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EDITORIAL
A Prodigious Inventory-Taking

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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.

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

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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

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Xenon Tetroxide: Mass Spectrum: J. L. Huston, M. H. Studier, E. N. Sloth
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Natural Carbon-14 Activity of Organic Substances in Streams: A. A. Rosen and M. Rubin
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**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]