

Notes and Queries.

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication.

but of experience. Under good conditions a spark of one inch will be detected at a distance of about a mile.

(9485) L. E. B. asks: 1. Can you recommend to me any books which would be of service to one taking up a course of instruction in physics?

(9482) E. C. I. asks: A man recently made the statement that dew "falls" as rain does. When challenged, he said that recent investigations have shown that the old theory that dew is deposited or precipitated on objects colder than the surrounding air, is wrong.

(9483) W. P. Y. asks: Will you please answer the following questions concerning storage batteries described in SUPPLEMENT No. 845?

NEW BOOKS, ETC.

LLOYD'S REGISTER OF AMERICAN YACHTS. Published by Lloyd's Register of Shipping, 15 Whitehall Street, New York. 12mo.; pp. 500. Price, \$7.50.

The second volume of the American Yacht Register, published by Lloyd's Register of Shipping, fully justifies the promise of the first volume, issued last year, and gives to yachtsmen what has long been needed, a thoroughly comprehensive directory of yachting.

FIRESIDE ASTRONOMY. By D. W. Horner, F.R. Met. Soc., M.B.A.A. London: Witherby & Co., 1904. 32mo.; pp. 105. Price, 60 cents.

This pamphlet forms a simply-worded treatise on some of the little-known and often misunderstood facts in the science of astronomy. It was written for "the man in the street," who simply wishes to learn the reason of certain things that happen in the heavens, but who has not the time or means to investigate such matters for himself.

THE VERMILION IRON-BEARING DISTRICT OF MINNESOTA. With an Atlas. By J. Morgan Clements. Charles Richard Van Hise, Geologist in Charge. Washington: Government Printing Office, 1903. Pp. 462.

This is Volume XLV. of the Monographs of the United States Geological Survey. It is large, well printed upon fine paper, and illustrated by maps, plates, and panoramic views of ore basins and mines.

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photomicrographs of granules and their details.

FREE-HAND LETTERING. Being a Treatise on Plain Lettering from the Practical Standpoint for Use in Engineering Schools and Colleges. By Victor T. Wilson, M.E. New York: John Wiley & Sons, 1903. 8vo.; pp. 105; 13 full-page plates. Price, \$1.

To begin with, great stress is laid upon the fact that good lettering is good design, and is an art not to be acquired by the assimilation of a few simple mechanical principles. The proper proportions of the various styles of lettering, of large to small letters, and of letters to spaces, are discussed from the artistic point of view.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending November 15, 1904

AND EACH BEARING THAT DATE [See note at end of list about copies of these patents.]

Table listing inventions and their patent numbers. Includes items like Advertising blotter, Air brake, Automobile attachment, and various mechanical devices.