TROOPS AND MILITARY SUPPLIES ON UPPER MISSISSIPPI RIVER STEAMBOATS

The constantly recurring outbreaks between the various Indian tribes and friction between Indian and fur traders had made necessary the erection of military posts at strategic points along the Upper Mississippi before the arrival of the first steamboat in 1823. Fort Edwards was located on the east side of the Mississippi at the mouth of the Des Moines River, near the foot of the Lower Rapids. Fort Armstrong, erected in 1816, was situated on Rock Island at the foot of the Upper Rapids. Fort Crawford, also erected in 1816, stood on the outskirts of the little French village of Prairie du Chien, six miles above the junction of the Wisconsin and the Mississippi. Fort Snelling was built on a towering bluff on the west bank of the Mississippi at its junction with the St. Peter's or Minnesota River. It was established in 1819 on a site almost eight hundred miles from what was to be its chief source of supply and reënforcement, Jefferson Barracks, Missouri.

Equally dependent on the Upper Mississippi steamboats were the posts situated on the various tributaries of the Mississippi. The second Fort Des Moines, at the Raccoon Fork of the Des Moines River, and Fort Atkinson in northeastern Iowa, Fort Ridgely and Fort Ripley in Minnesota, and Fort Winnebago in Wisconsin were important military posts in the period prior to the Civil War.¹

¹ Northwestern Gazette and Galena Advertiser, July 5, 1844; Hansen's Old Fort Snelling, pp. 18-30; Mahan's Old Fort Crawford and the Frontier, pp. 65-88, 120-139; Tanner's History of Fort Ripley, 1849 to 1859, in Minnesota Historical Collections, Vol. X, Pt. 1, pp. 179-202; American State Papers, Indian Affairs, Vol. II, p. 265; Van der Zee's Forts in the Iowa Country in The Iowa Journal of History and Politics, Vol. XII, pp. 163-204.

Approximately four decades intervened between the erection of Fort Armstrong and Fort Crawford and such posts as Fort Ridgely on the Minnesota River and Fort Ripley on the Mississippi River above the Falls of St. Anthony. As the Indian and fur trader frontier receded before the oncoming waves of immigration, the military frontier followed and the distance which steamboats had to travel was consequently increased.

The presence of troops on the frontier gave steamboating its initial impetus. Both the Virginia and the Rambler carried public stores as far north as Fort Snelling in 1823. Prior to this time keelboats were used to transport troops and supplies to the newly erected forts. To complete the entire journey upstream to Fort Snelling — the most remote point on the Upper Mississippi — the keelboat sometimes took only forty days, but often as many as sixty were required. As early as 1819 the War Department ordered Major Thomas Forsyth to ship \$2000 worth of goods by steamboat to the Sioux Indians above Prairie du Chien in payment for the site on which Fort Snelling was to be established. But at that time it was believed that the rapids could not be stemmed by steamboats and keelboats were used. By the summer of 1826 fourteen steamboats had followed in the wake of the Virginia and the Rambler and each had ventured northward primarily because of the traffic in troops and military supplies.2

The advent of the steamboat on the Upper Mississippi was of strategic importance to the government. Transpor-

² Missouri Republican (St. Louis), May 24, 1824; Taliaferro Journal, No. II (manuscript in possession of the Minnesota Historical Society); Forsyth's Fort Snelling: Col. Leavenworth's Expedition to Establish It, in 1819, in Minnesota Historical Collections, Vol. III, p. 140; Petersen's The "Virginia", the "Clermont" of the Upper Mississippi in Minnesota History, Vol. IX, pp. 348–352; Bishop's Floral Home; or First Years of Minnesota (New York, 1857), p. 32; Neill's Occurrences in and around Fort Snelling, from 1819 to 1840, in the Minnesota Historical Collections, Vol. II, pp. 102–116.

tation by keelboat had been slow, uncertain, and expensive, and the risk great. In 1819, for example, James Johnson charged 3 cents per pound to transport goods from Bellefontaine, Missouri, to Fort Crawford. At \$3.00 per 100 pounds the 389,946 pounds or 194 tons netted \$11,699.28. Despite the fact that St. Peter's was only two hundred miles farther upstream the cost from Bellefontaine was 7 cents per pound and \$9,810.50 was paid to transport 70 tons of provisions to that post. This was more than seven times the usual charge made later by steamboats.³

Steamboats were afforded several ways of reaping profits on the Upper Mississippi. Scientific and exploring expeditions were generally dependent on steamboats for transportation of equipment and supplies. Tours of inspection of the military posts occurred almost yearly. Moreover, troops assisted in conducting Indians to their new homes or to treaty grounds and thereby fattened the pocketbooks of steamboat captains and owners. But more important than these was the transportation of troops in time of war, the yearly movement of troops from post to post during times of peace, and the transportation of supplies and equipment.

SCIENTIFIC EXPEDITIONS

In 1820, three years before the voyage of the Virginia, the steamboat Western Engineer ascended the Upper Mississippi as far as the present site of Keokuk. The event was significant not only because the Western Engineer was the first steamboat to ascend the river on a scientific expedition but also because she was the first craft known to have ascended the Upper Mississippi as far as the Lower Rapids. The Western Engineer was built at the United States Arsenal on the banks of the Allegheny River

³ American State Papers, Military Affairs, Vol. II, p. 69.

near Pittsburgh during the winter of 1818. The boat was launched on March 28, 1819, and "embraced the watery element in the most graceful manner, under a national salute".4 She was a dingy looking craft, measuring only thirty tons and drawing but nineteen inches of water light. Her equipment was calculated to strike terror in the heart of the Indians. In form the Western Engineer resembled a black, scaly serpent, rising out of the water from under the boat, with waste steam escaping from its sculptured head. A St. Louis newspaper declared that such objects as "artillery; the flag of the republic; portraits of a white man and an Indian shaking hands; the calumet of peace; a sword; then the apparent monster with a painted vessel on his back, the sides gaping with portholes, and bristling with guns" would frighten all except the most daring Indians.5

A mineralogist, a botanist, a geographer, and a painter, together with a considerable force of troops were with Major Stephen H. Long on the Western Engineer when she steamed down the Ohio from Pittsburgh on May 5, 1819. St. Louis was reached on June 9th, thirty-six days after the boat's departure from Pittsburgh. It took the Western Engineer almost three months to ascend the Missouri River to a point called Engineer's Cantonment on the Nebraska side of the Missouri River, a short distance above present-day Council Bluffs. Here the expedition went into winter quarters.

