

LAFAYETTE B. MENDEL,  
Sheffield Sci. School  
of Yale University,  
NEW HAVEN, CONN.

## TRAINING FOR MEDICAL OFFICERS

BY MEDICAL INSPECTOR H. G. BEYER,  
U. S. Navy.



Reprint from

*The* **MILITARY SURGEON**

WASHINGTON, D. C.:

THE ASSOCIATION OF MILITARY SURGEONS.

1910.



# TRAINING FOR MEDICAL OFFICERS

---

BY MEDICAL INSPECTOR H. G. BEYER,  
U. S. Navy.



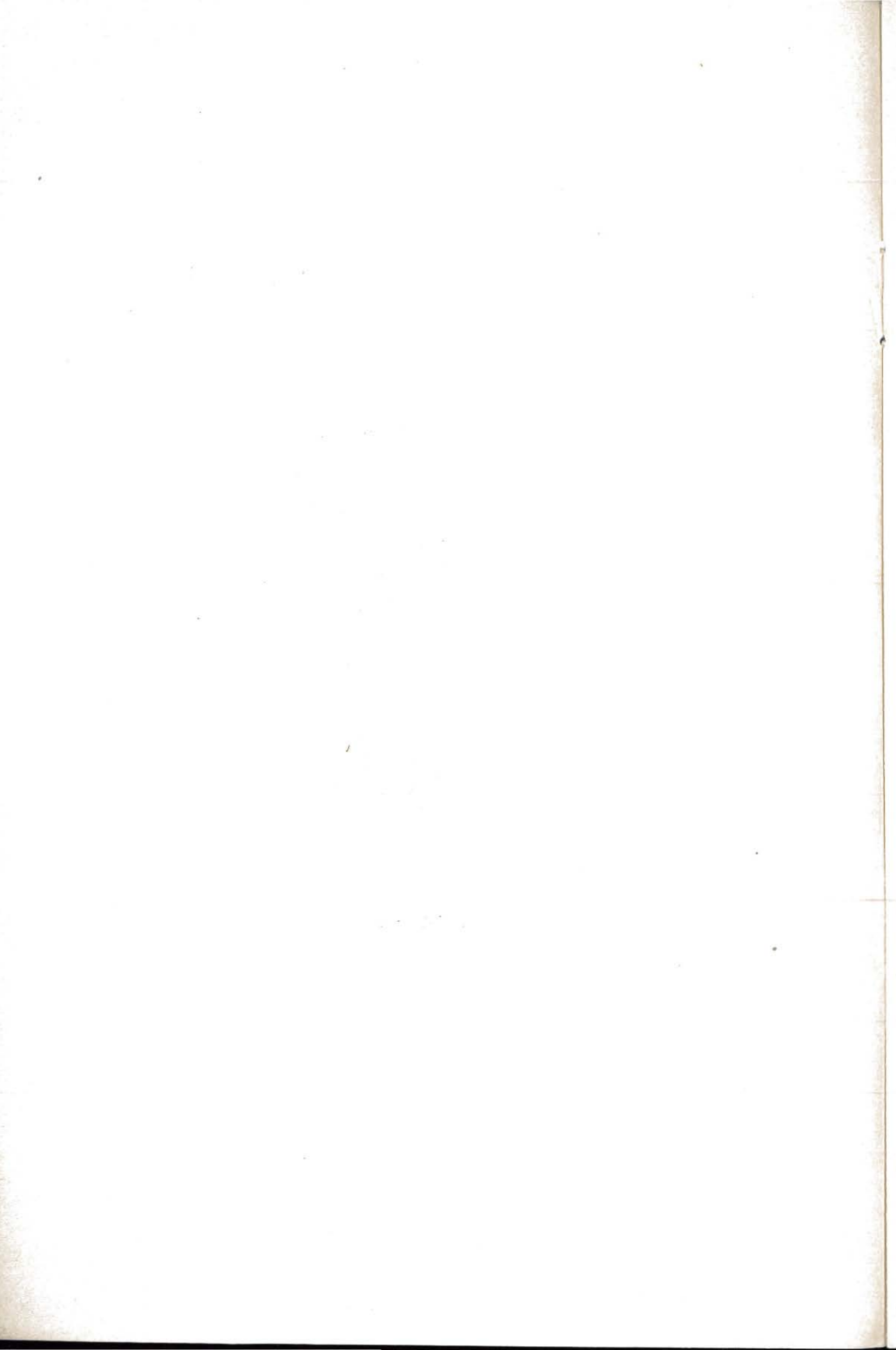
Reprint from

*The* **MILITARY SURGEON**

WASHINGTON, D. C.,

THE ASSOCIATION OF MILITARY SURGEONS.

