



Designed to Cure: Civil War Hospitals in Vermont

President Abraham Lincoln and Secretary of War Edwin Stanton greeted a proposal from Vermont Governor Frederick Holbrook to open military hospitals far from the battlefield as “inexpedient and impracticable of execution.” By the war’s end, however, the army had created 192 general hospitals in its 16 military departments. Twenty-five hospitals were in the Department of the East, including three in Vermont.

By NANCY E. BOONE AND MICHAEL SHERMAN*

In 1894 former Governor Frederick Holbrook of Brattleboro described his negotiations with federal officials to establish hospitals in Vermont to treat sick and wounded soldiers from the New England region.¹ Holbrook wrote that following a visit to the field hospitals in and around Washington, D.C., in December 1862, he convinced President Lincoln and Secretary of War Edwin Stanton to overcome their doubts that a hospital so far from the front lines would be “inexpedient and impracticable of execution. It was thought that many of the disabled men would die under the fatigue and exposure of such long transportation back to their state; and it was suggested that possibly some might be lost by desertion. It was also said that the plan would be an unmilitary innovation.”²

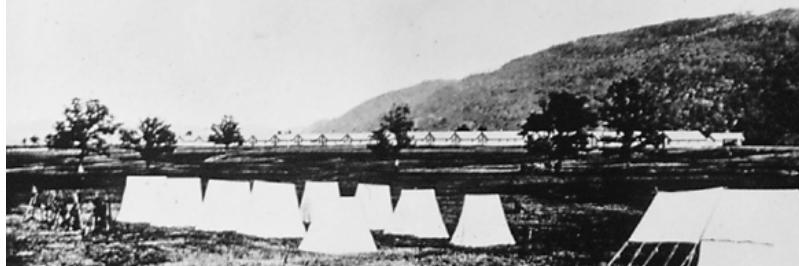
To overcome these concerns, Holbrook assured Lincoln and Stanton that the hospital would operate as a military facility, that the secretary of war would authorize transfer of patients from field hospitals, and that the experiment, as Stanton insisted on calling it, could be revoked in six months’ time if it proved unworkable. Holbrook countered concerns

about the costs of building a new hospital by offering to use the existing military campgrounds and buildings in Brattleboro. These had been hastily built on the town fairgrounds in the summer of 1861 to muster out Vermont's First Brigade and muster in the Vermont Second Brigade. Holbrook pledged the State of Vermont to move the military buildings "to a sheltered situation at one end of the grounds, placing them in a hollow square, and to fit them up with plastered walls, nice floors, chimneys, provisions for ventilation, an abundance of pure spring water, and all needed appliances and facilities for hospital purposes."³

By the summer of 1863 the hospital in Brattleboro, under the command of Edward E. Phelps, who had accompanied Holbrook on his negotiating trip to Washington, was treating 1,500 to 2,000 patients. With the barracks buildings full, tents accommodated the overflow. According to Holbrook, the facility easily passed its first inspection by government officials and "was soon credited by the United States medical inspector, with perfecting a larger percentage of cures than any United States military hospital record elsewhere could show. . . . The experiment of



United States Gen'l Hospital, Brattleboro, Vt.--1863.



U.S. General Hospital (later called Smith General Hospital), Brattleboro, 1863.

establishing this hospital proved so successful that similar hospitals were provided in other northern states.”⁴

The Brattleboro hospital, later known as Smith General Hospital to honor another Vermont wartime governor, J. Gregory Smith, was one of three military medical facilities in Vermont. It handled more patients than either of the other two—4,402 patients between June 1, 1863 and October 5, 1865—but it was not the first to open and in some respects Holbrook’s account is misleading.

FROM POST HOSPITALS TO GENERAL HOSPITALS

Before the Civil War, post hospitals cared for seriously sick and wounded soldiers, while those with milder cases were simply confined to their tents. This system proved adequate for meeting the medical needs of small stationary units of armed forces. At the beginning of the war, regimental hospitals served the needs of the assembling troops, and division or brigade hospitals were created by combining regimental facilities. The first new military hospitals of the war—the East Street Infirmary and the Union Hotel—opened in Washington, D.C., in May 1861. Nearby private homes, adapted to create wards, service, and administrative areas, provided supplementary facilities. After Bull Run, in July 1861, when it became clear that the war would be long and require large scale movement of troops, the army had to develop a new system quickly to receive the most seriously wounded cases sent from the field hospitals or left behind when troops moved off to pursue the Confederate army. The first of many general hospitals opened in Alexandria, Virginia, followed by hospitals in Baltimore, at the U.S. Naval Academy at Annapolis, and the grounds of the Agricultural Society of Frederick, Maryland. In June 1861, the Christian Hospital in Philadelphia became the most remote military establishment of the Union army.

As the war dragged on, the army expanded the number and locations of military hospitals. According to the six-volume *Medical and Surgical History of the War of the Rebellion*, published serially by the Surgeon General between 1870 and 1888:

North of Philadelphia, there were but few extemporized hospitals. Factory buildings were occupied in Newark, N.J. A three-story cabinet factory contained most of the hospital beds in Elmira, N.Y. Contracts were made at Rochester and Buffalo with the civil hospitals at 50 to 75 cents daily per bed. The Mason hospital in Boston, Mass. was a private residence, given up rent-free by its owner.⁵

The U.S. government set up a few military hospitals south of Washington. In the western states, it created hospitals by converting or adapting asylums, orphanages, factories, hotels, schools, and warehouses.

By the war's end the army had created 192 general hospitals in its 16 military departments. Twenty-five hospitals were in the Department of the East, including three in Vermont. The surgeon general's report, so rich in detail about the dimensions, capacity, treatment, and facilities at these general hospitals, offers few dates, so it is difficult to confirm Governor Holbrook's claim for the priority of the Brattleboro General Hospital. It is clear, however, that the context for establishing these remote facilities was the growing realization that preexisting arrangements were inadequate for treating the large number of men who came out of battle wounded or physically and mentally broken down, as well as the many who contracted debilitating and contagious illnesses in the military camps themselves, where sanitary conditions were poor and diseases spread rapidly. In fact, during the Civil War, death from disease accounted for two-thirds of all military fatalities, while only one-third of the deaths were directly attributed to battle wounds, overwhelmingly bullet wounds. If a soldier survived the first few days following a battle injury, he was threatened by a host of secondary potential killers—diseases such as chronic diarrhea, typhoid, and malaria—if he had been lucky enough to escape them in routine camp life. Thus, by the time Holbrook and Phelps made their proposal to Lincoln and Stanton for remote hospitals, the need for additional facilities had become acute and the army had already begun to accommodate that need.

Although Holbrook's account claims that the Brattleboro mustering grounds became the first remote general hospital, the Marine Hospital in Burlington was already receiving sick and wounded from the war seven months before the governor presented his proposal to Lincoln and Stanton.⁶ According to the report of the surgeon general of Vermont, the hospital "was opened by the State of Vermont under the direction of Governor Holbrook" on May 5, 1862, when it received its first patients, and "transferred to and organized by the United States Government" on July 1, 1862.⁷ The physician in charge of the facility was Dr. S. W. Thayer, surgeon general of Vermont.

Originally built between 1856 and 1858 with a congressional appropriation of \$39,000—a political patronage reward for Judge David Smalley, head of the Vermont Democratic Party—the Italianate-style brick building with a spacious verandah sat two miles south of the village of Burlington on ten acres of land off Shelburne Road. According to an account in Abby Hemenway's *Vermont Historical Gazetteer*, the building commanded "a fine view of the lake and village. . . . It is 2 stories high, with a basement; built very thoroughly, with ample and convenient rooms for the use intended."⁸ A reporter from the *Burlington Free Press* described it as "a substantial and expensive affair. The rooms are high



U.S. General Hospital, Burlington. The photograph, from a stereoscopic view, shows the original building, known as the Marine Hospital. The building dimly visible to the right may be one of the hospital wards built during the Civil War. Date unknown. Courtesy of Special Collections, Bailey/Howe Library, University of Vermont.

and airy, furnished with marble mantels, with closets and bath rooms attached to each ward on both floors, and every convenience in the way of store rooms, cases of shelves and drawers, &c. for the safe and orderly keeping of the quantities of clothing and hospital supplies in constant demand. . . . The wounded are all within the Hospital building. A few of the sick . . . are in a wooden portable house, and in the tents, which are provided with floors and stoves, and are entirely comfortable.”⁹ Renamed the General Hospital in April 1863 then Baxter General Hospital in September 1864, in honor of Vermont Congressman

Portus Baxter, the facility treated a total of 2,406 men before the U.S. Army closed it in July 1865 and transferred its remaining patients to a temporary post hospital elsewhere in Burlington or to Sloan General Hospital in Montpelier.

