A WORLD TRAVELER of renown in the 19th century was geographer-historian-scientist Johann Georg Kohl (1808-78), a native of Bremen, Germany. He began by studying law, ethnology, and mathematics at Göttingen, Heidelberg, and Munich. Then he became a tutor to noble families. But before long the influence of patrician relatives and the success of his published accounts of trips to Russia, the first in 1838, turned him to geography and travel.

Kohl spent two decades visiting and writing about practically every country in Europe and much of North America. His four years in America—1854-58—took him all over the continent, including Minnesota. In these four years he wrote three books and uncounted articles about his visit—over 3,000 folio pages in holograph, a stack almost two feet high, more than a million words about America's past, its land, and its maps. In all, he produced 25 volumes on Europe, North America, and the Atlantic Ocean. The selection published here in English for the first time is from Reisen im Nordwesten der Vereinigten Staaten (Travels in the Northwestern United States) and is called "The Falls of St. Anthony" in the original.

Kohl is credited with developing the literary form that offers scientific concepts and verifiable information in a popular style. His contribution has been rated the greatest ever to the history of American coastal geography. From Kohl's time to the present, scholars have praised his efforts. Two examples will suffice here. In 1879 American historian Charles Deane called Kohl "unquestionably the most distinguished geographer in Europe." Nearly a century later Samuel Eliot Morison termed him an erudite geographer-historian who "worked out a method for reproducing the essential features and toponymy of old maps for modern printing that, in my opinion, has never been surpassed."

Kohl never married; he was wedded to his work. With him the search "for new geographic knowledge was synonymous with pure exhilaration." His interest in historical cartography he narrowed to maps of the discovery and exploration of the New World. They fascinated him, as if the old maritime city of Bremen and her many sons who went down to the sea in ships had passed to him a desire to learn how the ancient mariners had found their way about, beyond the horizon. For five

Mr. Trautmann is associate professor of speech at Temple University in Philadelphia.
years he toured Europe and pored over everything about his topic in libraries, archives, and museums.

Obviously no armchair geographer, he soon decided to travel to the New World. On September 7, 1854, he boarded the 'City of Manchester,' a Philadelphia-bound steamer, to see for himself what, in many corners, was still considered a dark continent. Moreover, the history of the white man's discovery of North America remained largely unknown. He would fill in the blank. Accordingly, he traveled far and wide in the United States and Canada, became a corresponding member of the Massachusetts Historical Society, lectured at the Smithsonian Institution in Washington, D.C., schooled himself in the discovery of America, steeped himself in the story of its exploration (particularly as revealed in maps), worked on cartography in Washington and other eastern cities, and wrote and wrote until 1858.

Kohl became acquainted with all kinds of people; the old student of ethnology delighted in meeting Indians, for example. He sought out and associated with prominent men—like poet Henry Wadsworth Longfellow and statesman Charles Sumner. Indeed, he dealt on cordial terms with so many Americans that, later in Germany, he advised his colleague Hermann A. Schumacher to "mention my name [in the United States] and you'll be welcomed." Important to Kohl's study of America were his friendships with Matthew Fontaine Maury, superintendent of the Navy's depot of charts and instruments, and Alexander Dallas Bache, head of the United States Coast Survey.

At Bache's urging and for Bache's office he compiled "Notes of Discovery on the Western Coast of the United States": maps, copies of maps, glosses on maps, and a catalog of maps: a conspectus of historical writings, a topography and hydrography of harbors, channels, bays, coves, estuaries, and inlets; a nomenclature of places; an inventory of charts; and a bibliography of books. In short, the "Notes" included everything appropriate. Central were maps of various kinds on the discovery and exploration of America, which he uncovered in Europe, duplicated, and brought to the United States. Next he produced similar "Notes" on the east and Gulf coasts. The three were deposited in the Coast Survey Office and entered, in abbreviated form and in the order in which they were written, in its superintendent's Annual Report for 1855, 1856, and 1857, respectively. Kohl was paid about $5,000 for the three. Later the Maine Historical Society published the east coast "Notes." 6

Meanwhile, Congress appropriated $6,000 for a repository of all maps referring to the history and development of the continent. This was a handsome sum, considering that members of Congress themselves were about to get a raise to only $3,400. But how many legislators toiled at government as Kohl labored at the history of cartography? He and a corps of assistants brought together maps found in America; they reproduced others available in Europe and transported the copies across the Atlantic. In 1857 the Coast Survey accepted the "Kohl Collection of Maps Relating to America." 747 items with annotations, later filed with the State Department, then passed to the War Department, stored in a troop billet, nearly destroyed in the Civil War, misplaced, scattered, and not yet fully recovered. 8

Kohl's American endeavors had not been limited to geography, history, and cartography. He also wrote of travel. For this he was well prepared. He had already described the land and characterized the people in popular books on such European countries as Germany, Denmark, Austria, Hungary, the British Isles, and the Balkans. What he had done for Europe he would do for North America. 8

He combined in his works close observation, detailed records, philosophical perspective, and exacting scholarship—all presented with literary grace. Therefore to read Kohl on travel is to be told not only of places and their inhabitants—which would be expected of any competent writing in the literature—but also to learn their relation to geography and history, appreciate their bit of the globe, and understand their place in the story of man. His travels are therefore excellent examples of the genre. Thus a Trappist monastery in Iowa prompts a discussion of the disparity between medieval and modern institutions and between religious and secular society; and an account of the monastery, New Melleray, on the Iowa prairie includes consideration of its influence on the people around it. A bluff on a Minnesota shore of the Mississippi, "covered with flickering fireflies," looks like "the dome of St. Peter's at Easter." In Minnesota Kohl observes a young couple searching for a homestead near Shakopee and writes an appreciation of them as representatives of the westward movement. He com-

4 Schumacher, "Kohls Amerikanische Studien, in Deutsche Geographische Blätter, 11:106 (April, 1885).
pares Indians and villages in Michigan to farmers and villages in Germany, with reference to the rise of the German village and to the ancient Teutons as Roman historian Tacitus found them. If inferior to Alexis de Tocqueville as a foreign commentator on America, Kohl was probably as good as any of the rest and better than most.

