

# A Brief History of the Sanitarian Profession

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American Academy of Sanitarians



# With Special Thanks To:



## Bob Custard

Friend, Colleague, Sanitarian,  
NEHA Past President

Environmental Health Manager (Ret.)  
Alexandria, VA

**Whose dedication and interest in environmental health and its history, and, the sanitarian profession made this presentation possible.**

With special gratitude and  
thanks to the following authors

Grace L. Loye, MSPA

1937 *The Sanitarian and His Duties*

Ben Freedman, MD, MPH

1957 *Sanitarian's Handbook*

George Rosen, MD

1958 *A History of Public Health*



# With gratitude and thanks

W.W. Sampson, PhD

1967 *The History of the National Association of Sanitarians*

John Duffy, PhD

1990 *The Sanitarians: A History of American Public Health*

Suellen Hoy, PhD

1995 *Chasing Dirt: The American Pursuit of Cleanliness*



# Evolution of the Definition

## Sanitarian

1. A non-medical practitioner of sanitation
2. An advocate of sanitary measures; one especially interested or versed in sanitary measures.
3. A person who is trained and experienced in the field of sanitary science and technology and who is authorized to carry out the educational, inspectional and enforcement duties in the field of environmental health services.

# Sanitarian - Current Definition

A credentialed practitioner in the environmental, sanitary and public health sciences whose vocational efforts are directed towards the evaluation and management of those factors and mechanisms in our environment which impact upon the reduction of risk of disease and injury as well as the improvement in the quality of life.

# PROFESSIONAL EMPHASES

Environmental  
Microbiology

Contamination Control,  
Risk Evaluation, and,  
Sanitation



# *Milestones*

*Polemics, Politics, Science and People*

# Environmental Health Milestones

c. 3000 B.C.: Mosaic Code of Hygiene - Influences on Christendom.

For over 1,000 years after the fall of the Roman Empire, personal hygiene was considered “worldly” and European living conditions and health, with minor exceptions, were left to the province of an extra rational power.

# Environmental Health Milestones

1200's London:

- Smoke abatement law

- Forbidding swine in streets

- Keeping fronts of houses clean

1348: Venice - First Board of Health and  
Quarantine.

1350: France - Sanitary Police program.

1388: England - First English Sanitary Act

1415: England - First Nuisance Act



# Environmental Health Milestones

1486: England - Regulation of slaughter houses.

1495: England - Statute against contagion by fomites (bedding).

1513: Santa Domingo - First health ordinances in the new world.

1558: Italy - Luigi Cornaro publishes treatise on personal hygiene.

1599: Vienna - Temporary prohibition on the sale of milk products.

# First Sanitation Law in Virginia

1610

Soiled laundry water shall not be discarded in the street or within forty-feet from the fort.

Pots and kettles may not be washed within twenty feet from the well.

“Necessities of nature” must be discarded  $\frac{1}{4}$  mile from the fort.

Houses must be clean and free of odors.

Streets must be kept clean.

Beds must be three-feet off the floor.

Penalty: answer to a “Marshall Court”.

# Environmental Health Milestones

- 1774: Guatemala - First Board of Health
- 1774: England - Prison reform\*
- 1783: Berlin - First meat inspection regulations.
- 1793: Baltimore - First City Board of Health
- 1798: USPHS established
- 1799: Germany - Johann Peter Frank published work on public hygiene
- 1855: Louisiana - First State Board of Health.
- 1859: Boston - First milk inspector



# Did you know ... ?

**Paul Revere** was the first President of Boston's Board of Health, he supervised the city's privy inspectors, who made sure that residents properly emptied their privies and did not let them overflow.



POLITICAL  
INFLUENCES ON  
SANITARY  
REFORM

# Newgate Prison: The beginning of environmental health reform



Newgate (1188-1902) was notorious for its crowding, unhealthy environment (lack of air and water, and epidemics).

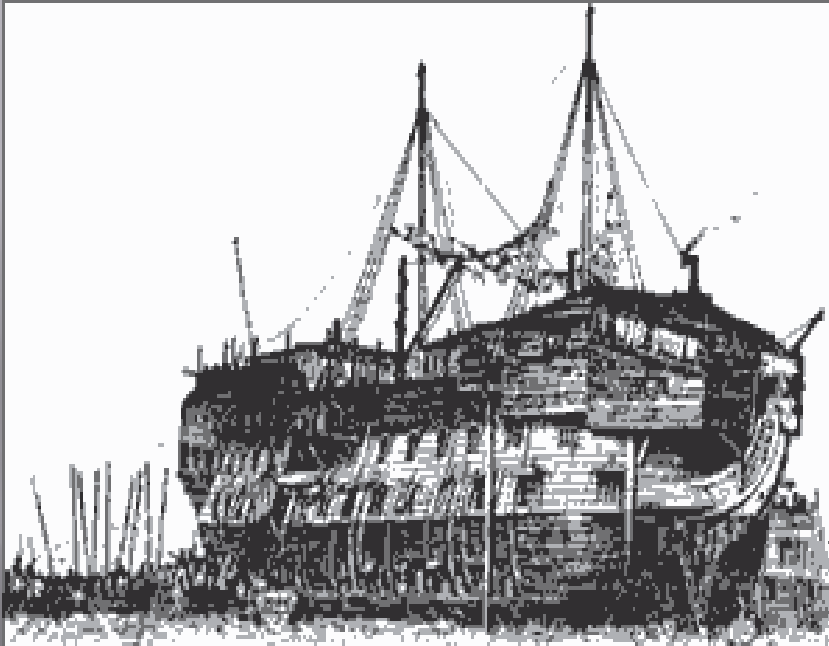
Prisons, Newgate included, did not supply their prisoners with bedding and clothing. These things had to be purchased from the keepers. In addition to this cost, prisoners were also expected to pay a fee upon admission. They also needed to continue to pay money if they wanted any of the ordinary comforts of life. Then, when released, they were expected to pay yet another fee before they were allowed to leave.

The reform movement started in 1431.



# Prison Ship Reform - 1847

British Shipboard Confinement  
1776 to 1857



## THE REFORMERS

In March of 1847 Captain William John Williams accepted a charge by the Home Secretary to "inquire diligently" into conditions of confinement on the hulks.

Thomas Duncombe, Member of Parliament, led the inquiry into conditions of confinement and assisted Williams in his work.

# BEGINNINGS

EVOLUTION OF THE SANITARY PARADIGM

# “Sanitary”

The word “sanitary” finds its way into the English language:

**SANITARY** : 1842, from Fr. *sanitaire* (1812), from L. *sanitas* "health," from *sanus* "healthy, sane." In ref. to menstrual pads, first attested 1881 (in sanitary towel). Sanitize first recorded 1886; metaphoric sense is from 1934.

**SANITATION**: 1848, irregularly formed from sanitary. As a euphemism for garbage (e.g. sanitation engineer) first recorded 1939.

