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MECHANICAL LIBRARY.
AEROPLANES; PP. 1-240**

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Every Boy's Mechanical Library. Aeroplanes; pp. 1-240 by J. S. Zerbe

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J. S. ZERBE

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By J. S. ZERBE, M.E.

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AUTOMOBILES

This is a subject in which every boy is interested. While few mechanics have the opportunity to actually build an automobile, it is the knowledge which he must acquire about every particular device used, that enables him to repair and put such machines in order. The aim of this book is to make the boy acquainted with each element, so that he may understand why it is made in that special way, and what the advantages and disadvantages are of the different types. To that end each structure is shown in detail as much as possible, and the parts separated so as to give a clear insight of the different functions, all of which are explained by original drawings specially prepared to aid the reader.

MOTORS

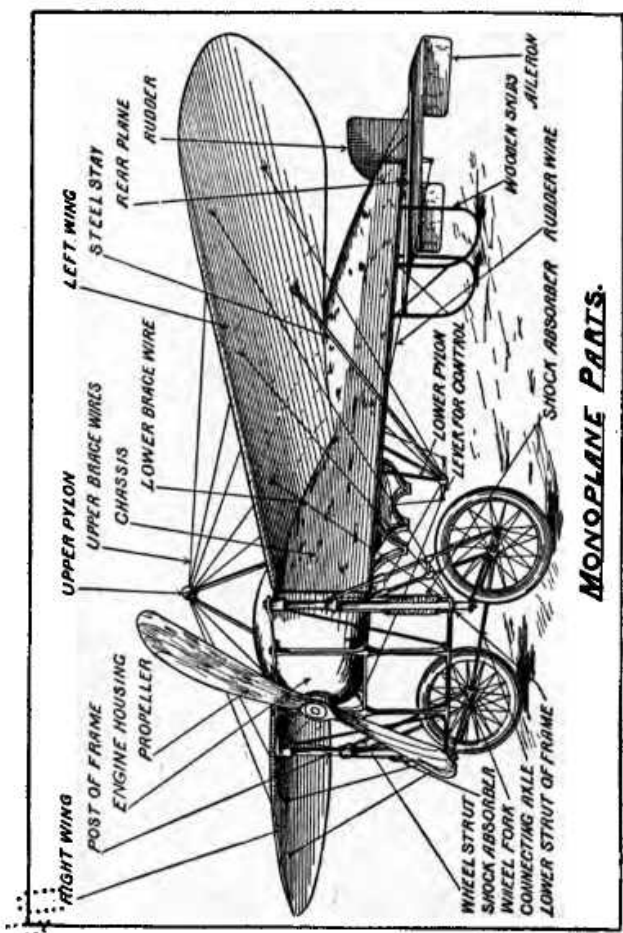
To the boy who wants to know the theory and the practical working of the different kinds of motors, told in language which he can understand, and illustrated with clear and explicit drawings, this volume will be appreciated. It sets forth the groundwork on which power is based, and includes steam generators, and engines, as well as wind and water motors, and thoroughly describes the Internal Combustion Engine. It has special chapters on Carbureters, Ignition, and Electrical systems used, and particularly points out the parts and fittings required with all devices needed in engine. It explains the value of compounding, condensing, pre-heating and expansion, together with the methods used to calculate and transmit power. Numerous original illustrations.

AEROPLANES

This work is not intended to set forth the exploits of aviators nor to give a history of the Art. It is a book of instructions intended to point out the theories of flying, as given by the pioneers; the practical application of power to the various flying structures; how they are built; the different methods of controlling them; the advantages and disadvantages of the types now in use; and suggestions as to the directions in which improvements are required. It distinctly points out wherein mechanical flight differs from bird flight, and what are the relations of shape, form, size and weight. It treats of kites, gliders and model aeroplanes, and has an interesting chapter on the aeroplane and its uses in the great war. All the illustrations have been specially prepared for the work.

CUPPLES & LEON CO., Publishers,

NEW YORK



MONOPLANE PARTS.

Every Boy's Mechanical Library

AEROPLANES

BY
J. S. ZERBE, M.E.
Author of
Automobiles—Motors



ILLUSTRATED

NEW YORK
CUPPLES & LEON COMPANY

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