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"The Living Mother of a Living Child": Midwifery and Mortality in Post-Revolutionary New England

Laurel Thatcher Ulrich

PORTY-ONE years ago, Richard Harrison Shryock could summarize the history of early American midwifery in a few sentences. "The history of obstetrics and of pediatrics," he wrote, "affords other illustrations of the way in which inadequate medical science affected the public health. Maternity cases were left, in English-speaking lands, almost entirely to midwives. . . . And since midwives lacked any scientific training, obstetrics proceeded on the level of folk practice, and with consequences which may be easily imagined." The consequences could be imagined because few persons in 1948 doubted the superiority of medical science over folk practice.

The advent of "natural" childbirth, culminating in recent years in the revival of lay midwifery, has changed historical judgments as well as obstetrics. In revisionist histories of childbirth, the pleasant story of scientific progress has been replaced by a darker tale of medical competitiveness and misplaced confidence in an imperfect science. Medical science did not on the whole increase women's chances of surviving childbirth until well into the twentieth century, the new histories argue, and may actually have increased the dangers. As Richard W. and Dorothy C. Wertz explain, puerperal fever, the dreaded infection that killed so many women in the nineteenth century, "is probably the classic example of iatrogenic disease—that is, disease caused by medical treatment itself."²

Ms. Ulrich is a member of the Department of History, University of New Hampshire. Versions of this article were presented at meetings of the Benjamin Waterhouse Medical Society (Boston University), the Maine Society for the History of Medicine, the American Antiquarian Society Seminar in Political and Social History, and the comparative history seminar at the University of New Hampshire. Acknowledgments: I am grateful to those groups and to Worth Estes, Judith Walzer Leavitt, Janet Polasky, and Cornelia Dayton for helpful comments. Some parts of this essay will appear in my forthcoming book on the diary of Martha Moore Ballard.

¹ Shryock, The Development of Modern Medicine: An Interpretation of the Social and Scientific Factors Involved, rev. ed. (London, 1948), 77-78.

² Judith Walzer Leavitt, Brought to Bed: Childbearing in America, 1750 to 1950 (New York, 1986), 56-57, and "'Science' Enters the Birthing Room: Obstetrics in America since the Eighteenth Century," Journal of American History, LXX (1983),

Although historians trace to the eighteenth century the gradual supplanting of midwives by physicians, most detailed studies have concentrated on the nineteenth century or later. The few discussions of childbirth in early America have dealt with urban centers and with the work of prominent physicians such as William Shippen of Philadelphia.³ Almost nothing is known about rural obstetrics or about the activities and attitudes of midwives. This essay begins to fill that gap. Its central document is the manuscript diary of a Maine midwife, Martha Moore Ballard, who lived at Augusta (then part of Hallowell) from 1778 to 1812. It also uses English obstetrical literature, scattered physicians' and midwives' records from Maine and New Hampshire, and the papers of Dr. Jeremiah Barker of Gorham, Maine.

Martha Ballard performed her first delivery in 1778, though her diary does not begin until six years later. Between 1785 and 1812 she recorded 814 deliveries. The expansiveness of her record is unusual not only among midwives (few of whom left any written evidence of their practice) but among country physicians as well. Yet the diary has received little scholarly attention. Historians who have used it have relied on an abridged version published in Charles Elventon Nash's History of Augusta. For most, the details of Ballard's practice have seemed less important than her symbolic image as a "traditional" midwife. One work portrays her as an untrained, intensely religious, and poorly paid practitioner, who nevertheless shared some of the attitudes of contemporary physicians. Another associates her with nineteenth-century controversies between midwives and physicians, emphasizing her helplessness when accused by a local physician of "meddling by giving her opinion of a disease."

Serious study of the entire diary shatters such stereotypes. Although physicians were delivering babies in Hallowell as early as 1785, Martha Ballard was clearly the most important practitioner in her town. Because her record documents traditional midwifery at a moment of strength, it allows us to shift the focus of inquiry from the eventual triumphs of medical science to the immediate relations of doctors and midwives in an era of transition. What is most apparent on close examination is the success of Ballard's practice, measured on its own terms or against contemporary medical literature. Although elements of the new obstetrics had begun to

^{281-304;} Wertz and Wertz, Lying-In: A History of Childbirth in America (New York, 1977), xi, x, 128.

³ Catherine M. Scholten, "On the Importance of the Obstetrick Art': Changing Customs of Childbirth in America, 1760 to 1825," William and Mary Quarterly, 3d Ser., XXXIV (1977), 429-431, and Childbearing in American Society, 1650-1850 (New York, 1985), chap. 2; Wertz and Wertz, Lying-In, chap. 2; Leavitt, Brought to Bed, 36-44, 263-265.

⁴ Nash, The History of Augusta: First Settlements and Early Days as a Town, Including the Diary of Mrs. Martha Moore Ballard (1785-1812) (Augusta, Me., 1904); Wertz and Wertz, Lying-In, 9-10; quotation from Scholten, Childbearing, 45; Leavitt, Brought to Bed, 37.

filter into the region, the old rituals of childbirth remained powerful. In her record, it is the physicians—particularly the young physicians— who appear insecure and uncomfortable.

The diary also extends and deepens recent discussions concerning eighteenth-century modes of delivery. A number of historians have argued that English innovations, such as William Smellie's improved forceps, encouraged an interventionist obstetrics that eventually displaced the gentler practices of midwives. Edward Shorter has countered that eighteenth-century English midwives were themselves "wildly interventionist" and that physicians, not midwives, introduced the notion of "natural" childbirth. This new obstetrics, he argues, was in part a response to general cultural trends—a medical reflection of Enlightenment respect for nature—and also a consequence of the work of pioneering physicians like Charles White, whose textbook published in London in 1773 was the first example of a fully noninterventionist obstetrics.⁵

By shifting the balance of attention from obstetrical prescriptions to obstetrical results, Ballard's diary provides a new vantage point for assessing this controversy. Although it reveals little about the particulars of Ballard's methods (we do not know, for example, whether she applied hog's grease to the perineum or manually dilated the cervix), it offers compelling evidence of her skill. Maternal and fetal mortality rates extracted from the diary compare favorably with those for physicians in both England and America, countering the horror stories of eighteenth-century literature as well as the casual assumptions of twentieth-century historians. The consequences of Ballard's practice need not be imagined.

In most respects Martha Ballard's is a typical eighteenth-century rural diary—a laconic record of weather, sermon texts, family activities, and visits to and from neighbors. Obstetrical and general medical entries are interwoven with this larger accounting of ordinary life, although she gave birth records a special significance by summarizing them in the margins, numbering each year's births from January to December. Each delivery entry gives the father's name, the child's sex, the time of birth, the condition of mother and infant, and the fee collected. Many also include the time of the midwife's arrival and departure, the names of the attendants who assisted her, and the arrival of the "afternurse," who cared for the woman during lying-in (the week or two following delivery). Succeeding entries record follow-up visits or hearsay reports about the mother and child.

