LETTERS  Nuclear Arms Buildup: G. Alcaino and W. Liller; ACDA Staffing: H. F. Cooper, Jr.; Supplemental Teachers of Science and Mathematics; J. C. Stanley and W. G. Durden; F. J. Rutherford

EDITORIAL  Large-Scale Extinctions

ARTICLES  The Developing Technology of Gas Separating Membranes: J. M. S. Henis and M. K. Tripodi

Radiation Exposures in Utah from Nevada Nuclear Tests: H. L. Beck and P. W. Krey

Retrieval of Information from Long-Term Memory: J. R. Anderson

NEWS AND COMMENT  Coping with Fraud: The Darsee Case

Wastes Seep Round the Law

White House Names New EPA Chief

Revisions in Cancer Policy

Briefing: Hit Lists Claim a Victim at EPA; Burford Ignored Advice on DOE Reactor; Industry Sets Conditions for Funding Clinch River

RESEARCH NEWS  The Race to Predict Next Week's Weather

Plants' Resistance to Herbicide Pinpointed

IBM Images Surfaces by Electron Tunneling

ANNUAL MEETING  Preconvention Program; Schedule of Contributed Papers; Meeting Information; Map of Downtown Detroit; Tours; AAAS Science Film Festival; Travel Information; Advance Registration and Hotel Reservation Forms
BOOK REVIEWS

The Separation of Madagascar and Africa: P. D. Rabinowitz, M. F. Coffin, D. Falvey ................................................................. 67

Fragile Sites in Chromosomes: Possible Model for the Study of Spontaneous Chromosome Breakage: P. B. Jacky, B. Beek, G. R. Sutherland .................. 69

Myoglobin Diffusion in Bovine Heart Muscle: D. J. Livingston, G. N. La Mar, W. D. Brown ......................................................... 71

Blood Cell Surface Changes in Drosophila Mutants with Melanotic Tumors: T. M. Rizki and R. M. Rizki ........................................... 73

Plant Chimeras Used to Establish de novo Origin of Shoots: R. Norris, R. H. Smith, K. C. Vaughn ....................................................... 75

Insulin-Like Growth Factors: A Role in Growth Hormone Negative Feedback and Body Weight Regulation via Brain: G. S. Tannenbaum, H. J. Guyda, B. I. Fosner ....................................................... 77

Trypsin Inhibition by Tapeworms: Antienzyme Secretion or pH Adjustment?: G. L. Uglom and J. J. Just ............................................ 79

Normalization of Depressed Heart Function in Rats by Ribose: H.-G. Zimmer . 81

Adenylate Cyclase Activation Shifts the Phase of a Circadian Pacemaker: A. Eskin and J. S. Takahashi ................................................. 82

Bidirectional Transmission at the Rectifying Electrotonic Synapse:
A Voltage-Dependent Process: C. Giaume and H. Korn .................................................. 84

Mechanical Action of the Intercostal Muscles on the Ribs: A. De Troyer, S. Kelly, W. A. Zin ............................................................. 87

Tumor Promotion by Phorbol Esters in Skin: Evidence for a Memory Effect:
G. Fürstenberger, B. Sorg, F. Marks .................................................. 89

Morphological Basis of Long-Term Habituation and Sensitization in Aplysia:
C. H. Bailey and M. Chen ................................................................. 91

Selection, Outbreeding Depression, and the Sex Ratio of Scale Insects:
D. N. Alstad and G. F. Edmunds, Jr. .................................................. 93

Early Morning Insomnia with Rapidly Eliminated Benzodiazepines:
A. Kales et al. ......................................................................................... 95

Shadows of Thought: Shifting Lateralization of Human Brain Electrical Patterns During Brief Visuomotor Task: A. S. Gevins et al. ..................... 97

A Functional Role for an Opiate System in Snail Thermal Behavior:
M. Kavaliers, M. Hirst, G. C. Teskey .................................................. 99

Mechanical Measurement of Red Cell Membrane Thickness:
R. M. Hochmuth et al. .......................................................................... 101

REPORTS

A History of Platinum and Its Allied Metals, R. P. Multhauf; Proceedings of the Seventeenth Rencontre de Moriond, G. Kane; Substance P in the Nervous System, L. Jan; Books Received .......................................................... 62

Counter

The Counter Black is a two-counter example that is used in the study of

American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to promote the understanding and appreciation of the importance and promise of the methods of science in human progress.

COVER

Artist's conception of Renaissance Center, Detroit, Michigan, site of the AAAS Annual Meeting, 26-31 May 1983. See page 45 for information about the program. [Steve Shepherd, Gaithersburg, Maryland]
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**  Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/220/4592

**Permissions**  Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl