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CONTENTS

The American Association for the Advancement of Science:—
Melody and the Origin of the Musical Scale: Professor W. C. Sabine ........ 841

The Relation of Instinct to Intelligence in Birds: Professor Francis H. Herrick .. 847

Scientific Books:—
Clarke’s Early Devonian History of Northeastern North America: Dr. H. M. Ami .. 850

Societies and Academies:—
The Michigan Academy of Science: Walter G. Sackett. The Torrey Botanical Club: Dr. C. Stuart Gager. The American Chemical Society, New York Section: Dr. C. M. Joyce ......................... 851

Discussion and Correspondence:—
The German Anatomical Society: Professor J. S. Kingsley. Dates of Early Santorin and Ischian Eruptions: Dr. C. R. Eastman ......................... 854

Special Articles:—
A Note on the Proportion of Injured Individuals in a Natural Group of Bufo: Dr. Wm. E. Kellicott. ......................... 855

Botanical Notes:—
Flowering Plant Notes; Biographical Notes: Professor Charles E. Bessey ... 857

The Administration of Syracuse University: Dean William Kent .................. 859

Conference on Conservation of Natural Resources .......................... 867

Scientific Notes and News .................. 869

University and Educational News .................. 871

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
MELODY AND THE ORIGIN OF THE MUSICAL SCALE

In the vice-presidential addresses of the American Association great latitude in the choice of subjects is allowed and taken, but there is, I believe, no precedent for choosing the review of a book, printed fifty-five years before. Helmholtz’s Tonenempfindungen, produced by a masterful knowledge of physiology, physics and mathematics, and a scholar’s knowledge of the literature of music, has warded off all essential criticism by its remarkable breadth, completeness and wealth of detail. Since it was first published it has been added to by the author from time to time in successive editions, and greatly bulked by the scholarly notes and appendices of its translator, Dr. Alexander J. Ellis. The original text remains unchanged and unchallenged on physical grounds. In taking exception at this late day to the fundamental thesis of Part III., I derive the necessary courage from the fact that should such exception be sustained, it will serve to restore to its full application that greater and more original contribution of Helmholtz which he included in Part II. Having given a physical and physiological explanation of the harmony and discord of simultaneous sounds, and therefore an explanation of the musical scale as used in modern com-

1 Address of the vice-president and chairman of Section B—Physics—American Association for the Advancement of Science, Chicago, 1907–8.