This catalog accompanies the exhibition *Saving Soldiers: Medical Practice in the Revolutionary War*, on view April 1 - November 27, 2022, at Anderson House, headquarters of the American Revolution Institute of the Society of the Cincinnati, Inc., 2118 Massachusetts Avenue, NW, Washington, D.C. 20008.

Text by Ellen McCallister Clark  
Design by Glenn A. Hennessey

This page: Flame-stitch wallet owned by Ebenezer Crosby, 1774. Linen, wool, and silk. The Society of the Cincinnati, Gift of Rear Admiral Schuyler N. Pyne, Society of the Cincinnati in the State of New Jersey, 1967. Ebenezer Crosby was surgeon to General Washington’s corps of guards.

American military doctors who joined the cause for independence faced formidable odds.

Of the fourteen hundred medical practitioners who served in the Continental Army, only about ten percent had formal medical degrees. The majority of the rest had learned their practice through an apprenticeship with an established physician. Most were young men at the beginning of their careers. Few had prior experience of war. Their civilian practices had not prepared them for the grim realities of warfare in eighteenth-century America, where far more soldiers under their care would die from disease and infection than would be killed on the battlefield.

Undaunted by these challenges, the healers played as critical a role in the war’s outcome as that of the warriors on the front lines. The field of military medicine was in its infancy at the time of the American Revolution. A generation earlier, Sir John Pringle had transformed medical care in the British army by emphasizing the need for order, cleanliness, sanitation, and ventilation in military hospitals. Published a century before the discovery of microbes and antibiotics, Pringle’s *Observations on Diseases of the Army* was a pioneering work in the prevention of contagion and cross-contamination in treating the sick and wounded. Working under constrained and often brutal conditions—and with a perpetual shortage of medicines, supplies, and personnel—American military doctors drew from Pringle and other writers to forge a system of medical care for the army based in the prevailing science of the time.

Each regiment of the army was staffed with a surgeon and surgeon’s mates who provided battlefield triage and critical care. The Hospital Department, created by Congress in July 1775, oversaw a more extensive staff of directors, physicians, purveyors, and apothecaries who were responsible for managing and supplying the network of hospitals established across the states. With no clear chain of command between the department and the regiments, the delivery of adequate care to the troops was beset with administrative and logistical problems. Despite these obstacles, the medical practitioners kept their focus on their patients, working tirelessly to improve their condition and ease their suffering. In recognition of their service, Congress granted the army’s doctors the same rank and benefits as officers of the line.

After the war, most veteran military doctors returned to civilian practice. Several became leaders in their field, building upon the knowledge gained from their wartime experiences to promote reforms and advancements that would shape American medical practice for the next generation.
The unprecedented mobilization of people from across the colonies and abroad created optimum conditions for the spread of the war’s most insidious killer—Variola or, as it is commonly known, smallpox. George Washington, who had survived a bout with smallpox as a young man, understood the devastating effects the unchecked spread of the deadly virus would have on his army. Immediately upon taking command of the Continental forces at Cambridge in the summer of 1775, Washington instituted protocols for quarantining any soldier exhibiting symptoms of smallpox in a special hospital and restricted interactions with the civilian population where the disease was becoming epidemic.

Smallpox was the one disease for which eighteenth-century physicians had effective preventative treatment through inoculation. The procedure involved infecting the recipient with live Variola, causing, it was hoped, a mild case that would confer immunity. Because of the period of recovery and quarantine required, Washington was initially reluctant to advocate widespread inoculation of his forces. However, as smallpox continued to threaten the very survival of his army, in February 1777 he finally ordered the inoculation of all troops who had not had the disease. The program continued for the duration of the war, with new recruits undergoing inoculation before they even received their uniforms and arms. Washington’s bold public health initiative saved countless lives and possibly the Revolution itself.

