

NEW BOOKS ON SCIENCE

Science News Letter presents a comprehensive list of scientific books published or to be published between January 1 and June 30, 1937. All information is believed to be correct but is not guaranteed. Prices are listed where known. Prices marked * are tentative.

Aeronautics

- AIRCRAFT AND THE AIR—Eric Sargent—*Appleton*, \$3.
 HEROES OF THE AIR, rev.—Chelsea Frazer—*Crowell*, \$2.50.
 HISTORY OF AERONAUTICS—William B. Gamble, comp.—*N. Y. Pub. Lib.*
 MATERIALS OF AIRCRAFT PROCESSES—George F. Titterton—*Pitman*, \$3.*
 MODERN BOOK OF AEROPLANES—W. H. McCormick—*Macmillan*, \$2.
 YOUR WINGS—Assen Jordanoff—*Funk*, \$2.50.
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 THE ANCIENT WORLD—W. E. Caldwell—*Farrar*, \$3.50.*

Archaeology—Anthropology

- AFTERMATH: A SUPPLEMENT TO THE GOLDEN BOUGH—Sir James G. Frazer—*Macmillan*, \$3.
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 ANCIENT MAN IN THE MOHAVE DESERT, CALIFORNIA—Elizabeth W. C. and William H. Campbell—*Southwest Mus.*
 ANTHROPOLOGY: An Introduction to Primitive Culture—Alexander Goldenweiser—*Crofts*, \$5, trade ed., \$3.75 text ed.
 ARCHAEOLOGICAL EXPLORATIONS IN PERU, Part III: Textiles of the Early Nazca Period—Lila M. O'Neale—*Field Mus.*
 ARCHAEOLOGICAL EXPLORATIONS IN PERU, Part IV: The Cañete Valley—A. L. Kroeber—*Field Mus.*
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 HISTORY OF HAWIKUH, NEW MEXICO, ONE OF THE SO-CALLED CITIES OF CIBOLA—Frederick Webb Hodge—*Southwest Mus.*, \$3.
 HOPI JOURNAL, 2 vols.—Alexander M. Stephen, ed. by Elsie C. Parsons—*Columbia*, \$10.
 INDIANS' BOOK—Natalie Curtis, ed.—*Harper*.
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FIND THE FISHES

Can you recognize any of the fish expertly portrayed in this second century mosaic picture from Antioch, Syria? An American-French joint expedition unearthed the mosaic, pronounced one of the earliest representations of Mediterranean fish according to species. Prof. E. G. Conklin, Princeton University, has identified clam, scallop, eel, sturgeon, a variety of squid, and members of the bass and mackerel families. Of the 11 species depicted, two remain unrecognized.

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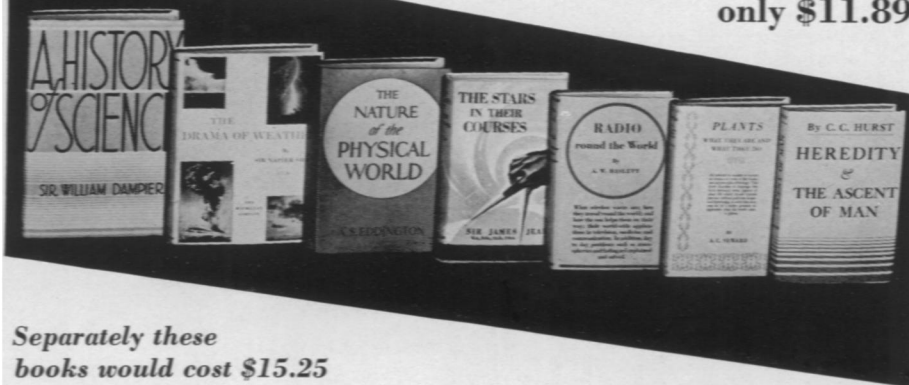
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● "What I want to know is: Can the thing happen that I saw happen?' Such was the Hibernian appeal to the United States Weather Bureau of a man who said that invariably he was called several sorts of a liar every time he ventured to tell of the occasion, years ago, when he saw a 'twister,' or tornado, as it more technically is called, pick up a railroad locomotive from one track and set it down uninjured, and headed the other way, on a neighboring parallel track. Of course he was told what while such a thing was not to be expected as an every-day occurrence, nevertheless those who have experienced tornadoes put nothing past them."—W. J. Humphreys in WEATHER RAMBLES (*William & Wilkins*).