The account of Tabitha Sewall's delivery on November 12-13, 1790, is typical:

⁵ Wertz and Wertz, *Lying-In*, 34-43; Scholten, *Childbearing*, 34-36; Leavitt, *Brought to Bed*, 38-40; Shorter, "The Management of Normal Deliveries and the Generation of William Hunter," in W. F. Bynum and Roy Porter, eds., *William Hunter and the Eighteenth-Century Medical World* (Cambridge, 1985), 371-383.

I was Calld by Colonel Sewall to see his Lady who was in Labour. Shee was not so ill as to Call in other assistance this day. I slept with her till about I hour morn when shee calld her Neighbours to her assistance. Mrs Sewal was ill till 3 hour pm when shee was thro divine asistance made the Living Mother of a Living Son her 3d Child. Mrs Brooks, Belcher, Colman, Pollard & Voce assisted us . . . Colonel Sewall gave me 6/8 as a reward. Conducted me over the river.

The only unusual thing about this account is the reference to "divine asistance," suggesting that Mrs. Sewall or her midwife encountered some difficulty along the way. Everything else about the description is routine. The father or a near neighbor summoned the midwife. The woman remained "ill" for several hours. Just before the birth she called her female neighbors. The child was delivered—safely. The father paid the midwife and escorted her home. In the eight deliveries Martha Ballard performed for Tabitha Sewall, the description of one differs very little from another. Mrs. Sewall "was safe delivered at 7 hour morn of a fine Daughter and is Cleverly," Ballard wrote, or "Mrs Suall Delivard at 1 this morn of a son & is Cleaverly."

Ballard performed her first delivery at the age of forty-three shortly after moving to the District of Maine from Oxford, Massachusetts. Although she had no doubt assisted in many births in Oxford (she was herself the mother of nine children), she seems not to have practiced alone until she came to Hallowell. Demographics may explain her entry into the profession. In Oxford she had been surrounded by older women; her maternal grandmother was still alive in 1777. In Hallowell she was one of the older women in a young and rapidly growing town. The diary opens in January 1785, the year she turned fifty. It ends with her death in May 1812, just ten days after she performed her last delivery at the age of seventy-seven.

The diary tells us nothing of how she acquired her skills, though genealogical data suggest that her family had something of a medical bent. Two of her sisters married doctors; a maternal uncle was a physician. Certainly, her family demonstrated an unusual commitment to education. Her uncle Abijah Moore was Oxford's first college graduate. Her younger brother, Jonathan, was the second. She probably learned midwifery in the

⁶ Martha Moore Ballard Diary, 2 vols., Maine State Library, Augusta, Me., Apr. 2, 1788, Dec. 31, 1786. According to the *Oxford English Dictionary*, "cleverly" means "well" or "in health" in some dialects. This is obviously the meaning Ballard intended. Henry Sewall, Tabitha's husband, also kept a diary. He mentioned Martha Ballard's presence on only four of the eight occasions, never recorded paying a fee, and only twice mentioned the presence of other birth attendants. Henry Sewall Diary, Massachusetts Historical Society, Boston, Mass.

⁷The medical tradition continued into the 19th century. Ballard's diary was inherited and preserved by her great-granddaughter, Dr. Mary Hobart, who practiced obstetrics at New England Hospital in Boston. Clara Barton, the Civil War nurse and founder of the American Red Cross, was Ballard's grandniece.

same way her husband, Ephraim, learned milling or surveying—by practice, by observation, and by working alongside someone who knew more than she.

Ballard's assurance as a midwife is the best evidence we have of her training. In almost 1,000 births she did not lose a single mother at delivery, and only five women died in the lying-in period. Infant deaths were also rare. The diary lists fourteen stillbirths in 814 deliveries and five infant deaths within an hour or two of birth. When Mrs. Claton and her infant both died in the autumn of 1787, a week after delivery, Ballard noted the singularity of the event: "I asisted to Lay her out, her infant Laid in her arms, the first such instance I ever saw & the first woman that died in Child bed which I delivered." The sight was as unusual as it was affecting. Under Martha Ballard's care, a woman could expect to become "the living mother of a living child."

By twentieth-century standards, of course, both maternal and infant mortality were high. The diary records one maternal death for every 200 births. Today the rate for the United States is one per 10,000. But as Judith Walzer Leavitt has demonstrated, such dramatic gains in obstetrical safety have come in the past fifty years; as late as 1930 there was one maternal death for every 150 births in the United States. A recent study of early twentieth-century births in a Portsmouth, New Hampshire, hospital gives stillbirth rates five times as high as Ballard's. The turning point for fetal as well as maternal deaths was the 1940s. 10

The appropriate question is how Martha Ballard's record compared with those of her contemporaries, particularly with New England physicians who began the regular practice of obstetrics in the eighteenth and early nineteenth centuries. Direct comparisons are difficult, in part because physicians' records tend to be organized much differently from hers. Most

⁸ Ballard Diary, Aug. 16, 20, 1787. Since the first fatality occurred during the diary period, I have included the 177 pre-diary births in arriving at the total of 991 births.

⁹ The phrase was conventional, and it persisted into the 19th century. Leavitt, for example, quotes a woman who gave thanks for having become "the living mother of a living and perfect child" (*Brought to Bed*, 34). Ballard's version of the statement was usually gender specific, as in "the living mother of a living son" or "the living mother of a fine Daughter" (Ballard Diary, Dec. 30, 1789).

10 Leavitt, Brought to Bed, 23-26; Helen M. Wallace, Edwin M. Gold, and Edward F. Lis, eds., Maternal and Child Health Practices: Problems, Resources, and Methods of Delivery (Springfield, Ill., 1973), 185; J. Worth Estes and David M. Goodman, The Changing Humors of Portsmouth: The Medical Biography of an American Town, 1623-1983 (Boston, 1986), 298. In 2.3% of Ballard's deliveries the child was stillborn or died in the first 24 hours of life. For Portsmouth Hospital the figures were 11.4% (1915-1917), 4.8% (1925-1941), 1.2% (1954-1957), and 0.8% (1971-1983). Because methods of compiling statistics vary markedly over time, these numbers must be considered approximations. Stillbirth ratios, for example, might be affected by abortions, spontaneous or induced. On the development of obstetrical record keeping in general see James H. Cassedy, American Medicine and Statistical Thinking, 1800-1860 (Cambridge, Mass., 1984), 80-83.

are simply a record of fees collected. Some doctors kept notes on unusual cases; a few compiled mortality tables for their towns. Account books, obstetrical case notes, and mortality tables seldom overlap, however, so that we know the numbers of deliveries performed by one physician but not the results, the management of extraordinary cases by another but not the overall caseload, and the incidence of stillbirths for a given town but not the numbers of maternal deaths or the names of practitioners. Comparison with midwives' registers is easier, since midwives typically listed all births, live as well as stillbirths, chronologically from the beginning to the end of their careers. Few such lists survive, however, and none that I have found offers the kind of narrative detail available in the Ballard diary.

Despite the difficulties, it is nevertheless possible to construct some comparisons. Table I gives stillbirth ratios derived from Ballard's diary, two physicians' records, two midwives' registers, and several published mortality tables. At first glance it is the success of Ballard's practice that stands out. Whether her record is compared to that of Hall Jackson, a prominent eighteenth-century physician, or to Lydia Baldwin's, a contemporary Vermont midwife, it is eminent. Yet none of the mortality ratios is as high as impressionistic accounts would lead us to believe, nor are there clear differences between midwives and physicians.

Most obstetrical treatises published in the first three-quarters of the eighteenth century emphasized the terrors of obstructed birth. Even authors who mistrusted "man-midwifery" and the use of forceps acknowledged the problems. Sarah Stone, an English midwife writing in 1737, described a breech delivery in which it took her an hour and a half to turn and extract the fetus. When she reached for the child, it "suck'd my fingers in the Womb, which concern'd me, fearing it impossible for the poor Infant to be born alive." Writing two decades later, Dr. Edmund Chapman, an English physician, included more gruesome tales. Among cautionary examples he cited one ignorant doctor who, not knowing "the Method of Turning a Child, made frequent use of the Hook and the Knife. and several other shocking and barbarous instruments, even while the Child was Living." Dr. William Smellie, the London physician whose improved forceps supposedly solved such problems as these, included vivid case studies in his published works, evenhandedly distributing the blame for mismanaged deliveries among superstitious midwives and

11 The lack of detail in the other sources makes it difficult to know whether the data are precisely comparable. Ballard's diary distinguishes between stillbirths and deaths within a few minutes or hours of birth. If other records melded those two categories, her record would look better by comparison. Still, adding the five very early deaths in her practice to stillbirths results in a ratio of only 2.3, almost identical with Jackson's and slightly lower than Baldwin's. Jennet Boardman's register includes three categories: "born dead," "died," and "died at age ——— or on ———." I list all those infants described as "dead" or "born dead" as stillborn, but exclude the "died" entries, some of which deaths may have occurred immediately after birth.

TABLE I
COMPARATIVE STILLBIRTH RATES

	Total Births	Total Stillbirths	Stillbirths per 100 Live Births
Martha Ballard Augusta, Maine 1785-1812	814	14	1.8
Hall Jackson Portsmouth, N.H.	511	12	2.4
1775-1794 Lydia Baldwin Bradford, Vt. 1768-1819	926	26	2.9
James Farrington Rochester, N.H. 1824-1859	1,233	36	3.0
Jennet Boardman Hartford, Conn. 1815-1849	1,113	36	3.3
Portsmouth, N.H. 1809-1810	541	14	2.7
Marblehead, Mass. 1808	222	7	3.3
Exeter, N.H. 1809	53	I	1.9
United States* 1942			2.0

^{*} Fetal death ratio, defined as fetal deaths of 28 weeks or more gestation per 1,000 live births.

Sources: Martha Moore Ballard Diary, 2 vols., Maine State Library, Augusta, Maine; J. Worth Estes, Hall Jackson and the Purple Foxglove: Medical Practice and Research In Revolutionary America, 1760-1820 (Hanover, N.H., 1979), 120; A Copy of Records from an Original Memorandum Kept by Mrs. Lydia (Peters) Baldwin, typescript, Baker Library, Dartmouth College, Hanover, N.H.; James Farrington Medical Record Books, 1824-1859, Special Collections, Dimond Library, University of New Hampshire, Durham; "Midwife Records, 1815-1849, Kept by Mrs. Jennet Boardman of Hartford," Connecticut Historical Society, Bulletin, XXXIII (1968), 64-69; Lyman Spalding, Bill of Mortality for Portsmouth, Broadside (Portsmouth, N.H., 1809, 1810); John Drury, Bill of Mortality for Marblehead, 1808, Broadside (Marblehead, Mass., 1809); Joseph Tilton, M.D., Bill of Mortality for Exeter, New Hampshire, Broadside (Exeter, N.H., 1809)); Helen M. Wallace, "Factors Associated with Perinatal Mortality and Morbidity," in Helen M. Wallace, Edwin M. Gold, Edward F. Lis, eds., Maternal and Child Health Practices: Problems, Resources, and Methods of Delivery (Springfield, Ill., 1973), 507.

poorly trained physicians. In comparison, Ballard's delivery descriptions are remarkably bland: "the foet[u]s was in an unnatural posetion but I Brot it into a proper direction and shee was safe delivered." Usually she said even less: "removed obstructions" or "used means." 12

Just as striking, given the tenor of the prescriptive literature, is her independence of Hallowell's physicians. Although the English authors agreed that midwives were capable of handling routine deliveries, authorities differed on the question of their ability to negotiate emergencies. Most publishing physicians argued that the sign of a good midwife was her willingness to call for help when needed. As Brudenell Exton put it, "the more knowledge they have, the readier they are to send for timely Assistance in Cases of Danger." Sarah Stone, the English midwife, disagreed, as did Nicholas Culpeper, a seventeenth-century herbalist and astrologer whose books were still being reprinted in New England in the early nineteenth century. Culpeper told the "Grave Matrons" who followed his advice that "the Lord will build you Houses as he did the Midwives of the Hebrews, when Pharaoh kept their Bodies in as great bondage as Physitians of our times do your Understandings." Both authors believed that experienced midwives were better equipped to handle difficult deliveries than officious but poorly prepared physicians. 13

Ballard's philosophy was closer to Culpeper's than to Exton's. Although she had cordial relations with Hallowell's physicians, several of whom occasionally officiated at routine births, she seldom needed their help. A handful of her patients called *both* a doctor and a midwife at the onset of labor, but even in those cases she usually handled the delivery. Only twice in her entire career did she summon a doctor in an emergency, once in 1785 and again in 1792. She was not herself responsible for the first emergency. Arriving late, she found the patient "greatly ingered by some mishap," though the midwife or neighbor who had delivered the child did "not allow that shee was sencible of it." Calling the doctor may have been

12 Stone, A Complete Practice of Midwifery . . . (London, 1737), 76-77; Chapman, A Treatise on the Improvement of Midwifery, Chiefly with Regard to the Operation . . . , 3d ed. (London, 1759), xiv; Smellie, A Collection of Cases and Observations in Midwifery, 3d ed., III (London, 1764), for example, 1-69, 416-427; Ballard Diary, Aug. 29, 1797, July 19, 1794, Feb. 18, 1799.

¹³ Nich[olas] Culpeper, A Directory for Midwives; or, A Guide for Women, in Their Conception, Bearing, and Suckling Their Children . . . (London, 1651), "Epistle Dedicatory"; Stone, Complete Practice, ix; Henry Bracken, The Midwife's Companion; or, A Treatise of Midwifery, Wherein the Whole Art Is Explained . . . (London, 1737), 146; Chapman, Improvement of Midwifery, vii-xiii; Brudenell Exton, A New and General System of Midwifery . . . (London, 1751), 11. The library of the College of Physicians and Surgeons, Philadelphia, has an autographed and annotated copy of Exton owned by Dr. John McKechnie, who emigrated from Scotland to Maine in 1755 and apparently practiced medicine until his death in 1782. Martha Ballard may have known him; three of his married daughters were among her patients (James W. North, The History of Augusta [Augusta, Maine, 1870], 913-914).

