# *Horatio Gates Spafford*

*Inventor, Author, Promoter of Democracy*

BY JULIAN P. BOYD

"COURAGE," wrote Horatio Gates Spafford in one of his few quotable sentences, "is often but another name for desperation." It was with these words that he brought to a close the costly and ill-fortuned editorship of *The American Magazine*. They are words that might also have been fittingly used as his epitaph. Courage born of desperation and courage born of an ineradicable love of learning were alike characteristic of his entire career. His writings and other ventures of which we have record fall in the years between 1809 and 1825, a period which witnessed a war that the young Republic might have avoided and an economic depression that it could ill afford. In that period, beginning three decades before Emerson's Declaration of Intellectual Independence, Spafford and his more famous contemporaries, possessed by a vision of the future of America, fought against overwhelming odds the battle to promote the arts and the sciences. While others, the vast majority, were engaged in the task of creating a nation of farms and industries, they, though a minority, were both articulate and vociferous in behalf of individual and social improvement. "If we examine the state of Society in America," Spafford wrote in his plea for a National School of Science and Mechanic Arts, "we find everywhere a spirit of intelligence, of improvement, that we can nowhere else find among the common people. Why is this, but because they here generally enjoy the benefits of learning, which leaves them at

liberty to embrace their own opinions;—free to the exercise of thought, untrammeled by the artificial systems of religious or political orthodoxy, too commonly imposed by other states? . . . America is the favorite soil of freedom—and however tyrants, little or great, domestic or foreign, may sneer at this, the Star of America seems destined to rise till it become the Sun of the Firmament."[1]

Such a vision and such a devotion to the advancement of knowledge found expression not merely in Boston and Philadelphia and Charleston, but also in isolated communities and even on the western frontiers of Ohio and Indiana. Literary and historical societies, agricultural associations, academies of arts and sciences, libraries and reading rooms, lecture programs and debating societies, ephemeral journals and miscellanies, extensive correspondences between men of learning—all of these proliferated wherever two or more men could be found whose tastes and appetites went beyond the physical necessities. Even the federal post office, as the one institution having representatives in every sizable community in the nation, took on at times the aspect of a far-flung learned society: the history of the part played by local postmasters in collecting data, in reporting to compilers of histories and gazetteers, and in answering the all-embracing questionnaires sent out by societies in New York, Boston, and Philadelphia, is yet to be written. All of this zeal for improvement, linked not merely to a profound sense of national pride but also to an equally profound belief in the unlimited possibilities opening up before the young Republic, was carried on by and large by individuals whose personal obstacles were so great as to make their effort little short of heroic. The story of Horatio Gates Spafford is, with few exceptions, a typical story of the

[1] "Franklin," "On A National School of Science and the Mechanic Arts, and on new modelling the Patent System," *The American Magazine* (Albany, 1815–1816), vol. 1, p. 317.

intellectual efforts made by numerous Americans of his generation. It is a story of an unending struggle with poverty, with an unsympathetic and even hostile public, with the handicaps that were appallingly great in an age when government reports, massive aggregations of books in libraries, research foundations, and the whole paraphernalia of scholarly apparatus had not yet eased the drudgery of the individual scholar.

The men of learning who engaged in this struggle were characterized not merely by a common sharing of poverty, the handicaps of great distances, the difficulty and uncertainty of communication, and the lack of resources, but also by the fact, perhaps produced by these hardships, of their common sharing of knowledge and their recognition of interdependence. It would have been pathetic for anyone to attempt to borrow ten dollars from such a perennial bankrupt as Spafford, but when the hopeful borrower was the Reverend Samuel Williams, aging and impecunious but heroically seeing his *History of Vermont* through a second valuable edition, the pathos becomes symbolic.[2] Not all of

[2] Samuel Williams to Spafford, January 6, 1812: "I am much perplexed for the want of ten dollars. It would be an act of great kindness if you could loan me that sum." This letter is in a quarto volume of some three hundred letters addressed to Spafford and now in the possession of Mr. Lloyd W. Smith of Morristown, New Jersey, whose kindness in permitting me to use these manuscripts enabled me to present many hitherto unknown facts about Spafford. The volume of letters to Spafford owned by Mr. Smith has a highly interesting provenance: someone, perhaps Spafford himself, pledged it for a tavern bill at Franklin, Pennsylvania, a town located about ten miles from a tract of land purchased by Spafford in 1817. The letters in this volume belong almost entirely to the years 1809–1817, thus indicating that Spafford may have left them with the tavern keeper in Franklin about 1820 when he abandoned his lands in that region and returned to New York. The tavern keeper, aged and infirm, sought the medical services of a Pittsburgh physician, Dr. James R. Speer, some time about 1845. A discussion about John Adams' attitude toward Freemasonry aroused Dr. Speer's interest in the manuscripts and, several years later, the volume was left to him at his patient's death. It passed in due course to his son, Dr. Alexander M. Speer, who in May, 1915, gave the story of the history of the letters as he had heard it from his father. These letters constitute the chief source of information about Spafford, though many of his letters to Jefferson and Madison are in the Library of Congress and the Massachusetts Historical Society; a few scattered ones are located in the American Antiquarian Society, the New York Historical Society, the Historical Society of Pennsylvania, and the New York Public Library. *Unless otherwise noted, it is to be understood that letters cited in footnotes are to be found in the Spafford Manuscripts in the possession of Mr. Lloyd W. Smith.*

Spafford's correspondents wasted the effort of attempting to borrow money from him, but nearly all of them, in one form or another, revealed their particular aspects of the grim struggle in behalf of learning. Noah Webster, harassed by poverty but determined to finish his dictionary in his own way no matter what the cost or the number of years it took, wrote that all of his efforts to secure patronage had failed; worse, there was opposition to his grammar: "The principal conductors of public prints in our large towns have been indifferent to my views or directly opposed to them, & all the remarks that have appeared have been in opposition. Not having one friend to notice the work with candor & favor, I cannot expect that the public will give it much attention."[3] David A. Leonard, at work on his Latin grammar but with an inquiring mind that was versatile enough to see the possibilities in Junia Curtis' rudimentary idea of the steam turbine, wrote Spafford when he learned of the suspension of *The American Magazine* and of Spafford's determination to give up literary pursuits for a few years: "We may say of literary pursuits as Goldsmith said of his muse 'Thou foundst me poor at first & kept me so.' I have like you need of some of this mammon. I am therefore bound with my young & numerous family into Indiana."[4] The venerable hero of the Revolution, Charles Thomson, wrote Spafford that he was waiting, at the age of eighty-five, to put his synoptic history of the gospels into press as soon as he could get "five or six or even four hundred subscribers."[5] William Dunlap wrote of suspending *The Recorder* after five numbers "to prevent an accumulation of debt which my future labours might fail to enable me to pay" and told also of the English pirating of his *Life of*

[3] Webster to Spafford, Aug. 22, 1811; Oct. 27, 1813; May 4, 1815.

[4] Leonard to Spafford, Jan. 31, 1817.

[5] Thomson to Spafford, Dec. 17, 1813.

*Cooke.* "So much," he concluded, "for the miseries of Authorship, of which I doubt not you have had your share."[6] Melatiah Nash wrote of his difficulties in publishing the *Columbian Ephemeris*, and a Connecticut zealot who wished to emulate Spafford's *Gazetteer of the State of New-York* revealed a humorous but nonetheless serious handicap to authorship: his wife became so enraged over his preoccupation with data about Connecticut that she threatened to burn his manuscripts and he was thus forced to carry on his researches by stealth.[7] Charles Holt of New York, trying unsuccessfully to place a manuscript for Spafford, wrote: "I am too much paralyzed and sickened with my own situation even to think of any other literary undertaking without seeing 'in my mind's eye, Horatio,' vexation, loss and ruin at the end of it."[8] Samuel Walker of Vermont reported that "Your Gazetteer is by all considered as the very best work of the kind which has ever appeared," but, explaining the paucity of sales, he added: "You know, Sir, that in Vermont, we are not all reading animals."[9]

Almost without exception, the story of the difficulties was the same. Almost without exception, too, these early promoters of learning allied themselves in their common cause. Isaiah Thomas, Horatio Gates Spafford, Zadock Cramer, Thomas Cooper, Samuel Williams, James Whitelaw, Elkanah Watson, John Melish, and others of the day exchanged each other's publications, promoted each other's subscriptions, and shared their sympathy as well as their knowledge. The names of those who corresponded with Spafford, aiding him and deriving aid from him, constitute a roster of the intellectual fraternity of that generation in

[6] Dunlap to Spafford, Jan. 1814.

[7] Nash to Spafford, Dec. 13, 1811, and April 14, 1812; Andrew Beers to Spafford, Feb. 19, 1814, and Jan. 23, 1815.

[8] Holt to Spafford, Apr. 21, 1816.

[9] Samuel Walker to Spafford, July 18, 1815.

America. It was an impressively long and varied roster: in addition to those already named, there were, among others, the following: Samuel Latham Mitchill, Peter S. DuPonceau, Daniel Drake, President Sanders of the University of Vermont, President Fitch of Williams, James Wallace, Cadwallader D. Colden, David Hosack, James Mease, William Duane, Winthrop Sargent, Alexander Wilson, Samuel Huntington, and, among the distinguished public figures who lent their names and influence to encourage learning, such men as Thomas Jefferson, John Adams, James Madison, John Jay, DeWitt Clinton, Elbridge Gerry, and Chancellor Livingston.[10] With all of these Spafford carried on correspondence, contributing and receiving information on a wide variety of subjects. He allied himself as well with some of the flourishing young learned societies, and, it must be conceded, exhibited an inordinate zeal for becoming a member of others. The New York Historical Society was the first to honor him with membership, closely followed by the American Antiquarian Society, the Berkshire Society for the Promotion of Agriculture and Manufactures, the American Academy of Arts and Sciences, and the Society for the Promotion of Useful Arts — precursor of the Albany Institute of History and Art — of which he was corresponding secretary in 1813 and a counsellor from 1814 to 1817.[11] He was granted the honorary degree of Master of Arts by the University of Vermont in 1811. All of this, together with his undeniably useful writings, would seem to indicate that Spafford played an important minor rôle in the intellectual life of

[10] Correspondence with all of those named, and many others, is to be found in the volume of letters owned by Mr. Lloyd W. Smith of Morristown, New Jersey.

[11] The dates of election to membership are as follows: N.Y.H.S., Jan. 8, 1811; A.A.S., June 1, 1814; Berkshire A. and M., Oct. 4, 1813; A.A.A.S., Aug. 23, 1815. On July 31, 1811, Spafford received an honorary M.A. degree from the University of Vermont. Sometime between 1815 and 1824 he seems to have acquired the LL.D. degree, but I have been unable to discover what institution awarded it.

his day. Indeed, one of his discoveries entitles him to a major place among inventors of modern times. Yet he is not to be found in any encyclopedia or dictionary of American biography, save that of Allibone, and the published records of his life are meager and unsatisfying. His name, too long obscured, symbolizes a career that, with all of its eccentricities and frustrations, was part of the intellectual ferment taking place in America in the early nineteenth century and worthy, therefore, of attention in the intellectual history of that era.

The name of Horatio Gates Spafford is one that betrays both the time and the vicinity of its bearer's birth. It also suggests something about his father. At least it prepares us to accept without surprise the fact that Horatio Gates Spafford was born on February 18, 1778, just a few months after General Horatio Gates compelled the surrender of General Burgoyne at Saratoga; that his place of birth was Dorset, Vermont, just across the border and northeast of the scene of surrender; that his father was Captain John Spafford, a Revolutionary veteran who had commanded a company of militia made up of Green Mountain Boys under Ethan Allen at the taking of Ticonderoga and Crown Point and had served also at Bennington and under General Gates; and that Captain Spafford had intended young Horatio for the military profession.[12] But if Captain Spafford named his third son for the official hero of Saratoga, he may or may not have regretted the choice when the fame of General Gates lost much of its lustre at the Cowpens in South Carolina. At any rate, when another son appeared in 1787, the stanch Revolutionary patriot chose the name not of an American general but of a British hero, recently appointed governor general of the Canadian provinces: that son bore the name

[12] Spafford to Madison, Madison Papers (Library of Congress), Sept. 13, 1814.

Guy Carleton Spafford, a tribute both to an able leader and to the sentiments of his parent.

Captain John Spafford, a native of Salisbury, Connecticut, belonged to the early Massachusetts family of Spofford or Spafford, and, just before the outbreak of the Revolution, became one of the first settlers at Tinmouth, Vermont.[13] It was there that Horatio Gates Spafford grew to young manhood, experiencing the self-reliant training that fell to the lot of the Vermont farmboy of that day. "Near fifty years ago," Spafford wrote in 1817 in his *Hints to Emigrants, on the Choice of Lands*, "some people, many of whom are yet living, then resident in Salisbury, Connecticut, purchased a large tract of land, wholly wild, and many miles in advance of the settlements, in the town of Tinmouth, Vermont. This town is principally a deep vale, bounded on three sides by high hills, or mountains, as some would call them, though not exceeding three to five hundred feet in height. . . . The surface of this vale, from one to three miles wide, has a gentle slope towards the centre, which is occupied by extensive and beautiful plains of some miles in extent. These plains were originally covered with an immense growth of maple, beech, ash, elm, basswood, &c. and had a coat of muck, from six inches to twelve in depth;—'deep as heart could wish.' . . . Twenty-five years ago, I ploughed fields on the Tinmouth plains."[14] The observations on the nature

[13] Jeremiah Spofford, *A Genealogical Record Including . . . Descendants of John Spofford and Elizabeth Scott* (Boston, 1888), pp. 76–7. Captain Spafford settled in Tinmouth about 1768. He was born Aug. 31, 1752, and died at Lowville, Lewis County, New York, April 24, 1823. His wife was Mary Baldwin (April 20, 1750–Sept. 9, 1842). They had twelve children; Horatio was the fourth child and third son. Guy Carleton Spafford was killed in 1796 by the "accidental discharge of a shot-gun in the hands of a brother;" the eighth child, Hiram, settled in Brockville, Canada, where he became "a man of great wealth, which evaporated in litigation." All of the children were born at Tinmouth except Horatio, who was born at Dorset. Hemenway, *Vermont Historical Gazetteer*, vol. 3, pp. 1150–1, cites the Spafford family Bible as giving the marriage date of Captain John Spafford and Mary Baldwin as March 19, 1772, but this seems to be an error; their first child was born Nov. 29, 1771.

[14] *Hints to Emigrants* (Albany, 1817).

of the Vermont soil made by young Spafford, and remembered in his cogent advice to farmers in the selection of wilderness lands, reveal a characteristic bent of mind. It is not clear in what way or where this schooling by nature was supplemented with formal education, though at an early period he spent four years at school in Virginia. These four years must have been an important formative influence, for in 1824 Spafford wrote to Thomas Jefferson: "In Virginia I imbibed my first principles, & the elements of literary taste." He spoke of himself in the same letter as "so much a Virginian & so friendly to the great design" on which Jefferson was then engaged that he wished to present one of his books to the library of the new university.[15] We also have Spafford's word, likewise in a letter to Jefferson, that Dr. Samuel Williams was his preceptor and also his example in historical research.[16] His natural bent for studies and his admission into the Society of Friends about 1800 made it impossible for him to follow the military life that had apparently been chosen for him. "It was expressly designed, by my Parents," he wrote to James Madison in 1814, "that I should be educated for military life; & I held a commission at a very early age. My Father was an officer, & active in the field, till called to the Commissariat, where he served to the close of the War. But my conscience forbid[s me] to resist evil with evil in any case, & to commit any violence. . . . I have been a Quaker 14 years."[17] This would indicate that Spafford entered the Society of Friends at about the same time that he was married, at the age of twenty-two, to Hannah Bristol.[18] His family life as well as his espousal of the princi-

[15] Spafford to Jefferson, Jefferson Papers (Library of Congress), Aug. 27, 1813, Oct. 28, 1824.

[16] Spafford to Jefferson (*ibid*), Feb. 24, 1815, Feb. 28, 1822.

[17] Spafford to Madison, Madison Papers (Library of Congress), Sept. 13, 1814.

[18] Spafford (Feb. 18, 1778–Aug. 7, 1832) was married twice. On May 19, 1800, he was married to Hannah Bristol, by whom he had six children. His second wife was Elizabeth Clark Hewitt, of Canaan, New York, by whom he had five children, the first born in 1815 and the last, Horatio Gates Spafford, born in 1828, Jeremiah Spofford, *op. cit.*, pp. 156–7.

ples of the Friends suffered from his eccentricities, his frequent change of residence, his undeviating interest in his studies, and his peripatetic career, but there is no doubt of his devotion to both.

We do not know what means of livelihood he chose to support his growing family and his researches, though in his *General Geography* he spoke of long experience in teaching school. Shortly after he was married, he began a series of elaborate experiments in light and heat, or what, after the scientific terminology of the period, he called "the matter of caloric." He regarded the sun as the only source of light in the universe and its heat, as well as its apparent diameter, undiminished by distance. He also held, and proved to his own satisfaction, the curious theory that "the heat of every warm blooded animal, is sufficient to make its own body a luminous object, to the eyes of some other animal." His experiment was equally curious:

> In a dark cellar during the darkest hours of night, I have confined a cat in a closet; after warming a leaden image, in the shape of a mouse, to the temperature of the body of that animal, I have opened the closet door by a long string, and in an instant, though at a distance of 28 feet, I have heard the cat seize her prey. When the same image is cold, she either does not find it at all, or only after a long time, and then, probably by chance.[19].

Another experiment, apparently designed to establish the effect of heat upon luminosity, involved an elaborate arrangement of three rooms, the middle one heated so intensely that a cat and mice died in it within a few moments. This experiment probably led also to Spafford's concern about the "deterioration" of the atmosphere in rooms heated by stoves or by steam or hot air passing through iron pipes. On this subject he corresponded with Thomas Cooper of

[19] "Thoughts on Philosophical Science, on Creation, and the Order and Constitution of Nature," *The American Magazine* (Albany, 1815–1816), vol. 1, p. 414. Spafford also corresponded with Count Rumford on this subject, as indicated in a letter from Rumford's early teacher, Samuel Williams, to Spafford, March 16, 1812.

Carlisle and Dr. James Mease of Philadelphia: Cooper gave a noncommittal answer, but Mease was emphatic in denouncing the practice of using stoves and hot-air ducts, citing as proof both his own headaches and the expensive mistake of the architect Pettibone in building an elaborate central heating plant for one of the Philadelphia banks.[20] These experiments probably led directly to the first of Spafford's unhappy relations with the United States patent system and certainly to the first record that we have of his public life: in 1805 he was granted a patent for an improved fireplace.[21] It was also about the time of his marriage that he became much interested in what he described as a philosophical theory concerning the chemical properties of iron, a theory which he believed would revolutionize the manufacture of iron and steel.[22]

Indeed, if we may credit Spafford's later writings, almost all of his efforts began around 1800. In 1809 he made his debut as an author and in the preface, dated on his thirty-first birthday, he informed the public that he had been engaged in the work for more than eight years. This was his *General Geography, and Rudiments of Useful Knowledge Digested on a New Plan, and Designed for the Use of Schools*, which was in effect an unsuccessful attempt to break the American monopoly held by Jedediah Morse in the field of geography. This small octavo volume of 393 pages was published at Hudson, New York, by Croswell and Frary and was illustrated with "an Elegant improved Plate of the Solar System" and with maps of the world and of the United States, together with numerous wood engravings. The

[20] Thomas Cooper to Spafford, Aug. 26, 1815; James Mease to Spafford, June 6, 1815.

[21] Granted May 3, 1805. The specifications for this patent are no longer available, the early records of the Patent Office having been destroyed by fire.

[22] Spafford to Jefferson, Jefferson Papers (Library of Congress), Nov. 25, 1822. Spafford to Madison, Madison Papers (Library of Congress), same date. See below for an account of this discovery.

"Map of the World from the latest discoveries" was drawn in the shape of two hemispheres by Spafford himself and engraved by G. Fairman, as was the map of the "United States; or Fredon." Both are done with great precision: Spafford apparently felt some dissatisfaction with the inadequacies of Mercator's projection, for he departs from it.

But if Jedediah Morse began his lectures and his geographies out of dissatisfaction with the treatment given in English texts to America, Spafford apparently undertook his *General Geography* because he thought, as he expressed it to Jefferson, "The Writings of Dr. Morse are not of the right character for this Nation."[23] What Spafford probably meant was that Morse, a valiant Federalist, could not be counted upon to give proper instruction to a generation of school children brought up under Jeffersonian Republicanism. He also felt that the national government, then safe in the hands of the Republicans, should make proper discrimination in this matter of comparative geo-politics: "When the Government shall have duly examined and contrasted mine with his," he wrote to Jefferson, "I hope for some patronage from the national administration." Spafford nevertheless adopted Morse's cherished "Fredonia" as a generic term for the United States. "Convinced as I am of its utility," he wrote, "I shall occasionally make use of Fredon, as a proper general generic term for the United States of America; and of the derivatives of Fredon, as occasion shall require. Thus Fredon, or Fredonia, will form a national name for our country; the people thereof will occasionally be styled Fredes, or Fredonians, and our adjective epithet will be Fredish, or Fredonian."[24] In spite of

[23] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Aug. 27, 1813. In 1810 Spafford had asked Madison to have the government relieve him in the matter of postage. Spafford to Madison, July 12, 1810.

[24] *General Geography* (Hudson, 1809), p. 152.

all this, the Gibraltar of Jedediah Morse remained unshaken and, even as good Jeffersonian geography, the book made only a moderate success.

The "New Plan" on which the *General Geography* was organized had, according to Spafford, "obtained the sanction of most scientific men in England, France, and throughout Europe in general" and was based directly upon the improved geographical principles of the Scottish historian, John Pinkerton.[25] In doing this, Spafford wrote, "I am well aware that, as I shall deviate considerably from the method of our late American geographers, so I may subject my work to the danger of their criticisms and prejudices." This forewarning, while good defense against anticipated attack, applied merely to the broad divisions of the subject into Historical, Political, Civil, and Natural geography. The detailed method was Spafford's own, exhibiting both his personal predilections and his political convictions. When the title page of the volume announced that Section IV "Takes a pretty comprehensive View of Natural Philosophy, as a useful preliminary to the Study of Geography and Natural History," what it meant was that Spafford was in his own element. The sections on the solar system, the earth, and maps and globes received from twelve to eighteen pages each, but natural philosophy covered eighty-five pages; the geography of North America was given only about twice the space, though it was the principal object of the volume. This disparity Spafford recognized in his preface, and promised that a second edition would place the "Philosophical and Miscellaneous parts" in a separate volume. In that part of the volume devoted to natural philosophy, Spafford plainly showed where his principal interest lay:

[25] *General Geography*, p. 129; *Cf.* John Pinkerton, *Modern Geography Digested on a New Plan*, 2 vols., 1802; 2d. ed., 3 vols., 1807.

I can but regret extremely that the limits prescribed by my present plan will not permit me to trace more fully the principles and powers of mechanism, and the principles and powers of nature in general: and my only source of regret on this occasion is, that I believe the general diffusion of such knowledge, is calculated to promote the essential benefits and blessings of mankind. . . . I shall however cherish a hope that the public mind may call for other editions, and an enlargement of this work, and afford an opportunity of pursuing and illustrating those subjects which are here merely given in miniature.[26]

But Spafford's design "to concentrate as much as possible of the sum of useful knowledge, within a small compass—and an attempt to introduce into our common school learning, a relish for the philosophy of nature," ended with this volume. The second edition never materialized. "It seems," wrote Spafford's friend Samuel Walker, "to have been your misfortune to have given too much learning, too much of this natural philosophy in your Geography. Schoolmasters readily shut their doors against systems, which they are unable to explain."[27] President Fitch of Williams also thought that Spafford had brought too many subjects into one small volume, which had "certainly prevented your doing justice to any one of them."[28] Worst of all, Spafford's great idol, Thomas Jefferson, seemed to be in agreement with Walker and Fitch: the geography appeared to Jefferson to be an "abridgment of several branches of science" and he hinted that the scale of the abridgment was not uniformly maintained. Two points in the Geography Jefferson challenged: the question of the origin of the so-called Irish potato and the comment of Count Volney on the description in *Notes on the State of Virginia* on the passage of the Potomac through the Blue Ridge mountains. Jefferson said that he had enquired much into the question of the potato and had

[26] *General Geography*, p. 73.

[27] Walker to Spafford, July 18, 1815; Dr. Samuel Latham Mitchill called it an "ingenious and instructive book;" Mitchill to Spafford, Aug. 26, 1809.

[28] Fitch to Spafford, Dec. 3, 1810.

concluded that it was a native of South and not North America, a point on which Spafford, in his account of this "most valuable esculent," seems more in accord with present knowledge than Jefferson.[29] Of Volney's opinion that Jefferson had "amazingly exaggerated" the view of the Potomac, the author of *Notes on the State of Virginia* was almost as sensitive to Spafford's acceptance of the Volney version as he had been to the public protests some years earlier against the accuracy of Logan's speech. It is worth noting, however, that Spafford could even bring himself to accept the word of Volney in preference to that of his political leader.

While Spafford's geography, chronology, physics, and natural philosophy are, for the most part, obsolete, and valuable chiefly as indicating the state of knowledge of his day, the *General Geography* is significant in what it reveals about its author. It shows him to be an American, passionately and earnestly devoted to his country and to his country's republican institutions.

> That the "United States" is a mere political title, and that we want a geographical one [he wrote], must be at once obvious to any person who will reflect for one moment on these things. That the terms *New-Englander*, *Yankey*, *Blueskin*, *Virginian*, and other local names as applied to people of different parts of the United States, were productive of much mischief in our continental army last war, and a source of many evils, was the loud and repeated complaint of the officers.[30]

For this and other reasons, Spafford refused to sanction the division of the country into southern, middle, and northern states, "as being likely to become merely political, and improper, because of evil tendency." So firmly rooted was his nationalism that he used the term New England rarely. Next to his extreme sense of Americanism, Spafford believed most profoundly in the common schools and in a

[29] Jefferson to Spafford, Jefferson Papers (Library of Congress), May 14, 1809; Spafford promised to correct these "erroneous impressions;" Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Jan, 14, 1810.

[30] *General Geography*, p. 151.

widespread system of public education. His contrast of public education in Vermont and in Virginia was both penetrating and revealing. He wrote with the pride of a native when he said that Vermonters were "a hardy, robust, enterprising and laborious people; tenacious of their rights, freemen, possessing a proud spirit of independence, and hatred of tyrants." He admitted that in such a new country "the abstruser parts of the sciences" were not embraced in the common schooling—"A giant in knowledge, is rarely met with in Vermont"—but Vermont had provided good schools in each township "in which the youth are well qualified for the common occupations of life." This, to Spafford, was far more in accord with democratic principles and much more important than to establish widespread means of obtaining higher education.[31] Of the Virginian system of education, he evidently spoke from first hand knowledge:

> The education of the rich and wealthy classes of the community, is in no state more extensive, or scientific, than in Virginia: nor is that of the poor, and dependent—or in other words, the laboring part of the community, in any state, perhaps, worse, and less practically scientific. Of very learned, and very ignorant men, therefore, this state produces large numbers, from the respective orders in society. The poor man would be despised, for having more knowledge than property; and the rich man, if he had more property than learning. . . . The common schools are unsteady, supplied by chance, and very miserable.[32]

The practice, if not the theory, of education under the tidewater aristocracy of Virginia could scarcely be described in more compact terms. Spafford disliked the absence of literary giants in Vermont as much as he abhorred the presence of slavery in Virginia, but the defect in either region was in his eyes overwhelmed by what both had contributed to the establishment of a government that "is universally regarded as the most replete with practical freedom, of any that has ever existed."[33]

[31] *General Geography*, p. 206.
[32] *Ibid.*, pp. 272–3.
[33] *Ibid.*, p. 158.

For some time after the *General Geography* appeared, Spafford continued to harbor the notion of publishing a second edition or an abridged universal geography for use in the schools. But Thomas Wait and Sons, publishers of Boston, discouraged such an attempt.

> At the time that Morse's Abridged Geography was first published [they wrote], and for many years after it had obtained a general circulation in the New England schools, there was no work that comes within our knowledge which could interfere with it. Dr. Morse was therefore successful in procuring its general use, and this copyright was valuable. Of late years many works of this kind have appeared in our market that have been introduced to the schools with various success; and these abridged geographies have now become so numerous, that the circulation of no particular one can become sufficiently general to make its copyright valuable. We are therefore decidedly of the opinion that an abridged Universal geography does not in the present times, promise anything like an adequate recompense to the labors of the publisher or author. . . . In the larger Geography, Morse has yet found no competitor.[34]

Spafford did not have an exalted opinion of the judgment of publishers, but with this one, reinforced by his disappointing experience with the *General Geography*, he apparently concurred.

If Spafford's published writings were not numerous, his ideas were: the books that he planned and frequently announced far exceeded those that actually reached the public. Gazetteers for all of the states, a life of Jefferson, a history of New York, a life of Count Volney, a life of Count Rumford, a digest of the third census of the United States, an apprentice's spelling book—these are some of the works that he set out upon or expressed an intention of performing, but never published. Yet his was not the easy planning of the indolent or procrastinating scholar: he merely outlined for himself a program far beyond his time, his energies, his means, or his knowledge of what misfortunes fate had in store for him. Under better circumstances, and with the discipline that would have come from better training, the

[34] Thomas Wait & Sons to Spafford, Nov. 9, 1814.

corpus of his writings might have been greater in size and more valuable in content. His unremitting energies, his inquiring mind, and his roving imagination were sapped and dulled by repeated misfortunes, a process which Spafford himself aided by his exorbitant desire for wealth and fame, his eccentricity, and his exaggerated claims for his ideas and inventions.

In the winter of 1809–1810, "encouraged by assurances of public patronage," he undertook to compile a gazetteer of the State of New York. His patronage was both public and private. Governor Daniel D. Tompkins assured him of "any reasonable access to executive papers, turnpike books, descriptions of military deposits, &c."[35] Dr. David Hosack and others promised to contribute information, and Chancellor Robert R. Livingston instructed all captains of the Livingston-Fulton steamboats to waive his half of Spafford's passage, adding that "Mr. Fulton will probably afford him the like encouragement when acquainted with his merits & his pursuits."[36] But the most substantial encouragement to the undertaking came from the state legislature some two years after Spafford had begun work, in an Act passed April 4, 1811. This Act was the result of a memorial from Spafford himself, in which he testified that "at great sacrifice of time, labor, and expense," he had nearly completed the gazetteer but was "destitute of the monies to defray the expenses of printing and publishing." The legislature thereupon authorized a loan of $3,000 for three years, with interest,

[35] Tompkins to Spafford, Jan 15, 1810; Elisha Jenkins, Secretary of State, to Spafford, Dec. 7, 1809. The New York legislature passed a bill granting Spafford access to the public records and permitting him to make copies "free of expense." *Gazetteer of the State of New-York* (Albany, 1824), p. 7.

[36] Livingston to Spafford, June 2, 1811. Chancellor Livingston seems to have taken an especially friendly interest in Spafford. On one occasion Livingston sent him a basket of peaches from Clermont and at another time he sent a check for $300, probably a contribution; Livingston to Spafford, Sept. 8, 1814, and Nov. 16, 1815. Hosack to Spafford, Oct. 20, 1810.

provided that Spafford would "execute a bond with sufficient sureties."[37] This public patronage brought a valuable book into being, but its sequel, as we shall see, probably had as much as anything else to do with stifling Spafford's literary productivity.

