L & C Forensics

Reconstructing Sergeant Floyd

Floyd’s Funeral Revisited

A “New” Portrait of Patrick Gass
The Lewis and Clark Trail Heritage Foundation, Inc.

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Mission Statement
The mission of the Lewis and Clark Trail Heritage Foundation, Inc. is to stimulate public appreciation of the Lewis and Clark Expedition’s contributions to America’s heritage and to support education, research, development, and preservation of the Lewis and Clark experience.

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**On the cover**  
On a hill overlooking the Missouri River on May 26, 1805, Meriwether Lewis gazes for the first time on the Rocky Mountains. The painting, by Olaf Seltzer, shows the captain holding a telescope. A telescope and a pocket watch owned by Lewis were recently examined by forensic experts to determine whether he carried them on the expedition. Our story about the investigation and its results begins on page 20. Seltzer’s painting is reproduced courtesy of the Gilcrease Museum, of Tulsa, Oklahoma.
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Letters
Ross’s Hole: Which way the view?

Regarding “Lewis and Clark at Ross’s Hole” in the August 2000 WPO: Author Patricia Burnham refers to the “considerable commentary about the mountain background that forms the upper horizontal plane of the painting.” I wonder whether this commentary includes discussion of the painting’s orientation: that is, whether the background represents the mountains to the east or to the west of the Bitterroot Valley.

The only basis for regarding the scene as pointing west, in my mind, is the appearance of Trapper Peak in the background. I suggest, however, that although Trapper Peak may have been included to give the painting greater drama and immediacy—a legitimate artistic device—Russell and his viewers are actually looking east.

Consider, first, that sunlight enters the canvas from the left—so that a morning scene would have the background to the west and an evening scene would have the background to the east. The initial contact—the one most likely to stimulate the evident excitement—occurred in the afternoon of September 4, 1805. Clark wrote that the people “received us friendly, threw white robes over our shoulders” [the ones on the ground in the picture?] and that “the Chiefs harangued untill late at night.” The diary of Joseph Whitehouse, although probably not available to Russell, makes it clear that “we proceeded on down the Valley towards evening.” Since the meeting appears to be one late in the day, the background mountains must be to the east.

Second, it should be noted that the captains are on the right side of the painting and the Flashead camp is on the left. This makes good sense if the expedition is viewed as coming down the valley, with its leaders shown here at its van. If the view is to the west and north, the explorers would have had to pass entirely past the encampment. As Whitehouse reported, we “pitched our

Apocrypha sought
The LCTHF Library (406-761-3950; e-mail library@lewisandclark.org) seeks the following apocryphal accounts of the Lewis and Clark Expedition:
• By William Fisher: New Travels Among the Indians of North America (Philadelphia, 1812); An Interesting Account of the Voyages and Travels of Captains Lewis and Clark (Baltimore, 1812 & 1813).
• By “Meriwether Lewis”: The Travels of Capts. Lewis & Clark (Philadelphia, 1809); The Travels of Capts. Lewis & Clarke (London, 1829); Die Reisen der Capitaine Lewis und Clarke (Libanon, 1811); The Journal of Lewis and Clarke, to the Mouth of the Columbia River beyond the Rocky Mountains (Dayton, Ohio, 1840).

Jeremy Skinner
Librarian, LCTHF
Great Falls, Mont.

WPO welcomes letters. We may edit them for length, accuracy, clarity, and civility. Send them to us c/o Editor, WPO, 51 N. Main St., Pennington, NJ 08534 (e-mail: wpo@lewisandclark.org).
Down the years with WPO

R

ecently, I found myself perusing back issues of WPO. Skimming through the pages, I rediscovered old friends who led the Foundation, created WPO, and worked to preserve and protect the Lewis and Clark Trail. I also discovered that the Foundation’s history is a part of my own history.

In the summer of 1974, the Foundation held its sixth annual meeting. Fifty-one full-time and 47 part-time attendees gathered in Seaside, Oregon, to explore the story of the Corps of Discovery along the shores of the Pacific. At that meeting the Oregon Historical Society was honored with the Foundation’s Award of Meritorious Achievement, established in 1972. It was the first institution to receive the award—appropriately, for its work to acquire and preserve the site of the expedition’s salt cairn, at Seaside.

Out of the directors’ meeting that summer came two decisions that impact us today. The first was to begin publication of WPO. The magazine’s founding editor, Bob Lange, had a flair for the written word and demanded the highest standard of scholarship. His efforts placed WPO in the forefront of historical quarterlies.

The second decision was to elect Gary Leppart president. At the time, Gary worked for the North Dakota Outdoor Recreation Agency. He now lives in Billings, Montana, and it was Gary who alerted us last summer to the proposed construction of a high-speed grain-handling facility near Pompey’s Pillar.

At that same meeting, flag maker Josephine Love of Astoria, Oregon, presented the Foundation with a 15-star, 15-stripe flag similar to the one carried by the Corps of Discovery. That flag still hangs above us at our annual meetings. This winter, it hangs in a place of honor in my office as a daily reminder of my own commitment to the Foundation.

Reading through back issues of WPO, I revisited my friendship with contributors like the late Paul Russell Cutright, Raymond Burroughs, Donald Jackson, and Arlen “Jim” Large. In 1983, the magazine published an article by a young author named Barb Kubik. It took two years of serious research and writing for my modest biography of John Colter to meet Bob Lange’s exacting demands of scholarship.

I read reviews of new and exciting books such as Robert Betts’s In Search of York: The Slave who went to the Pacific with Lewis and Clark. The Foundation is now pleased to offer our members a reprinted edition of this definitive work, with an introduction by Jim Holmberg. (See announcement, page 31.)

In an issue from 1979, I read of the appointment of Gary Moulton as editor of a new edition of the L&C journals. He expected to take nine years to produce a 10-volume set. Volume 13 was published in 1999, and a comprehensive index will be out later this year. Gary has become a dear friend, and we honor him for his dedication to the story we cherish.

My reading reminded me again about the Foundation’s long commitment to the Lewis and Clark Trail. We supported the government’s purchase of Beaverhead Rock for $60,000, the creation of the Lewis and Clark National Historic Trail, and the protection of 150 wild and scenic miles of the Missouri River. My husband, Rennie, our then-two-year-old son, Erik, and I floated that part of the river in 1985 with a naturalist friend and a group of foreign exchange students. We still talk about that trip.

From WPO, I learned that our first two international members (from Scotland and Canada) joined the Foundation in 1976. Five years later, the Foundation began its long friendship with the Alexander Mackenzie Voyager Trail Association. I first met John Woodward, one of the its founders, while working at Sacajawea State Park. John had so many questions about the Foundation and looked to us as a model. It has been an honor and privilege to work with our friends in Canada.

August 2001: Pierre

By now you have your registration materials for the 33rd annual meeting—“Encounters on the Prairie,” set for August 5–8 in Pierre, South Dakota. The volunteers there are working hard to make it a resounding success. If you have any questions, call and they will be happy to help.

Remember, though, that they are volunteers—be kind, be thoughtful, and above all be appreciative.

—Barb Kubik
President, LCTHF
New headquarters; raising national awareness

It hardly seems possible that in three short years the bicentennial of the Lewis and Clark Expedition will be launched from the steps of Monticello. What would Thomas Jefferson have said had he been able to imagine that on January 18, 2003, we would be gathering to honor his vision and reflect on the challenges he faced?

Meanwhile, the Council is moving forward to engage a new administration in the bicentennial. The task is daunting, but we proceed with high expectations for success. In December, we met with our federal-agency partners, who now include the U.S. Mint and the National Endowment for the Arts, to map a transition strategy that calls upon the Council to take the lead in urging the Office of Management and Budget to call for a comprehensive, coordinated budget for Lewis and Clark initiatives across all of the 18 federal agencies that have signed our memorandum of understanding; brief the congressional Lewis and Clark caucuses on state and national project priorities; and host a reception for the most recent signatories to the memorandum of understanding and members of the new administration.

The Council has undergone a slight but important transformation in the change of our name. Now known as the National Council of the Lewis and Clark Bicentennial, we have embarked on the corporate sponsorship campaign and product licensing and merchandising initiative as such. Negotiations with media partners and sponsors are underway, and we are pleased with the early responses.

Materials bearing the Council’s redesigned logo and hand-crafted gifts have been created for sponsors and members of our Circle of Advisors, chaired by Stephen Ambrose. For presentation to sponsors, Dr. Ambrose donated copies of the leather-bound Easton Press edition of Undaunted Courage. Landon Jones did likewise with copies of The Essential Lewis and Clark, his abridgment of the L&C journals.

Planning workshop

As this issue of WPO goes to press, the Council is completing details of its sixth annual planning workshop, to be held April 22-26 in Omaha. Sessions will include meetings of the Council of Tribal Advisors (COTA) and Council of State Advisors (COSA). The COTA gathering will be the first of four tribal meetings over 18 months. Opening and closing receptions will be held, respectively, at the Durham Western Heritage Museum and the Joslyn Art Museum.

The Council works with many partners to accomplish its mission. Most recently, we have added two groups to our roster: COSA and Friends of the Bicentennial, chaired by Gary Moulton. COSA has been made possible by the formation of state bicentennial commissions in 10 trail states and the appointment of bicentennial coordinators in 15 trail states. Chaired by Montana resident Clint Blackwood, COSA is coordinating state planning initiatives, marketing ventures, and project priorities.

—from David Borlaug
—from Michelle Bussard

Call for awards nominations

It’s time for nominations for the annual LCTHF awards. They are:

• Award of Meritorious Achievement, for outstanding contributions in bringing to the country at large a greater awareness and appreciation of the Lewis and Clark Expedition.

• Distinguished Service Award, for outstanding contributions toward furthering the purpose and objectives of the Lewis and Clark Trail Heritage Foundation, Inc.

• Appreciation Award, in recognition of gracious support (deed, word, or funds) given to the Foundation in its endeavors to preserve and perpetuate the lasting historical worth of the Lewis and Clark Expedition.

• Youth Achievement Award, in recognition of a person or group of persons under the age of 21 who have increased knowledge of the Lewis and Clark Expedition through outstanding composition, art, drama, photography, site preservation and enhancement, or other significant contributions.

The Distinguished Service Award may only be presented to a member of the Foundation. Nominations should include, in addition to names and addresses, sufficient background information to assist the Awards Committee in its selection. They should be sent to S. E. Knapp, Chairman, Awards Committee, 1317 S. Black, Bozeman, MT 59715. Nominations for the Youth Achievement Award will be forwarded to the chairman of the Young Adults Committee. All nominations must be submitted by April 20.

Auction set for spring

Attention book collectors, scholars, and readers! The LCTHF Library is planning a book auction, and we would like you to participate. As the fourth anniversary of the library approaches, space constraints have prompted us to take a closer look at the books on our shelves to determine whether each book is necessary to our collection. As a result, we have found a number of duplicate books and publications that have no relevance to the Lewis and Clark Expedition. The items we have decided to remove will be made available to Foundation members this spring in a one-time auction.

The auction will include about 150 items we hope you will be interested in bidding on, including: one set of the 1969 Arno edition of the Lewis and Clark journals edited by Ruben Gold Thwaites; a first-edition copy of A History of the Lewis and Clark Journals, by Paul Russell Cright; a first-edition copy of Lewis and Clark Among the Indians, by James Ronda; and a complete set of We Proceeded On, 1974-2000.

All Foundation members are invited to participate. The May WPO will include a flyer listing all of the books to be auctioned and their reserve prices. The flyer will also explain the bidding process.

Friends of the Library will receive a discount off any winning bid. If you are not a member of the Friends and would like to join, please call the library at 406-761-3950. In the meantime, check your shelves to see what you may be missing.

—Jeremy Skinner
Librarian, LCTHF
Winter on the northern Great Plains is just about as cold and as snow- and ice-covered as it was 197 years ago, when the Corps of Discovery lived among the Mandan and Hidatsa people along the Knife and Missouri rivers. And winter allows us time to reflect on past stewardship while making plans for work we must complete before the L&C bicentennial.

We are making progress on protecting Pompey’s Pillar and other segments of the trail in Montana. As of early January, President Clinton was expected to sign executive orders conferring National Monument status on Pompey’s Pillar and the stretch of the Missouri already designated a Wild and Scenic River. More on these in a moment.

Sacred sites

The approaching bicentennial presents a challenge and an opportunity regarding attitudes toward our Native American brothers and sisters and their many cultural and sacred sites located along the L&C Trail. Such sites are threatened on a daily basis from the kind of looting—a national disgrace—that has been going on for centuries. Native Americans have been humiliated, angered, and benumbed from the abuse heaped upon them by grave robbers and treasure seekers.

Federal laws implemented to protect cultural assets and sacred sites have been enforced in a haphazard and inefficient manner. Some of the governmental agencies responsible for assisting tribes in protecting cultural resources and sacred sites have failed in simple ways and at times have been dragged into courts and held accountable.

