

# **NOTES ON THE CONSTRUCTION AND WORKING OF PUMPS**

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Notes on the Construction and Working of Pumps by Edward C. R. Marks

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**EDWARD C. R. MARKS**

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NOTES ON THE  
CONSTRUCTION AND WORKING  
OF PUMPS.

BY  
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*"The Evolution of Modern Small Arms and Ammunition."*

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## PREFACE.

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THE Author has written the series of articles, now presented in book form, for users rather than for makers and students of pumping machinery. He has therefore considered the leading types of pumps and pumping engines as users receive them, or should receive them—*i.e.*, in the finished state. But such particulars are given concerning construction and capabilities, and as far as possible of results actually obtained, as will, it is hoped, be of assistance to engineers, manufacturers and others, in the difficult task of making the best selection for their service from the many proposals they may have before them.

The earlier chapters deal with matters common to all pumps, such as the conditions affecting the limit of suction lift, piston or plunger speeds, air vessels, pipes and other connections, and with types of valves, packings, and other details.

The author desires to thank the various makers who have kindly supplied blocks, particulars as to tests, or other information concerning their machinery.

E. C. R. M.

*13, Temple Street,  
Birmingham,  
May 1st, 1903.*



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