*A Gazetteer of the State of New-York; Carefully Written from Original and Authentic Materials, Arranged on a New Plan . . . With an Accurate Map of the State* issued from the press and publishing firm of H. C. Southwick in Albany in 1813. The map, both accurate and well drawn, was done by Mrs. B. C. Spafford,[38] and engraved by P. Maverick of Newark. The arrangement "on a new plan," which seems to have been a favorite phrase with Spafford, probably referred to a radical alteration that took place after he had made considerable progress in the work. In the preface to the *Gazetteer*, he explained that the months of travel and writing that he had engaged in had produced "A mere collection of Counties and Towns . . . an uninteresting and unsatisfactory skeleton of knowledge;—of little dignity, and far less utility than the subject would seem to demand." But his health was declining, "The public attention was aroused; letters poured in from all quarters of the State, bringing . . . important information . . . and already was public impatience calling for the Book!" At this point Spafford decided to reject all that he had written and to begin anew. He drafted letters enumerating the kinds of information that he desired and sent these circulars into "every Township, and, generally, in every little Village also in the State." From more than a thousand replies, aided by the materials gathered by personal agents—one of whom he sent at his own expense into every town of three remote counties—and by his own

[37] *New York Senate Journal*, 1811, pp. 133–5, 152.

[38] This may have been the wife of Spafford's elder brother, Heman, whose first name was Betsey.

travels and investigations, the *Gazetteer* was produced. The preface concluded with a frank expression of hope for financial remuneration, for Spafford claimed that he had spent three years and seven thousand dollars in publishing the work.

The *Gazetteer*, a substantial octavo volume of 343 pages, was arranged into three broad divisions: a "comprehensive geographical and statistical view of the whole state;" an "ample general view of each county;" and a "very full and minute topographical description of each town." Into these categories Spafford crowded an amazing amount of information. The general view of the state covered almost everything of interest or importance: boundaries, civil divisions, geology, lakes, rivers, mountains, climate, navigation, roads, agriculture, flora and fauna, minerals, government, schools, military establishments, manners and customs, languages, religion, banks, insurance companies, trade, natural curiosities, Indians, etc. On most of these subjects—especially those dealing with government, education, and the public *mores*—the stamp of Spafford's personal beliefs and opinions is deeply impressed. The patronage of the state could not keep him from criticizing lawyers and lawmakers, or from advocating an emancipation from British jurisprudence: the "circumlocutory expression and language [of the laws] calls more for legal interpretation, than common understanding. And the mysteries of legal knowledge, of course require many men versed in the arts of legal cunning, which constitutes the basis of a most lucrative learned profession. Wherefore is it that the science of law is stationary, in regard to progressive improvement, common to all other departments of science and knowledge?"[39] On the subject of religion, Spafford extolled the provisions of the state Constitution for the freedom of worship, and went so far as to

[39] *Gazetteer* (Albany, 1813), p. 27.

question "whether our pious zeal for the conversion of the Heathen to the lights of Revelation, should be first employed in efforts to civilize, or to make them comprehend the mysteries of our holy religion."[40] As for the bases of politics, he followed the Jeffersonian belief in the value of land-owning farmers in a democratic state.

> The allodial tenure of lands in America [he declared], forms a distinguished excellence of our civil character; and by an undivided profit to cultivators, forms a better guarantee for domestic happiness, and the perpetuity of our civil compacts, than all our laws and constitutions combined. It is these tenures that first inspire considerations of self-respect, and cherish and diffuse among cultivators, that spirit of independence which bids defiance to tyranny, the usurpations and encroachments of despotism, and the misrule of political or religious anarchy.[41]

In the same spirit Spafford deplored the condition of common-school education in the state and excoriated the partisan newspapers which expressed "the distorted views of angry minds, while they misrepresent facts for party purposes, insensibly pervert the public sentiment, till the general interests are forgotten in the pursuit of minor objects."[42] Spafford was a zealous defender of the principles of Jefferson and of the American government, but he was too much a man of learning to become a frenzied partisan. His chief exuberances belonged to the realm of philosophy.

The *Gazetteer*, valuable as it must have been to the people of New York and other states at the time it was published, has acquired significance for the historian with the passage of time. In its opinions as well as in its facts, the student of early nineteenth century society in America will find information available in few other sources, except perhaps in the journals of travellers. But Spafford, with an industry worthy of his subject, wrote also with an understanding gained from

[40] *Gazetteer*, p. 34.
[41] *Ibid.*, pp. 37–8.
[42] *Ibid.*, p. 39.

belonging to what he described. He had his prejudices—and frankly confessed them:

> Nor need it be concealed that those features and traits of character usually denominated national, are founded in national prejudices. . . . And though philosophy may contend that prejudice is founded in error, in folly, in the weakness of intellect, and teach that the wise should spurn its sway—yet let them remember that family prejudices keep families together; the prejudices of distinct societies, cherish the bond of their union; and those of communities and states, form the medium by which political existence is cherished if not preserved.[43]

The social historian will find in the *Gazetteer* innumerable statistical facts of value, and along with them Spafford's illuminating prejudices and opinions. In 1811, for example, New York City is recorded as having 1303 groceries and 160 taverns where spirituous liquors were sold. "It is presumed that Albany has as large a proportion of these houses as New-York," Spafford conceded, "and there is hardly a street, alley, or lane, where a lad may not get drunk for a few cents, and be thanked for his custom, without any questions how he came by his money, or perhaps any care. . . . The inn, is the traveller's home, and groceries are also convenient, if duly restricted in number, and well regulated. But the multitudes of mere grog-shops serve only to encourage idleness, dissipation, intemperance,—and as the prolific nurseries of vice."[44] In many respects the profoundly religious author of the *Gazetteer* was remarkably free of the prejudices that characterized many of his fellow members of the Society of Friends. He disapproved of lotteries, but he looked with favor upon the theatre, and declared that "Dancing has long been a favorite amusement of the New-England people, and is perhaps one of the most innocent diversions of any age."[45] He noted with some dis-

[43] *Gazetteer*, p. 35.
[44] *Ibid.*, p. 36.
[45] *Ibid.*

approbation the apparent increased use of ardent spirits: "I do not know that intemperance is more prevalent in this than in the other American states; but I know that social meetings depend too much on the bottle for their convivial pleasures; and that hilarity is dearly purchased, when obtained from this source."[46] On soil and agriculture Spafford expressed views which he later expanded into a pamphlet called *Hints to Emigrants*, and his advocacy of rotation of crops was an enthusiastic salute to what he regarded as a new era in the history of agriculture. At the close of the "General View of the State," he took occasion to stake out a claim for the authorship of a history of the State. "A comprehensive Civil and Natural History is what is wanted," he declared, "and to write one, duly arranged, would be a work of great labor. A work, however, on which I have had an eye for some years, and for which I have collected a great mass of materials. Should not some other person produce such a work within a short time, it is my intention to commence it by next summer; and I embrace this opportunity to solicit materials for that purpose."[47]

The *Gazetteer* was published in an edition of 6000 copies, sold at $3.00 per copy, and enjoyed a fairly rapid and wide distribution—a distribution for which Spafford himself was largely responsible by his indefatigable correspondence. Yet the author's prodigality in dispensing copies to statesmen, men of letters, and officers of learned societies must have interfered seriously with sales. Isaiah Thomas, thanking Spafford for the copy presented to the American Antiquarian Society, said: "The *Gazetteer* must have cost you much time and labor. I hope you will be rewarded by its meeting with what Booksellers call 'a good run.' "[48] Presi-

[46] *Gazetteer*, p. 36.

[47] *Ibid.*, pp. 17–8, 62. Spafford also informed Jefferson that he was writing a history of the State; Jefferson Papers (Mass. Hist. Soc.), Aug. 2, 1813.

[48] Thomas to Spafford, Feb. 12, 1814.

dent Madison ordered two copies, Elbridge Gerry thought it "a very useful & excellent production," John Adams called it "a monument of industrious research and indefatigable labor," and Josiah Quincy said:

> I . . . cannot refrain from expressing the obligations to which, in common with every other friend of the literature of his country, I am under, for the zeal, industry, and intelligence, with which this great undertaking was designed and executed. . . . You have performed a very desirable service to the United States and particularly to New York and every man who wishes to have an intimate knowledge of that leading state will be your debtor.[49]

James Dew, President Fitch, President Sanders, and many others expressed their commendation, both in personal letters and in communications that were obviously intended as formal testimonials.[50] The chorus of praise was not without its discords, however. Dr. Hosack objected to Spafford's confusing the College of Physicians and Surgeons with Columbia College, and President Sanders, who obliged Spafford with one of the formal testimonials, differed in a private letter with the author's explanation of the disappearance of ice on Lake Champlain.[51] John Adams promised to assist in getting copies of the work to Napoleon and to Emperor Alexander of Russia, though he insisted that they should be "handsomely bound," and added: "God omniscient knows whether it is or is not 'amiss to inform the European Potentates of the growing strength and Numbers, and general prosperity of the American States.' There is an

[49] Gerry to Spafford, Feb. 8, 1814; on Nov. 14, 1813, Gerry acknowledged receipt of the *Gazetteer* and said that he had taken steps looking toward Spafford's election to membership in the Academy of Arts and Sciences; he also promised to write to John Adams on the subject, "of whose interest for yourself there exists no doubt." Madison to Spafford [July, 1813?]; Spafford sent the two copies requested on Aug. 28, 1813; John Adams to Spafford, Sept. 7, 1813; Nov. 1, 1813; and Dec. 29, 1813; Josiah Quincy to Spafford, Nov. 24, 1813.

[50] Fitch to Spafford, Feb. 24, 1814; Sanders to Spafford, Jan. 22, 1812, and Feb. 20, 1814.

[51] On the latter date Fitch sent two letters, one a formal testimonial and the other a personal comment, somewhat critical of various details, particularly challenging Spafford's contention that the ice in Lake Champlain sank to the bottom of the lake at the time of the spring thaw. Hosack to Spafford, Nov. 5, 1812.

European Jealousy of America: and that Jealousy will increase at least as fast as their Information."[52] John Jay was obviously annoyed by having his initials subscribed to the sketch of the town of Bedford. That sketch, wrote Jay, "contains Information not given by me, and which is not correct, viz., that there is a prison in this town, and some other matters of less importance. There is no prison in this town."[53]

But it was Jefferson's approbation that Spafford coveted, and he wrote several letters asking for an opinion. By January, 1814, he could restrain his patience no longer: "I am so frequently asked," he wrote, "'How does President Jefferson like the *Gazetteer*?' or 'What does he say of it?' that I hope thee will excuse my anxiety to learn."[54] To Spafford's unconcealed joy, a letter from Jefferson soon arrived—a letter which he sent about with open pleasure to many of his friends. It was a letter worth showing. "I have read it [the *Gazetteer*] with pleasure," wrote the aging statesman, "and derived from it much information that I did not possess before. I wish we had as full a statement as to all of our states. We should know ourselves better, our circumstances and resources, and the advantageous ground we stand on as a whole. We are certainly much indebted to you for this fund of valuable information." This much was gratifying, but what followed was heart-warming evidence that Jefferson had read those parts of the volume that stamped it as more than a mere statistical compilation:

[52] Adams to Spafford, Oct. 16, 1813, Nov. 22, 1813, Dec. 29, 1813, and Aug. 28, 1814.

[53] Jay to Spafford, Oct. 20, 1813. On Aug. 6, 1814, Samuel Jones sent a long critique of the *Gazetteer* to Spafford, saying that "upon a cursory perusal of some parts of it, there seemed to me to be so many mistakes and inaccuracies in it, that I thought it would not be improper to mention some of them to you, as well to enable you to make proper corrections in the next edition, as to show the necessity of procuring more correct information on the subject;" a copy of this letter was sent to John Pintard and later printed in *Collections of the New-York Historical Society*, vol. 3 (1821), pp. 328–40.

[54] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Jan. 28, 1814.

I join in your reprobation of our merchants, priests, and lawyers for their adherence to England & Monarchy in preference to their own country and its constitution. But merchants have no country. The mere spot they stand on does not constitute so strong an attachment as that from which they draw their gains. In every country and in every age, the priest has been hostile to liberty. He is always in alliance with the Despot abetting his abuses in return for protection to his own. It is easier to acquire wealth and power by this combination than by deserving them: and to effect this they have perverted the purest religion ever preached to man into mystery & jargon unintelligible to all mankind and therefore the safer engine for their purposes. With the lawyers it is a new thing. They have in their mother country been generally the firmest supporters of the free principles of their constitution. But there too they have changed. I ascribe much of this to the substitution of Blackstone for my Lord Coke, as an elementary work. In truth, Blackstone and Hume have made tories of all England, and are making tories of those young Americans whose native feelings of independence do not place them above the wily sophistries of a Hume or a Blackstone. These two books, but especially the former, have done more towards the suppression of the liberties of man, than all the millions of men in arms of Bonaparte and the millions of human lives with the sacrifice of which he will stand loaded before the judgment seat of his maker. I fear nothing for our liberties from the assaults of force; but I have seen and felt much, and fear more from English books, English prejudices, English manners, and the apes, the dupes and designs among our professional crafts. When I look around for security against these seductions, I find it in the wide spread of our Agricultural citizens, in their unsophisticated minds, their independance and their power if called upon to crush the Humists of our cities, and to maintain the principles which severed us from England. I see our safety in the extent of our Confederacy, and in the probability that in the proportion of that the sound parts will always be sufficient to crush local poisons.[55]

Such a letter and such approval from the man to whom Spafford once declared "I feel towards thee a veneration I have never known towards any other person," was enough to offset all of the toils and disappointments and occasional criticisms that the great task had involved. It was almost enough to offset the disastrous blow that now fell because of that support given to the *Gazetteer* by the legislature of New York.

Among all the inevitable errors in such a work, probably no statement ever came back to haunt Spafford so much as

[55] Jefferson to Spafford, Mar. 17, 1814.

the acknowledgment in the preface of that "liberal aid and patronage . . . of the State, which I shall long cherish in most respectful remembrance." The successful sale of the *Gazetteer* caused that statement to remain untarnished by irony for only a short while. Indeed, the work enjoyed such a good run that Spafford projected a whole series of similar works for all of the states, to be concluded with a geography and a gazetteer synthesizing the information for the nation as a whole. "My intention," he wrote almost as soon as the *Gazetteer* came from the press, "is to pursue the plan of writing and form gazetteers of the several states, then separate the parts and form a geography and gazetteer of the United States in separate volumes. An arduous and expensive undertaking; but I am young, ambitious, and formed to habits of industry adapted to such a work." Unhappily, the patronage of the State of New York which had made the *Gazetteer* possible was one of the chief factors in preventing this laudable project from coming to realization, though it is perhaps nearer the truth to say that it was Spafford's unfortunate use of the state loan that encompassed his own defeat.

The Act of April 4, 1811, required a bond, with sufficient sureties, for payment within three years at the legal rate of interest. Two weeks after the passage of the Act, Spafford entered into a contract with Solomon Southwick, "written on the back of a sheet of paper containing a printed copy of proposals for publishing the *Gazetteer*." By this contract Southwick became surety for Spafford's bond, and the copyright, registered in the author's name, was transferred to Southwick to be held by him until he was relieved of his responsibility to the state as surety. Southwick agreed to print six thousand copies of the *Gazetteer* "at the usual rate of printing," with liberty also to print two hundred and fifty copies at his own expense and for his own use. The proceeds

of the sales of the 6000 copies were to be used toward the discharge of Southwick's responsibility to the state, though Spafford by the terms of the contract was entitled to receive, if he required it, not more than one-third of the sales even while the bond was being liquidated. On the same day that the contract was signed, Spafford advanced $1,500 to Southwick "towards the expense of printing and publishing." Unhappily, Spafford failed to protect himself against the printer, and Southwick, under attack a few years later by Judge Ambrose Spencer, dictator of Albany politics, became bankrupt both politically and financially. In 1814 Spafford paid $630 in interest on the bond, and in 1816 was given a receipt by Southwick discharging him of all debts and obligations existing between them. On November 3, 1821, the loan and interest, amounting to $3,952.58, was paid by another Solomon—Solomon Allen—who had also been a surety on Spafford's bond. By an Act of the legislature of the same year, Allen was authorized to proceed against Spafford and Southwick for the whole of the amount that he had paid, though the process was to be against Spafford for the whole amount, and, in case collection could not be made, against Southwick for his half of the obligation. Spafford protested in a memorial to the legislature in 1824 that this Act was discriminatory against him, and a committee of the house admitted the justice of the protest.[56] The result was that Spafford received little save empty honors for the years of labor and considerable amounts of money that he had put into the *Gazetteer:* and more than ten years after its publication his name was still on the bond. It was small comfort to him that, in 1823, Southwick published a long didactic poem called *The Pleasures of Poverty*. On that subject, Spafford was an authority.

