

We concede, however, that if we are always to obtain abroad the tin-plates that we export in various ways, because these tin-plates may be obtained virtually free of duty owing to the drawback provision of the tariff, then our capacity to produce tin-plates is already near the actual home consumption. But why assume that exported tin-plates will continue to be made abroad?—*Bull. Iron and Steel Association.*

---

## BOOK NOTICES.

---

*Electric Transmission of Energy and its Transformation, Subdivision and Distribution.* A practical handbook. By Gisbert Kapp. (4th edition, thoroughly revised.) New York: D. Van Nostrand Company. 1894.

Those of our readers who are interested in electrical science will be so familiar with the previous editions of this excellent handbook, that no introduction will be required in making reference to the appearance of a 4th edition.

In this the author has been compelled, by the enormous strides that have taken place in connection with electric power-transmission since the appearance of the previous editions, to modify considerably the scope of the work. The historical portion of the subject has accordingly been entirely omitted, as has likewise the detailed description of a number of transmission plants.

On the other hand, the present edition devotes considerably more space to the theory of continuous current machines, while the theory of alternators and multiphasers has been added. W.

---

*Annuaire pour l'An 1895,* publié par le Bureau des Longitudes; avec des notices scientifiques. (Price, fcs. 1.50.) Paris: Gauthier-Villars et fils. 1895.

This publication, issued annually by the "Bureau des Longitudes," contains, in conveniently accessible form, all the information that would naturally be looked for in a nautical almanac, together with a large amount of miscellaneous information respecting the coinage, statistics, geography, mineralogy, chemistry, etc. Among the specially interesting communications contained therein is one by Berthelot, giving a series of thermo-chemical values revised and corrected to date. W.

---

*The Source and Mode of Solar Energy.*—By I. W. Heysinger, M.D. Philadelphia: J. B. Lippincott Company. 1895.

The above-named work is an ingenious speculation in which the author seeks to account for the origin and maintenance of the solar energy. Like others who have preceded him in the study of this fascinating problem, notably Meyer and Sir Wm. Siemens, the author finds the explanation in sources exterior to the sun. His views on the subject are interesting and forcibly presented, and the book will repay perusal. W.

*A Laboratory Manual of Physics and Applied Electricity.*—Arranged and edited by Edward L. Nichols, Professor of Physics in Cornell University. In two volumes. Vol. II. Senior courses and outlines of advanced work. By George S. Moler, Fred'k Bedell, Homer J. Hotchkiss, Chas. P. Matthews, and the Editor. New York: Macmillan & Co. 1894. Price, \$3 25.

This is the companion volume to the manual for beginners in physics, which was lately reviewed in these columns, and is intended for the guidance and instruction of advanced students, who are prepared to undertake special work.

The book is divided into four parts, viz.: Experiments with direct current apparatus; experiments with alternating currents; senior courses on heat and photometry; and outlines of advanced work in general physics. The first three parts have been prepared with especial reference to the needs of those who are preparing themselves for the profession of electrical engineer. The method followed in the work is the presentation of experimental studies of the most important problems occurring under each chapter head. W.

---

*Encyclopédie Scientifique des Aide-Mémoire.* Paris: Gauthier-Villars et fils. (Price, per vol., fcs. 2.50, unb.; fcs. 3, bound.)

The following additional volumes of this practical and comprehensive encyclopædia of the arts and manufactures have been issued since the publication of the previous reference thereto in this *Journal*.

Dudebout et Croneau. Ingénieurs de la Marine. *Appareils accessoires des chaudières à vapeur.*

Leloutre, Georges. Ingénieur civil. *Le Fonctionnement des Machines à vapeur.*

Hatt. Ingénieur hydrographe de la Marine. *Des Marées.*

Vallier. Chef d'escadron d'Artillerie, Correspondant de l'Institut. *Balistique des nouvelles poudres.*

Jacquet, Louis. Ingénieur des Arts et Manufactures. *La fabrication des eaux-de-vie.*

La Baume Pluvinel, A. de. *La Théorie des procédés photographiques.*

Bourlet, C. Professeur au Lycée Henri IV, Docteur ès Sciences. *Traité des Bicycles et des Bicyclettes, suivi d'une application à la Construction des Velodromes.*

Sorel, E. Ancien ingénieur des manufactures de l'État. Professeur suppléant au Conservatoire des Arts et Métiers. *La Distillation.*

The foregoing volumes are uniform in appearance, each forming a small octavo, and complete in itself. Each subject is treated by a competent specialist. The convenient form of the separate parts of the series, and the condensed yet thorough treatment which each subject receives, render this work an extremely useful one. W.