LETTERS

EDITORIAL
AAAS: Retrospect and Prospect: W. Bevan

ARTICLES
The Long Search for Stable Transition Metal Alkyls: G. Wilkinson
Physicochemical Correlates of Olfactory Quality: S. S. Schiffman
Prehistoric Intensive Agriculture in the Mayan Lowlands: B. L. Turner II

NEWS AND COMMENT
Watergate: 1972 Campaigners Tried to Use R & D Agencies
Oil and Gas Resources: Did USGS Gush Too High?
Beagles: Army under Attack for Research at Edgewood

RESEARCH NEWS
Mercury: More Surprises in the Second Assessment
Nitrogen Fixation: Research Efforts Intensify
Human Biogeography: Similarities between Man and Beast
BOOK REVIEWS

Toward a Political Sociology of Science, reviewed by N. W. Storer; Comparative Vertebrate Morphology and Analysis of Vertebrate Structure, C. Gans; Taxonomy and Ecology, R. C. Rollins; Books Received

REPORTS

Mariner 10 Mercury Encounter: J. A. Dunne

Preliminary Infrared Radiometry of the Night Side of Mercury from Mariner 10: S. C. Chase et al.

Observations at Mercury Encounter by the Plasma Science Experiment on Mariner 10: K. W. Ogilvie et al.

Magnetic Field Observations near Mercury: Preliminary Results from Mariner 10: N. F. Ness et al.

Electrons and Protons Accelerated in Mercury's Magnetic Field: J. A. Simpson et al.

Mercury's Atmosphere from Mariner 10: Preliminary Results: A. L. Broadfoot et al.

Mercury's Surface: Preliminary Description and Interpretation from Mariner 10 Pictures: B. C. Murray et al.

Mercury: Results on Mass, Radius, Ionosphere, and Atmosphere from Mariner 10 Dual-Frequency Radio Signals: H. T. Howard et al.

Motor Pattern Production in Reciprocally Inhibitory Neurons Exhibiting Postinhibitory Rebound: D. H. Perkel and B. Mulloney

Brain Catechol Synthesis: Control by Brain Tyrosine Concentration: R. J. Wurtman et al.

PRODUCTS AND MATERIALS

Recording Titration System; Enzymes; Animal Activity Monitor; Literature

COVER

The semicircle of cratered mountains in the left half of this processed photomosaic form the boundary for the largest basin on Mercury seen by Mariner 10. The basin is provisionally named “Caloris” or “hot” basin for its position near one of the subsolar points when Mercury is at perihelion. The ring of mountains is 1300 kilometers in diameter and up to 2 kilometers high; the basin floor consists of intensely fractured and ridged plains. The photomosaic was compiled by personnel at the Jet Propulsion Laboratory and the U.S. Geological Survey in Flagstaff. See page 169.