In these distressing circumstances, Spafford made des-

[56] *Gazetteer of the State of New York* (Albany, 1824), pp. 6–8.

perate efforts to recoup his losses. He repeatedly wrote to Jefferson and Madison soliciting the Albany postmastership.[57] The postmaster there, he said, had been in office since Timothy Pickering was Postmaster General, and besides was independently rich. "Rotation in office," he concluded, is a part of my Republicanism. . . . I have a large, expensive family to support and my whole fortune is absorbed in my copyright. And besides the distress among my connections, principally frontier inhabitants, occasioned by the War, press heavily upon me. My parents, far advanced in years, and my father a cripple, have been more than a year past driven from home."[58] To this Jefferson, while promising to do what he could, replied:

> The principle of rotation is not that of our constitution; nor has it ever been acted on by our government. I believe there has never been an instance of removing an officer who has well done his duty, merely on the consideration that he has been long enough in office, and ought to give way to another.[59]

Spafford made the mistake of applying to the President of the United States, thus overlooking a figure much more powerful in Albany: Judge Ambrose Spencer. The postmastership at Albany went to Solomon Southwick.

In the *Gazetteer* Spafford had urged the Society of Useful Arts to undertake the publication of a monthly magazine. When this suggestion was not acted upon, he made the unwise but heroic mistake of attempting to supply such a need himself, partly because of his devotion to learning, partly because he hoped thereby to make up some of his losses. Friends gave him ample warning.

> I know you *can* make a good work of it—and I believe you *will* [wrote his friend Croswell], but I must say, that I am afraid you will never find

[57] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Apr. 7, Apr. 24, and Nov. 25, 1814; Spafford to Madison, Madison Papers (Library of Congress), Nov. 18, 1815.

[58] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Mar. 30, 1814.

[59] Jefferson to Spafford, Apr. 26, 1814.

yourself half remunerated for your trouble. If that strange creature, called "The Public," would content itself with being foolish and capricious, we might bear with it: But to mix so much injustice with its folly and so much illiberality with its caprice, as it generally does, in all its concerns with the proprietors of periodical publications, is abominable, and unpardonable.[60]

His friend Chamberlain of Burlington, Vermont, promised to do what he could to obtain subscriptions, but added: "the people in this state are not so fond of encouraging literature as I could wish."[61] But Elkanah Watson was enthusiastic and offered to send "appropriate essays—original matter—& sometimes little anecdotes—& lively adventures."[62] Cadwallader D. Colden was more dignified, but no less enthusiastic: "It is I think a reproach to our state that we have nothing of the kind. You may be assured that I will do all in my power to promote your Views. I have obtained some subscribers, and I hope to do more in this way."[63]

The first number of the magazine, which according to the editor's proposals had been long in contemplation, was launched in June, 1815. Its title claimed more than its contents, valuable though they were, could justify: *The American Magazine, A Monthly Miscellany, Devoted to Literature, Science, History, Biography, and the Arts; Including also State Papers and Public Documents, with Intelligence, Domestic, Foreign, and Literary, Public News, and Passing Events; Being an Attempt to form a Useful Repository for every Description of American Readers.* This rare little magazine, its numbers bound in blue paper, was issued at first from the press of E. and E. Hosford at Albany, later from that of S. W. Clark of Hudson. It was announced in the first number that each issue would appear on the last

[60] H. Croswell to Spafford, June 17, 1815.

[61] Chamberlain to Spafford, May 18, 1815.

[62] Watson to Spafford, May 11, 1815.

[63] Colden to Spafford, June, 1815.

Tuesday of every month, containing at least 36 pages, and would be sent to subscribers at $2.50 if paid in advance or $3.00 if paid at the end of the year. By the second issue, Spafford could claim more than eight hundred subscribers, among them Thomas Jefferson and other distinguished Americans. Agents who solicited subscriptions were scattered throughout the states, and a brother, Hiram Spafford—who later became a man of wealth in Canada—was "Agent for the British Possessions in America."

Spafford meant what he said when he declared that the *American Magazine* would be "strictly miscellaneous." He announced that he would include any original or selected pieces that would be useful, but would pay particular attention to agriculture, manufacturing, mercantile interests, foreign history and foreign events, and his old favorite, "Mechanic Arts." He would include well-written essays on government and politics, but "No party Politics shall ever appear in its columns." The editor, he said, "will invite to temperate discussion, on every subject connected with the welfare and happiness of man, and society; but will never consent that cunning and foul design shall usurp the place or right of fair argument and sound reasoning. Liberal, in his own views—a foe to no sect or party; knowing no other distinctions than those of right and wrong, his constant endeavour shall be to do justice to all. . . . The Editor is no friend to those *Medleys* of bon mots, and vulgar and profane jests and tales." But, he added, lest this forthright statement of aims should frighten off subscribers, "if he cannot satisfy his Readers without [them], he will occasionally serve up a small select dish." He concluded by saying that he was well aware of the difficulties in such an undertaking, and of the frequent failures in such attempts, but he nevertheless intended his magazine to be of permanent duration.

The *American Magazine* was the editor's vehicle of

expression and the first number was almost wholly his own. In addition to a lengthy selection from the *Edinburgh Medical and Surgical Journal*, digested by the editor; a condensed report of the adultery case of The Earl of Rosebery *v.* Sir Henry Mildmay, with ample moralizings by the editor; a number "of facts thrown carelessly together" by the editor on the British woollen industry; and a notice of the description of Lake George which appeared in the editor's *Gazetteer*, there was included in the first issue Spafford's own account of his invention concerning the construction of wheel carriages. The last, an abstract of a pamphlet that had been lately published, was presented with apologies and with the assurance that "ever hereafter, other men shall have priority in the articles that may be offered for this department" of the magazine. But as the journal became better known, the editor could depend more and more upon contributions from a wide variety of sources. Some of them were of contemporary interest and are now of historical value. The Reverend Noah Worcester, whose anonymous peace tracts had been published a few months earlier in Hartford, New York, and Philadelphia, and whose copyright had been taken up by the Society of Friends in order that obstacles to their distribution might be removed, asked Spafford to give the support of his magazine to the cause. Spafford complied: *A Solemn Review of the Custom of War*, already widely reprinted, was included in the *American Magazine*.[64] One of the most valuable essays in the journal, so far as the interest of the historian is concerned, was the anonymous biographical sketch of Baron von Steuben. It was, the editor declared, written "by a man who saw much of public service, and who has, with the independence of a veteran, very feelingly spoken of what he himself has seen." The sketch fully justified the editor's words. The account of

[64] Worcester to Spafford, Oct. 1815, April 27, 1815, and June 29, 1816.

the sufferings at Valley Forge and the obstacles that had to be overcome in publishing Steuben's military regulations for the army are graphically portrayed. The article also contained a spirited defense of Thomas Jefferson against the aspersions cast upon him because of his flight before Tarleton's raid on Charlottesville. In a letter to James Madison, Spafford revealed the fact that the sketch of Steuben had been written by one of his aides-de-camp, General William North, a Federalist. "I mention this circumstance," he added, "because that, in doing justice to thyself & some others, he has not followed the fashion of his party."[65] Count Volney was another contributor to the magazine, though his comment about Niagara Falls was brief and unimportant. Samuel Huntington, introduced as "one of the most intelligent and distinguished citizens" of Ohio, contributed an anonymous letter about the "pecon nut."[66]

Spafford's own writings for the magazine, probably more numerous than can be discovered under the anonymous and pseudonymous practice that cloaked authorship, were interesting as revealing his own ideas and activities. He wrote under the pseudonyms "Americanus," "Franklin," and "Agricola." He may have been the author of the article signed "G." which claimed an economy and a greater efficiency in the making of tallow candles if a tube of straw should be inserted in the wick so as to permit the passage of a current of air.

> Suppose [the author concluded in a manner of typical of Spafford], I could show that a saving of 5 or 10 per cent. could be made in the annual expense of all the candles consumed in the United States, [the public would still not give up old habits and inefficient ways] . . . I turn from the cheerless prospect to you, Mr. Editor—for of you I am certain. Already I see your grave matter-of-fact reasonings laid aside, while, in

[65] Spafford to Madison, Madison Papers (Library of Congress), Nov. 18, 1815; Spafford to Timothy Pickering, Pickering Papers (Mass. Hist. Soc.), June 27, 1816.

[66] Huntington to Spafford, Aug. 4, 1810; *American Magazine*, vol. 1, pp. 425–8.

pursuit of my hint, your classick hands are bedaubed with tallow and wax!

"Americanus," on the question of the future source of a supply of fuel for the Eastern Atlantic States, revealed Spafford's concern for natural resources and his ability at gathering statistics of consumption and supply. But it did no credit to his perspicacity as a prophet: "In my opinion," he said, "the Coal Region of the United States, is almost exclusively confined to the country embraced by, and lying to the West of the Alleghany, or Appallachian Mountains." He felt that Albany inhabitants should look to Richmond, Virginia, as a market for coal rather than depend upon the dwindling and costly supply of wood.[67] "Franklin" on "Thoughts on Philosophical Science, on Creation, and the Order and Constitution of Nature," exhibited Spafford in his familiar role of natural philosopher and gave an account of some of his highly original and expensive experiments, interspersed with comments from the editor about the value of such investigations. "This is probably the last opportunity I may ever have for acknowledging how much satisfaction I have enjoyed in such kind of pursuits," he wrote in the last issue. "I have paid little, perhaps less attention than I ought, to the accumulation of money. . . . A little farm, which I might have purchased for the money laid out upon a very few of some of my experiments, would be worth more to me now, perhaps, than all that I have gained from them; and I mention this only as a word of precaution to others. . . . If I have not done so much good as I might, I console myself with a hope that I have yet done some, and that I have done little harm."[68] But his philosophical speculations, if freed from the inhibitions that might have been imposed by religion, were both original and naïve:

[67] *The American Magazine*, vol. I, pp. 281–8.

[68] *Ibid.*, p. 416.

> Were I now to offer a conjecture that, though a Comet pass through the body of the Sun, it would be in no danger from the heat of that luminary, the conjecture might be viewed as wild, or even profane; and yet this inference may very soon be recognized in the doctrines of the schools. I should deem it no hardship, if, by permission of the Deity, I were even now thus journeying. . . . I cannot know but this same Sun, may even be the Heaven of my Christian hopes.[69]

Sun spots he thought were comets or planetary bodies, in process of creation, passing across the face of the sun. Spafford, aware that ancient heresies had sometimes become modern truths, made the mistake of thinking that his fantastic heresies might one day be accepted and taught.

The most important contribution to the magazine by Spafford, and one of the outstanding pieces printed in it, was "Franklin's" essay "On a National School of Science and the Mechanic Arts, and on new modelling the Patent System."[70] This, a subject to which Washington, Joel Barlow, Thomas Jefferson, and others had given much thought, had occupied Spafford's thoughts for some time. The essay was a passionate—and at times even eloquent—appeal to national pride and an argument in defense of learning. "In a popular government," Spafford declared, "public intelligence forms the surest guarantee for public liberty, and this is principally assured in succession, through the medium of common schools, in which the common people, or in other words, the majority of the people, in any country, acquire some knowledge of letters, and some learning that may be useful in their pursuits. In the education of youth, in common schools, the seeds of knowledge are liberally bestowed in our country, and these schools are necessarily the nurseries of public sentiment, and public virtue. . . . [It] is due to the character of America, and to the condition of its civil institutions, that we now advance one other step, and establish such a National School." "Franklin," whose authorship Spafford

[69] *The American Magazine*, vol. 1, p. 416.

[70] *Ibid.*, pp. 295–6; 313–26.

freely acknowledged in private letters to John Adams, Thomas Jefferson, and even the Emperor Alexander of Russia, came out courageously against theologians and theological seminaries:

> Is it not high time for every devout Christian, every friend to humanity, to weigh well the popular opinion of the present day, concerning Schools of Theology? The subject is of the utmost importance. The remark I am going to add, will excite some surprize. Were I a man of wealth, earnestly disposed to bestow that wealth in founding a seminary or seminaries of learning; were my only object in doing this to promote the hapiness of mankind, and procure to myself an assurance of peace, from a consciousness of having discharged an act of duty as a man and a Christian; were the hope of Heaven my only object, I would sooner endow common schools, for giving the youth of the poor, a common school education, than found a theological college, or university. I would much sooner endow an academy of mechanic arts, than a theological seminary.[71]

In that section of the essay devoted to "new modelling" the patent system, "Franklin" anticipated the action of James Smithson by several years in suggesting the establishment of a National Museum of the Arts and Sciences, and he anticipated the Patent Office and the Smithsonian Institution by more than a century when he suggested that the models and papers in the Patent Office ought to be exhibited "in some convenient form for inspection."[72] In this way, he thought, the Patent Office and the national museum "would soon become a central point for the display of all the ingenuity and taste of the nation, as would the School be, for instruction in the Arts and Sciences." But Spafford's particular grievance with the patent system was that the issuance of letters patent gave neither assurance of the merit of the invention nor protection to the inventor; on this point he was in complete agreement with that other contemporary genius in the field of the mechanical arts, Oliver Evans.[73] "The only object . . . of granting the Patent," Spafford

[71] *The American Magazine*, p. 295–6.

[72] *Ibid.*, p. 321–3.

[73] *Ibid.*, p. 323; Greville and Dorothy Bathe, *Oliver Evans* (Philadelphia, 1935), *passim.*

thought, "seems to be to get 30 dollars for the treasury; While the Patentee had much better keep his money in his pocket, and his invention in his head." He suggested that Congress establish a Patent Board, with power to examine all claims, to issue certificates as to the probable utility of the invention or improvement, to graduate the length of time from five to thirty years during which the letters patent were to run, and to assure the inventor of some legal protection for his ideas.

