

SANITATION IN WAR

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Sanitation in war by P. S. Lelean

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P. S. LELEAN

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BY
with several
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WITH AN INTRODUCTION BY
SURGEON-GENERAL SIR ALFRED KEOGH
K.C.B., M.D., F.R.C.P.

With 40 Illustrations



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1915

Introduction

confident hope that the knowledge gained in those years of progress would lead to the successes of peace time finding their counterpart in a marked reduction of the high rates of sickness which have hitherto been regarded as inevitable in the field. To the attainment of that aim there is one essential condition—the intelligent co-operation of the whole personnel of the field force—and it is upon the knowledge of sanitation possessed by medical officers that this essential condition primarily depends. To the R.A.M.C. officer the sanitary methods of field service are necessarily familiar; the civilian practitioner who serves with the army for the first time finds himself at a grave disadvantage when faced by problems in the solution of which the training provided by the civil medical curriculum affords little assistance.

In order therefore to lighten the difficulties of those practitioners who have loyally volunteered their services, a series of lectures dealing with subjects of practical value in war have been organized at the R.A.M. College. The appreciation of those gentlemen who have attended these lectures has indicated that the information thus summarized would prove of value to those who have been unable to attend the various courses arranged.

The wider the scope and the more precise the knowledge of medical officers on all matters affecting the health of the troops, the greater will be the measure of success attending their efforts to maintain that fighting efficiency upon which depend to so great an extent the prospects of a speedy and successful conclusion of the war.

ALFRED KEOGH

PREFACE

THE medical officer who essays to write a book finds that the nomadic life of the service has prevented the collection of notes, cuttings, and annotated works of reference which are so essential to accurate speed.

During war the difficulties are enhanced by the absence on service of most of the colleagues whose aid would otherwise have been as freely given as frankly sought, while the few left stranded at home are so overworked that they are immune from appeals for help.

There remain only the facts, figures, and impressions that memory has stored in its many odd corners, whence they must be extracted, dusted, and marshalled during the hours that in less strenuous times would be devoted to peaceful slumber. Well as these may serve for the lecture-room, they call for confirmation and amendment in the light of recent investigation before being embodied in the text of a book, but for this purpose war-time affords no opportunity.

The past few months have witnessed the dislodgment of many—both at the front and at home—from secluded corners for which they have a strong preference: they have been forced from their quiet dug-outs into the danger-zones of the plateau and the platform. Among the number is the author of this work, who has been allotted the duty of assisting newly joined officers by lectures purporting to give an insight into the

Preface

mysteries of sanitation on active service. The favourable reception accorded to these efforts indicated that to some extent they met a definite need, but many appeals for publication fell upon deaf ears until a wish expressed by "higher authority" led to the production of this unpretentious little volume. The difficulties referred to make it unavoidable that these lectures, if published at all, must be published practically as they were delivered and without the careful revision which other conditions would have made imperative. It is therefore advisable to forestall the inevitable avalanche of adverse criticism by frankly admitting their manifold defects and shortcomings.

