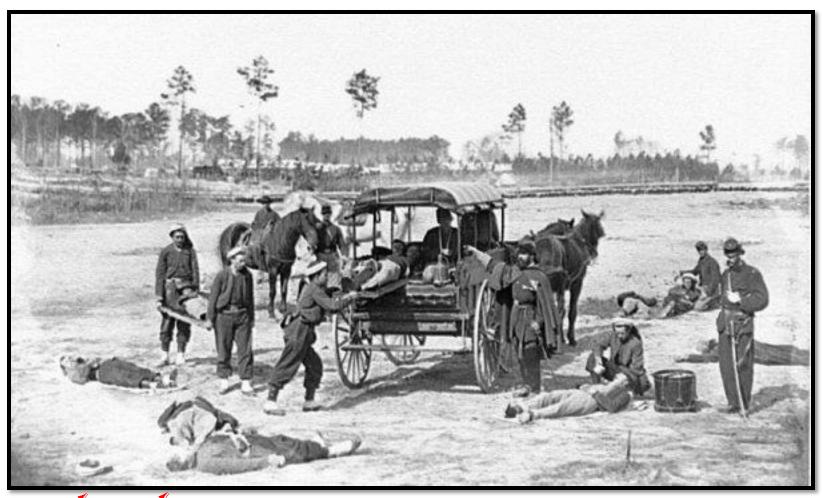
### GANGRENE AND GLORY



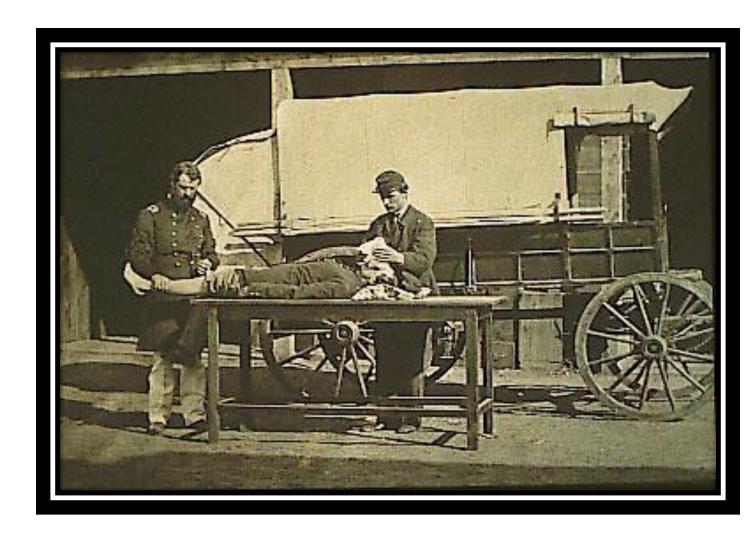
CIVIL WAR MEDICINE AND DR. HAMMOND



DR. WILLIAM HAMMOND, M.D.

Surgeon General of the Union Army during the first part of the US Civil War.

ETHER USED AS ANESTHETIC ON BATTLEFIELD— AN INNOVATION



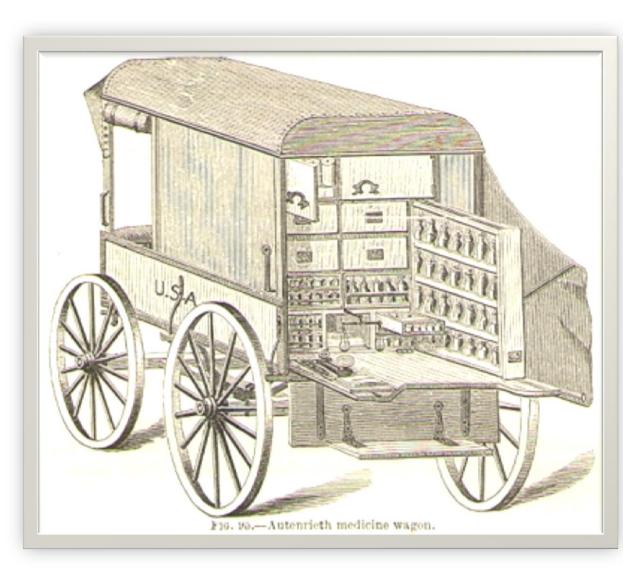
In addition to the fledgling Ambulance Corps, Hammond championed the use of ether and other anesthetics on or near the battlefield. A stiff paper cone was used to drape an ether-soaked cloth across the patient's face.

#### NASAL ANESTHETIC INHALER



Invented by a Confederate surgeon as a way to conserve scarce anesthetic supplies, this became a valued tool of doctors on both the Union and Confederate sides of the war.

# THE AMBULANCE CORPS HAD A VARIETY OF VEHICLES



Not only were ambulance wagons used to transport wounded from the field, between treatment areas and to transit points, they were adapted to carry medical supplies. This was another Hammond innovation. Unfortunately, no springs on the vehicles.

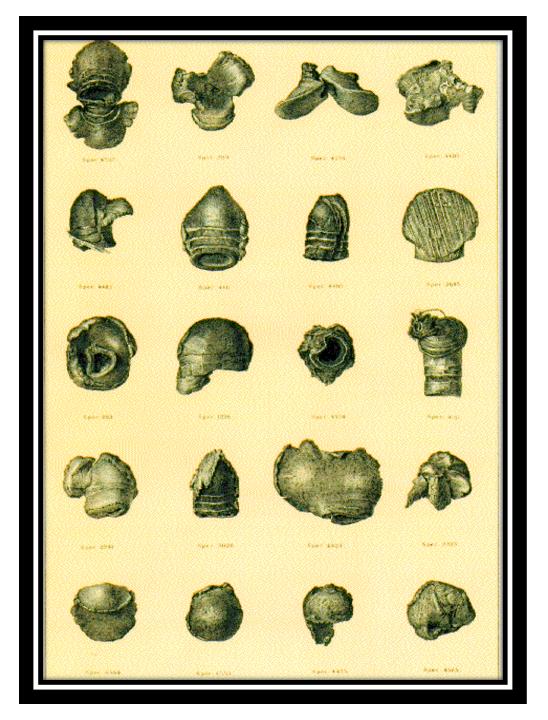
## UNION ARMY DOCTOR'S MEDICINE CHEST

A very valuable tool for any military doctor, these kits were often supplied by well-meaning civilian doctors from the military doctor's home town. Keeping them supplied, at least at first, was the individual doctor's responsibility. Hammond developed the Army medical supply list, which allowed doctors to order and stock their medical supplies more easily.

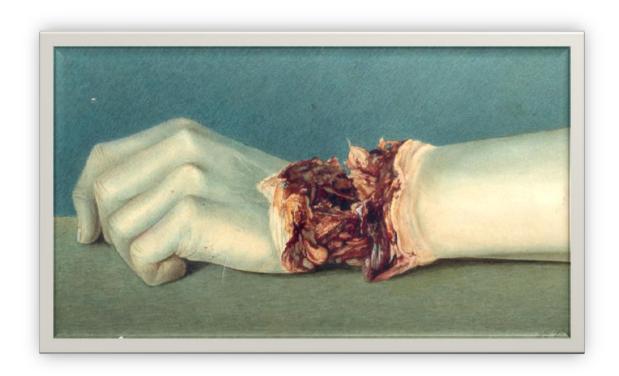


### MINIE BALLS WERE DEADLY

Formed from soft lead, easily deformed by impact with the human body... the Minie ball was a deadly tool of the Civil War, one that the generals on both sides didn't take into account at first. They were fighting the wars of 50 years earlier, with musket balls, not rifled Minie balls.



HAMMOND'S MEDICAL COLLECTION TAUGHT ARMY DOCTORS (AND STILL DOES)



The wounds produced by the soft lead, rifled Minie balls, as well as by shrapnel and cannon shot, were documented meticulously by Hammond's medical artists. These illustrations were extremely life like and used to educate Union Army medical doctors, most of whom had never encountered wounds like this before.

#### GENERAL SICKLES' LEG

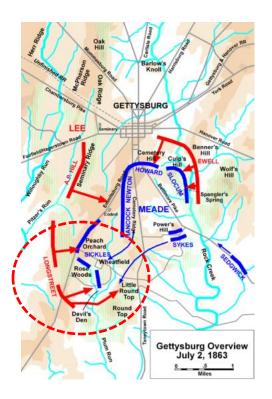


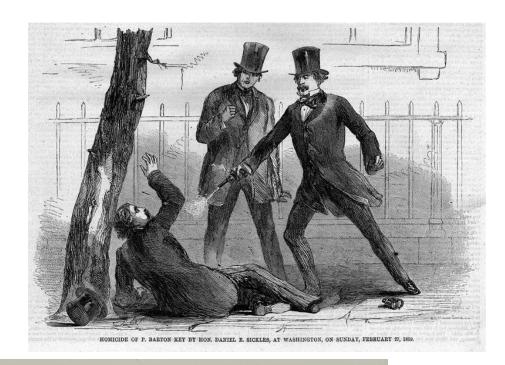
Sickles was photographed in 1865 at the Army Medical Museum. William Bell. Woodward 1760.



Hammond's medical documentation team even collected battlefield items like the cannonball and severed right leg of Union General Sickles. The general himself posed for a photo at the Army Medical Museum, documenting his survival of a terrible wound.

### SICKLES, MURDER, GETTYSBURG AND MEDAL OF HONOR









Sickles was photographed in 1865 at the Army Medical Museum. William Bell. Woodward 1760.

- As an antebellum New York politician, Sickles was involved in a number of public scandals, most notably the killing of his wife's lover, Philip Barton Key II, son of Francis Scott Key.[2] He was acquitted with the first use of temporary insanity as a legal defense in U.S. history. He became one of the most prominent political generals of the Civil War. At the Battle of Gettysburg, he insubordinately moved his III Corps to a position in which it was virtually destroyed, an action that continues to generate controversy. His combat career ended at Gettysburg when his leg was struck by cannon fire.
- After the war, Sickles commanded military districts during Reconstruction, served as U.S. Minister to Spain, and eventually returned to the U.S. Congress. MoH Major General, U.S. Volunteers. Place and Date: At Gettysburg, Pa., July 2, 1863. Entered Service At: New York, N.Y. Birth: New York, N.Y. Date of Issue: October 30, 1897.



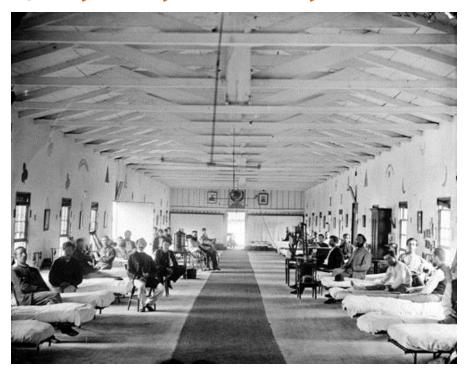
#### **NURSES AND YOLUNTEERS**

Hammond employed Clara Barton to organize swarms of eager Union women volunteers into a cohesive, trained, professional nursing corps.

Mother Bickerdyke, a church volunteer, was horrified to see the condition soldiers were suffering in, in supposedly modern Union field hospitals.



#### **CLARA BARTON AND DR. HAMMOND**





In 1861 Barton was living in Washington, D.C., working at the U.S. Patent Office. When the 6th Massachusetts Regiment arrived in the city after the Baltimore Riots, she organized a relief program for the soldiers, beginning a lifetime of philanthropy.

When Barton learned that many of the wounded from First Bull Run had suffered, not from want of attention but from need of medical supplies, she advertised for donations in the Worcester, Mass., Spy and began an independent organization to distribute goods. The relief operation was successful, and the following year U.S. Surgeon General William A. Hammond granted her a general pass to travel with army ambulances "for the purpose of distributing comforts for the sick and wounded, and nursing them."

For 3 years she followed army operations throughout the Virginia theater and in the Charleston, S.C., area. Her work in Fredericksburg, Va., hospitals, caring for the casualties from the Battle of the Wilderness, and nursing work at Bermuda Hundred attracted national notice. At this time she formed her only formal Civil War connection with any organization when she served as superintendent of nurses in Maj. Gen. Benjamin F. Butlers command.

#### HAMMOND PUBLISHED GUIDES FOR THE ARMY

His emphasis was on organization, training and getting results in the field. His writings were clear, concise and often dryly humorous.

A

#### TREATISE ON HYGIENE

WITH

SPECIAL REFERENCE

TO

#### THE MILITARY SERVICE.

B2

#### WILLIAM A. HAMMOND, M.D.,

SURGEON-GENERAL U. S. ARMY:

FELLOW OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA; MEMBER OF THE PHILADELPHIA PATHOLOGICAL SOCIETY; OF THE ACADEMY OF NATURAL SOCIETY; OF THE ACADEMY OF NATURAL SOCIETY; HONORARY CORRESPONDING MEMBER OF THE RETURN MEMICAL ASSOCIATION; MEMBER OF THE RETURN FOR GENERAL OF THE SOCIETY; OF THE VERSEN FOR GENERAL OF THE SOCIETY OF MASSICAND DER WESSENMANTACHICIEN BELIEVEDE; LAKE PROPERSOR OF ARATOMY AND PHYSICIONY IN THE UNIVERSITY OF MASSICAND; LATE SOCIETY OF A SOCIETY OF THE BLATT OCAL SURGISTY AT, THE BLATT MORE EVERTEABLY AT, THE BLATT

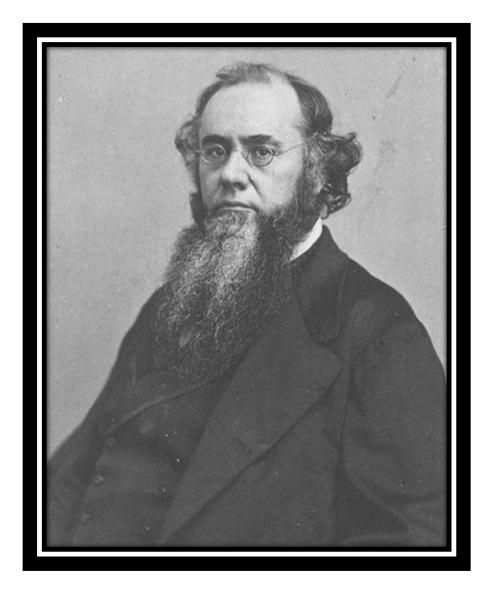
J. B. LIPPINCOTT & CO., Nos. 715 and 717 Market St.

1863.

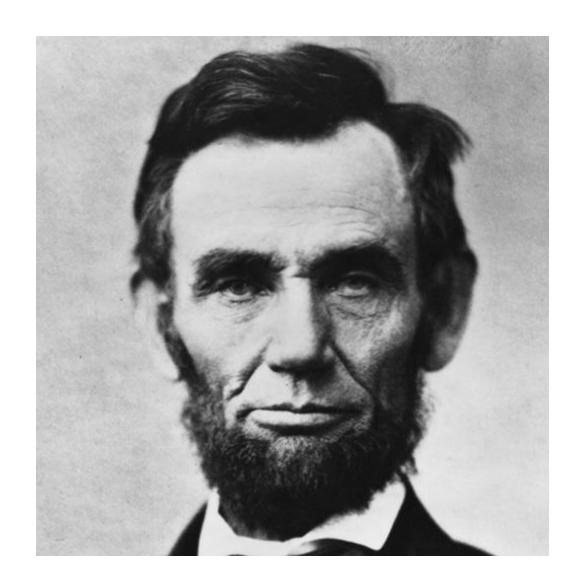
### EDWIN STANTON VS. DR. HAMMOND

Stanton, Lincoln's Secretary of War, was Hammond's nemesis. He had his own person in mind for the Surgeon General of the Army, and it wasn't Hammond. Stanton eventually engineered a court martial for Hammond over trumped-up charges, with a rigged trial. He forced Lincoln into firing Hammond and kicking the doctor out of the Union Army.

Hammond was later vindicated and the charges cleared from his name.



ABRAHAM LINCOLN sacrificed Hammond for political means but kept Hammond's innovations firmly in place in the Union Army hospital system



#### HAMMOND'S INNOVATIONS AND IMPACT





- Reorganized and modernized Army medical command during wartime
- Developed Ambulance Corps
- Developed basic nurse corps
- Stopped purging/emetic use
- Redesigned hospital layouts to reduce spread of diseases among soldiers
- Developed front line medical care and triage for wounded men
- Despite politics, innovations saved thousands of lives
- Vindicated in the end by medical community and Army
- Continued neurological research
- Developed training materials and museum for Army Medical Corps that exists today and trains today

# Mobile Medical Care in the Military Today

1 administrative officer, 4 medical doctors, 2 nurse anesthetists, 3 registered nurses, with the remaining enlisted soldiers functioning as medics, nursing assistants, or surgical technicians.

It's usually transported by wheeled vehicles, and can be ready to receive patients in as little as 30 minutes after moving to a new location.