Vermont's third military hospital opened in Montpelier in June 1864. Named in honor of W. J. Sloan, U.S. medical inspector for the Department of the East, the facility accommodated 500 patients, hospital staff, and a company of Vermont Reserve Corps, who served as hospital guards. On April 25, 1864, Governor Smith turned over the buildings to the U.S. War Department and in mid-June the first 300 patients arrived.¹⁰

THE ARCHITECTURAL DESIGN OF CIVIL WAR HOSPITALS

Sloan General Hospital was a fully developed example of the pavilion principle of hospital design, which employed many small, connected buildings instead of a single massive structure. This approach to hospital design and construction derived from the work of Florence Nightingale, who exposed the poor conditions in British military hospitals during the Crimean War (1853–1856) and became an internationally renowned advocate for improved sanitation and care in hospitals. Attributing poor recovery rates of injured soldiers to “bad air”¹¹ and crowded conditions, she recommended treating patients in smaller wards, with improved ventilation. More windows would let in sunlight and air, provide light for reading, and offer views for enhancing good morale. The pavilion system proposed by Nightingale as an organizational principle for hospital construction and operation called for smaller treatment wards in detached buildings with centrally located administrative and support spaces. Pavilions could be arranged parallel to each other, or in line. The U.S. military tested, refined, and revised the pavilion design as it erected large new hospitals in rapid succession throughout the eastern states. The hospital complexes functioned as discreet, self-contained communities, providing for the physical and social needs of the hundreds of patients, medical personnel, and support staff who lived there. Tents often supplemented the wooden buildings of a facility. The hospitals bore a resemblance to forts or prisons—often contained within a high fence, although most typically of a picket type that only symbolically protected the complex from invasion or escape. Point Lookout (1862) in Maryland combined a prison and a hospital. The hospital there used the spoke-and-wheel plan, perhaps the first example of a design that would later be used at Montpelier.

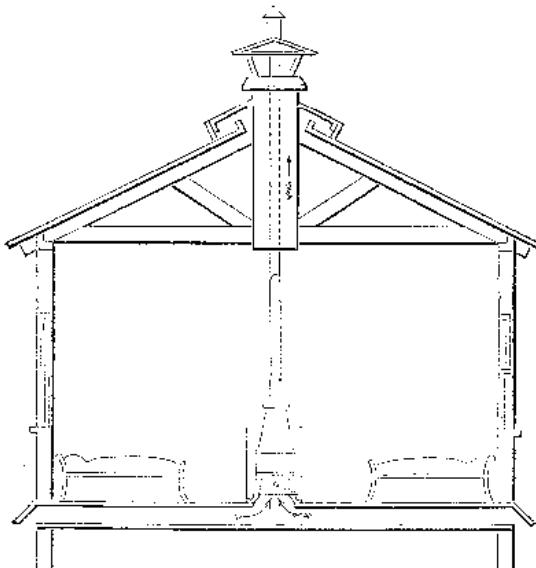
The converted barracks buildings that became the wards at Smith General Hospital in Brattleboro lacked sufficient windows for air and light. Barracks were typically constructed directly on the ground, exposed



Birdseye view of Hamming General Hospital and U.S. Prison, Point Lookout, Maryland. Courtesy of the National Library of Medicine, History of Medicine Division, Prints & Photographs Collection.

to damp and odors, termed by one observer as “unwholesome exhalation from the confined soil beneath.”¹² By contrast, the pavilion-style hospitals constructed by the U.S. Army consisted of one-story wards raised off the ground, with clear-span interiors open to the roof ridge.

As the prescription for good air and lots of it became an essential part of medical treatment, the army began improving ventilation in the pavilion model. Florence Nightingale noted that a patient gave off three pints of moisture in each twenty-four-hour period.¹³ Contemporary accounts of hospital facilities measured quality in terms of the cubic feet of fresh air available per patient bed. Early examples providing 500–600 cubic feet of air space per bed proved inadequate and “unhealthy,” and the goal moved toward 800, 1,000, and 1,200 cubic feet/bed. Using these criteria the army designed wards with an abundance of windows and placed two beds between adjacent windows so that each patient was next to one. Ridge ventilators penetrated the roofs to draw air through the wards. Some pavilion wards included shafts that in winter could be opened periodically to funnel air under the floor to an opening beneath a stove, where the air would be warmed as it entered the ward.



Schematic drawing of ventilation plan for U.S. general hospitals, from U.S. army specifications. Medical and Surgical History of the War of the Rebellion (1861–1865), Part III (1888), 945.

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Separating ward buildings also became a concern. Closely spaced wards were thought to stifle good air circulation, and the distance between adjacent pavilions grew to forty feet and more. Similarly, wards should be free of taller surrounding structures that could cut off breezes. Topographic elevation became a desirable specification for new hospital sites.

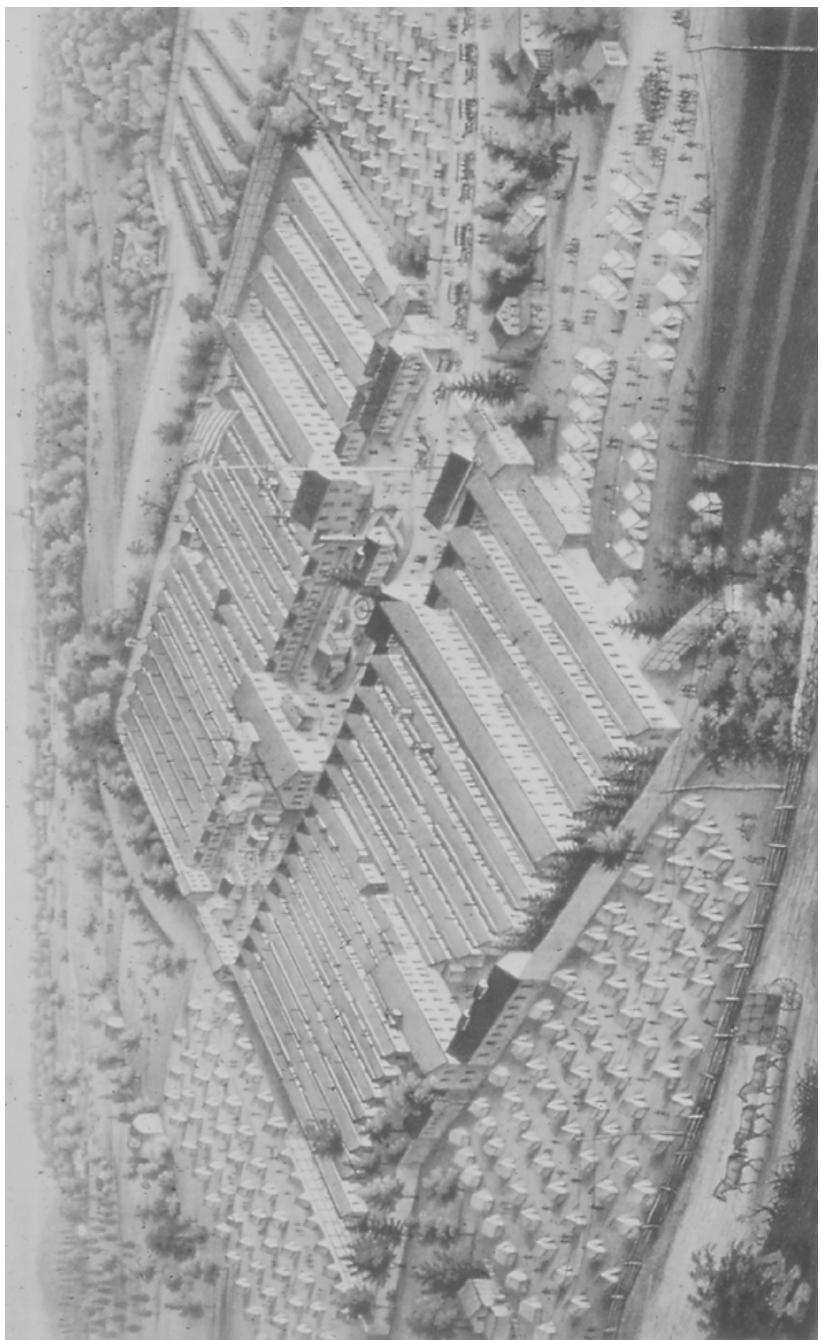
The army constructed its first ridge-vented hospital wards in Parkersburg, Virginia, with pavilions measuring 130 feet long by 25 feet wide by 14 feet to the eaves. That general size became a standard dimension for subsequent pavilion-style military hospitals, although length could vary considerably. In southern hospitals, the ventilators ran continuously along the roof ridge and remained open or, when necessary, could be covered by side shutters. This design proved impractical for colder climates, where only sections of the ridge were vented. Sloan General Hospital in Montpelier had only two small ridge vents per ward, which like little barn cupolas, vented moisture and encouraged air circulation.