As stewards of the trail, our first task is to think, listen, read, and watch. Those of us who are not Native Americans need to educate and sensitize ourselves about threats to cultural and sacred sites. We need to listen to how Native Americans wish to handle this issue and offer assistance where we can. Most importantly, we need to look into our hearts and minds. How would any of us feel if someone came into the cemetery where our relatives are buried and started digging things up, hauling off whatever might be interesting, historic, or a top-seller on eBay?

Pompey’s Pillar

Monument status for Pompey’s Pillar would help guide United Harvest, the Portland-based company that wants to build a grain-handling complex close by, toward a decision to relocate the proposed facility, which is already partly built. The company began the project without the air-quality permit it needs to operate. Despite protests about the project’s location, Montana’s Department of Environmental Quality provisionally granted the permit last September. The Billings-based Pompey’s Pillar Historical Association, with support from the LCTHF, appealed the decision to the state’s Board of Environmental Review, which has called for public hearings.

Missouri Breaks

Monument status for the Wild and Scenic Missouri River would offer more stewardship possibilities and the chance to continue to support private landowners along the Trail.

The Bureau of Land Management, which owns Pompey’s Pillar, will also be the management agency for the upper Missouri area—the Missouri Breaks—that received monument status. This stretch of the Missouri (one of the few that is visually little changed from Lewis and Clark’s day) includes more than 175,000 acres along 149 river miles from near Fort Benton downstream to the Charles Russell Wildlife Refuge. Most of the land in the monument area is owned by BLM, but nearly 90,000 acres are in private hands. The area includes portions of Antelope Creek, Arrow Creek and the Judith River. Livestock grazing, hunting and fishing and other recreational activities are to continue in the area. Monument status has no effect on private lands.

—Jeffrey Olson
Trail Coordinator

Jeffrey Olson welcomes your comments. He can be reached at P.O. Box 2376, Bismarck, ND 58502; trail@lewisandclark.org; 701-258-1960.
The Price of Used Paper

How a treasure trove of William Clark documents was rescued from the scrap heap

BY JAY H. BUCKLEY

In 1953, some of William Clark’s expedition field notes from 1803 to 1805 were found among the possessions of General John H. Hammond in an old roll-top desk in an attic in St. Paul, Minnesota. The Minnesota Historical Society acquired the field notes. A lengthy court battle involving the National Archives over the rightful ownership of the Clark notes ensued. After the court ruled in favor of General Hammond’s grandson, the Clark material was sold to Yale University. Since Ernest S. Osgood had already been working on transcribing the journals while they were at the Minnesota Historical Society, he was given the task of editing the papers. In 1964, he published The Field Notes of Captain William Clark, 1803-1805. Osgood later described the field notes—as far and away the most significant find among the many letters, ledgers, and notebooks among Hammond’s possessions—as “an ingot of gold in a bale of hay.”

Other discoveries followed. Donald Jackson added valuable insights in bringing forward new unpublished Lewis and Clark material with his magisterial collection, Letters of the Lewis and Clark Expedition with Related Documents, 1783-1854, first published in 1962. This publication included 33 letters and documents written by Clark, many of them donated to the Missouri Historical Society by Clark descendants Julia Clark Voorhis and her daughter Eleanor Glasgow Voorhis. In 1988, 51 original letters written by Clark to his brother Jonathan were discovered in an attic in Louisville, Kentucky, and are now in the archives of The Filson Club Historical Society there.

How many additional “missing” pieces of American history await “discovery” in some attic or basement? Unfortunately, numerous historical documents have been lost forever through fire and water damage or discarded by persons unacquainted with their value. And some, doubtless, were sent to paper mills and unceremoniously pulped. Such was almost the fate of many of the records kept by William Clark during his years as the federal government’s officer in charge of Indian affairs west of the Mississippi.

Clark’s Superintendency Records

In 1883, 29 handwritten volumes of St. Louis Superintendency records, mainly correspondence and account books kept by Clark and his agents between 1813 and 1838, were rescued and deposited in the Kansas State Historical Society (KSHS), in Topeka. Although the books show evidence of wear, the heavy sheepskin-over-board-backing covers have protected the writing on the high-quality rag content paper. These important historical sources contain valuable primary information, for example, on Indian villages, treaties, land surveys, Indian agents and traders, white and Indian depredations, and steamboat transportation.

The collection, certainly one of the KSHS’s most valuable, was acquired for a pittance—$33, the price they would have brought as scrap had their owner at the time carried through on his plan to sell them to a paper mill.

The story of how these records were rescued from oblivion and ended up in Topeka begins in St. Louis, where Clark lived and worked for the last 32 years of his life. Following the Corps of Discovery’s return, in 1806, President Thomas Jefferson appointed Lewis the governor of Louisiana Territory and made Clark the principal Indian agent west of the Mississippi. In 1813, with the creation of the Missouri Territory, President James Madison appointed Clark territorial governor and ex-officio super-
intendant of Indian affairs. He served in this dual capacity until Missouri became a state, in 1820. In Missouri’s first gubernatorial elections, Clark was defeated by Alexander McNair.

Congress, however, created a special position for Clark as superintendent of Indian affairs, a position he held from 1822 until his death, in 1838. From his headquarters, in St. Louis, Clark oversaw all aspects of Indian affairs for tribes along the Missouri and Mississippi rivers. He served as a commissioner for more federal treaties with Indian nations than any other person. In addition to supervising numerous agents and fulfilling treaty obligations with tribes, he assisted eastern Indians forced by the government to relocate to the West. He issued licenses to fur traders, sent surveyors to plot tribal boundaries, and tried to keep white settlers out of Indian lands. Tribes mentioned in his superintendency correspondence include Delawares, Peorias, Kaskaskias, Weas, Piankashaws, Sacs, Foxes, Shawnees, Ottawas, Kickapoos, Chippewas, Kansas, and Osages.

In addition to materials pertaining to Clark’s superintendency between 1813 and 1838, other portions of the collection reflect on Clark’s involvement in the Missouri Fur Company in 1812-13 and 1817. One can find here references to such principals in “La Compagny des Fourures du Misoury” as Silvestre Labbadie, Charles Gratiot, Pierre Menard, Manuel Lisa, Pierre Chouteau, August P. Chouteau, Andrew Henry, and Leuben Lewis. The materials also include letters and records kept by Clark’s successors from 1839 to 1855: Joshua Pilcher, David D. Mitchell, Thomas H. Harvey, and Alfred Cumming.

The St. Louis Superintendency operated from 1824 to 1851. From 1822 to 1834, its jurisdiction included the agencies located on the Missouri and Mississippi rivers. In 1834, new legislation creating the Bureau of Indian Affairs expanded its jurisdiction to include all tribes west of the Rocky Mountains.

As new territories were created, the superintendency’s area of jurisdiction shrunk and shifted farther west. In 1851, its name was changed to the Central Superintendency. Its headquarters moved upriver to St. Joseph, Missouri, in 1859 and to Atchison, Kansas, in 1865. During its last 11 years (1869 to 1880) the superintendency was headquartered in Lawrence, Kansas.

Indian agent John H. Hammond, among whose papers Clark’s field notes were found in St. Paul, also played a role in saving Clark’s superintendency records. Hammond was ordered “to examine, classify, and arrange for shipment to the Commissioner of Indian Affairs” the superintendency papers at Lawrence after the office closed, in 1880. Many records were sent in bulk to Washington, while some were taken by Hammond to St. Paul and the remainder were discarded.

At some point, the 29 volumes that were eventually placed in the Topeka archives of the Kansas State Historical Society ended up on a sidewalk outside a used bookstore in downtown Lawrence. One day in 1883 they were noticed by retired newspaper editor John Speer, a Lawrence resident and member of the KSHS. How and why they got there remains a mystery, but evidently the store’s owner had no intention of selling the documents for anything but scrap. William E. Connelley, the longtime secretary of the KSHS, wrote the following account of their rescue, which was related to him by Speer and published in 1947.
One day John Speer was walking down a street in Lawrence. He passed by a secondhand book store and noticed a pile of leather-bound books piled on the sidewalk in front of the store. He stopped and looked at some of the books and noted what they were and realized at once their extreme value as historical documents.

He did not ask the proprietor of the store the price or make any other inquiry. He went straight to the Santa Fe railroad station, boarded a train and came to Topeka. He told Judge Adams [Franklin G. Adams, one of the first secretaries of the KSFS and in charge of acquisitions] what he had seen. The two men took the next train back to Lawrence and together walked to the secondhand store. Speer stopped a short distance away because he was fearful that the proprietor may have noticed him looking at the books earlier that day and might get the idea there was some value to them and thus put a high price on them.

Judge Adams went to the store, looked around a bit and then casually began examining these books. In an indifferent sort of way he asked the proprietor what he wanted for them. The proprietor said he hadn’t fixed any particular price but he thought he ought to get about what he would be paid if he sold the books to the paper mill. Judge Adams agreed that he thought this was a fair price and they discussed the weight of the books some more and finally the store man said he would take $33 for the entire twenty-nine volumes. Judge Adams dug that much money out of his pocket, paid the man, motioned to Speer to come up and the two carried the books to Speer’s office. There they were boxed and shipped to Topeka.

Without Speer’s timely discovery and quick action, Clark’s papers would have wound up on the scrap heap, and history would have been the poorer. Instead, they were preserved and later microfilmed, so that today they are widely available to scholars of Lewis and Clark and the American West.

Jay H. Buckley is a doctoral candidate in history at the University of Nebraska–Lincoln, where he is finishing his dissertation, entitled “William Clark: Superintendent of Indian Affairs at St. Louis, 1813-1838.”

NOTES
5 A list of contents of the collection is described in Transactions of the Kansas State Historical Society 3 (1883-1885), pp. 49-51, 125. A microfilm roll list for the William Clark Papers (MS 94-99) is available upon request through the Kansas State Historical Society, 6425 SW 6th Avenue, Topeka, KS 66615-1099; telephone 913-272-8681 or on the Internet at http: www.kshs.org.
7 The Clark papers also include correspondence and account books of Benjamin O’Fallon, George H. Kennerly, John Dougherty, Richard Graham, James Latham, Nicholas Boilvin, John A. Sanford, Lawrence Taliaferro, Thomas Forsyth, Felix St. Vrain, Joshua Pilcher, M. S. Davenport, Alexander McNair, John F. Hamtramck, and Paul L. Chouteau—all Indian agents—as well as other agents and sub-agents of the period.
8 The 1834 legislation defined the new limits of the superintendency as follows: “The superintendency at St. Louis will include all the Indians and Indian country west of the Mississippi River, and north of the Osage reservation, as far west as De Mun’s Creek, and thence the said superintendency will be bounded on the south by the Santa Fe road, where it crosses the Arkansas, and thence, by the Arkansas, to its source in the Rocky Mountains. And the said superintendency shall include all the Indians and the Indian country west of the Rocky Mountains.” See Edward E. Hill, The Office of Indian Affairs, 1824-1880: Historical Sketches (New York: Clearwater Publishing Company Inc., 1974), p. 155.
9 Boyd, pp. 159-60.
10 Kansas City Times, March 17, 1947; information gathered on a personal visit, December 1999.
11 The KSFS also has microfilm of the originals in its repository (MS 94-99). Other microfilm copies can also be accessed at the National Archives—Kansas City Branch (Mo.), the Missouri Historical Society (St. Louis), and the State Historical Society of Missouri (Columbia).
12 For their help with this article, the author wishes to thank his dissertation adviser, Gary E. Moulton, Sorenson Professor of History at the University of Nebraska–Lincoln and editor of The Journals of the Lewis and Clark Expedition, the staff of the Kansas State Historical Society and the Missouri Historical Society, and Linda Ratcliffe of the Center for Great Plains Studies.
The Floyd Memorial near Sioux City, Iowa, sits high on a bluff above the Missouri River. An obelisk 100 feet tall and reminiscent of the Washington Monument, it was erected in 1901 to mark the last of three burial places of Sergeant Charles Floyd, who was interred nearby in 1804 and whose remains were reinterred in 1857 and 1895. It honors the first American soldier to die in the service of his country west of the Mississippi.

The monument recalls the day when salutes were fired over the dead soldier’s grave and a red cedar post was fixed at the head, branded with the words “Sergt. C. Floyd died here / 20th of August 1804.”

For what actually happened on that solemn day we must turn to the journals of Captain William Clark, Sergeants John Ordway and Patrick Gass, and Private Joseph Whitehouse. Those records, regrettably, are meager in detail, and their ambiguity has permitted interpreters to imagine various scenarios of Floyd’s last rites. For example, at the reinterment ceremony held on August 20, 1895 (91 years from the day of Floyd’s first burial), Professor James D. Butler gave his version of events. Imagining the activities of the Corps of Discovery on that sad afternoon of 1804, Butler pictured the whole band too broken hearted to linger, with folded hands, casting a last look at the heaped up earth, go down the slope, launch their boats and the same evening push on further in the great lone land.
For some present-day readers, Butler’s scene may be more reminiscent of a family funeral service in a midwest farm village of the late 19th century than of a military burial. Butler makes no mention, for instance, of the “honors of war,” which are noted in three of the four journal entries for the date.