Throughout the war Americans harbored fears that the enemy was deliberately causing the spread of smallpox through the military and civilian population. Although it is difficult to prove specific cases of such biological warfare, there is fascinating evidence in this book by a British military officer, published in New York in 1777. In his chapter on “Bows,” Robert Donkin added a footnote: “Dip arrows in matter of small pox, and twang them at the American rebels, in order to inoculate them; this would sooner disband these stubborn, ignorant, enthusiastic savages, than any other compulsive measures. Such is their dread and fear of that disorder!” The audaciousness of Donkin’s suggestion did not go unnoticed, and the passage has been excised in nearly every known copy of his book.
A major outbreak of smallpox ravaged the American forces that had marched to Canada to lay siege to Quebec in the fall of 1775. More than a third of the troops were unfit for duty by the time Americans attacked the fortified city in a blinding snowstorm on December 31, which ended in a swift and decisive defeat and the death of the American commander, Gen. Richard Montgomery.

Private James Melvin, a Massachusetts soldier, was among the survivors who were taken prisoner by the British. On January 7, 1776, just a week into his confinement in a Catholic monastery, Melvin recorded in his diary, “Some of our People taken with the small Pox.” Two days later he wrote, “…some more taken with the small pox & we expect it will be a very general disorder, for we are very thick, nasty & Lousy.” The next day he noted, “I went to the Hospital having the small pox.” Melvin remained hospitalized for eleven days, characterizing his case as “mild.” He made special note of the tender care a dying French soldier received from the priest and nuns on duty.
Continental soldiers and sailors were vulnerable to a host of debilitating and deadly diseases, including dysentery, diphtheria, typhus, malaria, and influenza. In the crowded conditions of camp, these illnesses spread rapidly, rendering large numbers of men unfit for duty. The prevailing treatments were based on the ancient idea that illness was caused by an imbalance of the body’s humours—blood, phlegm, yellow bile, and black bile. Military doctors used purgatives and bloodletting to release the toxins and restore equilibrium in the patient’s body. Their arsenal of medicines included opium—usually administered as a tincture in alcohol—to relieve pain, and Peruvian bark (*Cinchona succirubra*), an anti-malarial remedy that contains quinine. They also relied heavily on therapeutics concocted from herbs and roots to alleviate symptoms of disease.

American military physicians recognized that prevention was their best defense for protecting the health of the troops. Although they had no scientific knowledge that disease was transmitted through microscopic pathogens, they understood that isolation and quarantine could control contagion. They sought to improve conditions in hospitals and camps, emphasizing ventilation, sanitation, adequate space, and a dry location. For their suffering patients, palliative care usually proved to be the most effective treatment, allowing nature and the healing ability of the human body to run its course.
Scales and weights owned by Justus Storrs
18th century
Oak, brass, metal, paper, and wool

Opposite page: Lancet owned by Justus Storrs
Made by Benjamin Hanks, Mansfield, Conn.
1774
Brass and iron
The Society of the Cincinnati, Gift of Mr. and Mrs. Harold Justus Craft, Society of the Cincinnati in the State of Connecticut, 1965

These scales and weights for measuring medicines and lancet used for bloodletting belonged to Justus Storrs, who served as a surgeon’s mate in the Connecticut Continental Line from 1780 to the end of the war.

The Diseases Incident to Armies, with the Method of Cure
Gerard, Freiherr van Swieten
Philadelphia: Printed, and sold, by R. Bell, 1776
The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection

As the war began, American publishers sought out medical texts to meet the needs of the new army’s medical corps. This translation of the work of a prominent Dutch military physician was published in Philadelphia in 1776. The handbook also included excerpts from the works of two British authors—John Ranby on the nature and treatment of gunshot wounds and William Northcote on the prevention of scurvy at sea.
Image: *Revolutionary War Field Amputation* by Christopher Fisher, oil on linen, 2006. The artist consulted Dr. John Jones’ *Plain Concise Practical Remarks for the Treatment of Wounds and Fractures* (New York, 1775) to capture the grim realities of battlefield surgery.

**Treating Wounds and Fractures**
The most common injuries army surgeons confronted were from musket balls or bayonets. Extraction of foreign objects from the body was recommended only if the projectiles were not embedded too deeply because of the risk of infection from aggressive probing. Surgeons generally limited their operations to wounds of the limbs—surgery that risked an impact on the vital organs of the torso was considered too dangerous. A shattered bone usually resulted in amputation of the limb. In the case of head injuries, the surgeon might use an instrument called a trephine to drill through the skull to relieve pressure on the brain.

