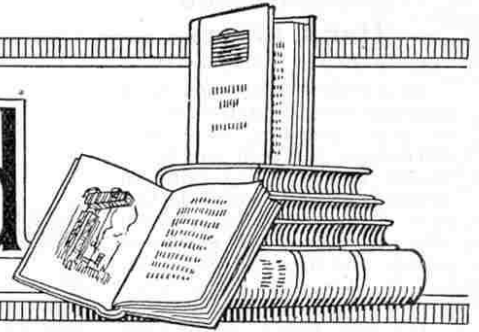


# Books to Read



Readers frequently write to me asking if I can recommend books that are both of interest and of use. On this page I review books that specially appeal to Meccano boys. I do not actually supply these books, which may be obtained either through any bookseller or direct from the publishers.—EDITOR.

## Masters of Science and Invention

F. L. Darrow

(Published by Chapman and Hall. 10/6).

This book, containing 350 pages and 50 portraits, should interest all readers of the "M.M." who like to read of the lives of inventors and scientists. The author tells us of the lives and deeds of those who have won secrets from Nature and applied them to the uses of Man. The book covers almost every branch of science, including the story of the steam engine, which is told in the lives of Watt, Fulton and Stephenson. The story of invention in the textile industry, chemistry, electricity and every other branch, is equally fascinating and we feel sure that readers will not lay the book down until they have read it through from cover to cover.

## The Outdoor World

By W. S. Furneaux

(Longmans, Green & Co., London.  
Price 6/6 net).

This fine book, of 411 pages, will be of the greatest value to the young collector and to anyone interested in outdoor life. It is written in a clear and intelligible style and has no less than 549 illustrations, including some fine colour plates. Although the common names are chiefly employed for naming the specimens of flowers, insects and animals, the Latin equivalents are also given.

Special sections are devoted to pond and stream life, sea-shore life, snails and slugs, insects, spiders, centipedes and similar creatures. Also to reptiles, British birds and mammals, seaweeds, fungi, mosses, ferns and wild flowers, grasses and trees.

In a book covering such a wide scope it is only natural that in many cases descriptions must be curtailed, but the book loses none of its value on this account. Everyone interested in nature will find the book extremely interesting reading, while as a work of reference it forms a valuable addition to the bookshelf.

## Scientific Paradoxes and Problems

A. S. E. Ackerman

(The Old Westminster Press, 1925. 5/- net).

This book, which contains a hundred paradoxes and problems, has an interesting origin. At the beginning of last year, the author broadcast fortnightly talks from London on "Popular Fallacies." In these talks he asked his listeners to send him posers, which they did, in their hundreds! The book is a collection of the best of these posers, with the addition of some collected by the author many years ago, and everyone interested in this type of

literature will find the book useful.

The book is more or less on the scientific side, but includes many problems that are purely and simply mathematical puzzles. One of these, which our calculating readers may like to worry out, is contributed by Professor C. V. Boys (who, incidentally, uses Meccano in his experimental work and has paid a high tribute to its value in this connection). This poser runs thus:—"Little Tommy was exactly half my age. Some time later he died. If he had lived twice as long as he did he would have been a year older than I was when he died, and that would have been as many years ago as I was older than Tommy. Now I am eight years older than I was when he was half my age. Poor little Tommy! How old was he when he died?" asks Professor Boys.

Another interesting problem, which comes up for solution periodically, was invented by Lewis Carroll, the author of "Alice in Wonderland," and is the first one given in the book. This reads as follows:—

"A rope is hung over a pulley and its two ends hang down and end at the same level. A monkey holds on to one end and its weight is balanced by an equal weight tied to the other end. The monkey starts to climb up the rope. What happens?"

Mr. Ackerman solves this problem thus:—"Suppose the weight of the monkey is 5 lbs., then the weight at the other end of the rope is also 5 lbs. The tension or pull throughout the whole length of the rope is therefore also 5 lbs. Now in order to climb up the rope, the monkey must cause his body to move up, and it cannot do this without applying an additional upward force to it—additional because the rope is already pulling upwards to the extent of 5 lbs. on the monkey.

"The moment this additional force is produced by the monkey's effort to climb, it increases the tension in the rope supporting the monkey; this increase of tension is transmitted over the pulley and passes down to the weight on the other end of the rope. This weight is thus also caused to move up, but in doing so, more than half the rope gets on to the monkey's side of the pulley, and that side thus becomes the heavier, overcomes the other, and the weight arrives at the top first. If the rope were weightless, or if being not weightless it were endless (i.e., a large ring of rope), then the monkey and weight would arrive at the pulley at the same time.

## Battles by Sea

By E. Keeble Chatterton

(Sidgwick & Jackson Ltd. 7/6).

Mr. Keeble Chatterton's name needs no introduction to our readers, many of whom must be familiar with his "Sailing Ships and their Story," "Ships and Ways of Other Days" and several other volumes all telling of the life of the sailor and those who "go down to the sea in ships." In "Battles by Sea," the author deals with 12 of the world's most famous naval engagements, from the defeat of Xerxes at Salamis to the Battle of the Falkland Islands. He describes these sea fights in a graphic manner and his object is to present a connected view of the development of naval warfare from the earliest times to the present day.

The book is divided into three parts,

the Galley, the Sailing Ship, and the Steam-Ship periods, and the author has endeavoured to present his narrative in such a manner that the characters and the difficulties of the commanders, as well as the ships engaged may easily be imagined by his readers. It is a book full of daring deeds well calculated to stir the imagination of any reader, and we feel sure that many of our readers will find delight and profit from reading it.

## The London & North Eastern Railway

By G. E. Mitton

(A. & C. Black. Price 2/6 net).

As mentioned in the introduction to this book, it is no light task to deal with such an important Railway group as the L. & N.E.R. in one small volume of 92 pages, yet the author has certainly performed the task in a very efficient and interesting manner.

First of all the history of this Railway group is dealt with from the time when the longest railway was the London and Birmingham. This is followed by the main outlines of the development of the railway from 1840 to the present time, which make very interesting reading. Several chapters are devoted to a description of the various counties through which this railway passes, with comments on their past history, illustrations and descriptions of some of England's most beautiful cathedrals and some account of the famous county families.

The technical side of the railway is not mentioned to any great extent in this book, which deals more with interesting towns and villages and the countryside through which it passes. The book contains one or two sketches in line, a map of the whole of the L. & N.E.R. system, and eight beautiful coloured plates showing the country through which the L. & N.E. Railway runs. Incidentally, the book should give readers many inspirations for their holidays.

## Other Books Received

We have received copies of the undermentioned books during the past month, and these will be reviewed in a future issue.

"RAILWAY MARVELS"

by C. J. Allen (J. F. Shaw & Co.), 2/6

"THE EMPIRE CRUISE"

by V. C. Scott O'Connor (Griddle, Smith & Duffus), 16/-

"THE FUTURE"

by A. M. Low (Routledge), 5/-

"BRITISH BUTTERFLIES AND MOTHS"

by Furneaux (Longmans, Green & Co.), 6/6 net

"COPPER"

by N. E. Crump (Rider & Co. Ltd.), 10/6

"GREAT PEOPLES OF THE ANCIENT WORLD" by D. M. Vaughan

(Longmans, Green & Co.), 3/6

"STRATEGY AND TACTICS OF AIR FIGHTING" by Major O. Stewart

(Longmans, Green & Co.), 6/-