The difficulty of navigating the Missouri and the failure of the other steamboats to follow the Western Engineer

⁴ Pittsburgh Gazette, March 30, 1819. For an account of the first steamboats built and operated on the Allegheny River see Kussart's The First Steamboats on the Allegheny River in The Waterways Journal (St. Louis), Vol. XLI, (December 22, 1928), p. 6.

⁵ Niles' Weekly Register, Vol. XVI, (July 24, 1819), p. 368; Flint's Letters from America in Thwaites's Early Western Travels, Vol. IX, pp. 164, 165.

necessitated a change in plans, and Lieutenant James D. Graham was ordered to steam down the Missouri to St. Louis with the Western Engineer, thence up the Mississippi to the "De Moyen" rapids and then down the same stream to Cape Girardeau "taking such observations and sketches on the voyage as are requisite in constructing a chart of that part of the river and the adjacent country."

Little is known of this voyage on the Upper Mississippi, for in making his report Major Long merely states the results of the surveys of those aboard the Western Engineer. "The bottoms on the Upper Mississippi", Long reported, "contain less woodland, in proportion to their extent, than those of the Missouri. The prairies upon this river also become more numerous and extensive as we proceed upward." The land was fertile, though hilly, and timbered in spots with cottonwood, blue and white ash, hackberry, black walnut, cherry, mulberry, hickory, and several varieties of oak. The population was located almost exclusively in the river valley and extended upwards about 160 miles. Especially numerous were the Salt River settlements around Louisiana, Missouri, but Long felt that the scarcity of timber, mill sites, and springs of water would prove a serious impediment to settlement in that region.7

It was left to Captain Stephen Watts Kearny to record the presence of the first steamboat known to have ascended the Upper Mississippi River as far as Keokuk. In his journal of August 15, 1820, Kearny wrote:

⁶ Flint's Letters from America in Thwaites's Early Western Travels, Vol. IX, pp. 164, 165; James's Account of an Expedition from Pittsburgh to the Rocky Mountains, performed in the Years 1819, 1820... under the command of Maj. S. H. Long in Thwaites's Early Western Travels, Vol. XIV, pp. 39-45, 96-108, 121-221, Vol. XV, pp. 188-190, Vol. XVII, p. 97.

⁷ James's Account of an Expedition from Pittsburgh to the Rocky Mountains, performed in the Years 1819, 1820. . . . under the command of Maj. S. H. Long in Thwaites's Early Western Travels, Vol. XVII, pp. 118, 119.

At 8 A. M. we embarked on board our canoe, & descended one mile, to the mouth of the Des Moines, where we found the Steam Boat, "Western Engineer," commanded by Lieut. Graham, who came here a week since, for the purpose of taking observations, &c. Put our baggage on board, & fastened the canoe to her. Near this saw a coffin containing the bones of an Indian tied fast to the centre of a large tree which was done at the request of the deceased to preserve his fame after the extinction of his body.

Proceded at 10 & run about 15 miles when about 1 P. M. we found ourselves on the Sand bar & from which we endeavored, but without success, to extricate ourselves. The boat has but few hands & those sick with fevers.

August 16th.

At 8 A. M. we succeeded after much exertion in getting off the Sandbar & in endeavoring to cross to the opposite shore to reach the channel, we ran on another bar about 200 yards from the one we left, & found ourselves even faster than before.

At 2 P. M., aware of the uncertainty of the Steam Boat reaching St. Louis, and our party being desirous to proceed without loss of time we took to our canoe, & having a favorable breeze hoisted sail.⁸

Such unfavorable reports and sparse settlements were doubtless responsible for the failure of steamboats to navigate the Upper Mississippi above the Lower Rapids before the voyage of the *Virginia* in 1823.

The Western Engineer was built and owned by the government, but three other boats used in the expedition — the Johnson, the Expedition, and the Jefferson — were constructed by James Johnson of Scott County, Kentucky. The contract required Johnson to transport clothing, ordnance, and military stores from Pittsburgh to St. Louis, to furnish supplies, and to supply transportation. Johnson estimated the cost of this service at \$256,818.15, an amount which staggered the committee appointed to investigate the bill, but it was endorsed by Quarter Master General

⁸ Porter's Journal of Stephen Watts Kearny in Missouri Historical Society Collections, Vol. III, pp. 127-129.

Thomas S. Jesup. For the forty-day detention of the *Expedition* at the mouth of the Missouri, Johnson demanded \$13,333.33 or more than double the value of the boat. At the same time he asked \$7200 for the thirty-six day delay of the *Johnson*.⁹

Despite the expenses incurred, scientific expeditions were frequently undertaken. Indeed, in 1820, the same year that the Western Engineer was ascending the Upper Mississippi to the Des Moines Rapids, Henry R. Schoolcraft was despatched to discover the source of the Mississippi, a task he was not destined to accomplish until 1832.10 In 1823 William H. Keating led a portion of another one of Stephen H. Long's expeditions down the Wisconsin in keelboats and up the Mississippi to the sources of the St. Peter's River. 11 Engineers were constantly despatched to make surveys, soundings, and maps of the river, and equipment was provided. The Upper and Lower rapids were especially troublesome, and in 1837 Lieutenant Robert E. Lee was sent to report on the best means of eliminating the latter.12 When the northern route for a transcontinental railroad was surveyed by Isaac I. Stevens in 1853, steamboats carried members of the expedition, scientific equipment, food, clothing, and scores of draft animals to St. Paul. Stevens arrived at St. Paul on May 27, 1853, on

⁹ American State Papers, Military Affairs, Vol. II, pp. 68, 69, 324, 325. See also Documents in Relation to the Claim of James Johnson for Transportation on the Missouri and Mississippi Rivers, printed in House Executive Documents, 16th Congress, 2nd Session, Document No. 110.