Accordingly, his discussion of an excursion out of St. Paul, which follows in this translation, begins in the authoritative voice of the historical geographer pondering the city’s origin, location, and destiny and summing up what 50 years of exploration and settlement had determined about the significance of the site. Aware of geographical influences on history, he saw that water had been, was, and would be influential. Minnesota’s situation between the Great Lakes and the Red River of the North, and at the headwaters of the Mississippi, determined how the area was to be explored, peopled, and developed. St. Paul would be important because it was near the point of a funnel that gathered the waters and commerce of so much of the North and West in those early days of the United States. More than 11,000 lakes remain one of Minnesota’s distinctive features, and Kohl refers frequently to bodies of water in Minnesota. Thus he took for granted the preponderance of rivers around St. Paul, mentioning them in passing. Of interest to him, and the burden of his first paragraphs below, therefore, was not that Minnesota would give rise to a city thereabouts but that St. Paul took shape exactly where and how it did.

On the excursion out of St. Paul, then, his was the pictorial eye of the geographer, the omnivorous eye of the historian, and the discriminating eye of the cartographer. He reported visits to properties changing hands in wild speculation; to the Falls of St. Anthony, where he penned one of the best descriptions of that landmark; to Minnehaha Falls, where he met immigrants entering the territory by wagon; to Fort Snelling, and to caves along the Mississippi. He missed little if anything, and he wrote graphically. Minnesota is fortunate to have such a careful witness and such a learned commentator, a scholar in the best of a great tradition, a skillful writer, and a leading authority on America, who recorded what he saw and said what he thought of the territory and its inhabitants.

TO ME, at first glance, St. Paul seemed misplaced. True, the fact is clear enough that somewhere around here, at a confluence of rivers of the upper Mississippi Valley, a big city had to be born. Within a few miles, three large rivers bring together waters drained from an area almost twice the size of the kingdom of Bavaria [about 54,000 square miles]. The St. Croix flows 200 [165] miles here from the vicinity of Lake Superior, a natural connection with the west end of that great inland

---

9 Reisen im Nordwesten, 178. 205. 293-300. 454.
sea. From the northwest comes the Minnesota, or St. Peter’s, almost 400 [330] miles long, 200 now navigable, passing through a very fertile region. And the Mississippi, largest of all, winds a course of nearly 600 miles in Minnesota and gathers unto itself the overflow of countless small lakes and streams. These three and their tributaries fan out much like the crown of a palm tree.11

Clearly enough, as I’ve said, somewhere near the center of the crown a rich, heavy fruit—a city—must emerge. However, it would be reasonable to expect it, not where it is, but at the mouth of the St. Croix, say, or near the Falls of St. Anthony. There would have been the finest opportunity for harnessing water power. Besides, they mark the navigable Mississippi’s upper limit, the very spot that should bear fruit. Another excellent place for a city would have been at the union of two great rivers, Mississippi and Minnesota, where the countryside spreads into a still broader and more beautiful landscape, soil is more fertile, and management of transportation by land and water is easier.12

I was told that St. Paul’s founders originally intended to put their city in the latter place. But Fort Snelling was in the way. It had long occupied the best location for a city—the high, level point at the Minnesota’s mouth. Though the government seems now ready to give up the old “military reserve,” when St. Paul was being founded eight years ago, giving up the reserve was not advisable.13 Also ruled out were the site at the falls, because big boats cannot go quite that far upstream, and the site at the mouth of the St. Croix, because they can go somewhat farther. So the city was built in none of the three seemingly apt places. Yet in that fact lies its strength: St. Paul construed a triangle of the three likeliest locations for a city and set itself at the center. St. Paul thus resembles St. Louis, which “misplaced” itself between the mouths of the Ohio and Missouri, on which its life depends.14

St. Paul is nearly nine miles from the falls that helped call the city into being. We drove there through genuinely beautiful and fertile prairie and forest, and occasionally through groves called oak openings. We were amazed and almost frightened to hear to what dizzying heights the prices of prairie and openings had soared.15

- Footprints of recently displaced Indians had barely disappeared.
- Everything was as Nature created it.
- Man had done practically nothing to alter it except here and there drive a stake or blaze a tree to mark the boundaries of a property.
- Ten years ago this land could have been got gratis.

Yet now it is already completely taken, and many hundreds of thousands of dollars changed hands to secure ownership where not a single potato has been harvested nor one cow eaten its fill. Land speculation is said to have raged hotter here in recent times than anywhere else in America. We were shown an ugly swamp, black with muck, a splendid buffalo wallow, which to us looked like something that, as people say, could not be

11 The St. Croix forms the Minnesota-Wisconsin border for some 127 miles; the Minnesota River rises in Big Stone Lake at Onamia on the western border of the state and flows some 330 miles to join the Mississippi at Fort Snelling. The Mississippi wanders from its source in Lake Itasca through a large part of Minnesota, forming the Minnesota-Wisconsin border southward from its junction with the St. Croix. Thus the waters of all three rivers flow southward to the Gulf of Mexico by way of the Mississippi. See, for example, James Taylor Dunn, The St. Croix: Midwest Border River (Reprint ed., St. Paul, 1979); Thomas F. Waters, The Streams and Rivers of Minnesota (Minneapolis, 1977).
12 Lieutenant Zebulon M. Pike, who explored the area in 1805-06 recognized the importance of the sites at the confluence of the Mississippi and St. Croix rivers and the Mississippi and Minnesota (St. Peter’s) rivers. He acquired land at both sites for the United States in a treaty signed September 23, 1805, with the Dakota (Sioux) Indians. One tract stretched for nine miles along both sides of the Mississippi upstream from its junction with the Minnesota and included the Falls of St. Anthony. See American State Papers, Indian Affairs, I:754 (Washington, D.C., 1832). Fort Snelling was founded in 1819 at the junction of the Mississippi and Minnesota rivers. On the fort’s establishment, see, for example, William Watts Folwell, A History of Minnesota, I:135-141 (Reprint ed., St. Paul, 1956).
13 Kohl probably refers to the huge reduction in the military reservation made in the early 1850s. For a good account of this action, see Folwell, Minnesota, I:422-434.
14 St. Paul was named for a log chapel that Father Lucien Galtier built and dedicated to the apostle Paul in October, 1841. Before this, a whisky-selling settler, Pierre (“Pig’s Eye”) Perrault, staked a claim on the site of St. Paul in 1838 (and almost gave the settlement his nickname) and two years later a group of Catholic French Canadians settled in the heart of what became St. Paul. At the seat of water power, on the east bank of the Mississippi at the Falls of St. Anthony, a town of St. Anthony grew up in the 1840s to rival St. Paul. Minneapolis developed across the river somewhat later and became an important industrial center, merging with St. Anthony in 1872. See Lucile M. Kane, The Waterfall That Built a City, 7, 12 (St. Paul, 1966). St. Paul, at the head of navigation, grew into the commercial metropolis of the area. Senator Stephen A. Douglas of Illinois, who helped make Minnesota a territory, wanted Mendota across the river junction from Fort Snelling, to be named the capital, but territorial delegate Henry H. Sibley chose St. Paul and the latter won out. See Folwell, Minnesota, I:243. At the junction of the St. Croix and Mississippi the town of Point Douglas was platted, but no sizable city grew up there. The town of Prescott, Wisconsin, is located there today.
15 Of two meanings of “oak openings,” Kohl seems to have meant “a piece of land having a few scattered oaks growing upon it,” rather than “a light sandy soil, poor, on which nothing but hard oak will grow.” See Sir William A. Craigie and James R. Hulbert, eds., A Dictionary of Americanisms on Historical Principles, II:1145 (Chicago, 1951).
given away. But, we were told, this swamp had already had half a dozen owners, remaining in its natural dismal-swamp state all the while, and now is worth I don't know what exorbitant sum. And this swamp may very well remain swamp still more years, pass to new ownership another six times, double its price at each sale, always with the expectation that when it is drained