The U.S. Sanitary Commission, founded in June 1861 to advocate for improved medical treatment of wounded and sick soldiers, promoted use of the pavilion principle and urged the construction of new hospital facilities. Two such hospitals in Washington, D.C., Judiciary Square and Mount Pleasant, were ready for occupancy by April 1862. For administrative convenience, the pavilion wards at these sites, which measured 84 feet by 28 feet by 12 feet, were laid out on both sides of and perpendicular to a central connecting corridor, staggered in alternating fashion along its length to promote air circulation.

Critics were quick to point out two major flaws in the design as executed in these early experiments. By joining all the pavilions to a single enclosed corridor, the hospital interior and the “atmosphere” within it became one space, whereas the goal was to separate pavilions and thereby control the spread of airborne diseases. The second error was the placement of the water closets in the corridor, instead of at the free end of the pavilions. Later hospitals avoided both problems.

At Baxter General Hospital in Burlington the army hastily constructed a row of seven (or nine—reports differ on the number) parallel pavilions to supplement the original brick building.¹⁴ An open porch connected the pavilions at the end nearest the complex of administrative offices, kitchen, and dining facilities. Separated from each other by forty-eight feet of open space, the new pavilions had six-over-six sash windows every ten feet along their length and privies entirely detached from the wards.

Saterlee Hospital in Philadelphia opened a month after Baxter began operation, and utilized parallel open corridors facing a central elongated courtyard. The pavilion wards joined the outside face of the corri-



Birdseye view of Satterlee U.S. Army General Hospital, West Philadelphia, Pennsylvania. Courtesy of the National Library of Medicine, History of Medicine Division, Prints & Photographs Collection.

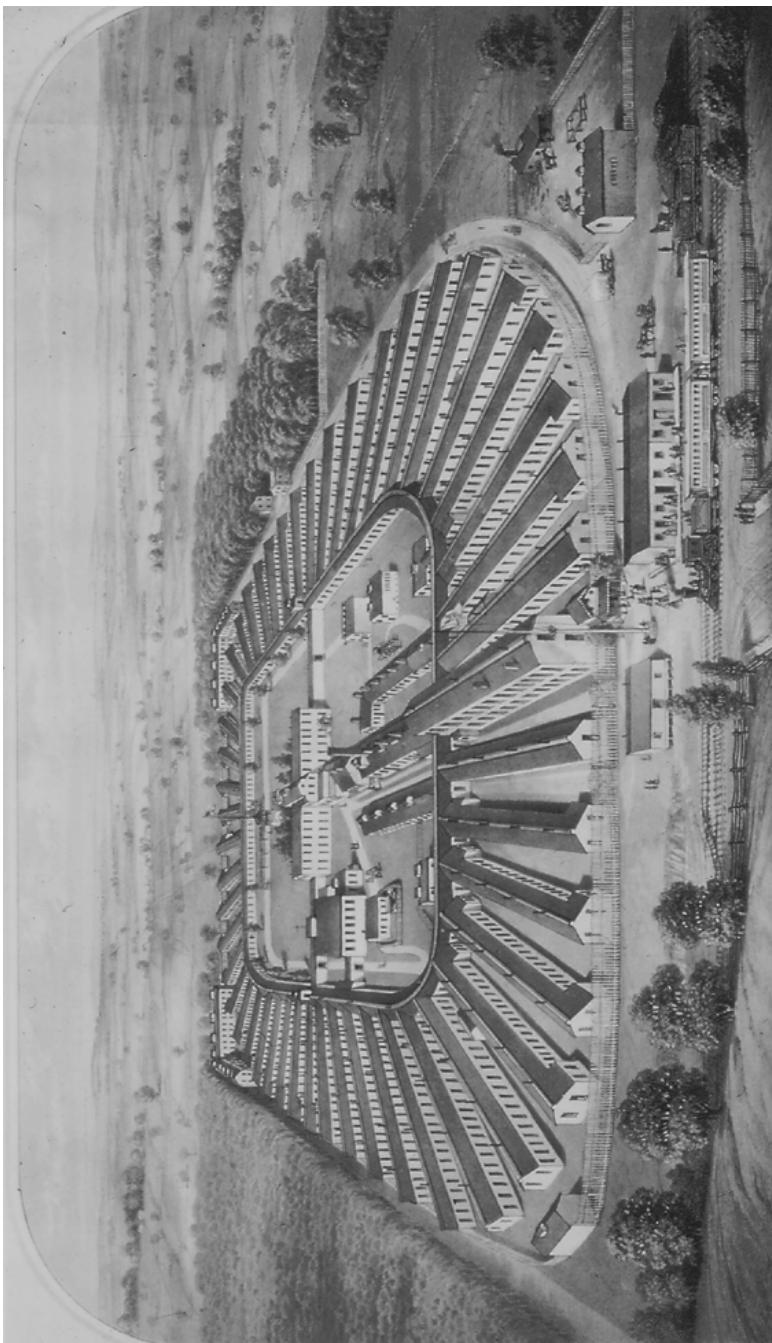
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dors. From that rectangular configuration, hospital layout progressed first to an elongated ellipse, and finally to an oblong or circular corridor with radiating pavilions. In December 1862, Mower Hospital in Chestnut Hill, Pennsylvania, opened with fifty wards arranged on an elliptical plan. The Jefferson Hospital in Jeffersonville, Indiana, which opened in September 1863, featured a 2,000-foot long enclosed corridor encircling a central open area 600 feet in diameter. Designers also experimented with the “en echelon” plan. At Lincoln Hospital in Washington, D.C., the pavilions were arranged in the V-plan, with administrative buildings sited at the apex. To increase the freedom of air flow, enclosed corridors, which had become de facto dining halls and cut off air circulation at the ends of the pavilions, soon gave way to open, covered walkways.

By July 1864, the U.S. Army had refined hospital design to a series of specifications for sites and buildings. Although finished just before the army published its design pamphlet, Sloan General Hospital in Montpelier represented a model of good hospital design. Vermont’s Surgeon General, Samuel Thayer, Jr., selected the site, located about a mile east of the State House on a plateau of land that served formerly as a fairground. It possessed the desired qualities of altitude (650 feet above sea level, or by local measure, 85 feet above the Winooski River), access to fresh spring water, and access to the Central Vermont Railroad (which was owned by Governor Smith), for convenient transportation of wounded troops and supplies.

Built on the pavilion principle, with detached buildings for various purposes, Sloan Hospital was arranged around an almost circular covered walkway. The wards, administrative offices, kitchen, and dining halls were attached at one end to the walkway. Other buildings, located outside the circle but within the fence marking the perimeter of the hospital grounds, included a chapel that could seat 300 to 400 people, morgue, laundry, Reserves Corps barracks, ice house, and a large elevated water tank measuring 22 feet in diameter and 13 feet high.

