## INTRODUCTION

Early in October 1851, a very young second lieutenant in the Corps of Topographical Engineers sat at his desk in Philadelphia and wrote to his father. Slim, black-haired, and moustached, with a penetrating gaze that became somber as the years passed, Gouverneur K. Warren pondered his future. He had graduated second in the Military Academy's class of 1850 and already had a reputation for uncommon intelligence. In fact, rumors circulated about his return to West Point as a mathematics instructor. While flattered by the gossip, Warren hoped to avoid such an assignment, at least for a while. As he confided to his father, "I would rather rough it than be sent there before hard service had made me above reproach."<sup>1</sup>

Warren soon had the field work he craved. Like other members of the small, elite Corps of Topographical Engineers, he became involved in an expanding program of navigation improvements. After two years as an assistant engineer on the topographical and hydrographical survey of the Mississippi Delta, he worked for Colonel Stephen H. Long on the canal around the falls of the Ohio River at Louisville. From there he moved to the upper Mississippi, where he took charge of the surveys for improvement of Rock Island and Des Moines rapids. By 1855 he had honed his abilities with four years of practical experience.<sup>2</sup>.

In 1855 the nature of Warren's duties changed dramatically. America's attention focused more than ever on the vast region west of the Mississippi River. The huge southwestern domain obtained after the Mexican War, the twin fevers for California gold and Oregon farmsteads, and the political debates over a railroad route to the Pacific coast meant important work for the Topographical Engineers. Exploring parties examined the new country, reported on its resources, surveyed wagon roads, and led expeditions over proposed railway lines across the plains and mountains. Assigned to compile a map of the trans-Mississippi West in the Office of Pacific Railroad Surveys, Warren began to play his part in the great westward movement.<sup>3</sup>

The widespread interest in the new country joined with more specific developments to shape Warren's role. In a drama played out on the banks of the North Platte near Fort Laramie in August 1854, an irate emigrant, a wandering cow, and a green second lieutenant



Gouverneur K. Warren. Nebraska State Historical Society.

sparked a conflict that later took Warren beyond the Father of Waters into the hunting grounds of the Sioux. The emigrant was one of a large number of Mormons bound for the Great Salt Lake and the haven first pointed out to Brigham Young in the reports of Lieutenant John C. Frémont of the Topographical Engineers. The Mormon emigrant owned the cow, until it strayed and ended its life in Indian cook pots. After the owner found out about the cow's demise, he complained to First Lieutenant Hugh B. Fleming, who commanded Fort Laramie. Fleming ordered Second Lieutenant John L. Grattan to capture the Indian miscreant, a Miniconjou Sioux warrior who was a guest in a Brulé Sioux camp. His hosts would not surrender him, so Grattan unlimbered a small artillery piece and opened fire. The Sioux cut down the young officer and twenty-eight of his twenty-nine men. One wounded soldier made it back to Fort Laramie with the awful news before he too died.<sup>4</sup>

The tragic affair, which quickly became known as the Grattan massacre, had wide repercussions. The fire fight in the Brulé camp was, as historian Robert Athearn observed, "like a rock thrown into a pond." As the ripples widened, the relative calm on the northern plains ended, and a period of intermittent Indian wars that lasted over twenty years began. The military presence in the region grew enormously, the pressure forced the tribes into ever-shrinking spaces, and the Missouri River fur trade that depended on Indian bows and traps for pelts died.<sup>5</sup> Gouverneur Warren took part in all of these developments.

The Army reacted swiftly to the news of the Grattan disaster. Scarcely two months after the fight, the War Department ordered Colonel William S. Harney to report to St. Louis and take command of an expedition against the Sioux. The directive reached Harney in Paris, where his wife and daughter lived, soon after he had crossed the Atlantic. Although he had been promised a two-year leave after a hard tour of duty in Texas, the tough older campaigner packed his bags and, on Christmas eve of 1854, boarded ship for his return to the states.<sup>6</sup>

While Harney organized his force of dragoons, infantry, and mounted artillery, Lieutenant Warren got his marching orders. He was not the first choice to serve as Harney's topographer. Colonel John J. Abert, Chief of Topographical Engineers, initially assigned Captain Thomas J. Lee to the expedition. Lee resigned from the Army, and Abert had to take Warren from his job with the Office of Pacific Railroad Surveys. He received his instructions in late April and reported to Harney in St. Louis a month later.<sup>7</sup>

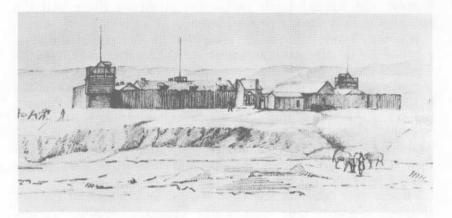
Even before he arrived in the frontier metropolis, Warren prepared for his assignment. He took along a copy of "Instructions for Astronomical and Magnetic Party," which Lieutenant Amiel W. Whipple had written for another novice topographer, Lieutenant Joseph C. Ives. Whipple's instructions also included reminders on the



William S. Harney. Library of Congress.

care of instruments in the field and technical hints on their use. Once in St. Louis, Warren studied the maps of topographical engineers Frémont and Lieutenant Howard Stansbury, who had already traversed parts of the northern plains, and talked with veteran frontiersmen of the American Fur Company. He also met and hired as meteorologist Paul Carrey, an experienced western traveler who had been as far as the White River in northwestern Nebraska and Pueblo in present-day Colorado. From his conversation here and later at Fort Pierre up the Missouri River, he sketched the terrain and jotted down a handful of Sioux words, among them the phrases for "where is the road?", "where is the shortest road?", and "which way?"<sup>8</sup>

Harney moved his 600-man force westward in two columns. Most of the expedition, which included units of the Second and Sixth Infantry, Second Dragoons, and Fourth Artillery, went overland with him. Two companies of the Second Infantry steamed up the Missouri on a paddle-wheeler to establish a supply base at Fort Pierre, which Pierre Chouteau's American Fur Company had just sold to the government after deciding to relocate its upriver operations nearer to the Rocky Mountains. Warren went with the Fort Pierre contingent to reconnoiter the country and lay out a military reservation for the fort. With the river unusually low, the steamer took thirty-nine days to make its way to Pierre.<sup>9</sup>



Fort Pierre, drawn by Captain Alfred Sully of the Second Infantry in 1857. South Dakota State Historical Society.

Dakota can be blazing hot in July, and so it was in the summer of 1855. In no time Fort Pierre joined the ranks of frontier posts hated and cursed by their garrisons. Soldiers of the Second Infantry summed up their feelings in song:

Oh, we don't mind the marching nor the fighting do we fear,

But, we'll never forgive old Harney for bringing us to Pierre, They say old Shotto [Chotteau] built it, but we know it is not so; For the man who built this bloody ranch is reigning down below.<sup>10</sup>

The fierce glare of the sun did not deter Warren. While continuing to gather information from the mountainmen, he laid out a 270square-mile reservation that encompassed a timber reserve, grasslands enough for forage, and arable ground for a post garden. The site in the heart of Sioux country had been a choice one for the fur trade, but the harshness of the country forced Warren to establish a huge reservation. While plotting the boundaries, the heat felled his theodolite bearer, an infantry soldier detailed as Warren's assistant. The soldier recovered; the instrument did not.<sup>11</sup>

Warren had explicit orders regarding his actions after completion of his work at Fort Pierre. He was to go back down the river to Fort Leavenworth on the first available boat and await instructions. However, he did no such thing. Perhaps, as historian William Goetzmann suggests, he had an impetuous streak akin to John Frémont's. Maybe he was just curious about the unknown country to the south of Pierre. In any case, he ignored the advice of the officers at the Fort, recruited six frontiersmen to accompany him and Carrey, and headed south across the Niobrara River and the sandhills to Fort Kearny on the Platte.<sup>12</sup>

Warren's letters and reports show that he understood and even relished the dangers of the 300-mile trek. As he knew, the Sioux to the west and the Pawnees to the east regularly crossed the dune country to raid each other's horses. He thought the Brulés would not hesitate to strike a small military party and was familiar with the Pawnee reputation for marauding. "We shall," he wrote at Fort Pierre, "travel as men of the country, and exercise the greatest vigilence." And so they did. Warren and his party slipped out of Pierre and made their way stealthily southward, crossing several fresh trails and passing recently used Pawnee camps.<sup>13</sup>

Fifteen days later, to the astonishment and delight of Colonel Harney, Warren rode into Fort Kearny. Proudly Warren enumerated the results of his "adventure of great danger": a detailed topographical sketch of the hitherto unexplored trail and a barometric profile of altitudes. In his report he also included a sevenpage "Description of route from Fort Pierre to Fort Kearny," a landmark-to-landmark itinerary which identified the locations and quality of wood, water, and grass. Of even greater importance to Harney, who was about to set out in pursuit of the Brulés, was Warren's party itself, the topographer, his assistant, and six firstrate guides and interpreters.<sup>14</sup>

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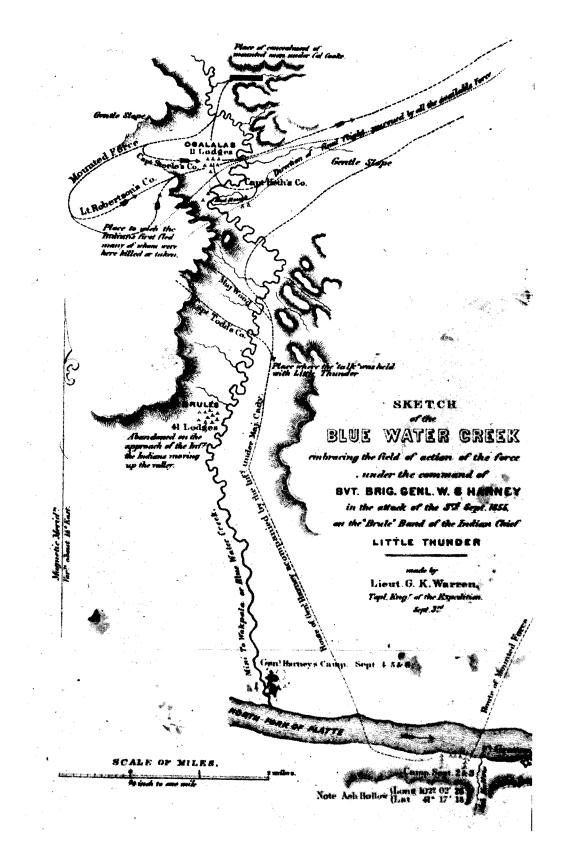
Warren's route from Fort Pierre to Fort Kearny. National Archives (Record Group 77, file Q56).

As Little Thunder's Brulé band soon found out, Harney was a relentless foe. He was also generous and even extravagant in his praise of initiative and daring. In his report to Washington, he applauded Warren's "bold and unauthorized" journey and commended Warren and Carrey for "their zeal and disinterestedness in this hazardous undertaking." He also treated Warren and the other officers of the command to a champagne lunch, and on the next day broke camp and set out against the Brulés.<sup>15</sup>

Harney found Little Thunder's band camped near Ash Hollow on Blue Water Creek, a few miles from where it spills into the Platte. The Indians knew nothing of the enemy that approached in the early morning darkness. Harney set his trap with care, sending Lieutenant Colonel Philip St. George Cooke, two companies of dragoons, an infantry company, and artillery north around the Brulé camp to block the path to the sandhills. Then, still under cover of darkness, he sent his main force directly against the village. Before the soldiers struck, the Indians learned of the danger, took down their teepees, and fled north up the creek-right toward Cooke. Meanwhile, Little Thunder met Harney on neutral ground and tried to negotiate an end to the confrontation. Warren claimed that Harney instigated the meeting "to give time and learn the disposition of these Indians." Harney, who reported only that the meeting took place, offered terms that Little Thunder could not accept-surrender of all the young men who had been involved in the destruction of Grattan's command and other depredations, "all of the butchers of our people," as Harney put it.16

There were no surprises in the fight that ensued. The infantry drove the Brulés right into Cooke's cavalry, and the rout was on. Men, women, and children scattered in every direction. Many took to the caves in the cliffs on the west bank of the stream. Some defended themselves there until the soldiers flushed them out. Others fled across the plain, mostly to be cut down by the cavalry. Eighty-six Sioux fell in the encounter; Harney lost four men.<sup>17</sup>

After the fight, Harney again spoke generously about Warren. The commander said his topographer was "most actively engaged," both before and during the shooting, "reconnoitering the country and the enemy." Warren did not mention his actions during the battle, but in his journal recorded at length his activities in the aftermath. He found the battlefield, the first he had ever seen, a dreadful sight. Everywhere, it seemed, lay injured innocents, "wounded women and children, crying and moaning, horribly mangled by the bullets." Most of them had been hit while in the caves from which armed warriors had fired at the soldiers. Warren picked up one young girl and carried her and a small boy to the creek, where he made them a shelter and bathed their wounds. He and other members of the expedition worked until well after sundown tending the injured.<sup>18</sup>



Warren's sketch of the battlefield. National Archives (Record Group 77, file Q57a).

Although preoccupied with this effort, Warren found time to rescue large quantities of Sioux camp equipment from the bonfires to which Harney consigned most captured supplies. In fact, Warren preserved enough material to assemble the largest and most complete collection of pre-Civil War Teton Sioux artifacts. After he completed his work in the west, he donated the collection to the Smithsonian Institution.<sup>19</sup>

Warren seemed to be of two minds about the battle of Ash Hollow. In his published report, he wrote that "the punishment inflicted on the Brulés....at Blue Water has taught them a useful lesson, which they will not soon forget." Furthermore, he recommended taking the fight to other Sioux tribes, so they too would gain respect for the power they faced. In his private journal, he dwelt on other matters. "I was disgusted," he said, "with the tales of valor in the field, for there were but few who killed anything but a flying foe."<sup>20</sup>

One final duty awaited Warren before he and the expedition left Blue Water Creek and marched up the North Platte. Colonel Harney decided to leave a company at Ash Hollow with the wounded and wanted a fort built for their protection. Most of the officers opposed this plan, probably because they thought it unlikely that the Brulés would return for some time. Harney remained adamant, so Warren chose a site and laid out a 100-foot-square stockade. Using Nebraska sod, the soldiers built Fort Grattan with walls three feet thick at the bottom and six feet high.<sup>21</sup>

Warren accompanied the Sioux Expedition on the long march to Fort Laramie, then east along the edge of the Black Hills to Fort Pierre. Along the way he made detailed notes on the unfamiliar terrain between Laramie and Pierre, recording distance, landmarks, and the locations of those travelers' essentials—wood, water, and grass. Because early snows foiled Harney's plan for a winter campaign, the expedition laid over at Pierre. Warren hastened back to Washington where he resumed work on his map in the Office of Pacific Railroad Surveys. His report of the summer's labors, quickly written and just as quickly published, bore praise from Secretary of War Jefferson Davis, who called the document "very useful to the troops on that frontier and to travelers and emigrants."<sup>22</sup>

In April 1856, barely a month after completing his report, Warren boarded Captain John Throckmorton's *Genoa*, a Missouri steamboat bound for Fort Pierre. Meteorologist J. Hudson Snowden, who had traveled with Warren in 1855, made the trip and so did two new companions, topographer N. H. Hutton and geologist Ferdinand V. Hayden. Warren enjoyed riverboat travel and took a liking to Throckmorton, a veteran of the Indian wars of the 1830's. Nevertheless, Warren grew impatient as the *Genoa* struggled against wind and current. Finally, with the vessel aground on a sandbar in the shallows near the mouth of the Niobrara, he, the Fort Pierre sutler, and three others set out overland. They walked 160 miles, subsisting mainly on birds brought down with shotguns. Although the journey was hard, Warren welcomed the chance to examine the terrain away from the river. On 21 May 1856, he reported to Colonel Harney at Fort Pierre. The *Genoa* arrived three days later.<sup>23</sup>

Warren found Harney in council with most of the important Sioux chiefs. Harney introduced Warren to the assembled headmen and told them the lieutenant would spend the summer reconnoitering the upper Missouri. The colonel wanted Warren to cover the country between Pierre and the route of the Pacific railroad expedition that had reached the Missouri near the mouth of the Yellowstone three years previously. The Indian leaders at Pierre, mindful of the blow suffered by Little Thunder, agreed to allow Warren to pass unmolested.<sup>24</sup>

Reunited with those who had stayed on the *Genoa* and reinforced by an infantry detachment, Warren boarded Captain Joseph LaBarge's steamer *St. Mary* for the trip up the Missouri. The captain, who was on a run for the American Fur Company, showed great interest in Warren's work. On the way up river, past the fur trading post at Fort Union into present-day Montana, LaBarge often stopped his vessel so the topographer could examine the countryside. Years later the riverboatman remembered his passenger as

> a very handsome man, with a fine head and clear eye, at that time rather slender, but well built and erect. He was always pleasant, and was liked by his men, but was nevertheless a strict disciplinarian.<sup>25</sup>

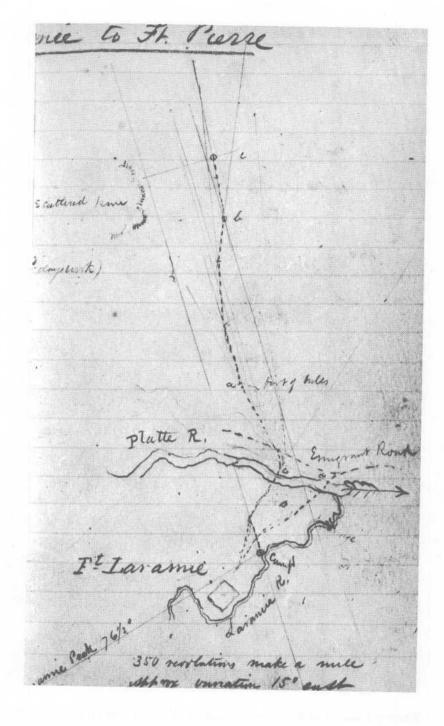
Near Fort Union, Jim Bridger joined the expedition. Bridger knew the Missouri's tributaries as well as any man. He led the way down uncharted portions of the Yellowstone to the mouth of the Powder River. Warren evaluated the terrain for potential fort sites while gathering data for his map. Living off the land was easy. He

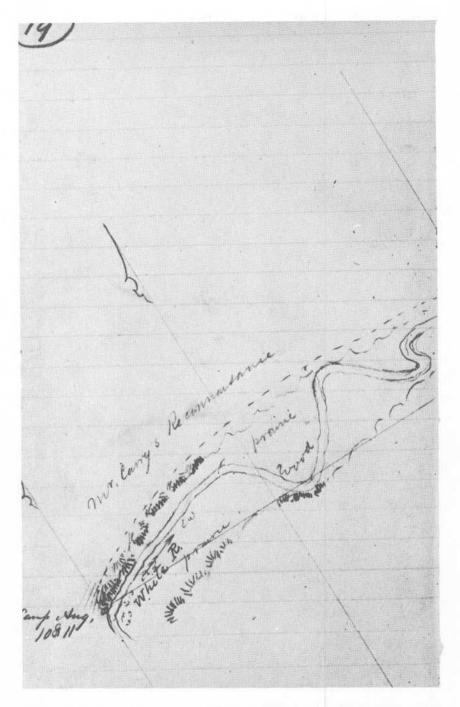


Fort Union, as seen by the Pacific Railroad Expedition commanded by Isaac I. Stevens.

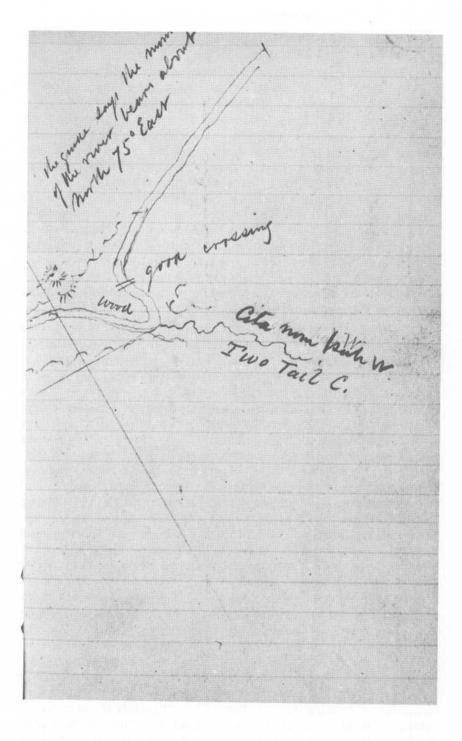
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These pages from Warren's 1855 notebook contain topographical notes and a sketch of the Fort Laramie vicinity. *National Archives (Record Group 77, file Q579-50).* 





Warren's sketch of the upper reaches of White River shows a crossing and the location of wood. National Archives (Record Group 77, file Q579-50).



and his men "enjoyed the greatest abundance of large game of all kinds while on the Yellowstone...."<sup>26</sup>

On the first of September, Warren began the month-long trip back to Fort Pierre. Most of the party paddled to Fort Union in a flatbottomed bullboat made of buffalo skins stretched over a cottonwood frame, then switched to a wooden craft for the rest of the way down the Missouri. A shore contingent of seven herded the animals. Warren stopped at the mouths of tributaries to note their positions and examine the country. His progress was uneventful until the boat struck a sandbar near Fort Pierre and spun broadside against the current. The men leaped into the 40° water and freed the craft before it became uncontrollable. With an eye on the Indians watching from shore, Hutton noted that the party "presented an appearance much more interesting to our enemies than agreeable to our friends." Warren reached Pierre safely, released his escort, and continued downriver to Sioux City. From there travel became easier and more comfortable, as he took a steamboat to St. Louis and finished the journey to Washington by rail.<sup>27</sup>

In 1857, with his map of the trans-Mississippi West nearly completed, Warren returned to Nebraska. This time his travels took him up the Loup to the sandhills and then along the Niobrara to Fort Laramie and back through the Black Hills. This probe proved to be the most difficult and dangerous of his three northern plains expeditions. His troubles included Loup River quicksand, the ubiquitous Platte valley mosquitoes, the Sioux, and even his military escort. Before he set out for the mouth of the Loup, most of his 27-man escort became drunk and insubordinate. Twelve of the soldiers, "tempted," Warren said, "by the high price of labor in this vicinity, and tired of the toils and privations of campaigning," deserted, and thieves stole two of the party's horses. Still near Sioux City, Warren wondered what might befall him in less hospitable surroundings: "These losses occurring in a civilized community, where we supposed ourselves among friends, were quite annoying, and gave rather unpleasant forebodings of what might occur to us when we should come among our enemies, the Indians."28