Science News Letter, April 17, 1937

PSYCHOLOGY

Not Mature

● "As long as people become angry over superficial social situations, are afraid of what other people will think, are dependent upon older people or members of their own sex for happiness, or are inclined to take everything personally, they have not yet ceased to be adolescents. It is at once clear that some people never grow up and that others do not become mature until long after they have passed beyond the age of legal responsibility." — Luella Cole in THE PSYCHOLOGY OF ADOLESCENCE (*Farrar & Rinehart*).

Science News Letter, April 17, 1937

MATHEMATICS

Calculation

● "The Moslem civilization which swept across the southern domain of the Roman Empire brought together the technique of measurement, as it had evolved in the hands of the Greeks and the Alexandrians, adding the new instrument for handling numbers which was developed through the invention of the Hindu number symbols. In the hands of Arabic mathematicians like Omar Khayyám, the main features of a language of calculation took shape. We still call it by the Arabic name, algebra.

"Along the trade routes this new arithmetic is brought into Europe by Jewish scholars from the Moorish universities of Spain and by Gentile merchants trading with the Levant, some of them patronized by nobles whose outlook had been unintentionally broadened by the Crusades. Europe stands on

THE AUTH

the threshold of the great navigations. Seafarers are carrying Jewish astronomers who can use the star almanacs which Arabic scholarship has prepared. The merchants are becoming rich. More than ever the world is thinking in large numbers."—Lancelot Hogben in MATHEMATICS FOR THE MILLION (*Norton*).

Science News Letter, April 17, 1937

HISTORY

Room for All

● "Even down to the present day, no English town has ever been so lavishly supplied with public buildings, relatively to the size of its population, as was the average tribal capital by the end of the first century. A town hall that would hold every man, woman, and child in the city, and more; a second building where they might all watch shows at once; another, where every one of them might bathe daily; such things are hard to believe in these times, when all the public halls and theatres and picture-palaces of an English town will together hold, only perhaps a tenth of its population. These public buildings were, no doubt, planned and executed by a small autocratic body; but they were not intended for the use of that body; they were patently designed for the use of the entire city populace."—R. G. Collingwood and J. N. L. Myres in ROMAN BRITAIN AND THE ENGLISH SETTLEMENTS (*Oxford*).

Science News Letter, April 17, 1937

MATHEMATICS

General

● "The expert user of mathematics is a general commanding perfectly trained armies he never sees. Unforeseen combinations, inherent in the planned coordination, but not themselves deliberately planned, appear as if by fate in the engagement with the unknown. . . . Whatever be the explanation, it is historically true that scientists gifted with mathematical imagination have frequently made discoveries of unsuspected physical phenomena. To this extent at least mathematics has helped science."—Eric Temple Bell in THE HANDMAIDEN OF THE SCIENCES (*Williams & Wilkins and Reynal*).

Science News Letter, April 17, 1937

DRS SAY:

SAFETY ENGINEERING

One Life

● "Some children are kept so much in cotton wool and shielded from every risk during their early years at home that they are greatly at a loss when subsequently exposed to the hard knocks of school life and the outside world. They become over-anxious and fearful, and their inclination to avoid the chances of accident and injury may have adverse effects on their character which persist for the rest of their lives. Still, it ought to be possible to instil in the minds of the children the idea that they have only *one* life, which they can, in due course, devote to adventure. . . . It is mere foolishness to risk their lives by omitting such simple precautions as a preliminary look-out for traffic before crossing a road."—H. M. Vernon in *ACCIDENTS AND THEIR PREVENTION Cambridge (Macmillan)*.

Science News Letter, April 17, 1937

RADIO

Wireless

● "Yes, this thing called wireless was so simple, but even so how could a layman catch the idea. The engineers liked this simile of a stone tossed into a placid pond: A series of ripples is created which spread out in ever-widening circles; any small bits of wood floating on the surface are bobbed up and down by each successive ripple. The stone is the 'transmitter'; the pond is the 'ether'; the wood is the 'receiver.'

"But think how complicated the ripples if ten stones or even two were thrown in at once. To detect each ripple clearly, that was the trick—and Marconi could do it; he separated each one by tuning."—Orrin E. Dunlap, Jr. in *MARCONI THE MAN AND HIS WIRELESS (Macmillan)*.

