Editorial

A Machineless Teaching Machine ........................................... 531

Articles

Molecular Basis for Action of Ionizing Radiations: F. Hutchinson ............. 533
A simple method describes the inactivation by ionizing radiations of
molecules in the living cell.

Report on Russia: Geochemistry and Politics: K. B. Krauskopf ................. 539
Soviet geologists are busy with a host of projects, but in their off-hours
they enjoy talking politics.

Science and the News

Grand Strategy: The Views of the Administration and the War College Do Not
Seem To Coincide ........................................................................ 543

Book Reviews

The "Two Cultures" within Biology: G. Hardin .................................. 548
The Virus Laboratory makes a notable effort to contact biologists
and laymen outside the walls.

J. Rostand's Human Heredity, reviewed by V. A. McKusick; other reviews .... 549

Reports

Natural Tritium Measurements by Ethane Counting: A. E. Bainbridge,
P. Sandoval, H. E. Suess ......................................................... 552

"Hypersexuality" in Male Cats without Brain Damage: R. P. Michael .......... 553

Spontaneous Occurrence of Chromosome Abnormality in Cats:
H. C. Thuline and D. E. Norby ............................................. 554

Simian Malaria in the Philippines: L. M. Howard and B. D. Cabrera .......... 555

Effect of Actinomycin D on Cellular Nucleic Acid Synthesis and Virus Production:
E. Reich et al. ........................................................................ 556

Rapid Development of Drug-Resistant Mutants of Poliovirus:
J. L. Melnick, D. Crowther, J. Barrera-Oro ................................... 557

Antiviral Effect of Guanidine: W. A. Rightsel et al. ............................ 558

Foliar Retention of Strontium-90 by Wheat: R. G. Menzel, D. L. Myhre,
H. Roberts, Jr. ....................................................................... 559

Single Unit Activity of Anterior Hypothalamus during Local Heating:
T. Nakayama, J. S. Eisenman, J. D. Hardy .................................. 560

Authigenic Dolomite in Modern Carbonate Sediments along the Southern Coast
of Florida: W. H. Taft ................................................................ 561

Mass Culture of Phytoplankton as Foods for Metazoans: H. C. Davis and R. Ukeles .. 562

Blood Flow Measured by Doppler Frequency Shift of Back-Scattered Ultrasound:
D. L. Franklin, W. Schlegel, R. F. Rushmer ................................ 564

Eastern Equine Encephalomyelitis Vaccine Prepared in Cell Cultures:
J. P. Lowenthal, S. Berman, E. W. Grogan .................................. 565

Calcification of the Permanent First Mandibular Molar in Rhesus Monkeys:
D. R. Swindler ....................................................................... 566

Departments

Letters from L. Burton and F. Friedman; J. R. Pierce; A. B. Lees and
H. H. Goldstine; N. B. Cothup and W. M. Sinton ............................ 527

International Andean Year; Forthcoming Events; New Products ............. 568

Cover

Leaf of the unusual Darlingtonia californica, or western pitcher plant, a native of
northern California and adjacent Oregon. Like other carnivorous plants of this group,
the tubular base constitutes a liquid-filled trap; at the top the leaf is strikingly translucent.
The general resemblance to a snake's head has suggested another common name—cobra
plant. [W. H. Hodge, Kennett Square, Pa.]