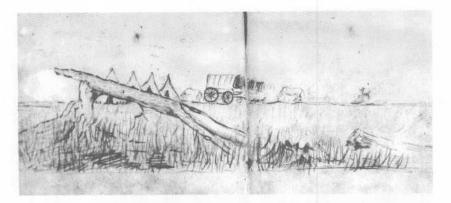
Quicksand, rain, and plain hard work marked the journey into the sandhills. The bed of the North Loup was so treacherous that a wagon sank clear to its floorboards as the party tried to cross the river. The men waded into the muck and hauled the baggage ashore, then extricated the vehicle. Later, they bridged several streams on their way northwest. One seriously ill soldier rode in a wagon, which was fine until a jackrabbit stampeded the herd and sent the makeshift ambulance careening down a steep hill. Fortunately the conveyance remained upright, and the party finished the journey to the head of the Loup safely. The reconnaissance filled a small white space on Warren's map, but he wondered if the effort was worthwhile:



A soldier of the 1857 party. National Archives (Record Group 77, file Q579-53).

We have now traced the river from end to end and found its impracticability for almost any purpose so marked that it seems like a great waste of time to have made the exertions we have. Our greatest wish is to get away from it as soon as possible and never return.<sup>29</sup>

The trip up the Loup had been hard but at least there had been water. During their first two days in the dune country, the party found none at all. On August 9, Warren sighted a lake in the distance, and the men rushed forward, only to find it "so salty and bitter that a mule would not drink it." They managed to get some palatable water by digging a hole in the sand. Two days later a driving rain brought relief. They collected the water in barrels for the remainder of the trek to the Niobrara, or Running Water as the Sioux called the fast moving stream. The river was only a short distance away but was difficult to reach because the sandhills forced them onto a southwesterly course away from it. They took more than a week to cross the 40-mile expanse of sand between the head of the Loup and Running Water.<sup>30</sup>



A camp of the 1857 expedition. National Archives (Record Group 77, file Q579-53).

The bone-weary travelers found the remainder of the journey to Fort Laramie much easier. The striking windcut formations of the upper reaches of the Niobrara, which reminded Snowden of ruins of ancient forts and castles, did not impede their progress. On August 18, they looked down on the valley of the North Platte, and "the prospect of reaching Laramie cheered everyone." On the next day, Warren's exhausted party arrived at the post for a well-earned rest.<sup>31</sup>

Warren rested at Fort Laramie for two weeks, planning a reconnaissance into the Black Hills. Although the hills were the center of the shrinking Sioux hunting grounds, Warren thought the Indians would let him pass in peace. When he had met a Sioux band on the way up the Niobrara, they had fled in terror. Moreover, Major Thomas Twiss, the former Engineer officer who served as Indian agent at Fort Laramie, also believed the Sioux would not trouble Warren. They had complained to Twiss, but appeared satisfied with assurance that Warren would not make a road through the region.<sup>32</sup>

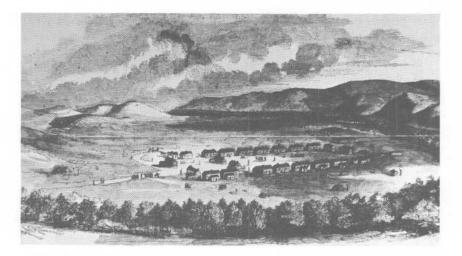
The great deal of military activity on the North Platte also increased Warren's confidence. Troops bound for Utah, where war with the Mormons was imminent, passed Fort Laramie, as did a column operating against the Cheyennes. In addition to these and Warren's own party, a fellow topographical engineer, Lieutenant Francis T. Bryan, explored a potential railroad route south of Fort Laramie, up Lodgepole Creek to Bridger Pass. The day before setting out, Warren wrote his father that the display of force "completely overawed" and puzzled the Indians. So, supposing that all this activity impressed and puzzled the Sioux, Warren left for the Black Hills, expecting a hard but fruitful journey.<sup>33</sup>

Snowden and a portion of the expedition remained at Laramie preparing to examine the Niobrara before meeting Warren downstream, east of the hills in mid-October. Those who stayed got more than enough trader whiskey, a rank mixture which some say was spiked with chewing tobacco, red peppers, and even rattlesnake heads, and discipline began to weaken. Ten days, one desertion, and two horsethefts after Warren left, Snowden led his party toward the source of the White River, east of the modern Nebraska-Wyoming line near the yet undiscovered deposits of dinosaur bones at Agate Springs. Once cheered by the sight of Laramie, Snowden was happy to put the post behind him.<sup>34</sup>

Contrary to Warren's expectations, the Sioux blocked his path through the Black Hills. Shortly after he entered near Inyan Kara peak, a large force of warriors led by a Huncpapa Sioux chief named Bear's Rib demanded that Warren turn back. Bear's Rib was very persuasive. He feared that Warren would spook the buffalo, but dreaded even more the potential military value of the reconnaissance. The angry warriors with him were more convincing. Bear's Rib allowed Warren to leave by a northern route, and the lieutenant wisely departed. He cut across what is now the Pine Ridge Indian Reservation, camped on Wounded Knee Creek, and followed the Keya Paha to its junction with the Niobrara. He found Snowden on October 15, making his way downstream along the northern fringes of the sandhills.<sup>35</sup>

Snowden, who endured "a very tortuous and fatiguing march, as bad if not worse than any of our sandhills experience," also confronted an angry Sioux party. On October 11, Brulé warriors stopped him and complained that Harney had assured them no whites would pass through their lands without a license from him (they did not know—and probably would not have cared if they did—that Congress had repudiated Harney's agreements). The Indians protested Snowden's profligate consumption of the resources along the Niobrara, the plums and chokecherries, wood and grass. Moreover, they accused the whites of frightening the game for a hundred miles in every direction. Snowden had to threaten to open fire before the Sioux withdrew from his camp.<sup>36</sup>

Reunited on October 15, Warren and Snowden traveled to Fort Randall while a small detachment followed the Niobrara to its confluence with the Missouri. The trip from Laramie had been hazardous, but Warren had obtained important information about the river. His reconnaissance convinced him of the impossibility of road construction in the Niobrara valley. The upper two-thirds of the stream ran swift and shallow through deep canyons. The lower portion, wider than the Missouri, was almost uncrossable due to the treacherous bottom. Warren discouraged consideration of a proposed road from Lake Superior southwestward across Minnesota, Dakota, and Nebraska to the Platte where it would join the main road through South Pass to Oregon. Such a trail would have to cross Running Water three times. Besides, the Sioux would oppose such an effort. Anyone bold enough to attempt a road survey through their hunting grounds would need the protection of at least 200 tried men. Warren



Fort Randall. Nebraska State Historical Society.

was convinced "the Sioux are in earnest about stopping white men from coming there anymore."<sup>37</sup>

Carefully Lieutenant Warren pondered the difficulties and options confronting the Sioux. He had at one time urged that the Indians be taught respect for the whites. After three seasons among the Sioux, he had developed considerable regard for them. Although he erred in calling the seven autonomous Teton Sioux tribes a nation, he made no mistake about their military skill and determination. They were superb horsemen "numerous, independent, warlike, and powerful ..." and had the strength and will for "prolonged and able resistance to further encroachment of the western settlers."<sup>38</sup>

While he knew that any effort to dislodge the Sioux would bring war, he also recognized that the attempt would nonetheless be made. Personally familiar with the growth of white settlement on the Missouri River. Warren concluded that the resultant pressure on the Sioux hunting ground, combined with the process of Indian dispossession to the east of the Sioux domain, hastened war. Indians evicted from their land and forced west ultimately exerted pressure on the resources available to plains natives. This, in turn, caused poverty and disease, while the government exacerbated these ills by its failure to protect and support the dispossessed. Concluding this sophisticated analysis, Warren said there were "so many inevitable causes at work to produce a war with the Dakotas before many years. that I regard the greatest fruit of the explorations I have conducted to be the knowledge of the proper routes by which to invade their country and conquer them." He was not particularly proud of this accomplishment: "I almost feel guilty of crime in being a pioneer to the white men who will ere long drive the red man from his last niche of hunting ground."39

Warren also laid bare the dilemma that faced Sioux leaders who understood the process then underway. Bear's Rib, for example, a man with "fine mental powers and a proper appreciation of the relative power of his people and the whites . . .," trod a very narrow and dangerous path, knowing that surrender would make him an outcast but that advocacy of resistance would make him responsible for the destruction of the tribe. Ultimately the Huncpapa chief's personal dilemma was resolved by Sioux enemies, who assassinated him in July 1862. But the problem of providing appropriate guidance in this crucial period tormented many a Sioux leader.<sup>40</sup>

At the end of 1858, with the map of the trans-Mississippi West just published and three western explorations under his belt, Warren could have rested on his well-earned laurels. As he told his father, "I have every reason to believe I have gained for myself a good reputation as a Topographical Engineer." Certainly he had seen sufficient service to accept a teaching appointment to West Point without compunction. But the frontier had found its way into Warren's blood. His discussions with Jim Bridger and other mountainmen whetted his appetite for the Yellowstone country, the fabulous wonderland of bubbling mud and hot water spouts first visited by John Colter after he left the Lewis and Clark expedition for the life of a trapper in the northern Rockies. Warren presented Captain Andrew A. Humphreys with a detailed proposal for the exploration, which Warren hoped might reveal connections between Utah and navigable portions of the upper Missouri. Humphreys recommended approval of the project. With his experience and ability, Warren was the right man to fill this blank space on the map.41

Yet when the Yellowstone expedition set out in the spring of 1859, Warren was not at its head. Earlier in the year, his father died. Then Warren accepted a position as assistant professor of mathematics at West Point to be near his younger brothers and sisters at the family home in Cold Springs, New York.<sup>42</sup>

The Civil War interrupted Warren's tour of duty at the academy. He entered active service as a volunteer lieutenant colonel, second in command of a New York regiment, and rose to the rank of major general. Warren's most important service came during the seond day of the battle of Gettysburg. While chief engineer of General George C. Meade's Army of the Potomac, Warren rushed reinforcements to Little Round Top just in time to fend off a Confederate assault on the Union Army's left flank. His quick action and keen eye for terrain helped prevent a possible disaster for Union arms.<sup>43</sup>

Just before the end of the war, at the battle of Five Forks in Virginia, General Philip Sheridan removed Warren from command of the Fifth Corps. Sheridan's motive remains unclear, but the effect on Warren's career was decisive. Many of his peers kept or went beyond their Civil War ranks, but Warren reverted to his permanent rank of major and received only one promotion to lieutenant colonel in the next 17 years. During this time he served as district engineer in St. Paul, Minnesota, and Newport, Rhode Island. In 1879, the government finally consented to examine the matter and convened a court of inquiry. Warren died on 8 August 1882. Three months later, the court absolved him of wrongdoing.<sup>44</sup>

Warren's career included the normal blend of civil and military engineering assignments. He participated in river improvements, exploration, cartography, and both conventional and Indian warfare. Moreover, one kind of duty plainly enhanced the ability to perform another. Three expeditions into the northern plains sharpened the fine eye that saved the day at Gettysburg.

