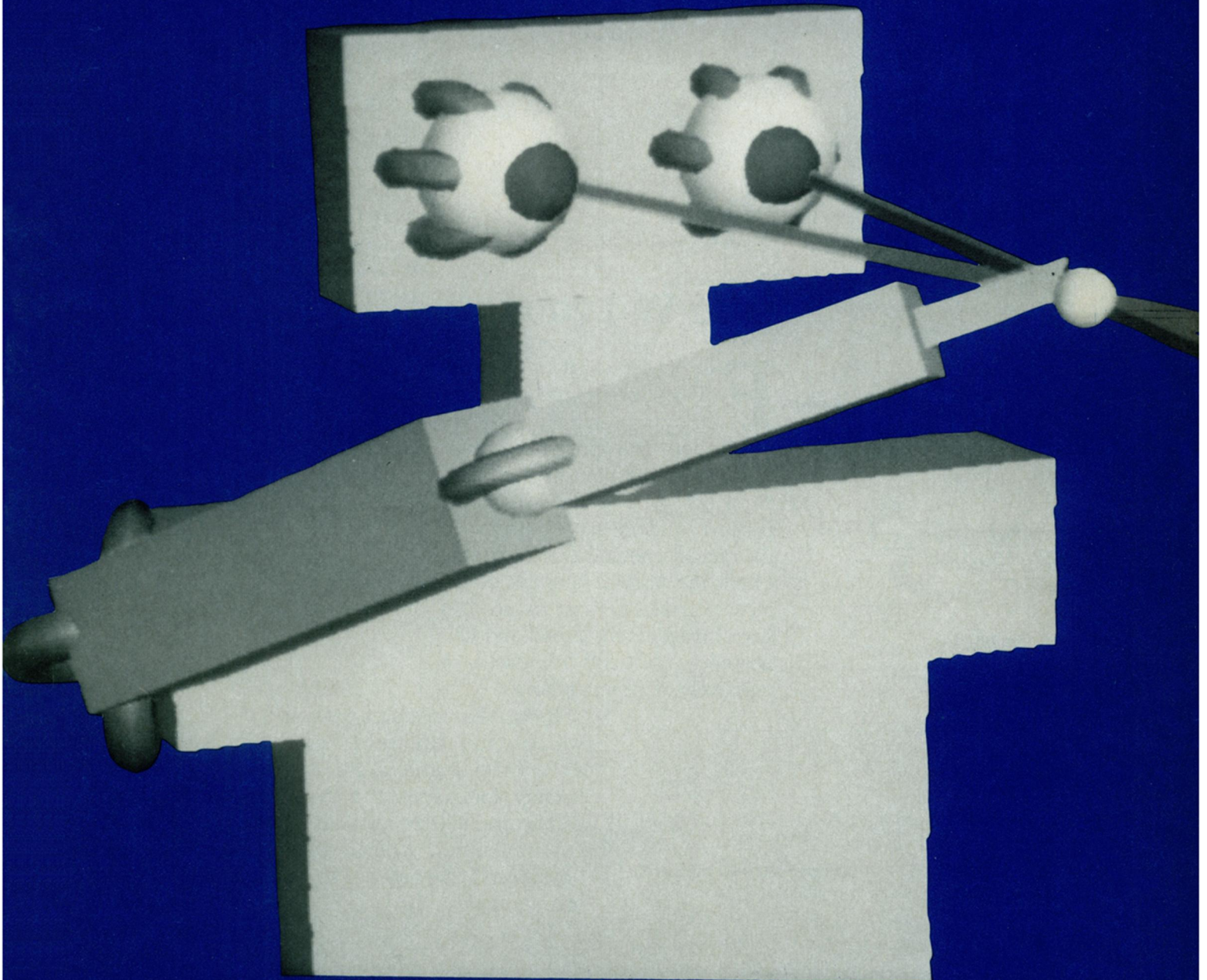


The Weekly Newsmagazine of Science

SCIENCE NEWS

June 6, 1987
Vol. 131, No. 23
Pages 353-368

Catching a Robot's Eye



Sun & Earth



Fire

John W. Lyons

Fire is friend and foe, capable of sustaining life and destroying whole cities. Controlled fire provides Americans with mechanical and electrical energy; fire also wipes out property and life in the U.S at twice the rate of other industrial nations. **Fire** is the story of how one of the most primal forces of nature has been investigated, tamed and harnessed — yet still represents a massively destructive power.