Just how all this could be accomplished, in a day before the principle of interchangeable parts had solved many of the problems of patent rights and created others, when every village had its wheelwright, cabinet-maker, or practical exponent of the mechanical arts, skilled in copying any novel idea that came along, Spafford did not venture to say: he merely outlined the problem and suggested the machinery which he thought would cope with it. One of the most interesting of the inventions set forth in the *American Magazine*, anticipating a popular mail-order commodity of the late nineteenth century, carried no illustration because the inventor, John Mead of Albany, knew perfectly well that any other cabinet-maker in the country could follow his design. This object was given a title as complicated as its construction: "Mead's jointed, reclining, Valetudinary Cot-Chair, on Rockers." Spafford said that a severe fit of sickness had reduced him "to such a state of feebleness and debility, as to make the acquisition of such a machine, extremely desirable." He had purchased one, used it as a rocking chair with the back reclined at any desired angle, and had converted it into a bed in a moment's time and with the effort of a child. He urged the medical profession to adopt it in hospitals, though he anticipated that "the Ladies shall pronounce upon this matter, independently of Professional Men, and at least call Mead's Chair into every Nursery

where taste and fashion meet with wealth." Besides all of these versatile qualities, Spafford declared that "it is even an elegant article of furniture."[74]

But in spite of these varied and interesting contents, together with a substantial support from more than 800 subscribers, the *American Magazine* had great difficulty surviving even to the end of its first and only year. Even so early as the second issue the editor said that "there had been frequent enquiries about the probable duration of the American Magazine," to which he could only reply that "the plan was deliberately formed, and that for a Work that should be durable." The October and November issues of the journal were delayed by "the ill-health of the Editor, and a 'conspiracy' of causes," an evidence that his financial affairs were becoming seriously involved and also a probable evidence of the cause of the transfer of the printing of the magazine from Albany to Hudson. Again, in the December issue, the "Editor's Address to his Patrons," intended for that number, was postponed to the next because of Spafford's illness. In the twelfth and final issue, bringing Volume One of the *American Magazine* to an untimely end just when Spafford appeared to have a large number of interesting manuscripts on hand, he explained that the venture had cost him almost $2,000 and that the delays had been caused by his "pecuniary embarrassments;" in consequence of these financial difficulties he had been obliged to assign all of the accounts to his creditors. He asserted his intention of discontinuing the magazine until he could "ascertain the real patronage," and if it should be revived, it would be in the hands of persons having ample pecuniary resources, who would issue the numbers promptly on the first of every month. There is evidence that Spafford did have some encouragement to enter into a partnership to continue the magazine, but it is doubtful if these offers were supported

[74] *The American Magazine*, pp. 431–2.

by substantial resources.[75] But even as he threw out these tentative feelers about the possibility of revival, Spafford announced a decision that he had been compelled to make. He had, he said, spent ten years at literary work and had experienced his share of "public liberality, in the sale of near 12,000 Volumes, the fruit of these labors." For this, though he said nothing of the private misfortunes that had robbed him of most of these fruits of toil, he was grateful. But, he continued:

> I find myself under so many obligations, which circumstances have not enabled me to repay, that I have been led to conclude there is some radical fault in the plan of my pursuit. I am about to change it—and to devote, if Divine Providence permit, ten years to other labors, by which I am in hopes to redeem some time, and to gain some share of that mammon, which crowns success and sweetens every toil.

In his desperation, he offered to sell some five thousand sheets of data that he had gathered for his natural and civil history of New York. He hoped that some society or individual would take this mass of information, which he offered on reasonable terms. But he was determined to finish the history at the end of ten years if the papers still remained in his hands. "Strange as it may appear," he concluded, "amidst such discouragements, [I possess] a zeal so ardent in this kind of literary drudgery, as to make me disregard all its cares, perplexities, and toils."[76]

Like so many of his contemporaries, Spafford looked to the West as a place to spend ten years in search of mammon. But before entering upon that search, he explored a much less realistic realm in search of the same thing—the realm of his own mind and of his explorations in mechanics. Spafford's account of these searches provides us with an excellent commentary upon his mental processes and his impractical self-delusions.

[75] C. G. DeWitt to Spafford, May 2 and 25, 1816; Ferris Pell to Spafford, May 1, 1816.

[76] *The American Magazine*, p. 444; the final issue of the magazine came out in Feb., 1817, eight months after it was due.

For a long time [he wrote to Jefferson in 1814], I have been engaged in an investigation of mechanics, or rather, the philosophy of motion and the powers of moving bodies. Philosophers and mechanics have failed to perceive one grand consequence of the loss of motion in moving bodies which I discovered to my own satisfaction about fourteen years ago. It will be fourteen years in May next. During this long period I have been busily employed in these investigations and I am very happy to have it in my power to inform thee that I have lately concluded a complete demonstration. My discovery will prove of vast utility to the poor and middling class of people, and nothing of the present age will outlive it in fame. I long to see thee and to show thee what no man hath ever seen but myself, and to secure the coveted boon of they entire approbation. . . . Don't startle at these suggestions; they are the sober reflections and facts of a sober and practical mind not given to speculation and whose prospects have never been deemed visionary by others. Nor have they ever deceived me. In my mind's eye thou art the man who of all others in the world to whom I would disclose a great discovery hidden hitherto for purposes which Divine Providence alone can assign. Flattery is far from my present purpose, and so devoutly am I engaged in this wish that I am this moment in tears, humbly craving the blessings of Heaven upon it.[77]

Jefferson replied that he could keep a secret, "but . . . to a mind long occupied on a particular problem in mechanics, it would not be likely that anything I could offer, would be new or not before contemplated."[78] Late in the same year Spafford went to Washington, had a conference with President Madison, and was pleased when Madison apparently agreed with him that the patent laws ought to provide a discretionary power to graduate the length of time covered by the patent according to the merits of the case.[79] On his return to Albany, he urged Madison to request of Congress such an amendment to the laws, otherwise he would be obliged to make the effort on his own initiative, since he was convinced his "invention equals in importance, any that have ever been made public in this country."[80]

If these claims for the great discovery were marked by eccentricity, so was the principle of the invention itself:

[77] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Mar. 30, 1814.
[78] Jefferson to Spafford, Apr. 26, 1814.
[79] Spafford to Madison, Madison Papers (Library of Congress), Dec. 16, 1814.
[80] Spafford to Madison (*ibid.*), Feb. 18, 1815.

Spafford had designed nothing more than an eccentric, U-shaped axle for wheel carriages, with the shafts attached to the lower or cranked portion, which swung forward or backward. This advantage, if advantage it was, was somewhat offset by the fact that Spafford increased the diameter of the wheels to seven feet, thereby restoring the point of application of power to about where it had been originally. Early in 1815 the invention was laid before the public in an eleven-page pamphlet entitled *Some Cursory Observations on the Ordinary Construction of Wheel-Carriages: with an Attempt to point out their defects, and to show how they may be improved; Whereby a saving may be made in the power applied, the motion be rendered more uniform and easy, and the danger of upsetting most effectually prevented.* The invention had been patented on November 25, 1814—and the relative importance of the subject, if not the invention, is indicated in the fact that Spafford's was the fifty-sixth patent issued for improvements in wheel carriages since the founding of the Patent Office. In addition to the "crooked axle, or what the coach makers propose[d] to call a cranked axle," the pamphlet threw out an interesting suggestion for carriage springs: "a bladder, nearly filled with air, and enclosed in a strong case of leather, presents an action of elasticity, acting precisely on those principles which are best calculated to meet alike the wishes and wants of the philosopher, and the mere economist." The pamphlet containing these remarkable discoveries was sent to Napoleon and to Count Volney through Baron Lescallier, the French consul general; to the Emperor of Russia through Mr. Daschkoff, the Russian minister; and to many public figures in the United States.[81]

[81] *Cursory Observations* (Albany, 1815), p. 9. Baron Lescallier to Spafford, Apr. 1, July 10, July 31, Aug. 17, Aug. 29, and Oct. 31, 1815; Spafford wrote a personal letter to Napoleon which he asked Lescallier to forward. This was done, though before the pamphlet was despatched, news of Waterloo reached New York. A. Daschkoff to Spafford, Mar. 10, 1815; John Adams to Spafford, Feb. 5, 1814 [1815]; A. J. Dallas to Spafford, Feb. 26, 1815 and Mar. 20, 1815; J. Chamberlain to Spafford, Mar. 10, 1815; General Humphreys to Spafford, Apr. 5, 1815; William Peck of North Carolina offered to act as agent in the State to promote the improved wheel carriage; Peck to Spafford, Mar. 18, 1815.

The comments were both polite and skeptical. Jefferson himself was one of the skeptics, saying that he had been "very much of a projector in mechanics, and often disappointed in . . . theoretical combinations," and that without proof by experiment he "should not have expected that shifting the center of gravity of the load backward or forward from the axle would relive the power."[82] Cadwallader D. Colden said that he would have built a carriage for himself on these correct principles had it not been for the high wheels, and James Wallace of Georgetown College asked for a small model for use in class lectures. Spafford clung to the idea for at least three years, and in the spring of 1815 persuaded General Stephen Van Rensselaer to build a carriage on its principles. "The chaise has been now three days in motion," he wrote Jefferson on April 12.

> Hundreds have been to examine it and many have rode in it. I rode with the owner a few miles today on muddy and dry, rough and smooth, level and uneven road, and the motion and apparent ease to the horse fully satisfied us that the principles are correctly conceived in my pamphlet. We have no hesitation . . . in believing that it effects a saving of full one quarter. The ease and uniformity of its motion are truly astonishing. It sinks far less into the mud, raises less on the wheel, and throws very little.[83]

General Van Rensselaer had long been interested in Spafford's invention; in the very beginning of the promotion of the idea, he had lent his support to the inventor's effort to "procure patronage of foreign governments both for fame and money," and had said to John Kent Kane: "If you converse with Spafford for half an hour you will perceive that his mind is stored with a great deal of knowledge original &

[82] Jefferson to Spafford, Feb. 21 and May 14, 1815.

[83] Cadwallader D. Colden to Spafford, June 12, 1815; James Wallace to Spafford, Apr. 29, Aug. 10, and Nov. 7, 1815. Colden did not doubt the correctness of Spafford's principles and Wallace, in an academic opinion that was little more than a restatement of Spafford's ideas, subscribed to the plan without reservation. DeWitt Clinton to Spafford, Feb. 14, 1815. Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Apr. 12, 1817.

acquired & that there is no possible pretence for supposing that he is deranged."[84] But the firm belief that Spafford expressed to President Madison in 1815 that he would "revolutionize the whole world of mechanics" and save a million dollars a year for the American people—of which he hoped to obtain a proper share—never became a reality.[85] The debts accumulated by the *Gazetteer* and the *American Magazine* were still pressing.

Spafford's fertile imagination, however, produced about this time another idea that was calculated to save his country many millions of dollars. More, in this instance the claims—great though they were—were neither exaggerated nor unjustified. Like many another eccentric genius, he finally set forth, in the same self-defeating terms that characterized his more visionary impracticalities, the one theory that gave substantial promise of rewarding his inordinate desire for wealth and fame. Partly because of his inability to distinguish between sound and unsound theory, partly because of an unrivalled capacity for turning every scheme into loss and ruin, Spafford left to other men the gathering of the laurels and the fruits of one of the really momentous discoveries of the nineteenth century. The almost malicious fate that dogged his entire career even wiped out, in the destruction of the Patent Office records by fire, the records of this discovery.

Spafford's preliminary essay on this subject was entitled, "Cursory Observations on the art of making Iron and Steel,

[84] Van Rensselaer to John Kent Kane (Hist. Soc. Pa.), Apr. 29, 1812; on Apr. 6, 1815, Spafford wrote to Jefferson: "General S. Van Rensellaer, proprietor of the Manor of Rensellaerwyck, has a chaise nearly finished on my plan. It will be in motion next week, when I shall close my letter with an account of its success. Except to myself, the sight will be novel in Albany, and hundreds of curious are waiting to try it;" Jefferson Papers (Mass. Hist. Soc.). Spafford reported the successful trial on Apr. 12, in the letter quoted above.

[85] Spafford to Madison, Madison Papers (Library of Congress), Dec. 25, 1817. Count Volney acknowledged the pamphlet on Aug. 21, 1815: "I have already distributed several copies of your *Wheel-carriages;* it will go better in England. The war absorbs us here."

from native Ores of the United States."[86] It was apparently never printed, and all information about its essential contribution is derived from the fact that Spafford sent it to the American Philosophical Society early in 1816. It was read before that distinguished body on April 19 and May 3, 1816, and was referred to a committee composed of Thomas Cooper, Joseph Cloud, and William Hembel, Jr. On May 10, the committee reported that:

> The Theory advanced requires to be verified by repeated experiment before it can be admitted; and that the communication is greatly deficient in this respect . . . also, that the processes are not fully and sufficiently detailed, and that many parts of the process are left in obscurity. The paper in its present state is not such as they [the committee] can recommend for publication, but it is capable of being made so by adding to the facts, and abridging the length of the Dissertation.[87]

Spafford requested the return of his manuscript, and on August 2, Peter S. DuPonceau, Secretary of the Society, complied with the request. At the same time DuPonceau, while cautiously refraining from committing the Society as such to an expression of opinion, did transmit to Spafford the comment of one of the members. It is to this anonymous member's appraisal that we are indebted for a fairly adequate description of the process.

> Mr. Spafford's paper [wrote this member], contains one idea, which, I think is both new & important, viz: That during the roasting of iron ores, first for the purpose of desulphuration, the next purpose Should be not to take away but to add oxygen to the maximum, by exposing the

[86] Spafford to Peter S. DuPonceau (American Philosophical Society), Feb. 10, 1816. This letter was read before the Society on Feb. 16, 1816, and Spafford was invited to submit his essay. This was done on Apr. 5, 1816. Minutes of the A.P.S. I am indebted to Mrs. Gertrude Hess, Assistant Librarian of the American Philosophical Society, for examining the minutes and archives of the Society to discover the actions of that body respecting Spafford's essay. In answering Spafford's initial letter of Feb. 10, 1816, DuPonceau, replying on Feb. 19, said: "Any communication from you on learned subjects will be respectfully received & of course referred to a Committee to report upon. . . . You will easily understand that however respectable the Author of a communication may be, the Society cannot pledge themselves before hand to publish it." DuPonceau showed a strong personal interest in Spafford and offered to engage in corresponding with him on literary subjects.

[87] Minutes of the American Philosophical Society, Apr. 19 and May 3, 1816. The report of the committee is in the handwriting of Thomas Cooper; it was filed with the Society on May 17. Minutes of the American Philosophical Society, May 17, and July 19, 1816.

heated ore to the action of the atmosphere. In this State, it is more fusible, requires less charcoal, and can be sooner & more perfectly freed from impurities, especially by long continued fusion. All this is as I think new, and just, and well worth experiment both in the large and the small way.

The commentator thought, nevertheless, that Spafford's essay was objectionable on three grounds: it was "overloaded with words: too diluted;" the process was not fully detailed and the failure to give specifications as to whether charcoal or limestone was used, and in what proportions, "threw an air of concealment over the paper;" and the author's ideas on the growth of iron should have been omitted because "not at present calculated to do him credit," and, even if true, "not to be advanced but on the strength of experiments numerous & varied." The comment closed with the remark that "The Paper is so well worth attention, that it is a pity, any objection lie against it, especially as the defects can be so easily remedied by the author." In transmitting this anonymous appraisal, Peter S. DuPonceau told Spafford that a Philadelphia lawyer had given his considered opinion that the new idea advanced in the essay could not be patented. "All you will get by it," DuPonceau concluded, "is fame, to which I think your discovery is well entitled."[88] This last remark of the renowned linguist and scholar revealed an understanding heart as well as a discriminating intelligence. Spafford, much as he desired wealth coveted fame more.

He proved that the high authority of a Philadelphia lawyer could be overruled when, on October 30, 1822, he was granted two patents covering his process of making iron and steel.[89] Less than a month later he wrote to James Madison with an eye both on patent rights and immortal fame:

[88] DuPonceau to Spafford, Aug. 2, 1819.

[89] I am informed by the Chief Clerk of the United States Patent Office, in a letter dated July 3, 1942, that "the above patents are out of print and there is nothing available in this office from which reprints may be made. Some of the early patents were destroyed by fire and never restored."

