

guing this or that in social insect evolution. In fact, the book is worth buying just for these exhaustive tables.

Overall, then, the book is a tour through the genetic intrigues of social insect life. Readers interested in hard facts will find examples from all the social insects, including not only ants, bees, and wasps but also thrips, termites, and bark beetles. Readers interested in theory will find a guide to relevant models. Readers will come to appreciate how social evolution progresses; which type of insect society can be realized, and which not, by the power of natural selection; whether any such society can be totally free of conflicts or whether the respective interests of workers and queens always remain partially incongruent; and what would happen if social Hymenoptera ever evolved tax laws. For, in the parliament of the hive, workers lobby that drones should be taxed more and females less; while the queen lobbies that drones be taxed like females. The logic behind this may seem as strange as the bickering between Republicans and Democrats (all of them diploids, I think) but undoubtedly is natural to haplodiploid organisms like ants, bees, and wasps.

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Also Noteworthy

Ship Fever and Other Stories. ANDREA BARRETT. Norton, New York, 1996. 255 pp. \$21 or C\$27.99; paper, \$12.

Books about science are rarely considered for literary awards, but this year the wall has been partially breached with the bestowal of the National Book Award for fiction on this collection of short stories with (in the words of the author) "love of science" as a principal theme. Two of the eight stories in the book have 18th-century settings: "The English Pupil" recounts a visit of the elderly and mentally failing Linnaeus to his country retreat, and in "The Rare Bird" an intellectually lonely and unappreciated Englishwoman finds a kindred spirit with whom she puts to an empirical test (and refutes) an idea about the wintering of swallows dogmatically defended by Linnaeus. The title story, about a typhus epidemic among Irish immigrants to Canada in the 19th century, records some of the uncertainties of the time about the transmission

of the disease, another story of that period deals with a would-be naturalist à la Alfred Russel Wallace, and an account of Darwin's travels is embedded in a story that the widow of a pharmaceutical executive. These historical recountings are not entirely free of an air of didacticism, and to this reader the most graceful stories in the book are two set in the present day: In "The Behavior of the Hawkweeds" a geneticist's wife recalls her horticultural grandfather, who knew Mendel, and "The Littoral Zone" portrays a couple making the best of a costly marriage that had its origins in a marine biology summer course. Present-day science also figures, though not dominantly, in the remaining story in the book, in which the main characters are two sisters who shared a youthful love of biochemistry. These are three of the stories in which the author's other stated concern, "the science of love," is most fully developed.

Katherine Livingston

Books Received

André-Marie Ampère. James R. Hofmann. Cambridge University Press, New York, 1996. xiv, 406 pp., illus. \$49.95. Cambridge Science Biographies. Reprint, 1995 ed.

Bacterial Adhesion. Molecular and Ecological Diversity. Madilyn Fletcher, Ed. Wiley-Liss, New York, 1996. xii, 361 pp., illus. \$95. Wiley Series in Ecological and Applied Microbiology.

Chemical Evolution. Physics of the Origin and Evolution of Life. Julian Chela-Flores and François Raulin, Eds. Kluwer, Norwell, MA, 1996. xiv, 413 pp., illus. \$190 or £130 or Dfl. 295. From a conference, Trieste, Italy, Sept. 1995.

Climatic Variation in Earth History. Eric J. Barron. University Science, Sausalito, CA, 1996. xv, 25 pp., illus. Paper, \$17.50. Global Change Instruction Program.

Coulomb Interactions in Nuclear and Atomic Few-Body Collisions. Frank S. Levin and David A. Micha, Eds. Plenum, New York, 1996. xvi, 347 pp., illus. \$89.50. Finite Systems and Multiparticle Dynamics.

Cytochrome P450. Part B. Eric F. Johnson and Michael R. Waterman, Eds. Academic Press, San Diego, 1996. xxxii, 468 pp., illus. \$79. Methods in Enzymology, vol. 272.

Dental Anthropology. Simon Hillson. Cambridge University Press, New York, 1996. xvi, 373 pp., illus. \$64.95; paper, \$29.95.

Ecosystem Management in the United States. An Assessment of Current Experience. Steven L. Yaffee et al. Island Press, Washington, DC, 1996. xx, 352 pp. Paper, \$30. A collaborative effort of the University of Michigan and The Wilderness Society.

The Evolution of Modern Human Diversity. A Study of Cranial Variation. Marta Mirazón Lahr. Cambridge University Press, New York, 1996. xvi, 416 pp., illus. \$74.95. Cambridge Studies in Biological Anthropology, 18.

Experiments and Observations on the Gastric Juice and the Physiology of Digestion. William Beaumont. Dover, New York, 1996. xl, 280 pp., illus. Paper, \$10.95. Reprint, 1833 ed.

Foundations of Animal Behavior. Classic Papers with Commentaries. Lynne D. Houck and Lee C. Drickamer, Eds. Published in association with the Animal Behavior Society by University of Chicago Press, Chicago, 1996. xvi, 843 pp., illus. \$95 or £75.95; paper, \$34.95 or £27.95.