Sloan’s 496 beds were distributed among twelve wards, in pavilion buildings most of which were 108 feet long, 24 feet wide, and 12 feet high—somewhat shorter in length and height than the army’s final published specifications of 187 feet by 24 feet by 14 feet. The dimensions made practical sense for Vermont according to the Vermont surgeon general, who, referring to a similar practice in the construction of wards at Baxter Hospital, noted that in the local market, lumber mills cut boards in twelve-foot lengths.¹⁵ A twelve-foot height used one board, and a length of 108 feet required 9 boards. Each ward had approximately forty beds arranged in two rows along the walls of the pavilion.



Birdseye view of Mower U.S. Army General Hospital, Chestnut Hill, Philadelphia (1865). Courtesy of the National Library of Medicine, History of Medicine Division, Prints & Photographs Collection.

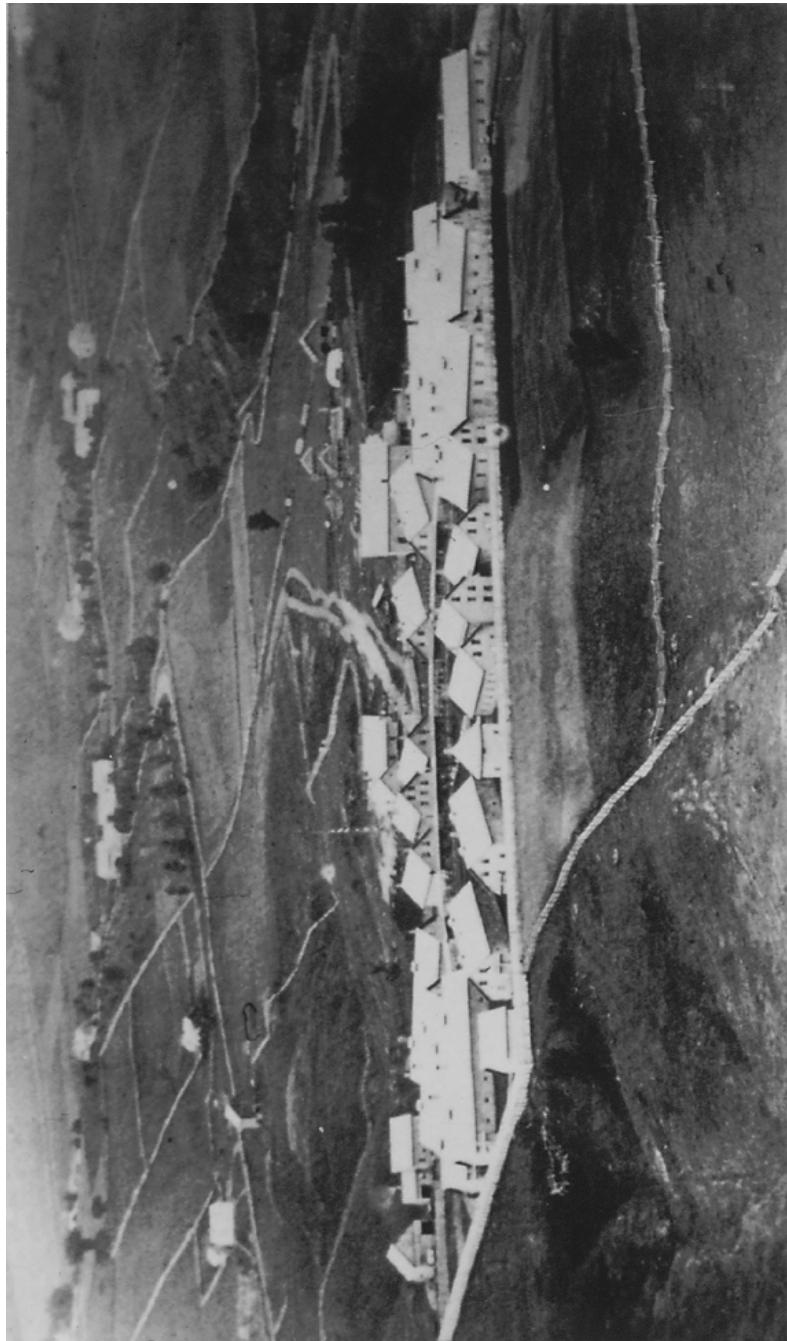


Birdseye view of Lincoln U.S. Army General Hospital, Washington, D.C. Courtesy of the National Library of Medicine, History of Medicine Division, Prints & Photographs Collection.

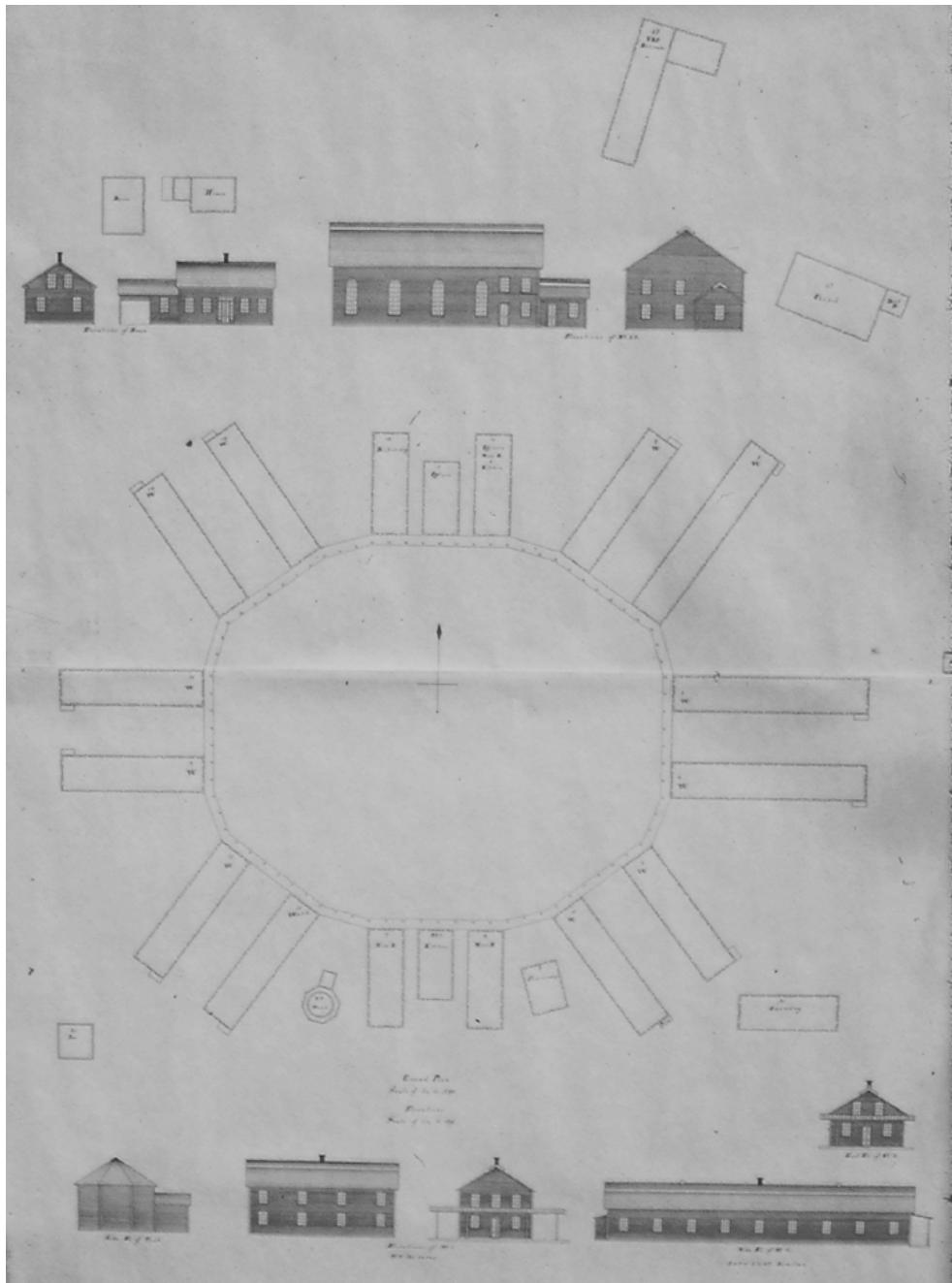
Air space per bed measured 1,000 cubic feet. Pavilions stood elevated above grade, insulated with “double-floors” as a concession to Vermont’s cold climate. A wardmaster’s room and lavatory room were partitioned off at the free ends. Privies located behind each ward emptied into a wooden sewer pipe.

