LETTERS


EDITORIAL

A Prodigious Inventory-Taking

ARTICLES

The Challenge of Chromospheric Physics: R. G. Athay

Chromospheric plasma reveals complex interactions of magnetic, hydrodynamic, radiative, and thermal fields.

Microscopic Brains: V. G. Dethier

The behavior of insects and vertebrates may not differ qualitatively to the extent that had been supposed.

Science Policy Shapes Up as Issue in Coming British Election: J. Maddox

Dissatisfaction with economic position causes major parties to pledge greater emphasis on research.

NEWS AND COMMENT

Basic and Applied Research—Congressional Preferences: California—As Aerospace Goes: Project Plowshare—The Test Ban and the Peaceful Atom

BOOK REVIEWS

Scientists and National Policy: R. N. Kreidler

Introduction to Geological Microbiology, reviewed by S. C. Rittenberg; other reviews by J. F. Maddux, G. W. Hewes, T. Rogers, M. Lindsay, S. C. Brown, B. W. Sitterley, M. L. Corrin

REPORTS

Petrology of Venus: Further Deductions: L. S. Walter

Xenon Tetroxide: Mass Spectrum: J. L. Huston, M. H. Studier, E. N. Sloth

Computer Program for Printing Undeformed Fourier Maps: J. D. H. Donnay and H. Takeda

Natural Carbon-14 Activity of Organic Substances in Streams: A. A. Rosen and M. Rubin

Explosive Welding with Nitroguanidine: L. D. Sadwin
Overlap of Photoreactivation and Liquid Holding Recovery in *Escherichia coli* B:  
A. Castellani, J. Jagger, R. B. Setlow

Pleistocene Wood Rat Middens and Climatic Change in Mohave Desert: A Record of Juniper Woodlands; P. V. Wells and C. D. Jorgensen

Amino Acid Code in *Alcaligenes faecalis*: J. J. Protass, J. F. Speyer, P. Lengyel


Separation of Microsomal RNA into Five Bands during Agar Electrophoresis:  
R. Bachvaroff and P. R. B. McMaster

First Linkage of a Species Antigen in the Genus *Streptopelia*: W. J. Miller

Pollen Wettability as a Factor in Washout by Raindrops: J. E. McDonald


Nocturnal Changes in Oxidative Activities of Rat Liver Mitochondria:  
J. L. Glick and W. D. Cohen

Following and Imprinting: Effects of Light and Social Experience:  
J. M. Polt and E. H. Hess

Early Arousal and Imprinting in Chicks: W. R. Thompson and R. A. Dubanoski

Inheritance of Avoidance Conditioning in Mice: A Diallel Study: R. L. Collins

Pupil Size in Relation to Mental Activity during Simple Problem Solving:  
E. H. Hess and J. M. Polt

Pursuit Eye Movements in the Absence of a Moving Visual Stimulus: G. H. Deckert

Luminous Figures: Influence of Point of Fixation on Their Disappearance: J. T. Hart

Home Movies of Early Childhood: Correlative Developmental Data in the Psychoanalysis of Adults: H. M. Serota

**MEETINGS**

Polar Geology: A. Mirsky; The Ionosphere and Radio Propagation in the Lower Frequencies: T. N. Gautier; Bioastronautics: W. C. Kaufman

Gordon Research Conferences Program for 1964: W. G. Parks

Forthcoming Events

**ASSOCIATION AFFAIRS**

New Affiliates: Division of Chemical Literature of the American Chemical Society, American Fisheries Society, Medical Library Association

New Products

**COVER**

The solar chromosphere projected against the sun in the monochromatic light of the red hydrogen line at 6563 angstroms. This picture, taken at Mount Wilson Observatory, shows clearly the fine-scale structures of the chromosphere. These structures are becoming increasingly important in the interpretation of chromospheric phenomena. The elongated dark filaments and the bright plages near sunspots are familiar features of solar activity. See page 1127. [R. B. Leighton, California Institute of Technology]