I have now fully realized the truth of a theory of great importance in the arts & to the country, long since conceived; & what has so very long been theory, struggling in the birth, is now mere mechanical demonstration, & may be taught by practise in a few minutes! How, now, shall I avail myself of the benefit of this discovery? I ask thy advice. The theory was that all Iron, perfectly pure, is uniformly good; that pure Iron, duly & equally carbonized, makes good Steel; & it embraces modes of operation conformable to this theory, designed to make perfectly pure Iron, & Cast Steel, a pure carbonate of Iron. The system is all new, & perfectly succeeds, equal to the high expectations I had formed of it. The Steel is of the quality called Cast Steel, has been thoroughly & severely tried, by the best artists & mechanics, & is pronounced decidely superior to any ever imported. I make it from the ores of Iron, Pigs, Bar Iron, &c &c with such facility that it affords profit enough for a good business. A company is formed for manufacturing Steel, men of business, with a half million of dollars capital, bound to make so much as to supply the demand in the United States, giving to me one third of the clear profits. Such is the confidence of capitalists that were it possible to carry on the manufacture & keep the process a secret, I could sell the invention for almost any sum that could be named. It is my intention to apply to Congress for a special law, permitting the specifications to remain sealed papers in the department of State, for 14 years. Were this done, I could sell the Steel Patent for an annuity of 5000 dollars for that term of time. The system embraces the making of Iron, as well as Steel, & is secured to me by 2 Patents. I have stated to the Patent Officer my intention to apply for such a law, & have requested him, if permitted by the laws, to keep the specifications private until the meeting of Congress. Of all men living, I hate lawyers & lawsuits the worst. My desires as to money are moderate. I wish the government would buy the discovery: say pay me one third of what good judges should say it would be worth, perfectly secured, for 14 years, & make it a public benefit. I should then only want to stipulate that the Iron & Steel, made conformably to my theory, should be stamped with my name, Spafford Iron & Spafford Cast Steel, let the world call it vanity, or what it please, & give myself no farther any concern about it. It has cost me enough of care. The thing is now perfected; I want to dismiss it from my mind. Now: one of the two things I have named is very desirable. Pray give me thy opinion whether Congress would grant me such a law; & also, whether, in thy opinion, the government, being fully satisfied, of the truth of what I state, it would purchase the discovery on some equitable terms? I can make the very best of Cast-Steel, from our native ores, at about the expense of making refined Bar Iron, by the old process; & can make pure Bar Iron, Castings, &c. for half what they are made, in any country, by the old method. In a few weeks I will send thee, should I have opportunity, some cast-steel plough-shares for trial, cast, as the cast-iron ones are. Bar Iron is now worth, per cargo, 80 dolls. a ton; Cast Steel, 500. The Contractors on three half-miles of the Erie Canal, have used three tons of cast-steel

this year, at 28 cents a pound. The best English Cast-Steel is a carburet, not perfectly pure; mine is all of one quality, a pure carbonate of Iron—Iron saturated with carbon. As a discovery, none of modern times exceeds it in importance; and it is all American, all new; no patch-work system; nothing borrowed from the old, the work of 20 centuries. If the government would act wisely, we could soon stop the importation of Iron & Steel, save our millions of dollars at home, & tell Europe, as Europe tells us, we consider self-preservation the first law of nature: We are as independent as you are.[90]

On the same day, Spafford wrote Thomas Jefferson substantially the same kind of letter that he sent to Madison.[91] Jefferson apparently did not reply, but Madison, cautiously framing his rough draft, was interested but noncommittal. "Iron," he wrote, "is the metal and even the article which has been justly considered as causing more than any other, the civilization and increase of the human race. Every improvement therefore in the preparation & uses of it has long been deemed a benefaction to the world. If the discovery you have made be formed on extensive and thorough trials, to justify your expectations from those already made, it will be well entitled to the merit claimed for it and the Author to the pecuniary as well as the honorary recompense due to public benefactors." He went on to express doubt whether Congress, under its enumerated powers, could grant the kind of special protection desired by Spafford, and concluded by extending his good wishes instead of the advice asked. He had no doubt, however, that there might "be cases in which a purchase on behalf of the public might be preferable to the grant of a monopoly."[92] Spafford did not bother to tell either Jefferson or Madison that, in 1816 and again in 1820, he had sent the secret details of his discovery

[90] Spafford to Madison, Madison Papers (Library of Congress), Nov. 25, 1822.

[91] Spafford to Jefferson, Jefferson Papers (Library of Congress), Nov. 25, 1822.

[92] Madison to Jefferson, Madison Papers (Library of Congress), Dec. 5, 1822.

to the Emperor of Russia and had endeavored to interest that monarch in its promotion.[93]

If Spafford, a Jeffersonian Anglophobe, had known that the fame and wealth that might have attended his improvement in the manufacture of iron and steel were reaped some four decades later by an Englishman, he would have felt even more tortured than usual by malicious fate. For, despite the paucity of details given in his letters and in the report of the American Philosophical Society, it seems clear that he had grasped and perhaps had perfected the essence of the process that is today associated with the name of Sir Henry Bessemer. The principle by which the manufacture of iron and steel was revolutionized in the middle of the nineteenth century, and patented by Bessemer in the United States in 1856, was the oxidization of the impurities in the melted iron by means of air, a process in which the furious burning of the carbon raised the temperature of the mass above the melting point and which successfully decarburized the iron within a few minutes. Steel, which is iron with a controlled and uniform content of carbon, was then produced by recarbonization in such a way that, with the addition of measured quantities of spiegel iron or ferro manganese, the carbon content could be controlled. This epoch-making invention supplanted the slow and expensive process of cementation, by which wrought iron was placed in a closed retort with charcoal where, under heat, it remained for days slowly absorbing the proper and uniform amount of carbon. The result was blister steel, of excellent quality but exceedingly costly. For centuries no substantial improvement had been

[93] A. Daschkoff to Spafford, Mar. 10, Aug. 30, and Nov. 29, 1816. Spafford sent a copy of his essay to Daschkoff, dedicated to Emperor Alexander, and also a personal letter to that monarch. Daschkoff assured him that "the secrecy of your invention will be strictly preserved." Peter Poletica, Minister from Russia to the United States, to Spafford, Apr. 27, 1820. Poletica was unable to inform Spafford "how far Daschkoff may have succeeded in laying your plan before our government and whether there are any prospects of acceptance."

made in this process save that of Benjamin Huntsman, who, in the middle of the eighteenth century, invented crucible cast steel. It will be noticed that in this ancient process, the making of steel was done by sealing the wrought iron in a retort away from the air. It was certainly not this process, but essentially the Bessemer process that Spafford described to the American Philosophical Society.

Bessemer implemented his theory with a converter.[94] What device Spafford made use of we do not know. Perhaps among his widely-scattered descendants there may be found some day a yellowed copy of his letters patent, revealing the specifications by which he departed from the ancient methods of making iron and steel. If so, there can scarcely be any danger in predicting that these specifications will entitle the eccentric Quaker to the honor of one of the great discoveries of modern times. The discoveries of Huntsman, Cort, Neilson, and especially Bessemer assured England of supremacy in the production of iron and steel until the United States took the lead late in the nineteenth century. Had Spafford been less eccentric and had fate been more kind, his dream of seeing America independent of Europe in one of her great necessities might easily have come half a century earlier. The secrecy which was intended to secure for him fame and wealth was the thing which deprived him of both. At least he had the scientist's satisfaction of be-

[94] Patent Number 16082 for the manufacture of iron and steel was granted to Bessemer on Nov. 11, 1856; patent Number 16083 for the smelting of iron ore was granted to him on Nov. 18, 1856; *Rept. of Commr. of Patents for the Year 1856* (34th. Cong., 3rd. sess., Exec. Doc., no. 65), vol. 1 (1857), pp. 373–4; vol. 3 (1857), p. 84. *Cf.* James M. Swank, *History of the Manufacture of Iron in all Ages* (Philadelphia, 1884); J. Russell Smith, *The Story of Iron and Steel* (New York, 1922). Bessemer's claim to priority in discovering that melted cast iron could be decarbonized and desiliconized by blowing air through it did not go unchallenged. William Kelly, an ironmaster of Eddyville, Kentucky, immediately brought forth a claim of having experimented with the same principle and of having succesfully operated what was known as "Kelly's air-boiling process." This claim, so far as it respected the manufacture of iron, was allowed and he was granted a patent. This operated as a handicap to Bessemer in America and in 1866 the patents were consolidated. By 1879 Bessemer's royalties were calculated at more than £1,057,000. Swank, *op. cit.*, pp. 304–14.

lieving, with much justice, that among the discoveries of man, "none of modern times exceeds it in importance." Three years after he had taken out patents he was forced by financial need to part with them: "I have fought & struggled against the power of money," he wrote to John W. Taylor, his friend and Speaker of the House of Representatives, "till the purse-proud have convinced me it was best & I have sold out my Cast-steel-works & patent to a wealthy company for $5000 cash & some stock."[95]

Spafford told Jefferson and Madison in 1822 that his investigations in making iron and steel had been under way for twenty years. In the six years that elapsed between the reading of his paper before The American Philosophical Society and the granting of his letters patent in 1822, he had undergone such experiences and misfortunes as must have interrupted these investigations many times. The *obiter dicta* on the diffuseness of Spafford's style, as set forth in the report of the anonymous member of the American Philosophical Society, may easily have been responsible for his turning, in the autumn of 1816, to the Emperor of Russia with his discovery. Worse, accumulating misfortune may have diverted the talents of a potential benefactor of his age into the unfamiliar channels of creative literature. What the lusty America of 1816 wanted was iron and steel, not sentimental novels. But what Spafford needed was ready money and, totally without experience, he turned to what seemed to be an easy means of obtaining it. In 1825 the Pennsylvania Society for the Promotion of Internal Improvements reported to its European agent that no improvement in the manufacture of iron had been made in America in thirty years. This unflattering statement might have been turned into a boast of triumph had it not been, among other things, for a mediocre, scarcely-known novel, written by Horatio

[95] Spafford to John W. Taylor (N.Y. Hist. Soc.), Dec. 15, 1825.

Gates Spafford but credited until recently to a non-existent Maria-Ann Burlingham.

*The Mother-in-Law: or Memoirs of Madam de Morville*, a duodecimo of 190 pages, bound in calf and boasting two wood engravings by Abel Bowen, was published at Boston by Bowen early in 1817.[96] The identity of Maria-Ann Burlingham as its supposed author might have remained unknown to posterity, though Spafford freely revealed it to Thomas Jefferson, Ferris Pell, Charles Holt, David A. Leonard, and other contemporaries, had it not been for a casual listing of the title in the letter that Spafford wrote on February 17, 1817 to the Reverend William Bentley of Salem.

> For certain purposes [he wrote], I could not devise a vehicle so well adapted, as a Novel; & I have written one, that I might have the opportunity which this species of composition presented. It is anonymous, and I must not be known as the Writer. In order to conceal the Authorship, it is published at Boston, where my autography is not known to all the printers. "The Mother-in-law, or Memoirs of Madam de Morville, by M. Ann Burlingham" I have directed my publisher to send thee a Copy, & earnestly hope it may meet thy approbation. The composition occupied me 1 day short of 3 weeks, & I only mention by way of apology for its faults. How it is printed, I know not, as none have yet reached me.[97]

Bentley had written an appreciative comment upon *The American Magazine* and Spafford hinted that he would like to see a review of "this little child of mine."[98]

What Spafford did not tell Bentley was the story that lay back of the book's publication in Boston rather than New

[96] Copies are located in the Harvard College Library, the American Antiquarian Society, and the Boston Public Library. The work was printed by Edmund Munroe and David Francis, at 4 Cornhill, Boston; it was distributed by Cummings and Hilliard, who were located at 1 Cornhill in 1817. Bowen (1790–1850) shares with Nathaniel Dearborn the honor of having established a wood engraving business in Boston in 1811. One of the interesting facts about *The Mother-in-Law* is Bowen's advertisement about *The Naval Monument*, a popular and now very rare work, in which he announced to the public that "the very flattering encouragement he has received in the art of Engraving on Wood, has induced him to pay his whole attention to that branch."

[97] Spafford to Bentley, Bentley Papers (American Antiquarian Society), Feb. 17, 1817.

[98] *Ibid.;* see also Spafford's letter of Mar. 4, 1815, addressed to "The Editor of the Essex Register," in Bentley Papers (American Antiquarian Society).

York. This three-week composition was apparently written early in 1816 and presumably had been sent to Ferris Pell in New York. The first identifiable reference to it occurs in a letter from Charles Holt to Spafford, written on April 21, 1816: "There are printers and publishers enough here, who will perform your work for you in the best manner, for a handsome price. . . . I presume it is not necessary for me to see Ferris Pell, or talk to anybody about the 'M—in—L—.' I have not seen, or do not remember anything about its publicity. When fit time offers, however, I may give it a jog."[99] A few days later, evidently having received a jog, Pell reported to Spafford that the booksellers of New York City seemed to be of but one sentiment:

> Native genius is neglected, and they do not scruple to avow it. They inform me that with every disposition on their part to encourage our own productions, public prejudice and popular feeling constantly counteract their wishes. They cannot give currency to a work however good, written here, because it wants the stamp of a name. The inundation of Books from England prevents our native works from rising, and the supply of novels is more redundant than of any other class of works. Eastburn told me that he would rather undertake an edition of the Velvet Cushion, old as it is, than any new work.[100]

Pell thereupon returned the manuscript to Spafford, who had his own opinion of booksellers and of American dependence on England in any field of endeavor. But he was not above taking advantage of a prejudice when it appeared as an obstactle. Henry Cobbett and G. S. Oldfield, "perfect strangers to America," were the American publishers of *Cobbett's Weekly Political Register*, and to them Spafford sent the manuscript of *Madam de Morville*. Messrs. Cobbett and Oldfield reported, however, that "publishing books is

[99] Holt to Spafford, Apr. 21, 1816.

[100] Pell to Spafford, May 1 and 10, 1816. Pell had carried the manuscript to New York City by steamboat from Albany. "Your sentiments respecting booksellers concur with my own," Pell wrote to Spafford. "They are dubious of their own opinions and attribute the scarcity of domestic productions of genius to anything rather than their own want of liberality."

in general out of our line, but particularly Novels, our Business being chiefly confined to dry Politics."[101] They offered to show the manuscript to the "many extensive Booksellers in this place" who would no doubt be glad of the chance to publish the work.

If strangers to America could not be induced to accept the manuscript in the face of prevailing prejudices, there was still another way of overcoming the obstacle: *Madam de Morville* could be made to appear as the product of an English pen. In his letter to Bentley, Spafford revealed the fact that he had relied upon the lack of familiarity of Boston printers with his handwriting to conceal his authorship. It is not known what device he used in transmitting the manuscript to Bowen, but the publisher, in all seriousness, explained to the public the reason for the appearance in Boston of a work allegedly English in origin. "The Reader," he said in a foreword, "will very naturally inquire, Why does this work first come to the Public from an American Press? and, before he gets through with it, he will find a probable cause. The Authoress lived but a few days after the date of her Preface;[102] and Amelia, an interesting young Lady, with whom the Reader will be acquainted in due time, has just arrived in this country from England, on a visit to her Brother, who has long been detained in India, by the events of the late War." Spafford, a lifelong follower of Thomas Jefferson, a champion of American intellectual as well as political independence, not only posed as an English author, but sent a copy of his book, with a humorless letter, to the leading Anglophobe in America. "It is the first thing of the kind that I have written & I do not wish to be known as the writer," he wrote to Jefferson. "If it do but amuse thee, I

[101] Cobbett and Oldfield to Spafford, June 15 and July 29, 1816.

[102] The preface of Maria-Ann Burlingham was dated at Kessick, Cumberland County, Dec. 1815.

shall be glad, & should gladly learn that the composition is approved."[103] He said nothing about his reasons for assuming a British character.