1910.



WHAT SHOULD CONSTITUTE THE BEST TRAINING FOR MEDICAL OFFICERS INTENDED FOR THE POSITIONS OF FLEET AND SQUADRON SURGEONS, AND WHAT PRINCIPLES SHOULD DETERMINE THEIR SELECTION FOR THE POSITIONS? WHAT ARE THE DUTIES AND RESPONSIBILITIES OF FLEET AND SQUADRON SURGEONS IN RELATION TO FLEET SANITARY EFFICIENCY?

---

BY MEDICAL INSPECTOR H. G. BEYER, U. S. N.

---

SINCE the subject of my theme has already been treated somewhat at length in an article that was published in the May number of the *Military Surgeon*, I may well limit my remarks today to a few of the more essential features of the question.

Since, moreover, the first question on my program can be answered more easily after having considered and answered the second question, I shall reverse the order in which both appear on the program, and begin by taking up the second question first.

Second question is: "*What are the duties and the responsibilities of fleet and squadron surgeons in relation to fleet sanitary efficiency?*" The question limits me to the discussion of those duties and responsibilities of the fleet surgeon that refer to the sanitary efficiency of the fleet, and it is, accordingly, logical to, first, find out what is meant by the sanitary efficiency of the fleet.

When, may it be said, of a fleet of sixteen battleships, eight armored cruisers and the necessary number of auxiliaries, with a possible complement of 25,000 men, that it is in a perfectly sanitary condition?

Naturally, we would say, when every part of every ship in the fleet is sanitarily clean and every man in the fleet is free from communicable disease germs; when, in addition, every living space and workshop on board every ship in the fleet is kept under such hygienic condition as will ensure the continued health and prosperity of the men, whether they be at work or at play, under the average conditions of human resistance to injurious outside influences.

While, then, it may be, comparatively speaking, easy to arrive at a theoretically correct definition and to formulate a relatively true conception of such a condition as must be regarded as the ideal one, practically, the production and maintenance of such an ideal condition is a matter of the greatest difficulty, if not altogether an impossibility.

Granting, then, that the sanitary efficiency of a fleet-in-being is a high aim and that its maintenance is fraught with innumerable difficulties, would any medical officer of the navy be willing to admit that it was unattainable? I should say decidedly, No.

It is the goal of the medical department of the navy and the legitimate duty of its officers to try and bring it about by all the means in their power. The more difficult it is of attainment the more interesting the work of creating and operating the machinery that is required and necessary to reach and maintain it at its highest level. It is a worthy enough aim for the best of us. A fleet to be efficient demands it from both the purely military as well as from the humanitarian point of view. The sanitary efficiency of the fleet is by far the most important problem of the medical department of the navy. Upon it all attention should be focused and everything else is subsidiary from a naval point of view.

Having thus briefly pointed out to you the significance and importance of the sanitary efficiency of the fleet, my next duty is to define the position, responsibilities and the duties of the fleet surgeon in relation to this efficiency.

The position of the fleet surgeon, in an organized fleet, is on the flagship, where he constitutes a member of the official family of his commander-in-chief. Professionally, he is the mouthpiece of the Bureau of Medicine and Surgery; from the point of view of administration, he is the subordinate and executive of his commander-in-chief. As the representative of the Bureau of Medicine and Surgery, he should be regarded as the professional head of and exercise professional authority over the entire medical and sanitary personnel in the fleet, being held responsible only by the head of that bureau in all matters of a technical-medical and sanitary character. In his capacity of sanitary counsellor to the commander-in-chief he is in all respects subordinate to him. Both the duties and responsibilities of the fleet surgeon, as such, must be allowed to emanate from and end in the flag officer. But, regardless of his official relations to his commander-in-chief and the Bureau of Medicine and Surgery, his duties, as a medical officer and sanitarian with the highest aims are not

fully done, his responsibilities are not completely discharged, unless the fleet surgeon is able to satisfy his own personal conscience, as well as that of the profession at large, of the fact that he has done everything, both professional and administrative, in accordance with the highest standards of the laws of sanitary science and of military discipline at the same time. The position of the fleet surgeon, then, is one organically connected in three directions: first, with the flag officer; next, with the Bureau of Medicine and Surgery, and, lastly, with the sanitary officers and men of the fleet. This tripartite bond of connection, likewise, points out the triple nature of his duties.

To his commander-in-chief he should be a patient as well as efficient and unbiased counsellor. Subordinate and respectful at all times, no matter what his rank, but dignified and frank, without being servile. To the Bureau of Medicine and Surgery he should be an able, reliable and loyal representative of all that is best in the profession. Among the medical officers of the fleet he should stand preeminent for his professional ability and tact and be recognized as such in all official and professional dealings in which his duty brings him into contact with them. Objective professional criticisms on his part should be gladly accepted without the slightest resentment.

The sanitary portion of the duties of the fleet surgeon may be said to naturally fall into two distinctive divisions, namely: (1) The duty of establishing the fact that all the ships of the fleet are free from infectious diseases, and, (2) the duty of seeing to it that the required precautions employed against the importation of disease germs are of such a nature as to prove effectual in all cases that come under observation, and that they are actually observed and duly enforced. To this end it becomes a standing necessity that the medical officers of the fleet are organized into a cooperative working body. A knowledge of Naval Hygiene on the part of the medical officers being assumed, they must become trained observers. Not a single observation of sanitary import, made by any of the medical officers on the several ships of the fleet, should ever be allowed to become lost, but be recorded with scientific accuracy and in accordance with the scientific method, and, in due time, communicated to the fleet surgeon as the chief sanitary intelligence officer who must digest, assimilate the information and apply its lessons. The ships with their armaments and living spaces are the laboratories and the equipment alike. The living personnel are the material on whom and for whom the work is done. The methods and the details of the work to be

done must vary in accordance with the particular military situation at the time.

A practical laboratory training in hygiene and sanitation, experience in ships of recent construction, cruising under the most varied conditions, will suggest the methods and their application to the exigencies of the occasion.

The maintenance of the hygienic efficiency of a fleet, not being the work of a single man, it needs cooperative work by many, and that means organization. To create this and maintain it in working order is clearly the duty of the fleet surgeon in being. The medical officers of the fleet must be gotten together and every one must take his share in the work according to his ability and in harmony with a prearranged plan. Frequent conferences of the medical officers of the fleet for an interchange of opinion on professional subjects would be productive of a phenomenal amount of good and of disseminating the results of the experience of each one among many. Matters affecting the sanitary efficiency of the fleet cannot be left to the chance of an accidental discovery by one of the medical officers of an outbreak of an epidemic, already well advanced. A more permanent organization is essential for doing the vitally important work of consistently and continuously keeping infectious diseases out of every vessel in the fleet. Medical officers may come and go, but the fleet surgeon must be the permanent nucleus of this organization.

First Question: *"What should constitute the best training for medical officers intended for the positions of fleet- and squadron surgeons, and what principles should determine their selection for the positions?"*

A technical knowledge of practical sanitation and theoretical understanding of its principles to enable him to apply its methods to naval conditions are the essential requisites of a fleet surgeon. Sufficient laboratory experience in physiology, chemistry and bacteriology, and the methods of hygienic research work, will enable him to do the necessary scientific work and to give his work a permanent value, and will enable him to understand the literature on these subjects for a long time after leaving off laboratory work, and, thus, to keep up with the procession and abreast of the progress of the times; above all a wide experience in ships and in the fleet on his part will be both an inspiration and a stimulus for his professional colleagues in the fleet to cooperate with him. If, in addition to the required professional knowledge, experience and training, he should possess capacity for organization,



good judgment, discretion, force of character, tact and initiative, it would mark him out as endowed of quite special fitness for his duties and responsibilities.

To go further into the details of this question on this occasion would be transgressing the limit and scope of my theme.

But one subject remains that I would be inclined to lay special stress upon in connection with the discussion of the scientific equipment which it would be desirable that the fleet surgeon should possess in a high degree, and that is, an intimate knowledge and acquaintance with the various interesting practical problems of "Infection and Immunity." Such knowledge has an important bearing on the management of infectious diseases and, hence, on the sanitary safety of the fleet.

There are many problems connected with naval hygiene that must be considered composite problems, possessing both engineering and medical elements for investigation. There is none so exclusively medical; none in deciding which the medically educated sanitarian casts the winning die more often than the problems involving a knowledge of Infection and Immunity.

The natural habits, cultural characteristics, developmental forms of disease germs, the remarkable variety of effects which the latter produce in the human organism, their many different ways and channels of invasion and evasion, their selective localization in different organs and tissues, the production of toxins and the varied effects of these upon the animal organism, etc., etc., make it a subject of the greatest importance in the control of infectious diseases and epidemics.

It is, therefore, on this great topic of scientific medicine that the fleet surgeon should keep abreast the times.

But, above all, after all has been said and done, the fleet surgeon should ever strive to be the trusted and habitual advisor of the commander-in-chief and the confidential advisor and friend of his brother medical officers on the several ships of the fleet. Among honest men familiarity breeds confidence, not contempt, and mutual confidence is what is needed most in cooperative work!

#### DISCUSSION.

Surgeon N. J. BLACKWOOD, U. S. N.—It has been with much pleasure and great profit that I have listened to Dr. Beyer's paper and have read his very excellent article on the same subject in a recent number of the Journal. I find that we are generally so much in accord on this subject, that there is little or nothing for me to discuss. However,

there are a few ideas of my own which may be expressed at this time with perfect propriety.

To prepare a man for the duties of Fleet Surgeon is not the work of a few weeks or months, nor can it be done in books or laboratories; the whole life of the naval medical officer should be his training for the duties of that office. Years of duty at sea, in gunboats, cruisers and battleships, is the only school from which a man can graduate into the office of Fleet Surgeon, and no man should be ordered to such duty without that experience. I do not mean to disparage laboratory work as an aid to his knowledge, but the ideal Fleet Surgeon is a practical man as opposed to a theoretical one. Knowledge of naval hygiene and sanitation of a practical kind are essential, but besides possessing these he should be a man of tact and patience, as well as one who commands respect for his ability and opinions. He should be selected by the Flag Officer from a list of eligibles and should enjoy the entire confidence of his Commander-in-Chief, being a member of his personal staff, and living in close touch with him. The rank of a Fleet Surgeon should be that of Captain in the Navy, and that rank should be actual and not merely acting. In a general way my idea would be to do away with the two present upper grades of the Medical Corps, and substitute therefor three grades, viz., Squadron Surgeons (25), Fleet Surgeons (15), and Medical Directors (9).

Squadron Surgeons to have the rank of Commanders, Fleet Surgeons that of Captain and Medical Directors that of Rear Admiral of the lower nine, while the Surgeon General should have the rank of Rear Admiral of the upper nine.

The cruise of a Squadron and a Fleet Surgeon, should be each two years, and every one must have done those duties in order to be eligible to the grade of Medical Director, just as he must have served a full cruise on a battleship in order that he may be promoted to Squadron Surgeon. In order that these two important sea-going grades may contain young men of energy and ability, and to promote a normal healthy flow of promotion, I should institute a "plucking board," such as is now the law with regard to the line, to eliminate all those who for one reason or another have become unfit to perform the duties of Fleet and Squadron Surgeons. Between the cruises performed in these grades, the officers would be detailed for one year in some of our large civil hospitals in our big cities, and three months for laboratory work in hygiene and sanitation.

The duties of Fleet Surgeon should be definitely prescribed by law, so that there could be no quibbling about them, and he should have the same authority delegated to him in matters of fleet hygiene and sanitation, by the Commander-in-Chief, as is now given to the Chief of Staff in all other matters. He should have no other duties than those of Fleet Surgeon.