Science News Letter, April 17, 1937

BIOLOGY

Organismalism

● "Whatever it is that sees to all these essential needs of an animal, it is more than the parts or the mechanisms of the parts. For want of a better name we call it the whole of the organism.

"Some call it the vital principle. There is no objection to this name, provided it

is properly interpreted. If it is meant to imply that there exists in an organism an unknown force that interferes in any way with the physical and chemical activities of the organism, it is objectionable to scientists and is not based on sound philosophy. The vital principle is not a force separate and distinct from the organism itself."—U. A. Hauber in *BIOLOGY: A STUDY OF THE PRINCIPLES OF LIFE FOR THE COLLEGE STUDENT (Crofts)*.

Science News Letter, April 17, 1937

CHRONOLOGY

Lamp Clock

● "The Romans combined a clock with a lamp. There was a long tube of glass set upright and in the tube there were painted figures to indicate the hours. The tube was filled with oil up to the hour at which it was lighted, and as the oil was burned, the time was indicated. At a date still recent these lamp clocks were used at night by peasants in Holland and Germany."—P. W. Wilson in *THE ROMANCE OF THE CALENDAR (Norton & Co.)*.

Science News Letter, April 17, 1937

PSYCHOLOGY

Poise

● "Older people naturally tend to be more cautious and more ingenious in the face of perils. They have a richer background. Knowing more, they fear less. Their very lack of explosive endocrine energies steadies them and reduces the chances of panic. Sometimes, too, their weaker interest in living works to the same end. People who care little whether they go on living or not keep their inner and outer poise in crises which upset the life-hungry."—Walter B. Pitkin in *CAREERS AFTER FORTY (Whittlesey House)*.

Science News Letter, April 17, 1937

PSYCHOLOGY

Aptitudes

● "The obvious main function of standardized tests of aptitudes is to help in estimating the probabilities that a person would be able to follow successfully an occupation he is considering. Related uses are to discover unsuspected talents; to suggest possible alternative fields; to bring to attention endowments which might well be capitalized, and disabilities which should be recognized and removed or compensated for; and in general, to provide the inquirer, whether youthful or mature, with food for objective thinking about himself and his future relations to the world of work."—Walter Van Dyke Bingham in *APTITUDES AND APTITUDE TESTING (Harper)*.

Science News Letter, April 17, 1937



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'MISSING LINKS'

Plant "missing links" have been discovered in Oregon, and the discovery has been verified by Dr. Ralph W. Chaney of the Carnegie Institution of Washington, shown above. The new-found fossils date from the Pliocene geologic epoch, which came before the Great Ice Age. The beds were uncovered during the progress of recent highway construction. They are capped with approximately 100 feet of lava. The discovery verifies a prediction made by Dr. Chaney many years ago, when he said that willows and poplars would be abundantly represented in beds of this age, whenever they were found. Many leaf-impressions of these trees are among the new fossil finds, as well as box-elder and cherry.

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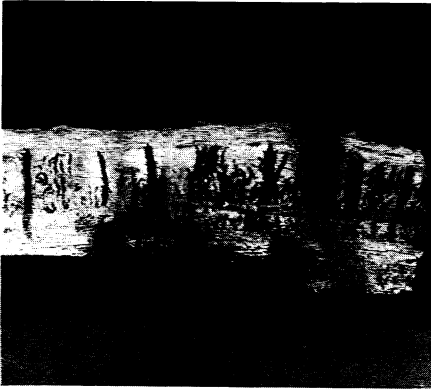
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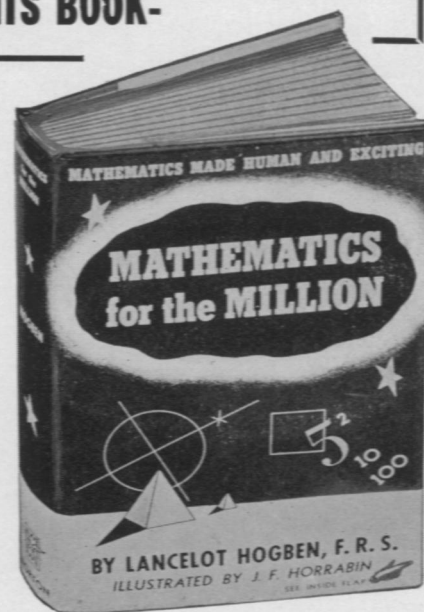
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