Editorial
Where Shall We Meet? .................................................. 575

Articles
Architecture of the Human Lung: E. R. Weibel and D. M. Gomez .... 577
Use of quantitative methods establishes fundamental relations between
size and number of lung structures.

Evolution of Intelligence and Vocal Mimicking: R. J. Andrew .... 585
Studies of large-brained mammals promise to elucidate some problems of
human evolution.

News and Comment
Soviet SpaceFeat: Repercussions in the United States ................. 590

Book Reviews
J. R. Partington’s A History of Chemistry, reviewed by L. Pearce Williams;
other reviews ......................................................... 594

Reports
Possible Virus-Induced Genetic Abnormalities in Tree Fruits: G. Nyland 598
Determination of the Mixing Ratios of Water Vapor and Carbon Dioxide in the
Stratosphere: S. F. Rohrbough ........................................ 599
Neuroepithelial Component of the Urethra and Urogenital Junction of the Rat:
P. L. Risley and C. N. Skrepotos ...................................... 600
Eye Movement during Active and Passive Dreams: R. J. Berger and I. Oswald 601
Antarctic Peninsula Traverse: J. C. Behrendt and P. E. Parks, Jr. .... 601
Action Spectrum for Developmental Photo-Induction of the Blue-Green Alga Nostoc
muscorum: N. Lazaroff and J. Schiff ................................. 603
A Mechanism of the Indole Defect in Experimental Phenylketonuria: C. M. McKean,
S. M. Schanberg, N. J. Giorman .................................... 604
Chemical Effect of Ionizing Radiation on Cytosine: C. A. Ponnamperuma,
R. M. Lemmon, M. Calvin ........................................... 605
Molecular Changes in Deoxyribonucleic Acid Induced by X-rays: H. E. Guda,
W. J. Frajola, M. A. Lessler ....................................... 607
Flight Behavior of a Fly Alighting on a Ceiling: W. G. Hyzer ...... 609

Staggerer, a New Mutation in the Mouse Affecting the Cerebellum:
R. L. Sidman, P. W. Lane, M. M. Dickie ................................ 610
Polyoma and Papilloma Viruses. Do They Have 42 or 92 Subunits?: C. F. T. Mattern 612
Preliminary Experiments on a Microbial Fuel Cell: J. B. Davis and H. F. Yarbrough, Jr. 615
Conditioning of Induced Electroencephalographic Sleep Patterns in the Cat:
W. Wyrwicksa, M. B. Sierman, C. D. Clemente .................... 616
A Law for Loudness Discrimination: J. L. Stewart .................... 618
Angular Displacement of the Visual Feedback of Motion: J. Gould and K. U. Smith 619
Relationship of Erythrocyte to Leukocyte Antigens in Chickens:
L. W. Schierman and A. W. Nordskog ................................ 620
Neurochemical Differences between Two Strains of Mice: J. W. Maus .......... 621

Departments
Letters from W. Gray and D. Page; T. B. Nolan; H. I. Fusfeld and D. Rothman;
E. J. H. Corner ....................................................... 571

Lifelike Forms in Meteorites: H. C. Urey ................................ 623
Are fossils present in carbonaceous meteorites? The evidence is
suggestive but as yet inconclusive.

Meetings: Forthcoming Events ........................................ 628
New Products ................................................................ 632

Cover
Zenker-fixed, celloidin-embedded, phyloxin-stained section (280 μ thick) of the normal
human lung (× 20). The architecture of the human lung is discussed on page 577.
[Robert R. Wright and Charles M. Stuart, San Francisco Medical Center, University
of California]