

# science news

FEB. 19, 1977  
VOL. 111, NO. 8, 112-128





#### THE INCREDIBLE DR. MATRIX

**Martin Gardner.** For the first time, here are all of Gardner's *Scientific American* columns on the adventures of an imaginary numerologist, along with new commentary. Presenting a wealth of mathematical recreations and word play (with clear answers in the back), the book is "witty, original, instructive . . . a real tour de force."—S. M. Ulam. 256 pages. \$8.95

#### EPIDEMICS

**Geoffrey Marks and William K. Beatty.** A history of epidemic diseases—bubonic plague, yellow fever, syphilis, Lassa fever, influenza, and many more—from Biblical times to the present, often recounted in the words of eyewitnesses. "Timely, well-written, and thorough."—*Library Journal*. 324 pages. Photographs. Reference notes, bibliography, index. \$9.95

#### QUASARS, PULSARS, AND BLACK HOLES

**Frederic Golden.** This scientific survey by the science editor of *Time* describes the spectacular astronomical discoveries of recent years that are revolutionizing the field. "Remarkably lucid, informed, and up-to-the-minute."—*Publishers Weekly*. 206 pages. Photographs. Glossary, bibliography, index. \$8.95

#### THE HIVE AND THE HONEY BEE

##### Revised Edition

**Dadant & Sons, Editors.** Twenty-seven specialists have collaborated in the latest edition of this book, a practical, classic and definitive work covering every aspect of bees and beekeeping from earliest times to the present. 740 pages. Numerous photographs, drawings and charts. Bibliography, index. \$14.95

#### ADVENTURES OF A MATHEMATICIAN

**S. M. Ulam.** "In this remarkable volume, one of the world's greatest living mathematicians has tried to break down part of the wall between creative mathematicians and the rest of society . . . a fascinating book, and you don't even need algebra to understand it."—Harry Schwartz, *The New York Times*. 318 pages. Photographs and drawings. \$14.95

#### CRIME BY COMPUTER

**Donn P. Parker.** "Fascinating . . . a detailed account of computer abuses that range from filching a competitor's trade secrets out of a time-sharing computer system to the multi-billion dollar Equity Funding fraud."—*New York Times Book Review*. 308 pages. References, index. \$10.95

#### THE INNOVATION MILLIONAIRES

##### How They Succeed

**Gene Bylinsky.** A *Fortune* editor's account of today's pioneering technology companies—Hewlett-Packard, Alza Corporation, Intel, and more—and the entrepreneurs who have created them. "Exciting stories of a new kind of business world . . . Useful reading for scientists and businessmen; heart-warming success stories for the general reader."—*Publishers Weekly*. 238 pages. Index. \$9.95

#### COMETS

##### An Illustrated Introduction

**Patrick Moore.** A thorough account of comets—their history, origins, structure, and the lore that has surrounded them. "A perfect gift book for the budding astronomer or the armchair observer."—*Kirkus Reviews*. 150 pages. Photographs and drawings. Tables, glossary, index. \$7.95

#### SECRETS OF THE DEEP

**Stephen Spotte.** Drawings by Gordy Allen. The Director of Mystic Marineland Aquarium explores marine, plant and animal life in a series of lively sketches. "Stephen Spotte effectively covers the world's oceans in a single volume, providing a multifaceted portrait of marine life that artfully evokes the mystery, variety and sophistication of the aquatic world."—*Natural Science Book News*. 146 pages. Glossary, bibliography, index. \$7.95

#### SCIENCE BRAIN-TWISTERS, PARADOXES, AND FALLACIES

**Christopher Jargocki.** Over 160 challenging and entertaining puzzles based on scientific principles—space and time, mechanics, electricity, geophysics, astronomy, and more—each with a detailed solution. All reward the reader with a great deal of physical intuition and insight into the world around him. 184 pages. Diagrams, index. \$9.95

#### SEX LIVES OF ANIMALS WITHOUT BACKBONES

**Haig H. Najarian.** A biologist's introduction to the styles, processes and behavior associated with reproduction in invertebrate animals. 116 pages. Drawings. Glossary, suggested reading index. \$6.95

#### THE UNIVERSE

##### Its Beginning and End

**Lloyd Motz.** This extraordinarily complete account of present-day astronomy by a noted professor traces the universe from its birth to the forces that may bring about its destruction. "Wide-ranging, reverent and lucid . . . Rarely has astronomy been made to seem so intimate and local a part of the biological main in which homo sapiens inch forward plagued with sin, viruses, and dreams of God."—*Washington Post Book World*. 344 pages. Photographs and diagrams. Bibliography, index. \$14.95



At your bookstore or order directly from:  
**CHARLES SCRIBNER'S SONS, Dept. AS**  
597 Fifth Avenue, New York, N.Y. 10017

Please send me number of copies indicated below:

- The Incredible Dr. Matrix @ \$8.95
- Epidemics @ \$9.95
- Quasars, Pulsars and Black Holes @ \$8.95
- The Hive and the Honey Bee @ \$14.95
- Adventures of A Mathematician @ \$14.95
- Crime by Computer @ \$10.95
- The Innovation Millionaires @ \$9.95
- Comets @ \$7.95
- Secrets of the Deep @ \$7.95
- Science Brain-Twisters, Paradoxes, and Fallacies @ \$9.95
- Sex Lives of Animals Without Backbones @ \$6.95
- The Universe @ \$14.95

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Check or money order must be enclosed.  
Please add 75¢ per book for postage and handling, plus necessary sales tax.

**A whole new way of sharpening!**

Sharpens your knives effortlessly in seconds... adds years to their lives!

Just a few strokes make blades as sharp as new!

The perfect sharpening tool for any cutting-ingredient in the household!