Geoscience Education and Training. In Schools and Universities, for Industry and Public Awareness. Dor-

rik A. V. Stow and G. J. H. McCall, Eds. Balkema, Brookfield, VT, 1996. xx, 855 pp., illus. Hfl. 150. AGID Special Publication, no. 19. Based on a conference, Southampton, UK, April 1993.

The Harmonic Oscillator in Modern Physics. Marcos Moshinsky and Yuri F. Smirnov. Harwood, Langhorne, PA, 1996 (distributor, International Publishers Distributor, Brooklyn, NY). xx, 414 pp., illus. \$85 or £51 or ECU 65; paper, \$37 or £22 or ECU 28. Contemporary Concepts in Physics, vol. 9.

An Introduction to Composite Materials. D. Hull and T. W. Clyne. 2nd ed. Cambridge University Press, New York, 1996. xvi, 326 pp., illus. \$90; paper, \$34.95. Cambridge Solid State Science.

Introduction to Physical Oceanography. John A. Knauss. 2nd ed. Prentice Hall, Englewood Cliffs, NJ, 1996. x, 309 pp., illus. \$68.

Lemaître, Big Bang and the Quantum Universe. With His Original Manuscript. Michael Heller. Pachart, Tucson, AZ, 1996. 108 pp., illus. Paper, \$37. Pachart History of Astronomy, vol. 10.

Membrane Protein Models. J. B. C. Findlay, Ed. Bios Scientific, Oxford, UK, 1996 (U.S. distributor, Books International, Herndon, VA). xvi, 213 pp., illus. \$110 or £55.

The Myth of the Framework. In Defence of Science and Rationality. Karl R. Popper. Edited by M. A. Nottur. Routledge, New York, 1996. xiv, 230 pp. Paper, \$16.95 or C\$23.95. Reprint, 1994 ed.

Nonmammalian Genomic Analysis. A Practical Guide. Bruce Birren and Eric Lai, Eds. Academic Press, San Diego, 1996. xiv, 353 pp., illus. Spiralbound, \$39.95.

The Ocean Basins and Margins. Vol. 8, The Tethys Ocean. Alan E. M. Nairn et al., Eds. Plenum, New York, 1996. xxii, 530 pp., illus. \$125.

Patterns in Evolution. The New Molecular View. Roger Lewin. Scientific American Library (HPHLP), New York, 1996 (distributor, Freeman, New York). x, 246 pp., illus. \$32.95. No. 62.

Pollution Prevention and Waste Minimization in Laboratories. Peter A. Reinhardt, K. Leigh Leonard, and Peter C. Ashbrook, Eds. Lewis (CRC), Boca Raton, FL, 1996. xx, 480 pp., illus. \$74.95.

Prairie Conservation. Preserving North America's Most Endangered Ecosystem. Fred B. Samson and Fritz L. Knopf, Eds. Island Press, Washington, DC, 1996. xii, 340 pp., illus. \$50; paper, \$28.

Principles for Evaluating Epidemiologic Data in Regulatory Risk Assessment. Federal Focus, Washington, DC, 1996. iv, 124 pp. Paper, \$15. Based on a conference, London, Oct. 1995.

Prisoners of the Crystal Palace. Mapping and Understanding the Social and Cognitive Organization of Scientific Research Fields. Peter Stern. Boréa Bokförlag, Umeå, Sweden, 1996. 223 pp., illus. Paper, \$29 or 205 SEK or £18.50.

Quantum Groups in Two-Dimensional Physics. César Gómez, Martí Ruiz-Altaba, and Germán Sierra. Cambridge University Press, New York, 1996. xviii, 457 pp., illus. \$110. Cambridge Monographs on Mathematical Physics.

The Recovered Memory/False Memory Debate. Kathy Pezdek and William P. Banks, Eds. Academic Press, San Diego, 1996. xvi, 394 pp., illus. \$54.95.

Science, Technology and the British Industrial "Decline," 1870-1970. David Edgerton. Cambridge University Press, New York, 1996. viii, 88 pp., illus. \$29.95; paper, \$9.95. New Studies in Economic and Social History.

Stereoselective Synthesis. Günther Helmchen et al., Eds. Workbench edition. Thieme, Stuttgart, 1996. 10 vols. xcii, 6989 pp. Paper, DM 3.600. Houben-Weyl, E21.

Supplying the Nuclear Arsenal. American Production Reactors, 1942-1992. Rodney P. Carlisle, with Joan M. Zenzen. Johns Hopkins University Press, Baltimore, 1996. xvi, 275 pp., illus. \$48.

Technologies for Detection of DNA Damage and Mutations. Gerd P. Pfeiffer, Ed. Plenum, New York, 1996. xxvi, 441 pp., illus. \$95.

Van der Waals and Molecular Science. A. Ya. Kipnis, B. E. Yavelov, and J. S. Rowlinson. Clarendon (Oxford University Press), New York, 1996. x, 313 pp., illus., + plates. \$105.

The Yeast Proteome Handbook. Proteome, Beverly, MA, 1996. vi, 468 pp. Spiralbound, \$80.