Ballard's way of resolving a disagreement over the severity of the injury. ¹⁴ In the other case she described her feelings in vivid language, though characteristically she offered little obstetrical detail:

My patients illness Came on at 8 hour morning. Her women were Calld, her Case was Lingering till 7 p.m. I removd difuculties & waited for Natures opperations till then, when shee was more severly atackt with obstructions which alarmed me much. I desird Doct Hubard might be sent for which request was Complid with, but by Divine assistance I performed the oppration, which was blisst with the preservation of the lives off mother and infant. The life of the latter I dispard off for some time.

In the margin of the day's entry she added, "The most perelous sien I Ever past thro in the Course of my practice. Blessed be God for his goodness." Whether Dr. Hubbard's emergency skills included the forceps delivery of a living child or only the dismembership of a dead one, we do not know. Fortunately, in this case as in all the others, Ballard and her patient got along without him.

In difficult deliveries, she typically gave God the credit for her success. The phrases are formulaic: "Her illness was very sever a short space but Blessed be God it terminated in Safety and the infant is numbered among the living," or "She had a Laborious illness but Blessed be God it terminated in safety. May shee and I ascribe the prais to the Great Parent of the universe." One should not assume from such language, however, that Ballard lacked confidence in her own ability or that she relied on faith to the exclusion of skill. She knew that God worked through her hands.

Her confidence may actually have increased with the arrival of Dr. Benjamin Page in Hallowell in 1791. Page is remembered in local history as an extraordinarily successful physician. When he died in 1844, after more than fifty years of practice, the Boston Medical and Surgical Journal published an eleven-page biography proclaiming his skills as a general practitioner, surgeon, and gentleman. According to the anonymous author, Page was also "unequalled in the success of his obstetric practice. . . . [H]e attended upwards of three thousand females in their confinement, without the loss of a single life from the first year of his practice! This is almost miraculous, and may challenge the professional records of Europe or America for anything to compare with it." 17

This is not the picture of Page preserved in Ballard's diary. Her first encounter with the young doctor was at the delivery of his near neighbor, Mrs. Benjamin Poor, the wife of a printer newly arrived in the town.

¹⁴ Ballard Diary, Nov. 11, 1785.

¹⁵ Ibid., May 19, 1792.

¹⁶ Ibid., June 30, 1807, Mar. 31, 1800.

¹⁷ "Memoir of Benjamin Page, M.D.," Boston Medical and Surgical Journal, XXXIII (1845), 9, 173.

Perhaps the woman intended medical delivery; perhaps she was simply worried that her midwife would not arrive in time. "I Extracted the child," Ballard wrote. "He Chose to close the Loin." The language is opaque here, suggesting either a friendly division of duties or an officious take-over by the doctor. The second encounter was more troublesome. Ballard had been sitting up all night with twenty-year-old Hannah Sewall, who had recently arrived in Hallowell from the town of York. "They were intimidated," she wrote, "& Calld Dr. Page who gave my patient 20 drops of Laudanum which put her into such a stupor her pains (which were regular & promising) in a manner stopt till near night when she pukt & they returned & shee delivered at 7 hour Evening of a son her first Born."18 Hannah Sewall's intimidation, so called, may have had something to do with the fact that she had grown up in an elite family in a coastal town and was already familiar with medical delivery. As for Ballard, she was openly annoyed. Thereafter she was unmerciful in reporting Page's mistakes.

"Sally Cocks went to see Mrs. Kimball," she wrote. "Shee was delivered of a dead daughter on the morning of the 9th instant, the operation performed by Ben Page. The infants limbs were much dislocated as I am informed." She even questioned the doctor's judgment on nonobstetrical matters. Called to treat an infant's rupture, she recommended the application of brandy. "They inform me that Dr. Page says it must be opined [opened], which I should think improper from present appearance," she added. In June 1798, while she was engaged in another delivery, the doctor again delivered a stillborn child. Her report of the event was blunt: "Dr Page was operator. Poor unfortunate man in the practice." 19

Page was unfortunate, but in eighteenth-century terms he was also ill prepared, as his administration of laudanum at Hannah Sewall's delivery suggests. The prescriptive literature recommended the use of opiates for false pains but not for genuine labor; Page was apparently having difficulty telling one from the other. Experience was the issue here as in so many other aspects of midwifery. Ballard had sat through enough lingering labors to know promising pains from false ones. Her reference to the doctor's dislocation of an infant's limbs also suggests lack of familiarity with the difficult manual operation required in breech births. The English midwife Sarah Stone had warned against doctors like him, "boyish Pretenders," who having attended a few dissections and read a few books professed to understand the manipulative arts so important to midwifery. Even Henry Bracken, an author who insisted that midwives should call in

¹⁸ Ballard Diary, Nov. 17, 1793, Oct. 9-10, 1794. For additional detail on relations between midwives and physicians in Hallowell see Laurel Thatcher Ulrich, "Martha Moore Ballard and the Medical Challenge to Midwifery," in James Leamon and Charles Clark, eds., *From Revolution to Statehood: Maine in the Early Republic*, 1783-1820 (Hanover, N.H., 1988), 165-183.

¹⁹ Ballard Diary, July 8, Aug. 14, 1796, June 14, 1798.

a doctor in difficult births, cautioned, "I would never advise any one to employ a young physician."²⁰

After 1800, Page's misadventures disappear from the diary. Presumably, he eventually learned the obstetrical art in the way Ballard did—by experience.

Extracting the child was only part of the problem. Toward the end of the eighteenth century, English writers began to give as much attention to the dangers of the lying-in period, particularly the problem of childbed fever, as to delivery itself. Puerperal fever may in fact have been rare in England in the early years of the eighteenth century; obstetrical treatises published before 1760 rarely comment on its treatment.²¹ Thomas Denman's Essays on the Puerperal Fever appeared in London in 1768. Four years later, Charles White appended a detailed account of puerperal mortality in British hospitals to his Treatise on the Management of Pregnant and Lying-In Women.²²

Puerperal fever is a wound infection caused by bacterial invasion of the uterine cavity. The infectiousness of the disorder was first suggested in the 1840s by Dr. Oliver Wendell Holmes in the United States and Dr. Ignaz Semmelwis in Austria, though the bacteriology of the disease was not settled until the 1880s, when Louis Pasteur demonstrated the presence of what is now known as streptococcus in patients suffering from the affliction. The symptoms—elevated temperature, headache, malaise, and pelvic pain—usually do not appear until several days after delivery. With certain strains of bacteria there is a profuse and foul-smelling discharge.²³

At least one of Martha Ballard's patients probably died of puerperal infection. Mrs. Craig was "safe Deliverd of a very fine Daughter" on March 31, 1790, but after five days finding her "not so well as I could wish," Ballard administered a "Clister [enema] of milk, water, & salt" and applied an "ointment & a Bath of Tansy, mugwort, Cammomile & Hysop which gave Mrs. Cragg great relief." A week later the woman was still "Exceeding ill." Someone (perhaps a physician) prescribed rhubarb and Peruvian bark but without effect. A day or two later Dr. Cony "plainly told the famely Mrs. Cragg must die." She expired that night. Ballard helped

²⁰ Thomas Denman, An Introduction to the Practice of Midwifery (New York, 1802 [orig. London, 1794, 1795]), 179; Stone, Complete Practice, 76-77, xiv; Bracken, Midwife's Companion, 194.

