siders far older than the Lycian. The Etruscan numerals on the celebrated Toscanelli dice he reads: 1, *mach;* 2, *ki;* 3, *zal;* 4. *sa;* 5, *thu;* 6, *huth;* agreeing in this with Taylor, but at variance with Professor Sayce, who, in the *Academy*, Oct. 15, 1892, prefers the following sequence: *makh, huth, sa, ki, thu, zal.* Professor Newman does not think the Etruscan language either Aryan or Semitic, but does not proceed farther in its identification, indulging himself in this connection with the following comment on the procedures of another Etruscan student: "Mr. Isaac Taylor treats all languages outside of these two systems as if so specially allied, that he may at pleasure interpret the vocables of any one from any other, and this however different the ages of the two." Other subjects treated are Etruscan concord, words for bronze and brass, attempted translations of epitaphs, the meaning of *kle* and *kal*, etc. Most of this he frankly calls "guessing"; but it is guessing by a method.

The second pamphlet is a reprint from the Proceedings of the American Philosophical Society. Dr. Brinton has published various papers intended to show some ethnic affinity or cultural connection between the Etruscans and the Libyans. Here he takes up the venerable song of the Fratres Arvales — probably the oldest literary monument of Roman antiquity — and seeks to show the indications it presents of a connection with the Berber religions of North Africa. Of course, much of his argument turns on the third line of the song:

Satur fufere Mars limen sali sta Berber;

for which he accepts the rendering of Professor Michel Bréal:

Sata tutere, Mars; clemens satis esto, Berber.

Berber, he points out, is but the reduplication of Ver or Ber, whom Varro mentions as the chief divinity of the Etruscans; a deity who under the same name occupied the same position in the Libyan pantheon, and from whom the name Berber is derived, as well as the word Africa (A-fer-ica). The coincidence, if it is nothing more, is a most curious one, and it would certainly seem that the Etruscans borrowed their gods from Africa, if they did not come from there themselves.

*Theory of Structures and of Strength of Materials.* By HENRY T. BOVEY. New York, J. Wiley & Sons, 1893. 817 p. 8°. $7.50.

CANADIAN authors have been neither numerous nor productive, hitherto, and especially in the fields of science. Sir John Dawson and the able men of the Dominion Surveys, in science, and Goldwin Smith, in history, nevertheless, have led a small body of able men in the performance of work which is most creditable to that now practically independent nation. The appearance of a new work by a Canadian writer, especially in the department of applied science, is thus a somewhat important event; and the volume here offered us will receive a hearty and appreciative welcome by all who are familiar with the standing and ability of its author, and with the work accomplished by him, both professionally and in the development of technical education in his own country. The work itself is an extension, with revision, of the smaller work on Applied Mechanics issued by its author some years ago. It has the form usually considered appropriate to a work of its kind, intended for the use of classes in engineering, in the higher class of schools, such as that of McGill University with which Professor Bovey is connected. It treats of framed structures, their stresses and strains, and their materials, of earthwork and retaining walls, of friction, and of the various forms of bridges and other constructions of the engineer and the architect. The book gives more of modern and exact data than is usual in works of this sort, written, as they are apt to be, by writers drawing upon literature, rather than recent research, for their facts and principles, and unfamiliar, through practical experience, with the actual work of the profession which they assume to instruct. We find here the records of the latest investigations relative to the strength and working qualities of materials, the laws of friction, solid, fluid, and "mediate," and investigations of the direction and magnitude of stresses in the mem-

CALENDAR OF SOCIETIES.

**New York Academy of Sciences.**

Feb. 27.—H. Carrington Bolton, Progress of Chemistry since the Fifteenth Century, B.C., as Depicted in Apparatus and Laboratories.

bers of structures variously strained. Rankine's unique studies, and the graphics of that author and of continental writers, find illustration and useful application in intelligible and practically available shape; and the methods of connection of parts in practical construction are given in a form likely to meet the approval of the practitioner, as well as of the learner. Tables of constants for use in connection with computations of proportions of parts, and good illustrations, are distributed throughout the book. The work is somewhat extensive, even for students in engineering schools, and will prove valuable for office use as well as in the classroom. We observe that it is dedicated to Mr. Wm. McDonald, the generous donor of the new engineering buildings and equipment of McGill University; a graceful and well-deserved compliment to a man who has done more, perhaps, than any other citizen of Canada to promote this essential element of modern progress in his native State. The composition and printing are excellent; but the paper is thin, probably designedly so, in view of the fact that the volume is a bulky one at best. The book is well worth its price.

## AMONG THE PUBLISHERS.

THE Century Co. is about to publish "A Handbook of Invalid Cooking," by Mary A. Boland, instructor in cooking in the Johns Hopkins Hospital Training-School for Nurses. The book is intended not only for nurses in training-schools and private practice, but for all who care for the sick. Besides recipes, menus, suggestions for the proper feeding of children, etc., a part of the book is devoted to "Explanatory Lessons," wherein the various food principles are described, with chapters on Nutrition, Digestion, Chemical Changes in Food, etc.

— J. J. Audubon, the great naturalist, wrote, many years ago, the story of his youth for his children. It was found accidentally in an old volume where it had long been hidden, and is to be printed for the first time in its entirety in *Scribner's Magazine* for March. The youth of Audubon was most romantic, and at times exciting, and his story of it is told with an ingenuous charm which makes it as interesting as a novel.

— Professor Henry Drummond will deliver the Lowell lectures at Boston this spring. The subject will be "The Evolution of Man." Professor Drummond has not yet decided as to the date of the publication of these lectures, but has taken steps to protect his copyright in America.

— Professor William Holms Chambers Bartlett, the author of "Treatise on Optics" (New York, 1839), "Synthetical Mechanics" (1850), "Analytical Mechanics" (1853), and "Spherical Astronomy" (1855), died at his home in Yonkers, N.Y., on the 11th of February, aged eighty-nine.

— Instances of the recognition of the claims of science by the general press are always worth chronicling. It is therefore not without interest that we notice that the *Queenslander* (a Brisbane weekly) is issuing a series of extended descriptive articles on the Butterflies of Queensland, the work of an entomologist writing under the *nom de plume* of "Aurelia." This, we believe, is the first attempt to accomplish a connected account of Australian Rhopalocera, and, as Queensland contains by far the larger proportion of the species inhabiting the Australian sub-regions, these contributions to science are of especial significance.

— Charles Scribner's Sons are preparing a novel and interesting contribution to the World's Fair in the form of an "Exhibition Number" of *Scribner's Magazine* to be published simultaneously with the opening of the Exposition at Chicago. It is not proposed that the text shall relate chiefly to the Fair, but, on the contrary, the leading writers and artists have been asked to contribute to the number what they themselves think will best represent them. The pages of text and illustration will be largely increased, and the appearance of the number is likely to be looked for with eagerness by all readers interested in the work of American magazines.

# QUERY.

Can any reader of *Science* cite a case of lightning stroke in which the dissipation of a small conductor (one-sixteenth of an inch in diameter, say,) has failed to protect between two horizontal planes passing through its upper and lower ends respectively? Plenty of cases have been found which show that when the conductor is dissipated the building is not injured to the extent explained (for many of these see volumes of Philosophical Transactions at the time when lightning was attracting the attention of the Royal Society), but not an exception is yet known, although this query has been published far and wide among electricians.

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