## **Books**

**Books** is an editorial service for readers' information. To order any book listed or any U.S. book in print please remit retail price, plus \$1.00 handling charge for each book, to **Science News Books**, 1719 N Street, NW, Washington, DC 20036. All books sent postpaid. Domestic orders only

These American Lands: Parks, Wilderness, and the Public Lands — Dyan Zaslowsky and The Wilderness Society. Public lands account for approximately one-third of the United States' land mass. This is a history of these lands, discussing the manifold problems that afflict them and setting forth management, expansion and preservation goals that The Wilderness Society believes necessary to maintain this precious resource. Holt, 1986, 404 p., illus., \$22.95.

**Annual Review of Biochemistry, Vol. 55** — Charles C. Richardson, Ed. The prefatory article is an autobiographical account of the life and research of Martin D. Kamen. Annual Reviews, 1986, 1294 p., illus., \$33.

Apprentice to Genius: The Making of a Scientific Dynasty — Robert Kanigel. "Science," says the author, "remains one field in which something like the traditional master-apprentice relationship still prevails." Kanigel here examines the role of mentoring in science and explores how creative genius is transferred by tracing four generations of eminent scientists who for over 40 years have made outstanding discoveries in pharmacology and neuroscience. The scientists in the this "genealogy" are Bernard Brodie, Julius Axelrod, Solomon Snyder and Candace Pert. Macmillan, 1986, 271 p., \$19.95.

Knotted Doughnuts and Other Mathematical Entertainments — Martin Gardner. Recreational mathematics to sharpen your mind drawn from Gardner's "Mathematical Games" column in SCIENTIFIC AMERICAN. Includes games, puzzles and brainteasers. W H Freeman, 1986, 278 p., illus., \$16.96, paper, \$10.95.

The Magic of Holography — Philip Heckman. A well-illustrated book for young people and adults that introduces holograms and tells about their amazing properties. A pioneering holographer is quoted in the preface as saying that "a hologram is a program that tells a beam of light what to do." The behavior of light is discussed. Tells how light makes a hologram and then, using the hologram, recreates an image identical to the original object. Surveys the jobs holograms do and their possible uses in the future. Atheneum, 1986, 287 p., illus., \$19.95

Make Your Own Working Paper Locomotive: A Cut-and-Assemble Model of a Miniature Steam Locomotive — Kyle Wickware. The model that can be created with this book is called a "steamless" steamer. It uses air pressure stored in a balloon in place of steam but is in all other respects, according to the introduction, a real steam locomotive. Har-Row, 1986, 53 p., illus., paper, \$8.95.

**The Mathematics Calendar 1987** — Theoni Pappas. This wall calendar includes a different mathematics problem for each day of the year; the solution to the problem is the date of the month on which it appears. Each month a new topic in mathematics is illustrated and discussed. World Wide/Tetra, 1986, calendar, \$6.95.

Thunderstones and Shooting Stars: The Meaning of Meteorites — Robert T. Dodd. Meteorites, the oldest rocks still extant, record the first steps in the history of the solar system; many were formed before earth was created. They carry to earth a record of the space environment. Huge meteorites have struck the earth in the past, and there is evidence that some of these bodies affected the evolution of life on the planet. This book, by a scientist who has studied meteorites for the last 20 years, summarizes what is known and thought about these ancient objects from space. Harvard U Pr, 1986, 196 p., illus., \$24.95.

Thursday's Universe — Marcia Bartusiak. Describes for the general reader the view of the universe that has emerged from the exciting new knowledge in astronomy and astrophysics, and traces the historical roots from which this new view came. Discusses such topics as stellar formation, black holes, quasars, the Big Bang and dark matter. Tells of the scientists working in this area, who, according to Bartusiak, are "intent on wresting the secrets of the heavens out of each photon of light and cosmic ray that happens to reach the Earth or a spaceborne detector." Times Bks, 1986, 306 p., illus., \$19.95.

Tilings and Patterns — Branko Grünbaum and G.C. Shepard. This book dealing with geometry is directed to students, mathematicians and nonmathematicians interested in patterns and shapes. The art of designing tilings and patterns is centuries old and well developed. However, the science of tilings and patterns — the study of their mathematical properties — is comparatively recent and is explored here. Sci Am Bks(WH Freeman), 1986, 700 p., illus., \$59.95.

# AUTOMATE MEASUREMENT ON YOUR IBM PC



New digitizing tablet with Sigma-Scan™ measurement software. \$1195

Cat #3011 - 12" x 12" system

Resolution of .025 mm, accuracy of at least .25 mm. Comes with state-of-the-art software for area, linear, perimeter, length of curvy line, and angular measurements. X, Y point or stream digitizing. Descriptive statistics. Transfer data to other programs in standard ASCII or DIF format.

Call or write today for more information.

#### JANDEL SCIENTIFIC

MICROCOMPUTER TOOLS FOR THE SCIENTIST 2656 Bridgeway, Sausalito, CA 94965 800-874-1888

(In Calif. call 415-331-3022)

# Seeds of Change

# Five plants that transformed mankind

### Henry Hobhouse

Five plants - quinine, sugar cane, tea, cotton and the potato - have in effect been responsible for changing the course of humanity, and Hobhouse's recounting of their histories presents a challenging new interpretation of the post-Renaissance world. Without quinine, for example, Asia and Africa would never have been opened up to imperial expansion. Sugar's history is a tragic one, involving untold human suffering in the slavery it brought about. Europeans' addiction to tea in the eighteenth century was ultimately responsible for the disruption of Chinese civilization. Cotton was the impetus for the eightfold increase in the slave population in the United States between 1784 and 1860. The Irish potato famine led not only to the subsequent Irish emigration to America but also to England's industrial decline. -from the book

Quinine • Potato •

Sugar Cane • Cotton • Tea

Harper & Row, 1986, 252 pages,  $9\frac{1}{2}$ " x  $6\frac{1}{4}$ ", hardcover, \$18.95

Science News Books 1719 N St., NW, Washington, DC 20036	
Please send copy(ies) of Seed Change.I include a check payable to Sci News Books for \$18.95 plus \$1.00 hand (total \$19.95) for each copy. Domestic or only.	ence dling
Name	
Address	
City	
StateZipi	RB 606

SCIENCE NEWS, VOL. 130