16 Kohl was in St. Paul during the land rush of 1855-57. On the land boom, which "had its parallel in all our western states, but it may be doubted whether its violence and rage were anywhere quite equaled," here and below, see Folwell, Minnesota. 1:363. J. Fletcher Williams, A History of The City of Saint Paul to 1875, 357 (Reprint ed., St. Paul, 1993).

17 In that "tulipomania" (the wild speculation in the new flower from Turkey), one bulb in Holland might bring the equivalent of several thousand dollars. Indeed, before the crash of 1637 (comparable to that of Wall Street in 1929), demand so outran supply and greed so smothered ethics that bulbs composed the finest of dowries. The costliest commercial enterprises were mortgaged to buy bulbs that the buyer did not see, and that may never have existed. Alexandre Dumas told the story in detail and vividly in The Black Tulip, 3 vols. (1850). See Anthony Bailey, The Light in Holland, 139 (New York, 1970), E. V. Lucas, A Wanderer in Holland, 129 (New York, 1912).

18 Collapse did come. In August, 1857, "the panic-struck Minnesota with extreme violence", loans were recalled, business halted, land prices plummeted; and St. Paul lost half of its population. Folwell, Minnesota. 1:363. Williams, Saint Paul, 380.

19 Hennepin, a Belgian Recollect priest of the Franciscan Order, and a companion, Antoine Auguelle, viewed the waterfall in midsummer, 1680, after spending some two months in the Mille Lacs Lake area as captives of the Dakota Indians. Still captives, they were soon rescued by soldier-explorer Daniel Greysolon, Sieur Du Lhut. Regardless of whether Hennepin was the first white man to "discover" the waterfall, he was the first to see it and then publicize it widely with a famous book. After returning to Europe, he wrote A Description de la Louisiane (Paris, 1683) that became immensely popular. Though boastful, it was the first to tell Europeans about the waterfall and life in the area. Among many sources, see Father Louis Hennepin, Description of Louisiana (Minneapolis, 1938), with translation by Marion E. Cross and an introduction by Grace Lee Nute. Patricia Condon Johnston, "Portrayals of Hennepin: 'Discoverer' of the Falls of St. Anthony, 1680," in Minnesota History, 47:57-62 (Summer, 1980); Folwell, Minnesota. 1:27-30.

THE FALLS OF ST. ANTHONY fascinated Kohl. ink wash by R. O. Sweeny. circa 1860.
and two other large falls of North America: [Chaudière on] the Ottawa, and Niagara. At all three a wide stream takes a moderately sharp plunge over a neat, rectilinear plane. In all three an upthrust divides the downward turn into two parts. [All three are alike because, as the geological composition of North America's lithosphere is uniform, so must all players on that stage act according to its uniformity. True, Niagara, with its gigantic proportions, escapes close comparison with the other two, but St. Anthony and Ottawa are brothers, that is, with distinctly individual traits and only family resemblances.20 The more waterfalls I visit, the more excited I am about how Nature creates and shapes so that man can always see something he has never seen before. 

Nature's tool here, the Mississippi, carved these falls out of two layers: [Platteville] limestone above and beautiful light-colored [St. Peter] sandstone below. In the upper Mississippi Valley a traveler observes this limestone-sandstone formation anywhere a slope barest itself to the eye, but also along the Minnesota and St. Croix. Each layer is equally thick everywhere. Any piece broken off from either is therefore always uniform in structure. The friable sandstone, much more fragile than the limestone, can sometimes be broken off in pieces with the fingers. Hence the undermining of rock took place in the sandstone layer and gave first cause for the creation of a rocky precipice and a waterfall. The water dashing upward wore away the sandstone from below, while, presumably, water from above found its way through fissures and fractures to the sandstone, washed part away, and thus induced crumbling and collapse of limestone. These [hydraulic] circumstances produced all the various details now visible. Most prominent are the great pieces of rock, so remarkably uniform in shape, in great masses along both shores. Here and there these rocks, almost all of which come in parallelogram shapes, have sometimes been pushed like ice floes into step-like formations.21

Directly opposite the middle of the falls is a small island left by the water when its erosion was shaping the falls, a compact ruin in the middle of the river—tall, covered by bushes and trees, and named by the French l'île du St. Esprit, presumably a translation of an old Indian expression meaning Spirit Island. Indians call almost every isolated, lonely, uninhabited, forsaken island Spirit Island.22

On the shores of the island are the biggest and most remarkable of the colossal ashlars and freestones washed up or deposited there. Some are stacked flat, one atop the other, as if a pyramid collapsed or a giant construction project were to begin. Others stand almost vertical, 45 feet in the air, like gravestones half tipped over. The island is one of a kind. An accurate picture of it would decorate a geologist's study perfectly.23

