

SCIENCE

FRIDAY, MAY 21, 1920

CONTENTS

<i>Local Anesthetics</i> : DR. HENRY G. BARBOUR..	497
<i>The American Association for the Advancement of Science</i> :—	
<i>Phenomena in the Ultra-violet Spectrum, including X-rays</i> : PROFESSOR DAVID L. WEBSTER, PROFESSOR R. A. MILLIKAN, PROFESSOR WILLIAM DUANE AND DR. A. W. HULL	504
<i>Scientific Events</i> :—	
<i>Publications and Membership of the National Academy of Sciences; Mathematical Meetings at the University of Chicago; The Southwestern Division of the American Association for the Advancement of Science; The Resignation of President Drinker of Lehigh University</i>	508
<i>Scientific Notes and News</i>	513
<i>University and Educational News</i>	512
<i>Discussion and Correspondence</i> :—	
<i>Formule giving the Day of the Week of Any Date</i> : DR. W. J. SPILLMAN. <i>Origin of the Supposed Human Foot-prints of Carson City, Nevada</i> : DR. CHESTER STOCK. <i>Scientific Photography</i> : A. J. NEWTON	513
<i>Quotations</i> :—	
<i>Competition in Research</i>	515
<i>A New Statistical Journal</i> : PROFESSOR RAYMOND PEARL	515
<i>Special Articles</i> :—	
<i>Foot-rot of Wheat</i> : PROFESSOR F. L. STEVENS	517
<i>The American Association for the Advancement of Science</i> :—	
<i>Section E—Geology and Geography</i> : PROFESSOR ROLLIN T. CHAMBERLIN	518
<i>The American Mathematical Society</i> : PROFESSOR F. N. COLE	523

MSS. intended for publication and books, etc., intended for review should be sent to The Editor of Science, Garrison-on-Hudson, N. Y.

LOCAL ANESTHETICS¹

SINCE earliest times, those who have resorted to surgery for the relief of their fellow creatures, have desired to mitigate their procedures by the exclusion of pain. Generally speaking, this has been brought about by a complete abolition of consciousness, whence the term *anesthesia* ("without sensation").

To those cases in which sensation is removed by the application of a drug only at the point of operation is applied the term *local anesthesia*; substances used for this purpose are termed local anesthetics. Some authorities consider this designation inaccurate because during the employment of these substances consciousness is fully retained. They might therefore be described as local *analgesics* ("without pain") but the other term has the sanction of usage.

Historians cite abundant instances of the employment in ancient times of general anesthesia, the oldest being a case of removal of a rib. For this purpose we are told that "the Lord God caused a deep sleep to fall upon Adam," the patient. The commonest of the age-old general anesthetics are alcohol opiates and mandragora, all of which were given separately or mingled with other ingredients.

Local anesthesia, on the other hand, was attempted with comparative infrequency before the last century. Perhaps the earliest authentic description of an approach to this method is that which emanates from the school of Salerno,² in the twelfth century. In those days was practised a form of general anesthesia by causing the patient to inhale the vapors of so-called "soporific sponges," the chief ingredients of these being poppy, hen-

¹ Lecture given before the Brooklyn Institute of Arts and Sciences, February 7, 1920.

² Cited by Husemann, *Deutsch. Zeitschr. f. Chirurgie*, 1896, 42, 585.

Science

51 (1325)

Science 51 (1325), 497-524.

ARTICLE TOOLS

<http://science.sciencemag.org/content/51/1325.citation>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 1920 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works.