The two-story administration building, officers’ quarters, and laundry also housed in the upper floors the staff who worked below. Although the Army specification for laundry buildings called for a flat roof with clotheslines, at Montpelier builders used the snow-shedding gable roof design. The morgue or “dead house” stood behind the chapel, out of sight of the wards.

Clapboards sheathed the exteriors of the buildings. Inside the walls were plastered and painted white. Store receipts from the time indicate that the hospital used large quantities of brown pigment, either as brown paint or mixed with white pigment to make tan.¹⁶ Six-over-six sash windows were used throughout, except for some Gothic, pointed arch windows in the chapel. The eaves were simply detailed, without the cornice returns typical of Greek Revival design of the period.



Photograph of Sloan U.S. General Hospital, Montpelier. No date [1864–1865?]. The view is from the south looking north. From Henry Janes, Medical Notebook, p. 367. Special Collections, Bailey/Howe Library, University of Vermont.
Courtesy of Special Collections, Bailey/Howe Library, University of Vermont.



The architectural plans for Sloan General Hospital, from the National Archives and Records Administration, Washington, D.C. The spoke-and-wheel design of Sloan Hospital was connected at the hub by a continuous porch. Wards and other service and administrative buildings radiated out from the porch. Some buildings were freestanding, outside the circle, but within the picket fence that snaked across the landscape. To compare the photograph and plans note the hospital's ice house (SW corner—lower left), octagonal water tank (center of the south fence), laundry building (SE corner—lower right); the large chapel on the upper right (NE), and a small house and barn on the upper left (NW corner, still standing on what is now East State Street). The photograph reveals which structures rose to two stories. Beyond the hospital, Upper Main Street heads out of town toward Towne Hill Road. The hospital occupied the former fair grounds, where the Vermont College green is today.

OPERATION AND DAILY LIFE IN THE HOSPITALS

For most of its term of operation Sloan General Hospital was commanded by Waterbury physician Henry Janes, who already had three years experience with wartime medical practice when he took over as surgeon-in-charge on October 15, 1864. Janes enlisted in 1861 as surgeon of the Vermont Third Regiment, supervised the operation of the military hospital at Frederick, Maryland, following the battle at Antietam, and was in charge of the medical corps treating the wounded at Gettysburg, where he reformed battlefield medicine by convincing the 250 surgeons under his command to reduce the number of amputations.¹⁷ A major in the army when he took command of Sloan General Hospital, Janes brought to his new post a commitment to rehabilitating wounded soldiers. He followed personally the progress of many of the gunshot patients and, like some other surgeons, used the new technology of photography to record wounds and treatment. Janes commanded

*Hospital photograph
(2½" × 4") of Lyman
Hulett of Shaftsbury, Vt.,
Co. A, 2nd Vermont
Regiment.*



Gun shot wound of Elbow. Joint. Recovery
with an chylous at right angle

Lyonan Hulett. Fr. Co. A. 2d St. Ac 25.

Residence Shaftsbury Vt. 300

Wounded at battle of Fredericksburg May 5, 64
by a minie ball entering the underside
of the left forearm 4 in. from olecranon
process passing upward opening the elbow
joint. instantaneously making its exit between the
olecranon and internal condyle of the
humerus. Sent to Fredericksburg and from
there here to Finly Hospital Washington
May 1. The discharge was profuse and
offensive for 3 or 4 weeks. when 2 or 3 pieces
of bone came out of exit wound. after
which he improved and the wound
closed about two & half month after injury.
The joint was anchylized at a slight angle
he could not close his hand. In Aug. 64
in a scuffle he got it completely straightened
out. for 3 months afterward he tried passive
motion of the joint. but as it grew much
worse he was obliged to discontinue it.
and allow it to anchylize at a right angle.

Transf'd to U. R. C. Nov 25/64.

Disch'd Sept 14/15 Expiration of arm
Joint anchylized at right angle. good
use of fingers. less rotatory power of hand
3 and 4th fingers somewhat clumsy.

Card Photos.

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Tabulated Rice
F-PD-HULETT, LYMAN PURCHASE
Photographed at Sloan U. S. Gen. Hospital, Montpelier, Vt. 1927

On the reverse of the photograph shown at the left is a full medical report of Hulett's wound, treatment, and partial recovery.

the Montpelier hospital until its decommissioning in December 1865, then returned to private practice in Waterbury and kept most of his Civil War papers, which provide detailed information about the day-to-day operations of Sloan General Hospital.

Like every other general hospital, those in Vermont operated under military rules and regulations. Each hospital was run by a surgeon-in-charge, who had full military command over the persons and property connected with the hospital. The Vermont surgeons-in-charge were assisted by executive officers, who did some of the administrative work, including the routine but burdensome tasks of compiling and filing a myriad of bureaucratic forms: daily and weekly reports to the medical director of the Department of the East; monthly reports to the surgeon general and adjutant general of the United States; bimonthly muster and payroll reports to the adjutant general and paymaster; quarterly reports of property purchased with hospital funds and annual inventories of medicine and hospital stores to the surgeon general of the United States; and inventories of camp and garrison equipment to the quartermaster general of the U.S. Army.

The surgeon-in-charge also had responsibility for keeping records of admissions; alphabetical registers and registers by state of sick and wounded; records of casualties, deaths, discharges, transfers, and relations with local government officials; accounts of hospital fund property; and miscellaneous correspondence. Most important, but perhaps often buried under the bureaucratic requirements of the job, the surgeon-in-charge established some medical practices and policies at his hospital.

A corps of ward physicians served under the surgeon-in-charge, in theory one doctor for every seventy-five patients at the hospital. At the beginning of 1865, when Sloan General Hospital had 399 patients, it was staffed by a total of five medical officers, including Dr. Janes. The ward physicians provided medical and surgical treatment of the patients in their ward and had general responsibility for its condition. Each ward physician also served in turn a twenty-four-hour rotation as medical officer of the day. In addition to his regular duties, the medical officer of the day toured all the wards, inspected the hospital kitchens, enforced lights out, supervised guard duty and discipline, submitted a daily report on the condition of the hospital, and had authority to act in emergencies. The ward physicians were assisted by the wardmaster, who supervised the nursing staff, oversaw the physical condition and supplies of the ward, and supervised the medical cadets, young men (frequently medical students) who served as clerks and wound dressers.

The non-medical staff of the hospital was led by a group of three or four hospital stewards, who ran the dispensary and had charge of the

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hospital's medical property, served as quartermaster for the installation, and coordinated the subsistence for patients and staff. The hospital stewards handled significant amounts of money and large quantities of physical resources. It is not too surprising, therefore, to find an example of peculation and abuse of power among these officers. Early in 1865 Dr. Janes received several letters charging Hospital Steward Lt. G. A. Lee with abuse of power, including allowing his family to send their clothes to be washed at the hospital while forbidding other stewards from doing the same, diverting to his family articles of clothing given to the hospital for patients (even altering some shirts to fit one of Lee's young children), diverting food from the hospital storerooms for his and his family's personal use, and selling for his own profit 270 barrels of swill and grease from the hospital kitchens. An investigation revealed more offenses and on February 13, 1865, charges were brought against Lt. Lee for misappropriation of government property, getting drunk on stimulants taken from the hospital dispensary, appropriating clothing for his family, destroying accounts of hospital funds, and neglect of duty.¹⁸

Other nonmedical personnel at the hospitals included a chaplain; male and female nurses—in January 1865 there were twenty-four male nurses at Sloan General Hospital, the records show no female nurses—cooks, bakers, and kitchen assistants; laundry workers; a blacksmith, carpenter, painter, and shop and stable hands; attendants in the knapsack house (which held the patients' personal property), dispensary, quartermaster's and hospital store rooms; workers in the dead house; and clerks for various administrative duties. A large hospital could have a staff of up to 200 employees, although the Janes papers do not suggest that Sloan General Hospital had so large a staff. Civilians, whom the army considered unreliable, subject to military draft, and likely to make a sudden departure, held few if any of these positions.

