



HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto.

References to former articles or answers should give date of paper and page or number of question.

Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn.

Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.

Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.

Scientific American Supplements referred to may be had at the office. Price 10 cents each.

Books referred to promptly supplied on receipt of price.

Minerals sent for examination should be distinctly marked or labeled.

(9441) G. C. asks: 1. Is there any purely geometrical method for constructing a line equal to one-quarter a given circumference? A. A line equal to the quarter of a circumference cannot be exactly determined by geometrical methods.

(9442) E. N. M. asks: Will you tell me how to make a permanent steel magnet? I have been looking over your catalogue, and I find nothing that enlightens me on the subject? A. To obtain a good steel magnet, it is necessary in the first place that the steel shall be adapted to this purpose.

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second law of friction. In designing locomotives, it is the weight on the wheels which governs the number of wheels by its limit, which is about 20,000 pounds on each driving wheel in the heaviest engines, and varies to as low as 7,000 pounds per driver.

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NEW BOOKS, ETC.

DIE ELEKTRISCHE BÜHNEN UND EFFEKTBELUCHUNG. BY DR. TH. WEIL. VIENNA AND LEIPZIG: A. HARTLEBEN'S VERLAG, 1904. 16mo.; pp. 256. Price \$1.25.

The book deals with theatre stage illumination. The author has treated a very special branch of electricity in an admirable manner. The subject is of growing importance, and each new theatre is better than the last as regards the electrical installation.

AMERICAN METER PRACTICE. BY LYMAN C. REED. NEW YORK: MCGRAW PUBLISHING COMPANY, 1903. 8vo.; pp. 196. Price \$2.

This book will be found useful both to the central station manager and to the consumer of electricity. It describes the principles and methods of construction of typical American meters, and contains, among others, chapters on the "General Management of the Meter Department" and on "Reading Meters," chapters of value to the two classes of men above mentioned, respectively.

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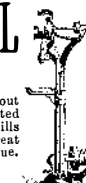
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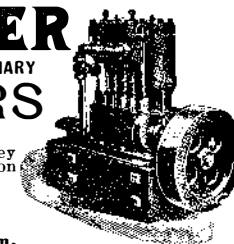
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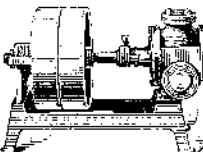
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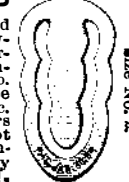
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