²¹ Exton, for example, gives no more attention to childbed fever than to afterpains (System of Midwifery, 150). In addition to the English works cited above, I have read the Worcester, 1794, edition of Alexander Hamilton, Outlines of the Theory and Practice of Midwifery, first published in Edinburgh in 1784. It also ignores the problem.

²² White, A Treatise on the Management of Pregnant and Lying-In Women ... (London, 1772).

²³ Erna Ziegel and Carolyn Conant Van Blarcom, *Obstetric Nursing*, 6th ed. (New York, 1972), 522-526; Wertz and Wertz, *Lying-In*, 119-128; Leavitt, *Brought to Bed*, 154-155.

dress her body for burial. "The Corps were Coffined & sett in the west room," she wrote. "Purge & smell very ofensive." Meanwhile, neighbors came by turns to "give the infant suck." 24

Although Ballard attempted no diagnosis in this case, the symptoms fit the clinical description of puerperal fever. Perhaps one or two others among the five maternal deaths in her practice can also be attributed to infection. One woman was "safe delivered," fell ill a few days later, and died two weeks after delivery. Another died four days after giving birth at a time when scarlet fever, a form of streptococcus infection, was present in the town. In the two remaining maternal deaths, however, other symptoms were apparent. One woman was suffering from measles. 25 The other was in convulsions when delivered of a stillborn daughter and was still experiencing "fitts" four days later when she died. She was no doubt a victim of eclampsia, the most severe stage of an acute toxemia of pregnancy, a condition that is still considered one of the gravest complications of childbirth today. 26

The Ballard diary suggests that puerperal infection was present in late eighteenth-century Maine, but the random appearance of the disease shows why it was seldom identified and discussed. In contrast, contemporary English physicians were encountering a truly alarming phenomenon. Charles White reported mortality rates for several London and Dublin hospitals that at midcentury were losing one out of every thirty or forty patients to puerperal fever. In 1770, in one London hospital, one of every four women died, most from infection. (See Table II.) White was astonished that two hospitals that had been established at the same time, were an equal distance from the center of London, were directed by eminent physicians, and treated the same number of patients should have markedly different death rates. In true Enlightenment fashion he concluded that one hospital smothered patients with an artificial regimen, while the more successful one was not only less crowded and closer to fields and fresh air but obliged patients to do more for themselves.

White believed that bad habits led to childbed fevers. "Violence used either by instruments or by the hand, in the extraction of the child or the placenta," might bring on an inflammation of the womb, a condition made worse by the custom of pampering women in childbed. A woman should not be delivered in a hot room, or have her child or placenta dragged from her, or lie in a horizontal position in a warm bed drinking warm liquids for a week after delivery. Physicians and midwives were both to blame for practices that all too frequently led to maternal death. He suspected that lower-class women, who could not afford pampering, did better in childbirth than their more affluent neighbors, and he cited christening and

²⁴ Ballard Diary, Mar. 31, Apr. 4, 5, 10, 11, 12, 13, 15, 16, 1790.

²⁵ Ibid., Oct. 18, 21, 24-29, 1802.

²⁶ Ibid., Feb. 26, 27, Mar. 1, 2, 4, 1789; Ziegel and Van Blarcom, Obstetric Nursing, 208-213.

TABLE II
COMPARATIVE MATERNAL MORTALITY RATES

Place	Total Births	Maternal Deaths	Deaths per 1,000 Births
London A			
1767-1772	653	18	27.5
1770	63	14	222.2
London B			
1749-1770	9,108	196	21.5
1770	890	35	39.3
London C			
1747-"present"	4,758	93	19.5
1771	282	10	35.4
London D	790	6	7.5
Dublin A			
1745-1754	3,206	29	9.0
Dublin B			
1757-1775	10,726	152	14.1
1768	633	17	26.8
1770	616	5	8. ı
Martha Ballard			
1777-1812	998	5	5.0
1785-1812	814	5	6.1
United States			
1930			6.7
1935			5.8
1940			3.8
1945			2.I

Sources: Charles White, A Treatise on the Management of Pregnant and Lying-In Women (Worcester, Mass., 1793 [orig. publ. London, 1772]); Ballard Diary; Wallace, Gold, and Lis, eds., Maternal and Child Health Practices, 285.

death ratios from London and Manchester parish records to prove his point.²⁷

Had White known about Martha Ballard, he would have had a ready explanation for her success: she practiced among frontier women who lived close to nature. In fact, Ballard was probably guilty of one of the practices White deplored—using hot drinks laced with alcohol. Still, there

²⁷ White, A Treatise on the Management of Pregnant and Lying-In Women (Worcester, Mass., 1793 [orig. publ. London, 1772]), 17-31, 219, 236-240. White's estimates for London and Manchester work out to maternal mortality rates of 13/1000 and 6/1000 respectively. For a modern effort to compute maternal mortality ratios from parish christening and death records, see B. M. Willmott Dobbie, "An Attempt to Estimate the True Rate of Maternal Mortality, Sixteenth to Eighteenth Centuries," Medical History, XXVI (1982), 79-90. Dobbie believes that maternal mortality in England may have been as high as 29/1000, as compared with earlier estimates of 10-15/1000.

is plenty of evidence in the diary of the kind of vigor he admired. Ballard's patients were not all as sturdy as Mrs. Walker, who was "sprigh about house till 11 [and] was safe delivrd at 12," or as courageous (or foolhardy) as Mrs. Herriman, who "wrode in a sleigh 13 miles after her illness was on her"; but few Hallowell women could afford to lie in bed. Ballard's own daughter, Dolly Lambert, was "so well as to be helpt up and sett at table for breakfast" twenty-four hours after giving birth to her fourth child. Ballard generally left her patients in the care of an afternurse a few hours after delivery, but when she stayed overnight she helped to get the woman out of bed in the morning. "Got my patient up, Changd her Lining and came home," she wrote (in this case, twelve hours after delivery), and "help[ed] Mrs Williams up & maid her Bed and returned home" (twenty-four hours after birth). 29

Modern epidemiology confirms Charles White's belief that environment affected mortality, though, of course, the theoretical explanations differ from his.³⁰ Because Ballard was a part-time practitioner who delivered women at home and shared their postpartum care with nurses and family members, she had little opportunity to spread puerperal infection from one patient to another. The opposite conditions existed in the London hospitals, where as White himself suspected, the use of instruments in delivery probably increased the lacerations and tears that encouraged septicemia. Higher incidence of venereal disease in London may also have been a factor.³¹

That childbearing was safer in rural Maine than in London hospitals hardly seems surprising. The more interesting question for our purposes is how the literature emanating from those hospitals affected obstetrical practice in country places. Here the writings of Dr. Jeremiah Barker of Gorham, Maine, are particularly revealing. In February 1785 Barker initiated a discussion in the Falmouth [Maine] Gazette over the causes of an unusual "mortality among child-bed women, which has prevailed of late." Dr. Nathaniel Coffin, whose practice was in Falmouth (now Portland), submitted an angry response that was published in the next issue of the paper. Yes, several women had died in childbed in and about the town, but since the cause was unknown there was nothing that could have been done to save them. He denied that there was an epidemic, and he accused Barker of awakening "all those fears and apprehensions, which are but too

²⁸ Ballard Diary, Mar. 11, 1790, Jan. 19, 1800.