Convenient hanging thong keeps Rod always at hand.

## AMAZING CERAMIC Sharpening Rod ends dull knives...

**Restores razor-sharpness gently, without wearing down the blades!**

At last—a sharpening tool that's entirely different and more effective than any you've ever used... at about one-third the cost of a good sharpening steel! The "secret" is in the exclusive ceramic surface that gives knives a super-sharp edge in just a few strokes—without harmful grinding or wearing away of blades.

It's ideal for sharpening any knife, scissors or cutting tool you own. And it makes a great gift idea too! Measures 13 1/4" long, with solid ash handle tapered for comfortable gripping, and convenient hanging thong.

**ONLY \$4.95**  
POSTPAID

**30-Day Money-Back Guarantee!**

**DISCOVERY HOUSE, INC.** Dept. A708  
17241 Murphy Ave., Irvine, CA 92713

Please rush \_\_\_\_\_ Ceramic Sharpening Rod(s) at just \$4.95 each\*, shipping and handling included. If not completely satisfied, I will return Rod(s) within 30 days for full and prompt refund. Also send FREE Discovery House Catalog of unique items from around the world.

Check or M.O. for \$ \_\_\_\_\_ enclosed.

Print Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\*Calif. Residents Add 30% Sales Tax.

## SUPER POWER FOR ANY AM RADIO

**New Antenna Assist Turns A Tiny Transistor Into A Tiger!**

This amazing antenna assist has pulled in stations up to 1000\* miles away! Just set it beside your radio (no wires, clips, grounding) and fine-tune Select-A-Tenna's dial to the same frequency—"that's it"! Terrific for sportsmen, vacationers, shut-ins, radio & electronics buffs, Service men & women—anyone who wants to "get" home to a favorite station. Great for clearing weak signals in radio depressed areas, off-coast islands, stations in crowded frequencies, hard-to-tune stations way up on the dial. Solid state—no tubes to replace. Uses no electricity or batteries—works almost forever! Tough, break-resistant plastic case blends with any decor.

**\$19.95 Ppd.**  
STOCK NO. 72,095Q JUST

### ULTRA SELECT-A-TENNA (TUNES OVER 1000\* MILES AWAY)

Currently in use on Alaska's north slope where radio reception is very difficult. Has jack input & jack to which you attach 50 ft. of antenna wire (not included).

**\$24.95 Ppd.**  
STOCK NO. 72,147Q ONLY

\*Reception subject to local conditions

**GIANT FREE 164 PG. CATALOG**



4500 UNUSUAL BARGAINS FOR HOBBYISTS, SCHOOLS, INDUSTRY

**EDMUND SCIENTIFIC CO.**  
300 Edscorp Bldg.  
Barrington N.J. 08007  
America's Greatest Science • Optics • Hobby Center  
(609) 547-3488

### COMPLETE AND MAIL COUPON NOW

EDMUND SCIENTIFIC CO. 300 Edscorp Bldg., Barrington, N. J. 08007

AMERICAN EXPRESS     BANKAMERICARD     MASTER CHARGE  
 SEND FREE 164 PG. CATALOG "Q"

Charge my  American Exp.    Service and handling charge \$ \_\_\_\_\_ 1.00  
 BankAmericard  Master Chg.    Enclosed \$ \_\_\_\_\_ check,  
 Interbank No. \_\_\_\_\_    M.O. in amount of \_\_\_\_\_ \$  
 Card No. \_\_\_\_\_    Signature \_\_\_\_\_  
 Expiration Date \_\_\_\_\_    Name \_\_\_\_\_ Please Print  
 30-DAY MONEY-BACK GUARANTEE. You must be satisfied or return any purchase in 30 days for full refund.    Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_

HELPING TO DEVELOP AMERICA'S TECHNOLOGY FOR OVER 30 YEARS.

**McGraw-Hill DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS**  
Daniel N. Lapedes, Editor-in-Chief

1,634 pp. 8 1/2 x 11 \$39.50

The greatest one-volume compilation of scientific, engineering, and technical terms ever published

- Defines, clearly and concisely, nearly 100,000 terms from over 100 separate scientific disciplines
- Specifies the technology or technologies in which they are used
- Gives synonyms, acronyms, and abbreviations
- Shows symbols used in science and technology
- Lists chemical elements and elementary particles
- Presents SI unit system
- Includes abbreviations for scientific and technical organizations
- Fully cross-referenced
- 3,000 photos, drawings, diagrams, charts, maps, tables, etc.

Science News Box F Dorset, Vt. 05251

Remit in full + tax NOW and we will pay regular postage and handling.

Send \_\_\_\_\_ copies Dict. Sci. & Tech. Terms for 15 days' free exam., after which I'll either pay full price + local tax, postage & handling or return book(s) and owe nothing.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

### MURPHY'S LAWS!

Incomparable "scientific" wit. Colorfully lithographed on 8" x 10" heavy Parchtext for framing. A great business or personal gift! Only \$3 (4/\$10). Four Corners Press, Dept. USS, Hanover, Mass. 02339.

### METRIC SYSTEM

Are you prepared for the Metric System? Research Science has a comprehensive 2-page sheet of tables & conversions in an easy to use format. Convenient 8 1/2 x 11, 3-hole punched. Conversions to and from Metric include length, surface, volume, liquid, dry, weight, speed, & temperature measures. Printed on a remarkably tough, tear & water resistant paper substitute. Ideal for the office, lab, school, home, etc. Only \$1.98 plus \$.25 post & hdlg fees (FL residents add 4% sales tax). Send Check or Money Order to RESEARCH SCIENCE, PO Box 5779, Dept SN, Clearwater, FLA. 33518

PLEASE PRINT

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
ZIP \_\_\_\_\_  
(Large volume discounts available)