Another peculiarity of these falls, probably also to be explained by the structure of the precipice, is the unusual way the water plunges over the edge. Never have I seen the like anywhere else. At Niagara, as at every other waterfall, the approaching river begins to foam hundreds of feet before the edge, and to swirl, and move faster. But here it shoots suddenly and without foam or swirl over a sheet of limestone, follows a fairly sharp declivity, maintains speed and depth, and as clear as crystal drops 16 feet almost straight down. I was unable to learn the reason for this singular descent, but I presume that the flat sheet of stone on which the river executes this remarkable maneuver extends halfway down the height of the falls, uninterrupted, perfectly smooth, and without fissure. I estimate the entire sheet at over 300 yards long and the river itself at about 650 wide, with the sheet in question at a couple of hundred yards wide. The sheet's downward inclination, I should also think, is slight—no more than two or three feet. The superb uniformity of the angle's incline is most remarkable. Water rushing over it appeared to be of the same depth everywhere and, as I've said, without foam or agitation. The water therefore looked as though a broad piece of transparent gauze or a liquid mirror were being drawn over the face of the rock.24

20 The geology of North America is not as uniform as Kohl says, but the three waterfalls occur in the same physiographic province, where uniformity is therefore considerable—hence the falls' similar configuration. Marshall Kay and Edwin H. Colbert, Stratigraphy and Life History, 9, 18 (New York, 1965). The upthrust at the Falls of St. Anthony may have been the small island (Spirit) noted by Jonathan Carver in 1766 and by Pike in 1805, which may have collapsed to rubble before 1817. See John Parker, ed., The Journals of Jonathan Carver and Related Documents, 93a (St. Paul, 1976).

21 Kohl's explanation of how these and similar Minnesota falls were formed is essentially correct: Frederick W. Sanderson, "Beginning and Recession of St. Anthony Falls," in Geological Society of America, Bulletin, 19:52 (March 30, 1908). Contrary to Kohl, the limestone and sandstone are not "equally thick everywhere"; indeed, they may not be equally thick anywhere. The underlying sandstone is usually much thicker than the superimposed limestone. See George W. Schwartz and George A. Thiel, Minnesota's Rocks and Waters: A Geological Story, 216, 278, 323-325, 327 (Revised ed., Minneapolis, 1963).

22 Indians believed that Spirit Island sheltered the ghost of Ampato Sapa, or Dark Day, a Dakota woman who, broken-hearted at her husband's taking a second wife, put herself and her child in a canoe, in view of the frantic spouse, over the falls to her death. The last portions of the island were destroyed in the Upper Harbor navigation project in 1960. See Kane, Waterfall, 2, 176.

23 Kohl's "great pieces of rock... in great masses along both shores..." and his "colossal ashlars and freestones" were probably Decorah Shale exposed by action of the river. See Schwartz and Thiel, Minnesota's Rocks, 325, 326.

24 Various early observers gave diverse measurements for the falls. Hennepin, in one of his exaggerations, put the height
at 50 or 60 feet, Kohl’s figure corresponds to the more accurate one made by Pike in 1805. For a summary and citation of literature, see Kane, Waterfall, 2, 5, 6.

25 Kohl’s lengthy and factual description seems dispassionate and more credible than many other accounts. Writing at a time when the falls were changing because of industrialization, Kohl tells how they looked to people who preceded him. In quality, only Stephen H. Long’s 1817 account rivals Kohl’s. See Lucile M. Kane, June D. Holmquist, and Carolyn Gilman, eds., The Northern Expeditions of Stephen H. Long, 70 (St. Paul, 1978). For other descriptions and citation of literature, see Kane, Waterfall, 2-4, 5-9, 69.

26 St. Anthony was incorporated as a city in 1855. Across the river, a government mill had been constructed in the 1820s to cut lumber and grind grain for Fort Snelling personnel. True industrialization of the area began in 1847 when Franklin Steele, who had early laid claim to land adjacent to the falls, dammed the east channel of the river. The suspension bridge, erected in 1854 between the western shore and Nicollet Island, joined the bridge built earlier from the eastern shore to the island.

Residents at this time thought of themselves as living in the “New England of the West.” If they seldom mentioned the English industrial center of Manchester, they did compare their city to Lowell, Massachusetts, and their falls to those that drove the mills there. Indeed, the name “Lowell” was one considered for burgeoning Minneapolis. See Kane, Waterfall, 20, 29, 38, 39, 53.

27 In the extensive logging operations at the falls, logs escaping from the booms battered the cataract, while sawmills, built right out into the east channel on the dam, spewed sawdust and slabs into the water, endangering the falls themselves and looking horrid. Over 8,000,000 board feet had been floated to the falls as early as 1851. Kane, Waterfall, 27.

I HAVE now summarized briefly and approximately what I found interesting about my observation of the falls. The rest was distressing—at least for a friend of wild and unspoiled nature, of “spirit islands,” and of magnificent works of creation that a devotee of nature dedicates to saints. A millwright, a weaver, or a Sawyer might also enjoy what perturbed me; but the spirits and saints have now been driven off, the charm sullied. City building and speculation fever, and the archenemies of beauty in our time have taken over here and are gradually turning the lovely haunts of nymphs and mermaids into a very prosaic millpond. The entire vicinity is on the verge of becoming a temple to the gods of manufacture and trade.

Above the falls a suspension bridge (by the way, the first anywhere across the Mississippi) already swings over the river. Houses, springing up like mushrooms and crowding the falls on both sides, are becoming the city of St. Anthony, friendly and youthful. People want and definitely expect it to be the Manchester or Lowell of the northern Mississippi states. Snarling their threat, lumber barons and other speculators have already seized the beautiful nymphs and mermaids: La vie ou la bourse [Your money or your life].

Walls and dams have been built out into the falls, and the goddesses reduced to slaves who work their treadmills. The water being so low, the Mississippi could not carry away the massive load of sawdust, chips, odds and ends of board and plank, and logs dumped in upstream. This industrial waste was stuck everywhere in big jumbled heaps in the falls’ attractive little niches and in rocky clefts intended by Nature for the joyous downward passage of crystalline waters. It was a miserable picture, I say, and when I looked at it I believed I saw the good old river god himself before me, powerless, groaning under that excessive load of woody trash that had been dumped on him, shrunken, pitiful, and leaning on his rock.