At the same site 38 years earlier, Captain James B. Todd and a committee of local citizens evoked a different mood “in a ceremony both religious and patriotic.” A new coffin was borne in a formal procession from the Sioux City levee to a steam ferryboat that carried hundreds of participants to the bluff for the ceremony. Captain Todd, who officiated as marshal, was familiar with customary procedure for a military funeral of the sort carried out in this country at least since the Revolution. The journal of James Thacher, a surgeon in the Continental Army, comments on a military funeral in 1782:

No scene can exceed in grandeur and solemnity a military funeral. The weapons of war reversed, and embellished with the badges of mourning, the slow and regular step of the procession, the mournful sound of the unbraced drum and deep-toned instruments playing the melancholy dirge, the majestic mien and solemn march of the war-horse, all conspire to impress the mind with emotions which no language can describe, and which nothing but reality can paint to the liveliest imagination.

The rites for Floyd, a noncommissioned officer who died in the wilderness, would not have been so grand. However, as army officers familiar with the rituals of military funerals, Lewis and Clark almost certainly would have
We Proceeded On February 2001 organized a ceremony appropriate for the circumstances. While leaving much to the imagination, journal entries about Floyd’s funeral refer specifically to preparation of the decedent's remains for burial, observance of the “honors of war,” and graveside services. Considering that August 20, 1804, was the most solemn day of a mission lasting almost three years, one seeks a more complete picture than these brief references provide.

**Preparations**

Sgt. Ordway wrote that Floyd was “laid out in the Best Manner possible”; Pvt. Whitehouse recorded “in the most decent manner possible.” Does this language imply that an actual coffin was constructed? Edward Ruisch, in addressing the 12th Annual Banquet of the Lewis and Clark Trail Heritage Foundation at Sioux City in 1980, was cautious about this, stating that “if there was a coffin, it was an improvised one.” Ruisch referred to a report by Elliott Coues suggesting that “some stakes driven into the ground at the corners and edges of the grave may have provided some privacy in death.” This suggestion, however, does not seem to square with Coues’s further quoting of persons present at the exhumation of 1857. They certified that the original grave (of 1804) was then [i.e., in 1857] a well known landmark, and by the undermining of the foot of the bluff by the river the bank had caved so that part of the coffin projected out of the river side of the bluff which was the occasion of the reburial.” [italics added]

This report may have been the basis for Professor Butler’s sketch, noted above, where he imagined that “boards provided for mending the [expeditionary] boats are shaped into a coffin.” Thus when Ordway, Gass, and Whitehouse refer to “the most decent manner our circumstances would admit,” Butler seems to infer that the explorers managed to fashion a true coffin, crude though it may have been, yet something more than “stakes driven into the ground”—a box, in other words, that would project out over the bluff 53 years later. Perhaps it was built by Gass, the corps’s skilled carpenter and the man who soon replaced Floyd as sergeant.

**Honors of war**

Once Floyd was laid in his coffin, the corps moved on from the noonday halt, taking its new burden about a mile upstream “to the first hills” on the east bank of the river. There a few men, probably led by Lewis, would have walked up the hill to a point “overlooking the river & Countrey for a great distance,” where a site was staked out and a grave dug. At the same time, back at the boats, someone (probably Clark) would have organized the rest of the men for the ceremony.

References in the journals and in subsequent commentaries refer to the honors of war that would have been paid to Floyd. Nothing in the Lewis and Clark literature, however, describes specifically what these honors entailed. With much history behind it, the term honors of war was an expression for “the forms prescribed for the burial of soldiers … set down with military punctiliousness and regard for detail,” all characterized by a uniformity of proceeding and a dignity “based on essential principles which never fail to awaken the sympathetic interest of the
The phrase connoted much more than simply draping the deceased with a flag and firing a rifle salute over the grave. It was Clark who typically supervised drills, inspections, formations, and “parades.” Clark wrote that Floyd was buried with “all” the honors of war, and in carrying out the ceremony he probably followed well established procedures that were first codified some years later in the army’s General Regulations of 1821. Article 14 of those regulations, titled “Honours—to the Dead,” prescribes the composition of funeral escorts, the detailing of pallbearers, the order of the procession to the grave, the manner of addressing arms and correlative commands, the management of the coffin, and the firing of rounds on interment of the remains.

We can imagine that when the keelboat landed alongside the high prairie hills, Clark promptly began arrangements in accord with the above—assigning men to the escort group, designating pallbearers, organizing the order of procession, and instructing the armed escort on the execution of the manual of arms peculiar to funeral services. The men might have assembled and the ceremony unfolded as follows:

- Twenty men (the number appropriate for a sergeant) are assigned to a funeral escort commanded by a noncommissioned officer of the grade of the deceased (Art. 14.2). Sgt. Ordway is the probable designee.
- Eight pallbearers are detailed (Art. 14.5).
- All other men spared from duties such as guarding the boats join in the procession (Art. 14.6).
- The escort detail forms in a line centered opposite the deceased’s “quarters” (i.e., the entrance to the keelboat, which has the coffin on board).
- As the pallbearers disembark from the boat, carrying the coffin (probably draped in a 15-star flag), the escort commander, as a salute, commands “Present, ARMS.” The coffin is then carried to the flank of the escort line.
- The escort comes to shoulder arms and executes a right or left face, so it is ready to march in column.
- The procession is organized in the following order: (1) escort group, (2) persons to minister the service (probably Clark and also Lewis, who by now would have returned from the gravesite), (3) pallbearers with the coffin, and (4) other members attending (Art. 14.7).
- Thus formed, the escort commander orders “Re-ARMS” (“executed by bringing the firelock under the left arm, the butt to the front, the barrel downwards, the muzzle within inches of the ground, the left hand sustaining the lock, and the right steadying the firelock behind the back.”) The procession marches at slow pace to the grave.
- The center of the column having arrived opposite the grave, a line is formed facing it, and the commander orders arms to be shouldered (Art. 16.10).
- The coffin is brought forward, and the escort salutes it with “Present, ARMS.” The coffin is placed over the grave.
- The escort commander orders “Rest on, ARMS,” executed by “placing the muzzle on the left foot, both hands on the butt, the head on the hands, and the right knee a little bent” (Art. 14.13). Others attending would stand “at ease.”
- At this stage of the proceedings, the graveside services begin with a reading by Lewis. At the conclusion of the reading, the escort commander brings the detail to attention, then orders it to “prime and load.” After removal of the flag as a pall, the coffin is let down into the grave and the escort commander orders the firing of three volleys. The escort forms into a column and is marched with the rest of the procession back to the boats and dismissed.

In sketching the above scene, I am not suggesting that the expedition proceeded exactly in the practiced manner one would have found at a garrison post or a military cemetery. The young men of the Corps of Discovery were not all professional soldiers, and it is doubtful that a “punctilious” ceremony could be conducted under wilderness conditions. Nevertheless, one can reasonably assume that Lewis and Clark followed the basic sequences described above.

The funeral service
To imagine how Lewis might have conducted the graveside services is a greater challenge. The journals offer two clues: one is from Clark, that “Capt. Lewis read the funeral Service,” and the other is from Ordway, that “the usual service [was] performed by Capt. Lewis as customary in a Settlement.”

But what, exactly, did Lewis read? Was it a few words he dashed off for the occasion or something more formal,
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from a book? Donald Jackson is the principal source for identifying books carried on the expedition, but none of those he lists would have served for such an occasion. Jackson does remind us, however, that Lewis “spent three years as secretary to one of the most avid bookmen in America, Thomas Jefferson.” Among many religious references, the library contained both The Book of Common Prayer and Abridgment of the Common Prayer. Jackson notes that, although “there is nothing to indicate conclusively that Lewis took any of Jefferson’s own books with him . . . [there is] plenty to indicate that he spent many hours of study in the Jefferson library during his secretarial appointment.” Given the spiritual influences of Lewis’s earlier teachers, it is reasonable to believe that he might have lingered over the religious volumes when not occupied with references more immediately concerned with expedition matters. In any event, it should not be dismissed that a Bible or some version of The Book of Common Prayer was among the volumes on the expedition—perhaps a personal copy carried by Lewis or Clark or a copy borrowed from Jefferson’s library.

One other possibility should be considered. Thanks to Eldon Chinnard and Richard Dillon, it is well known that Lewis had joined the masonic order in 1797 and “took the ritual and idealism of free masonry quite seriously.” Many army officers of the day were Masons, and references to army funerals often note the observance of “customary masonic honors.” Lewis might have carried some masonic reference he could have adapted for reading over Floyd’s grave.

Sgt. Ordway’s record puts more light on the question. He describes the services as “the usual seremony performed by Captain Lewis as custommary in a Settlement” [italics added]. One ponders what kind of funeral ceremonies were commonly observed in frontier settlements of the early 1800s. A fairly standard pattern prevailed. Services were conducted in a house or church and typically included a brief sermon, a silent prayer, a reading from Scripture, and a prayer from “the prayer book,” as The Book of Common Prayer was known. Mourners and coffin then proceeded to the grave. After the coffin was lowered and the grave filled, a hymn was sung, and the minister said a few more words and closed the services with a benediction.

The key common feature was reading from Scripture and from “the prayer book,” whose liturgy was observed among many denominations across America. In a special section entitled “Rites for the Burial of the Dead,” The Book of Common Prayer sets forth specific readings and prayers for the guidance of the minister or lay person presiding at services. Assuming he had a copy, Meriwether Lewis could have readily excerpted passages for an order of service. This might have involved a reading of the “lesson” from the Old Testament, followed by a suitable Psalm; a lesson from the New Testament, followed by another Psalm; a brief homily; and a prayer for the deceased. The coffin would then have been committed to the earth.
conjectural. The actual proceedings could have been shortened, or varied in order and content, though the essential principles must have been observed—this on the strength of the reports that Lewis "read the funeral service" and that it followed "the usual seremony . . . customary in a Settlement."

The day ended, as Clark noted, "in a butiful evening"—a fitting close to the most solemn day of the expedition, when the sound of guns honored the one man who did not return.

Robert R. Hunt lives in Seattle. He is a long-time member of the Foundation and a frequent contributor to WPO.

NOTES
1 Edward Ruisch, "Sergeant Floyd and the Floyd Monument, Sioux City, Iowa," We Proceeded On (hereafter WPO), Special Publication No. 4, December 1980, pp. 4-12; also, with respect to the marker as a beaconlike landmark for river travel, p. 6, citing Bradbury and Brackenbridge in 1811, Caitlin in 1832, Maximillian in 1833, and Nicollot in 1839.
2 Elliott Coues, In Memoriam—Sergeant Charles Floyd—Report of the Floyd Memorial Association (Sioux City; Sioux City Press of Perkins Brothers, Co., 1897). See Ruisch (Note 1) for a summary of the related incidents and events. Cf. also Paul R. Cutright and Michael J. Brodhead, "Dr. Elliott Coues and Sergeant Charles Floyd," WPO July 1978, pp. 6-10. The author is indebted to the late Strode Hinds of Sioux City for references from the Report of the Floyd Memorial Association and referrals re living-history enactments. See also James J. Holmberg, "Monument to a Young Man of Much Merit," WPO, August 1996, for an extended discussion of the history of the grave site and construction of the monument, with documentary illustrations.
5 Coues, Note 2; see pp. 39-40, "Report of the Floyd Memorial Association." Professor Butler was the editor of Floyd’s journal, which had been recently discovered and published in 1894 by the American Antiquarian Society.
6 Cutright and Brodhead, Note 2.
7 James Thacker, M.D., Military Journal During the American Revolutionary War, from 1775 to 1783 . . . (Hartford: Silas Andrus & Son, 1854), pp. 212-213.
8 See Note 1.
9 See Note 2.
10 Bertram S. Puckle, Funeral Customs, Their Origin and Development (New York: Frederick A. Stokes Co., 1926), pp. 204-205.
11 U.S. War Department, General Regulations for the United States Army, 1821 (Washington: Gabe and Seaton, 1821) pp. 27/29. The author is indebted to the staff of The Center of Military History (Department of the Army) Washington D.C., and the staff of the U.S. Army Military History Institute, Historical Reference Branch, Carlisle Barracks, Penn., for references and suggestions concerning the subject of this essay.
12 A supplementary reference for this purpose is Edward S. Farrow, Farrow’s Military Encyclopedia (New York: Published by the author, 1885), Vol. 1, pp. 718-719. The journals record that the corps "returned to the Boat & proceeded to the mouth of the little river" named for Floyd.
15 Cf. Stephen E. Ambrose, Undaunted Courage: Meriwether Lewis, Thomas Jefferson and the Opening of the American West, (New York: Simon & Schuster, 1996), pp. 25-27 re: the education of Lewis as a boy and young man under his several teachers who were "preachers or parsons," (though this is not to suggest that his teachers necessarily gave Lewis any specific spiritual or religious instruction).
17 Thacher, Note 7, p. 43 for example, re funeral solemnities for General Joseph Warren in 1776 "conducted by the Society of Free Masons."
18 Moulton, re Note 4. In reading Ordway’s entry, as shown in various journal editions, a question may exist as to what Ordway had in mind when writing "customary in a Settlement." Was he referring to erecting a marker, or was the reference to the "Serrymony?" As evident in the text, we have assumed the latter.
21 Several living-history groups in the Sioux City–Council Bluffs area perform reenactments of Floyd’s funeral using a liturgy from The Book of Common Prayer, and in doing so they seem to be on solid ground. The author is indebted to Jack Schmidt of Council Bluffs for information on these groups.
22 As Edward Ruisch (Note 1) observed, it is likely that Floyd’s remains were draped with the 15-star flag of the U.S. Probably it was the coffin, not the body, that was draped; it is unlikely that the flag served as a “winding sheet” buried with the remains, as Professor Butler seemingly imagined.
Reconstructing Charles Floyd