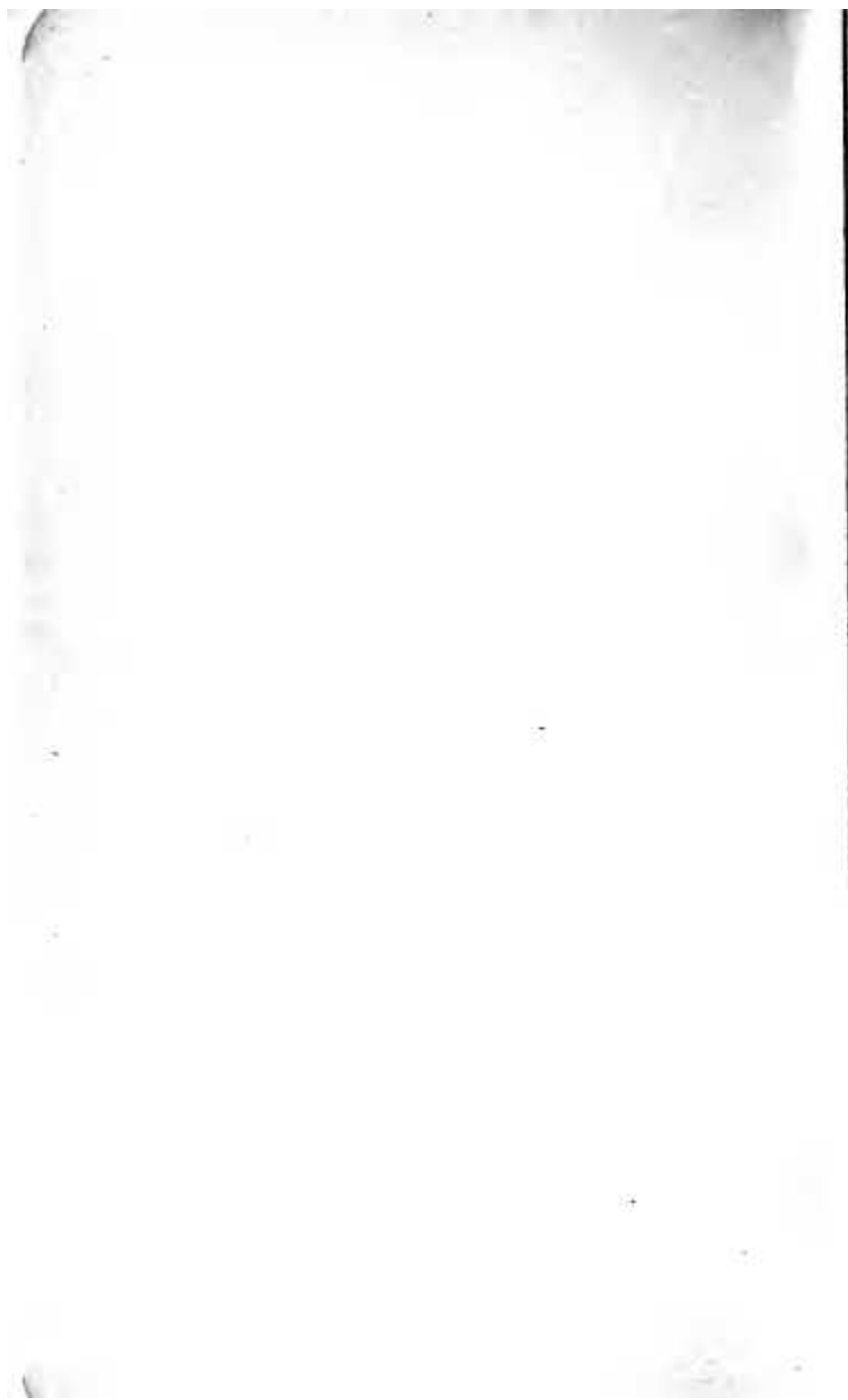
Those defects would have been numerous and glaring indeed but for the kindly and invaluable aid of those friends who have remained within reach, and this opportunity is welcomed of gratefully acknowledging my indebtedness for the help given by Colonel W. H. Horrocks, K.H.S., A.M.S.; Lieutenant-Colonel D. Harvey, R.A.M.C.; Lieutenant C. J. D. Gair, F.C.S., R.A.M.C. (I.F.); Mr. H. Marshall Webb, B.Sc.; Dr. A. Strahan, of the Geological Survey Department; and Corporal J. A. Sadd, B.Sc., A.C.G.I., R.A.M.C. (I.F.).

P. S. L.

R.A.M. COLLEGE.

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LECTURE I

PHYSICAL FITNESS FOR WAR

INTRODUCTION

GENTLEMEN,—When the news was broken to me—none too gently—that I, as a suspected expert, was to deliver these lectures, I recalled the cynic's definition of an expert as "one with just sufficient knowledge to mask a colossal ignorance."

The definition suggests the advisability of seeking refuge in safe seclusion, and—on being haled into the embarrassing prominence of the platform—I hasten to forestall detection by forthwith confessing to a colossal ignorance of the *science* of hygiene. As regards the *art* of sanitation, however, the medical officer is—necessarily—less ignorant, and it is upon this factor in the important duty of maintaining the health of the army in the field that I would therefore concentrate attention.

Sanitation, as I think you will agree, is not the subject that one would select with the object of being interesting, and the unpromising nature of the subject is enhanced by the difficulty caused by the fact that so many degrees of knowledge are represented in the audience. It is no easy matter to avoid, on the one hand, boring the officer who has had considerable experience of camp life or,