¹⁰ Schoolcraft's Narrative Journal of Travels... to the sources of the Mississippi River (Albany, 1821); Schoolcraft's Narrative of an Expedition through the Upper Mississippi to Itasca Lake (New York, 1834).

¹¹ Keating's Narrative of an Expedition to the Source of the St. Peter's River (London, 1825).

¹² Drumm's Robert E. Lee and the Improvement of the Mississippi River in Missouri Historical Collections, Vol. VI, p. 161; Wilson's The Des Moines Rapids Canal in The Palimpsest, Vol. V, pp. 117-132.

STEAMBOATING ON THE MILITARY FRONTIER 267

board the *Nominee*, having purchased all the draft mules offered in the ports along the way. Such expeditions offered a lucrative income to steamboat captains.¹³

TOURS OF INSPECTION

Another source of profit was derived from carrying inspectors to the various military posts. In the spring of 1824 Brigadier General Winfield Scott left St. Louis for the Upper Mississippi on the steamboat Mandan, Captain William Linn commanding. It was on this trip that Scott recommended changing the name of Fort St. Anthony to Fort Snelling. Six weeks later the Mandan returned to St. Louis in sixty-two and one-half hours running time. Captain Linn expressed the belief that he could make the round trip of fifteen hundred miles in ten days. Shortly afterwards the Mandan ascended the Missouri River to Fort Atkinson.

Jefferson Barracks was the entrepôt for such expeditions and the trips were made when a good stage of water was assured. Having completed their inspection of the posts on the Upper Mississippi, Brigadier General Henry Leavenworth and his officers left St. Louis in the fall of 1831 on board the *Enterprise* for Cantonment Jesup near Natchitoches, Louisiana. Though the number of passengers carried was small such trips afforded a welcome addition to the business of the Upper Mississippi steamboats.¹⁴

MILITARY ESCORT FOR INDIAN TRIBES AND DELEGATIONS

Troops escorted Indian delegates to treaty grounds and the tribes to new reservations. Bound for the conference at Prairie du Chien, a detachment of troops under Colonel

¹³ Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean (Washington, 1860), Vol. XII, Book 1, p. 35.

¹⁴ Missouri Republican (St. Louis), April 5, 1824, September 27, 1831; St. Louis Enquirer, May 24, 1824; Neill's Occurrences in and around Fort Snelling from 1819 to 1840 in Minnesota Historical Collections, Vol. II, p. 108.

Willoughby Morgan accompanied the three hundred Indians on board Captain Butler's *Planet* when she arrived at Dubuque in 1830. Dragoons and regulars were aboard the *Dr. Franklin* as she steamed back and forth from Wabasha's prairie to St. Paul during the removal of the Winnebago in 1848. Troops were also aboard the *Excelsior* when she conveyed the lower tribe of Sioux to Traverse des Sioux in 1851. After the massacre at New Ulm, Minnesota, in 1862, a heavy military force escorted the Sioux prisoners down the Minnesota and Mississippi rivers to Davenport.¹⁵

MOVEMENT OF TROOPS DURING WAR TIMES

The transportation of troops during war times was usually more profitable than during times of peace, because the work was done under pressure and no time could be lost in obtaining competitive bids. The steamboats Hamilton, Indiana, and Essex departed from Jefferson Barracks in July, 1827, with a detachment of five hundred soldiers under Brigadier General Henry Atkinson, destined for the Upper Mississippi Valley to chastise the Winnebago for attacking white settlers. The progress of this formidable flotilla was interrupted by the low stage of water at the Des Moines Rapids and the remainder of the journey was made by keelboat. In 1831, six companies from the Third and Sixth Regiments left Jefferson Barracks on Captain James May's Enterprise bound for Rock Island to quell disturbances of Sauk, Fox, and Winnebago Indians.16

¹⁵ Miner's Journal (Galena), July 3, 1830; Northwestern Gazette and Galena Advertiser, May 23, June 7, 9, 29, 1848; Galena Daily Advertiser, July 9, 1851; Annual Report of the Commissioner of Indian Affairs, 1866, pp. 46, 47, 212, 213; Mahan's Moving the Winnebago in The Palimpsest, Vol. III, pp. 33-52. An account of the incidents of the trip down the Minnesota River was given the writer by Captain John Killeen of Dubuque.

¹⁶ Missouri Republican (St. Louis), July 19, 26, 1827, May 31, 1831; Mis-

Upper Mississippi steamboats also played an important rôle in three major conflicts—the Black Hawk War, the Mexican War, and the Civil War. During the Black Hawk and Mexican wars the Mississippi was the chief avenue of transportation and communication, while throughout the Civil War steamboats conveyed most of the troops southward.

With the outbreak of the Black Hawk War in 1832 the Indian question became a national instead of a local and minor issue. Steamboats were promptly pressed into service of the government. Early in April, 1832, the Sixth Regiment of United States Infantry left Jefferson Barracks on board the *Enterprize* and *Chieftain* with strict orders to force the Sauk and Fox to surrender the murderers of twenty-eight Menomonee Indians in the village of Prairie du Chien. Undeterred by this movement, Black Hawk and his followers started up the Rock River where the defeat of the militia at Stillman's Run was followed by Governor John Reynolds's proclamation asking for two thousand mounted volunteers. Thoroughly aroused by this reverse, both State and national government worked frantically to crush the uprising.¹⁷

Throughout the hostilities, conflicting reports trickled into St. Louis from steamboats running on the Illinois and Upper Mississippi rivers. Crowds lounged about the levee awaiting each arrival. Anxious wives and mothers lingered patiently, hopeful for news from passengers and newspapers brought down on the steamboat. Always extolled for their kindness and gentlemanly virtues, captains and clerks became more popular than ever. Pilots received fabulous salaries but the lowly clerk received the plaudits

souri Observer (St. Louis), September 5, 1827, quoted in Niles' Weekly Register, Vol. XXXIII (September 29, 1827), p. 68.