Like so many other documents of Engineer exploration, Warren's account of his travels involved the collaboration of a number of scientists. By the mid-1850's, it was common practice for scholars to accompany expeditions beyond the settlements. They used the opportunity to study and assess plants and animals, geological formations, and native peoples. Frequently, the Smithsonian Institution played an important part in this enterprise, informing scientists of expeditions and their destinations, lending equipment to explorers, finding experts at universities to study collections, and occasionally providing letters of introduction to foreign specialists. On the other hand, Warren and many other explorers deposited their natural history collections with the museum.<sup>45</sup>

While Ferdinand Hayden was the only scientific collector to accompany Warren, several others participated in the analysis of his specimens. Hayden's "Catalogue of the Collections in Geology and Natural History," appended to Warren's report, bore the names of many prominent scholars of the day. Among them were John Torrey, Fielding B. Meek, John S. Newberry, George Engelman, and Spencer F. Baird of the Smithsonian, all of whom cooperated with many expeditions.<sup>46</sup> Hayden's inventories, completed with the cooperation of these and other scholars, provided a record of the fauna and flora of the region and indicate the changes that have since taken place.

The publication history of the report underscores the importance of relations with the Indians. Originally printed without a map, the document appeared as an appendix to the Secretary of War's bulky annual report of 1858. In 1875 the War Department reissued the narrative, this time as a separate volume with a map. The year of publication was significant. The existence of paying quantities of gold in the Black Hills had been verified during the previous summer. A year after publication, the major battles of the Sioux wars would be fought. The slim book carried a dual message to those eager to seek their fortunes in the Sioux homeland. While it contained the map and data that travelers to the region so badly needed, it also delineated the risks they faced. Captain Humphreys' introduction to



Ferdinand Hayden, by J. Hudson Snowden. *National Archives (Record Group 77, file Q579-53)*.

the 1858 edition, pertinent when it was written, was even more meaningful in 1875: Warren's narrative, Humphreys cautioned, gave "the objections urged by the Sioux against the passage ... through the territory. This may prove valuable to any white man that may travel there."<sup>47</sup>

The report provides more than a record of Warren's travels and campaigns.<sup>48</sup> In addition to discussing the terrain, identifying fort sites, and evaluating potential roads, Warren dealt at length with the problems Indians and Anglo-Americans presented each other. A perceptive and articulate participant in the expansion of the military presence in the Missouri River valley, Warren understood the forces that brought on the climactic Indian wars. At a critical time in the region's history, as war with the Sioux became imminent, he described the Indians, their fighting qualities, and attachment to their homeland, as well as the physical features of the country in which the Army would have to fight them. Hayden's inventories, while not as engaging as Warren's narrative, rounded out the picture. Warren's *Preliminary Report* depicted a region in transition and documented an important phase of the Army Engineer role in the settlement of the West.

## NOTES

- 1. Warren to Sylvanus Warren, 6 October 1851, Warren Papers, New York State Library, Albany.
- 2. General Orders No. 5, Headquarters, Corps of Engineers, United States Army, 9 August 1882, File 649 ACP 76, Gouverneur K. Warren, Record Group 94, National Archives.
- For a survey of the role of topographical engineers in the westward movement, see Frank N. Schubert, Vanguard of Expansion: Army Engineers in the trans-Mississippi West, 1819-1879 (Washington: Government Printing Office, 1980). William H. Goetzmann, Army Exploration in the American West, 1803-1863 (New Haven: Yale University Press, 1959), is a more detailed account.
- 4. Robert M. Utley, Frontiersmen in Blue: The United States Army and the Indian, 1848-1865 (New York: Macmillan Publishing Co., Inc., 1967), pp. 113-14.
- 5. Robert G. Athearn, Forts of the Upper Missouri (Englewood Cliffs, New Jersey: Prentice-Hall, 1967), pp. 33-34.
- 6. Logan V. Reavis, The Life and Military Services of Gen. William Selby Harney (Saint Louis: Bryan, Brant & Co., 1878), pp. 247-48.

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- Warren to Colonel John J. Abert, 21 April and 31 May 1855, Letters Received, Topographical Bureau (Microcopy 506, Roll 80), Record Group 77, National Archives.
- 8. Warren, Journal 1855, Warren Papers; Warren, "Notes taken on the Sioux Expedition by Lieut. G. K. Warren, Top'l Engr," Headquarters Map File (Q 578), Record Group 77, National Archives.
- 9. Frederick T. Wilson, "Fort Pierre and its Neighbors," Journal of the United States Cavalry Association, XII (September 1899) pp. 241-42; Assistant Adjutant General, Sioux Expedition (Captain Oscar F. Winship), to Warren, 4 June 1855, and Warren to Colonel Abert, 19 September 1855, Letters Received, Topographical Bureau (Microcopy 506, Roll 80).
- 10. Wilson, "Fort Pierre," p. 228.
- Assistant Adjutant General, Sioux Expedition, to Warren, 4 June 1855, Warren to Colonel Abert, 21 March 1856, Letters Received, Topographical Bureau (Microcopy 506, Roll 81); Hiram M. Chittenden, *The American Fur Trade in the West*, vol. II (Stanford: Academic Reprints, 1954), p. 767.
- 12. Assistant Adjutant General, Sioux Expedition, to Warren, 4 June 1855, Letters Received, Topographical Bureau; William H. Goetzmann, Exploration and Empire: The Explorer and the Scientist in the Winning of the American West (New York: Alfred A. Knopf, 1967), p. 309; Gouverneur K. Warren, Ex-

plorations in the Dakota Country in the Year 1855, 34th Congress, 1st Session, Senate Executive Document 76 (1856), p. 21.

- 13. Warren, *Explorations* ... 1855, pp. 21-35.
- Warren, Explorations ... 1855, pp. 22-27; Warren to Colonel Abert, 23 August and 19 September 1855, and 28 January 1856, Letters Received, Topographical Bureau (Microcopy 506, Rolls 80 and 81).
- 15. Warren to Colonel Abert, 28 January 1856, Letters Received, Topographical Bureau; Warren, Journal 1855.
- 16. Warren, Journal 1855. Harney's report of 5 September 1855 is reprinted in Reavis, *Harney*, pp. 252-58.
- 17. Reavis, *Harney*, p. 256; Merrill J. Mattes, *The Great Platte River Road* (Lincoln: Nebraska State Historical Society, 1969), pp. 320-24.
- 18. Reavis, Harney, p. 258; Warren, Journal 1855.
- 19. Dr. James Hanson of the museum is presently preparing an enthnohistorical analysis of the Warren collection.
- 20. Warren, Explorations... 1855, p. 19; Warren, Journal 1855.
- 21. Warren, Journal 1855.
- 22. Reavis, *Harney*, p. 260; Secretary of War Jefferson Davis to Honorable John B. Weller, Chairman, Committee on Military Affairs, US Senate, 26 March 1856, in Warren, *Explorations*... 1855, pp. 1–2.
- Warren, Journal, 1856, Warren Papers; Warren to William J. Warren, 24 May 1856, Warren Papers; N. H. Hutton, Journal for June 28—October 27, 1856, Warren Papers.
- Gouverneur K. Warren, Preliminary Report of Explorations in Nebraska and Dakota, in the Years 1855-56-57 (Washington: Government Printing Office, 1875), pp. 13, 15; Warren to William J. Warren, 24 May 1856, Warren Papers; Utley, Frontiersmen in Blue, p. 118.
- 25. Hiram M. Chittenden, History of Early Steamboat Navigation of the Missouri River: Life and Adventures of Joseph LaBarge, Pioneer Navigator for Fifty years identified with the Commerce of the Missouri Valley, vol. I (New York: Francis P. Harper, 1903), pp. 208-09.
- 26. Gouverneur K. Warren, Memoir to Accompany the Map of the Territory of the United States from the Mississippi River to the Pacific Ocean, 33d Congress, 2d session, House of Representatives Executive Document 91 (1855), vol. XI, p. 90; Warren, Journal 1856; Warren, Preliminary Report of Explorations, pp. 15-16; Vincent J. Flanagan, "Gouverneur Kemble Warren, Explorer of Nebraska Territory," Nebraska History, 51 (Summer 1970), p. 183. The section of the text on the return during 1856 and the expedition of 1857 is adapted with minor changes from Schubert, Vanguard of Expansion, pp. 122-29.

- 27. Hutton, Journal for 1856; Warren, Memoir, p. 90; Warren, Preliminary Report of Explorations, p. 16.
- 28. Gouverneur K. Warren, Lieut. Warren's Official Journal Commanding Explorations in Nebraska, 1857, Warren Papers.
- 29. Warren, Preliminary Report of Explorations, p. 17; J. Hudson Snowden, Journal 27 June-14 November 1857, Warren Papers; Warren, Official Journal of 1857.
- 30. Warren, Official Journal of 1857.
- 31. Snowden, Journal, 1857.
- 32. Warren, Official Journal of 1857; Warren to Sylvanus Warren, 3 September 1857, Warren Papers.
- 33. Warren to Sylvanus Warren, 3 September 1857.
- 34. Warren, Preliminary Report of Explorations, p. 18; Snowden, Journal, 1857; Mari Sandoz, Love Song to the Plains (Lincoln: University of Nebraska Press, 1966), pp. 79-80.
- 35. Warren, Preliminary Report of Explorations, pp. 18-21; Warren, Official Journal of 1857; Snowden, Journal, 1857.
- 36. Snowden, Journal, 1857; Utley Frontiersmen in Blue, p. 119.
- 37. Warren, letter draft, 27 January 1858, Warren Papers.
- 38. Warren, Preliminary Report of Explorations, pp. 51-52, 79. The seven tribes were Oglala, Brulé, Miniconjou, Sans Arc, Two Kettle, Blackfoot, and Huncpapa.
- 39. Warren, Preliminary Report of Explorations, p. 53; Warren, letter draft, 27 January 1858.
- 40. Warren, updated letter draft, Warren Papers; Utley, Frontiersmen in Blue, p. 271.
- 41. Warren to Sylvanus Warren, 9 December 1858, Warren Papers; Warren, Preliminary Report of Explorations, pp. 7, 10-11.
- 42. Captain William F. Raynolds commanded the expedition. See his Report on the Exploration of the Yellowstone River (Washington: Government Printing Office, 1868).
- 43. Bruce Catton, The Army of the Potomac: Glory Road (Garden City: Doubleday, 1952), pp. 291-94.
- 44. Louis H. Manarin, "Major General Gouverneur Kemble Warren: A Reappraisal," unpublished M. A. thesis, Duke University, 1957, argues convincingly that Warren's outspoken criticism of his superiors set the stage for his dismissal from command.
- 45. Schubert, Vanguard of Expansion, pp. 63, 104. Manuscript collections of the Smithsonian Institution's archives, particulary the private correspondence of Spencer Baird, detail the extent and character of the museum's relationship with officers of the Corps of Engineers and Corps of Topographical Engineers.
- 46. Schubert, Vanguard of Expansion, pp. 63-64, 89-90, 139.
- 47. Quoted in Warren, Preliminary Report of Explorations, p. 6.

48. Other firsthand accounts of the battle at Ash Hollow were written. These included the following: Philip St. George Cooke, "March of the 2d Dragoons ...," ed. by Hamilton Gardner, Annals of Wyoming, 27 (April 1955), pp. 43-60; Richard C. Drum, "Reminiscences of the Indian fight at Ash Hollow, 1855," Collections of the Nebraska State Historical Society, 16 (1911), pp. 143-64; John B. S. Todd, "The Harney Expedition against the Sioux: The Journal of Capt. John B. S. Todd," ed. by Ray H. Mattison, Nebraska History, 43 (1962), pp. 110-11.