This 190-page narrative of misfortune, seduction, and the triumph of virtue is less interesting as an American novel in the sentimental tradition than as an intriguing problem concerning those undefined "certain purposes" for which Spafford had written it, and had written it, too, in unseemly haste. Maria-Ann Burlingham, calling herself an "unknown female," explained that all of her principal characters were drawn from real life. This statement is amply supported both by internal and external evidence. The character who supports the title of *The Mother-in-Law*, used in its older sense of step-mother, suffered under the name of Glorvina Bowdoin. The only child of an Anglican rector, she was born in Keswick, on the Derwentwater, Cumberland County, and died there October 17, 1814, at the age of seventy-six. When her father died, his parish was filled by Francis de Morville, son of an old friend of Glorvina's father. Both the Bowdoins and the de Morvilles were descended from a long line of noble ancestors in the South of France and had emigrated to England at the time of the Revocation of the Edict of Nantes. Francis de Morville came to Keswick to escape his past. He had been born to affluence and prepared for a military career, but, choosing the ministry instead, he was disinherited. He then became a curate in Lancashire. Possessing "a warm temper, and great sensibility," he had fallen victim to an "artful, designing woman, and had married at an age too early by many years. Before the age of thirty, this wife had presented him with four children;—and at that period consented to swell the black catalogue of crimes in this kingdom, by an adulterous connection with a miserable wretch!" De Morville obtained a divorce, and,

[103] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Apr. 12, 1817.

with his four children, assumed his parochial duties at Keswick. In due time he and Glorvina Bowdoin were married, she became the step-mother of his four children, and to them were born three others.[104] The oldest of the daughters by the first marriage, Nanette, influenced by parish gossip, "almost began to regard her prostituted mother as a victim of unmerited disgrace, and her father as a monster of cruelty." She eloped with a young British officer, Alonzo Preston, who suffered under the delusion that she was an heiress. She was joined by her mother, who married a low fellow called "Sergeant A." The four sailed to America at the outbreak of the American Revolution, after one of them had depleted de Morville's finances by a forged draft. Preston and Sergeant A were killed in action "at Boston," and Nanette's mother, "labouring under a dreadful malady," died there in the alms-house. Nanette followed the British army to Halifax and to New York. At Bedford, repentant and enjoying the hospitality of a "Mr. and Mrs. Jay," she died in childbirth. In a series of letters dated at Bedford from November 1, 1776, to January 11, 1777, Nanette described the kindness of the Jays and referred to Mr. Jay as the "worthy uncle" of Glorvina.[105] Three other daughters of the de Morvilles married substantial farmers of Keswick. Francis de Morville died on May 21, 1801, at the age of sixty-eight, having served at Keswick for thirty-three years

[104] The four children by de Morville's first wife were Nanette, Angelica, Juliette, and Harriet. The last three married, respectively, Charles (later Sir Charles), Henry, and James Granby. The children by Glorvina were Adeline, who married Dr. Burlingame Greville; Francis Charles, who married Dr. Greville's sister; and Laura. One circumstantial bit of internal evidence concerning the reality of the characters involves the story of Sir Charles' Yorkshire grandfather, who gave to Sir Charles a plough for a coat of arms. The repartee in this story, often repeated by Sir Charles after he went into Parliament, caused George III to laugh "most immoderately." This story is the subject of one of the two engravings in the volume; the other, used as frontispiece, shows Maria-Ann Burlingtham seated underneath the willow by Glorvina's grave, finishing her journal.

[105] This may have referred to Chief Justice John Jay who lived at Bedford and who was a correspondent of Spafford at the time *The Mother-in-Law* was published.

and six months. Glorvina survived him thirteen years, surrounded by her children and grandchildren, and completed the memoirs which furnished the basis for Maria-Ann Burlingham's account. Such are the main outlines of the story, stripped of its lengthy moralizations and sermonizing on the duties of children, the sanctity of marriage, the virtues of Glorvina, and the dangers of gossip.

The chronology and vital statistics of *The Mother-in-Law* are so precise and so consistent as to support the author's statement that the characters were taken from real life. But there is other evidence bearing not only on this point, but tending to show that these characters had some connection with Spafford's own family history. Glorvina, at her death, was buried beside her husband and her father. At this spot Glorvina's father had planted a willow tree, close by the Derwentwater, "observing, at the same time, 'that at the root of this tree, he had buried all his hopes of nobility.'" This tree, we are told at the close of the volume, "was once a little twig, plucked from that ancient tree which shaded the tomb of his ancestors, during many ages, in one of the finest regions of old France. It is a family tree, genealogical and historical:—the branches of which are blooming in England and America, while its roots are destroyed in the parent soil. Long may it flourish here, and Grace this vale of Keswick, in which it first took root when fleeing from the power of tyranny. It is a tree of Liberty, civil and ecclesiastical. Long may it flourish." Spafford, never hesitant about writing to famous personages about his own affairs, knew that, at the time he was writing the history of Glorvina, Keswick's most distinguished citizen was Robert Southey. He therefore addressed a letter to him inquiring about the family tree that had been planted by Glorvina's father.

Southey's reply, a long and cordial one, was written the

day after he received Spafford's inquiry, but it came too late for the author of *The Mother-in-Law* to use. It was dated at Keswick, March 5, 1817:

It would not be easy [wrote the poet laureate], for me to express how much I have been affected as well as gratified by your letter. With that wide Ocean between us, you & I are in sympathy with each other. In awakening my feelings you have also strongly excited my curiosity. There is an oak, or rather the shell of what was once a stately one, upon the estate of Monk-hall, within my view, about a quarter of a mile distant . . . Is this your family tree? When the estate belonged to Sir Michael Fleming, about twelve years ago, he sold the timber upon it to the person who rented the farm, an old man of the name of Slack, & this old oak, which all artists have admired, was marked for the axe, & purchased with the rest. But tho Slack had paid for it he did not chuse to destroy the tree. He said to me, "It was there long before my time, & I would not be the man who should cut it down." I have respected the old man ever since. He has left the farm, but the Oak is yet standing. There *was* within my view a yew tree, likewise of great age & beauty. The Town of Keswick consists chiefly of one long street & this yew stood behind some houses, which have been erected not above twenty years: other buildings have since been built behind them & to make room for these the yew to my great regret was destroyed. There is yet a third tree to which your history may peradventure relate. It is a Weymouth pine upon the top of a little hill called Cockshot. The hill is covered with wood, but this pine is manifestly half a century older than all the rest, & stands a conspicuous object above them all. If this should be your tree, I have a deeper feeling connected with it even than yours. I had an only son, of whom it has pleased God to bereave me. He was my pupil & I was his playfellow. I loved him with all my heart & with all my soul & with all my strength, for he was in intellect & in disposition every thing I could desire, & in acquirements I verily believe superior to every boy of his age. He was the constant companion of my Walks & our last walk was to that Pine Tree. . . . I well remember that he touched the Tree, & remarked that it must have been planted before the surrounding wood. It is full in view from the window of my study—but I have never since ventured to the spot. Tell me if either of these may be the memorial to which you allude; or direct me to it if you can, that if it be still standing, I may use my endeavours to prevent it from being ever cut down.

Southey closed this revealing letter with the statement that his inheritance, too, lay in England and America—"upon the waters of the Hudson as well as of the Thames,—& of *our* Derwentwater." He also told Spafford that he would make good use of the *Gazetteer of New York* in a long

poem then under way, the scene of which was laid in Connecticut in the time of King Philip's War.[106]

Though the pseudonymous Maria-Ann Burlingham gave Glorvina a willow tree for a memorial, and though Southey was not certain whether it was an oak, a yew, or a Weymouth pine, we may be fairly certain that when, if ever, Spafford's original inquiry to Southey comes to light, the true story of the real Glorvina will become clear. In all likelihood she will be found to be a close relative of the author of *The Mother-in-Law*.

But improved wheel carriages, new methods of making iron and steel, genealogical novels that would not sell, magazines of miscellaneous information, postmasterships that could not be obtained—all ended up the same way: with the State of New York holding an unredeemed bond and with Solomon Southwick bankrupt. Moreover, Spafford was beginning to be crippled with rheumatism and he was already suffering under another bodily affliction. Even when misfortune pressed so close, however, his unflagging inventiveness was brought to bear upon his own ailments in the hope that some discovery in the field of medicine might be of benefit to others. His essay upon the therapeutic properties of candle-tallow, impregnated with cigar smoke, was sent to Dr. Samuel Latham Mitchill, who at least dignified it by publishing it in the *Medical Repository*.[107] When, in February 1817, the May, 1816, issue of *The American Magazine*

[106] Robert Southey to Spafford, Mar. 5, 1817. Spafford received this letter on May 9, 1817 and replied to it on May 30. He again wrote to Southey, from his "Western Cabin" in Venango County, Pennsylvania, Jan. 13, 1819.

[107] On Sept. 21, 1816, Dr. Mitchill acknowledged Spafford's memoir as follows: "The affecting narrative of a stricture in the strait gut, accompanied by haemorrhages, and relieved by tobacco, has been received and placed on file for the Medical Repository. While it exhibits exemplary patience under long protracted distress, it contains wholesome expedients, and the means of mitigating at least if not entirely removing the tormenting malady. I am indeed sorry for your heavy affliction." On Feb. 4, 1817, Mitchill wrote that "Your Memoir on Tobacco as a remedy for stricture in the Intestinum Rectum has been printed in No. 4. Vol. 18 of the Medical Repository, published a few days ago."

finally appeared, announcing Spafford's surrender to the accumulating misfortunes of a career devoted to science and literature, he had already come to a decision that had been two years, at least, in forming. For the next ten years he would attempt to recoup his fortunes by cultivating and dealing in western lands. It is not clear whether his *Hints to Emigrants, on the Choice of Lands; Particularly Addressed to Farmers in the North-Eastern States*, by "Agricola," was written before or after his plunge into the feverish atmosphere of land-jobbing.[108] But, whenever written, it was a closely-reasoned argument by one who was obviously both a practical and a theoretical agriculturalist. This essay, written to assist those who were engaged in converting forests into farms, challenged the generally accepted view that heavily wooded lands were the best for agricultural purposes. Settlers from New England sought lands covered with maple, beech, birch, ash, and elm trees, especially where there was a deep covering of leaves half-converted to earth, called black muck. Spafford contended that this was erroneous, since the presence of black muck indicated a thin layer of rich soil over a hard and sterile subsoil. Indeed, he attempted to show that, "invariably, the land is poor where this is found, exactly in proportion to its depth." The early western settlers, he continued, chose the wooded, muck-covered soils; the later emigrants, taking what remained, found themselves after a few years "in possession of far better lands, much easier to cultivate, yielding better crops, and equally well adapted for either grain or grass. These farms, which now sell fifty per cent higher than those, were perhaps, purchased several years later, and at least one hundred per cent lower! I do not make this comparison from a few solitary instances. . . . The evidences may be found . . .

[108] *Hints to Emigrants* (Albany, 1817) was signed by *Agricola* at Albany on Aug. 11, 1817, just before Spafford set out for his western lands.

numerous and indubitable." This pamphlet, filled with interesting facts about Spafford's experiences as a Vermont farm-boy and more exact in its description of soils than in its calculations of percentages, may not have been entirely disinterested in its argument. For Spafford, who planned to cultivate western lands as well as to sell them on commission, was entering the great American gamble at a time when the best lands of New York, Pennsylvania, and Ohio had already been preempted according to the prevailing opinion of what constituted best lands.

Yet, in negotiating with leading land-jobbers of the day, he revealed a surprising invulnerability to their blandishments. David Parrish of Ogdensburg had both lands and blast furnaces and would have been much pleased to "see a man of your respectable character" settle on his lands and dispose of them to Quaker families.[109] Judge B. B. Cooper of Cooper's Ferry, who never seemed to be able to make anything out of Spafford's signature but "Horotis Gatio Shassford," offered to let him have 10,000 acres of land, covered with beech, maple, cherry and hemlock, in McKean County, Pennsylvania. The price, justified by a masterly description of over half a million acres purchased from the Holland Land Company, was two dollars per acre. "However," the judge added, "We have concluded for a man of your ability and influence to let you have a district . . . at one Dollar and seventy-five Cents per acre."[110] This was reticence compared with the high flattery of W. S. Hart of Norwich. That land magnate, condoling Spafford for the lack of appreciation

[109] Parrish to Spafford, Dec. 13, 1815; Spafford had sent Parrish the essay on iron and steel, and Parrish sent it on to the Rossie Furnace, saying that he thought "some arrangements can be entered into between us, both for the Land & Iron business." Also, Parrish to Spafford, Oct. 28, 1815; Feb. 23, 1816. Daniel Hoare to Spafford, May 16, 1816, quotes Parrish as saying that Spafford had "some idea of establishing a settlement of Friends" in Parrishville.

[110] Benjamin B. Cooper to Spafford, Sept. 12, 1814; Nov. 5, 1814; Apr. 28 and Aug. 20, 1815; and Mar. 1, 1817.

shown to authors during their lifetime, said: "The greatest Authors have never been highly celebrated till some time after their works have been published. This was the case with Shakespear, Lock, Milton, Hume, and many others." Without driving the implied comparison home, Hart then took up the matter "relative to your proposal of purchasing lands." Spafford could purchase several thousand acres of land, sell one-half or two-thirds to settlers in payment of principal and interest on his mortgage, and have the remainder as clear profit, an accelerating profit because of the "increase in value which you and all other sensible men know is taking place with these lands." Hart concluded by assuring Spafford that "we have more call for Lands than we can answer. But your early request and the respectability of your character give you a prior claim."[111] A few landholders were more cautious. Frederick Rapp of Harmony coolly set a price of $200,000 on the three thousand acres and buildings of that community, confining himself to a statistical appraisal of the property. James Taylor of Kentucky, offering lands in Ohio on relatively high terms, asked Spafford for references as to his character and financial ability.[112] J. H. Tiffany, who apparently was not on the side of the dealers, cautioned Spafford against buying lands at any price without first examining them. "In all cases of land agency," he warned, ". . . be invested with all discretionary power, & do not forget what has been obscured upon mortgages, & deferring of interest & installments, or an equivalent discount for prompt payment."[113]

Spafford finally approached Paul Busti of the Holland Land Company, who referred him to Henry Shippen of

[111] W. S. Hart to Spafford, June 8, Nov. 23, and Dec. 23, 1814.

[112] Frederick Rapp to Spafford, July 18, 1814; James Taylor to Spafford, Jan. 23, 1815; Alexander F. Rose to Spafford, Jan. 20, 1815; and C. Schulte, Marietta, Ohio, to Spafford, Dec. 13, 1816.

[113] Tiffany to Spafford, Mar. 4, 1817.

Lancaster, one of a group who had purchased some of the vast quantities of lands originally held by Amsterdam bankers. The result was that on May 13, 1817, Spafford signed a contract with Shippen to purchase about 10,000 acres of land at one dollar per acre, to be paid in six yearly instalments.[114] These lands were located about ten miles east of Franklin, in Venango County, Pennsylvania. In the summer of 1817, Spafford journeyed there to spend the next three years in what he called his "Western Cabin." He cleared woods, corresponded with Jefferson and Madison, described to them the good qualities of a wild potato that he had discovered, imported a species of winter wheat from Africa, and, at last, became postmaster of a wilderness site that he hoped would flourish under the name of Spafford's Settlement. He told Jefferson that after devoting three years and as many thousands of dollars to his lands, he had raised their value from fifty cents to three dollars an acre. His farm, he wrote Madison in the summer of 1818, had been entirely in forest the preceding December, and he added that all of his attention was "most sedulously directed to Agricultural & Rural Economics."[115]

But the wilderness life was almost devoid of intellectual stimulus. "In these woods," he wrote to Madison, "occupied in my new business, that of Farming & forming a new Settlement on an extensive tract of wild land, I hold little intercourse with the literary world & know little of what is going on."[116] He wrote to Rejoice Newton, secretary of the American Antiquarian Society, changing his address "to these backwoods," and offered to send to the Society some aboriginal antiquities, some pamphlets, and the large mass

[114] Paul Busti to Spafford, Jan. 18, 1816; Henry Shippen to Spafford, Aug. 9, Sept. 17, Nov. 1, Dec. 14, 1816; Mar. 10, 1817.

[115] Spafford to Jefferson, Jefferson Papers (Library of Congress), Feb. 28, 1822.