¹⁷ Missouri Republican (St. Louis), April 10, 17, May 8, 22, 1832.

of the press and newspapers spared neither space nor ink in extolling him.¹⁸

Steamboating was not without its attendant thrills in those days. Dangers of snags, explosions, or fires now became of secondary importance and passengers and crews lived in constant fear of attack by bands of Indians. While making her way downstream from Galena to St. Louis the steamboat *Dove* was suddenly attacked by Indians hidden along the bank. Her sides and upper works were splattered with lead but she managed to run safely through the gauntlet of fire without serious injury. Piloting under such conditions became a real art. To lose one's head and run the boat on a sandbar or into the bank might easily invite a massacre. Throughout the struggle, however, pilots and captains exhibited a skill and daring indicative of the character of the men who operated Upper Mississippi steamboats.¹⁹

Of these pioneer river captains none was better known than Joseph Throckmorton, who for twenty years commanded a dozen different boats and probably had a financial interest in as many more. Throckmorton began his river career aboard the *Red Rover* in 1828, bought the *Winnebago* in 1831, and in the summer of 1832 brought the *Warrior* and her safety barge to St. Louis whence he immediately set out for the war zone.²⁰

¹⁸ Missouri Republican (St. Louis), May 29, 1832. This issue alone carried news despatches brought by the Caroline, Souvenir, and Winnebago.

¹⁹ Missouri Republican (St. Louis), June 5, 1832.

²⁰ Enrolment of Vessels, Collector of Customs Office, Pittsburgh, Vol. 2, 1831–1835. Enrolments 30 and 31, June 2, 1832, reveal the measurements and ownership of the Warrior and her safety barge. The Warrior, built at Pittsburgh during the winter of 1831–1832 and owned by Joseph Throckmorton and William Hempstead of Galena, was 111 feet 5 inches long, 19 feet beam, 5 feet hold, and measured 100 tons burden. She had one deck and no mast, a transom stern, a cabin above deck for officers and crew, and a figurehead. Power was furnished by a high pressure engine and three boilers. Her safety barge was 111 feet 8 inches long, 16 feet beam, 4 feet

The Warrior arrived at Prairie du Chien just as Black Hawk and his band were retreating toward the Mississippi. She was immediately pressed into service and Throckmorton was given orders to patrol the river above the fort to prevent the Indians from crossing. Lieutenants James W. Kingsbury and Reuben Holmes, with a detachment of fifteen regulars and six volunteers, were sent aboard and a small six-pounder was placed on the bow. The Warrior first steamed north to Wabasha's village where about one hundred and fifty Winnebago Indians were enlisted to help patrol the river. Then Throckmorton proceeded downstream and reached the spot where De Soto now stands just as Black Hawk and his warriors were pouring down through the hills to the river. A white flag was raised by Black Hawk and Throckmorton was invited to land but promptly refused. Black Hawk in turn refused to board the Warrior, whereupon hostilities began. During the brief engagement the Indians fired hundreds of shots, only sixty of which reached their mark. One man was wounded. Four shots of grape sent the Indians scurrying for shelter.

Having halted the retreat of the Indians the Warrior steamed grimly down to Fort Crawford for a fresh supply of fuel. While this brief skirmish was of no great significance in itself it served to check the Indians sufficiently to allow the troops to come up a little later and completely rout them at Bad Axe. Shortly afterwards the Winnebago captured Black Hawk and brought him to Prairie du Chien whence he and eleven of his warriors were brought down to Jefferson Barracks on the steamboat Winnebago.²¹

⁸ inches hold, and measured 55 tons. According to Edward Jones, the Surveyor at Pittsburgh, the safety barge had a square stern, a cabin above deck, and a plain figure. The *Warrior* was one of the few steamboats to tow a safety barge on the Upper Mississippi.

²¹ Niles' Weekly Register, Vol. XLIII (September 1, 8, 15, 22, 29, 1832), pp. 5, 12, 13, 51, 78, 79.

The picturesque commanders and their forces used steamboats throughout the Black Hawk War. Inscribed in the cabin registers of such boats as the *Chieftain*, the *Dove*, the *Enterprize*, the *Warrior*, the *Winnebago*, and the *William Wallace*, were the names of Brigadier General Henry Atkinson, Brigadier General Winfield Scott, Colonel Zachary Taylor, and Lieutenant Jefferson Davis. Henry Atkinson took passage on the *Warrior* to Jefferson Barracks after the battle of Bad Axe, while Winfield Scott, in forwarding Atkinson's two reports of the battle, dated the letter "steamboat Warrior, near Galena, Aug. 10,".22

And there were other wars. On May 15, 1846, the Tempest whisked up to the Galena levee with news of the outbreak of the Mexican War. The J. M. White had brought this news from New Orleans to St. Louis whence the Tempest had steamed upstream to spread the news throughout the Upper Mississippi. Four days later the Red Wing brought newspaper accounts of the destruction of Matamoras and the killing of seven hundred Mexicans while the Atlas, the Uncle Toby, and the Prairie Bird, arrived almost in her wake with further dispatches. Neither telegraph nor railroad had made sufficient progress to act as a connecting link so the Upper Mississippi Valley relied on the steamboat to transmit the latest news from the front. Since each community had contributed many young men to the struggle, the levee was constantly thronged with people awaiting the arrival of steamboats. There was general rejoicing at Galena when in the spring of 1847 the War Eagle came snorting up the Fever River with news of Major General Zachary Taylor's victory at Buena Vista.²³

²² Missouri Republican (St. Louis), May 29, June 5, 26, July 10, August 14, 21, 28, September 11, 1832; Niles' Weekly Register, Vol. XLIII (September 8, 1832), p. 26.