Forensic artistry yields an image of the ill-fated sergeant

by V. Strode Hinds

Charles Floyd was one of three sergeants who left Camp Dubois on the Lewis and Clark Expedition in 1804. The son of Robert Clark Floyd and Lilyan Hampton Floyd, he entered the army on August 1, 1803. He died of appendicitis with a subsequent peritonitis at the age of 22 on August 20, 1804, only 13 weeks after the expedition’s departure. Born in Kentucky in 1782, he was buried far from home atop a high bluff overlooking the Missouri River, a few miles south of what is today downtown Sioux City, Iowa. Two days after his death, the men elected Patrick Gass as a sergeant to replace Floyd.

Floyd had performed admirably as the leader of the second squad of the Corps of Discovery until his illness, which began to seriously affect him on August 18. He died in the early afternoon two days later. The expedition camped that evening a few miles above his grave on the “Petit R de Sceaux,” which they renamed Floyd’s River—a name that it retains today.

The grave was visited by the Corps of Discovery on its return in 1806, and it was the site of frequent visits by travelers on the Missouri for the rest of the century. George Catlin painted a view of it as he went up the Missouri River in 1832.

By late April of 1857, the ever-meandering channel of the Missouri River had moved east and was gnawing away at the base of the bluff beneath Floyd’s grave. Some bones found near the water’s edge were traced to others eroding out of the grave above. These bones were reburied about 600 feet east of the bluff’s edge on May 27, 1857. Local interest in Floyd was revived when his journal was discovered by Reuben Gold Thwaites on February 3, 1894, among papers in the Lyman C. Draper Collection, at the Wisconsin Historical Society, in Madison. On May 30, 1895, several local citizens went to the grave site to relocate it. The task was simple because some of them had been present in 1857 at Floyd’s second interment.

The bones were placed in two urns from the Holman Brothers, a local funeral home, and buried for a third time. The bones were recorded as being the skull, mandible, tibia,
fibula, clavicle, and some ribs and vertebrae. This time, however, the grave was covered by an eight-inch-thick marble slab measuring seven by three feet. No one knows what ultimately happened to that slab.

When the Floyd monument was erected five years later, the urns were disinterred, and the sergeant’s bones were buried for the fourth and last time, encased in the concrete core of the bottom courses of the monument.

The monument base, which was poured by hand in 10 hours on May 29, 1900, contains 143 yards of concrete and weighs about 200 tons. It is 22 feet square at the bottom, 14 feet square at the top, and 11 feet high. An obelisk of classical Egyptian design, 100 feet tall and made of 72 course stones, was erected on the base. Its cornerstone was laid on August 20, 1900, and it was dedicated on May 30, 1901.

The monument to Floyd is more impressive than a similar one over William Clark’s grave, in St. Louis, although when it comes to the number of statues, neither explorer can compete with Sacagawea.

Fortunately, before Floyd’s remains were reinterred in 1900, someone made two plaster casts of his skull and jaw, and full-front and side view black-and-white photographs were taken of the skull with the jaw in place. Why were the casts made? Perhaps because phrenology (interpreting the shape of the skull) was a big thing then. By that time, all of the teeth were missing (had they been taken from the skull as souvenirs?). The photographs were published in newspapers when the monument was erected, and one of the plaster casts was placed in the Sioux City Public Museum, though the jaw has since broken away and is now missing. (The other cast, once in the Iowa Historical Society, has disappeared.) No actual skeletal remains are available today, for what remained of Floyd’s bones were entombed beneath the towering monument to his sacrifice.

Some years ago, a U. S. Army Corps of Engineers workboat named the M.V. Sergeant Floyd was pulled from the Missouri and dry-docked on the river’s floodplain in Chris Larsen Park, on the south side of Interstate 29, on the west side of Sioux City. The boat was left intact, but its interior has been transformed into a museum that commemorates Sergeant Floyd and Missouri River history. Blair Chicoine, a master craftsman at building historic boats and models, spearheaded efforts to create the museum, and he became the curator and manager of the museum in the Sergeant Floyd Welcome Center when it was completed.

After the museum was built, Blair and I decided that a forensic approximation of Floyd’s face should be made and attached to a mannequin to be placed at the front of the museum.

In the fall of 1996, anthropologist W. Raymond Wood of the University of Missouri–Columbia was visiting me in Sioux City, and, hearing of the quest for a facial approximist, said he would help find one. His call to Dr. Douglas W. Owsley of the Smithsonian Institution yielded a recommendation that Sharon Long do the work, for Owsley ranked her as among the best for this type of forensic/museum project. The résumé she sent me was outstanding, and the references she furnished were enthusiastic about her. She was therefore commissioned to do a bust of Floyd, her work being subsidized by a number of Sioux City businesses and businessmen.

Long enjoys doing research on her subjects, so that her images can be made as accurate as possible. Her work is remarkably precise. Indeed, through her efforts, natives of Easter Island were able to identify the family line of the skull of an individual recovered there. Long has made more than 20 such reconstructions from skulls, for clients as diverse as the National Museum of Health and Medicine, the Smithsonian Institution, and the Little Bighorn Battlefield National Historic Monument.

The skull cast was borrowed from the Sioux City Museum, and, together with copies of the photographs, it was sent to Long, who was then living in Laramie, Wyoming. The cast was in poor condition, but, together with the photographs, she was able to fashion another skull, complete with teeth, which she used for her reconstruction. [For Long’s own account of reconstructing Sgt. Floyd, see page 18.]

Long gave the bust brown eyes and hair based on research she did on the Welsh people and her knowledge that dark hair and brown eyes run in the Floyd family. The head was painted by former Laramie artist Mark Adams on February 6, 1997, shipped from Laramie on February 12, and arrived in Sioux City on February 17.
When I received a telephone call from Dr. Raymond Wood of the University of Missouri's anthropology department about doing a facial reconstruction of the skull of Sgt. Charles Floyd, I could hardly believe it—for Charles Floyd was my great-great uncle. (My great-grandfather, Silas Floyd, was the son of Sgt. Floyd’s brother, Davis Floyd.) Coincidentally, I had just been discussing the Floyd family genealogy with my sister (Diane Long of Tucson) a few days before Ray’s call on August 16, 1996.

I enthusiastically agreed to do the project. Ray explained that he was calling on behalf of Dr. V. Strode Hinds of Sioux City, Iowa, a retired oral surgeon and Lewis and Clark enthusiast and scholar. Strode was seeking a facial reconstruction of Sgt. Floyd and soon contacted me with more details. He gave me most of the historical information I needed to prepare for the job at hand, and I also read through the Lewis and Clark journals.

Before I begin work on any approximation of a skull, I learn all I can about the terrain where it was found and the deceased’s physical attributes, age at death, and the period when he or she lived. In addition to reading about the subject, I talk to physical anthropologists, historians, archaeologists, geologists, or anyone else who might be helpful. I try to think about my subject as a living person with a personal history, family, feelings, and ambitions.

The skull cast of Sgt. Floyd proved a challenge, because some of it had been damaged, and it was generally in poor condition. This required my rebuilding parts of the cast before I could make my own mold and cast.

For any reconstruction my method consists of making a latex (natural rubber) mold covered by a mother mold (a plaster brace over the latex, for strength). Latex captures every detail of a skull. Then, using the skull cast I have made, I reconstruct the face. First I glue on tissue depth markers at 21 standard points. The tissue-depth scale I used for Sgt. Floyd consisted of scientifically determined averages for a male Caucasian.1

After completing the face and aging it, I make another rubber mold. From this I cast a face in plaster on which every line and detail is reproduced. Normally, I use plaster rather than rubber for the final bust because plaster is less prone to cracking or deteriorating in a museum setting. Once the plaster has dried, I place the glass eyes. For the color of Sgt. Floyd’s eyes I chose brown, which predominates in the Floyd family. After the skin is painted, I apply a wig. The women’s wigs I use come off the shelf and are styled to modern times, so I must restyle them for the appropriate period. In Sgt. Floyd’s case I made a short pigtail and wrapped it with a leather strip.

Strode Hinds and his collaborator Blair Chicoine arranged for the purchase of a specially prepared mannequin on which to mount the bust, and they dressed the figure in a uniform of the type probably worn by a sergeant of the expedition.

Facial reconstruction artist Sharon A. Long lives near Reno, Nevada, and graduated from the University of Wyoming with a degree in art and anthropology. She can be reached at 775-359-9243. For information on the Sgt. Floyd exhibit, call the River Museum in Sioux City, Iowa (712-279-6174).

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the museum, the bust was mounted on a mannequin of Floyd’s height, dressed in period clothing. The mannequin was manufactured by a Maryland company that supplies mannequins for museums; Floyd’s six-foot body was the tallest the company makes. The mannequin’s clothes were made by a firm in Indiana that supplies period uniforms for military reenactments. Today, our reconstructed Sgt. Floyd stands at the entrance to the Welcome Center’s museum to greet visitors.  

We have formal portraits of Meriwether Lewis and William Clark at ages not far removed from their expeditionary days. Now we have a fresh, new image of one of the men of the Corps of Discovery—that of a brave young man who died “with a great deel of composure” in a wilderness far from home. After serving his country as a soldier for little more than one year, he died among men who had become his friends on a most hazardous enterprise. A family history shows that his father received a land warrant from the army for his son’s service.  

The late V. Strode Hinds was a former president of the LCTHF and a contributor to WPO. He and his wife, Beverly, attended their first Foundation meeting at Seaside, Oregon, in 1974. His obituary, by Gary Moulton, appears in the November 1997 WPO. At the time of his death he was working on this article, which was completed by his friend Raymond Wood.  

NOTES

1 The “Petit R de Seaux” was so named on the John Evans map of 1796-1797, a copy of which was carried by the Lewis and Clark expedition. See W. Raymond Wood, “The John Evans 1796-97 Map of the Missouri River,” Great Plains Quarterly, Winter 1981, Figure 2. Moulton, Gary E. Moulton, ed. The Journals of Lewis & Clark (Lincoln: University of Nebraska Press, 1986), Vol. 2: August 30, 1803–August 24, 1804, pp. 492-495, 500.  

2 For details of the painting, see William H. Truettner, The Natural Man Observed: A Study of Catlin’s Indian Gallery (Washington, D.C.: Amon Carter Museum of Western Art and the Smithsonian Institution, 1979), Figure 67 and p. 249.  

3 For details of the exposure of the bones and their ultimate deposition beneath the obelisk, see V. Strode Hinds: “Monument for a Sergeant,” WPO, August 1995, pp. 18-19; and James J. Holmberg, “Monument to a Young Man of Much Merit,” WPO, August 1996, pp. 4-11.  


The Forensic Conservator and the Science of Lewis and Clark

An “inside look” at instruments that may — or may not — have traveled on the expedition

BY CAROLYN GILMAN

Conservator David Blanchfield is a soft-spoken, bearded man who wears a white lab coat and latex gloves at work. His brightly lit laboratory in Williamsburg, Virginia, is full of enough high-powered microscopes, fume hoods, and scientific glassware for a forensic pathologist. In a way, that is just what he is—but his patients are the historic instruments of science. He dissects them to glean clues about their past and then puts them back together again better than they were before.

Recently, Blanchfield brought his armory of modern technology to bear on three artifacts from the col-
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lections of the Missouri Historical Society (MHS). The objects were tools of discovery associated with the Lewis and Clark Expedition: a telescope and a watch that belonged to Meriwether Lewis, and William Clark’s compass.