Herbert Friedman

Until the twentieth century, little was known about the dynamic relationship between the sun and the earth, though this unexceptional star sustains all life on our planet. **Sun and Earth** captures all the drama and excitement of the history of sun-earth studies from Galileo and Copernicus to Einstein and the Skylab explorations. Friedman explains the nature of solar gases, solar wind, sunlight, sunspots, radiation, auroras, eclipses, supernovas, the comings and goings of great ice ages — even the birth and death of the solar system. Along the way, readers discover a comprehensive picture of how the sun shapes our environment and affects the contemporary problems of radio communications, the survival of astronauts and spacecraft in the earth's orbit and the increasingly precarious existence of life on earth.

— from the publisher

W.H. Freeman, 1987, 8½" x 9¼", (Sun & Earth) 251 pages, (Fire) 170 pages, hardcover, \$32.95.

Lyons demonstrates how an age-old fascination with fire and combustion has inspired such scientists as Lavoisier, Rumford, Faraday, Watt and Franklin — leading, for example, to the electric bulb. From the gentle candle flame to the devastating violence of fire out of control, Lyons explains the fundamental physics and chemistry of flames, heat and combustible materials.

— from the publisher

Science News Books
1719 N St., NW
Washington, DC 20036

Please send me the books marked below at \$32.95 each.

Sun & Earth

Fire

Enclosed is a check payable to Science News Books for the price of the books plus \$1.00 per book to cover handling costs. Domestic orders only.

Name _____

Address _____

City _____

State _____ Zip _____

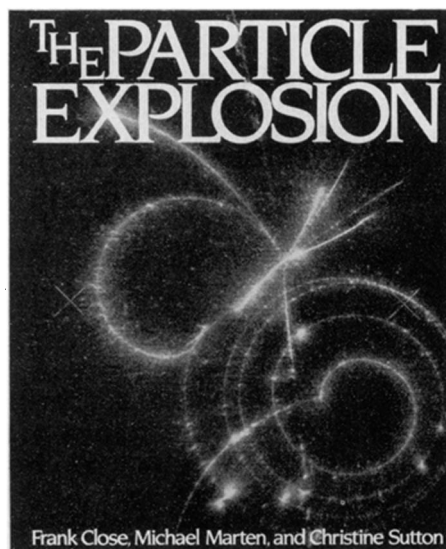
RB722

Both books are a part of the Scientific American Library

The Particle Explosion

Frank Close, Michael Marten and Christine Sutton

This is the first book to bring together, and to present in the style they deserve, the classic images of particle tracks produced with cloud chambers, photographic emulsions, bubble chambers and modern electronic detectors. This journey to the heart of matter opens with an introduction to the fundamental particles (the subatomic "zoo" that includes quarks, bosons, leptons, "strange" particles and "charmed" particles) and of the methods used to create and investigate them. The even-numbered chapters tell the story of their discovery, from the first experiments with X-rays and the elucidation of the nature of the atom, to the great machines that today smash particles together at enormous energies and the underground caverns where physicists are seeking confirmation of a Grand Unified Theory. The odd-numbered chapters describe the major particles and groups of particles in more detail.



—from the publisher

"If atoms could speak, what a tale they would tell. Some of the carbon atoms in the ink of this page may once have been part of a dinosaur. Their atomic nuclei may have arrived in cosmic rays, having been fused from hydrogen and helium in distant, extinct stars. But whatever their various histories may be, one thing is certain. Most of their basic constituents, the fundamental particles — the electrons and quarks — have existed since the primordial Big Bang at the start of time. In recent years, physicists have learned to make these particles in the laboratory, and by studying them, they hope to learn about the origin of the Universe."

From the book

"The Particle Explosion is written in a delightful style . . . the book is a valuable and welcome addition to the literature of particle physics. It is up to date and extraordinarily well produced."

—Abdus Salaam, *New Scientist*

Oxford Univ. Press, 1987, 8³/₄" x 11",
239 pages, hardcover, \$35.00
ISBN 0-19-85-1965-6

Science News Books
1719 N St., NW, Washington, DC 20036

Please send _____ copy(ies) of *The Particle Explosion*. I include a check payable to Science News Books for \$35.00 plus \$1.00 handling (total \$36.00) for each copy. Domestic orders only.

Name _____

Address _____

City _____ State _____ Zip _____

RB719