Operating without anesthesia, surgeons needed to work as quickly and efficiently as possible. They were aided in their work by the Petit tourniquet, a relatively new invention in the eighteenth century that used a screw device affixed to a leather strap to control the flow of blood to the affected part of the body. Following surgery, which might have taken place under improvised conditions on the battlefield, the patient was usually sent to one of the army hospitals to recover. Despite the surgeons’ heroic efforts, only about a third of their patients survived treatment.

**Plain Concise Practical Remarks on the Treatment of Wounds and Fractures**
John Jones
New-York: Printed by John Holt, 1775
The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection

Dr. John Jones, a professor of surgery at King’s College in New York, was a veteran of the French and Indian War. Recognizing the inexperience of the new recruits to the medical corps, he published this manual “for the Use of young Military Surgeons in North-America” in New York in 1775. A second edition, which included advice for naval surgeons, was published in Philadelphia the following year. This copy belonged to Dr. Henry Latimer, who directed the Continental Army’s “Flying Hospital,” a mobile surgical unit.

**Barnabas Binney (1751-1787)**
Artist unknown, possibly William Verstille
ca. 1779-1783
Watercolor on ivory
The Society of the Cincinnati, Gift of Emily V. Binney, 1955

Barnabas Binney left his native Boston in 1774 to study medicine at the College of Philadelphia. In May 1776, shortly after earning his degree, he was commissioned a surgeon in the Hospital Department of the Continental Army. Dr. Binney spent more than seven years treating sick and wounded American soldiers. This portrait miniature painted during the war—possibly for Binney’s wife, Mary—depicts him in the uniform worn by Continental Army surgeons.
The Hospital Department

At the outbreak of hostilities, medical care for soldiers was available only through local doctors, who quickly proved insufficient for the realities of full-scale war. Realizing the need for a proper medical corps following the Battle of Bunker Hill, Congress established the Continental Army’s Hospital Department in July 1775. Under the direct authority of Congress, the director general of the Hospital Department was responsible for establishing hospitals, procuring precious supplies, hiring medical personnel, and overseeing the overall care administered to the army’s wounded and sick soldiers.

From the outset, the Hospital Department’s operations were challenged by the competing needs of regimental hospitals and petty squabbles or philosophical differences among core medical staff. As the theater of war expanded, the department was divided into regional departments, further weakening its central control. Frequent problems undermined the authority of the director general and hindered the department’s ability to provide appropriate care, supplies, and facilities for the sick and wounded. Congress enacted several reforms of the Hospital Department during the war in a continuing effort to improve its administration and ensure adequate care for the suffering troops.

William Burnet (1730-1791)
American School
Late 18th century
Oil on canvas
The Society of the Cincinnati, Gift of Helen W. Ellsworth, 1994

A prominent New Jersey physician before the war, William Burnet served in the Continental Congress in 1776 and was appointed physician and surgeon general of the Eastern Department the following year. He was sent to Congress again in 1780 and later became chief physician and hospital surgeon of the army.

Register of patients admitted to a Continental Army Hospital
September 16, 1778-early January 1779
The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection

Continental Army physicians relied on registers like this to account for and monitor patients under their care. This register lists patients according to their individual regiments and conveys important information pertaining to soldiers’ illnesses or injuries, with the malady crossed off when the patient was discharged. The inclusion of a column for “Deserted” along with “Fit for Duty” or “Died” is a telling indicator of the connection between health and morale within the army.
As a surgeon's mate of the Third New York Regiment, John Stephenson took part in the Canadian campaign of 1775, providing medical assistance in the aftermath of the disastrous American assault on Quebec. In 1777, he was appointed surgeon to the Independent Battalion of Continental Artillery. He retired from military service in 1778.
David Olyphant (1720-1805)
By Samuel F. B. Morse (1791-1872)
c. 1818-1821
Oil on canvas
The Society of the Cincinnati, Gift of Murray Olyphant, Jr., New York State Society of the Cincinnati, 1985

A graduate of the Royal College of Surgeons of Edinburgh, David Olyphant came to America following the Battle of Culloden (1746) and settled in South Carolina. From the early years of the Revolutionary War, he directed a general hospital in the Charleston area. He was appointed director general of hospitals in South Carolina in May 1781, and shortly thereafter he and his hospital staff were taken prisoner by the British during the Siege of Charleston. Following his release, Olyphant administered a hospital for American prisoners still held in Charleston. After the war, he moved to Newport, Rhode Island, where he continued to practice medicine.
Congress created a Naval Committee in October 1775 to oversee the fledgling Continental Navy. Under the leadership of John Adams, the committee issued a manual of official regulations that emphasized cleanliness and a healthful diet in the care of sick sailors. The regulations presumed that each ship would have adequate medical staff and medicines, though in practice some of the navy’s ships fell short in personnel or supplies.

For naval surgeons, the challenges of treating patients were compounded by their confined spaces and limited access to medicines and supplies while at sea. They also faced illnesses particular to nautical life, such as scurvy and seasickness, along with diseases that plagued land forces as well, such as typhus (called Ship’s Fever) and dysentery. To prepare for combat at sea, naval surgeons set up a surgical station separate from the ship’s sick bay. The most common injuries they treated were from cannon fire—either direct hits to the person or from flying fragments of the damaged ship. When the ship was back in harbor, injured sailors usually were transferred to a military hospital on land to convalesce.
Nathan Dorsey (1754-1806)
By Charles Willson Peale (1741-1827)
c. 1775
Watercolor on ivory
On loan from the Corinne Dorsey Onnen Trust

Nathan Dorsey served as a naval surgeon from 1776 until the end of the war. After his ship Raleigh endured several hours of cannon fire in 1778, he and fellow surgeons performed hours of amputations and wound dressing in the cramped, dark quarters. Later, as a prisoner on HMS Jersey, Dr. Dorsey gave medical advice to his fellow captives and was allowed to travel by boat to the hospital ship and to New York for medicine. Dr. Dorsey was the last surgeon to tend to a mortally wounded man in the war.

Medical journal kept aboard the Continental frigate Deane and other vessels
Peter St. Medard
Boston, 1777-1788
The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection
An Ounce of Prevention

Image: Detail from the portrait of Walter Stewart by Charles Willson Peale, oil on canvas, 1781.
Yale University Art Gallery.
The wisdom behind Benjamin Franklin’s famous proverb was actually the military establishment’s most powerful weapon for protecting and preserving the health of the troops. Physicians and commanders alike understood, through observation and experience, the connections between sanitation and hygiene and the state of the soldiers’ health. They also were influenced by the ideas of the Enlightenment, which emphasized humanity and compassion as key components of the treatment of soldiers in sickness and in health.

From his earliest days of command, George Washington emphasized order and cleanliness in camp. His general orders were codified in the official manual of the Continental Army, Regulations for the Order and Discipline of the Troops of the United States, written by Gen. Friedrich Wilhelm Steuben in 1779 following the brutal winter at Valley Forge. The leading proponent of preventative medicine in America was Dr. Benjamin Rush, whose 1778 pamphlet Directions for Preserving the Health of Soldiers was distributed throughout the army. “The art of preserving the health of a soldier,” Rush wrote, “consists of attending to the following particulars: I. DRESS. II. DIET. III. CLEANLINESS. IV. ENCAMPMENTS. And V. EXERCISE.”

Orderly book of the Sixth Pennsylvania Regiment
Kept by Capt. Jacob Bowers
January 1-April 27, 1779

The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection

This regimental order of January 13, 1779, directs the appointment of a subaltern officer, whose “particular duty will be to visit the Huts regularly twice a Day, see that the Camp is kept Clean and free from filth; in short all matter relative to preserving good order; Cleanliness and decency are strictly observed, as he will be accountable for the least Neglect of this order.”

Directions for Preserving the Health of Soldiers Recommended to the Consideration of the Officers of the Army of the United States
Benjamin Rush
Lancaster, Pa.: Printed by John Dunlap, 1778

The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection
A RECEIPT
For a CHEAP SOUP for six Persons;
Published
for the Use of the PRIVATE SOLDIERS and their FAMILIES,
encamped on Cox-Heath, near Maidstone, 1778.

TAKE half a Pound of Beef, Mutton, or Pork, and cut it into
small Pieces, and three Spoonfuls of split Pease, then take three
Quarts and one Pint of Water, and put it into a Pot or Saucepan, and
put in the Meat that is cut in Pieces and the Pease, and let them boil;
then put in three Turnips, three Jerusalem Artichokes, three Potatoes,
one Onion, and some Celery, that have been all cut in small Pieces;
boil them over a very slow Fire for three hours, then thicken the
Soup with half a pint of Oatmeal, or half a pound of Flour, or Ground
Rice, and let it boil half an Hour after the Thickening is put in,
stirring it half the Time, then season it with Pepper and Salt to the
Taste.

Pounded Ginger, and All-spice, may be used occasionally in the
seasoning; also Thyme, Sives, Onions, Garlic, Rocambole, Savory, and
almost any sort of Garden Stuff, or Pot-Herbs, provided they are cut
small, for they will dissolve in the Soup while it is stewing; and if
the Bones are chopped small and boiled in the Soup, it will much
improve it, and thus by varying the above ingredients, a Number of
cheap Soups may be made, that will not cost more than a Penny for
each Person for a good Meal.

N. B. The chief Art in preparing these cheap Foods, is to cut the
Ingredients small, and stew them a considerable Time over a slow fire,
and thus almost all Sorts of Meat and Garden-stuff will dissolve, and
when properly seasoned, be a very wholesome and pleasant food,
and will serve very well at the Tables of the Rich, as well as the Poor.
A commander’s responsibility to protect the health of his soldiers was a new idea in the age of the Revolution. In addition to the regulations about cleanliness of the camps, there were rules about maintaining personal hygiene, such as bathing and washing clothes. The army strove to provide as healthful a diet as possible, supplementing basic rations with local produce when available. In between campaigns, soldiers were encouraged to engage in sports and other forms of exercise for their physical and mental well-being.

In May 1780, George Washington sent a plea to Congress requesting relief for his troops, who were suffering under dire shortages of food, clothing, and pay. Hearing of this, a group of women in Philadelphia organized a fundraising drive across the city, raising three hundred thousand dollars by the Fourth of July. Although the ladies hoped to distribute the funds directly to the soldiers, Washington persuaded them that nothing would be more beneficial to his troops than a supply of new linen shirts. By the end of the year, the ladies had arranged for the sewing of more than two thousand shirts, shipping them to Washington with the hope that “they be worn with as much pleasure as they were made.”
Rituals of Death

Colonel Owen Roberts 4th SC Artillery
detail, by Percival de Luce, 1877.
Image courtesy The Gibbes Museum of Art.

Col. Owen Roberts of the Fourth South Carolina Regiment was mortally wounded at the Battle of Stono Ferry in Charleston County, June 20, 1779.
Despite the military physicians’ best efforts, the illnesses and injuries soldiers suffered were often beyond the power of eighteenth-century medicine to cure. Death was a common and constant fact of military life. Army chaplains ranked even higher than surgeons for military pay, and they provided essential services giving comfort to the dying as well as to the survivors mourning their fallen comrades-in-arms.

In the face of large casualties in battle, common soldiers killed were often buried by necessity in mass graves. But officers, as circumstances allowed, were usually interred individually with military honors. The duty of informing the family of their loss usually fell to the commanding officers, but sometimes it was the closest associates of the deceased who wrote home to break the sad news.

Daniel Hobert was killed by a musket ball during the Battle of White Plains on October 29, 1776. In mourning, Daniel’s widow, Kezia, wrote and illustrated this memorial poem to her husband. This relic was passed down to their great-granddaughter who, in an accompanying note, wrote “This simple ‘In Memoriam’ expressed truly the sentiment of her heart. For him, as the loved and lost, she ever mourned.”

Jabez Smith, Jr. served as lieutenant of marines on the Continental ship Trumbull, perishing aboard ship in 1780 in a renowned battle with the British privateer Watt. An officer who participated wrote of the engagement, “It is beyond my power to give an adequate idea of the carnage, slaughter, havoc and destruction… I hope it won’t be treason if I don’t except even Paul Jones… we may dispute titles with him.” Smith was laid to rest in Boston’s Granary Burying Ground, where today he lies near Crispus Attucks and Paul Revere. His headstone was topped with a handsome bas relief artwork depicting the ship Trumbull, a carving which has since become a symbol for the cemetery and reproduced on a variety of souvenir plaques, memorializing the grief felt for all the fallen patriots.
After the War

Image: Benjamin Rush by Thomas Sully, 1812.
National Portrait Gallery, Gift of Mr. and Mrs. Richard Stockton Rush III.
For most of the military doctors who served, their experience during the Revolution was the defining event of their lives. Many went on to distinguished careers in civilian or military medicine, building upon their connections and reputations made during the war. Hospital directors, physicians, surgeons and surgeon’s mates, purveyors, and apothecaries with three years’ service were eligible for Society of the Cincinnati membership, and nearly 140 signed their names to the Society’s rolls in the early years of the republic.

Notable among the medical corps veterans who carried forward the legacy of the Revolution was Dr. Benjamin Rush of Pennsylvania, a signer of the Declaration of Independence and a surgeon-general of hospitals during the war. He resumed his civilian practice as a hospital surgeon and became a professor at the University of Pennsylvania, continuing his pioneering work in preventative medicine. Dr. James Thacher of Massachusetts, who had entered service as a surgeon’s mate and rose to the rank of regimental surgeon, published his Revolutionary War diary and a biographical compendium of leading American physicians. Dr. James Tilton of Delaware drew upon his wartime experiences to promote major reforms in hospital management as physician and surgeon general of the U.S. Army.

Tipped into this family copy of Thacher’s Military Journal is a page from his original diary that reads: “We have been several times without meat for several successive days & then as many days without bread, & without forage for our horses, & destitute of medicine & necessary stores for our sick soldiers. These complicated sufferings & privations are such that the patience of our army is on the point of being exhausted. But we have one great consolation, we have a Washington for our Commander. In him we have full faith & entire confidence we believe him capable of doing more & better for us & for the cause of our country than any other man in existence.”
Saving Soldiers: Exhibition Checklist

The Scourge of Smallpox


Fighting Disease


The Hospital Department


“Pay roll of a detachment of the part of the several Virg’a Regiments left in the hospital at Baltimore for one month.” Signed by Mordecai Gist and John Willis. June 14, 1777. The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection.

Shipboard Medicine


Affidavit on behalf of James Warren, Jr., lieutenant of marines, in support of his petition for a state pension. Signed by Matthew Parke, Samuel Cooper, and James Warren (Sr.). February 5, 1784. The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection.


An Ounce of Prevention


Diet, Exercise & a Clean Shirt


Rituals of Death
Perez Morton. An Oration Delivered at the King’s Chapel in Boston, April 8, 1776, on the Re-interment of … Joseph Warren, Esquire, President of the Late Congress of this Colony, and Major-General of the Massachusetts Forces, who Was Slain in the Battle of Bunker’s-Hill, June 17, 1775. Boston: Printed, and to be sold by J. Gill, 1776. The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection.


Kezia Hobart. “Sacred to the memory of Mr. Daniel Hobert, who was slain at White-Plains, Oct. 29, 1776, AE 28 years.” Watercolor and ink on paper. 18th century. The Society of the Cincinnati, The Robert Charles Lawrence Fergusson Collection.


After the War


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The American Revolution Institute of the Society of the Cincinnati promotes knowledge and appreciation of the achievement of American independence, fulfilling the aim of the Continental Army officers who founded the Society of the Cincinnati in 1783 to perpetuate the memory of that vast event. The Institute supports advanced study, presents exhibitions and other public programs, advocates preservation and provides resources to teachers and students to enrich understanding of our War for Independence and the principles of the men and women who secured the liberty of the American people.