# MOSQUITO BRIGADES AND HOW TO ORGANIZE THEM

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Mosquito Brigades and How to Organize Them by Ronald Ross

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# **RONALD ROSS**

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## HOW TO ORGANISE THEM

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### GRATEFULLY DEDICATED

TO

# SIR ALFRED L. JONES, K.C.M.G.

AND THE SUBSCRIBERS OF

THE LIVERPOOL SCHOOL OF TROPICAL MEDICINE;

AND ALSO TO

THOSE GENEROUS DONORS

WHO BY THEIR MUNIFICENT SUPPORT

HAVE ENABLED US TO UNDERTAKE

OUR

CAMPAIGN IN WEST AFRICA

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### PREFACE.

The discovery that the germs of several of the most important tropical diseases, namely, malarial fever, yellow fever, and elephantiasis, are inoculated into human beings by the bites of mosquitoes has revolutionised tropical hygiene. Not only our comfort but our security in the tropics now depends upon the measures we adopt against these insects.

There are several means of protection already well known to us. For example, in India punkahs swing night and day over the heads of Europeans, and at night almost everyone employs mosquito nets. In America entire houses are protected from the invasion of these pests by means of wire-gauze screens fixed to the windows and doors.

Such measures as these, however, have one great defect. They protect only those who can afford them, and who are necessarily few in number. Moreover, it is found in practice that the protection is only partial, because, whatever efforts of this kind we may make, we cannot, especially in the tropics, entirely avoid being bitten.

Another safeguard against mosquito-borne diseases consists in isolating ourselves in buildings separate from the bulk of our neighbours, in the hope that, even if we continue to be bitten by mosquitoes, these insects will not be infected by having previously bitten infected persons. This means, also, can be adopted only by the rich, and is sometimes very inconvenient even to them.

While all these measures are undoubtedly beneficial, particularly under special circumstances, the question strikes us at once, "Rather than take so much trouble in protecting ourselves from the bites of these insects, would it not be better to get rid of them at once?"

Where this measure can be carried out, not only the rich, but the whole population will be protected; and individuals will be saved the trouble and expense involved in providing their houses with wire-gauze screens.

The object of the present work is to show how we can best wage war against mosquitoes. The information given is based upon experience gained by me during many years' study of mosquitoes in various parts of the world; and more especially upon the actual results of the operations now being carried on by the Liverpool School of Tropical Medicine in West Africa. The work is not written only for medical men in the tropics, but for anyone who lives in countries where mosquitoes abound. I have tried to describe the various operations in detail; and the Appendix contains accounts of the campaigns already started in various parts of the world.

The reader will perceive that, in fact, I am preaching a general crusade of a more novel and perhaps more useful character than most crusades. I trust that he will volunteer under the flag.

LIVERPOOL, 13th October, 1901.

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