All authorities agree that these falls are the most important and strongest source of water power in the whole United States, primarily because they are the most suitable, most accessible, and most easily har-
nessed. Many falls have so fortified themselves behind boulders and hidden themselves in wilderness that Misses Improvement just has to leave them in peace. But these falls of the Mississippi are so placed by nature as to seem to have chosen the situation themselves.

Our friends took us along the Mississippi a little above the falls to show us something of what the river is like there. I definitely intended to go farther on my own sometime but unfortunately never could. So, to this day, I am grateful for having looked along a few miles of that winding river and seen how, in those miles, it is no giant anymore, only a stream of third magnitude, flowing through meadows and with inferior bluffs on either side. Then I lost sight of the river in the mist of the horizon. From that point on, the river remains a dark mystery to me.

Minnesota is rich in waterfalls, probably because it is high tableland that drops abruptly several times to the north and south. So, on our return, to the west of the Mississippi, we got to marvel at another natural "fountain." This is a quite small, clear stream that also rushes over a steep declivity of limestone and sandstone, probably the same declivity that creates the Falls of St. Anthony. Though formed by the same declivity, Minnehaha Falls—that is the euphonious name of this pretty sight—are higher than the Falls of St. Anthony.

Minnehaha, an Indian word, famous now because of Longfellow's Hiawatha, means "laughing water." No name could better describe this sparkling little stream that leaps in a bold, graceful curve to a basin of the purest sandstone below. Looking at it, I hoped Minnehaha would remain the name and not be replaced by the cacophonous Brown's Falls, which suggests nothing and says nothing except the name of some Mr. Brown who probably wants to build a sawmill here. Yet many have begun to use Brown's Falls instead of the onomatopoetic Indian name.

WE MET a family of migrants—movers, as they are called—who had stopped near the falls for the noon meal and to repair their wagon. Often in my American travels I had seen movers' white wagons and slow oxen but until now nothing of them in detail except the names of their destinations—"Minnesota"—"Iowa"—"Wisconsin"—that they always have painted in large, black letters on their wagons' white canvas. They do this, it is said, because then every Paul Pry can read where they are going and they won't have always to answer that

**MINNEHAHA FALLS, or Little Falls, as depicted in 1834 in a colored lithograph by artist Henry Lewis**

28 The Falls of Saint Anthony was the last and greatest of the major waterpowers brought under development in the United States. Until it was eclipsed by the far more striking conquest of Niagara Falls the massive cataract at Minneapolis led the field. Here a year-round average of some 25,000 tons of water a minute fell some seventy feet within a mile, representing a gross capacity estimated at 120,000 horsepower.” Louis C. Hunter, A History of Industrial Power in the United States, 1780-1930, 1:233-242 (Charlottesville, Va., 1979). Hunter acknowledges that his chief source here was Kane, Waterfall.

29 Minnehaha Falls are higher than St. Anthony's estimated 16 to 18 feet—estimates for the former vary from 40 to more than 90 feet—but the Falls of St. Anthony carry much more water and are much wider. Federal Writers' Project, Minnesota: A State Guide, 192 (New York, 1938). Warren Upham, Minnesota Geographic Names, 230 (Reprint ed., St. Paul, 1969).

30 Henry Wadsworth Longfellow's poem, The Song of Hiawatha (Boston, 1855), was the "latest thing" when Kohl arrived in Minnesota. Kohl has the change of name backwards. "Brown's Falls" was passing from currency, not entering it. The falls, also called "Little Falls," was probably named for Major General Jacob Brown, and not for Joseph Renshaw Brown, one of Minnesota's most prominent settlers. June Drenning Holmquist and Jean A. Brookins, Minnesota's Major Historic Sites: A Guide, 38 (St. Paul, 1983).
question. (This custom, universal among movers, leads to the conclusion that Americans are readier with questions than answers.) Here I saw for the first time these remarkable people up close.®

They were a whole wagonload of children and a mother who looked very wretched and careworn; she already seemed old enough to be her husband’s mother. They had just unhitched their oxen, and the oldest son was driving them to water while the father took a hammer to a piece of the wagon’s iron. The mother had built a fire to prepare the universal “bread of the West.” It is not of grain threshed from a sheaf of wheat, but of meat cut from the back of a hog, dried or salted and smoked, carried on prairie expeditions for months, and cooked morning, noon, and night. Here in the West, everybody is offered this pork; we were presented some now. Half of hospitality consists of offering pork and having it accepted. You can tell these rustics a hundred times that you can’t stand pork, that, to your mind, Westerners’ sick and yellow look results from a steady diet of pork; and that you never eat pork—never, never! No matter. At the next stop, contrary to what you said, they will proceed as if you have an insatiable appetite for pork from morning until night.®

But it is unjust to be irritated by this practice. The eating of pork is most understandable. These movers, “pioneers of the West,” had no choice but to introduce to western cuisine this food that is now ineradicable from that cuisine. The few deer, elk, and moose remaining from Indian times were practically exterminated. And even if they still abounded, they—as well as wild turkeys, prairie chickens, ducks, and geese—would not exactly come running into camp and throw themselves on the block. Therefore something tractable, convenient, and durable must provision these wagons. And this can be nothing but smoked or salt pork. Early English seafarers, dealing with spoilage at sea, brought pork to the New World.®

SIMILARLY, as descendants of those seafarers continue ever westward over billowing prairies, sailing this grassy ocean as that briny one was formerly sailed, so they have salt pork as their one and only daily bread. In addition, endless oak forests in the eastern half of the West furnished superb feed for swine; and swine, quickly taking over where elk and moose were exterminated, multiplied like flies. The forested parts of Virginia, Kentucky, Pennsylvania, and Ohio are now the

---

® As early as 1810, “mover” was used to mean an emigrant “moving west to settle” or one “participating in the tide of western migration”; in Kohl’s time it might also have included “a tenant farmer who exhausts the original fertility of a piece of land and then moves on to repeat the process again and again.” Mathews, ed., Dictionary, 2:1092. On the role of wagons—a basic vehicle of western expansion—and western roads see Thomas D. Clark, Frontier America: The Story of the Westward Movement, 295, 396 (New York, 1959), and Arthur J. Larsen, Roads and Trails in the Minnesota Triangle, 1849-60, in Minnesota History, 11:394 (December, 1930).

