LETTERS
Macromutation Conference: D. J. Futuyma et al.; A. R. Templeton and
L. V. Giddings; H. L. Carson; E. C. Olson; J. E. Armstrong and
B. A. Drummond; Lasers in Space: M. B. Callahan; B. Bova

EDITORIAL
Laboratory Safety

ARTICLES
Prudent Practices for Handling Hazardous Chemicals in Laboratories:
B. C. McKusick


The Judiciary: What Role in Health Improvement? D. L. Bazelon

NEWS AND COMMENT
Cabinet Split on Merits of Grain Embargo

EPA and Industry Pursue Regulatory Options

Prior Restraints Recommended

Briefing: Science Subcommittees Get New Chairmen; Air Academy
Drops Ban on Sickle Carriers; Budget Cutters Clip Away at Science;
Academy Hosts Meeting on Conservation of Monuments

Institute Loses Bid for Hughes’s Billions

The Tradition of Hughes Medical: Support of Superior Research

RESEARCH NEWS
Matter, matter everywhere

Ethiopian Stone Tools Are World’s Oldest

Prediction of Huge Peruvian Quakes Quashed

BOOK REVIEWS
The Evolutionary Synthesis, reviewed by M. Ruse; Plasticity of Muscle,
M. Bárány; Enzymatic Basis of Detoxication, F. P. Guengerich;
Comparative Biology and Evolutionary Relationships of Tree Shrews,
R. Martin; Lower Wenlock Faunal and Floral Dynamics, R. J. Ross, Jr.;
Books Received
REPORTEs

Airborne Studies of the Emissions from the Volcanic Eruptions of Mount St. Helens: P. V. Hobbs et al. ................................. 816
Trajectories of the Mount St. Helens Eruption Plume: E. F. Danielsen ............................................ 819
Gaseous Constituents in the Plume from Eruptions of Mount St. Helens: E. C. Y. Inn et al. ............................................. 821
Changes in Stratospheric Water Vapor Associated with the Mount St. Helens Eruption: D. G. Muccray et al. .................................................. 823
Measurements of Cloud Condensation Nuclei in the Stratosphere Around the Plume of Mount St. Helens: C. F. Rogers, J. G. Hudson, W. C. Kocmond . 824
Filter Measurements of Stratospheric Sulfate and Chloride in the Eruption Plume of Mount St. Helens: B. W. Gandrud and A. L. Lazrus ........................................... 826
Trace Element Composition of the Mount St. Helens Plume: Stratospheric Samples from the 18 May Eruption: T. Vossler et al. ............................................. 827
Size Distributions and Mineralogy of Ash Particles in the Stratosphere from Eruptions of Mount St. Helens: N. H. Farlow et al. .... 832
Absorption of Visible Radiation by Aerosols in the Volcanic Plume of Mount St. Helens: J. A. Ogren et al. ................................................. 834
Measurements of the Imaginary Part of the Refractive Index Between 300 and 700 Nanometers for Mount St. Helens Ash: E. M. Patterson .................. 836
Marine Macrophytes as a Global Carbon Sink: S. V. Smith ................................................................. 838
Fate and Transport of Dieldrin in Coralville Reservoir: Residues in Fish and Water Following a Pesticide Ban: J. L. Schnoor ..................... 840
Protein Antigens from Staphylococcus aureus Strains Associated with Toxic-Shock Syndrome: M. L. Cohen and S. Falkow .......... 842
Exercise Hyperpnea and Locomotion: Parallel Activation from the Hypothalamus: F. L. Eldridge, D. E. Millhorn, T. G. Waldrop .... 844

COVER

Graphic representation of large-scale fluctuations in the ocean and atmosphere referred to as El Niño. The event is characterized by excessively warm ocean water (fourth panel) off the coast of Peru (second panel). During El Niño warm water accumulation is excessive, upwelling ceases completely, and large anchovy fishery (bottom panel) almost ceases. Coastal birds (middle panel), which depend on fish for food, die in large numbers. This natural catastrophe is linked to large-scale variations in the tropical atmosphere (upper panel). See Science, 2 January, page 22. [Design by W. C. Patzert, Scripps Institution of Oceanography, La Jolla, and Calvin Woo, HUMAN-GRAPHIC, San Diego.]