

Die Eis- und Kälteerzeugungs-Maschinen; ihr Bau und ihre Verwendung in der Praxis. Ein Compendium der gesamten Kälte-Industrie. Von Richard Stetefeld, diplomierter Ingenieur zu Pankow, Berlin. Stuttgart: Verlag von Max Waag, 1901.

This treatise makes a large octavo volume of nearly 500 pages, with thirteen plates and 340 illustrations in the text.

The subject is divided into, (1) an historical and descriptive portion, in which is given a review of the development of the art of refrigeration, and a series of chapters giving detailed descriptions of the various types of refrigerating machines, cold-air machines, absorption machines, vacuum machines; (2) a theoretical part, in which is presented the fundamental physical principles and the mechanical theory of heat; (3) a constructive part, treating in detail of the several mechanical elements—compressors, condensers, etc.—entering into the construction of refrigerating machines; (4) erection and operation; (5) installation, treating of the special location of machines for different kinds of service—in breweries, abattoirs, cold-storage houses and special forms of service; (6) duty-tests of refrigerating machines in practice, in which are treated instruments and methods, with examples. A series of tables useful for reference is appended.

The treatise is the work of an engineer who had an extensive practical experience, and should prove a useful addition to the literature of the subject.

W.

Armature Windings of Direct-Current Dynamos: Extension and application of a general winding rule. By E. Arnold, Engineer and Assistant Professor in Electrotechnics and Machine Design at the Riga Polytechnic School. Translated from the original German by Francis B. De Gress, M.E., Chief of Testing Department, Crocker-Wheeler Company. With 146 illustrations. 8vo., pp. vi + 124. New York: D. Van Nostrand Company. 1902. (Price, \$2.)

In this work Professor Arnold has formulated a rule for the solution of the problems in winding armatures for direct-current machines, which not only embraces all known windings—ring, drum and disk types—but also affords a general solution of the winding problem.

The designs and illustrations treated include all of the well-known forms and a number of new designs. The work will doubtless be very useful to electrical engineers.

W.

Electric Power Transmission: A practical treatise for practical men. By Louis Bell, Ph.D. Third edition, revised and enlarged; pp. 952. New York: *Electrical World and Engineer*, N.D.

The author has thoroughly revised the present edition of this well-known treatise, bringing it in touch with the present, and with the result of considerably enlarging it by the addition of new matter and numerous illustrations of recent plants and apparatus. A chapter on Commercial Electrical Measurements has been added; and in the final chapter on High Voltage Transmission, the author has sought to incorporate the latest developments of the art.

The present edition is illustrated with 21 full-page plates and 285 cuts in the text.

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