²³ Northwestern Gazette and Galena Advertiser, May 15, 19, 1846, April 6, 1847.

The outbreak of hostilities with Mexico demanded a quick concentration of troops throughout the Mississippi Valley and steamboats were immediately pressed into service. Almost every downstream craft was crowded with regulars and volunteers. Early in June, 1846, the dragoons stationed at Fort Crawford and Fort Atkinson passed down on Captain Throckmorton's Cecelia. Shortly afterwards volunteers from Galena and Jo Daviess County, composed chiefly of young miners, departed for Alton on the St. Anthony. During the winter it was necessary for troops to march overland and on February 2, 1847, a company of weather-beaten but healthy soldiers arrived at Galena after a four hundred mile tramp from St. Peter's. Spring brought a revival of traffic, however, and Captain John H. King recruited sixty-four men in Galena and departed immediately on the War Eagle. Two weeks later one hundred Illinois volunteers left Galena and Savanna for Cairo. Of the sixty and more craft which plied the Upper Mississippi during the course of the Mexican War, few failed to secure a fair share of the troops and supplies moving southward.24

During the winter of 1860 the importance of the impending struggle on Upper Mississippi steamboats was quickly recognized. Eastern newspapers sympathized with the northwestern States because they felt that secession would close the Mississippi River and prevent western products from moving southward. But a Dubuque newspaper editor thought this unlikely and believed that the South would grant free trade at both New Orleans and Mobile, which was exactly what the East did not want. A week later the same editor observed that the prospect of being blocked by the South was a less important problem for Senator James W. Grimes and other Iowa Congressmen to solve

²⁴ Northwestern Gazette and Galena Advertiser, June 26, July 3, 1846; February 2, April 6, 20, 1847; Bloomington Herald, June 26, 1846.

than was the urgent need of appropriations for improving the Upper and Lower rapids.²⁵

Excitement was at a fever pitch during those early Civil War days. Galena citizens were thoroughly alarmed when the steamboat La Crosse arrived at their levee with 224 kegs of powder from the Platteville powder mills presumably destined for Pike's Peak. Fearful lest the powder should fall into the hands of secessionists at Hannibal or St. Louis and in accordance with the Illinois Governor's telegram to "detain it by all means", the mayor of Galena forbade the captain of the La Crosse to take it downstream. A little later the powder was ordered to be forwarded to La Salle, Illinois.²⁶

Thousands of regulars and volunteers were transported by steamboat during the Civil War. Generous quotas of volunteers were contributed by the various towns along the Mississippi and its tributaries as far north as St. Paul. Late in April the Sucker State left Dubuque with a dozen members of the Governor's Greys on board, while her sister ship, the Hawkeye State, carried a portion of the First Iowa Regiment from Davenport to Keokuk. Eight boxes of uniforms for the Dubuque "Greys" were shipped to Keokuk on board the Key City. Early in June the Canada passed Dubuque with three hundred troops from McGregor, Iowa, and on her next trip she brought three companies of volunteers from further upstream. These were met at the levee by the Dubuque volunteers and made a "grand appearance" parading through the streets. Shortly afterwards the Washington Guards of Dubuque, the Pioneer Greys of Black Hawk County, and the Union Guards of Butler County left Dubuque on the Key City. Throughout the season the Jennie Deans, the Denmark, the

²⁵ The Herald (Dubuque), January 30, February 7, 1861.

²⁶ The Herald (Dubuque), April 27, 1861.

Henry Clay, the Pembina, the Bill Henderson, and two score other craft took companies of volunteers to the various points below. So gratifying were the returns from such employment during the first few months of the war that the Northern Line Packet Company of St. Louis did an unprecedented thing: it reduced the fare for transporting troops!²⁷

Despite this activity in transporting troops, the war had, at first, a depressing effect on steamboating. In commenting on an item in the Keokuk press the *Dubuque Herald* of June 2, 1861, declared that a similar situation would soon exist all along the river if the war continued. The Keokuk despatch read:

To sustain a river news column with the business that's now doing and the number of boats running, would be an impossibility. If our soldiers were not daily exercising on the Levee we would see grass grow there in abundance. The public can judge what business there is when six regular liners do the whole of it from St. Louis to the upper Lakes. Only for the mail the Keokuk and St. Louis Packet could not make expenses to run one boat and make weekly trips. The Northern Line boats bring up a great many passengers but very little freight, and their return freights are equally meagre, and totally destitute of passengers. Produce finds no outlet below us, and merchants just order sufficient to keep their stock assorted.

So many steamboats lay idle at the various ports, that the *Herald* of June 11, 1861, proposed that an excursion be run to Keokuk to allow the relatives and friends an opportunity to visit the three hundred volunteers encamped at that point.

But navigation slowly revived as the summer wore on, for a better stage of water and the movement of grain southward once more called steamboats into action. Cap-

²⁷ The Herald (Dubuque), April 28, June 1, 3, 6, 13, 1861.

tain Datus E. Coon's company of sixty-five cavalrymen was given a rousing farewell when the *Denmark* departed from Dubuque in August. The cheers of the company from the hurricane deck of the *Denmark* were heard on the bluffs of the city half a mile distant.²⁸

In November, 1861, a flotilla of steamboats carried the Third Regiment of Minnesota Volunteers southward from St. Paul. Throngs of cheering people gathered at the various towns along the Mississippi to see the troops. The levee at Red Wing was "jammed" with the largest crowd ever to gather there. Each boat was greeted with cheers and a salute. When the steamboat with the Goodhue County volunteers arrived, an immense bonfire was lighted near the point where the boat landed. The soldiers were allowed a half hour ashore which was spent in hurried greetings and farewells to relatives and friends.²⁹

MOVEMENT OF TROOPS DURING PEACE TIMES

The movement of troops during times of peace was more profitable than in times of war when viewed over a period of three decades. As has already been pointed out, prior to the voyage of the *Virginia* in 1823 troops had usually been transported by keelboat, a method which was as costly as it was slow. In 1821, for example, it took the keelboat *James Ross* sixteen days to convey a detachment of the Fifth Infantry from Prairie du Chien to St. Peter's. Although no rapids impeded its progress the *James Ross* averaged but thirteen miles per day for the two hundred and twelve miles of river between Fort Crawford and Fort St. Anthony.

