

**GERMS, DUST, AND  
DISEASE: TWO CHAPTERS  
IN OUR LIFE HISTORY**

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Germs, Dust, and Disease: Two Chapters in Our Life History by Andrew Smart

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**ANDREW SMART**

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# GERMS, DUST, AND DISEASE:

Two Chapters in Our Life History.

BY

ANDREW SMART, M.D., F.R.C.P.  
" EDINBURGH.

EDINBURGH:

MACNIVEN AND WALLACE.

TO  
MRS TRAYNER,  
THROUGH WHOSE ENLIGHTENED, ZEALOUS,  
AND PHILANTHROPIC INTEREST IN THE PEOPLE, THE  
EDINBURGH HEALTH LECTURES WERE FOUNDED, THESE PAGES  
ARE RESPECTFULLY DEDICATED BY  
THE AUTHOR.

## PREFACE.

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THE Author, in yielding to the wish conveyed to him to republish, in their present form, the two accompanying Lectures, does so, in the hope, that the attainment of the object contemplated by them will thereby be furthered.

The first Lecture, delivered under the title of "Preventible Diseases," gave, the Author believes, the first expression, to a popular audience, of the "Germ Theory" of Zymotic Disease.

It is to the indomitable genius and philosophical sagacity of Joseph Lister that, the contest, in regard to the application of this theory to Surgery, is now virtually ended; and, thereby, one of the brightest, most benign, and even romantic chapters has been added to the history of Medical Surgery.

The battle of the germ theory, however, in its relation to the State control and prevention of infectious diseases, has yet largely to be fought; and, to assist forward this great movement, in however small a degree, is the object in republishing this Lecture.

The second Lecture sufficiently explains its aim. It is intended to direct public attention to the great, and, as the Author thinks, preventible waste of life, incurred by a large section of workmen among the industrial class, in the pursuit of their employments. The appended tables exhibit the effects,

PREFACE.

in a great variety of occupations, in a light, for which, the mind of the country may scarcely be prepared. They seem to call for early legislative interference and prevention.

The Author takes the opportunity of claiming priority in the discovery of micro-organisms, in living tissues. His delineation—of which a drawing is given—of the Rinderpest germ was published in 1865, the next earliest being that of the Spirillum of relapsing fever by Obermeier.

14 CHARLOTTE SQUARE,  
EDINBURGH, *November* 1883.



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## LECTURE I.

THE title of this lecture is "Preventable Diseases and their Causes," and I have chosen it to indicate as nearly as possible the nature of the subject I have to speak of. Under this title we include, for the present, only such as come under the head of Zymotics—that group of diseases, viz.: which are more directly affected by public measures of prevention, and by the conditions which affect large communities. Many other diseases which are, strictly speaking, preventable, such as arise from noxious trades and unhealthy occupations, are not here included, but will, I trust, at some future time, form the subject of an interesting and useful lecture to you. A preventable disease may be described as one which arises or spreads in consequence of the wilful, careless, or ignorant violation of those laws, the proper observance of which we know to be necessary to insure the preservation of health, and avert the spread of disease.\* Those diseases—a very numerous group—which result from personal vices or from depraved habits of the community, are beyond the immediate control of public measures.

The chief of the zymotic diseases are:—smallpox; typhus fever; typhoid (or enteric fever); scarlet fever (or scarlatina); diphtheria; measles; and Asiatic cholera. We will consider them

\* Grimshaw.