

SCIENCE

FRIDAY, APRIL 30, 1915

CONTENTS

<i>The American Association for the Advancement of Science:—</i>	
<i>Standards of Ventilation in the Light of Recent Research: PROFESSOR C. E. A. WINSLOW</i>	625
<i>Some Engineering Problems in Ventilation: D. D. KIMBALL</i>	632
<i>Conditions at the University of Utah</i>	637
<i>The Pacific Association of Scientific Societies: PROFESSOR W. W. CAMPBELL</i>	637
<i>The American Association for the Advancement of Science: DR. L. O. HOWARD</i>	638
<i>Scientific Notes and News</i>	640
<i>University and Educational News</i>	644
<i>Discussion and Correspondence:—</i>	
<i>The Preservation of the Fundamental Conceptions of Mechanics: DR. GORDON S. FULCHER. Get the Units Right: PROFESSOR ALEXANDER MCADIE. A Spurious Case of Multiple Human Births: PROFESSOR G. H. PARKER</i>	644
<i>Scientific Books:—</i>	
<i>Kelly on Some American Medical Botanists: DR. F. H. GARRISON. Best on the Deaf: JOHN D. WRIGHT. Dr. Gifford's Natural Sines: PROFESSOR DAVID EUGENE SMITH. Tower, Smith and Turton's Principles of Physics: PROFESSOR G. W. STEWART</i>	649
<i>Special Articles:—</i>	
<i>Antagonism and Balanced Solutions: DR. RODNEY H. TRUE. On the Osmotic Pressure of the Juices of Desert Plants: DR. J. ARTHUR HARRIS, JOHN V. LAWRENCE, DR. ROSS AITKEN GORTNER. On the Genus Trachodon: CHARLES W. GILMORE</i>	653
<i>The Society of American Bacteriologists: DR. A. PARKER HITCHENS</i>	660
<i>Societies and Academies:—</i>	
<i>The Biological Society of Washington: M. W. LYON, JR. The New Orleans Academy of Sciences: PROFESSOR R. S. COCKS</i>	664

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE¹ STANDARDS OF VENTILATION IN THE LIGHT OF RECENT RESEARCH

THE fact that the stagnant air of an occupied room becomes uncomfortable and makes those who are exposed to it listless and inert is a matter of common experience. When overcrowding in a close unventilated space reaches a certain point the results may even be fatal within a few hours, as in the Black Hole of Calcutta, the underground prison at Austerlitz and the hold of the ship Londonderry. Conversely the value of fresh air in the treatment of tuberculosis and other diseases is one of the fundamentals of medical and hygienic practise.

For the sanitarian it is necessary, however, to know something more than this general fact that bad air is bad. He must not only have some workable conception as to its operation, but also a more or less definite standard of permissible deviation from absolute purity.

In the earlier days of ventilation this was an easy task. It was natural to assume that the evil effects of the air of occupied rooms was due, either to lack of oxygen or excess of carbon dioxide, or to the presence of some specific organic poison of human origin—morbific matter or anthropotoxin, as this hypothetical substance was called. Of either of these changes the amount of carbon dioxide should serve as a fair measure, and a carbon dioxide standard was therefore confidently advanced by the older sanitarians as a practically all-suffi-

¹ Papers presented at a Symposium on Ventilation at the Philadelphia meeting.

MSS. intended for publication and books, etc., intended for review should be sent to Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

Science

41 (1061)

Science **41** (1061), 625-664.

ARTICLE TOOLS

<http://science.sciencemag.org/content/41/1061.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. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.