® On pork’s being carried and eaten by travelers to the West, see Charles Wayland Towne and Edward Norris Wentworth, Pigs, From Cave to Corn Belt, 244-246 (Norman, Okla., 1950).

® Although elk were seldom if ever plentiful in Minnesota, there is no evidence that the three animals, especially deer, had been “practically exterminated” by 1855. See W. J. Breckenridge, “A Century of Minnesota Wild Life,” in Minnesota History, 30:123 (June, 1949), Thomas S. Roberts, “The Vanished Mammals of Minnesota,” in Thaddeus Surber, The Mammals of Minnesota, 3-13 (St. Paul, 1932).
world's inexhaustible producer of pork. No wonder that in the middle of the pork belt should arise such huge pork markets, immense slaughterhouses, wealthy pork dealers, and the pork-packer aristocracy found in Cincinnati, Louisville, Chicago, etc., and described by the English authoress.  

Indeed, taking a broader view, all things considered, the historian must be more pleased than irritated to see such a mover's wagon and its large provisions of pork, and to smell the pork dinner offered him. For, in American history, the hog is a very important element. Not only here in the North but also in the South and on the hemisphere from pole to pole. No other animal brought here from Europe was so well received from the very beginning; none multiplied everywhere so rapidly; and none played such a role in the discovery and exploration of the New World. [Francisco] Pizarro's expedition, crossing the barren Andes to explore the Amazon, brought along great herds of hogs as main provisions. [Hernando] de Soto and company, heading north into the Mississippi Valley, did the same. Read old Spanish conquistador historians' paeans to this beast, calling it the best and truest companion of armies in American forests and swamps. Bravest of travelers, it always roots and feeds itself, pushes steadily onward, and makes its way through the densest of thickets where neither sheep nor ox can follow. It is as at home in swamps as in forests, half amphibian that it is, and can find food in dry places or wet. Doubtless, without the hog, many of the boldest Spanish exploring expeditions would never have been tried. Moreover, lacking the hog as the basis of human existence here in the West, perhaps a large part of this region of the Mississippi Valley would not be settled or even explored. Movers even put pork in the mouths of infants. Usually nothing but Indian corn is eaten with pork.  

The movers we met at Minnehaha came from Missouri, or, as they say, "M'soura." It is a very common western solecism or, as Americans say, a Westernism to change the final "i" to "a." Thus, Westerners also say "Miami" for "Miami." Of "prairie" they make "paraera." I cannot say quickly enough how and why this change of "i" to "a" offends my ear. To me this pronunciation is most slovenly and extremely lazy. Of course a foreigner has to travel awhile in this country

For the importance of the hog in farming, of pork in the diet, and of swine in the economy in early America and at Kohl's time, see Towne and Wentworth, Pigs, 8, and Sam Bowers Hilliard, Hog Meat and Hocokc: Food Supply in the Old South, 1840-1860, 92-111 (Carbondale and Edwardsville, Ill., 1972).

The "authoress" was Frances Trollope, whose disparaging 1832 study of the United States was a best-seller in England, translated and widely read on the Continent and thus known to Kohl. For her comments on pigs and society in Cincinnati, see Donald Smalley, ed., Domestic Manners of the Americans by Frances Trollope, 58, 88, 105 (New York, 1949).

Towne and Wentworth, Pigs, 70-86, confirm the discussion in this long paragraph. "Indian corn" was the term in Kohl's day for what is now known in America as corn, the maize or "cereal grass which Europeans found in use here among the Indians." Mathews, Dictionary, 1874.

ON THE PRAIRIE stretching west of Fort Snelling in October, 1855, commanding officer Major Thomas W. Sherman's light artillery battery is shown drilling. Watercolor by Alfred Sully.
before he notices it as a departure from standard speech. 36

The woman of the family was born in Massachusetts, but in the course of time—she had already been in the West 20 years—she had taken on all Westernisms. Therefore she often used "mighty" instead of "very," talked frequently of "heaps of grass" and "heaps of money," said "plump down," and spoke atypically of "fellows," "boys," and other things. My eastern companions called her use of these words pure Westernism, though I could not always identify them as such. In short, I think, the West is notorious for having called forth grandiose expressions like "mighty," "heaps," and others of a scale to fit the territory itself, the huge West. 37

These people had been on the move since July, 1854, crossing Missouri and Iowa. Somehow in Iowa a son broke a leg and they had to spend the winter there nursing him. In the spring they resumed the trek. Nowhere had they seen a place where they wanted to buy land and settle. They had not found a home to their liking in Minnesota, either. They told us they had begun to think they were beaten. Their questions to us revealed ignorance even of what part of the country they were in. They seemed to us like lost souls and were delighted when we gave them a map of Minnesota and they could correctly identify all rivers and counties. One of our party gave them the address of a local land office. More than money, this kind of people usually lack knowledge, opportunity, and perhaps the firm resolve to settle down; because, typically, they usually have in their wagons (besides pork) a strongbox and $1,000 or $1,500 hidden among beds, blankets, kettles, bowls, hatchets, rifles, pistols, knitted goods, and harness. So these movers, despite migratory habits, probably found a home somewhere before fall. 38

ON OUR RETURN we also visited famous Fort Snelling, named for an American colonel [Josiah Snelling]. Its situation is beautiful, and it has stood a long while even though built on sand; that is, on one of those remarkable sandstone beds that underlie limestone and are often exposed hereabouts. The sandstone is so friable that swallows are able to peck holes in it and lay eggs in them. 39

We met the friendliest and most cordial officers in the fort. They took us through extremely clean barracks and other living quarters and showed us splendidly powerful horses and the cannons of the renowned "Sherman's light artillery battery" that distinguished itself in the Mexican War and is now stationed here; as well as their force of 80 men (20 are Germans), "the best provided soldiers in the world": their little garden where the soldiers grow strawberries, beans, and other fresh delicacies; a wolf and a dog fastened to the same chain; and various other curiosities of an American garrison. 40

For nearly 40 years, Fort Snelling was the key outpost against Indians of the upper Mississippi. Now, with the region sufficiently settled, the fort no longer has that role. New forts or posts have been established 100 miles west and north; and there is talk of closing these old ones, and of putting in this one a military school for these northern regions. 41

From the first, Fort Snelling has been part of the

36 Kohl’s hearing of “M’soura” as the family’s pronunciation of Treaties of their state was neither infrequent nor a solecism. See Harold Wentworth, American Dialect Dictionary, 282 (New York, 1944); Allen Walker Read, “Pronunciation of the Word ‘Missouri,’” in American Speech, 5:2236 (December, 1935). “Westernism” was probably current in Kohl’s day to signify "a word or expression supposed to be peculiar to the West." Mathews, Dictionary, 2:1852. “Paraera” was probably Kohl’s hearing of “peraira,” recorded in 1849, or perhaps of “pererah,” recorded in 1882. See Peter Christopher Watts, A Dictionary of the Old West, 1850-1900, 250 (New York, 1977); Wentworth, Dialect Dictionary, 473.

