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Friday, September 25, 1936

No. 2178

The Nervous System: Dr. Edgar Douglas Adrian	to Reducing Sugars by Ascorbic Acid: Professor Edward S. West and Luman F. Ney. The Condensation of β-Cyclocitral with Dimethylacrolein: Professor Reynold C. Fuson and Dr. Robert E. Christ ————————————————————————————————————
Deaths	C. Robert Moodey and Arnold Lowman 295 Science News 6
Scientific Notes and News	Belence News
Significant Figures in Statistical Constants: Pro- FESSOR EDWARD B. ROESSLER. Paramecium Multi- micronucleata vs. Paramecium Multimicronuclea- tum: Professor John A. Frisch, S.J. Trocho-	SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by
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THE NERVOUS SYSTEM¹

By Dr. EDGAR DOUGLAS ADRIAN

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The lower creatures do not meet to discuss the factors which determine their behavior. "Know thyself" is a precept reserved for homo sapiens; indeed the more academic our discussion the better we shall demonstrate our true position in the animal kingdom.

We are animals with powers of reflection and foresight, who can use tools and form propositions. Our knowledge and attainments can increase from one generation to another because our children can learn from our successes and failures. In the last hundred years we have found out so much about the material world that we have acquired immense new powers of action on it. What have we found out meanwhile about ourselves?

There have been no practical achievements comparable to the radio set or the flying machine, but no

1 Given at the Harvard Tercentenary Conference of Arts and Sciences, Cambridge, September 7, 1936.

one can doubt that ideas about human behavior are vastly different from what they were over fifty years ago. Our conduct is no longer as right or wrong as it was. We think of it still as the outcome of a conflict between opposing forces, but we do not postulate forces wholly good and wholly evil. In some lands they are now thought of as racial or class instincts: here we have more choice and are free, if we wish to see ourselves driven by the more primitive forces which Freud has made respectable. But everywhere human behavior has become something to be studied by the methods of natural science, as objectively as possible.

As a foundation to this study there is a mass of information about the mechanism of the body. The behavior of any animal must depend in part on general structure—its shape, size, number of limbs, arrangement of sense organs, etc., and with man there

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Contents of Volume 20, No. 1, September 20, 1936

- BONNER, JAMES. The growth and respiration of the *Avena* coleoptile.
- OSTERHOUT, W. J. V. Changes of apparent ionic mobilities in protoplasm. I. Effects of guaiacol on *Valonia*.
- WALD, GEORGE. Pigments of the retina. II. Sea robin, sea bass, and scup.
- HECHT, SELIG, and SHLAER, SIMON.
 The color vision of dichromats. I. Wavelength discrimination, brightness distribution, and color mixture.
- HECHT, SELIG, and SHLAER, SIMON.
 The color vision of dichromats. II. Saturation as the basis for wavelength discrimination and color mixture.
- FERRY, JOHN D. Statistical evaluation of sieve constants in ultrafiltration.
- CURTIS, HOWARD J. Electric impedance of injured and sensitized red blood corpuscles.
- CROZIER, W. J., and PINCUS, G. Analysis of the geotropic orientation of young rats. X.

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Vol. 64

Contents for October, 1936

No. 3

- S. MAYER, Jr. and A. Heldfond. The function of the cerebellum in frogs as shown by extirpation experiments.
- R. L. CROUCH. The efferent fibers of the Edinger-Westphal nucleus. Six text figures.
- Kozo Tamaki. Further studies on the effect of section of one peroneal nerve of the albino rat on the intact nerve of the opposite side.
- J. C. HINSEY and C. C. CUTTING. Reflexes in the spinal opossum. Two text figures.
- H. S. Rubinstein. The effect of the growth hormone upon the brain and brain weight-body weight relations. Three text figures.
- W. H. HOLLINSHEAD. The innervation of the adrenal glands. One plate.
- E. H. CRAIGIE. The cerebral cortex of the ostrich (Struthio). One text figure and four plates.
- R. S. SNIDER. Alterations which occur in mossy terminals of the cerebellum following transection of the brachium pontis. Two plates.
- F. C. Lee. A study of the pacinian corpuscle. Twelve text figures.

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