

pletely changed its aspect, the physics of to-day being distinctly the science of energy. It is from this point of view that the text-book has been written, the classification which has been adopted being based on the most recent views of energy, considered as being ultimately a phenomenon of the æther. The fact is significant that more than half of the entire work has been devoted to æther-physics.

The introductory portion of the book considers, first, physical relations in general, and second, the laws of motion; the latter being discussed, first in the abstract, and second with reference to the action of force upon matter. Under mass-physics energy is first treated of as a mass-condition, and then work, as being done whenever energy is transferred or transformed; the subject of potential being developed as a consequence of mass-attraction. The properties of matter are next considered, including the modern views of its structure; and then follows the subject of sound considered as a mass-vibration. Under molecular physics the phenomena of heat alone are treated; the term heat being restricted, in accordance with modern usage, to molecular kinetic energy. Under the head of æther-physics are grouped: (1) æther-vibration or radiation, (2) æther-stress or electrostatics, (3) æther-vortices or magnetism, and (4) æther-flow or electrokinetics; following the classification so well set forth by Lodge. Radiation is considered broadly without any special reference to those wave-frequencies which excite vision and are ordinarily called light.

The ground covered is that which is usually traversed by students in the more extended courses in physics in our leading universities, colleges, and technological institutes.

The book is well printed and well illustrated, a colored magnetic map of the United States being given as a frontispiece. The text is interspersed with examples, and descriptions of illustrative experiments in smaller type. The metric system has been used throughout, and all the units employed are those of the C. G. S. system.

Although the preface only bears date of October 1, 1892, a second edition has already been issued.

AMONG THE PUBLISHERS.

A NEW edition of Haeckel's "The History of Creation," has been issued in Germany, and a translation, revised by Professor E. Ray Lankester, is just published in this country by D. Appleton & Co. The book is a popular exposition of the doctrine of evolution in general, and of that of Darwin, Goethe, and Lamarck in particular. The reviser calls it "a statement of the views of one of the most learned, experienced, and honored naturalists of modern times." It is issued in two volumes, with numerous illustrations.

— D. Appleton & Co. publish a "Dictionary of Every-Day German and English," by Martin Krummacker, Ph.D. In addition to the dictionaries proper, it contains lists of the most important technical terms, proper names spelled differently in the two languages, a sound-notation, an outline of grammar, and several pages of "travel talk" in parallel columns.

— Ginn & Company announce "A Students' Manual of a Laboratory Course in Physical Measurements," by W. C. Sabine, Instructor in Harvard University, to be published in February. The manual will contain an outline of seventy experiments in mechanics, sound, heat, light, magnetism, and electricity, arranged with special regard to a systematic and progressive development of the subject. The description of each experiment will be accompanied by a brief statement of the physical principles and definitions involved, and a proof of necessary formulæ. That the manual may be of more ready and general service a set of apparatus has been designed which is especially adapted to the course and can be found complete on the market. The book is intended for use in supplementing college courses in physics.

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