembly a charter designating the persons who constituted the corporation, their purposes, and a limited period of time in which to operate. Most public enterprises, such as building a public road or jail or laying out a town, were authorized in the same manner and were directed to be carried out by a commission of persons designated in the legislative act.<sup>12</sup> A substantial landowner had the same range of management experience required for the "public" enterprises. The decisions and activities were the same—adjudication of disputes, surveying, valuing land, valuing crops, drawing up legal documents,

managing a labor force, supplying the labor force with food and housing, negotiating sales, locating and cutting roads, and overseeing the construction of buildings. For public enterprises, the same set of persons was taxed for the cost of the improvements and received most of the benefits of the enterprise, roughly in proportion to the size of their land holdings. It is easy to understand, then, that these commissions should have consisted of the large neighboring landowners who together worked out the solutions to development problems that affected more than one person's property. The same landowners often served in other roles, such as judge or county surveyor. It is also natural that this system, in which the private and the public interest were so closely interwoven, should have resulted in a rather ingrown form of social control and in an enormous number of appeals to the courts in Annapolis. Lawsuits were also encouraged by the scarcity of cash (which meant that everyone did business on credit), by the problems of controlling an unwilling labor force in a near wilderness, and by the rising resale value of land as development proceeded. Despite its modern image as a genteel society, this was a property-conscious, speculative, and litigious society in which the courtroom was a political forum and a favorite spectacle.

The growth of Baltimore was knotted in this web of mutual debts and transactions in land, the process of private development on credit, the expectation of ever-rising land values, and the dependence upon public investment to generate land values. The city itself was to be the great speculation.

Baltimore grew, not by the regular enlargement of one focus of settlement, but by the seeding, rivalry, and coalescence of three nuclei—Baltimore Town, Jones Town, and Fells Point. The distinctive character of each was to prove stubborn.

On 12 January 1730, commissioners, appointed for life, laid off Baltimore Town: "Sixty Acres of Land, in and about the place where one John Fleming now lives." Its original site and shape were governed by natural features, that is, the extent of high ground near the waterfront. The water came up to present-day Water Street; the village was surrounded by water on the south, by a great gully on the northwest (toward Sharp Street), and by swamps on the east along the Jones Falls. The falls "swept round in a deep, horse-shoe bend"<sup>18</sup> as far as the corner of Calvert and Lexington streets, and then northeastwardly along the line of Calvert Street. The internal arrangements of the town resembled the design of a village of English plan. There were only two wide streets, sixty-six feet, or four perches. Long Street, later called Market Street and now Baltimore Street, was intended for business. Perpendicular to it, a short but potentially monumental street rose from the waterfront to the bluff overlooking the Jones Falls. It was given a more elegant name, Calvert Street, for the proprietor's family. Forrest Street, later Charles Street, was three perches wide, but all the other streets were mere "lanes" one perch wide. Sixty one-acre lots were laid out, more or less square. With one hundred years of hindsight, Griffith offered a critique of the original plan:

### Creating a Town

From the small quantity of ground originally taken for the town, and from the difficulty of extending the town in any direction, as it was surrounded by hills, water courses or marshes, it is evident that the commissioners did not anticipate either its present commerce or population. The expense of extending streets, building bridges, levelling hills and filling marshes, to which their successors have been subjected, and which, unfortunately, increases that of preserving the harbour as improvements increase and the soil is loosened, have been obstacles scarcely felt in other American cities; but requiring immense capitals of themselves, against which nothing but the great local advantages for internal and external trade would have enabled the citizens to contend.<sup>14</sup>

The same kind of vision is evident in the original layout of Jones Town (Oldtown) and later Fells Point: the same keen sense of strategic location for trade and the same very modest expectations. The street plans were pragmatic and riverine, aligned to exploit the waterfront and the natural drainage. Jones Town was laid off in 1732, into half-acre lots on ten acres east of the Jones Falls. It consisted of three streets, "or one street with three courses, corresponding with the meanders of the bank of the falls." The only cross street was the eastern road, now Gay Street, redirected by a ford.<sup>15</sup> Rivalry between Jones Town and Baltimore Town was felt from the beginning, but the original plats gave no hint that they might grow together.

William Fell, a ship carpenter, had settled east of the Jones Falls in 1726 on a tract called Copus Harbor and had built a mansion on what is now Lancaster Street. The harbor potential there was distinctly better than at Baltimore Town. Depths of sixteen to twenty feet were normal at the point, while to the west the alluvions and shoals created problems, more or less severe from year to year. Nevertheless, nothing happened at the point for nearly forty years.

To "read" the original plans of Baltimore Town and Jones Town on the spot today is difficult. The street orientations remain, but only a few disjointed alleys near Water Street, along the old southern waterfront of the town, convey some feeling of the narrowness of the original lanes. Generation by generation, the relief has been softened, the grades lessened, the precipices blunted, the crowns lowered, the gullies filled. From the site of St. Paul's Church one still gets a distinct impression of the steep edge of the Jones Falls valley. The first parish church, situated on the highest lot in the village, was later described as a "barn-like edifice on the edge of a sand hill, with the graves of deserted congregations clustered around, their coffins at times being exposed by the violence of northeast storms." A walk through the changing courses of Saratoga Street, with glances down Liberty, Charles, and Light streets toward the harbor, and over the "hump" of Calvert Street, now much cut down, gives some sense of the original lay of the land.

The lots toward the river were all taken up within a few days of the survey, but those on Baltimore Street were not in demand. A number of lots eventually reverted to the owner, Charles Carroll, because they had not been improved within the prescribed seven years. As streets were graded, as structures were raised, as the woods were cut and the land farmed, man and nature conspired to scour the heights and muddy the low places.

