

## CORRESPONDENCE \*

March 13, 1941

Prof. J. Warren Horton  
Department of Biol. & Public Health  
Mass. Institute of Technology  
Cambridge, Mass.

Dear Professor Horton:

I have spent some time with the RECOMMENDED SAFE PRACTICE FOR OPERATING ROOMS preliminary draft. Having read these sheets, put them aside and reread them, I am still in the greatest difficulty regarding a reply which should contain my reactions honestly expressed.

It seems to me that these sheets contain two sorts of material: *A.* That which is already contained in the National Electric Code and other similar sources; *B.* Material which is at present in the state of what might be called suggestion and not the "finished product" as it were.

It would seem to me that in view of the experimental work in which you are now engaged and similar work which has been initiated in other places, any printing of these recommendations might well be postponed for two years. During that time, I should hope that the suggestions referred to under *B* above might have come to be facts supported in a stable manner.

In view of my present opinion, I cannot honestly approve of the printing of these recommendations even though you were to tell me that they carry no obligation that hospitals try to accept them.

Whether it is worth while, under these circumstances, for me to attempt to com-

\* *Editor's Note:* The major portion of a report "Recommended Safe Practice for the Use of Combustible Anesthetics in Hospital Operating Rooms" was reprinted by permission in the September and November issues of Volume 2 of ANESTHESIOLOGY. This report was prepared by a special reference committee to the Committee on Gases of the National Fire Protection Association. Ralph M. Waters, M.D., a member of this special reference committee, has requested that his letter in which he stated his personal opinion of the problem to the Chairman of that committee be made public. Because such publication coincides with our editorial policy to present apparently valid views of potentially controversial subjects, Dr. Waters' request has been granted.

ment section by section, I doubt. Nevertheless, there are a few statements that I might make. For instance, under section I [Introduction], it was my understanding at the committee meeting that no attempt would be made to apply the ideas discussed in the committee meeting to anything other than completely new buildings to be constructed in the future. Certainly a casual reading of section I would give many people the idea that the recommendations are to apply to existing institutions.

The comment which occurs to me regarding the following sections I think has been expressed by me in your presence on various occasions. The attempt, for instance, to localize "hazardous locations" and define them I believe to be futile. There are too many factors of variability that modify particular situations.

Under section IV, the matter of ventilation, it seems to me may be a protection and it may be an added hazard, and I do not think we yet know enough regarding it to make it safe to say anything. Accidents have happened where ventilation is used, and they have happened where it is not used, and they have not happened where it is not used.

The section on "electrical wiring and equipment," I am not in a position to criticize. To me, it sounds all right. Is it not, however, largely contained in the National Electric Code and in other similar sources? Section VI, however, having to do with the electrostatic hazards, is in too unsettled a state at present to make definite statements feasible. Much work is being done in your laboratory, of course, and in other places along this line. Reports from this work will not be complete for a period of at least two years. Would it not be better to leave it alone until more definite statements based on demonstrated facts can be offered?

Section VII, "Storage and Handling of Gases," admits in the text that it comes from already published sources to a large degree. Some suggestions in it seem to me rather ridiculous. For instance, on page 34 is a suggestion which would require the Wisconsin General Hospital to

paint the copper piping which is carried in underground conduits from our oxygen source to the hospital and through the walls of the hospital to the various outlets. Since this pipe is permanently attached to outlets which are only used for oxygen, what difference does it make what color the piping may be, or whether it is painted or not? I realize that this was not meant to apply to such a situation and yet, strictly speaking, it would so apply.

The material in the appendices *A* and *B* will be interesting material, I do not doubt; nevertheless, it does not appeal to me as necessarily a part of Recommended Safe Practice for Operating Rooms. At least, I am not in a position to subscribe to it as a part of such recommendations at the present time.

In other words, I am just about the sort of help to the subcommittee on gases of the National Fire Protection Association that I feared I would be when we talked about it last fall. The problems which this subcommittee is trying to solve are, in my estimation, not backed by sufficient positive knowledge to warrant positive final statements at this time. Why

not leave the whole matter alone until we are in a position to make positive statements? In other words, maintain the status quo until there is a good recommendation for every change required. Historically, the places that have constantly jumped at every new suggestion of a protective factor and which have introduced every new suggestion, have been exactly the places that have had the most accidents. Why complicate an already complicated situation until we are dead sure what we are recommending?

Finally, then, it is my earnest plea that this subcommittee make no report at this time, stay in existence for periodic discussions and agree among themselves to make no report for publication until at least two years from this time.

Regretting the necessity for writing such an unsatisfactory letter, and with kind personal regards to you, I am,

Sincerely,

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The University of Wisconsin,

State of Wisconsin General Hospital,

Madison

## APPARATUS

### PREPARATION OF PENTOTHAL SODIUM IN BULK

For hospitals where pentothal sodium is used in large quantities a simple apparatus for its preparation consists of a 400 cubic centimeter graduated Pyrex glass bottle; a rubber stopper with central hole; a ten-inch needle, 15 gage, of the Fordyce type with Luer-Lok, and a glass cap which fits snugly over the needle on the rubber stopper. (See illus. p. 94.)

In preparing a solution of pentothal sodium in 5 per cent concentration the contents of a 10 gram ampule are emptied into the bottle, and 200 cc. of distilled water is added, or if a solution in two and a half concentration is desired, 400 cc. of water is added. The solution is agitated gently for a half minute, the rubber stopper is placed on the bottle, the long needle is placed in the bottle through

the hole in the stopper, and the glass cap is fitted on the stopper, keeping the needle sterile. The preparation of the solution is carried out under sterile technic.

Syringes may be loaded when desired simply by lifting off the glass cap and attaching the syringe to the needle while holding the flange of the needle. A simple glass tube may be utilized to cover the needle of the loaded syringe while it is kept in a folded sterile towel before administration of the pentothal sodium. A syringe filled with pentothal sodium, prepared as described above, may be kept safely for twenty-four hours before being used.

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