²⁹ Ibid., Apr. 17, 1801, May 31, 1799, Nov. 28, 1787; see also ibid., June 30, 1794, June 3, 1795, Aug. 10-11, 1799.

³⁰ Some 19th-century Americans debating the causes of childbed fever used the same environmental argument, anticipating the conclusions but not the logic of 20th-century historians (Charles E. Rosenberg, *The Care of Strangers: The Rise of America's Hospital System* [New York, 1987], 124-126, 376, n. 10, n. 11).

³¹ Dorothy I. Lansing, W. Robert Penman, and Dorland J. Davis, "Puerperal Fever and the Group B Beta Hemolytic Streptococcus," *Bulletin of the History of Medicine*, LVII (1983), 70-80. On the complexities of the puerperal fever debate in the 19th and early 20th centuries see Leavitt, *Brought to Bed*, chap. 6.

often cherished by the sex." The debate continued through four issues of the newspaper, Barker insisting that an excess of bile characterized all the cases of puerperal fever he had studied, Coffin retorting that Barker had misread the symptoms.³²

Barker included additional detail on the puerperal fever controversy in "History of Diseases in the District of Maine," a manuscript that he wrote after his retirement from active practice in 1818. Taken together, the newspaper stories and the "History" tell us a great deal about how medical reforms, initiated in London, were received in America. In his letters to the Falmouth Gazette Barker appears as a bold empiric asserting the power of direct experimentation against the dated theories of academic physicians. In his manuscript he reveals that the source of his ideas was a work by Thomas Denman, presumably his 1768 essays on puerperal infection.³³

According to Barker's history, the puerperal fever outbreak began at the same time as an equally troubling rash of wound infections. In the spring of 1784, he recalled, "some unusual appearances took place in wounds & bruises, even trivial ones, which baffled the skill of the Surgeon, and issued in the death of the patient. . . . Local inflammations chiefly from injuries were more frequent and untractable during the year than I ever knew them to be before or since. The subjects of these complaints were chiefly males and apparently of good constitutions." At the same time, several women in Gorham, Falmouth, and adjoining towns contracted puerperal fever. Although Barker made no connection between the two phenomena, it is difficult for a twentieth-century reader to avoid doing so.

Since Barker gave no statistics on the number of men who died from infected wounds or of women who suffered from childbed fever, and since birth and death records for the region are incomplete, it is impossible to know how serious the problem really was. Barker simply tells us that few women who suffered childbed fever survived, and that he attended autopsies in three different towns. Yet his description confirms the rarity of the disorder in the region. "The ill success which attended my practice," he wrote, "induced me to write to several aged & experienced physicians in different portions of Massachusetts, for advice, as puerperal fever had never appeared among us excepting in a few sporadic cases, which yielded to common means." His correspondents had never seen such an epidemic themselves, but they referred him to the works of Denman and other unnamed British authors. It was from Denman's book, apparently, that Barker got his notions about bile and the use of "the bark" (quinine) as a remedy. He also wrote to Dr. Ammi Ruhamah Cutter of Portsmouth, New Hampshire, who had reportedly experienced high mortality from

³² Falmouth Gazette and Weekly Advertiser, Feb. 12, 26, Mar. 5, 12, 1785.

³³ Jeremiah Barker, "History of Diseases in the History of Maine," chap. 3, Barker Papers, Maine Historical Society, Portland.
³⁴ Ibid.

childbed fever. Cutter suggested applying "fermenting cataplasms to the abdomen composed of flower & yeast." ³⁵

Barker credited none of these sources in his 1785 newspaper letters, however, nor did he elaborate on the problems in his own practice. Alluding to an unusual childbed mortality, "especially in the town of Falmouth" (where Nathaniel Coffin practiced), he offered his remedies as a disinterested effort to "secure the happiness of mankind." Although he claimed to have "taken the opinion of the Massachusetts Medical Society," he gave no names. Whom was he addressing? Surely not his fellow doctors. If that had been his intent, he would have limited himself to the private correspondence he had already begun. Instead he reached beyond the medical fraternity to the literate public of his region. The very form of his argument suggests that some part of his intended audience was female.

When Barker asserted that his patients could testify to the effectiveness of his methods, Coffin countered, "I am sorry the Dr. is obliged to have recourse to the female sex for a vindication of them." He suggested that the young doctor read "Astruc, Brooks, and others" to correct his faulty diagnosis. Barker retorted that the proposed authors were not only "Obsolete" but "esteemed of less consequence, in many respects, than the opinion of some of the female sex, founded on experience, in this more enlightened age."37 The reliance on experience was, of course, a staple of Enlightenment medicine. Whereas earlier physicians had relied on theoretical learning, English reformers like William Smellie had emphasized the necessity for practical training in the manual arts of midwifery. Ironically, the obstetrical Enlightenment encouraged physicians to assume women's work in the very act of celebrating its importance. As Thomas Denman expressed it, "A natural labour was the last thing well understood in the practice of midwifery, because scientific men, not being formerly employed in the management of common labours, had no opportunity of making observations upon them."38

Barker's regard for female experience was conditional. He praised enlightened women who sought his care but mistrusted traditional midwives and nurses. His case notes from 1774 describe his efforts to deliver a woman with an imperforate vagina after the ministrations of her "friends" had failed. "I found that nothing could be done but to dilate the Perineum for the egress of the Child," he wrote, "and 'tho the operation is simple, yet fearing the sensure of the Vulgar (if any misfortune should befall the patient, afterwards) advised to send for Dr. Savage as an

³⁵ Ibid.

³⁶ Falmouth Gaz., Feb. 12, 1785.

³⁷ Ibid., Feb. 26, Mar. 5, 12, 1785. Coffin was perhaps referring to Richard Brookes, The General Dispensatory . . . (London, 1753), or The General Practice of Physic . . . (London, 1754) and to Jean Astruc, A Treatise of the Diseases of Women . . . , 2 vols. (London, 1762), or Elements of Midwifery, containing the Most Modern and Successful Method of Practice in Every Kind of Labor . . . (London, 1766). Astruc's works were translated from the French.

³⁸ Smellie, Collection, III, 533-543; Denman, Introduction, I, 171.

assistant." As it happened, the dead fetus was delivered before the second physician arrived. 39 Barker's concern about the censure of "the Vulgar" suggests the difficulties many physicians had in establishing credibility in the region, not only in obstetrical but in general medical cases. One young man entering practice in Waterville, Maine, in the 1790s even signed contracts with prospective patients, promising not to charge them if his remedies failed. 40

Like Benjamin Page of Hallowell, Barker had begun his medical career after a brief apprenticeship with a Massachusetts physician. In 1774 he was twenty-two and in his second year of practice. The newspaper debate suggests that, ten years later, he had grown tired of his practice in Gorham and adjoining towns, and perhaps hoped to attract the attention of prosperous families in the port of Falmouth.⁴¹ Jeremiah Barker knew that women, whether vulgar or enlightened, were guardians of a doctor's reputation.