As the wheat lands were slowly being settled, the road network began

to be crudely defined. In 1745 York Road, Reisterstown Road, which branched to Westminster and Hanover, and the old Frederick Road could be traveled by wagons, but only under good weather conditions. That same year, the town of Frederick was settled, and German tenants and settlers were arriving from Pennsylvania. The Gay Street bridge brought the great eastern road linking Georgetown and Philadelphia through both Baltimore Town and Jones Town. The bridge gave value to the land between, and was critical to the process of uniting Baltimore. Thomas Harrison, who had arrived from England three years before, bought the lots nearest the water on each side of South Street and built a house near South and Water streets. In 1745 he, with William Fell, Captain Lux, and others, served as commissioner for joining the two towns. He bought from the Carrolls the twenty-eight-acre marsh lying between the two parts of the town. The legislature authorized adding to the town the part that was "fast land" west of the falls. Gay, Frederick, and parts of Second and Water streets were laid out through it. Further additions were made, fifteen or twenty acres at a time. A public wharf was built at the end of Calvert Street, and a tobacco inspection house west of Charles.

The acts authorizing the merger and addition also empowered the town commissioners to open and widen streets or alleys, to remove nuisances, and to oversee chimneys. One act promoted the "making of land" by allowing a person to claim land he had developed by dredging or filling. It was, however, specifically set down that neither the commissioners nor the inhabitants of the town should elect delegates to the assembly. "How different," says Griffith, "have the fortunes of Baltimore been in this respect, from that of all the other great cities of this continent."<sup>16</sup>

# Notes

## *The Empty Century*

I have freely used Baltimore's great chroniclers and interpreters: Thomas W. Griffith, *Annals of Baltimore*, 2d ed. (1824; Baltimore: W. Wooddy, 1833), and J. Thomas Scharf, *The Chronicles of Baltimore* (Baltimore: Turnbull Bros., 1874). The *Archives of Maryland* are volumes of documents published by the Maryland Historical Society over many years.

1. Griffith, *Annals of Baltimore*, p. 288.
2. Baltimore is located at latitude 39°12', has a growing season nine months long, "abundant" sunshine, and a rainfall of forty-two inches rather evenly distributed throughout the year. Maryland Geological Survey, *Baltimore County* (Baltimore, 1929), p. 368, contains meteorological data and a more detailed account of the geology of piedmont and coastal plain "provinces" and "the fall line." (The B&O Railroad track can be said to demarcate the fall line.) See also *Maryland Soils*, University of Maryland Cooperative Extension Service bulletin 212 (May 1967).
3. Maryland Toleration Act of 1649, as transcribed by Isaac M. Fein, *The Making of an American Jewish Community: The History of Baltimore Jewry from 1773 to 1920* (Philadelphia: Jewish Publication Society, 1971), pp. 245-46.
4. Bliss Forbush, *A History of Baltimore Yearly Meeting of Friends* (Sandy Spring, Md.: Baltimore Yearly Meeting of Friends, 1972), p. 4.
5. Baltimore City Council journal, 1835.
6. Winthrop D. Jordan, *White over Black: American Attitudes toward the Negro, 1550-1812* (New York: Oxford University Press, 1974), pp. 71-82.
7. Silvio A. Bedini, *The Life of Benjamin Banneker* (New York: Scribner's, 1972).
8. Griffith, *Annals of Baltimore*, p. 23. See also Avery O. Craven, *Soil Exhaustion As a Factor in the Agricultural History of Virginia and Maryland, 1606-1860*, University of Illinois Studies in the Social Sciences 13 (Urbana: University of Illinois Press, 1925), p. 51; Jacob M. Price, "The Economic Growth of the Chesapeake and the European Market, 1697-1775," *Journal of Economic History* 24 (1964): 496-511; and Pauline Maier, *From Resistance to Revolution* (New York: Knopf, 1972).
9. For information on large landowners, see Clarence P. Gould, *The Land System of Maryland, 1720-65*, Johns Hopkins Studies 31 (Baltimore: The Johns Hopkins Press, 1913), p. 59; idem, *The Economic Causes of the Rise of Baltimore: Essays in Colonial History* (1931; reprint ed. Freeport, N.Y.: Books for Libraries Press, 1966); Aubrey C. Land, "Economic Base and Social Structure: The Northern Chesapeake in the Eighteenth Century," *Journal of Economic History* 25 (1965): 639-54; idem, "Economic Behavior in a Planting Society: The Eighteenth Century Chesapeake," *Journal of Southern History* 33 (1967); and Jack Mowll, "The Economic Development of Eighteenth Century Baltimore" (Ph.D. diss., The Johns Hopkins University, 1956).
10. Dr. Charles Carroll of Annapolis to his son, Charles Carroll (later barrister Carroll), "Correspondence of Dr. Charles Carroll," *Maryland Historical Magazine* 25 (1930): 284-89.

11. L. C. Gottschalk, "Effects of Soil Erosion on Navigation in Upper Chesapeake Bay," *Geographical Review* 35 (1945): 219-37; and idem, "Sedimentation in a Great Harbor," *Soil Conservation* 10, no. 1 (July 1944): 3-5, 11-12.

12. St. George L. Sioussat, "Highway Legislation in Maryland and Its Influences on the Economic Development of the State" (Ph.D. diss., The Johns Hopkins University, 1889), in *Maryland Geological Survey* 3 (1899): 105-89.

13. Scharf, *Chronicles of Baltimore*, p. 21.

14. Griffith, *Annals of Baltimore*, pp. 18-20, 101.

15. *Ibid.*, p. 23.

16. *Ibid.*, p. 28.