Lewis would have applauded the 20th-century techniques marshaled to reveal information about his artifacts. Like his mentor Thomas Jefferson, Lewis was a diehard technophile. The expedition, which left St. Louis in May 1804 to trace the most practical water route to the Pacific Ocean, was no band of rude frontiersmen, but a well-equipped scientific and imperial project in the best Enlightenment tradition—modeled on the efforts of such British explorers as Captains James Cook and George Vancouver. Not to be outdone by the Royal Navy, Lewis made his “western tour” a showcase of cutting-edge technology, much of it American.

The three artifacts studied at Williamsburg are part of a collection of more than 50 artworks, letters, journals, and artifacts at MHS that will form the core of the upcoming National Lewis and Clark Bicentennial Exhibition, which will tour nationwide in 2004 through 2006. Being organized by MHS with the collaboration of six other institutions, the exhibit will assemble as many of the surviving artifacts of the Lewis and Clark Expedition as possible. In preparation for the exhibit, MHS is treating and studying items in its own collection to reveal clues about their history.

The two Lewis artifacts studied so far—a silver watch and a brass telescope—came to MHS in 1936 from Meriwether Lewis Anderson, the great-grandson of the explorer’s sister Jane. They were part of a collection that also included letters and portraits of Lewis and his family. Both artifacts presented some intriguing puzzles.

Lewis’s telescope, characteristically, is no ordinary spyglass. It was made by William Cary, a London manufacturer and purveyor of “mathematical instruments” whose shop stood along the Strand from 1790 to 1825. Cary was an apprentice of the famous Jesse Ramsden, from whom Jefferson purchased the telescope he used at Monticello. Lewis’s telescope is larger than Jefferson’s: constructed of six collapsible sections, or draw-
tubes, it is only 15 inches long when collapsed, but it measures an unwieldy five feet when fully extended. A tanned leather sleeve covers its largest section, a tube of mahogany. How was such an instrument used? Was it for the astronomical observations that were so critical in finding latitude and longitude? How did Lewis hold it steady—with a tripod or stand? And most important, had it gone on the expedition, as the Lewis family believed?

The other artifact of Lewis’s was a similarly elegant piece of 18th-century technology. His pocket watch has a double case—that is, the watch itself fits into a hinged outer case of silver, lined by a piece of paper with a floral design on it. The watch has an ivory face with two dials: a main dial showing hours and minutes, and a smaller dial at the 12 o’clock position, divided from one to 60, apparently for seconds. The function of a small lever on the inner case at the 10 o’clock position was unknown. The watch had obviously been subjected to some hard use: one hand was missing, and the outer case no longer closed properly.

Accurate timekeeping was a critical activity for any navigator attempting to determine his position, and both Lewis and Clark carried personal pocket watches as well as a highly accurate marine chronometer. Could the watch at MHS be the “silver secont watch” Lewis had cleaned in Philadelphia before setting out for the West, or the one that he tried to barter to a Chinook Indian after it stopped running?

Neither a William Cary telescope nor a silver watch appears on the lists of equipment purchased for the expedition, now in the National Archives. However, since both artifacts were Lewis’s personal property, and the equipment lists cover only purchases from government funds, we would not expect to find them there. There are scattered references to both a “spyglass” and watch in Lewis’s journal. “My pocket watch is out of order, she will run only a few minutes without stoping.” Lewis wrote on April 24, 1805, characteristically endowing his equipment with femininity. “I can discover no radical defect in her works, and must therefore attribute it to the sand, with which, she seems plentifully charged, notwithstanding her cases are double and tight.”

His spyglass entered the written record at two dramatic moments. In 1805, it revealed the welcome presence of a mounted Shoshone warrior in the distance, at a time when Lewis was searching desperately for that tribe to guide the party across the Rocky Mountains. Later, at the northernmost point of exploration, on the Marias River in 1806, Lewis ascended a hill to use the “spy glass” to scan the landscape but discovered instead the presence of a party of unfriendly Indians (either Blackfeet or Gros Ventres). However, in a seemingly contradictory passage when he observed a lunar eclipse to determine the longitude of Fort Mandan in 1805, Lewis specifically noted that he had no telescope and was forced to use the small telescopic sight on his sextant instead.

The third artifact, a compass, belonged to William Clark and came to MHS in a large collection acquired in 1924 through the will of Julia Clark Voorhis, Clark’s granddaughter, who donated five volumes of the expedition journals, among other things. The compass is a tiny thing, about the size of a quarter, attached to a brass chain by a spring clip. It is mounted in a polished red stone setting and can be viewed from either side through a convex crystal. The needle still rotates freely. Because it is highly photogenic, it has often appeared in publications about the Lewis and Clark Expedition.

Nicola Longford, the Missouri Historical Society’s conservator, opted to send these three artifacts to Colonial Williamsburg because that institution has long been a pioneer in the study and treatment of both archaeological and artifactual evidence from the past. While better known for its restored colonial town, the Colonial Williamsburg Foundation also supports an extensive research program, housed in a newly opened complex at Bruton Heights, across a highway from the historic district. There, conservators have access to advanced diagnostic equipment and can also draw on a wide variety of experts on the staffs of both Colonial Williamsburg and the College of William and Mary.
The watch

The discoveries started almost immediately. Longford hand-couriered the artifacts to Virginia in a specially designed case. David Blanchfield began his analysis in her presence. One of his first steps was to view the artifacts under long-wave ultraviolet light. The glass over the watch face fluoresced, leading him to conclude that it was not glass but plastic. Later chemical analysis (a diphenylamine spot test) was positive for cellulose nitrate, confirming his diagnosis. The original watchface had been broken some time before coming to MHS and had been inexpertly replaced in the early 20th century with an ill-fitting plastic one. That explained why the outer case no longer closed properly: the watchglass was too large.

Jay Gaynor, curator of mechanical arts at Colonial Williamsburg, identified the watch itself as a common type available on both sides of the Atlantic at the turn of the 19th century. The movements for these watches were produced in Lancashire and often shipped to London to be matched to an outer case in a dealer’s shop. Curiously, when the back of Lewis’s watch was opened, it proved to have no dealer’s name engraved on the movement drive plate, although the initials “ML” were lightly scratched into the surface in script. The lack of a dealer’s name may indicate the watch was exported directly from Liverpool to America. The outer case bore touchmarks tracing it to casemaker Peter Desvignes of London and was probably made in 1796 but no later than 1798, when the duty mark expired.

Once Blanchfield had opened the watch, the function of the mysterious lever on its side became apparent. When pressed, the lever disengaged the hands from the movement. This would be useful mainly when trying to synchronize the watch with some other timepiece—a chronometer, for instance. The feature would have made it possible for Lewis to set his watch before leaving the keelboat, where the chronometer was kept for safekeeping, and still make an accurate noontime observation with his sextant.

A paper conservator studied the circle of paper that separated the back of the watch from the outer case, identifying it as wove rag, a type of handmade paper, hand-painted with watercolor. A botanist examined the floral spray design to determine whether it represented a particular species, but it proved instead to be a conventional decorative representation of the type young ladies often learned to paint. Was it created by someone important to Lewis—his sister, perhaps, or a woman from his unsuccessful love life? There is no way to tell.

The dating of the watch to 1796 suggests strongly that Lewis owned it prior to the expedition, and the double case and second hand match the watch he brought on the expedition. However, another watch owned by Lewis was known to exist as recently as 1965. William Loudin, who owned the watch in 1905, described it in that year as “a double caser open faced silver watch, made by R. T. Raskill, Liverpool, No. 3211, second hand making complete revolution every fifteen seconds. . . . This watch has always kept good time.” Since the watch that went on the expedition ceased to work after being dosed with Montana sand in the spring of 1805, it is no surprise that Lewis should have purchased another. The evidence was leaning toward the MHS watch being the one carried on the expedition, but so far nothing had proved it conclusively.

The telescope

The telescope also yielded new information from the start. Under bright raking light, the leather wrapping revealed
We Proceeded On February 2001

some hitherto unsuspected incised lettering, but all that could be made out was an E and an R. X rays can often reveal hidden inscriptions, so after humidifying and flattening the leather, the conservators made X radiographs. In the end, however, these were less helpful in deciphering the inscription than simple raking light, which revealed the name “ANDERSON”—the family of Lewis’s sister, who had owned the telescope between 1809 and 1936.

The conservators tested the leather itself to determine the method of tanning. First, Blanchfield removed two small fiber samples. He then exposed one sample to ferric sulfate. The fibers turned blue-gray, indicating the presence of a vegetable tannin. He tested the other sample with hydrochloric acid. When no reaction occurred, he concluded that the tannin was either derived from oak (galls, leaves, or bark) or chestnut. Thus the leather was tanned by a Euro-American method (Indians used animal brains and smoke) before about 1880, when chrome tanning was adopted.

The telescope itself proved not to be used for astronomical observations but was a refracting terrestrial telescope made for daytime use, a type often called a “sidereal telescope” because of its popularity among sea captains. A celestial telescope reverses the image, which makes no difference when the object of study is a star but would play havoc with someone trying to determine which way a far-off river was heading. The extra mirror required to right the image cuts down the brightness enough to make the instrument useless for low-light observations.

Dr. John McKnight, an expert on historic scientific instruments at the College of William and Mary, found the telescope to be “one of the best examples of an unmodified early telescope” he has seen. It was well designed and powerful—36X magnification with a field size of one degree (about 50 feet at 1,000 yards). The telescope had to be fully extended to work and was focused by inserting or withdrawing the eyepiece drawtube.

Close examination of the telescope also answered the puzzle of how such an awkward instrument was used. The largest brass drawtube had wear marks and clumps of solder where something had once been attached. Blanchfield was able to match the marks on Lewis’s telescope to a stand clamp or “annulus,” a mechanism designed for telescopes by Jesse Ramsden, William Cary’s tutor, that fastened the instrument to a tripod.

THE COMPASS

The chain and metal frame of the compass both were made of “rolled gold,” an 18th-century technology similar to Sheffield plate that fused a thin layer of gold to a copper substrate. Clearly, this was a showy and expensive piece of chain, not a utilitarian one. The compass would have been difficult to use because the convex glass prevented it from being placed on a level surface. We concluded that this was probably a piece of jewelry from Clark’s later years as governor of Missouri Territory. He originally would have worn the chain draped across his vest, with a watch on one end and the chain attached through a buttonhole on the other. Hanging from the swag of chain would be a fob, or decorative ornament—and what symbol more appropriate for Clark than a working compass? As the object had come to MHS, the compass was attached where the watch should have been, but a microscopic search of the links revealed wear marks where the compass/fob had originally been attached, in the middle. To correct the error, Blanchfield reattached the fob where it belonged.

The red stone that formed the setting of the compass excited some speculation. Geologist Dr. Stephen Clement was called in to identify it, and before being informed of the history of the object, he volunteered that the stone was jasper of a type that could be readily picked up along the coast of Oregon. Had Clark brought back a souvenir stone from the west which he later converted into a keepsake?

THE CRITICAL QUESTION

Although we had learned much, there was still one critical question about the telescope and watch: Did either of them go on the expedition? Was there anything modern science could do to answer that?

As any fan of detective novels knows, objects pick up invisible fibers, hairs, and bits of pollen that can yield evi-
We proceeded on evidence about where they have been. If some cranny of the artifacts had captured pollen from a plant species that exists only west of the Rockies—Douglas fir or Ponderosa pine, for instance—it would be strong evidence that the artifacts had been in the west. Since the Anderson family had kept them in Virginia after 1809 and MHS had never loaned the artifacts to a western museum, the expedition would be the most likely way for them to have picked up such microscopic traces.

There was great excitement on the day when Longford first removed the telescope eyepiece and discovered a tiny red hair trapped inside it. Everyone speculated: could it belong to a prairie dog, coyote, or mule deer, all animals first observed by the expedition? Or was it from that other famous redhead, William Clark? Blanchfield carefully removed the hair and preserved it for study by the Colonial Williamsburg experts. Later, under the microscope, it proved to be not human, but animal—in the investigator’s words, it had “ladder-like multi-seriate medullae.” It belonged, in fact, to a camel.

A camel? This result was unexpected, to say the least. That is, until the conservator pointed out that camel’s hairbrushes have been used for centuries—and the inside of the telescope had been painted black to reduce reflection. He had discovered the remains of an 18th-century camel made into a workman’s paintbrush.

Undeterred, Blanchfield took samples of the grime from the drawtube threads and cracks in the barrel as he disassembled the telescope. At this point he needed to enlist the aid of another expert—a forensic palynologist, a person who studies pollen grains. He chose Dr. John Jones of Texas A&M University. After receiving the samples, Dr. Jones mounted a small pinch of material from each sample in glycerine on a microslide. He then permanently sealed the slides and examined them at high magnification (250-1,250X). The bulk of the best sample was made up of carbon (blacking), leather fragments, a waxy resinous material, cotton fibers, possible linen fibers, bleached plant tissue (possibly paper towel fragments), one very fine human hair, and another hair of unknown origin. Finally, after scanning four complete slides, Dr. Jones encountered a pollen grain, but the champagne had to stay corked. It was pollen from a sycamore tree, common to both Virginia and Missouri.