[116] Spafford to Madison, Madison Papers (Library of Congress), Aug. 9, 1818.

of correspondence from which his *Gazetteer* was compiled.[117] In the spring of 1819, unsubdued by the hardships of pioneering, he wrote to Jefferson about a new literary venture that he had decided upon:

> I desire permission to say, confidentially, that I have in contemplation, should I survive thee, to write a History of thy Life, on a scale of brevity suitable for a Class Book in our better sort of schools. This is a design I have not rashly formed, nor without a due reflection on the objects proposed to be accomplished by it. To no other man is our country indebted for so large a portion of our temporal blessings. To thee, more, by far, than any other, do we owe our pure Republicanism in doctrine. Our second era, not less critical than the first, is the work of thy mind: the preservation of our liberties from 1799 to 1809 was not less difficult than from 1776 to 1780![118]

This was the letter of a Jeffersonian yeoman, conscious of his liberties, and Jefferson was touched. But to the request for the loan of his papers, he replied: "I cannot be insensible to the partiality which has induced several persons to think my life worthy of remembrance, and towards none more than yourself, who give me so much more credit than I am entitled to, as to what has been effected for the safeguard of our republican constitution." His memory, he added, was failing, he had an aversion to labor, he had no narrative or record of events, and his life was fully occupied. He urged Spafford, therefore, to employ his time more usefully in something else.[119] Even so, such a reply to Spafford in his isolation was "among the most considerable of the consolations of this life."[120]

Again ill fortune closed in. His right leg became partially paralyzed, and to add to this misfortune the title to his lands was disputed, compelling him to resort to the hated lawyers and jeopardizing the labor and money that he had expended.

[117] Spafford to Newton, May 5, 1819.

[118] Spafford to Jefferson, Jefferson Papers (Library of Congress), Apr. 5, 1819.

[119] Jefferson to Spafford, (*ibid.*), May 11, 1819.

[120] Spafford to Jefferson (*ibid.*), Sept. 5, 1819.

This, he wrote to Jefferson in September, 1819, "checks my course, and will probably induce me to abandon the Settlement, and all hopes from it. This is an affliction that seizes upon my spirits the more, as, in my 42d year it finds me suffering under the effects of a chronic rheumatism that makes me a sort of cripple. I must wait, hence, a legal decision; but my only remaining hope, now, is in my goose-quill!! I must return to the State of New York & resume my literary labors. A second edition of my *Gazetteer* of New York is called for & may well appear soon after the next census." He hoped that Jefferson would obtain for him the appointment as director of the census in New York.[121] But the only public office that Spafford ever achieved was postmaster of the ill-fated Spafford's Settlement.

He returned to New York, probably in the winter of 1819, ill in health and poverty-stricken. In 1820 he settled in Ballston Spa for the benefit of the waters and began to publish a short-lived newspaper called *The Saratoga Farmer*. He was so poor that he could not pay the dues for his coveted membership in the American Antiquarian Society, but he was unashamed: "Mine is honest poverty," he wrote to the treasurer, "& I am not ashamed of it. Should the caprices of dame fortune yet lead her to smile on my courage & industry, the society shall have its very moderate & reasonable demand."[122] Both courage and industry in a high degree marked the few remaining years of his active life. "A cripple, poor, far advanced in a premature old age," he wrote to Jefferson, "I have returned to my 'first love' from necessity & am again ardently and zealously engaged in literary labors. I am, to use the figurative style of our Aborigines, an old horse, turned out, in December, to graze the common."[123]

[121] Spafford to Jefferson, Jefferson Papers (Library of Congress), May 11, 1819.

[122] Spafford to Nathaniel Maccarty, Oct. 6, 1820.

[123] Spafford to Jefferson, Jefferson Papers (Library of Congress), Feb. 28, 1822.

But his very courage, and the desperation of his fortunes, drove him to plan more work than even a strong and unharassed man could have accomplished in the time left. Aside from the second edition of the *Gazetteer*, together with an abridgment of it for school use, he revived the plan for a natural and civil history of New York, though he expected to wait until the completion of the Erie Canal. The canal was soon finished, but Spafford's history never was. He projected a history of the canals themselves and told Madison that he was "preparing a sort of American Plutarch, for the youth of the Republic—the youth of the two Americas.[124] He wished to undertake the preparation of a gazetteer of Virginia, and if the booksellers would guarantee him one thousand dollars a year and a few copies of the book, he would undertake to do it in two years. He learned from booksellers that tourists needed a convenient pocket account of "places of business, routes, distances, stages, fares, accommodations, amusements." Europe had such guides, and it was apparent that tours were becoming so fashionable in America that a similar convenience was needed. In consequence, Spafford had written many letters to postmasters asking for information, and he expected to publish the work within three months.[125] He went so far as to send to Jefferson the title-page description of a work planned:

> The Apprentices' Spelling Book; containing Besides the Usual Exercises in the Rudiments of English Literature all the tables in Arithmetic that ought early in life to be engraved on the Memory, a brief Epitome of the Arts & Sciences, and of the Chief branches of Knowledge that come into the everyday business of life, with Collections of Morals . . . from the Greek, Latin, French, &c correctly accented & translated: Designed for the use of Apprentices in the Mechanic Arts, Farmers' Sons, and all those who have not an acquaintance with the learned languages & the higher branches of Learning. By Horatio Gates Spafford, LL.D.[126]

[124] Spafford to Madison, Madison Papers (Library of Congress), Mar. 15, 1822.

[125] Spafford to Madison (*ibid.*), May 10, and Mar. 8, 1825.

[126] Spafford to Jefferson, Jefferson Papers (Library of Congress), Feb. 28, 1822.

Spafford asked Jefferson's opinion and added, somewhat superfluously, "the title will acquaint thee with all my object." But Jefferson thought that Spafford "could not have approached a more incompetent judge than myself . . . the right of saying to the public what is worthy or not worthy of their attention . . . is the office of critics by profession, in whose line I am the least practised of all men living."[127]

All of this might indicate that, as with many authors, Spafford was more industrious in planning than in performing. Yet, by the middle of 1822, he had expended an incredible amount of energy upon the second edition of the *Gazetteer*. This, he claimed with justice, was not really a second edition or revision of the work of 1813, but a completely new production, carried out on the same principles as the first. Within the first six months of 1822, as he informed Madison, he had sent out more than 1100 letters to all parts of the State, "more than 800 of which were autographs, thinking, as indeed I have always found it, that less attention is paid to printed than MS. letters." He thought that the *Gazetteer* of 1813 had done the State of New York a vast amount of good: "It has been the means of increasing our population a good many thousands, & such will be acknowledged when the Author shall be under the sod. . . . I have made nothing, yet, by the work, but the booksellers have & the community has been benefited."[128] In this spirit of sacrifice for the good of the community, not altogether uncomplaining, he brought to fruition early in 1824 his most substantial literary production, *A Gazetteer of the State of New-York: Embracing an ample Survey and Description of its Counties, Cities, Villages, Canals, Mountains, Lakes, Rivers, Creeks, and Natural Topography, Arranged in One*

[127] Jefferson to Spafford, Jefferson Papers (Library of Congress), Mar. 19, 1822.

[128] Spafford to Madison, Madison Papers (Library of Congress), June 11, 1822.

*Series, Alphabetically.*[129] "That it is a new Work, and not a second edition of the former one, published ten years since, will be seen on inspection," Spafford declared in his preface.

> Such is the rapidity of our march, in most matters relating to Topography and Geography, that in this short period of time descriptions become quite antiquated, and are never consulted, but by way of comparing the past with the present state of things. . . . If Authors, like military-men, were not sometimes subject to the imputation of more courage than conduct, this Work, after the experience so dearly purchased by my first Gazetteer of this State, would never have been written. . . . I have been more than 2½ years, constantly employed, in the laborious drudgery of this task. If I have failed in the execution, it has not been owing to a want of materials for the Work, nor to any lack of labor or expense. The time I have devoted to it will average 10 to 12 hours of 6 days in every 7;—and during a considerable part of the whole time, my postage, alone, has cost me as much as all the supplies of food and drink for my family.[130]

The book was put to press in October, 1823, and Spafford's preface was dated at Troy, April 2, 1824, a few days after the copyright was registered. "Whether," he concluded, "after so long a period between seed-time and harvest, we are now to enjoy a crop, or even have a harvest, is submitted to a decision from which we claim no right to appeal." But he did warn those who, with a little dexterity in the use of scissors, had determined to make a very "saleable pamphlet" out of his labors, that the law would protect his literary property, which he and his publisher were prepared to defend.

In the matter of organization of his material, Spafford yielded to the advice of critics of his earlier *Gazetteer* and arranged the whole in one alphabetical sequence, instead of having three main divisions. In the matter of injecting the author's opinions on all subjects into such a statistical work, Spafford was as free as ever. He argued for improved breed-

[129] Published at Albany, 1824, by B. D. Packard, and by Spafford, at Troy; printed by Packard & Van Benthuysen.

[130] *Gazetteer*, pp. 4–5.

ing of livestock, rotation of crops, and leaned heavily upon *Hints to Emigrants* for information on soils. Even on mineralogy he could introduce political implications: "Iron (and why not steel?), salt, gypsum, articles of the first necessity, may be produced among us, for an abundant supply,—whenever our step-mother legislation shall learn not to take all its doctrines of political economy from the other side of the Atlantic." On the judiciary, Spafford took advantage of the recent adoption of a State constitution to urge a complete eradication of the common law from American jurisprudence, in order to break "this last link of our humiliating dependence on a foreign government, now alien in every sense, which even a dependent Colony indignantly repelled." On the Literature Fund, a capital investment of proceeds from land sales, canal stock, and other sources, yielding in 1823 over six thousand dollars, Spafford grew indignant: "Why apportion the income . . . to the number of classical students [in the academies]? In my opinion this is an injurious perversion; but I have not room to examine the subject as it ought to be examined." Remembering the criticism of Dr. Hosack in 1813, Spafford declared that the College of Physicians and Surgeons in New York was "probably the best in America, and perhaps not inferior, taking all things into consideration, to any in the world." In contrast to the opinions expressed in the earlier *Gazetteer*, education, he thought, had been as amply provided for as in any country on earth, but there was need for an agricultural school and "we have fewer facilities for acquiring a knowledge of the Natural Sciences, than we ought to have." As for the banking system, "The Truth is, beyond all controversy, that our Banking system is wholly an unsound one, and the sooner every body finds it out the better." The same remarks applied to insurance companies, which were just about as numerous as banks: they also were "founded upon a system

of fictitious capital." Pauperism received extended treatment. New York had a total of 22,111 paupers, and Spafford, who had a thorough acquaintance with poverty, thought that two-thirds of the permanent paupers and more than half the occasional paupers were brought to that state by an excessive use of ardent spirits. Moreover, "It is feared that this mass of pauperism will at no distant day form a fruitful nursery for crime, unless prevented by the watchful superintendance of the legislature." He thought the people of America derived little profit from their foreign commerce and he referred bitingly to the "gosling Politicians" who had proposed moving the New York Custom House to the Jersey shore. The long sketch on the history of the State which had appeared in the 1813 *Gazetteer* was omitted, though Spafford declared again that it was high time a comprehensive history be written: "The task is too great for an individual," he added, "though I was once foolish enough to undertake it, and have expended some money, and a good deal of time in collecting the necessary materials—and still have a sort of longing for the old historical documents in the Secretary's Office, where, by-the-bye, our History ought to be written." He expressed gratitude for the assistance rendered by many postmasters throughout the State, but poured out scorn on other "churlish creatures in office who have opposed me at every step." On the proposed new public bathing-house at Troy, Spafford informed his fellow townsmen and the State at large that he did not know whether the rates charged would be "such . . . that any but the rich can enjoy this luxury, one of the very few that is really conducive to happiness."[131]

Such opinions—and those given are mere samples of what may be found throughout the work—amply sustain Spafford's remark to Madison about his intention: "I should like

[131] *Gazetteer*, pp. 525, 598, 600–2, 605, 606, 608, 611.

very much to know thy opinion of it," he wrote, "particularly as to the many matters besides mere Topography. My object has been a manly frankness, such as I think becomes a Republican, aiming only at Truth."[132] Few gazetteers and statistical compilations have ever contained such a high percentage of what can only be described as manly frankness.

This 620-page monument of data about the flourishing State of New York, still valuable for the social historian, was Spafford's supreme achievement and his last substantial one. *A Pocket Guide for Tourist and Traveller*, not the one planned for the entire United States but one limited to the canals of New York, appeared in 1824 and was reissued in a second edition in 1825.[133] *The New York Pocket Book*, a sixteen-page pamphlet listing the towns of New York in an extremely complicated code of references, was also issued in 1825. Even in so innocuous a publication as the *Guide* for canal-travellers, listing towns, distances, and fares, the conscientious Quaker, now leaning toward Emanuel Swedenborg and attempting to get James Madison to follow him, he could not subdue his manly frankness. "The Troy Steam boat Company," he informed the public on page six, "will soon have one Boat, and next spring two, plying direct, between Troy and New York, by the way of Jersey City, a perfectly ridiculous farce, even if played according to law." The practices of the canal transportation companies also aroused his ire:

> I am sorry to see that these great companies are making such a monopoly of the Transportation business, driving off the small capitalists and the many hundreds of poor and industrious men, who are striving

[132] Spafford to Madison, Apr. 8, 1824.

[133] Printed at New York by T. and J. Swords. *The New-York Pocket Book* was published at Troy by William S. Parker. For the ten known publications issued in separate form by Spafford, including *The American Magazine*, nine different printers were employed, at Hudson, Troy, Albany, New York, and Boston.

to support themselves and families, by this new species of Trade. They will do it, however, for wealth will have its own way; and power will beget power, and strengthen itself—a tendency that we little weak men may deplore but ought always to guard against.

He was a Jeffersonian Republican to the end.

Spafford lived on until 1832, but apparently no further publications came from his pen during the last seven years of his life. He moved from Troy to Lansingburgh and there, in spite of ill-health and limited resources, he continued his experiments in mechanics. In 1827 he wrote to Professor Amos Eaton of the newly-founded Rensselaer Polytechnic Institute of Troy, the kind of letter than on former occasions he had sent to Madison and Jefferson:

I intend to have for you, before another year ends, one of the most interesting combinations, in mechanics, that ever was exhibited, now partly in model. With all the wealth & liberality, of the Patron of your School,[134] I could excel him, in bequests, by a single engine, the power of which would be incalculably great. The expence of making it, however, is too great for my purse, at present, and it must wait for more ample means. With this engine, I engage that a Boat, say of 15 tons load, exclusive of its own weight, can be moved at the rate of 20 miles an hour, which is 5 faster than any one has yet been propelled, either by wind or steam, & the cost of making it would not exceed 5000 dolls.[135]

This great improvement in marine transportation apparently met the fate of oblivion that attended the improved wheel-carriage of a decade earlier, but Spafford, undeterred by failure, carried on his experiments and sought to encourage others to engage in the study of mechanics. What part he may have played in the decision of his patron, General Stephen Van Rensselaer, to establish a polytechnic nstitute, is not known. But when the school was founded, he told Professor Eaton that he would be glad to offer a copy of his *Gazetteer* annually to "the best scholar in topographical mineralogy or the one best acquainted with the localities of

[134] General Stephen Van Rensselaer.

[135] Spafford to Amos Eaton (N.H. Hist. Soc.), Nov. 23, 1827.

valuable minerals & fossils in this State." He thought the lectures by such students would be generally interesting and should be published.[136]

Thus, at the close of his life, he carried on the fight to promote a democratic kind of learning such as became a Jeffersonian Republican. Those last years of obscurity, lived out perhaps in ill health if not in want, might have been enjoyed in the comfortable warmth provided by recognition and reward, had he possessed more of the qualities needed for him to realize his own potentialities. One of the best informed men in New York, he was never called to public service where that knowledge, given his progressive views, might have had large benefits. A discoverer of one of the most important secrets of his day, he was unable to persaude either theorists or men of practical affairs to underwrite that momentous fact. A compiler of two of the most informative documents for the historians of a great commonwealth, he is to most of those historians only a name on a title-page. His exalted confidence offset by occasional self-deprecation, his acute observations mixed with child-like phantasies, reveal a mind whose force was largely spent by its own conflicts. This much he realized. To Jefferson he wrote: "I often regret the warmth of my feelings or rather the want of prudence. But I never was formed for any policy of design; and at best can never be better than a zealous drudge."[137] Of his zeal there can be no question: it was zeal born of courage that was often derived from a higher source than desperation.

[136] Spafford to Amos Eaton (N. H. Hist. Soc.), Nov. 23, 1827.

[137] Spafford to Jefferson, Jefferson Papers (Mass. Hist. Soc.), Mar. 22, 1814.