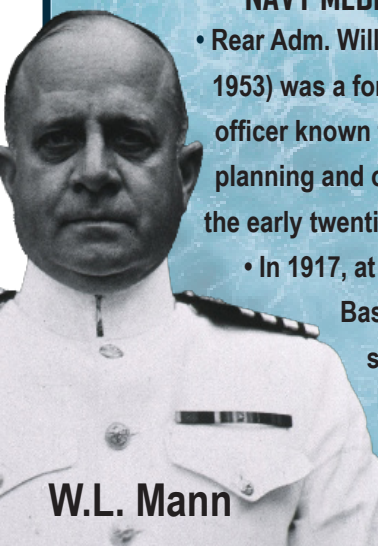




## MEDICAL TACTICS IN NAVAL WARFARE

*Classics in Navy Medicine Literature*



W.L. Mann

### NAVY MEDICINE'S MAHAN

- Rear Adm. William Leake Mann (1884-1953) was a forward-thinking medical officer known for his work on medical planning and operational medicine in the early twentieth century.

- In 1917, at the Marine Corps Base Quantico, Mann spearheaded the concept of field medical training.

- He became a flight surgeon in 1926 and was later senior

medical officer of USS *Saratoga* (CV 3).

- At the end of his career, Mann was selected to organize and stand up the Naval Medical Research Institute (the forerunner of the Naval Medical Research Command).

 Mann's book is organized in three parts: (1) Medical tactics on board combatant ships; (2) Tactical employment of hospital facilities in naval warfare; and (3) Medical tactics of amphibious warfare.

### MEDICAL TACTICS IN NAVAL WARFARE

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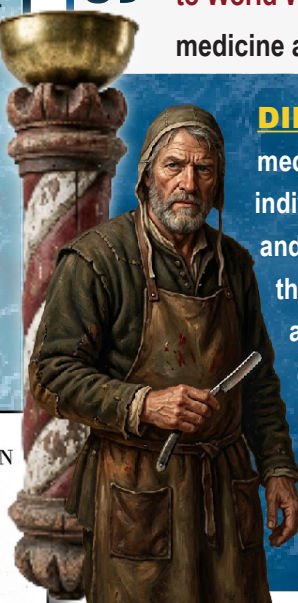
*"The mission of a military medical service is the promotion of physical efficiency for combat. . . The fundamental principles of war may be roughly expressed as the concentration of a superior force against a vulnerable portion of the enemy; and, secondarily, the use of a minor force to contain or delay a superior force"*

~W.L. Mann

## SYNOPSIS

- *Medical Tactics in Naval Warfare* is an authoritative treatise by Cmdr. (later Rear Adm.) **William L. Mann** written in **1926** and compiled into a book in **1927**.
- It was among the first U.S. Navy publications to explore the administrative, organizational, and tactical protocols needed to **treat battle casualties and preserve manpower at sea**.
- Using historical **naval lessons from the ancient world to World War I**, Mann examines the interconnectedness of medicine and the operational demands of warships.

**DID YOU KNOW?** Mann traces the roots of medieval naval medicine through **barber-surgeons**, individuals who bridged the gap between basic grooming and rudimentary trauma care. As their name implies, these **multi-faceted tradesmen** could provide an assortment of services from trimming beards to tooth extraction and blood-letting. Their **iconic striped poles (originally red and white)** advertised their services with the **red representing blood-letting** and the **white representing bandages** used to stem the flow of blood.



Royal Navy transferring a casualty at sea, 1916



### MANN'S 12 CORE DOCTRINES OF SHIPBOARD MEDICINE



Mann identified **12** core doctrines of shipboard medicine. These included integrating **medical planning** into warship design, strategically **dispersing onboard medical personnel**, and **training lay crewmembers** to administer immediate first aid. Additionally, he emphasized the need for **rapid casualty evacuation** from combat vessels as both a humanitarian duty and a tactical military necessity to "preserve fighting efficiency."



## CASUALTY RATES IN NAVAL WARFARE

Reviewing historical data, Mann estimated that any warship suffering **40 percent casualties** would be placed out of action and “any percentage above this figure will create such disastrous conditions and will disorganize the medical department to such an extent that it will practically cease to function.” He notes two notable exceptions of ships that remained afloat despite heavy casualties: the *Lawrence* in 1813 and *Zhenyuan* in 1894.

**80%** Percent of ship complement of USS *Lawrence* at the Battle of Lake Erie (War of 1812) who were casualties.

Percent of ship complement of Chinese ironclad *Zhenyuan* at the Battle of Yalu River (First Sino-Japanese War) who were casualties. **76%**



The Destruction of L'Orient at the Battle of the Nile  
George Arnold, National Maritime Museum



Japanese ship Hiyei, Battle of Lissa, 1894

In one of his case studies, Mann examines the *Japanese ironclad Hiyei* and presents it as a chief reason why medical personnel should be disbursed across a ship. In 1894, in the *Battle of Lissa*, a single large shell wiped out *Hiyei's* entire medical department and all of its medical supplies because they were located in a single location (an unprotected wardroom).

*“The weapons of naval warfare have undergone vast and remarkable changes, yet the fundamental psychological traits governing the behavior of the naval personnel under war conditions remain almost stationary.”*

~W.L. Mann

## SHIPBOARD CASUALTY EVACUATION

- A highlight of Mann's book is the history of **handling / moving casualties** during and after naval engagements. He explores the transportation methods, ship-to-ship transfer logistics, and types of external evacuation.
- Mann underscores that **Navy Medicine's primary battle objective is rapidly returning fit sailors to their stations**, while ensuring the swift evacuation of the severely wounded as both a tactical necessity to prevent operational interference and a vital morale booster for the crew.

Upon his retirement in 1945, Secretary of the Navy James Forrestal awarded Rear Adm. Mann a **Letter of Commendation**, honoring his distinguished **37-year career** spanning both World Wars. Forrestal lauded him as a “visionary pioneer” who **shaped the foundational principles of modern naval medicine**, specifically citing his groundbreaking efforts in **field medicine, sanitation, amphibious warfare organization, and ship-to-shore evacuation logistics**. Furthermore, the commendation highlighted his internationally renowned treatises.



Mann related the story of the German light cruiser SMS *Emden* and its difficulties transferring casualties after its defeat in November 1914. Due to the damage incurred to its Davits system, it took over **four hours to transfer 80 wounded** to the receiving ship (HMS *Sydney*) a ship it had been in combat against.