There was one more possibility to check. Pollen often is captured in porous materials like cloth and paper, so Blanchfield put the watch paper under the microscope. At 400X magnification, the paper fibers looked like a tangle of twining ropes, and there nestled among them was a single grain of pollen—pine, which meant the watch had been somewhere on planet earth.

Ultimately, Meriwether Lewis’s high-tech equipment did him little good. The air gun was used for neither hunting nor defense, but only for target-practice displays before the Indians. The chronometer, that precision scientific instrument, was dunked in water, oiled with bear grease on a feather, and allowed to run down. Not surprisingly, it was constantly stopping. After the men hauled the “portable” 99-pound iron boat past the Great Falls of the Missouri and spent several days assembling it, it sank like a stone.

Our technology also produced disappointing results—not because it failed, but because it worked. Science will not yield to wishful thinking or speculation. When the evidence does not exist, it will not fabricate any. Years of good museum practices, keeping the artifacts clean and well-polished, had erased the evidence that might have proved their association with the expedition.

“Science will not yield to wishful thinking or speculation. When the evidence does not exist, it will not fabricate any. Years of good museum practices, keeping the artifacts clean and well-polished, had erased the evidence that might have proved their association with the expedition.”

Carolyn Gilman is a special projects historian at the Missouri Historical Society and the curator of the National Lewis and Clark Bicentennial Exhibition. This article originally appeared in a slightly different form in the Winter 2000 issue (Vol. 20, no. 3) of Gateway Heritage. © 2000 by the Missouri Historical Society and reprinted by permission.
A “New” Portrait of Patrick Gass

Its owner recalls his grandmother’s recollections of her father, the last living member of the Corps of Discovery

by J. I. Merritt

Patrick Gass was the Corps of Discovery’s able carpenter and one of its four sergeants. Despite his being one of the oldest members of the Lewis and Clark Expedition (he turned 33 a few weeks after it set out from Camp Dubois), he outlived all his fellow explorers, dying on April 2, 1870—two months and 10 days shy of his 99th birthday. His long life is fairly well documented, and we know what he looked like, at least in old age. For along with Meriwether Lewis, William Clark, and Alexander Hamilton Willard, he was one of just four members of the expedition known to have sat for portraits by artists or photographers.

Until recently there were five known portraits of Patrick Gass. Now a sixth has come to light (opposite). It is owned by Gass’s great-grandson Eugene Gass Painter and hangs in his farmhouse, near Avella, Pennsylvania. The portrait, which Painter recently had removed from its frame for reproducing and examining, is either a touched-up photograph taken from life or (more likely) a photograph of a pencil or charcoal sketch of Gass which has since been lost.

Painter, who is a hearty 85, remembers as a boy seeing the portrait in his grandmother Rachel Gass Brierly’s house, in Independence, Pennsylvania. He and his brothers and sisters lived in the same town and, accompanied by their mother, were regular visitors. Their grandmother was Gass’s youngest child and had inherited the portrait from her father. Upon her death, in 1926, it passed to Painter’s mother, who in turn gave it to Eugene, her oldest boy, in 1945.

Patrick Gass was born on June 12, 1771—144 years to the day before the birth date of Eugene Gass Painter—on Falling Springs, a stream near Chambersburg on Pennsylvania’s Allegheny frontier. The limestone house is still standing and is listed on the National Register of Historic Places. As a young man Gass served briefly in a militia outfit guarding settlements from Indians, crewed on a flatboat.
on the Ohio and Mississippi rivers, and worked as a carpenter. He enlisted in the army in 1799 and was stationed at Kaskaskia, Illinois, on the Ohio, in the fall of 1803 when Lewis recruited him for the Corps of Discovery. Captains Lewis and Clark regarded Gass as a man of “capacity, diligence and integrity,” and on August 26, 1804—seconding a vote cast four days earlier by the enlisted men—they promoted him to sergeant to fill the vacancy caused by the death of Charles Floyd. Gass was the principal builder of Forts Mandan and Clatsop. He was also one of at least seven members of the expedition to keep a journal, and (much to the dismay of Lewis) he was the first to get his in print, in 1807, a year after their return from the Pacific.

Following the expedition, Gass settled in Wellsburg, a village in what is now the panhandle of West Virginia (at the time it was part of Virginia). Following the outbreak of the War of 1812, he reenlisted and fought on the Canadian border near Niagara Falls, where he was wounded in a charge of a British artillery battery during the Battle of Lundy’s Lane. After mustering out in 1815, Gass returned to the Wellsburg area and spent most of the remaining 55 years of his life there. Because he had lost an eye while in service (according to army records, from an accident while felling a tree), the government granted him a disability pension, which he supplemented with occasional carpentry jobs. According to Painter, in those post-army years he also tended a ferry and worked in a brewery.

On March 1, 1831, three months shy of his 60th birthday, Gass married Maria Hamilton, a woman at least 40 years his junior—family tradition says she was 20 at the time, although census records suggest she may have been as young as 16. They had six children who survived infancy. Their last child, Rachel—Painter’s grandmother—was born on March 31, 1846, when Gass was 74. Eleven months later, on February 16, 1847, his wife died of measles. As an elderly widower, Gass felt unable to raise such a young child and placed Rachel in the care of a local family, although he saw her regularly throughout her childhood.

Rachel was 23 when her 98-year-old father died, in the home of her older sister Annie. “Grandmother talked about him a time or two when we’d visit,” recalls Painter. “She always spoke of him as a kind old man, although I didn’t know enough to ask too many questions about him.” One remark he remembers her making about her father’s experiences on the Lewis and Clark Expedition occurred when one of Painter’s siblings complained about being hungry. “She smiled and said, ‘When I was a child, one of my brothers said he was hungry, and my father told him, ‘Young man, you don’t know what hunger is.’ ”

Painter remembers that in a hall cupboard his grandmother kept what she called the Gass relics. “She showed them to us on several occasions. One was a hatchet he took with him on the expedition. Another was a razor box which Sacagawea carved for him out of cottonwood or cedar during their winter at Fort Mandan. People debate about the proper pronunciation of her name and whether it’s with a ‘j’ or a ‘g’—sac-ka-ja-WEE-a or sa-KAGA-see-EE-a. My grandmother called her sac-ka-ja-WEE-a. She got that from Patrick Gass and that’s good enough for me.”

The hatchet and razor box passed to one of Painter’s uncles and eventually wound up in the Lewis and Clark Interpretive Center at Ft. Canby State Park, on Cape Disappointment in Washington—the westernmost point
A GALLERY OF GASSES

Before the recent “discovery” of the Patrick Gass portrait owned by his great grandson Eugene Gass Painter, there were five known images of the Corps of Discovery’s last surviving member. We’ve assembled them here and for the sake of explanation have labeled them according to their ownership or provenance.

• **Taranik.** This is a daguerreotype of Gass owned by a great granddaughter, Jeanette Taranik, who believes it was taken in the last year of Gass’s life.1

• **Smith.** This color-tinted photograph of Gass is also owned by Taranik. It was originally in the possession of one of Gass’s daughters, Taranik’s grandmother Annie Jane Gass Smith.2

• **Muter.** This is a painting owned by a great-great grandson, Richard B. Muter.3 It bears an obvious resemblance to the Smith photograph, which was probably its source.

• **Forrest.** This portrait comes from the frontispiece of a biographical pamphlet privately published in 1950. The author, Earle R. Forrest, states it is an “enlargement” of a restored photograph of Gass taken when he was 90. But in several of its features—the orientation of the head, the position of the hands, and the shirt collar—it is strikingly reminiscent of the Muter portrait. According to Eugene Gass Painter, it is actually based on a photograph of the Muter painting.4

• **Jacob.** This woodcut was first published in an 1859 biography of Gass by J. G. Jacob. It is based on a photograph of Gass taken by E. F. Moore when Gass was in his late 80s.5 The photograph itself is lost. This is the one portrait of Gass that can be dated with some certainty, since it could not have been made later than 1859. Some who have examined the picture closely believe his left eye—the one he injured in an accident in 1813—is closed.6 If Gass’s left eye was disfigured (and there is no other documentation to suggest that it was), then the other existing portraits must have been retouched, since the left eye in all of them appears normal.

It is also possible that the artist used the Taranik photograph for his model but reversed the image, so that Gass faces to the viewer’s right. We have “corrected” this possible reversal in the “Jacob (reversed)” image. Compare this with Taranik and note the similarities of the shirt collar and the fall of the lanyard (which held Gass’s lorgnette, or reading glasses) across the shirt’s front. In Taranik, Gass rests his left hand on a cane, but in Jacob his hands are folded on his lap. Perhaps the artist preferred this pose; if so, the awkward rendering of the hands suggests that he drew them without benefit of a similarly composed photograph to copy from. If Jacob is based on Taranik, then the latter is a portrait of Gass in his late 80s.

—J.M.M.

**Notes**

2. Ibid.
5. Taranik.
reached by the Corps of Discovery. The “relics” also included several items Gass acquired later, including a flask (he was known on occasion to enjoy a dram or two) and several account books, which were later edited by Carol Lynn MacGregor and published in 1997 as part of a new edition of Gass’s expedition journal.

Thanks to his middle name, Eugene Gass Painter became aware of his illustrious ancestor at an early age. His mother gave him the name because he and Patrick Gass shared the same birthday, although Painter never wondered where the name came from until his grade-school classmates teased him about it. “They’d say ‘Gass—what kind of name is that?’ I went home and asked my mother. So I grew up knowing who Patrick Gass was and what he’d done.”

Another time in his youth, Painter recalls, he was talking to an elderly neighbor who told him that, as a boy, he was riding in a wagon with his father one day when they stopped along a stream named Pierce’s Run, where Gass lived alone in a log cabin. “There was an old white-haired man sitting on the porch,” the neighbor told Painter. “My father said to me, ‘Now, that’s Patrick Gass—he’s a famous man and you ought to remember you saw him.'”

In some historical novels and in The Far Horizons, the highly fictionalized Hollywood version of the Lewis and Clark saga, “Paddie” Gass is depicted as an Irishman and given a brogue thick enough to curdle stout. In fact, genealogical sleuthing by Painter and others of the Gass clan reveals that he was a third-generation American who, if anything, probably spoke with an Appalachian twang. Like thousands of other frontier families, the Gasses were Scotch-Irish. Patrick Gass’s Huguenot ancestors, says Painter, were fullers of cloth who came from Holland in the late 17th century and settled first in Scotland and then in the Protestant enclave of Northern Ireland, which Gass’s grandfather left for the New World.  

Painter studied engineering at the University of Cincinnati and spent much of his career in production control with the Westinghouse Corporation, in Pittsburgh. On weekends he helped his uncles run the family farm, and eventually he took it on full time with his two sons. The dairy cows were sold a few years ago, and the Painters now raise a few beef cattle and grow oats, hay, and corn. “I’m mostly retired but still rake hay and build fences,” says the patriarch, who lives in the family homestead, a stately brick farmhouse completed in 1820 and listed on the National Register. The house sits in rolling country eight miles east of Wellsburg, where Patrick and Maria Gass lie buried in a cemetery on a hill overlooking the Ohio River. Painter visits the gravesite regularly.

Painter was widowed two years ago and recently remarried. His cheerful wife, Rita, is adjusting to his absorption in Lewis and Clark. Last September she accompanied her husband to the Heritage Days Festival in Elk Point, South Dakota, where for the second year in a row he took part in a reenactment of his ancestor’s election as a sergeant in the Corps of Discovery. In a role he expects to reprise this summer, Eugene Gass Painter played Patrick Gass.

J. I. Merritt, WPO’s editor, lives in Pennington, New Jersey.

NOTES
1 Author’s interviews with Eugene Gass Painter, October 13 and December 9, 2000.
3 MacGregor, pp. 16, 224.
Having served the Foundation for the last year as membership coordinator, Cari Karns has been promoted to executive director. She fills the vacancy left by Sammye Mead-ows, who left in the fall to assume the duties of director of communications and development for the National Council of the Lewis and Clark Bicentennial. Filling Karns’ former position is Rebecca Bogden-Young. A fifth-generation Montan-an, she grew up on her family’s ranch between Ulm and Cascade, studied biology and chemistry at the University of Great Falls, and for the last four years has worked as a membership/field specialist for the Girl Scouts of Big Sky.