# The Public Health Reformers

Catharine Beecher - 1841

*A Treatise on Domestic Economy, for the Use of Young Ladies at Home and at School*

William Alcott - 1830-1859

Wrote 100's of articles on Cleanliness, Health and Virtue. The "Law of Cleanliness"

Sylvester Graham - 1840's - Cholera and Hygiene

John H. Criscom - 1844

*The Sanitary Condition of the Laboring Population of New York*



THE  
FIRST  
SANITARIANS

# Florence Nightengale (1820-1910)

“The Apostle of Cleanliness”



**Human health is first linked to environmental conditions.**

Studied death rate from communicable diseases (principally cholera and typhus) among wounded British soldiers during the Crimean War (1855).

As a statistician and social reformer, she proved that improvements in sanitation at hospitals led to a decrease in the death rate.

*“Notes on Matters Affecting the Health, Efficiency and Hospital Administration of the British Army”*

# James Tilton (1745 - 1822)

## Physician and Surgeon General of the United States Army

During the campaigns of 1775-80 he was successful in providing small well-ventilated log huts capable of holding but six or eight patients each.

In February 1813, he published a small treatise entitled, *Economical Observations on Military Hospitals and the Prevention and Cure of Diseases Incident to an Army*.

His efforts to improve hospital conditions and to rehabilitate the medical and hygienic service of the army resulted in the publication of the *Regulations for the Medical Department* issued in general orders of December 1814.



# Edwin Chadwick (1800-1890)

Lawyer and Social Reformer



After the influenza and typhoid epidemics in 1837 and 1838, Edwin Chadwick was asked by the government to carry out a new enquiry into sanitation. His report, *The Sanitary Conditions of the Labouring Population* was published in 1842.

Chadwick argued that disease was directly related to living conditions and that there was a desperate need for public health reform.



# Lemuel Shattuck (1793-1859)

Merchant and Politician



Reviewed birth, marriage  
and death records for  
Boston neighborhoods

Concluded that sanitary  
conditions affected the  
death rate

Editor of the Report on the  
Sanitary Condition of  
Massachusetts - 1850

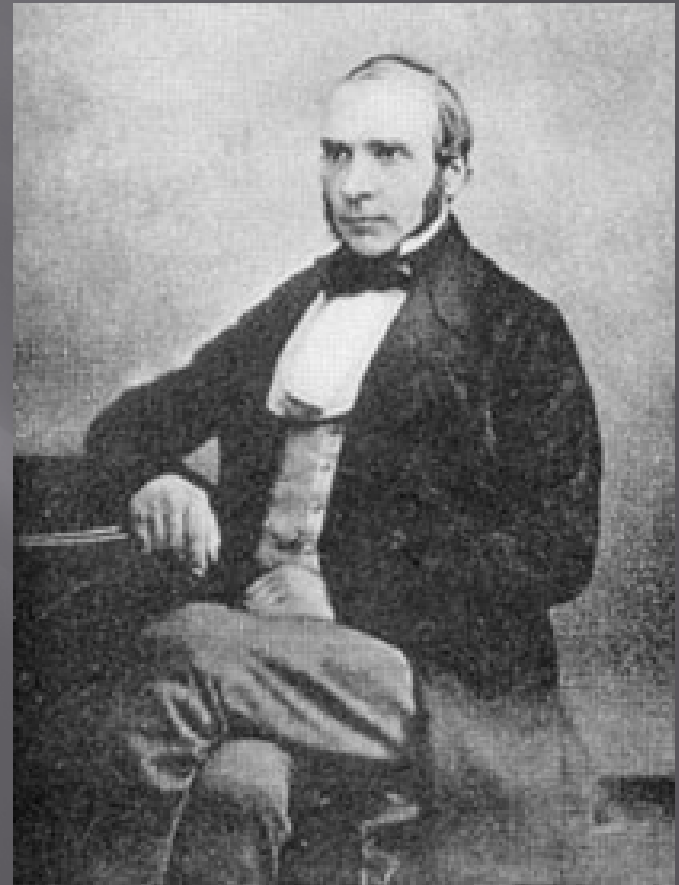
# John Snow (1813-1858)

Father of modern Epidemiology and Anestheologist

Studied the geographic distribution of cholera deaths in London during the 1854 epidemic.

Concluded that people who drank water from the Soho District Broad Street pump were more likely to get cholera.

Removed the pump handle and stopped the epidemic. Contamination came from a "Dolphin" located downstream of a sewer outfall.



# Ann Maria Jarvis (1832-1905)

## Social Activist and Community Organizer



She noted the exceptionally high infant mortality rate in Taylor County, WV; seven of her eleven children died of communicable disease.

She organized Mothers Day Work Clubs through churches in five local towns to provide medicine for the indigent, inspection of milk for wholesomeness, and care for children of tubercular mothers.

She asked area physicians to help her set up procedures for sanitation inspections.

During the Civil War, her women's clubs assisted soldiers ill with typhoid and measles on both the Union and Confederate sides.

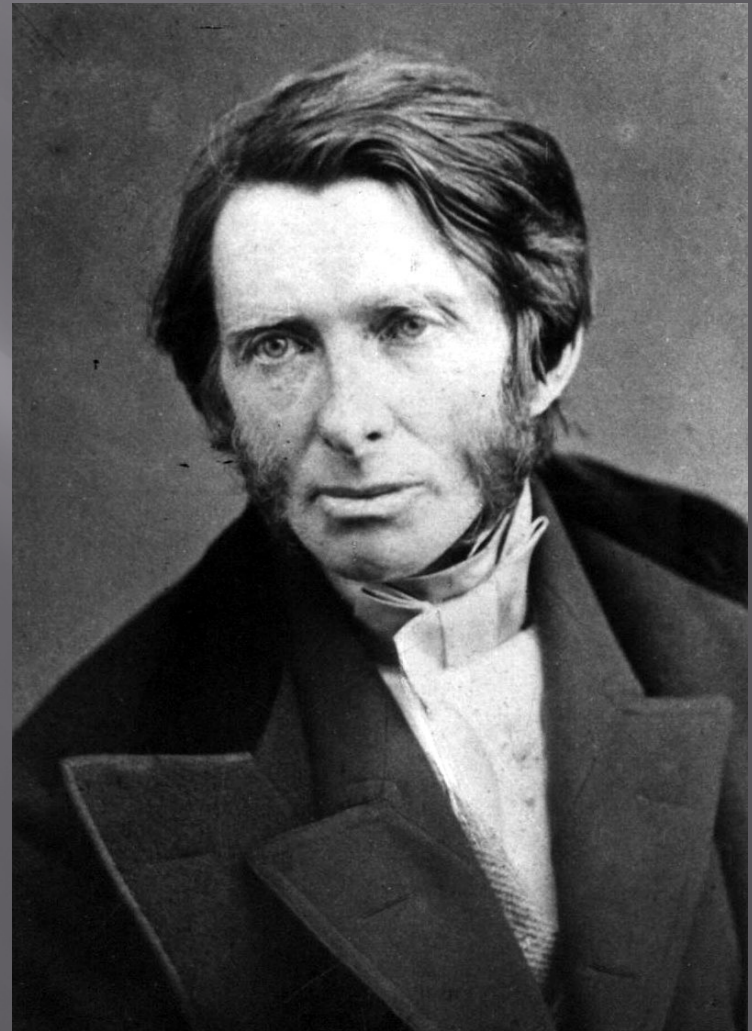


# John Ruskin (1819-1910)

Art Critic and Writer

English critic of art, architecture, and society. He was a gifted painter, a distinctive prose stylist, and an important example of the Victorian Sage: a writer of polemical prose who seeks to cause cultural and social change.