For his part, Coffin was furious at Barker for questioning the skills of other physicians. He was also dismayed that the younger doctor should invoke the authority of the Massachusetts Medical Society, even though he was not a member. When Coffin wrote to the society in 1803 recommending a number of new members from Maine, he explicitly excluded Barker, partly on the basis of the 1785 affair, which still rankled. (The society ignored his advice and elected Barker anyway.)⁴² Thus a young physician moving into obstetrical practice in the 1780s and 1790s had two obstacles to overcome—folk reliance on traditional midwifery and the mistrust of older, more conservative physicians.

For our purposes, however, the more important issue is the way in

³⁹ Jeremiah Barker, Medical Cases, 1771-1796, Barker Papers.

⁴⁰ Loose paper dated Apr. 29, 1802, Moses Appleton Papers, Waterville Historical Society, Waterville, Me. On the larger question of lay resistance see William G. Rothstein, American Physicians in the Nineteenth Century: From Sects to Science (Baltimore, 1972), 128-138, and Joseph F. Kett, The Formation of the American Medical Profession: The Role of Institutions, 1780-1860 (New Haven, Conn., 1968), 101-107.

⁴¹ Barker was born in Scituate, Mass., began his practice in Gorham, Me., in 1772, removed to Barnstable on Cape Cod after a year, returned to Gorham in 1779, and finally went to the Stroudwater section of Falmouth in 1796 (James Alfred Spalding, Jeremiah Barker, M.D., Gorham and Falmouth, Maine, 1752-1835, reprinted from Bulletin of the American Academy of Medicine, X ([1909], 1-2). Barker had an indirect link to British medicine. In mid-career his mentor, Dr. Bela Lincoln of Hingham, Mass., had spent a year studying in London hospitals and acquiring an M.D. from King's College, Aberdeen. Spalding, Barker, 1-2; Clifford K. Shipton, Sibley's Harvard Graduates: Biographical Sketches of Those Who Attended Harvard College, XIII (Boston, 1965), 456.

⁴² Nathaniel Coffin to Massachusetts Medical Society, May 8, 1803, and Jeremiah Barker to Joseph Whipple, July 12, 1803, Countway Medical Library, Boston. In the long run, Barker may have been more forgiving than Coffin. His manuscript history describes Coffin as a physician "who commanded an extensive practice in physic, surgery and obstetrics, with good success" ("History," chap. 2).

which the puerperal fever incident of 1784-1785 began to shape Barker's practice. All of the cases of childbed fever described in his history came from that outbreak, yet he used them to support a long, detailed discussion of the cure and prevention of the disorder. Even by his own account, puerperal fever cannot have been a serious problem in the region. Most of the physicians to whom he wrote had seen only scattered cases; all of them referred him to British authors for an understanding of the subject. Coffin even doubted that the deaths could be attributed to a single disease, and he questioned whether he or any other physician could have done anything to prevent them. In Barker's own practice the trouble also faded away. There were additional cases during the winter of 1784-1785, he wrote, yet the disease showed "decreasing malignancy and mortality. Since which it has not appeared among us, excepting in a few sporadic cases, which seldom proved fatal."43 Yet by 1818 his interpretation of the 1784-1785 cases had expanded to encompass citations from medical literature published as late as 1817.44 Barker measured his entire career against that single early disaster. Since it was never repeated, he assumed that his preventative practices were successful.

Barker combined the noninterventionist prescriptions of the late eighteenth century—better ventilation, lighter food, avoidance of alcohol—with more heroic measures. "The means of prevention may be reduced to two," he argued. First, the physician should treat the patient during labor as though she were already a victim of the disease, drawing blood, administering emetics and cathartics, debarring her "entirely from spirits," and keeping her "on a low diet, without any animal food, in a well ventilated apartment without any curtains, on a mattress or straw bed." The second method involved "facilitating or rather hastening, by artificial means, the termination of labour." Presumably, this meant using forceps and possibly ergot, a powerful and dangerous drug that, when given orally, stimulates uterine contractions. In this, Barker departed from the advice of his 1784 mentor, Thomas Denman, who, like Charles White, believed that forceps should be used rarely and that hastening labor led to postpartum complications. In the second method involved that forceps should be used rarely and that hastening labor led to postpartum complications.

What we have, then, is a clear example of the way in which medical literature in combination with local experience came to define a practice.

⁴³ Barker, "History," chap. 2.

⁴⁴ Ibid. The citations on puerperal fever are, as he gave them, "Dr. Terriere, 1789; Dr. Biskell, Medical Papers, v. 2, 1798; London Medical Repository, May 1815; New England Journal, v. 4, 5; Dr. Channing, New England Journal, vol. 6, 1817; Medical Repository, vol. II."

⁴⁵ Barker, "History," chap. 2.

⁴⁶ Leavitt, Brought to Bed, 144-145.

⁴⁷ On some things Denman had changed his own mind by 1794. Although he continued to oppose intervention in labor, he did accept bloodletting as a cure for puerperal fever, something he had dismissed in his earlier treatise, as had Barker in his *Falmouth Gaz*. letters. Denman, *Introduction*, I, 184-190, II, 253-254; *Falmouth Gaz*., Feb. 26, 1785.

Barker's need to differentiate himself from other practitioners, as well as his desire to apply the latest in scientific knowledge to the management of his practice, made it impossible for him to see the 1784-1785 outbreak as an anomaly. Thereafter, he was convinced that it was his own intervention that had prevented a similar disaster from occurring. In contrast, Martha Ballard's nonscientific, even providential interpretation of events enabled her to treat each case on its own terms. For every patient, she did what she knew how to do and let God determine the outcome. This is not to say that she was incapable of experimentation or that she never wondered why one infant died and another lived. It is simply to argue that her craft was oriented toward practical results rather than theoretical explanation. The death of Mrs. Claton or Mrs. Craig did not destroy her confidence in the soundness of her methods. Hers was not an approach that encouraged innovation, but neither did it promote ill-considered intervention.

Adrian Wilson has estimated that, in nature, 96 percent of births occur spontaneously. Approximately 4 percent involve serious obstruction of some kind and cannot be delivered without intervention. An additional 1 percent, though spontaneous, result in complications—minor ones such as fainting, vomiting, and tearing of the perineum, or major events like hemorrhaging or convulsions. Martha Ballard's records fit Wilson's typology well. Approximately 95 percent of her entries simply say "delivered" or "safe delivered." In the remaining 5 percent, some sort of complication is indicated, by explicit reference to obstructions, an oblique comment on the severity of the labor, or simply an acknowledgment that the delivery was accomplished through the mercy of God. Her records thus attest to the relative safety of childbearing as well as to her skill in managing difficult labors. Her ministrations no doubt improved the conditions of birth, but, perhaps even more important, she did little to augment the dangers.