Each hospital received medicines, equipment, and standard rations through army contracts, but also maintained a hospital fund for special purchases, most often additional food. Some hospitals supplemented their rations with produce from their own gardens. The hospitals were also allowed to set up a fund derived from the sale of nonconsumable and waste items such as paper and barrels of grease and swill like those Lieutenant Lee sold on the side. The surgeon-in-charge exercised discretionary use of this fund.

In his discussion with Lincoln and Stanton about the hospitals, Governor Holbrook accurately assessed their virtues and risks. He argued that soldiers sick with malaria, swamp fever, and a variety of illnesses bred by close and unsanitary conditions in the camps and field hospitals

would recover better and sooner if removed to a healthier climate. Hospital records at the National Archives show that of the 8,574 patients admitted to the Vermont hospitals (including Burlington's post hospital) from May 1862 to December 1865, only 175 died while under treatment. About 66 percent returned to duty. This compared quite favorably with the 25 percent rate of return to duty from the Washington, D.C., and Philadelphia hospitals.¹⁹ The majority of patients sent north for treatment were diagnosed upon admission with dysentery ("chronic diarrhea" in the record books), high fever, or one of several diseases associated with overcrowding and poor sanitation. Aside from altitude, fresh water, and less crowding, little could be done to cure the effects of dysentery, and hospital records for Brattleboro and Burlington show far more deaths from this than from any other cause.

Following the Wilderness campaign in May 1864, the hospitals received many patients suffering from "general debility"—battle fatigue and nervous breakdowns. Sloan General Hospital opened just in time to receive casualties from Cold Harbor (May 23–June 12, 1864), and here for the first time a far greater number of patients arrived with gunshot wounds than those suffering from illness or disease. Following the Battle of Cedar Creek on October 19, 1864, the admissions records in Brattleboro also show a higher proportion of gunshot wounds. In almost all these cases, however, the wounds were not critical and usually not fatal. Clearly, battlefield hospital surgeons had adopted a system of "triage" and sent north those with illness, disease, and gunshot wounds to their hands and feet—in other words, those whose prospects for recovery were highest. Surgeons' reports for the hospitals also show a higher proportion of "excisions" than amputations and consequently a high survival rate among patients admitted for gunshot wounds. Physicians and the all-important state agents, who roamed the wards of field hospitals and the general hospitals closest to the front looking for patients from their state, resolved Lincoln's and Stanton's concerns about the feasibility of moving wounded soldiers by moving mostly those who could bear the trip.

Roger Hovey of Worcester, a corporal in Company A of the Vermont Eighth Regiment, is a case in point. Wounded in the left shoulder by a minié ball early in the battle of Winchester, Virginia, on September 19, 1864, he was transported by baggage wagon to Harpers Ferry—a fifteen-hour trip over poor roads—then transferred to Baltimore, and sent on to Saterlee Hospital in West Philadelphia, where he arrived on September 25. In a letter to his sister, Martha, Hovey initially described his wound as "slight as no bones were broken and my arm is not stiff"; but it healed slowly.²⁰ In mid-October the army judged him fit to make

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the four-day trip to the General Hospital in Brattleboro, where he stayed—despite his repeated requests for a transfer to Sloan General Hospital—from October 21 until January 7, 1865.

Lincoln and Stanton also worried about desertion. Hospital records show that there was some cause for concern, but that it was not a serious problem. Of the 8,574 patients admitted, 481 were recorded as having deserted—slightly over 5 percent. Emendations to the hospital records show that many of the charges of desertion were later dropped.²¹ These figures can be interpreted in several ways. A substantial number of the patients arrived in Vermont on their way to hospitals in their home states of New Hampshire, Maine, Massachusetts, and upstate New York. Facing an uncertain future, they may have taken the opportunity to visit their families before being officially transferred, discharged from the hospital, or sent back into combat. Some, healthy enough to be mobile but restless, lonely, close to home, and denied furloughs by nervous army doctors who feared the very behavior they provoked, left the hospitals without leave or passes, then returned. Some, it appears, deserted and reenlisted to obtain a second bounty payment from the government or from a town eager to fill its quota. And some doubtless did desert. These men had suffered through some of the fiercest fighting of the war. The prospect of recovering only to be thrust back into battle constituted a severe test of patriotism and nerve.

Moreover, life in the hospital was neither luxurious nor always restful and conducive to recovery. Hovey wrote of loneliness and boredom, constantly beseeching his sister for letters. In Brattleboro, he complained of Dr. Phelps's refusal to grant furloughs, writing to Martha, "I believe it is more than meat and drink to that man to torment, aggravate, and abuse the soldiers under his charge."²² In December 1864, Hovey wrote that several men had complained by letter to Governor Smith, who sent Lieutenant Governor Paul Dillingham to inspect the hospital. "Since then we have lived much better," he noted, but added that Dr. Phelps took his revenge by denying requests for transfers to Sloan General Hospital in Montpelier.²³ Frustrated in his efforts to obtain a transfer to Sloan, Hovey eventually wrote to President Lincoln for a transfer for himself and a comrade. Surprisingly, Lincoln replied with an order to Phelps either to discharge the two soldiers or transfer them. A furious Phelps confronted Hovey, threatened to send him back into active duty, but finally agreed to transfer him to Sloan. Phelps failed to take action before the army transferred him from Brattleboro, but Hovey eventually obtained his transfer to Sloan, where he could be close to his family and sweetheart.

Late in his stay at Sloan, Hovey reported that Surgeon-in-Charge Janes arranged to have classes in bookkeeping, grammar, arithmetic,

writing, and "declamation" offered to the patients.²⁴ Whether this program was unique to Sloan Hospital is uncertain. Possibly Janes initiated it to relieve his patients' boredom and thereby forestall potential discipline problems. Possibly, too, he understood and acknowledged that these men from farms and rural areas, disabled by their wounds, would need new skills in order to find new employment when they left the hospital or when the war ended.

Another patient at Sloan General Hospital, Norman William Johnson of East Montpelier (Company F, Second Vermont Regiment), kept a diary of his recovery from wounds to the right side and wrist received at Spotsylvania on May 12, 1864.²⁵ Struck down in the morning, he arrived at the field hospital by 4:00 P.M. The next day he was moved to Lincoln Hospital in Washington, D.C. On May 29 he wrote, "the Vermont State Agent came through to transfer us to Burlington." Johnson left Washington by train on June 2, arrived in Philadelphia at daybreak, June 3, in time for breakfast, and reached New York City at 9:00 P.M. At midnight the train pulled out, headed for New Haven, Connecticut, where it arrived at 7:00 A.M. on June 4. Three hours later Johnson boarded another train headed north, arrived at Brattleboro at 10:00 A.M., June 5, and was admitted to the general hospital. He recorded on June 8: "Had a comfortable night. Very cold. Seventy new cases came in last night." On June 12 he recorded having his wounds burned with caustic to prevent gangrene. "There is a caravan and exhibits near here. I did not go up." A week later Johnson's wife visited him and he obtained an overnight pass. His wife stayed in Brattleboro through June 20 and he received day and evening passes into town to be with her. On July 2 Johnson got a furlough to return to East Montpelier for forty-eight days. Back in the Brattleboro hospital on August 18 he wrote that breakfast consisted of beans, bread, applesauce, and hash. On August 22, Johnson noted the arrival of 114 new patients. Later that week, the process began for transferring him to Sloan General Hospital, where he arrived on September 10. Almost immediately he received a four-day pass to be with his family again in East Montpelier. On September 26 he participated in a lottery for clothes and equipment, probably donated by the Christian or Sanitary Commission. He "drawed two pairs of drawers and one haversack."

