

SAWS AND SAWING MACHINERY

ERIC N. SIMONS

PUBLICITY MANAGER, EDGAR ALLEN AND CO. LTD. CO-AUTHOR OF "THE STRUCTURE OF STEEL," "STEL MANUFACTURE" "THE MECHANICAL WORKING OF STEEL," "THE HEAT-TREATMENT OF STEEL" AUTHOR OF "MARKETING THE TECHNICAL PRODUCT." ETC.



LONDON SIR ISAAC PITMAN & SONS, LTD. 1946

PREFACE

THIS book constitutes, to the best of my belief, the first attempt to gather together within the covers of a single volume detailed information about saws for *all* types of materials. Most handbooks and pamphlets on saws appear to regard the cutting of timber and wood as the primary purpose of these tools. This, as most engineers and quarrymen know, is far from being the truth. Nevertheless, the literature on metal-cutting saws remains meagre in the extreme, and on the cutting of stone by circular diamond-set discs or saws it is doubtful if any publication whatsoever exists in any language, apart from the catalogues of manufacturers, and an odd article or two in journals.

The difficulties of compiling and publishing a book of this type in time of war will be obvious to all, and while I have done my best to overcome them, I am conscious that, had normal conditions obtained, this would have been a far better book than I am inclined to think it. Personal visits for consultation and investigation have, in view of exacting war duties and the undesirability of railway travel, been inevitably minimized, and paper restrictions have made compression and some omissions compulsory. This must be my excuse for shortcomings.

I have endeavoured to group saws according to their type and the work they do, and after outlining their functions, method of manufacture, and principles of use, have devoted some space to a description of the actual machines in which they are used. This, in my view, is essential, because the reader called upon to use a particular type of saw should not be left in the dark as to the modern types of machines of which the saw is the instrument. He will gather from the various chapters not only what are the latest and most up-to-date models available to him, should he be about to buy, but also whether his existing equipment, seen in the light of the most recent advances, is adequate, and will thus be able to decide for himself if the time has come to install new plant. Should this book attain the success represented by a second edition, it will be my endeavour to keep this particular aspect up to date by the incorporation of whatever progress may have been made in the interim, so that the reader may always have the latest information before him.