WORM GEARING

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Worm Gearing by Hugh Kerr Thomas

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HUGH KERR THOMAS

SECOND EDITION
REVISED AND ENLARGED

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PREFACE TO SECOND EDITION

A second edition of this book having been called for, the opportunity is afforded for making corrections of a few typographical errors, which appeared in the first edition. Part of Chapter IX has been rewritten, and three short appendices added to bring the text abreast of the writer's most recent investigations. It is hoped that the value of the book is thereby considerably enhanced.

H. K. T.

PREFACE TO FIRST EDITION

In the following work an attempt has been made, it is believed for the first time, to deal exhaustively with a little understood branch of applied mechanics. A complete analysis of the principles of the design of worm gearing has been made, and, primarily, this has been treated in its application to the rear axles of automobiles. For a number of years this type of gearing has enjoyed considerable popularity in Great Britain, and its wider use is daily becoming more general.

From his experience with his own staff, as well as with many professional acquaintances, the author believes that the book will give information, which, although possibly possessed by a few engineers, has not hitherto been accessible to the designer and draughtsman in anything like a complete form.

An important use for worm gearing is rapidly developing in connection with the reduction gear of steam turbines for marine propulsion; while these are, mechanically speaking, simpler problems, by reason of their greater stability, than the gears of an automobile, precisely the same rules can be applied, and the same thing may be said of gears for driving line shafting from electric motors.