

books, are those concerning the comparison and calibration of graduated scales, the balance, density by hydrostatic weighing, thermometry, calibration of thermometers and high temperature measurements, the mechanical equivalent of heat, photometry, spectrometry, the capillary electrometer, and the like. The book is illustrated by 180 diagrams. It is concise in style, and will be found of great assistance in the teaching of physics.

STEVENSON'S SEA GUIDE AND YACHTING MANUAL FOR 1904. Edited by Paul Eve Stevenson. Published by Gardner & Cox, New York. 16mo.; pp. 219. Price, 25 cents.

An excellent manual for its purpose. It contains everything that a practical yachtsman needs to know, and a large amount of very useful information besides. The tide tables are complete, and, of course, thoroughly up-to-date. The information relative to waterways, anchorages, lighthouses, currents, and the various items that are essential to summer cruising is particularly detailed and complete. The manual has the advantage of being a size that can be slipped into the pocket, instead of being left to be stowed away in some locker, where it would be most inaccessible when it was most needed.

BUILDERS' ARCHITECTURAL DRAWING SELF-TAUGHT. By Fred T. Hodgson. Chicago: Frederick J. Drake & Co., 1904. 8vo.; pp. 262. Price, \$2.

Mr. Hodgson, in writing this book, has compiled from the various voluminous works on the subject, and from his own knowledge of architecture and building, a very helpful handbook for young men engaged in subordinate positions in these trades, who have no particular knowledge of drawing or geometry, but who, if they should acquire a fair working knowledge of these subjects, would be capable of filling, with credit, better positions. The book is written in concise style, and is well illustrated with some 250 odd drawings. It should be found very helpful by all who are trying to secure a working knowledge of architectural drawing.

CATALOGUE OF THE NATIONAL FIREPROOFING COMPANY. By Henry L. Hinton, Engineer. New York: The National Fireproofing Company, 1903. 12mo.; pp. about 250. Price, \$3.

This handbook forms an abridged edition of the larger work to be brought out by the National Fireproofing Company, and which, it is expected, will deal very completely with fireproofing materials and construction. The present volume is printed from plates that will be used in the larger one, and is issued in the form of a pocket manual, being neatly bound in flexible leather covers. The sample pages it contains are taken mainly from the second and third divisions of the larger work, which treat of "material" and "safe loads." There are also, however, a number of pages of specifications of floor construction, entitled "Model Floors," and a series of "moment of resistance" tables, which make the handbook quite complete, since, aside from their special uses, they can also be used for obtaining the safe loads of the beams, and consequently can be made to take the place of the tables in the rolling mill catalogues, which tables have heretofore generally been used for obtaining the safe loads for the different sections of steel I-beams and channels. The book has numerous blank memorandum pages; and as it is the first concerted effort from a scientific standpoint which has been made to thoroughly treat of the materials now in common use, as well as the methods prevailing, in the construction of fireproof buildings, it should be of great use to all those engaged in the building trades.

INDEX OF INVENTIONS For which Letters Patent of the United States were Issued for the Week Ending June 21, 1904 AND EACH BEARING THAT DATE

(See note at end of list about copies of these patents.)

- Adjustable bit, W. H. de Roseau 763,072
Agricultural boiler, Marrs & Wolf 762,920
Air brake, Graham & Potts 762,905
Air brake, W. O. Mundy 763,310
Air compressor, hydraulic, J. H. Alexander 762,293
Amusement apparatus, W. S. Tothill 762,959
Anchor, hand, A. Casteln 763,081
Applicator, E. E. Tope 763,232
Ashes, apparatus for separating coal and coke from, C. N. Paver 763,018
Autosleigh, W. C. Weiss 763,232
Balance leaf, celluloid perpetual daily, W. F. Dedsworth 763,091
Baling press, H. Larose 763,005
Barrel closer, H. L. Klancik 763,172
Battery plate, H. C. Porter 763,222
Beadwork loom, W. W. Dinwiddie 763,156
Bed sofa, J. Christensen 763,156
Bedstead tray attachment, H. B. Hales 763,281
Belt punching implement, W. W. Woodley 763,137
Binder, loose leaf, Gresham & Schade 763,176
Bit, See Adjustable bit.
Blotter holder, H. T. Patterson 763,017
Bolster, body, J. Green 763,278
Bomb lance, F. E. Brown 763,147
Books, etc., ornamenting the edges of, K. Miegel 763,106
Bottle, non-refillable, G. W. Filbrun 762,992
Bottle, non-refillable, A. Johnson 763,290
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Bottle washing apparatus, F. Goebel 763,174
Box or candy cover, A. J. Field 762,894
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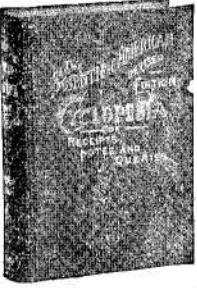
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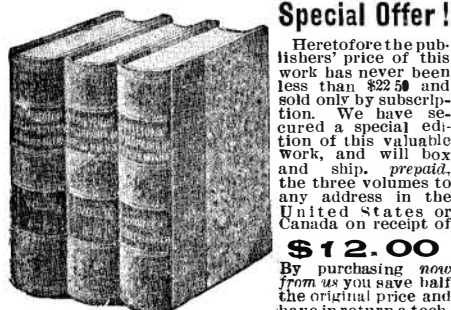
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