Johnson's entry for September 30 shows us that discipline and security at the hospital were ongoing issues. "Five men picked up downtown, three of them put to bed and clothes taken away. No passes given today." Security remained a persistent problem at all the hospitals. Janes complained upon his arrival at Sloan General Hospital that "The grounds are open on all sides, and consequently, I can neither keep soldiers in nor civilians out

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of the Hospital. I find vendors of pies and peddlers of various sorts circulating about to the detriment of the sick and the injury of the others.”²⁶ He quickly erected a fence around the hospital grounds, and was allocated a contingent of Veterans Reserve Corps troops to serve as guards.

Late in his stay in the military hospitals, now back in Brattleboro, Johnson himself was assigned to guard duty, one way the army used recovering patients, thereby releasing more able-bodied men for active duty on the front, where they were desperately needed.

The experiences of Hovey and Johnson show that hospital administrators used furloughs to alleviate overcrowding and as rewards, and withheld them as punishments. They may also have used them in hopeless cases, so that men could die at home with their families. At least twenty men died on furlough, according to hospital records. One of them was Private John Piper of Company K, Tenth Vermont Regiment. Admitted to the Baxter General Hospital at Burlington on February 13, 1864, at the age of forty-two, he received a furlough on March 14 and died at home on April 16. Under “remarks” in the hospital register, the clerk wrote, “He left this vain world without a fear[,] without a struggle or a tear to mingle with the dead, His relatives so well pleased that they did not notify the hospital of his death until May 27, 1864.”²⁷ For others who died on furlough the clerks noted more laconically the receipt of death certificates, and for those who died in the hospital, they noted the cause, date of death, and when the family of the deceased claimed his body or possessions.

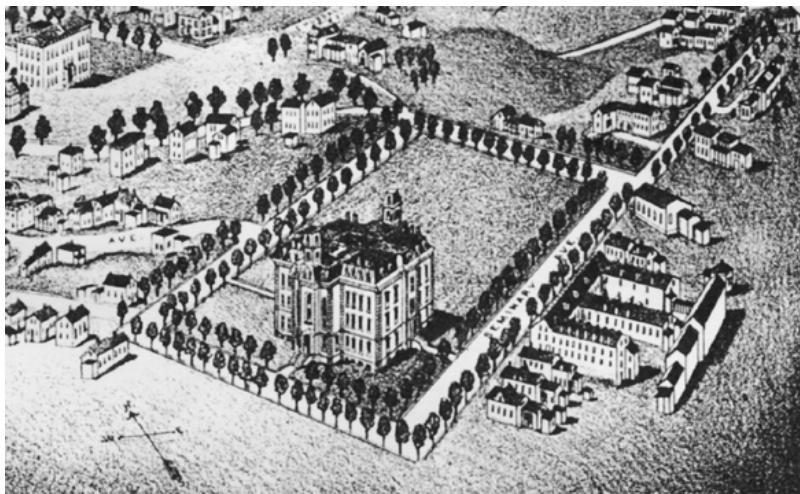
AFTER THE WAR: NEW USES FOR DISCARDED BUILDINGS

Within a year of the end of the war all three military hospitals shut down. Brattleboro Hospital was first to close. The Agricultural Society of Brattleboro purchased the buildings at a public auction on January 24, 1866, for \$3,200, which according to the *Free Press* was “within a few hundred dollars of the estimated value of the material.”²⁸ The society also bought the land at a separate auction. The buildings were eventually razed and the site is now occupied by the Brattleboro high school. On July 17, 1866, the government sold the Burlington hospital buildings for \$7,000 to the Home for Destitute Children. Eventually those buildings, too, were razed to make room for a shopping mall on Shelburne Road.²⁹ Sloan General Hospital, the last of the Vermont military hospitals to close its doors, ceased operation on December 12, 1865, by which time it had treated 1,670 patients.

On August 7, 1866, with approval from the Vermont legislature, the state sold the Sloan Hospital grounds and buildings for \$15,500 to the Vermont Conference Seminary and Female College, which was relocat-

ing from Norwich, where it had been known as the Newbury Seminary. The seminary, later known as the Montpelier Methodist Seminary and Female College and eventually as Vermont College, moved and reused many of the former hospital buildings for dormitories, faculty housing, recitation rooms, and society rooms. The core of the old hospital grounds became the campus green.³⁰ College Hall, the heart of the Vermont College campus today, was constructed on the green in 1872. The seminary continued to use the hospital chapel at its original location, which in the original plan of the complex was set back from the circle of other hospital buildings, but in the new campus plan was sited opposite the northeast corner of the green. It was torn down to make way for Alumni Hall, a gymnasium constructed in 1936. The hospital water tank also continued in use into the early twentieth century.

The seminary moved several ward buildings, setting them above new first stories to create a large 2½-story main dormitory facing the east side of the green. The front was apparently made from one of the longer, twelve-bay wards; two ells, extending to the rear, were adapted from nine-bay wards. A one-story middle ell completed an “E” forma-



Birdseye view of Montpelier, Vermont, 1884, showing the area of the Vermont Methodist Conference Seminary and Female College—formerly the location of Sloan U.S. General Hospital. The view shows the hospital chapel in place across from the northeast corner of the college green, and the E-shaped main dormitory complex, made from former ward buildings, on the east side of Seminary Avenue.

C. H. Freeman, Montpelier, Vt.



Main dormitory complex, Vermont Seminary, Montpelier. Stereoscopic view by C. H. Freeman, Montpelier, Vt., no date.

tion and was used as the kitchen and dining hall for the complex. The main dormitory was taken down to make way for new residence halls in the 1950s.

Many of the other original hospital buildings remain, however. Most of the wards were cut into shorter lengths, usually thirds, removed to nearby lots, and sold for houses. Deed restrictions promoted what the seminary hoped would be “a good opportunity to establish a community, noted for morality, refinement and religion in close proximity to [the] Seminary.”³¹ Many of the deeds for these “hospital houses” direct that “no intoxicating liquors shall ever be sold on said premises, and that no business or amusements shall ever be carried on or permitted on said premises that are contrary, or which shall be contrary, to good morals, or that are injurious to the community.”³² The deeds claim that a property shall revert to the grantor if the conditions are ever violated.

The “hospital houses” are recognizable by their 1½ story height,

open eaves without cornice returns, high kneewall between the tops of the windows and the eaves, six-over-six sash windows, and characteristic peaked window lintel trim. On their long eaves side, the buildings are generally three bays wide, with a central door substituted for what was formerly a middle window. The gable ends may display the original central door typical of the ward sections closest to the circular walkway. If the house came from the rear section of a ward, it may retain all the windows or a side door from the original building together with one new gable-end wall. Houses created out of the middle section of a ward have two new gable ends.

Some of the other hospital buildings also became houses. In all, fifteen reported “hospital houses” still exist today in the vicinity of the Vermont College green and more may be identified.³³ They represent a unique legacy of Civil War history.

The proliferation of military hospitals throughout the nation during the war served many purposes. Not least of these was alleviating the overcrowded conditions at hospitals in and around Washington, D.C. More significant was promoting a high rate of recovery among soldiers who were sick or wounded but not maimed or permanently disabled by their injuries. As the war dragged on and recruitment of new soldiers



A private home on Emmons Street in Montpelier, near the former site of Sloan General Hospital. This house is one of several in the College Street area that display characteristics of former hospital buildings.

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became increasingly difficult and encountered increasing resistance and resentment, the successful treatment and return to active duty of some of the military force became increasingly important. It is clear that Governor Holbrook's "experiment" helped launch significant changes in the U.S. Army's planning and use of medical facilities. In contrast with medical practices in the field that with rare exceptions remained primitive, dangerous, and largely ineffective throughout the war, the rapid development of the design and operation of the army general hospitals contributed significantly to their success in treating patients. What Lincoln and Stanton originally dismissed as an inexpedient, impracticable, and "unmilitary innovation" doubtless helped them win the war and doubtless saved the lives of many New England soldiers.

NOTES

* Our thanks to the Preservation Trust of Vermont for a grant to support the publication of illustrations for this article.

¹ Frederick Holbrook, "The Military Hospital," *Picturesque Brattleboro*, ed. Frank T. Pomeroy (Northampton, Mass.: Picturesque Press, 1894), 40–44.

² *Ibid.*, 41.

³ *Ibid.*, 42.

⁴ *Ibid.*, 43, 44.

⁵ Surgeon General of the United States, *The Medical and Surgical History of the War of the Rebellion (1861–1865)*, 6 vols. (Washington, D.C.: U.S. Government Printing Office, 1870–1888), 6: 898.

⁶ See Surgeon General of Vermont, *Annual Report of the Surgeon General of the State of Vermont to His Excellency the Commander-in-Chief, October 6th, 1865* (Burlington, Vt.: Free Press Printers, 1865), 6–8.

⁷ *Ibid.*, 6.

⁸ Abby M. Hemenway, *Vermont Historical Gazetteer*, vol. 1 (Burlington, Vt.: A. M. Hemenway, 1868), 512; T. D. Seymour Bassett, *The Growing Edge: Vermont Villages, 1840–1880* (Montpelier, Vt.: Vermont Historical Society, 1992), 145.

⁹ *Burlington Free Press*, 9 May 1862, p. 2, col. 3.

¹⁰ *Rutland Weekly Herald*, 17 November 1864; Mary W. Kidd, "'War Years,' Sloan General Hospital, Green Mountain Whittlin's, 9 (n.d.), 16–18; Raymond P. Flynn, "Civil War Hospital in Montpelier," *News and Notes* [Vermont Historical Society newsletter] 11, No. 2 (October 1959), 9–11; William A. Shepard, *The Hospital that Became a College: Sloan Army General Hospital, Montpelier, Vermont* (Northfield, Vt.: Norwich University Press, 1983); Walter Carpenter, "Sloan: Montpelier's Union Army Hospital on the Hill," *The Montpelier Bridge*, Sept. 2000, 12–13.

¹¹ The term "malaria" was originally used to describe the various diseases and illnesses associated with proximity to swamps and marshes. The association of the word with diseases caused by an organism transmitted by the bite of mosquitoes dates from 1898. See *Oxford English Dictionary*.

¹² *The Medical and Surgical History of the War of the Rebellion*, Part III, vol. 1 (1888), 915.

¹³ Florence Nightingale, *Notes on Hospitals*, third edition (London: Longman, Green, Longman, Roberts and Green, 1863), 17.

¹⁴ See the *Burlington Free Press*, 26 August 1864, which reported that seven buildings went up in thirty-five days. Hospital plans in the National Archives and Records Administration show seven ward buildings. The surgeon general of the United States reported that there were a total of twenty-one wooden pavilions at Baxter, nine of which were used as wards. *Medical and Surgical History of the War of the Rebellion*, 1 (1870), 924.

¹⁵ "Several buildings were erected in a substantial manner, shingled and clap-boarded outside, and lathed and plastered inside. They were constructed in sections, twenty-four feet wide, and in length the multiple of twelve, viz: 24 × 48—24 × 60—24 × 72 and 24 × 84. The above plan of construction was adopted for two reasons. 1st, If the buildings should be no longer required for hospital purposes, they could be easily separated into sections of 24 feet by 12, and removed and sold for dwellings. 2d, The length of planks, board and scantling, in this market, is twelve feet, laths four

feet, and clapboards four or six feet, favoring an economical use of lumber." *Annual Report of the Surgeon General of the State of Vermont* (1865), 7. No evidence has been found to suggest that any of these buildings still exist.

¹⁶ "Estimate of Material Required and cost of Painting Sloan U.S. General Hospital, Montpelier, Vermont," in Sloan General Hospital file, Janes papers, Waterbury Historical Society, Waterbury, Vt.

¹⁷ See Pauline Moody, "'49,000 Wounded Soldiers Passed Through His Hands': The Story of Waterbury's Dr. Henry Janes," *Vermont History News* 29, No. 2 (March–April 1978), 20–23; Howard Coffin, "Blood Sweat & Tears: The Journal of a Civil War Surgeon," *Vermont Sunday Magazine*, 7 May 1989, 4–5, 14–15; Howard Coffin, *Full Duty: Vermonters in the Civil War* (Woodstock, Vt.: Countryman Press, 1993), 210–218.

¹⁸ The letters and final report on the case are in Carton 2, "Correspondence with Vermont Officials and Miscellaneous Correspondence," Henry Janes Papers, Waterbury Historical Society.

¹⁹ The Vermont surgeon general, by contrast, reported 8,570 soldiers treated, 4,330 returned to duty (51 percent), 339 discharged with certificates of disability, and 181 who died while in treatment. *Annual Report of the Surgeon General of Vermont* (1865), 8.

²⁰ Roger Hovey, Saterlee Hospital, West Philadelphia, to Martha Hovey (staying in Florence, Massachusetts), 28 September 1864. Roger Hovey Civil War Papers, 1861–1866. Special Collections, Bailey/Howe Library, University of Vermont (hereafter cited as Hovey Papers, UVM). Thanks to Jeffrey Marshall for bringing these letters to our attention.

²¹ The Vermont surgeon general reported 451 deserted and 231 "positively known to have returned." *Annual Report of the Surgeon General of Vermont* (1865), 8.

²² Roger Hovey to Martha Hovey, 21 November 1864. Hovey Papers, UVM.

²³ Roger Hovey to Martha Hovey, 11 December 1864. Hovey Papers, UVM.

²⁴ Roger Hovey to Martha Hovey, 2 March 1865. Hovey Papers, UVM.

²⁵ Diary of Norman William Johnson [MS B J635], Vermont Historical Society, Montpelier, Vt.

²⁶ Letter from Dr. Henry Janes to unnamed general, 21 June 1864. Janes papers, Waterbury Historical Society.

²⁷ See U.S. Army Hospital Registers, Vermont. 55 volumes, National Archives, Washington, D.C. Register 43: "Sick & Wounded, Brattleboro"; Register 52: "Sick and Wounded, Marine Hospital Burlington"; Register 53: "Sick and Wounded, General Hospital and Baxter Hospital, Burlington"; Register 62: "Sick and Wounded Sloan General Hospital, Montpelier." Other volumes in the collection include registers of furloughs, charge orders, surgeons' reports, miscellaneous reports, and weekly muster rolls, which list each individual present—patients, staff, and military units assigned to guard duty. The record for Private John Piper is in Register 53, page 4.

²⁸ *Burlington Free Press*, 27 January 1866, p. 4.

²⁹ The location is at the northwest quadrant of the intersection of I-189 and Shelburne Road, South Burlington.

³⁰ See Walter Rice Davenport, *Montpelier Seminary and Its Students* (Montpelier, Vt.: Montpelier Seminary, 1934), 104–121; Eldon Hubert Martin, *Vermont College, A Famous Old School* (Nashville, Tenn.: Parthenon Press, 1962), 105–110; Vermont College Sesquicentennial Organizing Committee, *Celebrate Our Past, Join Our Future: Vermont College Sesquicentennial, 1834–1984* (Montpelier, Vt.: Vermont College, 1984), 5.

³¹ "Announcement of the Vermont Conference Seminary and Female College, 1868" (Montpelier: Freeman Steam Printing Establishment, 1868), 2.

³² See for example, City of Montpelier, Land Records, Book 7, deeds on pages 60, 93, 111, 191, 282, and 302.

³³ Lists of "hospital houses" can be found in "History of Sloan Hospital," no author, no date, in the William Shepard papers on the Sloan Hospital, Kreitzberg Library, Norwich University; and in the Vermont Historic Sites and Structures Survey, Vermont Division for Historic Preservation, Montpelier. Identified houses that clearly display hospital characteristics are: 64–66 College Street; 87 and 89 East State Street; 2 and 4 Emmons Street; 25 Kent Street; 20 and 60 Ridge Street; and Martin Hall behind the Gary Library of Vermont College. Pictorial, map, and deed evidence also supports hospital associations for: 80 and 84 College Street; 99–101 and 110 East State Street; 5–5½ Emmons Street; and 22 Ridge Street. Many of these houses have undergone some exterior changes since their conversion to dwellings.