

BOOKS

**THE NEW ASTRONOMY
THE PHYSICS AND CHEMISTRY
OF LIFE
FIRST BOOK OF ANIMALS
ATOMIC POWER
AUTOMATIC CONTROL**

Scientific American Books,
Simon & Schuster, New York \$1 each

THESE FIVE BOOKS are the first in a new series of *Scientific American* paperbacks. Each book is made up of a collection of articles from the magazine. The articles have been re-edited, in some cases, to bring them up to date (since they appeared in the magazine as far back as 1948) and to make them comprehensible to an even broader audience than that reached by the magazine. The original magazine illustrations, which were often in color and of some complexity, have been reduced to simple line drawings in the books.

Each book includes from 12 to 24 separate articles, covering various

phases of the particular field of science under consideration. "The New Astronomy" consists of 20 articles concerning recent discoveries about the nature and structure of the universe.

"The Physics and Chemistry of Life" includes articles on the origin of life, the structure of proteins (by Linus Pauling, Robert Corey and Roger Hayward), the chemistry of heredity, viruses, genes (by George Beadle), enzymes, cell division and the electrical activity of the brain.

The 24 articles in "The First Book of Animals" describe some scientific investigations of animals which provide interesting insights into the workings of life.

"Atomic Power" begins by explaining the basic principles of atomic fission, covers reactors, resources, fission products, radiobiology, thermonuclear reactions, the economics and politics of atomic power and the Geneva Conference of 1955. As the editors explain, it is a book that emphasizes the constructive, beneficial uses of energy liber-

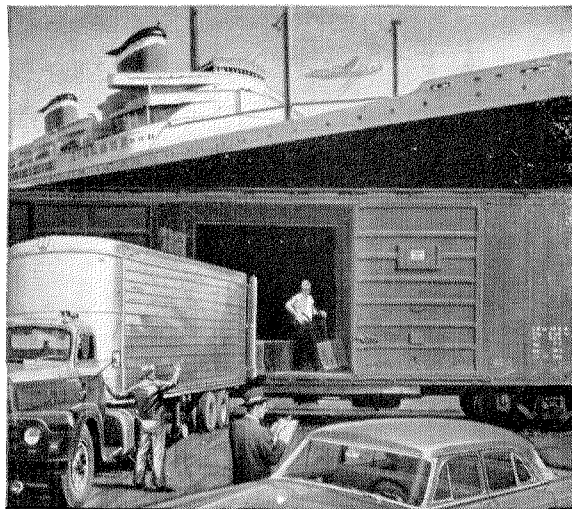
ated from the atomic nucleus, rather than the bombs.

The articles on automation in "Automatic Control" are a good antidote for the layman who has already been bewildered by both the Sunday-supplement writers and by the cybernetics experts. Starting with the basic principle of "feedback," the book describes the applications of self-regulating machines to business (the automatic office) and industry (specifically — automatic chemical plants and an automatic machine tool), considers the economic impact of this new industrial revolution and then tells about some of the awesome "giant brains" we'll be seeing soon.

Any regular reader of *Scientific American* is familiar with the clarity and comprehensiveness of its articles. In these paperbacks these qualities are, if anything, even more pronounced, so that the books may well attract a brand new audience of popular-science readers. They *should*, at any rate. And the price—as anyone can see—is right.

INDUSTRIES THAT MAKE AMERICA GREAT

TRANSPORTATION... FREEDOM'S GIANT



We sometimes become so bemused with its astronomical facts and figures that we are apt to regard the transportation industry as an end in itself.

But transportation has grown into a giant because it represents the translation into reality of some basic precepts of democracy . . . freedom to think, freedom to buy and sell, freedom to move about as we please. The resultant interchange of ideas, people and goods has inevitably led to the development of large-scale, efficient transportation. It is thus no accident that history's greatest democracy should also have history's greatest transportation system to serve it.

The transportation industry itself has never lost sight of its basic origins. Cognizant of its responsibility to the nation, it has always reinvested large amounts of its earnings in plant expansion, in engineering, in research—all for the development of better and more efficient methods, machines and conveyances. That is why American cars, planes, ships and trains are able to supply their services so efficiently and abundantly.

The science of steam generation for power, processing and heating in the transportation industry has likewise kept pace with the demand for greater efficiency. B&W, whose boiler designs power

such giant vessels as the *S. S. United States*, continues to invest large amounts of its own earnings in research and engineering to discover better ways to generate steam for ships and trains, for power plants and factories. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.

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