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Engineering as a Vocation by Ernest McCullough

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ERNEST MCCULLOUGH

ENGINEERING AS A VOCATION

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BY

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Consulting Civil Engineer; Member of the American Society of Civil Engineers; Western Society of Engineers; American Water Worke Association; American Society of Municipal Improvements; National Association of Cement Users; American Society of Engineering Contractors; Illinoia Society of Engineers and Surveyors; Fellow of the American Association for the Astancommut of Science; etc., etc.

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The Engineer's Mife

THIS BOOK

IS MOST RESPECTFULLY DEDICATED

BY

HER FRIEND AND SINCERE ADMIRER

AND SYMPATHIZER.

The Author

And Buth said "Intrest me not to leave thee, or to return from following after thee; for whither thou goest I will go; and where thou lodgest I will lodge;



SPECIFICATIONS FOR A GOOD ENGINEER

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"A good engineer must be of inflexible integrity, sober, truthful, accurate, resolute, discreet, of cool and sound judgment, must have command of his temper, must have courage to resist and repel attempts at intimidation, a firmness that is proof against solicitation, flattery or improper bias of any kind, must take an interest in his work, must be energetic, quick to decide, prompt to act, must be fair and impartial as a judge on the bench, must have experience in his work and dealing with men, which implies some maturity of years, must have business habits and knowledge of accounts. Men who combine these qualities are not to be picked up every day. Still, they can be found. But they are greatly in demand and when found they are worth their price; rather, they are beyond price and their value cannot be estimated by dollars." -Chief Engineer Sterling's Report to the Mississippi Levee Commissioners.

PREFACE

THE subject matter of this work has been rearranged (with additions) from a number of addresses given before technical schools and associations of engineer assistants. It is published for the information of parents in order that they may act wisely in selecting a career for their sons. Semi-technical periodicals and daily newspapers are bureaus of information consulted frequently by ill-informed parents; and, perhaps, more than half the students now in technical schools are there because of opinions obtained as valuable advice from such sources.

The reason for the opinions expressed by writers in such publications is hard to ascertain. A careful reading of the back numbers of technical periodicals and transactions of technical societies will prove the statements in this book to be accurate, and the advocates of wholesale technical education have always had these sources from which to obtain information. The reader is to bear in mind that when the average engineer is mentioned it is the average in numbers and not in ability that is meant.

THE AUTHOR.

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Chicago, Ill., June, 1911.

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