In this regard it is interesting to compare her records with those of James Farrington of Rochester, New Hampshire, a nineteenth-century physician whose caseload was similar to hers and whose records, unlike those of his eighteenth-century predecessors, are extraordinarily complete. Dr. Farrington began the study of medicine in 1814, two years after Ballard's death. His manuscript records include a systematic register of 1,233 deliveries performed between 1824 and 1859. At first glance, his stillbirth and mortality ratios confirm the conclusions of revisionist histories—that childbirth became more dangerous in the nineteenth century. Farrington's stillbirth ratios are higher than any of the eighteenth-century practitioners and closer to those of the nineteenth-century midwife Jennet Boardman. (See Table I.) Even more striking is the number of maternal deaths at delivery. That he was occasionally called to complete someone else's mismanaged delivery is certain, though those few cases that include extended descriptions suggest that, regardless of

⁴⁸ Adrian Wilson, "William Hunter and the Varieties of Man-midwifery," in Bynum and Porter, eds., William Hunter, 344-345.

practitioner, nineteenth-century obstetrical practice added new dangers to the old problems of obstructed birth. Curiously, there is no indication of puerperal fever in Farrington's records. One might have expected at least a few cases of infection over such a long career. Since his tightly organized accounts, with one exception, list deliveries *only*, it is possible that such cases, usually arising a week or so after delivery, appeared in another set of more general medical records.⁴⁹

Farrington recorded five maternal deaths. One woman, he wrote, was "enfeebled by intemperance." Another had a severe cold and "spoke but few words after delivery, but sunk away without a groan." The most dramatic case had been abandoned by another physician. Farrington described it as "preternatural labor requiring in the end the dissection of the infant," adding details that might have come from English obstetrical literature a hundred years before: "the external parts of generation much lacerated and mangled by *books*, *pincers*, and knives." The woman survived Farrington's extraction of the dismembered fetus but died five days later. A fourth woman died of bleeding after an unidentified attendant failed to extract the placenta. The fifth woman suffered a ruptured uterus: "in a few minutes the whole child could be felt expelled from the Uterus within the abdominal cavity." The woman lived about an hour.⁵⁰

The numbers are small, however, and, without more detail on postpartum infection, inconclusive. The most striking contrast between Farrington's and Ballard's records is not in mortality rates themselves but in their characterizations of delivery. The process of labor was biologically the same, yet their descriptions differ markedly. Whereas Ballard thought in terms of the general outcome ("left mother and child cleverly"), Farrington focused on theoretical categories. Labors were "natural," "tedious," "premature," "preternatural," "complicated," or, after 1838, "instrumental," regardless of whether the mother and child survived. ⁵¹ Twenty percent of the deliveries in his records are listed as something other than "natural." ⁵²

⁴⁹ Franklin McDuffie, History of the Town of Rochester, New Hampshire, from 1722 to 1890, ed. Silvanus Hayward (Manchester, N.H., 1892), I, 345-346; James Farrington Medical Record Books, 1824-1859, Special Collections, Dimond Library, University of New Hampshire, Durham. Farrington added an entry about the woman dying five days after delivery in different colored ink at the end of his delivery record. On the general pattern of listing childbed deaths under other causes see Wertz and Wertz, Lying-In, 125-126.

⁵⁰ Farrington, Medical Record, Case #451, Sept. 9, 1835, #118, Feb. 24, 1825, #442, May 28, 1835, #292, Jan. 30, 1831.

⁵¹ Farrington used forceps before 1838; he just did not have a separate category to cover instrumental labors.

⁵² Joan M. Jensen's analysis of 109 deliveries by an early 19th-century Chester, Pa., physician shows no maternal deaths at delivery, 7% stillbirths, and 30% difficult labors (*Loosening the Bonds: Mid-Atlantic Farm Women, 1750-1850* [New Haven, Conn., 1986], 30-33). The low caseload of this physician, roughly 14

Here the telltale category may be his 102 cases of "tedious" labor, defined in the medical literature as lasting longer than twenty-four hours. In one case, which terminated safely at twenty-six hours, Farrington reported taking blood from the woman's arm, then giving an opiate. Four hours before the birth he gave her "Ergot in Infusion" and was pleased when he was able to deliver the child "without Instruments though for several hours no alteration was made by the force of the Pains." Reading such an account, one finds it difficult not to think of Ben Page's administration of laudanum at the delivery of Hannah Sewall. Ironically, the remedy that so dismayed Martha Ballard was by now a standard part of the physician's arsenal. The three remedies—laudanum, ergot, and forceps—went together, accomplishing, as the physicians and perhaps many of their patients thought, an artificial hastening of labor. 54

Judith Walzer Leavitt has argued that women chose medical intervention. Sally Drinker Downing, for example, sought out the services of the Philadelphia physician William Shippen, who administered opium during her 1795, 1797, and 1799 deliveries. Leavitt concludes that "the prospect of a difficult birth, which all women fearfully anticipated, and the knowledge that physicians' remedies could provide relief and successful outcomes led women to seek out practitioners whose obstetric armamentarium included drugs and instruments."55 Leavitt may be right about Downing, yet Martha Ballard's diary adds a new dimension to the question of choice. At ten o'clock on the evening of October 21, 1794, she was summoned to the house of Chandler Robbins, a Harvard graduate and new resident of Hallowell. "Doctor Parker was calld," she wrote, "but shee did not wish to see him when he Came & he returnd home. Shee was safe delivered of a son her first Born at 10 hour 30 minutes Evening" that is, twenty-four and one-half hours after summoning the midwife. Ballard's reward for officiating at this "tedious labor" was eighteen shillings and the satisfaction of knowing that God and the parents were pleased.

This brief survey of Martha Ballard's diary and related documents supports the reformist point that birth is a natural process rather than a life-threatening event. It suggests that rural midwives were capable of managing difficult as well as routine births, that the need for medical intervention was by no means obvious, and that puerperal infection, though present, was still only a random problem in the last years of the eighteenth century. For midwives like Martha Ballard or Lydia Baldwin, experience defined competence, yet in the years following the Revolution a number of brash young men with more confidence than experience took

deliveries a year, suggests the presence of other practitioners, probably including midwives.

⁵³ Denman, *Introduction*, 171; Farrington, Medical Record, Case #539, Aug. 8, 1839.

⁵⁴ Leavitt, Brought to Bed, 43-44.

⁵⁵ *Ibid.*, 40.

up the practice of delivering babies. Not content with the more restrained role of older doctors, they consulted British literature and sought advice from other physicians to solve their problems and validate their skills. That they gravitated toward works that emphasized the necessity of intervention is hardly surprising. In a competitive environment no bright young physician could embrace Charles White's advice that the less done in childbirth the better. Employing forceps, letting blood, administering opiates and ergot, they set themselves apart from the manual skills and the providential faith of the midwives.

During the earlier years of Martha Ballard's midwifery in Hallowell, however, the success of such physicians was by no means assured. In 1800, when age, ill health, and a move to a more distant part of the town forced her to cut back her practice, she was the single most important practitioner in her town, and she knew it.