37 For various words dealt with in this paragraph, see Wentworth, Dialect Dictionary, 282, 388; Mathews, Dictionary, 1:759; Oxford English Dictionary, 7-1021 (London and New York, 1933).

38 At the time of Kohl’s visit in 1855, a great immigration boom had just begun in Minnesota. Only four years earlier, the treaties of Traverse des Sioux and Mendota in 1851 had forced the Dakota Indians to move westward, thus opening a vast area to white settlement. See Lucile M. Kane, “The Dakota Treaty,” Minnesota History, 32:65-80; Folwell, Minnesota, 1:503-515.

39 Kohl does not identify the source of the quotation. The battery was that of Major Thomas W. Sherman (1813-79), which had “rendered conspicuous service” at Buena Vista, Mexico, in the Mexican War. Sherman (not to be confused with the more famous William Tecumseh Sherman) began a stint at Fort Snelling in 1853 and in the Civil War was brevetted brigadier general. Dumas Malone, ed., Dictionary of American Biography, 17-92 (New York, 1935).

40 The military school never came to be. Instead, the fort was suddenly sold in 1857 to a resourceful businessman, Franklin Steele, who had once served as sutler at the post. The fort was shortly commandeered to train soldiers for the Civil War and the Dakota War of 1862. The new posts Kohl mentioned were Ridgely to the west on the Minnesota River on the fringe of the Sioux reservations and Ripley to the north on the upper Mississippi to guard against the Ojibway Indians. Folwell, Minnesota, 1:503-515.
history of the whole, large Minnesota Territory. An
American woman who lived here a long time with her
husband, the commanding officer, recently wrote a his­
tory of the fort. I read her book with much pleasure.

Truly professional histories of the many diverse forts of
the West would surely be a very worthwhile contribu­
tion to the history of mankind. They would particularly
reveal how and where Indians lived. And in those places
and among those people some of the world’s most re­
markable and most characteristic transactions and events have taken place. Someday, perhaps, people will
study the history of this fort as carefully as we in Ger­
many study remains of castra the Romans built along the
Danube and Rhine.

WE ALSO VISITED, a few miles from Fort Snelling,
one of many remarkable caves that water has washed
out of sandstone here and there I think somebody told
me that it is called Crystal Cave because the small
stream that bubbles out of it is clear as crystal. The en­
trance is a true painter’s dream—a broad, spacious,
beautifully domed opening bathed in sunlight falling
through the green of surrounding trees. The walls are
very white and covered with shiny bits of pure quartz.
Swallows have pierced it with their beaks in a hundred
places; arm-length holes for nests that hold their young.
People have already noticed that sand has other uses,
and a glass factory will soon be built here. The cave
twists deep underground. In its depths can be heard a
hissing and boiling as in a kettle, said to come from sub­
terranean falls of the stream that exits the cave. 43

The same sandstone contains a much more interest­
ing cave on the Mississippi somewhat south of St. Paul,
the cave famous among white people since the days of
Mississippi explorers [Jonathan] Carver and [Zebulon]
Pike, and among Indians since time immemorial. I was
all the more eager to see this cave because it has its
place in our German literature in a poem by [Friedrich
von] Schiller. I visited it next day with a friend who
knows local history. The Sioux call the cave “Wakan­
Tepee,” meaning home of the Great Spirit. Americans
usually refer to it with the name of the man who discov­
ered it: Carver’s Cave. 44

It is two miles from St. Paul and on the bank of the
Mississippi, at the foot of tall bluffs. At the top of these
bluffs is a long row of mounds. Though still respected
by Indians and used occasionally by them for burial, they
originated (like all Mississippi mounds) in pre-Indian
times and show that the earliest inhabitants of America
honored this bluff and its cave. One of the mounds was
recently excavated and nothing found but a few traces of
human bones. 45

As usual the elevation of these mounds offers an­
other gorgeous view of the countryside. At our feet: the
Mississippi, to one side St. Paul’s friendly and attrac­
tive plateau, stippled with the already numerous houses
of what will be the great capital of the Northwest: oppo­
site: beautiful bluffs on the western bank; and all
round: fresh green of deciduous forests. Narrow Indian
paths among the mounds show that Sioux visited this

42 This must have been Mary Henderson Eastman (1818-87), wife of Captain Seth Eastman (1805-75), intermittent
commander of the fort (1841-48) and a notable artist who able painted scenes of the area and also Indian life. The 1849 book to which Kohl refers probably is Dahrougah, or: Life and Legends of the Sioux around Fort Snelling (Reprint ed., Minneapolis, 1962) by Mrs. Eastman. John Francis McDermott, Seth Eastman’s Mississippi: A Lost Portfolio Recovered (Urbana, Ill., 1973) and Seth Eastman: Pictorial Historian of the Indian, 32-62 (Norman, Okla., 1961).

43 This was probably Fountain Cave. Artist Henry Lewis addressed it at greater length than Kohl did, but in important
details the two descriptions coincide. See Henry Lewis, The Valley of the Mississippi Illustrated. 88 (St. Paul, 1867).

44 Carver came upon what became the best known of caver­
cerns occurring in the St. Peter sandstone of the area in the fall of
1766. He remarked on its depth and mentioned the Indian
burial ground nearby. Most important explorers and visitors
to the region had something to say about the cave and the
burial mounds. See Holmquist and Brokaws, Historic Sites, 20. Carver, Travels Through the Interior Parts of North
America in the Years 1766, 1767, and 1768, 63, 84, 86 (Reprint
ed., Minneapolis, 1956). The poem is Friedrich von Schiller’s “Nadowessers Todtenlied,” written in 1797; see note 49
below.