Keelboats generally descended with great facility. On October 13, 1821, the Saucy Jack left St. Peter's with

²⁸ Daily Express and Herald (Dubuque), August 18, 1861.

²⁹ Goodhue County Republican (Red Wing), November 22, 1861.

Colonel Snelling on board. Gliding along at the rate of eight miles an hour the Saucy Jack traveled throughout the night and by sunrise reached the foot of Lake Pepin, a distance of eighty miles. Four days were required to reach Prairie du Chien. This was exceptionally good time and meant that wind and water were favorable. The Saucy Jack probably consumed about sixty-five hours running time so that the average rate of speed was approximately three miles per hour downstream. Three years later, in 1824, the steamboat Mandan ran from St. Peter's to St. Louis in sixty-two and one-half hours running time, an average of almost twelve miles per hour downstream.³⁰

To facilitate the transportation of troops and supplies Brigadier General Henry Atkinson invented a new type of craft. The new boat made the trip from St. Louis to St. Charles on the Missouri River in two days or half the time usually consumed by the keelboat. It was estimated that Atkinson's boat could average twenty miles a day and make thirty in an emergency. The following description of Atkinson's strange craft has been left us:

The machinery consists of a shaft, thrown across the centre of the boat, with a water wheel at each end — a five feet cog wheel in the centre of the shaft, and put in motion by another cog wheel, three feet four inches, resting on an iron shaft, which supports a fly wheel at one end, of eight feet in diameter. The fly and small cog wheel are moved by a crank, projecting from an arm of the fly wheel, with two pitmans, which are impelled by soldiers, seated on from eight to ten benches, four abreast, with a succession of cross bars before each bench, contained in a frame that moves on slides, with a three feet stroke of the crank. The men are comfortably seated under an awning, sheltered from the sun and rain — the labor much lighter than rowing with a common oar, and the boats are propelled with a velocity sufficient to stem the most rapid current of the Missouri.³¹

³⁰ Taliaferro Journal, No. II; St. Louis Enquirer, May 24, 1824.

³¹ Niles' Weekly Register, Vol. XXVII (November 6, 1824), pp. 149, 150.

After the successful navigation of the Upper Mississippi by the *Virginia*, however, it was only on rare occasions that keelboats and similar craft were resorted to. Thus, in 1826, thirty-five keelboats arrived at St. Louis from Green Bay bringing the Third Regiment of Infantry. During the driest season the flotilla had to portage only twenty-five hundred yards between the Fox and Wisconsin rivers.³² Again, the low stage of water in 1827 forced the troops under Brigadier General Atkinson to disembark from the *Missouri* and *Illinois* at the foot of the Lower Rapids and complete the remainder of the journey to Prairie du Chien by keelboat. With a few such exceptions, however, the transportation of troops after 1825 was performed by steamboat.³³

Attacks were often made in Congress against the expenditure of large sums yearly for transporting soldiers from post to post, but the policy was warmly defended by Major General Jacob Brown. He asserted that the army looked to the government for "justice and impartiality" in the distribution of troops, some of whom would, if no changes were made, be located in unhealthy surroundings for long periods with no hope of a transfer. The occasional movement of troops was also necessary for the "preservation of discipline and efficiency" and it was held that the morale and general condition of the troops was kept at such a high level that the good results more than compensated for the expenditures involved in transportation.³⁴

Despite these occasional outbursts in Congress the movement of troops continued and steamboats reaped rich profits. The steamboat *Missouri* left Jefferson Barracks in the spring of 1828 with six companies of the First United

³² St. Louis Herald, November 8, 1826, quoted in Niles' Weekly Register, Vol. XXXI (December 9, 1826), p. 226.

³³ Missouri Republican (St. Louis), July 19, 26, 1827.

³⁴ American State Papers, Military Affairs, Vol. III, pp. 655, 656.

States Infantry and two of the Third, under Colonel John McNeil. Three companies of the First were destined for Fort Snelling, three for Fort Howard, four were to disembark at Fort Crawford, while but two were to be left at Fort Armstrong. At the same time the steamboat *Illinois* ascended the Missouri River with fourteen companies under Colonel Henry Leavenworth for Cantonment Leavenworth.³⁵

In 1837 the entire First Regiment of Infantry stationed at Fort Crawford and Fort Snelling was ordered to the Red River where a half dozen regiments had already been concentrated.³⁶ Two years later the *Pike* arrived at Galena bound for Fort Snelling with eighty new recruits from Covington, Kentucky. Shortly afterwards the *Pike* returned to Prairie du Chien to pick up one hundred troops destined for Fort Snelling. At that time there were two hundred soldiers at Fort Crawford and three hundred at Fort Snelling.³⁷

Steamboats engaged in conveying troops on the Upper Mississippi met with an occasional accident but the casualties were only minor in character. Thus, in April, 1842, the *Illinois* sank on the Lower Rapids while ascending the Mississippi with troops from Jefferson Barracks. At the same time the *Galena* passed upstream with 358 soldiers on board, 130 of whom were destined for Fort Snelling while the remainder were to be discharged at Fort Crawford. The *Galena* broke her machinery on the way up and blew a cylinder while bound downstream. She was towed from Galena to St. Louis by the *New Brazil*. On April 27, 1865, the *Sultana* exploded on the lower Mississippi with a

³⁵ Missouri Republican (St. Louis), April 29, 1828.

³⁶ Missouri Republican (St. Louis), May 31, 1837, quoted in the Northwestern Gazette and Galena Advertiser, June 10, 1837.

³⁷ Northwestern Gazette and Galena Advertiser, September 3, 21, 1839.

loss of 1647 lives, the worst disaster ever to befall a steamboat on western waters. Most of those aboard were exchanged Union soldiers bound homeward.³⁸

Immense profits were reaped by steamboats for transporting soldiers in time of peace. The Canada passed Dubuque in July of 1860 with the largest load of the season, having on board deck passengers who had paid \$1672 in fares and cabin passengers whose fares amounted to \$2000, while towing two barges loaded to the water's edge with freight. The Canada had been obliged to refuse both freight and passengers at every point below. Most of the passengers aboard the Canada were United States troops bound for some point upstream.³⁹

Two factors are essential in estimating the cost of transporting troops during peace in the period from 1823 to 1861. These are the number of troops carried and the distance traveled. Although the number of soldiers conveved is not known it would seem fair to assume that at least five hundred fresh troops on an average were moved about each year to the half dozen posts in existence at one point or another throughout this period. In estimating the distance traveled one must take into consideration the fact that the steady influx of immigrants swept back the frontier line. Fort Edwards, but two hundred miles distant from St. Louis, was the post closest to Jefferson Barracks in 1823 and was beyond the settled area, but by 1861 Fort Snelling was the fort on the Upper Mississippi nearest to Jefferson Barracks, while Fort Ripley and Fort Ridgely were located on the outer fringe of settlement. With this in mind the average distance traveled was possibly about six hundred miles. The government probably paid Upper Mississippi steamboats \$40 a round trip fare or \$20,000

³⁸ Northwestern Gazette and Galena Advertiser, April 30, 1842; Gould's Fifty Years on the Mississippi (St. Louis, 1889), p. 437.

³⁹ The Herald (Dubuque), July 24, 1860.

STEAMBOATING ON THE MILITARY FRONTIER 281

annually for transporting five hundred soldiers six hundred miles. At this rate approximately \$750,000 was expended in the decades preceding the Civil War.⁴⁰

TRANSPORTATION OF SUPPLIES

More prosaic but equally as important was the transportation of supplies and equipment to the various posts on the Upper Mississippi. Each year newspapers carried advertisements inviting merchants to submit bids for furnishing huge quantities of pork, flour, whiskey, beans, soap, candles, vinegar, and salt to the forts on the frontier. Separate proposals were also solicited for furnishing fresh beef on the hoof. Sometimes the cattle were driven overland but usually they were transported northward in pens constructed on the lower deck of the steamboat. Even if such stock was not seen its presence was otherwise noted by those deck and cabin passengers forced to locate in the vicinity of the cattle pen.

In 1823 the Missouri Republican advertised for bids for the posts at New Orleans, Pensacola, Baton Rouge, Natchitoches, Fort Smith (Arkansas), Council Bluff, Green Bay, Saginaw Bay, Superior, Mackinac, Pittsburgh, Niagara, Fort Edwards, Fort Armstrong, Prairie du Chien, and St. Peter's. The provisions were to pass St. Louis for their ultimate destination by April 15, 1824, and if destined for posts above St. Louis such as St. Peter's they were to be aboard the boat and ready at that time. Each post had a definite time limit set for final delivery. Thus, Fort Edwards and Fort Armstrong were to receive their goods by May 15th, Fort Crawford by June 1st, while June 15th was set as the date for final delivery at St. Peter's.⁴¹

40 Since the government usually paid a higher tariff than did ordinary passengers, the round trip fare has been placed somewhat above the regular rate

41 Missouri Republican (St. Louis), August 6, 1823, August 26, 1824, July 26, 1827; St. Louis Enquirer, October 18, 1824.

The amount of provisions and supplies was of course governed by the number of troops at each post. In 1824 Fort Edwards received 60 barrels of pork, 125 barrels of fine fresh flour, 700 gallons of good proof whiskey, 55 bushels of good sound beans, 880 pounds of good hand soap, 220 pounds of tallow candles with cotton wicks, 14 bushels of salt, and 225 gallons of cider vinegar. The consignments that year for the posts above were as follows:⁴²

		Armstrong	Crawford	Snelling
Pork	(barrels)	60	120	360
Flour	(barrels)	125	225	750
Whiskey	(gallons)	700	1400	4200
Beans	(bushels)	55	110	330
Soap	(pounds)	880	1760	5280
Candles	(pounds)	430	860	
Salt	(bushels)	14	28	84
Vinegar	(gallons)	225	450	1350

Similar announcements were made in succeeding years. The *Missouri Republican* of July 26, 1827, requested bids for supplies and provisions for Upper Mississippi posts and on October 1st, the same paper called for separate and sealed proposals for furnishing 35,000 pounds of fresh beef to Fort Snelling, 30,000 to Fort Crawford, and 15,000 to Fort Armstrong. The beef was to be delivered on the hoof before June 1, 1828.

Early each spring Upper Mississippi steamboats began transporting military supplies. On April 1, 1824, Captain William Linn arrived at St. Louis from New Orleans with the *Mandan*. After spending five days in port loading a cargo of military supplies the *Mandan* departed on April 5th for St. Peter's with her guards dripping. She returned to St. Louis on May 17th, having taken forty-two days for

⁴² Missouri Republican (St. Louis), August 6, 1823.

the round trip. A low stage of water on the rapids, an ice-locked Lake Pepin, some unforeseen engine trouble, or a sand bar studded channel must have delayed the *Mandan* on her voyage upstream for she required less than three days running time to return. On her way down she met the *Indiana* bound for St. Peter's with a cargo of provisions and supplies from Louisville. The *Indiana* left St. Louis on May 13th, commanded by S. Craig, and returned on June 5, 1824, having consumed twenty-three days in making the round trip. The *Virginia* required twenty days to complete the journey upstream the previous year.

