## The Way it All Looked

In 1813 a writer in the Lexington, Kentucky, Reporter described Fort Madison as "a wretched pen, improperly called a fort." He was quite mistaken. It was no bastioned fortress, but by the standards of the day it was a comfortable and adequate frontier fortification.

Modern writers have sometimes called the fort "tiny" and have referred to a "lone chimney" left standing after the fort was burned. A fort with a lone chimney would indeed have been tiny in those days when every room was heated by a fireplace. But when Fort Madison fell into ashes, at least a dozen blackened chimneys remained.

The fort could be reconstructed today from the fragments of information that have survived. These fragments fall far short of a blueprint; but by adding what we know of construction methods of the day, and by studying other forts for which more complete plans exist, we could come close to an accurate replica.

When Lieutenant Kingsley began work on the fort he sent a crude drawing of his plan to the Secretary of War. It was only a prediction of how the place would look, not an accurate detailing of the final structure. Until recently it was

thought to be the only drawing of the fort in existence.

Two other drawings mentioned in letters cannot now be located in the files of the National Archives. One was drawn by Colonel Daniel Bissell after an inspection trip to Fort Madison, and the other was made by Captain Stark. If either of these plans is ever found, more light will be shed upon the subject. Stark was a methodical man and would have produced a detailed drawing — although he apologized for its inadequacy in sending it to headquarters:

The whole is very roughly executed being the first thing of the kind I ever undertook and having no instrument whatever but a pair of bad dividers and Scale — The Measurement was made partly with a 10 feet Pole and partly in 3 feet paces; However, those who have seen this plan say it is tolerably exact.

The one real plan now available to us was drawn by factor John Johnson. It was found by this writer in 1956 while he was rummaging through a bundle of Johnson's vouchers and inventories at the National Archives. A modern version, redrawn for clarity, is reproduced on the inside back cover. By studying it item for item, following Johnson's numbering key, we can acquire a fair picture of Fort Madison.

No. 1, 2, 3, 4 — blockhouses. The first three were on level ground near the river but the fourth was on the ridge running behind the garrison and

parallel to the river. Johnson called it "an elevated situation, about 45 degrees." Captain James House, after a trip to the fort, wrote that the ridge was within 250 feet of the rear of the main work. A blockhouse was constructed there when it became apparent that the ridge was an ideal spot from which the Indians could fire upon the fort. No description of the blockhouses is available, but the Secretary of War in 1803 prescribed, for the frontier, blockhouses twenty feet square, two stories high, with portholes in the upper story for small ordnance and loopholes in each story for muskets. The timbers were to be hewed on two sides for close fit, and pointed with clay or lime. Johnson used the lower story of No. 3 for storage of furs and trade goods. No. 4 may have been smaller than the others, since it was an outpost. The stockade around the main work, joining the blockhouses, was made of great sturdy logs, sharpened at the top, but that portion running up the incline to blockhouse No. 4 may have been made of smaller pickets since it was intended only as protection for guard details passing to and from the main work. The gate near the river was the "main gate" and the one near blockhouse No. 3 was the "wicket gate."

No. 5 — officers' quarters. Johnson indicated six chimneys here and said the quarters were two stories high. The two detached units probably were kitchens. The unit containing the number 5

seems to have been a covered or enclosed passage between two buildings, each with two rooms downstairs and two upstairs. Stark wrote that officers' quarters and enlisted men's barracks would contain eight rooms each. (He added that Fort Madison was to be the best constructed of any garrison he had ever seen.) The rooms were plastered, probably with lime made at the post, for "burning lime" was a common fatigue duty of soldiers. The woodwork was of black walnut and pine. The common fireplaces were made of stone blasted from a quarry, but the one in the main room of the officers' quarters was made of "ground stones" — round stones picked up by the soldiers.

No. 6 — barracks. Similar in design to the officers' quarters, with eight rooms and four chimneys. At one time more than 100 men were housed here, but the usual number was much less. No detailed description is available, but the structure seems to have been about 20 by 80 feet with living and dining quarters downstairs and sleeping quarters upstairs. A similar barracks unit built in Detroit in 1805 was described by the Secretary of War as having two windows in each room (20 panes per window) and a 7-foot piazza running along the front of the building. This piazza, said the Secretary, should be furnished with benches along the wall and should have a gravelled floor. The outside walls probably were not painted but the roof, made of rough-hewn shingles, may have

been coated with oil and Spanish brown, the Army's favorite color for outside work.

No. 8 — covered way. In military terminology the passage to blockhouse No. 4 was a covered or covert way, but the men of Fort Madison simply called it "the tail." One of Captain Stark's superiors suggested that he "curtail the tail" to make defense of the fort simpler; Stark replied that it was a covered way to the blockhouse on the hill, and thus vital.

No. 9 — parade. In this open area the men paraded under arms at reveille and retreat and for such ceremonies as weekly and monthly inspections. The flagstaff was here, and perhaps the well. Johnson's drawing fails to show two structures which were important to any military post, the hospital and the powder magazine. These may not yet have been completed when he made his drawing in January, 1810. The magazine would have been located at one side of the parade, away from the other buildings, as a precaution against fire. The hospital could have been anywhere, perhaps along the east wall of the stockade where no structures are shown in the drawing. According to standard War Department plans the usual magazine was a conical stone or brick structure about eight feet in diameter, with no wooden parts except the door. It was water-proofed with two or three coats of Spanish brown and provided with a small vent for circulation.

No. 10 — factory. In the fall of 1810 a board of survey headed by Lieutenant Hamilton inspected the factory buildings then under construction to estimate their value. The description sent to Washington by the board is paraphrased here.

The main factory house was 52 by 20 feet, consisting of a stone-floored cellar and two stories of hewn logs, with an 8-foot piazza in front, "the whole under a strong roof of oak shingles." The lower story would eventually contain a room  $12\frac{1}{2}$  by  $11\frac{1}{2}$  in the south end, with a fireplace, to be used as an office; a trading room 19 by  $18\frac{1}{4}$ ; a room for skins  $11\frac{1}{2}$  by  $5\frac{1}{2}$ ; a room 20 by 12 for a kitchen or for use by the interpreter; and a stairway 20 by  $8\frac{1}{2}$ . Upstairs there would be a room 20 by 18 in the south end, with fireplace, for dining; a bedroom 13 by  $11\frac{1}{2}$ ; a room 7 by 7 for domestic articles; a room 20 by 12 in the north end, with fireplace, for the assistant factor, and a 7-foot passage connecting the rooms.

When complete the building would be worth \$3,166. While it was under construction the factor was also using these near-by structures: a house 15 by 20 occupied by Johnson as home and office; a trading house 15 by 20; an interpreter's house 12 by 15; and a house 15 by 18 built originally for Indian use and now serving as a warehouse. All these minor structures were "cabinaroofed" with clapboards instead of shingles.

Some of the cabins were torn down or burned

by Hamilton in 1812, against Johnson's wishes, apparently because there was danger that hostile Indians might occupy them and fire upon the fort.

Johnson hired soldiers for ten cents a day to build his factory, and also relied on some civilian laborers provided by trader Denis Julien. Construction went slowly, and in the spring of 1812 Johnson was still hiring builders. In May of that year he paid John Mason \$6.50 for "making a ground floor to the piazza."

No. 11 — the ravine. Johnson did not include the ravine in his drawing, but it is shown here — closer than the scale would ordinarily permit — because of its importance. Lieutenant Hamilton said it was 100 paces from the stockade. Here the Indians invariably gathered to attack, and finally Hamilton built a small blockhouse on the point of land where the ravine joined the river.

Other buildings outside the stockade. The blockhouse by the ravine, not built until 1813, emphasizes one difficulty in reconstructing the garrison on paper: buildings were erected and torn down throughout the five-year history of the fort. There is even one more blockhouse to contend with. Because the Indians concealed themselves behind the river bank in front of the fort, Hamilton built a small blockhouse at the edge of the river, near the stockade, in late 1812 or early 1813. It was connected to the main work by a "small subterraneous passage." Other buildings men-

tioned in correspondence include a stable, and a house occupied by Archibald McNabb, operator of a private trading establishment. Trader Denis Julien seems to have maintained buildings in the area for his hired men, and there probably was a sutler's store, ice house, bake house, and a few rough shelters for livestock.

Location of the fort. There is little reason to question the general location of Fort Madison as assigned by local tradition. A historical marker in the form of a fireplace chimney, near the W. A. Sheaffer Company in present Fort Madison, is undoubtedly near the site. As we have seen, the lone chimney which early settlers reported still standing could have been one of many, and may have been the remnant of a cabin some distance from the fort. In 1820, when Stephen Watts Kearny went down the river, he wrote in his journal that he saw the remains of nine chimneys. Captain James House wrote in 1809 of two islands across the channel from the fort, with an opening between the two through which the opposite shore could be watched by sentinels at the garrison. Two islands fitting this description, just below the railroad bridge, were inundated in 1913 when the gates of the Keokuk dam were closed, raising the river level for many miles above the dam.

The closing of the dam probably flooded the actual site of the fort. From the records we know that the installation was near enough to the river

to permit a "small subterraneous passage" to be dug to the shore, and that a ridge was located 250 feet behind the main stockade. This ridge could hardly be the substantial bluff that now overlooks the site from considerably farther back. Time and the busy hand of man have probably leveled a smaller ridge, about where the Sheaffer plant now stands. More research on this subject is needed.

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