*“That country is the richest which nourishes the greatest numbers of noble and happy human beings.”*





# The American Civil War

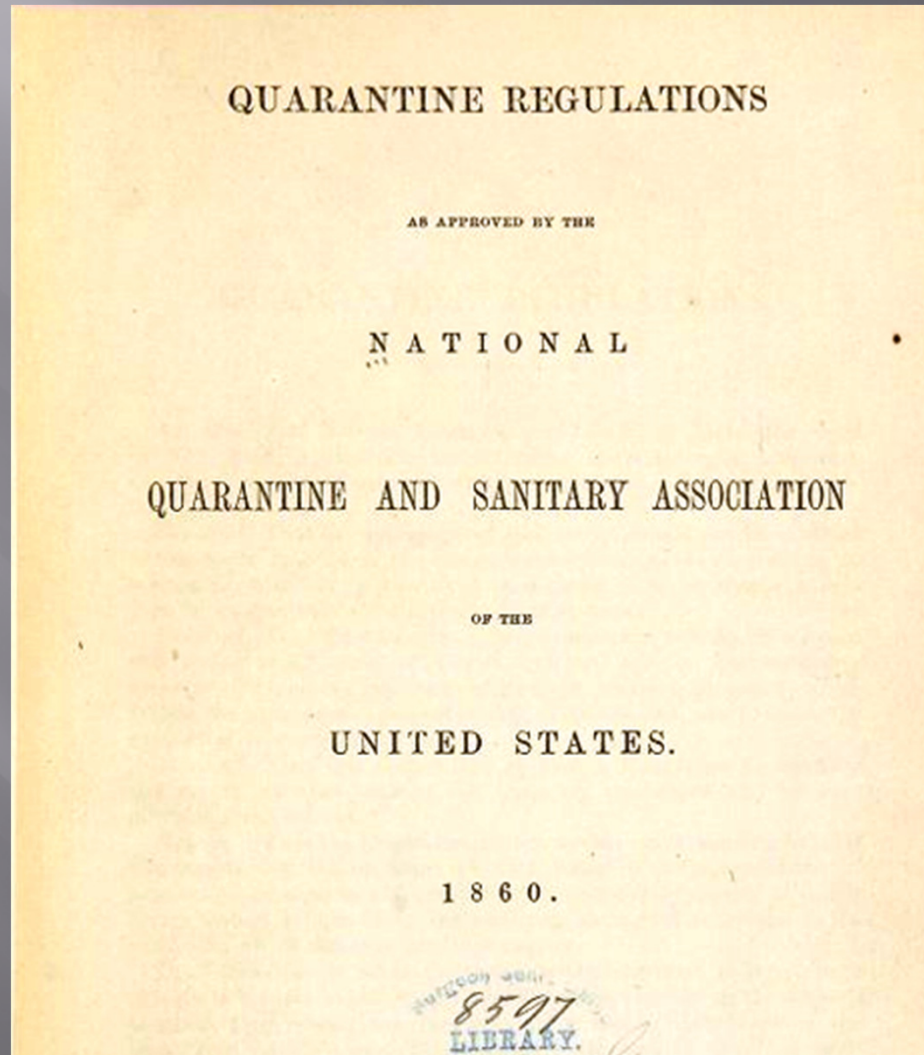
# Sanitarian Beginnings

At the dawning of the Civil War  
we enter into ...

## **The Age of Enlightenment**

and the influences that established  
our profession and gave it its'  
name.

# Introduction of Quarantine Regulations - 1860



# Sanitary Commission

First women volunteers and establishment of the Sanitary Commission on June 19, 1861.

Dr. Henry W. Bellows (Clergyman) was driving force; Frederick Law Olmsted (Architect) appointed CEO

Began inspection of Union camps with emphasis on sanitation and other environmental health conditions.

Emphasis of prevention over cure



# United States Sanitary Commission



**Mission:** To consider the location of the camp, its drainage, ventilation of tents or quarters, the quality of the rations, the methods of cooking, latrines, the general cleanliness of the camp and of the men ...

... they were instructed to suggest tactfully the points of deficiency to the commanding officers.

**George Templeton Strong,** Treasurer, raised nearly \$5 Million for the Commission during the war.

# U.S. Sanitary Commission

First USSC office and field  
hospital - 1861



USSC Doctors and Nurses  
Fredericksburg 1864



# Evolution of a Symbol

SANITARY COMMISSION  
CROSS BADGE 1861



FIRST USE OF THE  
GENEVA CROSS 1864





# Sanitary Commission

Provided most medical and sanitary supplies until the battle of Chancellorsville in 1863

“The Woman’s War” 20,000 women served on both sides.

The title “Nurse” carried cache!

“Whitewash and women were the best disinfectants”

The lessons of cleanliness were brought home from the war; which started rural and urban public health initiatives.



# William Alexander Hammond

(1828-1900)



A leading neurologist.  
Appointed Surgeon  
General of the Army  
in 1862.

Developed the modern  
ambulance.

*“A Treatise on Hygiene:  
With Special Reference  
to the Military Service”  
- 1863*

# Joseph K. Barnes

1817-1883

On September 3, 1863, Barnes was empowered by a special order of the War Department "To take charge of the bureau of the Medical Department of the Army".

For the remainder of his 18-year term of office he exhibited the greatest interest in the health and hygienic conditions of the army, in the comfort and welfare of the sick and wounded.

**Standardized Field Sanitation**



# Civil War and the Sanitarian

Societal values became popularized ... in civil and military life;

It brought home the idea of the value and economy of health and lives, and,

Made available to the public, the wide extent to which the knowledge and principles of hygiene influence personal and public health.



*New and emerging  
science for our  
profession*



# Post War Advances in Public Health

Public health laboratories

Identification of the Tuberculosis bacillus

Milk pasteurization

Identification of mosquito and tick borne diseases

Identification of parasitic diseases

Garbage reduction

# Post War Advances in Public Health

Water treatment and disinfection

Mosquito control

Identification of fecal borne diseases  
and control

Septic and sewage systems

Recognition of rural sanitation

# Notable Individuals who Shaped our Profession

# Robert Koch (1843-1910)



Known for his work on tuberculosis, for which he was awarded a Nobel Prize.

Established *Koch's Postulates* that provide the basis for establishing if an organism is the cause of a disease.

He pioneered the use of microbiologic techniques still used today – agar growth media, Petri dishes; bacterial purification and staining techniques.



# Louis Pasteur (1822-1895)



Established the “Germ Theory” in 1888.

Pasteurization process for beer and milk – 1877.

Discovered anaerobic life, microbial utilization of oxygen, filterable viruses.

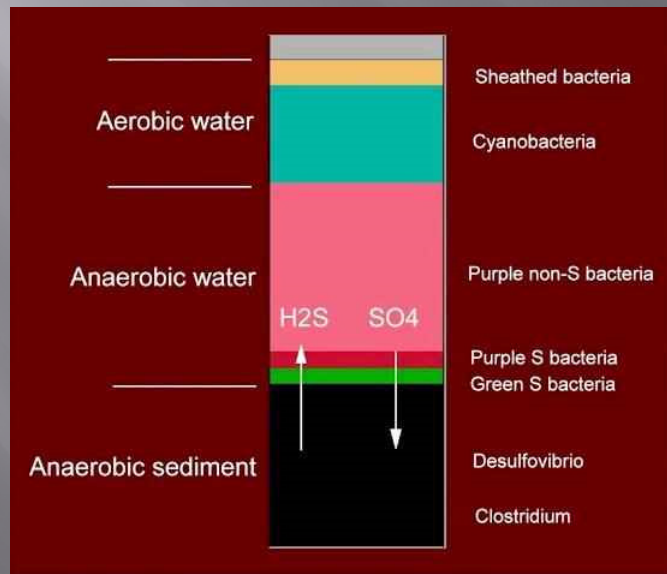
Defined fermentation, and developed rabies and anthrax vaccines and the basis for aseptic surgery.

# Sergei Winogradsky (1856-1953)

Father of modern environmental microbiology.

Defined the Biogeochemical Cycle

## *Winogradsky Column*



# Walter Reed, MD (1851-1902)

Reed's research on Yellow Fever was the seminal work on vector-borne disease transmission.

In October 1900, Major Reed was able to announce to the annual meeting of the American Public Health Association that "the mosquito serves as the intermediate host for the parasite of yellow fever."





## Cleaning of the City and Farm: the emergence of the modern Sanitarian

1872: APHA was founded

First Journal called "*The Sanitarian*"

1875: Alabama - first rural public health

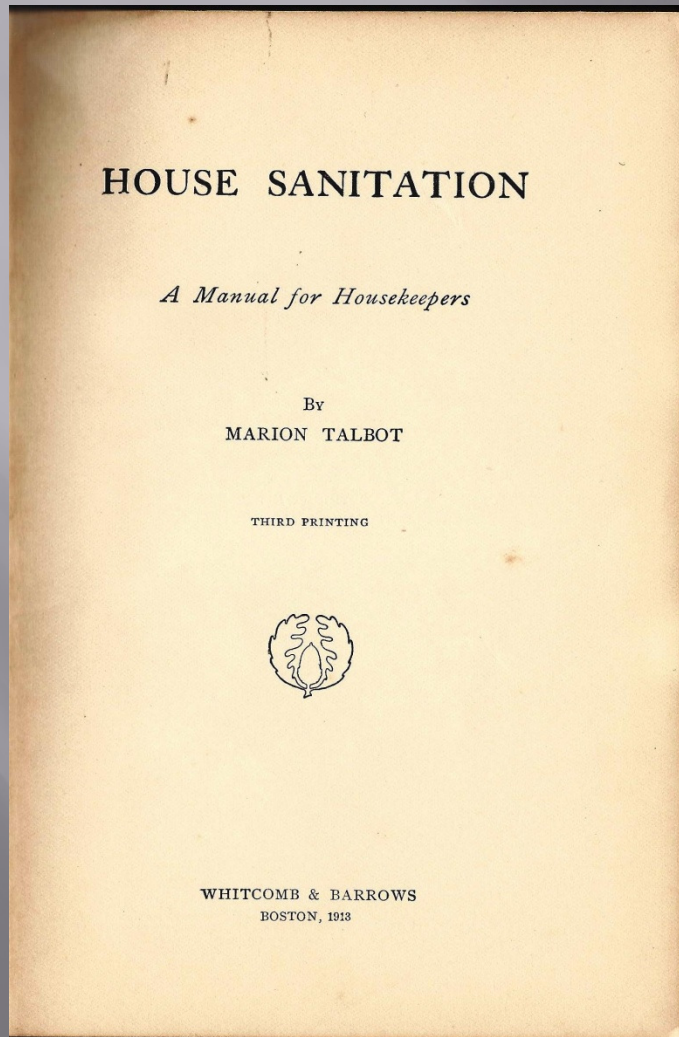
1879: National Board of Health created

Discontinued in 1893

1881: New York - first effective food control laws in the U.S.

1882: Newark - first dairy inspections

# Emerging attitudes towards the Sanitarian Profession



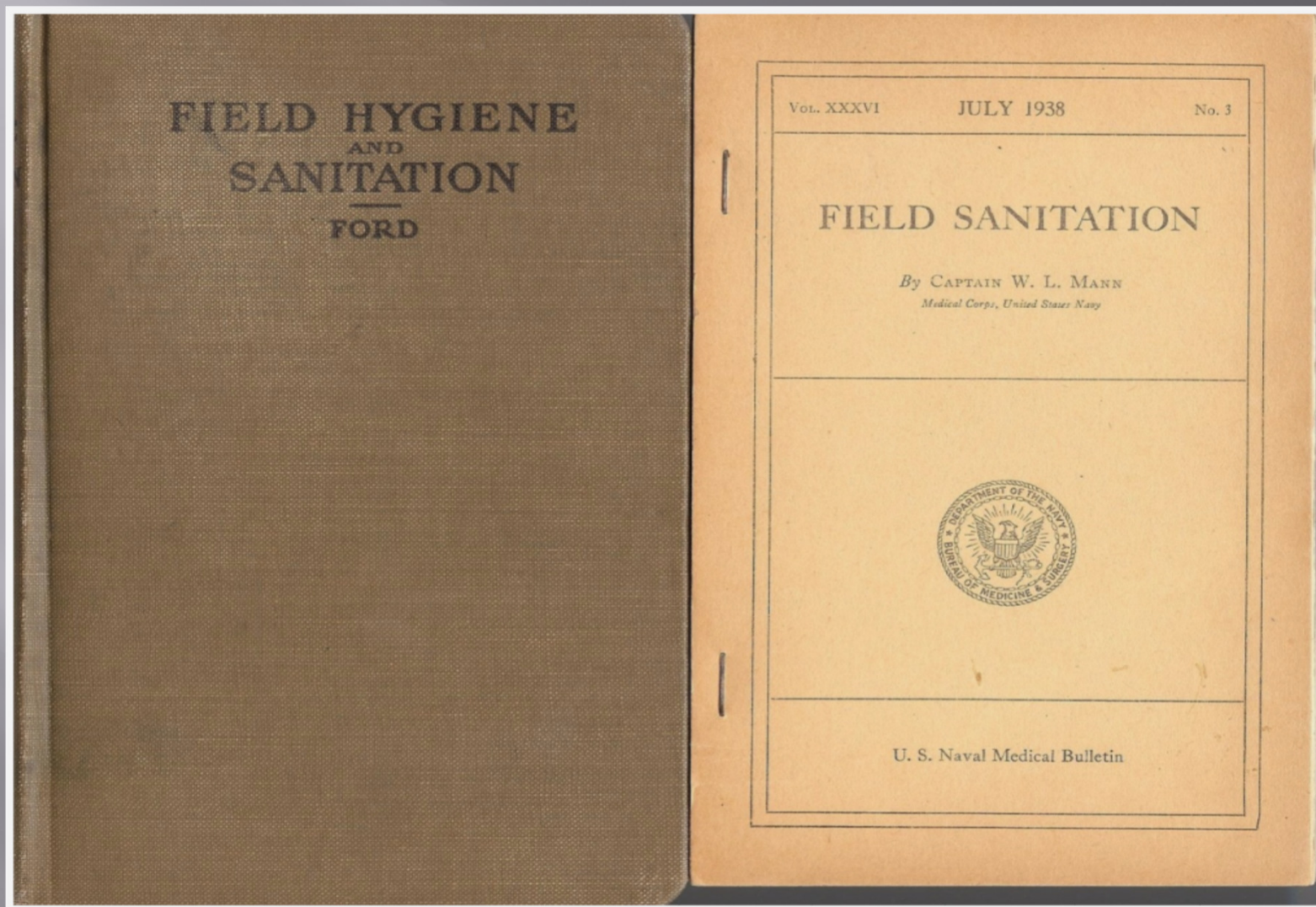
1913

"... the old-style sanitary inspector usually condemned everything in sight, from the garbage pail at the back door to the plumbing in the bathroom. But what availed it that the garbage pail was emptied every day or a vent pipe placed on the bath water waste pipe, if the milkman delivered scarlet-fever infected milk or an unrecognized case of measles sat next the children at school"

Dr. H.W. Hill

Modern sanitarians are urging that public funds appropriated for sanitary measures should be expended in such a way as to prevent the spread of disease.

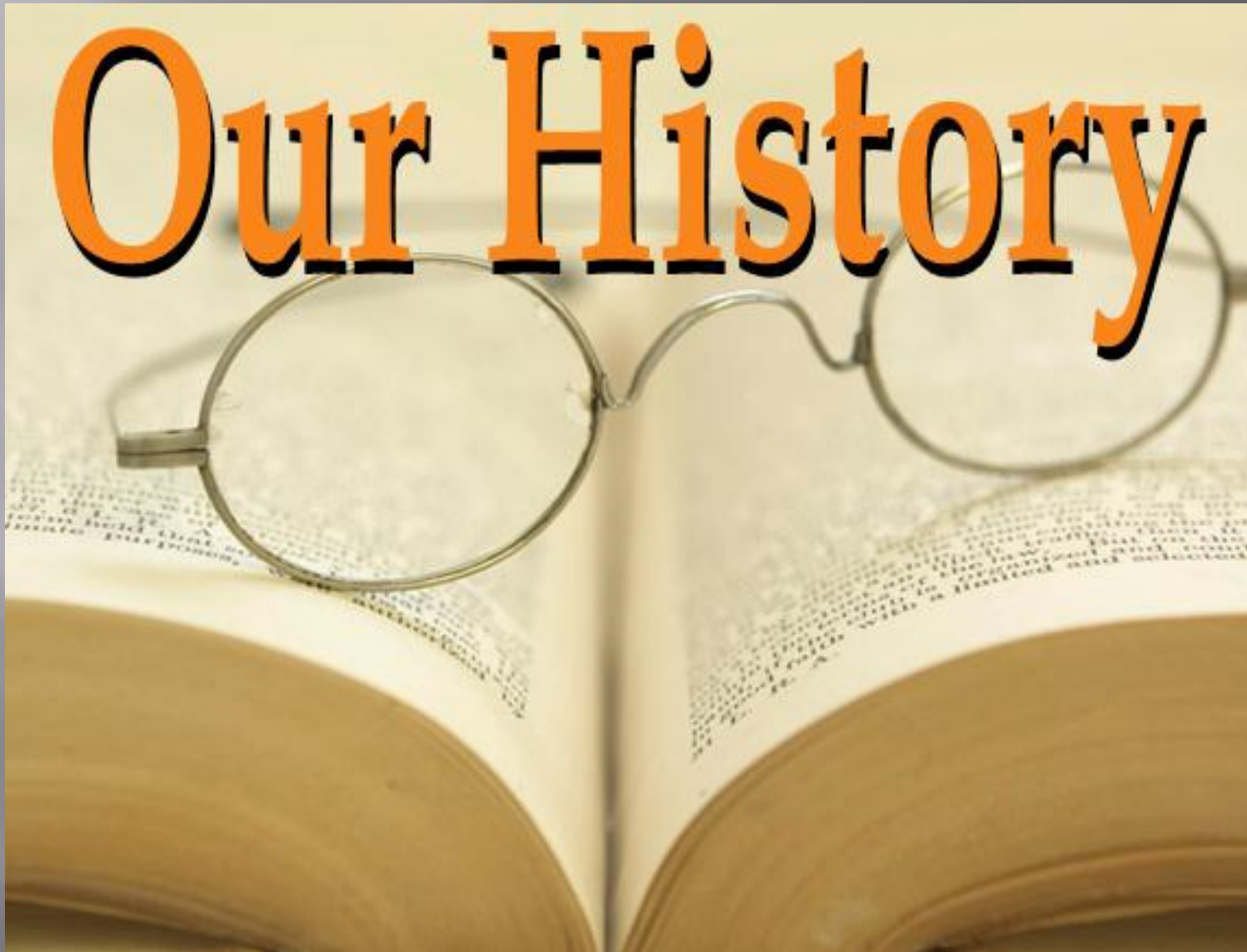




Field Sanitation Manuals: 1918 and 1938



# Our History



# A NEW PROFESSION

and events that made it significant

## Meanwhile in England ... the emergence of the modern Sanitarian

1877: The Royal Sanitary Institute established a simple examination to qualify sanitary inspectors.

1884: Sir Edwin Chadwick became the founding president of the Association of Public Sanitary Inspectors.

1956: “Public health inspector” was changed to Environmental Health Officer.

1983: Professional practices standardized.

# Milestones

1900-1910: Several states enact mandatory licensing.

1906: Creation of the Food and Drug Administration; Federal Food Laws promulgated.

1930: The term “Sanitarian” replaces sanitary inspector; first journal published.

1937: Formation of the National Association of Sanitarians.



# Milestones

1946: Communicable Disease Center was created in Atlanta, Georgia.

1966: Establishment of the AIACS (American Academy of Sanitarians).

1967: The National Accreditation Council For Environmental Health Curricula.

1970: The NAS became the National Environmental Health Association.

# Sanitarian

Officially becomes a Profession

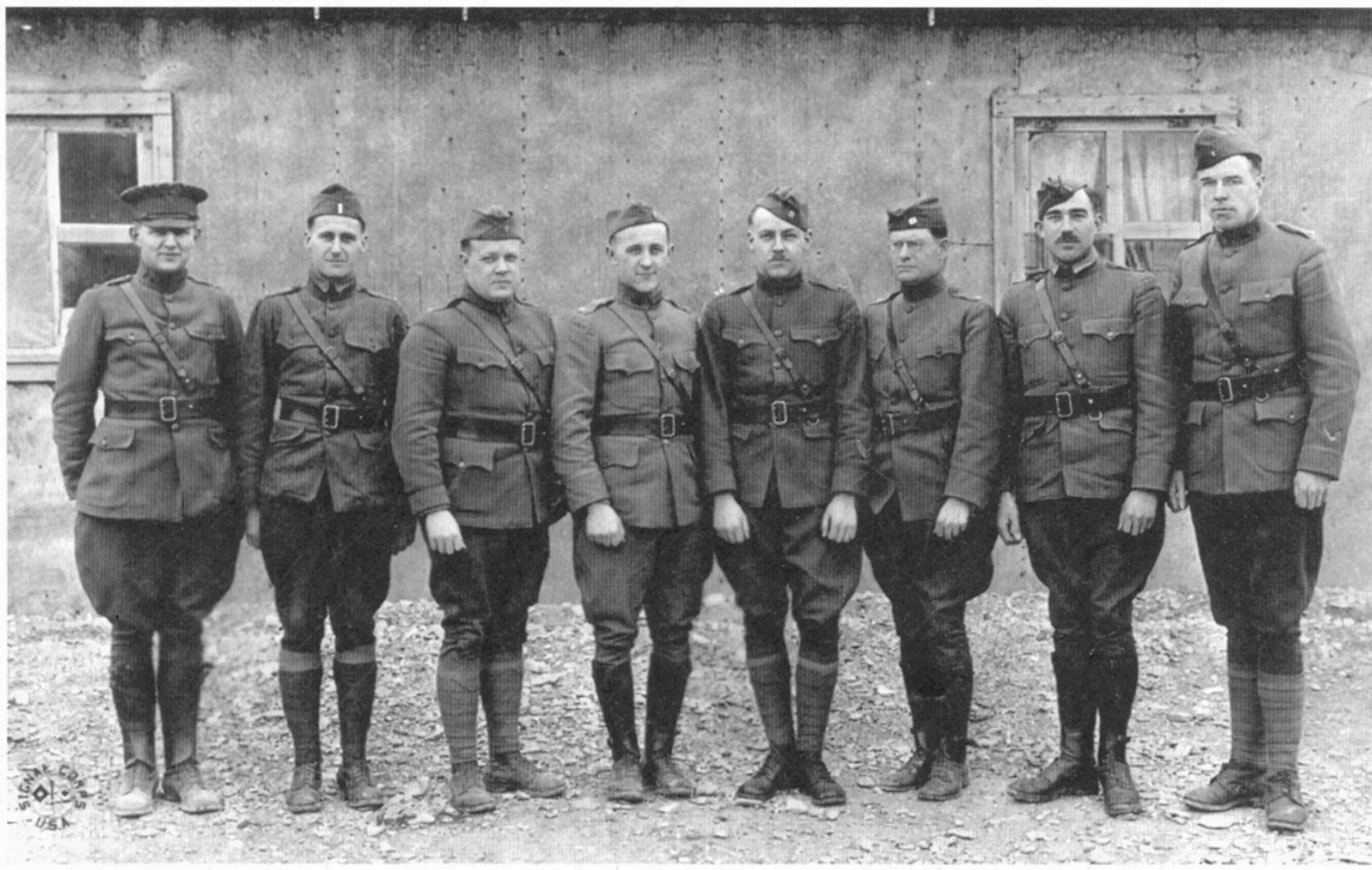
2000 -

Standard Occupational  
Classification

19-2041

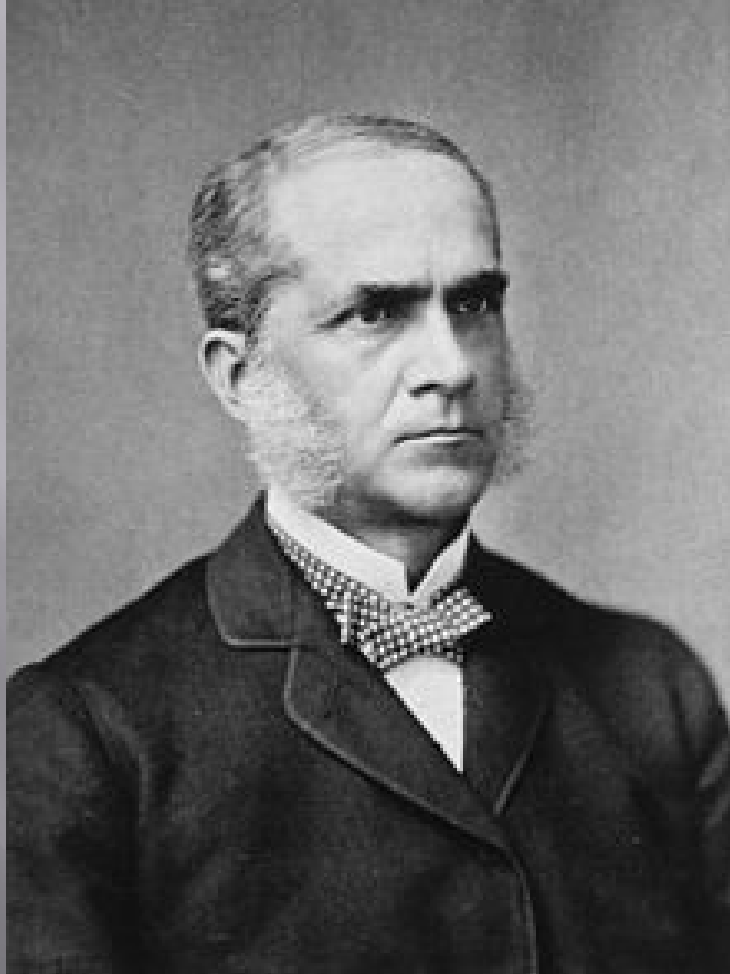
*Making the  
Modern  
Sanitarian*





*Sanitary Corps officers in Is-sur-Tille, France, February 1919*

# Stephen Smith, M.D. (1823-1922)



Editor of the American Medical Times (1860 - 1864) and first president of the American Public Health Association.

“The vocabulary of sanitary knowledge and the elementary facts of hygiene had become familiar to every household.”

# Samuel J. Crumbine, MD

(1862-1954)

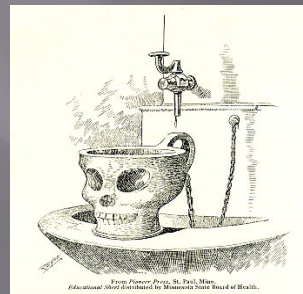
“Don’t spit on the sidewalk”

“Ban the public drinking cup”

“Out with the common roller  
towel”

“Swat the fly, Bat the rat”

“Save the baby”





# Charles Frederick Chandler

(1836 – 1925)

As member of the New York Metropolitan Board of Health, he  
Stopped the sale of watered-down milk;  
Championed the “Tenement House Act”;  
Prevented 1883 cholera epidemic, and,  
Reduced fatal kerosene related accidents.



# Charles-Edward Amory Winslow

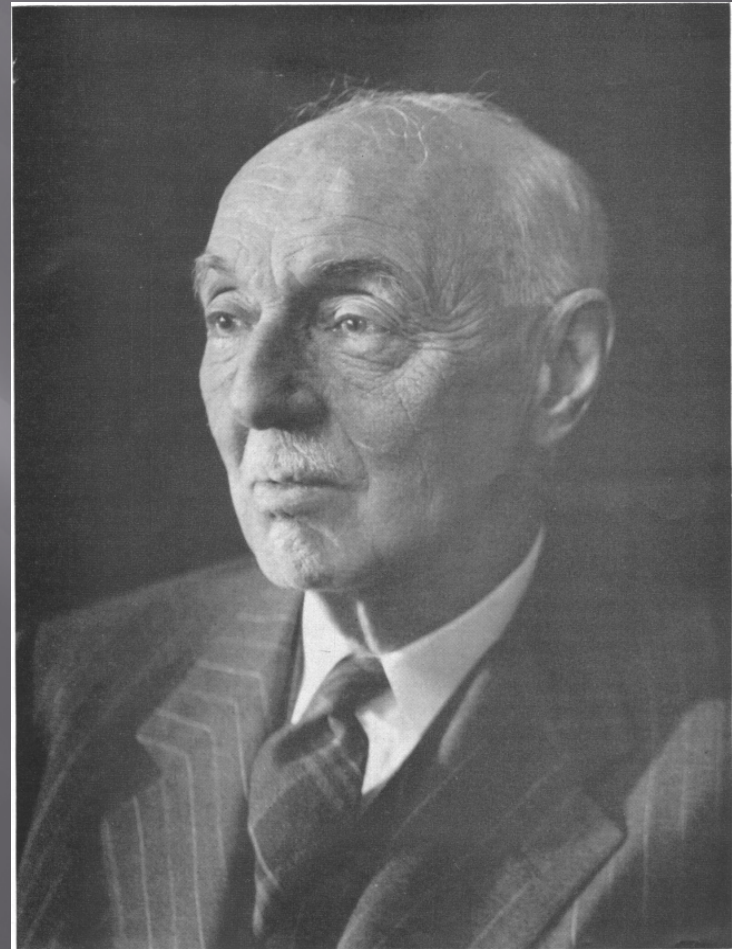
(1877-1957)

Founded the Yale School of Public Health – 1915.

Pioneered modern sewage disposal; housing and urban renewal.

1932-1947 - Senior Sanitarian, United States Public Health Service (Reserve).

Most widely quoted and influential public health pioneer.



# Walter Smith Mangold (1895-1978)

## Sanitarian and Educator



Defined the Knowledge,  
Skills and Attributes of  
the sanitarian profession.

Established the National  
Association of  
Sanitarians and was its'  
first Journal Editor.

Walter S. Mangold Award –  
Established in 1955.



# Slogan and Symbol



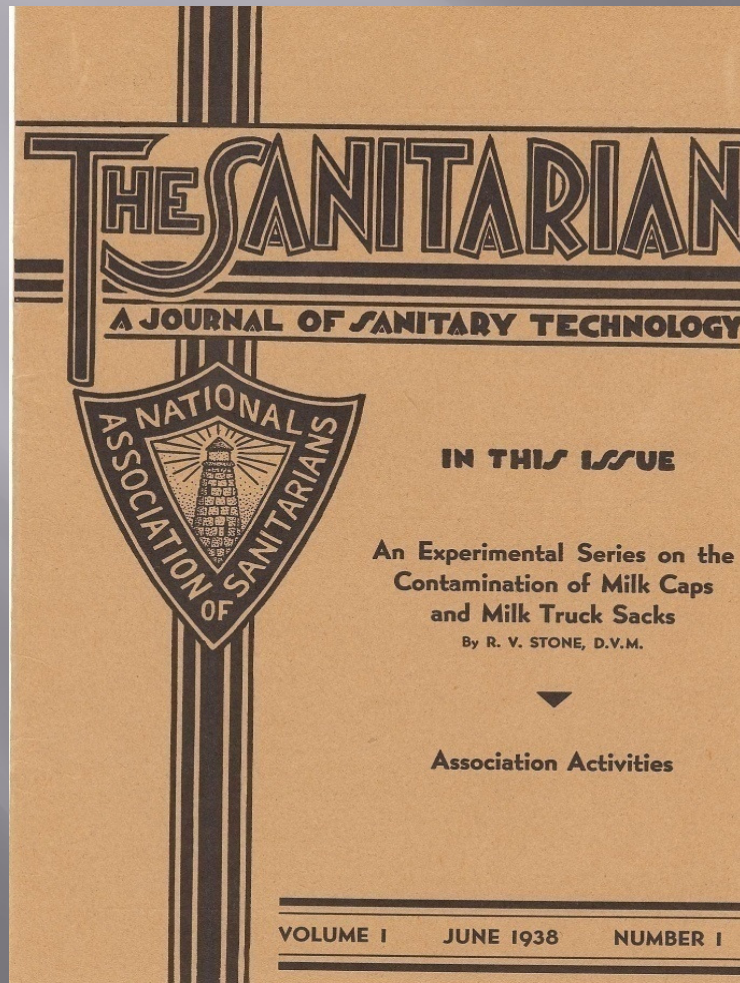
The slogan,

**“Sanitation – the Beacon  
Light of Public  
Health,”**

was adopted in 1932,  
and the emblem was  
adopted December 11,  
1937 at the first  
annual meeting of the  
NAS in San Luis  
Obispo



# The Sanitarian - June 1938 (Volume 1, Number 1)



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THE SANITARIAN

## THE PURPOSE OF THE NATIONAL ASSOCIATION OF SANITARIANS, INC.

The objective of the National Association of Sanitarians is: to promote the welfare of sanitarians engaged in public health inspection or in allied occupations and to professionalize their status; to foster and promote high standards of attainment in their work and of qualification for engaging therein; to strive for their recognition as a scientific group by public and official sources, rendering a governmental service for the general welfare of the public; to bring about harmonious and cooperative effort for better understanding and more efficient rendering of their duties and responsibilities; to bring about standardization in methods of law enforcement and general public health practices in their respective fields; to encourage the establishment of courses of instruction and schools of training for the purpose of increasing the knowledge and efficiency of its members for their usefulness in public health work; to encourage reciprocal cooperation of the various branches and departments of government in activities directed towards the improvement of public health; to cultivate social intercourse among its members; and to establish a central point of reference for its members.

HERBERT A. JEWETT, *Chairman*  
*Membership Committee.*

## APPLICATION FOR MEMBERSHIP

I wish to apply for membership in the National Association of Sanitarians.

Name.....  
(Print Name in full)

Street and City..... State.....  
(For Correspondence and THE SANITARIAN)

Present public health occupation.....

REQUIREMENTS: Any Sanitarian permanently employed by a whole-time health service in the United States or its Territories is eligible for election as a member of the Association.

DUES: Dues of Active Members are \$5.00 per year, which includes an annual subscription to THE SANITARIAN.

NATIONAL ASSOCIATION OF SANITARIANS, INC.  
678 South Ferris Avenue  
Los Angeles, California

# NSF International

In 1944, NSF International is an independent organization that tests and certifies products and writes standards for food, water and consumer goods to minimize adverse health effects and protect the environment.

Founded by Walter F. Snyder in Ann Arbor, Michigan in 1944, the National Sanitation Foundation used a transparent, consensus-based process to develop its' first standards for the sanitation of soda fountain and luncheonette equipment.

Sanitarians were involved in crafting these standards.

The Council of Public Health Consultants, made up mostly of sanitarians, evaluates and approves NSF public health and environmental health standards.

NSF was instrumental in supporting and training Sanitarians in the basics of environmental health and safety and in the use of its' standards.





# American Intersociety Academy for Certification of Sanitarians - 1966

## FOUNDER DIPLOMATES:

Harold S. Adams

A. Harry Bliss

Emil T. Chanlett

E. E. Diddams

B. Russell Franklin

Larry J. Gordon

William V. Hickey

William C. Miller, Jr.

A. Faegin Parrish

Verne C. Reiersen

Edwin L. Ruppert

Darold W. Taylor



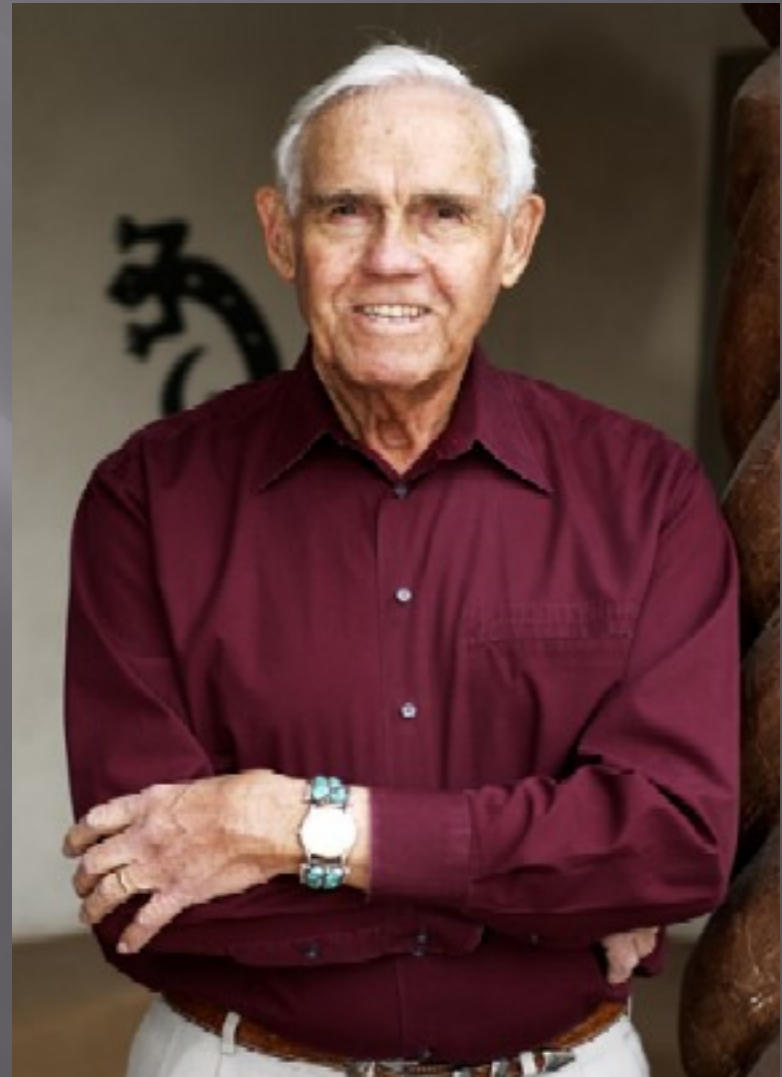


# Larry J. Gordon (1926- )

Administrator, teacher,  
mentor, writer, visionary  
and Sanitarian

Author of the original Food  
Code and the first  
sanitarian to hold a State  
cabinet position.

He is a Founder Diplomate  
and Diplomate Laureate in  
the American Academy of  
Sanitarians.



# American Academy of Sanitarians

The Academy is dedicated to:



1. Develop a uniform definition for “sanitarian”;
2. Promote the professional status of the sanitarian;
3. Develop a Sanitarian Specialty Board;
4. Draft a recommended uniform law for the registration of sanitarians, and,
5. Development and promotion for the educational and other qualifications for the sanitarian profession through mentoring and scholarship.

# *Epilog*

It is the mark of a profession to grow with problems and responsibilities of the times.

The horizon of our profession can no longer be limited to the local or even the national community but must extend to the international community.

We must continuously strive to advance our science, enhance our craft, and, pass on the noble legacy that has come down to us.

And, may the outcome be healthy, safe and productive!



The State of



New Jersey

# Department of Health

This Certifies That

ROBERT W. POWITZ

*Has passed a satisfactory examination to determine his qualifications and is hereby licensed, pursuant to Chapter 177, Section 38 of the Public Laws of 1947, and amendments thereto, as*

Sanitary Inspector, First Grade

*Type of License*

No. B-489  
Trenton, New Jersey  
June 2, 1967



*In Witness Whereof, I have hereunto set my hand and caused the Seal of the State Department of Health of New Jersey to be affixed.*

*Rescoe G. Randle*  
State Commissioner of Health