Low water made the passage over the rapids difficult and often dangerous. The time of arrival and departure of steamboats was extremely uncertain at such times for their speed was reduced by one-half and the delay occasioned by sand bars tended to quadruple the time of a trip. Early in April the *Indiana* carried military supplies to Fort Edwards. It took sixteen days to complete the round trip of four hundred miles. Late in June she departed for the same post with an immense cargo and returned in six days! On a previous voyage, the *Indiana* made the run to Fort Armstrong and back to St. Louis in the astonishing time of five days, running two hundred miles farther and picking her way up and back over a fourteen mile stretch of the Lower Rapids!⁴³

By July 31, 1824, four steamboats — the Virginia, the Rambler, the Mandan, and the Indiana — had visited Fort Snelling. Under date of May 17, 1826, Major Lawrence Taliaferro recorded three of these together with the General Neville, the Rufus Putnam, the Lawrence, the Scioto, the Eclipse, the Josephine, the Fulton, the Red Rover, the Black Rover, the Warrior, the Enterprise, and

⁴³ Missouri Republican (St. Louis), August 9, 1824; Petersen's The "Virginia", the "Clermont" of the Upper Mississippi, in Minnesota History, Vol. IX, p. 361.

the *Volant*. Most of the goods received at Fort Snelling on these steamboats consisted of supplies and provisions for the military. Taliaferro notes, for example, that the steamboat *Scioto* arrived on Friday, May 26, 1826, with public stores and some Indian goods for himself and the Columbia Fur Company. Among the passengers were Mr. Langham, the sub-agent at St. Peter's and Major John Fowle of the Fifth Infantry. The *Scioto* left for Prairie du Chien the next day to bring up the balance of the public stores and returned on June 1st, having made the round trip in six days.⁴⁴

According to an estimate made on March 22, 1844, by Secretary of War William Wilkins, the public property transported annually on the waters of the Upper Mississippi was valued at \$273,213.90. The clothing and quarter-master's stores furnished annually to the troops on the Mississippi and its tributaries above the mouth of the Missouri amounted to \$25,000. Clothing and equipment for Fort Snelling was valued at \$4,041.93; for Fort Crawford \$5,389.24; for Fort Des Moines \$3,579.78; for Fort Atkinson \$3,579.78; and for Fort Winnebago \$1,347.31; or a total of \$17,938.04. The quartermaster's stores for the same posts amounted to \$7,061.98. Small arms, ammunition, and paints for gun carriages, to the amount of \$5,910.00, were also sent to the companies stationed at Fort Atkinson, Fort Des Moines, and Prairie du Chien in 1844.

The quantity and value of the subsistence shipped to the same posts in 1844 were as follows:

		Bulk		
Post	Companies	in Barrels	Value	
Fort Snelling	3	822	\$5,992.30	
Fort Crawford	4	1073	7,481.40	

⁴⁴ Taliaferro Journal, No. III, May 17, 26, 27, June 1, 1826.

STEAMBOATING ON THE MILITARY FRONTIER 285

Fort Atkinson	2	530	3,757.40
Fort Des Moines	2	530	3,791.20
Fort Winnebago	1	270	2,371.60
		HAVE THE REAL PROPERTY.	
Total	12	3225	\$23,393.90

In concluding his report, Commissioner of General Subsistence George Gibson complained bitterly that the rapids made it necessary to ship a whole year's supply early each spring during a good stage of water.⁴⁵

While steamboats continued to be actively engaged in transporting troops and supplies in the decade before the Civil War their trips were confined chiefly to Fort Snelling and the posts above. Destined for work among the Indians on the Des Moines River, 150 soldiers embarked from Fort Snelling on the Highland Mary in May of 1850. Three years later the Ben Campbell arrived at St. Paul with a cargo of five hundred tons of freight, most of which was consigned to the government. Fort Madison and Burlington provided the Ben Campbell with these goods, the largest cargo to reach St. Paul that season. On August 1, 1857, the Northern Light came booming up to the St. Paul wharf with Company L of the Second Artillery in command of Major Hays. The troops had traveled sixteen hundred miles in six days "giving a fair impression of the celerity with which troops can be concentrated in exposed parts of the country, by means of railroads and steamboats."46

It would be difficult to overestimate the relative importance of the trade for which the presence of the military was responsible. In 1853 the trade of St. Paul in govern-

⁴⁵ Senate Documents, 28th Congress, 1st Session, Doc. No. 242, pp. 1, 2. (Serial 434)

⁴⁶ Weekly Northwestern Gazette (Galena), May 21, 1850; The Minnesotian (St. Paul), May 21, 1853; Daily Pioneer and Democrat (St. Paul), August 2, 1857.

ment supplies actually exceeded that of supplying goods to settlers.47 Although the exact amount is not known, the receipts from transporting supplies was perhaps as great as those derived from conveying troops during times of peace, so that one might estimate approximately \$1,500,000 was earned by steamboats engaged in this work. An additional \$500,000 was probably netted during the Black Hawk, the Mexican, and the Civil War. The total income from transporting scientific expeditions, assisting in engineering projects, and conveying United States Army officers on tours of inspection of the military posts was perhaps \$750,000. The commerce arising from the military frontier before the close of the Civil War may have yielded Upper Mississippi steamboats almost \$3,000,000. While the trade arising from the Indian and the fur trader did not equal this steady traffic in military forces and supplies, the three combined were significant factors in stimulating steamboating on waters far beyond the settlers' frontier.

WILLIAM J. PETERSEN

THE STATE HISTORICAL SOCIETY OF IOWA IOWA CITY IOWA

47 The Minnesotian (St. Paul), April 2, 1853.