CLARK’S BARS

Word comes to us from Michelle Bussard, executive director of the bicentennial council, that in November, President Clinton restored William Clark to the rank of captain in the U.S. Army. (Surely everyone knows, Clark, a captain in the 1790s, was officially a lieutenant on the expedition due to a bureaucratic foul-up.) Bussard heard the news from historian Stephen Ambrose, who received a package from the White House with a letter from Clinton and the pen he used to sign into law a congressional bill promoting Clark—196 years later, but late is better than never. The bill states that Clark “shall be deemed for all purposes to have held the rank of captain, rather than lieutenant, in the Regular Army, effective as of March 26, 1804, and continuing until his separation from the Army on February 27, 1807.” The pen, said Ambrose, “belongs to all of us who have been involved in the L&C Bicen-tennial” and who worked with members of the congressional L&C caucus to give Clark his bars. The council is considering auctioning the pen to raise funds for the bicentennial.

MERRIWETHER REPLACES LADY

We recently learned that Lady, the Newfoundland dog who was the mascot of the keelboat Discovery, died last June of unknown causes. Lady (pictured) took the role of Seaman, Meriwether Lewis’s Newfoundland, in the crew’s reenactments of the Lewis and Clark Expedition. According to her owners, Glenn and Joanne Bishop, she was seven and a half years old, at “the lower level of life expectancy” for her breed. Lady was with the Bishops when she died while they were scouting the upper Ohio River in preparation for the keelboat’s fall trip. Replacing Lady on the Discovery crew is Meriwether, an 82-pound female Newfoundland born last year. (For more on Discovery, see www.lewisandclark.net.)

L&C PANORAMAS

Many sharp-eyed readers of the November WPO noticed that the ad on the back cover had the wrong captions on two paintings by artist Charles Fritz of Billings, Montana. We regret the confusion and have reprinted the ad on the back of this issue with the correct captions. Coincidentally, Wayne York of Baton Rouge, Louisiana, informs us that Fritz and the University of Montana are collaborating on a series of landscapes related to the L&C Expedition. Fritz, whose panorama of Lewis at the Great Falls (see back cover) recently sold at auction for $72,000, will travel the Lewis and Clark Trail, visiting sites at the same time of year as the Corps of Discovery so that the paintings will be “in season” with the explorers. They will become part of a traveling exhibit and will be published in a book about the exhibition.

CLASSIFIEDS

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LEWIS&CLARKIDAHO.COM. Check this website for intriguing information about the Lewis & Clark Expedition in Idaho’s Northwest Passage. Discover traveler’s tips, tour options, photos, LC gifts and more.

L&C MOTORCOACH TOURS. Pre-set public tours or customized tours for organizations. Summer/Fall of 2001: 10-day “Rocky Mountain Tour” (MT, ID, WY). 14-day “Northwest Passage Tour” (MT, ID, WA, OR). 18-day “Plains to the Pacific Tour” (St. Louis to the Pacific Ocean). Includes on-bus Expert Scholars, Historic Sites, Interpretive Centers, Performers and Re-enactors. Also Boat Tours of the Missouri and/or Colum-bia Rivers. We provide the History, Journal Readings and Story-Telling while visiting some of the most spectacular scenery in America. $200 per person per day includes Lodging, Meals & Fees. All three tours were very successfully conducted during the summer of 2000. Contact Scott or Janet at Rocky Mountain Discovery Tours in Missoula, Montana. 888-402-0048. Many more details at www.rmdt.com E-mail: discovery@montana.com

TRAVEL PARTNER wanted for an RV trip along L&C Trail next summer, approx. two months. Good physical condition, good driver, congenial, share driving. Am male, 60+, interested in L&C history and sites. Call Adam, 858-271-4556 (San Diego).


CLASSIFIED RATES: 50 cents per word for Foundation members, 75 cents for non-members; $10 minimum. Address, city, state, and Zip code count as one word. Payment must accompany ads. Goods and services offered must relate to L&C. Send ads with payment (checks only; please) to Jim Merritt, Editor, WPO, 51 N. Main St., Pennington, NJ 08534.
A handsome reissue of Clark’s map of the trans-Mississippi west

A gallery in Stevenson, Washington, has produced a new, high-quality reproduction of the nearly unobtainable 1814 map that accompanied the Nicholas Biddle edition of Lewis and Clark’s History of the Expedition. If you are looking for the best available, this map is worth your attention.

The 1814 map, containing the first widely published authoritative information on the trans-Mississippi west, was copied from Clark’s field map by Samuel Lewis and engraved by Samuel Harrison, both of Philadelphia. The original copper plate on which the engraving was made is in the possession of the American Philosophical Society.

According to Elliott Coues, the second editor of the journals, not quite three quarters of the 1814 sets were issued complete, and today many of these books offered for sale lack this large map. The presence of the original map adds perhaps $50,000 to $75,000 to the price of the 1814 edition.

In 1979, the American Philosophical Society allowed 160 impressions to be taken from the original copper plate, of which 150 were offered to collectors and institutions. The press work on this restrike is not comparable to the expert quality of the original. Also, the plate had been damaged over the course of 165 years, and several scratches are evident on the 1979 reprint. Yet even this map, should one be fortunate enough to find a copy, fetches from $500 to $1,500, depending on the temperaments of the buyer and the seller.

In recent years, several lithographic reproductions of Clark’s map have become available. These have been priced at a few dollars and make no real pretensions of high quality. One commonly found is actually a reproduction of the map in the 1814 English—not American—edition of Lewis and Clark: yet another engraving.

A detail of the Missouri River from A Map of Lewis and Clark’s Track, a reprint of William Clark’s map published in the Biddle edition of the Lewis and Clark journals in 1814.

The present map is simply the best quality now available. It is made from a high-resolution digital scan and printed on 120-pound art paper using an Iris giclée (spray) printer. This printing technology “layers” the image on the paper in a way that makes the inevitable dot pattern imperceptible to the naked eye and nearly so under high magnification. The result is an almost photographic-quality image of a two-century-old map with the honorable indicia of its age—some foxing, staining, spots, and very small tears and creases.

My personal criterion for quality on reproductions of the 1814 map is the sharpness of the fine engraving lines of the original. The inexpensive reproductions simply do not have the uniformly sharp quality of the original. This Iris print comes closer to the quality of the engravings taken from the original copper plate than anything I have seen. The Iris map is a color print that is absolutely striking in its depth of color, capturing the brown tones of the old ink and the golden tones of the early 19th-century paper. In many ways an Iris print is very like a watercolor, and it has the luminosity and color gradation seen in that medium.

Two facts about the map should be mentioned. First, its size, although very close to that of the original, is not exact. At 71 by 30 centimeters, it is about five percent wider and very slightly shorter than the original. This is not noticeable except perhaps to the most discerning researcher; it may even be an advantage in that this map could never be passed off as an original—which might be a temptation to some. Because of the heavy weight of the paper, the map is unsuitable for folding and tipping into a copy of the 1814 edition. Secondly, one should be a little wary of the possible archival quality of this map. The best color inks used in the Iris process only guarantee a life of 30 or 40 years without fading or changing color under standard room illumination. This map is art and should be treated as such: keep it out of direct sunlight.

If you are searching for a suitable-for-framing reproduction of the original 1814 map of Lewis and Clark—and if price is secondary—this is for you.

—Ludd A. Trozpek

A Map of Lewis and Clark’s Track, $150 plus shipping unframed. Framing available. Obtainable only from the Lewis and Clark Gallery, 240 SW First St., Stevenson, WA 98648. Open Tuesday–Saturday, 10:30–5:30. Phone 509-427-7734. E-mail: arterbury@gorge.net.

Reviews continues on next page
Essays explore L&C trek as a journey into a heart of darkness—and light

Hauser’s humane account of the expedition is particularly evocative of the edginess of the Indians, from terrified Omaha captives to starving Shoshones, constantly dogged by hunger and fear of capture or death at the hands of rival tribes. His empathic treatment calls to mind Dee Brown’s memorable metaphor about a tribe whose members carried their lives “on their fingernails.” Reality undercuts the seductive mythology of a lost Eden. The truth is more complex and disturbing. For many Native Americans, life in the pre-contact period was nasty, brutish, and short. Candor runs counter to the claims of militant Native Americans and well-meaning whites that the Euro-American intruder alone was the serpent in the Garden.

Like all serious scholars, Hauser debunks the notion of a romantic attachment between Clark and Sacagawea. Given the circumstances, such a liaison could not have been kept secret and would have done irreparable damage to the corps’s morale. It would also seem out of character for either party to have acted on such feelings.

Nevertheless, like others, Hauser sees a closer relationship between Clark and Sacagawea than between Lewis and the Shoshone girl. Lewis has been portrayed as indifferent to, or disdainful of, “the Indian woman.” This view rests in part on Lewis’s comment that, with enough to eat and a few trinkets to wear, Sacagawea would be happy anywhere. Perhaps I am alone in this, but I have never been able to shake my suspicion that a quality of envy may be embedded in this famous observation. Sacagawea’s displays of stoicism and composure may have struck Lewis as strengths of character he lacked, especially given his own perfectionism, harsh judgment of himself, and his presumed fatal inability to find inner peace.

Hauser peers repeatedly into the troubled soul of Lewis, a black hole of fascination for scholar and buff alike. He centers on Lewis’s first contact with the Shoshones, at Lemhi Pass, and his subsequent introspective rumination.

A cookbook to savor

Food on the Lewis and Clark Expedition was hearty but plain—a mostly utilitarian fare like roasted buffalo hump ribs, boiled camas roots, and parched corn. Now three authors and epicures from Bismarck, North Dakota, have updated the Corps of Discovery’s table d’hoîte with a menu of 168 modern-day recipes—items like venison with chokeberry sauce, butter-nut squash soup, buttermilk corn bread, and pan-blackened salmon—based on ingredients that are evocative of the explorers’ experience, whether or not they were actually available to them on the trail. Many of the recipes call for game or wild edibles but suggest alternative ingredients found at any grocery.

The book is a delight to the eye as surely as its recipes are to the palette, with elegant graphics and color reproductions of art by Karl Bodmer, John Clymer, Charles M. Russell, and other artists of the American West. (The Lewis and Clark Cookbook, by Teri Evenson, Lauren Lesmeister, and Jeff Evenson. $19.95 plus $3.95 shipping and handling. Order from Whisper’n Waters, Inc., 328 Lunar Ln., Bismarck, ND 58503. Tel: 888-282-7693, fax 701-223-4259.)
nations at the continental divide as a possible downward turning point.
Yet Lewis's leadership at Lemhi is arguably among his finest hours. Reading Hauser's recapitulation of the captain's handling of this tense situation, I was struck by his inventiveness and courage. Hauser seems also to suggest that Lewis's moody 31st-birthday monologue may have been stirred in part by the joyous deference that Cameahwait and his band paid Clark. Hauser detects what others have also noted, that Lewis seems prone to accidents—nearly falling off a cliff, facing a grizzly with a rifle negligently left uncharged, stumbling into a fatal rendezvous with the Blackfeet, and ignominiously getting shot in the behind in a hunting accident. Does all this betray a pattern of subconsciously placing himself in harm's way? Only his therapist could say for sure. Certainly at many other times Lewis proved himself the man of the hour.

When I think of Lewis's errors of judgment and his risk taking, I recall not only the cliché that great men have great flaws but the words of a management consultant that the most creative and valuable person in any organization typically has the most bad ideas. At worst, Lewis's malaise was a noble pathology that somehow left him the strength to quell his demons and subordinate his own ego for the good of the expedition—and ultimately the nation—whenever it really mattered.

Hauser's sentiments about the history of this nation flow naturally from his fluid prose; the Lewis and Clark buff can forgive his occasional lapse, for example when he refers to the "nine 'good' men from Kentucky" (of course, these recruits are known as the nine young men). Reading his essays as the winter solstice approached not only directed my thoughts to the exceptional personalities of the expedition, but also made me yearn for much of what Hauser saw and felt along the trail, from warm days on the water at the White Cliffs to reflective moments in the Charles M. Russell Museum.

—Dennis M. O'Connell

Biking in the wake of the Corps of Discovery

With the approach of the Lewis and Clark bicentennial it's perhaps inevitable that, along with several new or updated guides to the L&C Trail, we should have a Baedekers for cyclists. Bicycle Guide to the Lewis & Clark Trail, by Tod Rodger (Deerfoot Publications, $24.95 paper) is thorough, easy-to-follow, and well organized. Its suggested route from St. Louis to the Pacific follows secondary roads but also takes you on extended cycling and walking trails wherever they are available. The guide has excellent maps and provides details about lodgings (including B&Bs and campgrounds), grocery stores and restaurants, museums and interpretive centers—information useful to anyone planning a back-country trek in the wake of the Corps of Discovery, whether by bicycle, foot, or car.

Songs for the campfire and winter lodge

Makoché Music has issued two new CDs—Sounds of Discovery and People of the Willows—related to the Lewis and Clark Expedition. Listening to Sounds of Discovery, you follow the members of the Corps of Discovery as they leave civilization, travel up the Missouri, meet the various river tribes along the way, spend Christmas at Forts Mandan and Clatsop, and return to St. Louis. This collection, composed almost entirely of period pieces, is skilfully performed, and it presents a "soundscape" similar to what the Corps of Discovery might have heard in its progress to the Pacific and back. Many of the selections are recorded at sites along the trail. It includes natural and man-made background sounds—birds, wolves, elk, flowing water, thunder, the crack of a black-powder rifle, and the plaintive bleat of a sounding horn. Vocals join instruments such as the harpsichord, bagpipes, tin whistle, drums, rattles, violin, alto recorder, and wooden flute in presenting classical, popular, and Native American songs.

Leaving the East, we hear songs such as "Chester," "The Rose Tree," and Handel's "Sonata in E Major." Head ing upriver, the music shifts to such tunes derived from the French as "Musette" and the hymn "All Mortal Flesh Be Silent." The explorers' encounter with the Teton Sioux is represented by two selections, the "Buffalo Society Song" and the victory song "Lakota Hoksila." The corps's long stay at the Mandan villages is represented by a number of Mandan and Hidatsa tunes featuring the strong, clear voice of Nellie Youpee and the haunting flute work of Keith Bear. The counterpoint to these tunes are what may have been the corps's own offerings—the lively dance tune
"Fisher’s Hornpipe" and holiday numbers “In Dulci Jublio” and “A Merry Christmas.” Further west, we are treated to songs from the Shoshone, Nez Percé and Yakima/Wallawalla tribes. On the return trip, the CD offers a traditional Blackfoot tune, the “Grass Dance Song,” followed by more Mandan and Hidatsa songs, one featuring Gary Stroutos on the wooden flute. Aurally, culturally and historically, this is an enjoyable compilation.

Accompanying the CD is an informative 24-page booklet describing the songs and tying them into the expedition’s musical landscape.

Another CD offering by Makoché Music is People of the Willows. It features many of the same talented musicians heard on Sounds of Discovery as well as modern arrangements of traditional Mandan and Hidatsa songs and some original tunes. Most of the musical arrangements were composed by Brazilian-born pianist Jovino Santos Neto and feature the Pacific String Quartet, of Seattle. The arrangements are smooth, polished and slightly jazzy. They seem to emphasize an uneasy gulf between the urbane sounds of the piano and strings with the primitive, spiritual tones of the Native American wooden flute—you can take the wooden flute out of the wilderness, but you can’t take the wilderness out of the wooden flute.

It is an interesting experiment performed by talented musicians, but I felt more comfortable with the traditional numbers. The vocals of Nellie Youpee and her daughter Ruth Short Bull are especially enjoyable. A booklet also accompanies this CD; for some songs its text includes the native words and their translations, a wonderful addition that makes it easier for an untrained car to distinguish the lyrics and to understand their story.

Both albums are priced at $13.99 CD ($9.99 cassette) and can be purchased from Makoché Music (208 N. 4th Street Bismarck, ND 58501; 800-637-6863; www.makoche.com).

— Jay Rasmussen
Two new books explore Sacagawea’s relations with Lewis and Clark

Two recent young readers’ books, Judith St. George’s Sacagawea (G.P. Putnam’s, $17.99) and Peter and Connie Roops’ Girl of the Shining Mountains (Hyperion Books for Children, $14.99), constitute either fictionalized history or historical fiction, depending on how you tip the hologram. The Roops’ account presents the kinder, gentler story with an aging Sacagawea relating her tale to a curious Pomp. St. George’s heroine is edgy and somewhat hypercritical of the captains’ judgment, often seeming to hope subversively that the Indians or the white bears will humble their hubris, which indeed happens.

The trek over Tillamook Head to see the great whale illustrates the difference in tone between the two books. In St. George’s version, when Sacagawea learns she is to be left behind she turns on Clark and scolds him in the presence of onlookers. In the Roops’ rendition, she is assertive and also unwilling to take an ungrateful no for an answer, but couches her petition in words of diplomacy in keeping with Clark’s stature and the level of trust between them. Clark’s own account seems to reveal the pleasure that a mentor often feels when a protégé strikes out with a bold proposal.

—Dennis M. O’Connell

In Brief: Montana Birds, Council Bluffs, William Clark and Mother Lucy

• Montana’s First Bird Inventory through the Eyes of Lewis and Clark, by Kenneth C. Walcheck ($12.95; available from the L&C Interpretive Association, POB 22848, Great Falls, MT 59403). The author, a wildlife biologist,
describes the 57 species of birds—seven new to science—noted by Lewis and Clark in their journals during the six months they spent in Montana. The list in this illustrated 48-page pamphlet includes Lewis’s woodpecker but not Clark’s nutcracker, which, although it is common to western Montana, they reported seeing only in Idaho. Walcheck deals with the confusion caused by Lewis’s use of generic names for birds, for example “pheasant” (a European import that wasn’t introduced into Montana until the 1880s) for grouse.

- Lewis and Clark at Council Bluff, by Kira Gale ($6.95, available from River Junction Press, 3314 N. 49th St., Omaha, NE 68104; 402-451-2878). This 25-page guide explores the Corps of Discovery’s experiences in parts of present-day Nebraska and Iowa, from Bellevue (Whitefish Camp) to Sioux City (Floyd’s grave).
- Captain Clark and Mother Lucy ($19.95 plus $5 s/h; Good Impressions, P.O. Box 5364, Vancouver, WA 98668; 360-576-1312; goodimp@pacificer.com). This video of two senior reenactors presents a different perspective on the Lewis and Clark Expedition. Keith McCoy plays William Clark in his 60s reflecting on the exploits of the Corps of Discovery 30 years before. Merna DeBolt as Lucy Meriwether Marks dons bonnet and Jefferson-era skirt as to portray the mother of Meriwether Lewis reminiscing on her famous son. She also offers tips on baking a greasy but nutritious beaver tail.
This is an interesting use of the old word bier, which we found early in this work employed for a covering for the head to keep off mosquitoes (whence our mosquito-bar); but it is now archaic, except in connection with funerals. The "net" of the text, therefore, is simply the child’s cradle, made light and portable, something like a basket.9

Nine years later, Reuben Thwaites allowed that Coues might have been right, but cited an early 18th-century traveler’s use of a canvas sack as a barre against mosquitoes while on the lower Mississippi River, and wound up implying that barre and bier were synonyms.

The term baire, thus used, would readily spread among the French voyageurs and traders throughout the entire Northwestern region; and by the time of Lewis and Clark the canvas was, at least sometimes, replaced by gauze or net to provide fresh air.8

The recent Dictionary of American Regional English (DARE) confirms Thwaites’s conjecture. Four variants—bier, baire, barre, and bère—are linked to the Cajun word boire, and in turn to the French barre, meaning cross-bar, with each word denoting a "mosquito bar." All were common in Louisiana in the late 18th century.9

Regrettably, the up-to-date Merriam-Webster’s compounds a century’s-worth of confusion in its opening definition of bier: "archaic: a framework for carrying." Even the venerable Samuel Johnson, the British 18th-century father of modern English dictionaries, wasn’t that archaic; he specified the condition of the burden—"on which the dead are carried to the grave."9

The only clue we have as to the construction of the biers used by the Corps of Discovery is Biddle’s annotation to Lewis’s journal entry of July 21, 1805, perhaps gotten from Clark or George Shannon: "made of duck or gauze, like a trunk—to get under." Webster, in 1806, defined trunk as, among other less relevant things, "a long tube," borrowing verbatim—as he did also for his definition of bier—from Entick’s New Spelling Dictionary of 1802.6

Elijah Criswell found one of the usages of the noun bear to denote a "pillow case." Thus it is conceivable that a musquito bier was a sack made of gauze or netting, with a support such as a cross-bar to keep it away from the body. Clark and Ordway always spelled the noun denoting mosquito netting as "bear" or "beare," evidently writing it as they heard it, and what they heard in Lewis’s Virginia accent didn’t rhyme with bear, but with bär.

On the other hand, Criswell points out that Lewis referred to a sandbar as a "bear," and probably pronounced it "bar." Clark also, on September 9, 1806, called a sandbar a "bear," which, as a Kentuckian he might well have uttered as bar.9

Of course, pronunciations are difficult to convey in print, and we can only speculate about the sounds of the forms uncovered by DARE. In the 18th century, boire could have been spoken as bWAHr, BOYr, or BAR; bier as beeYAY or bir; barre as BAYr or BU;r; bère as BEHr; and bear as almost any of the above. Localisms are hard to account for, either in spelling or pronunciation, and they often trip up the stranger.

A spokesperson for the Lemhi Shoshone Indians, descendants of Sacagawea’s (sic) people, insists that Sacajawea (sic) carried her baby in a cradleboard. The Hidatsa, among whom Sakakawea (sic) reached puberty and bore her child, contend she would have carried him as all Hidatsa mothers did, wrapped in a shawl or blanket draped over her shoulder. Nobody knows for sure.

But there can be little doubt that baby Jean Baptiste Charbonneau’s bier was a mosquito net, not a cradle board, much less a funeral litter.

Foundation board member Joseph Mussulman lives along the Lewis and Clark Trail an easy half-day’s horseback ride west of Traveler’s Rest, Montana. He is a professor emeritus of music at the University of Montana and founder of the Web site Discovering Lewis and Clark (www.lewis-clark.org).

NOTES
1Published in London in 1753 (2nd ed., 1764), it was known as Owen’s Dictionary, after the publisher. Clark may have been alluding to this in his post-expeditionary memorandum listing articles he forwarded to Louisville: “a Hat Box containing the 4 vols. of the [he struggles mightily with the word!] Deckinsky of arts an sciences.” See Gary E. Moulton, ed., The Journals of the Lewis & Clark Expedition (12 vols., Lincoln: University of Nebraska Press, 1983-1999), Vol. 8, p. 419; Donald Jackson, “Some Books Carried by Lewis and Clark,” Bulletin of the Missouri Historical Society, Vol. 16, no. 4 (October, 1959), pp. 11-13.


7As Daniel Boone is said to have spelled it in his legendary graffiti, having killed “a bar” on a certain tree in Kentucky.
On June 28, 1805, having lost some of the field notes he wrote 10 days earlier on his search for a portage route around the five falls of the Missouri River, William Clark set out to retrace his steps and fill in the blanks. York, Charbonneau, and Sacagawea with her five-month-old boy, Jean Baptiste (a.k.a. Pomp), went along as sightseers. A sudden downpour drove them to shelter under some overhanging rocks in a deep, dry coulee, which suddenly became the conduit for a flash flood that nearly swept them all into the river just above the first, highest, and deadliest of the five waterfalls.

With his typical nonchalance, Clark himself documented the most terrifying moment of all: "the woman lost her Childs Bear & Clothes bedding &c." Lewis filled in the details: "the bier in which the woman carries her child and all it's cloaths wer swept away as they lay at her feet she having time only to grasp her child." A footnote in the most recent edition of the *Journals of the Lewis & Clark Expedition* defines bier (and by inference, "bear") as "the cradle-board in which Sacagawea carried her child on her back." Homonyms are words with the same sound and often the same spelling, but different meanings. Bier is a homonym.

Noah Webster, the father of American lexicography, who published his first dictionary in 1806, the year of the Lewis and Clark Expedition’s return, defined bier as “a wooden hand-carriage used for the dead.” In his *American Dictionary of the English Language* (1828), he traced this bier’s etymology to the Latin *feretrum*, from *fero*, “to carry.” The latest *Merriam-Webster’s* takes the etymology of bier back to the 12th-century Middle English word *bere*, from Old English *bær*, akin to Old English *beran*, to carry, and similarly defines it as “a stand on which a corpse or coffin is placed.” What’s more, the four-volume *Dictionary of Arts and Science* (sic) that the captains may have carried on the expedition defined *bier* as “A wooden machine for bodies of the dead to be buried.” Certainly that’s the kind of bier Sergeant Charles Floyd’s body might have been borne upon to its grave on a bluff overlooking the Missouri. Correspondingly, the loss of the baby’s mosquito net would have been serious enough to warrant mention. Indeed, a year later, on the morning of August 3, 1806, Clark remarked with concern and sympathy that “The Child of Shabono has been So much bitten by the Musquetor that his face is much puffed up & Swelled.” Either the pests got inside Jean Baptiste’s bier, as they did Clark’s, or else Jean Baptiste didn’t have one at all, his having been lost a year before.

Baire, bier, or baere?

Nicholas Biddle, the editor of the first published Lewis and Clark journals (1814), simply paraphrased Lewis: “The Indian woman had just time to grasp her child, before the net [italics added] in which it lay at her feet was carried down the current.”

Elliott Coues, in his 1893 edition of Biddle’s work, led his own readers astray by confusing two different words having two different roots: