

**HOSPITALS: THEIR HISTORY,  
ORGANIZATION, AND  
CONSTRUCTION. BOYLSTON  
PRIZE-ESSAY OF HARVARD  
UNIVERSITY FOR 1876**

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Hospitals: Their History, Organization, and Construction. Boylston Prize-Essay of Harvard University for 1876 by W. Gill Wylie

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**W. GILL WYLIE**

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# HOSPITALS:

THEIR

HISTORY, ORGANIZATION, AND CONSTRUCTION.

BOYLSTON PRIZE-ESSAY OF HARVARD UNIVERSITY FOR 1876.

BY

*copy*  
W. GILL WYLIE, M.D.

"AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE."

NEW YORK:  
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1877.

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## BOYLSTON MEDICAL PRIZE QUESTIONS.

THE BOYLSTON MEDICAL COMMITTEE, appointed by the President and Fellows of Harvard University, consists of the following physicians:

J. B. S. JACKSON, M. D.,  
D. H. STORER, M. D.,  
MORRELL WYMAN, M. D.,

HENRY J. BIGLOW, M. D.,  
RICHARD M. HODGES, M. D.,  
CALVIN ELLIS, M. D.

SAMUEL CABOT, M. D.

At the annual meeting, held June 7, 1875, it was voted that no dissertation worthy of a prize had been offered on either of the subjects proposed for 1875.

The following are the questions proposed for 1876:

1. Civil Hospital Construction (not of Lunatic Asylums): Location, Materials, Arrangement, Warming, Ventilation, Drainage, Lighting; with Designs.

The author of a dissertation on this subject, considered worthy of a prize, will be entitled to a premium of Three Hundred Dollars.

Dissertations on the above subjects must be transmitted, postpaid, to J. B. S. Jackson, M. D., Boston, on or before the first Wednesday in April, 1876.

Each dissertation must be accompanied by a sealed packet on which shall be written some device or sentence, and within which shall be inclosed the author's name and residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

The writer of each dissertation is expected to transmit his communication to the President of the Committee, J. B. S. Jackson, M. D., in a distinct and plain handwriting, and with the pages bound in book form, within the time specified.

Any clew by which the authorship of a dissertation is made known to the committee will debar such dissertation from competition.

Preference will be given to dissertations which exhibit original work.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

By an order adopted in 1826, the Secretary was directed to publish annually the following votes:

1. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which premiums may be adjudged.

2. That in case of publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

At the annual meeting, held June 5, 1876, it was voted that a prize of three hundred dollars be awarded to Dr. W. Gill Wylie, of New York, for a dissertation on "Civil Hospital Construction."

It was also voted that a dissertation on "Hospital Construction," bearing the motto "Mille mali species, mille salutis erunt," was of such a high order of merit that the committee recommend its publication by the author.

RICHARD M. HODGES, M. D., Secretary,  
BOSTON, MASS.

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## PREFACE.

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As there may be persons who consider the subject of this essay, especially the chapter on "Construction," somewhat outside the field of a practising physician's work, perhaps a few words in regard to the circumstances which led to the writing of it may not be out of place.

More than five years ago, while a surgeon on the Resident House-Staff of Bellevue Hospital, a large pauper-hospital of this city, I had an excellent opportunity for seeing the bad effects of poor nursing and defective construction on the welfare of patients. At that time, with rare exceptions, the nurses were ignorant and in some cases worthless characters, who accepted the almost impossible task of attending to and nursing from twenty to thirty patients each. There were no night-nurses; the night-watchmen—three in number to a hospital of eight hundred beds—were expected to give assistance to patients requiring attention

during the night. The hospital-building, originally an old prison and almshouse erected sixty years ago, had been added to, and was now a massive stone structure, with three stories and a basement. The wards were only separated from each other by the intervening partitions inclosing the water-closets and bath-rooms, which were without ventilation, except as they opened into the wards. In some instances there were only six windows to wards of twenty beds.

The sanitary condition of the hospital was shocking, notwithstanding the fact that to the visitor the wards presented a clean and orderly appearance. I saw, while on duty in the wards, patients die from septic diseases contracted in the wards after the slightest surgical operations or injuries. From forty to sixty per cent. of all amputations of limbs proved fatal; and I saw a strong, healthy man die from pyæmia following an amputation of a great-toe.

From the twelfth official annual report of the hospital I take the following:

JANUARY 1, 1872.

Number of patients remaining in hospital.....	779
“ “ admissions during the year 1871.....	6,859
“ “ births “ “ “ 1871.....	376
Total number of patients “ “ “ 1871.....	7,514
Number of deaths “ “ “ 1871.....	1,102

Which gives 1 in every 6.8, or 14.7 deaths in every 100.

In a total of 1,102 deaths we find—



30 cases are recorded as caused by pyæmia.						
1 case is	"	"	"	"	pyæmia and delirium tremens.	
1 " "	"	"	"	"	"	pneumonia.
1 " "	"	"	"	"	"	necrosis of sternum.
1 " "	"	"	"	"	"	morbus coxarius.
1 " "	"	"	"	"	"	tertiary syphilis.
1 " "	"	"	"	"	"	resection of elbow.
33 cases are	"	"	"	"	puerperal peritonitis.	

From the above we get in 1,102 deaths 69 caused by hospital-poisons, or 1 in every 15.95, or 6.02 in every 100.

Taking the number of births as representing the number of women delivered during the year: In 376 confinements, 33 died of puerperal fever, or 1 in every 11.30; or 8.7 in every 100 of all the women confined died of puerperal fever. Since the introduction of trained nurses, the removal of the lying-in patients, the reduction of the number of beds from eight to six hundred, and the use of Lister's antiseptic dressings, the condition of the hospital has been very much improved, but the faults of the buildings remain the same.

Becoming, in the spring of 1872, a member of the standing Committee on Hospitals of the New York State Charities Aid Association, I devoted my spare time to studying the subjects of trained nursing and of hospital-construction, spending a summer abroad for the purpose.

A paper read by me before the Association, December, 1873, gave substantially the same plan for a model

ward which is described in this essay. The Association requested the publication of the paper, but I felt that the subject required more study. In February, 1876, the chapter on "History of the Origin and Development of Hospitals: their Progress during the Century of the American Republic," was read before the New York Academy of Medicine, after which, deciding to compete for the Boylston Prize, I wrote hurriedly, during March, the rest of the essay, and forwarded it to Cambridge, in accordance with the conditions, 3d of April, 1876. Since then I have withheld it from the press, in hopes of gaining time to rewrite it, but professional engagements have prevented a full revision.

I do not present this book as a complete work on hospitals. For the best statement of all the details of internal management, I refer my readers to the "Handbook for Hospital Visitors," Document No. 13, of the State Charities Aid Association.

W. G. W.

NEW YORK, *March 1, 1877.*

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