LETTERS
Berkeley Audit: J. G. Maslach; Isabelle: Request for Funds: M. S. Lubell; NIH Funding: J. S. Youngner and K. I. Berns; Hybridoma Technology: J. Schwartz; The Potassium Effect: G. Tassey; Omitted Data: H. Schumann and J. J. Zuckerman; Asteroid Results: D. P. Cruikshank; J. Gradie

EDITORIAL
Role of Professional Societies in Development: J. T. Ratchford

ARTICLES
Ion Beam Spectroscopy of Solids and Surfaces: B. J. Garrison and N. Winograd
Form and Function of Retroviral Proviruses: H. E. Varmus
Amazon Basin Soils: Management for Continuous Crop Production: P. A. Sanchez et al.

NEWS AND COMMENT
An Alternative to the MX

Briefing: Livermore Wins Laser Battle; Union Carbide Quits Oak Ridge After 40 Years; Samios Named Director of Brookhaven; U.S. Votes Against Law of the Sea Treaty; Medical Data Bank: A Security Risk

Why SUM Didn’t Add Up

Statistics Suffering Under Reagan

French Reforming Higher Education—Again

RESEARCH NEWS
CERN Resets Particle Hunt to October

A Hole in the Milky Way

How Did Humans Evolve Big Brains?

BOOK REVIEWS
A Synthetic History of Biology: D. J. Futuyma

The Work of Dobzhansky: J. H. Gillespie

Products of a Centennial: J. L. Heilbron; other review by A. Thackray

Science Establishing Itself: A. E. Moyer; other reviews by R. W. Seidel, C. S. Gillmor, A. F. C. Wallace

A Third Look at Middletown: G. H. Elder, Jr.
Population Patterns: A Reconstruction: D. S. Smith ........................................ 857
Economic Models Under Challenge: M. N. Baily .................................................. 859
The Book Industry: H. C. Morton ........................................................................... 862
Questions of Ability: L. R. Aiken; other review by C. B. Cazden .............................. 863
Psychology Applied to Law: S. Macaulay ............................................................... 866
Political Developments in Prehistory: G. A. Johnson; other reviews by G. Urton, M. D. Coe, M. M. Goodman .......................................................... 867
Cladistics in Action: W. L. Fink ............................................................................... 872
Adaptive Syndromes: R. S. Hoffmann; other reviews by T. J. Walker, W. G. Eberhard, R. R. Hoy, F. C. MacIntosh ............................................................... 873
A Harnessing of Electrons: A. Howie; other reviews by L. M. Brown, W. J. Marciano .......................................................... 878
New Instruments for Exploration: D. Morrison; other reviews by W. K. Hartmann, W. F. Ruddiman, K. Burke .............................................................. 881
Books Received ....................................................................................................... 884
Books Reviewed in Science ..................................................................................... 902

REPORTS
Evidence for a Major Meteorite Impact on the Earth 34 Million Years Ago:
Implication for Eocene Extinctions: R. Ganapathy .................................................... 885
Iridium Anomaly Approximately Synchronous with Terminal Eocene Extinctions:
W. Alvarez et al. ........................................................................................................ 886
Suicide Transport: Destruction of Neurons by Retrograde Transport of Ricin,
Abrin, and Modeccin: R. G. Wiley, W. W. Blessing, D. J. Reis ..................................... 889
Neurons in the Rat Dentate Gyrus Granular Layer Substantially Increase During
Juvenile and Adult Life: S. A. Bayer, J. W. Yackel, P. S. Furi ..................................... 890
Cytoemegolovirus Antibody in Cerebrospinal Fluid of Schizophrenic Patients
Detected by Enzyme Immunoassay: E. F. Torrey, R. H. Yolken, C. J. Winfrey ...................... 892
Transformation Induced by Abelson Murine Leukemia Virus Involves Production
of a Polypeptide Growth Factor: D. R. Twardzik et al. ................................................. 894
Nerve Fiber Growth on Defined Hydrogel Substrates: S. T. Carbonetto,
M. M. Graver, D. C. Turner ....................................................................................... 897
Anticonvulsant Action of Excitatory Amino Acid Antagonists: M. J. Croucher,
J. F. Collins, B. S. Meldrum ...................................................................................... 899

COVER
Patent drawing of Robert Fulton's steamboat. "Before Fulton applied for his first patent in 1809, he had turned over machine drawing to others, but they worked very closely under his supervision. . . . This view of the Steam Boat was probably an accurate view of the rebuilt boat that had made the 1807 trip to Albany, by now already being called the Clermont." [American Society of Mechanical Engineers; reprinted in part in Emulation and Invention, reviewed on page 853]