

**THE ELEMENTS OF
GRAPHIC
STATICS, TRANSLATED
FROM THE GERMAN**

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The Elements of Graphic Statics, Translated from the German by Karl Von Ott & Sir George Sydenham Clarke

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KARL VON OTT & SIR GEORGE SYDENHAM CLARKE

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OF
GRAPHIC STATICS

BY KARL VON OTT

PROFESSOR AN DER K. K. DEUTSCHEN OBERREALSCHULE
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TRANSLATED FROM THE GERMAN

BY

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TRANSLATOR'S PREFACE

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THE solution of problems of all kinds by purely graphic methods forms an important branch of study in the training of a Continental Engineer, and the publication of such considerable works as those of Reuleaux, Culmann, Bauschinger, and Levy, affords the best proof of the value attached to the subject.

In England, notwithstanding the valuable contributions to Graphic Statics made by Professor Clerk-Maxwell and the late Professor Rankine, the subject can hardly be said to have received the recognition it merits. It is true indeed that the power and facility conferred by certain isolated processes, such for instance as that of stress diagrams, are universally acknowledged; but these processes have for the most part been viewed as mere artifices for effecting special purposes, and not as applications of the principles of an important general method.

The present work, which has in Germany already gone through three editions, is for its size one of the most complete elementary treatises on the subject, while its essentially practical character and the extreme simplicity of the mathematics involved will, it is hoped, render it widely useful in an English form.

In carrying out the translation the Author's text

has, as far as possible, been adhered to; but the peculiarities of German idiom cannot always be literally rendered, and in such cases a certain amount of freedom must necessarily be claimed.

It was thought advisable to omit entirely the first portion of the work treating of Graphic Arithmetic, which, though it certainly forms a useful and appropriate introduction to the study of Graphic procedure, has not been much used in practice.

Some few notes have been added where further explanation seemed desirable, or where, as in the case of the treatment of wind pressure on roofs, a divergence from English practice seemed to call for some remark. All such additional matter incorporated with the Author's text has been enclosed in brackets.

COOPERS HILL, June, 1876.

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