

Blondlot (C. R., 117, p. 543; 1893). The signals were sent over a wire of about one kilometer in length and another of about 1.8 kilometers. In the first case the mean velocity was found equal to 293,000 and in the second to 298,000 kilometers per second which is very close to the velocity of light. Poincaré proceeds now to the discussion of the most severe test of the Maxwellian theory, that is the propagation of electromagnetic waves through dielectrics.

M. I. PUPIN.

COLUMBIA COLLEGE.

(To be Concluded.)

*Model Engine Construction.*—J. ALEXANDER. —New York and London, Whitaker & Co. 1894. Illustrated by 21 sheets of drawings and 59 engravings in the text. 12mo, pp. viii + 324. Price, \$3.00.

This little book is an excellent treatise on the construction of models of stationary locomotive and marine engines, and contains also instructions for building one form of hot-air engine. It is written by an author evidently familiar with his subject, and the text and illustrations are such as will serve the purpose of both artificer and amateur, desiring to produce model representations of real working engines of standard forms. Bright young mechanics will find here business-like statements of details of drawing, pattern-making, and finishing such models; and, if heedfully complied with, these instructions will result in the production of steam-engines which will actually 'steam,' and which will delight the heart of the mechanician. The drawings are all representative of British practice, and, in some respects, therefore, quite different from familiar practice in the United States; but British practice is 'not so bad,' after all, and many old mechanics, and probably every amateur, will be able to profit greatly by the careful study of this little work.

R. H. T.

#### NOTES.

##### PERSONAL.

KARL HANSHOFER, Professor in the University of Munich, and well known through his researches in crystallography and other branches of mineralogy, has died at Munich at the age of fifty-four.

PROF. G. LEWITZKY has been appointed Director of the Observatory in Dorpat, and Dr. L. Sturve succeeds Professor Lewitzky at Charkow.

PROF. F. KOHLRAUSCH, of Strassburg, was proposed as the successor of Hertz at Berlin, but the death of Helmholtz intervening he will now succeed the latter in the Directorship of the Physico-Technical Institute.

##### GENERAL.

THE discontinuation of the *Index Medicus* is threatened unless sufficient subscriptions are secured before February 1 to defray the costs of publication.

ACCORDING to the *Publishers' Circular* there were 5,300 new books and 1,185 new editions published in Great Britain during 1895, 203 more than during 1894. Of these, 98 new books and 30 new editions are placed under the heading 'Arts, Sciences and Illustrated Works.'

MR. GEORGE F. KUNZ, Special Agent, Division of Mining Statistics and Technology, U. S. Geological Survey, has sent letters asking for information concerning the freshwater pearl fisheries, and concerning precious and ornamental stones of the United States.

PROF. S. P. LANGLEY, Secretary of the Smithsonian Institution, has addressed a letter to the competitors for the Hodgkins Fund Prizes of \$10,000, of \$2,000, and of \$1,000, stating that in view of the very large number of competitors, of the delay which will be necessarily caused by the intended careful examination, and of the further time which may be required to con-

sult a European Advisory Committee, if one be appointed, it is announced that authors are now at liberty to publish these treatises or essays without prejudice to their interest as competitors.

#### CONGRESSES.

THE sixth International Geographical Congress will be held at London, on July 26, 1895, and continue until August 3. There will be an extensive exhibition in connection with the congress.

#### NEW AND FORTHCOMING PUBLICATIONS.

W. B. SAUNDERS, Philadelphia, has in preparation *An American Text-book of Physiology*, by Henry P. Bowditch, M. D., John G. Curtis, M. D., Henry H. Donaldson, Ph. D., William H. Howell, M. D., Frederic S. Lee, Ph. D., Warren P. Lombard, M. D., Graham Lusk, Ph. D., Edward T. Reichert, M. D., and Joseph W. Warren, M. D., with William H. Howell, Ph. D., M. D., as Editor.

THE idea of holding International Mathematical Congresses is crystallizing into shape. Prof. Vassilief, of Kazan, has suggested an assembly of mathematicians in 1896, in order to definitely decide the organization of such congresses. The matter was pushed a little further at the Vienna meeting of the Deutsche Mathematiker Vereinigung, in September last, when it was unanimously resolved that the Committee of the Mathematical Union should take part in framing the necessary arrangements; and the Mathematical Section of the French Association for the Advancement of Science have also expressed their support of the scheme. A circular now informs us that the Editors of the *Intermédiaire* will be glad to receive the names of mathematicians who are in favor of international meetings of the kind suggested. M. C. A. Laisant's address is 162 Avenue Victor-Hugo, Paris; and that of M. E. Lemoine, 5 rue Littré.—*Nature*.

FÉLIX ALCAN has just issued the first part (extending as far as *Aliment* only) of an elaborate *Dictionnaire de Physiologie*, edited by M. Charles Richet with the coöperation of the leading French physiologists. The work is expected to contain about 5,000 pages, and to be completed in fifteen parts or five volumes.

GINN & Co. announce for publication in February *Molecules and the Molecular Theory of Matter*, by A. D. Risteen.

APPLETON & Co. announce *The Dawn of Civilization*, by Prof. Maspero, and *The Pygmies*, translated from the French of A. de Quatrefages, by Prof. Frederick Starr.

WHITTAKER & Co. are publishing this year a weekly journal of science combining *The Technical World* and *Science and Art*.

W. ENGELMANN has begun the publication of an *Archiv für Entwicklungsmechanik der Organismen*, edited by Dr. W. Roux.

THE Rose Polytechnic Institute of Terre Haute, Ind., has begun the publication of a series of bulletins of which the first number is *Physical Units*, by Prof. Thomas Gray.

#### SOCIETIES AND ACADEMIES.

##### THE ANNUAL MEETING OF THE AMERICAN MATHEMATICAL SOCIETY.

THE annual meeting of the American Mathematical Society was held Friday afternoon, December 28th, at Columbia College, New York. In the absence of the president, Dr. Emory McClintock, and of the vice president, Dr. G. W. Hill, Professor R. S. Woodward, of Columbia College, presided. Among those present were Professor Simon Newcomb, Professor J. M. Van Vleck, Professor Henry Taber, Professor Mansfield Merriman, Professor H. D. Thompson, Professor Mary W. Whitney, Dr. E. L. Stabler, Mr. P. A. Lambert, Mr. R. A. Roberts, Dr. Charlton T. Lewis, Mr. Gustave Legras, Professor J. H. Van Amringe, Professor Thomas S. Fiske, Dr. E. M.