45 “Mound” signified “a kind of extensive earthwork” made by aboriginals who constructed burial and fortification
mounds chiefly in the Ohio and Mississippi valleys, the Gulf
states, and the Great Lakes region. See Craige and Hubbert, eds., Dictionary, 3:1552. For a brief account see Henry C.
Shetome, “Mounds and Mound Builders,” in James Truslow
Adams and R. V. Coleman, eds., Dictionary of American
History, 4:34 (New York, 1940). Kohl’s reference to a mound
“recently excavated” probably refers to one 260 feet around
and 18 feet high that Edward D. Neill dug into, unearthing
“fragments of skull, which crumbled on exposure, and perfect
shells of human teeth, the interior entirely decayed.” Edward D. Neill, The History of Minnesota From the Earliest French
Explorations to the Present Time, 208n (Minneapolis, 1852). See also the discussion of Indian Mounds Park in Holmquist and Brokaws, Historic Sites, 18-20.
magnificent spot right up to the present. A small stairway, little used by whites, took us to the river and the cave’s entrance.

In Carver’s day (1766) this entrance seems to have been tall, broad, and in the original undamaged condition as left by the stream that created the cave. But spirits of the cave seem to have wanted to close it to Americans. A thick mass of the overhanging sandstone recently collapsed and filled a large part of the cave. In 1817 the traveler [Stephen H.] Long crawled into the cave only with difficulty. A suitable entrance to part of the cave has since been opened and walled up.46

We entered, passing through a brightly lighted antechamber, and found a long but low room. On the sandstone ceiling, in big, black letters in soot or the smoke of torches, were “Carver,” “Pike,” “Nicollet,” and names of other famous explorers of the Mississippi. More interesting to me than those names were hieroglyphics carved in sandstone in profusion both on the walls of this inner room and on those of the antechamber.

THE HIEROGLYPHICS are of very diverse kinds. Recent European visitors obviously made many of them. But most are products of Indian draftsmanship, and anyone only a little familiar with Indian design and drawing can easily distinguish genuine from spurious. I had never seen these remarkable images reproduced in any book. My companion, whose authority I trust because he was one of the founders of the Minnesota Historical Society, assured me to my astonishment that they had never been reproduced. Therefore I copied into my notebook as many as I could set down at all clearly and was astounded at the extraordinary similarity between them and ones Americans have reproduced and published as found in other places thousands of miles away: New Mexico, for example.47

Not only are outlines the same in general. In many instances every line, the angle of every line, and the number of lines are so exactly alike [in items from widely separated places] that you would believe the same hand had been at work here on the upper Mississippi and there in New Mexico. Perhaps some day I shall find time and place to illustrate this phenomenon with drawings and more detailed discussion for the curious German reader.

Carver also mentions these “hieroglyphics” and says they looked very old: “time had nearly covered them with moss.” Which is how they look yet. He called here twice, once when he ascended the Mississippi and again when he returned. He says the Sioux or, as he called them, the “Naudowessies,” customarily held a great annual council near the cave to decide on policies for the coming year. He saw one, as well as a burial, and heard the Indian eulogy he quotes in an appendix.48

Our Schiller read Carver’s account of death among the Indians and was inspired to write his excellent poem, Des Naudowessies Todtenklage. Bulwer and one or two other Englishmen translated it into English and thus brought it to frequent attention and admiration by Americans.49 A German intellectual takes pleasure in visiting, in distant lands, such places associated with our classical German literature.

46 See Long, Northern Expeditions, 67. Long found the cave less interesting than it might have been before debris fell in it. Joseph N. Nicollet reopened the cave in 1837, removing enough rubbish to convince him of the accuracy of Carver’s description. See Lewis, Valley of the Mississippi Illustrated, 90; Joseph N. Nicollet, Report Intended to Illustrate a Map of the Hydrographical Basin of the Upper Mississippi River, 72 (26 Congress, 2 session, Senate Documents, no. 237—serial 380); Holmquist and Brooks, Historic Sites, 20.

47 Kohl’s companion was Edward D. Niel, clergyman, educator, historian. See General C[hristopher] C. Andrews, ed., History of St. Paul, Minn., 23 (Syracuse, N.Y., 1890). Niel wrote the first four chapters of this work. The “hieroglyphics” in rock are more correctly called petroglyphs. They and their counterparts on other surfaces occur over much of North America; they are coincidentally similar and often not of particular significance. See Frederick Webb Hodge, ed., Handbook of American Indians North of Mexico, 2:243 (Smithsonian Institution, Bureau of American Ethnology, Bulletin 30—Washington, D.C., 1910).

48 Carver, Travels, 64, 84. “Naudowessies.” Carver’s most frequent spelling, more often occurs in later writings as “Nadoweessioux” or “Nadowessious;” a contraction of which is “Sioux,” meaning “snake” or “snake-like enemy.” This name was originally given the Dakota by their enemies, the Ojibway. See Hodge, Handbook, 2:577; Carver mentions the council and burial in Travels, 84, 86.

49 Friedrich von Schiller (1759-1805), poet, playwright, historian, was considered second only to Johann Wolfgang von Goethe (1749-1832) in German literature. Schiller wrote the poem in 1797 after reading Christoph Daniel Ebeling’s German translation of Carver’s Travels. For an English translation of the poem and commentary on it, see Theodore C. Blehen, “A Note on Schiller’s Indian Threnody,” in Minnesota History, 39:198-200 (Spring, 1965). Bulwer was Edward George Earle Bulwer-Lytton (1803-73), English novelist and playwright best known for his novel, The Last Days of Pompeii (1834). He published a translation of Schiller’s poems in 1843. THE PORTRAIT on p. 125 is from Hermann Albert Schumacher, J. C. Kohls Amerikanische Studien, frontispiece (Bremen, Germany, 1858): The originals of the illustrations on p. 129, 131, and 135 are in the MHS collections; that on p. 136 is through courtesy of the Gilcrease Institute of American History and Art, Tulsa, Okla.; the picture on p. 134 appears in color in Henry Lewis, The Valley of the Mississippi Illustrated, between p. 50 and 51 (St. Paul, 1967); all others are in the MHS audio-visual library.