Editorial
Contributors Can Contribute Too

Articles
The Light of the Atom Bomb: C. P. Butler
In brightness, a nuclear detonation is comparable to the sun.

Human Water Needs and Water Use in America: C. C. Bradley
A permanent water shortage affecting our standard of living will occur before the year 2000.

The Ocean Bottom: R. M. Pratt

Instructions for Contributors: The Editors of Science

News and Comment
Nobel Award—Genetic Code . . Penguins and Politics

Book Reviews
Technical Progress, Social Structure, and Personality: N. J. Smelser
Advances in Comparative Physiology and Biochemistry, reviewed by C. L. Prosser

Reports
Malic Dehydrogenases in Sea Urchin Eggs: R. O. Moore and C. A. Villee
Lactic and Malic Dehydrogenases in Human Fetal Tissues: B. Wiggert and C. A. Villee
A Protein Present in Fetal But Not in Maternal Rat Serum: P. C. Kelleher and C. A. Villee
Secretion of Benzaldehyde and Hydrogen Cyanide by the Millipede Pachydesmus crassicuitalis (Wood): M. S. Blum and J. P. Woodring
Marrow Chimerism in Marmosets: K. Benirschke, J. M. Anderson, L. E. Brownhill
Ribonucleotides of RNA: Separation by Chromatography on Sheets of Diethylaminoethylcellulose: K. B. Jacobson
Force of Response during Ratio Reinforcement: D. E. Mintz
Sarcoma 180 Inhibition by Combinations of 6-Thioguanine and Uracil Mustard: B. A. Booth and A. C. Sartorelli
Maintenance of Globulin Levels in X-irradiated Rabbits after Immunization: M. B. Rittenberg and E. L. Nelson
Four-Electrode Method for Measuring the Direct-Current Resistivity of Ice: G. W. Gross
Natural Occurrence of Amino Acids in Virgin Crocidolite Asbestos and Banded Ironstone: J. S. Harington
Impedance to Water Movement in Soil and Plant: W. R. Gardner and C. F. Ehlig
Angiotensin II: Its Metabolic Fate: P. A. Khairallah et al.
Relation of Infrared Spectra to Coordination in Quartz and Two High-Pressure Polymorphs of Silicon Dioxide: C. B. Sclar, L. C. Carrison, C. M. Schwartz
Pollin Sequence at Kirchner Marsh, Minnesota: T. C. Winter
Inhibition of Antigen-Antibody Reactions by Aminocarboxylic Acids: W. A. Atchley and N. V. Bhagavan
Fallout Radionuclides in Euphausiids: C. Osterberg
RNA: A Marker in Embryonic Differentiation: L. Gluck and M. V. Kulovich
Amino Acids in Deep-Sea Water: K. Park et al.
Water Relations of Plant Communities as a Management Factor for Western Watersheds: J. P. Decker

Departments
Letters from K. D. Ansevin and W. B. Webb; D. K. Price; D. A. Holm and G. F. Jordan
Meetings: Muscle Contraction; Acarology; Treatment of Irradiated Primates; Forthcoming Events
New Products

Cover
Frames from a motion picture film showing an effect of the light from an atomic fireball at Eniwetok. Roosting birds, awakened by the light, took to the air. The feathers of black birds were ignited, and the birds fell to the ground (see trails in the two pictures at the bottom). White-feathered birds remained airborne. See page 483.