

NEW BOOKS, ETC.

THE NAVAL ARCHITECTS', SHIPBUILDERS', AND MARINE ENGINEERS' POCKETBOOK. By Clement Mankrow, M. I. N. A., of Great Britain. New York: D. Van Nostrand Company. London: Crosby Lockwood & Son. 1902. Pp. x, 750.

This work has been written to supply the great want which has long been experienced by nearly all who are connected professionally with shipbuilding of a pocket-book containing all the ordinary formulae, rules, and tables required by the architect in the working out of the necessary and multitudinous calculations. A characteristic of the work is that while, in the main, it is condensed as closely as possible consistently with giving full data required, many sections of the work are greatly amplified and their value proportionately increased. The diagrams are clear, and the whole work is excellently printed. It may be cordially recommended as one of the most complete pocket-books that have come under our notice.

ANCIENT AND MODERN ENGINEERING AND THE ISTHMIAN CANAL. By William H. Burr, C. E. New York and London: John Wiley & Sons. 1902. 8vo. Pp. xv, 473. Price \$3.50.

The subject matter of this work was first presented to the public in the form of six lectures delivered at Cooper Union, in the city of New York, under the auspices of Columbia University. By the desire of the President of the University, the material was prepared for ultimate publication. Part I., devoted to ancient civil engineering works, makes an extremely interesting introduction to the portions of the book dealing with modern engineering. It is richly illustrated with line cuts and photo-engravings, and covers all the more notable and some of the less known works of the engineers of ancient times. Part II., on bridges, contains eight chapters, and commencing with a historical resumé of early bridge building, proceeds through the whole field, and gives a lucid explanation of the principles of bridge design. There are some excellent half-tones and drawings of notable bridges, including the Forth Bridge and the new East River Bridge in this city. This is followed by an equally clear and comprehensive series of chapters in Part III. on waterworks for cities and towns, in which the subject is treated historically. Then the art of modern waterworks construction is very fully explained. The question of the Nile water supply is gone into at some length, and several other notable water works systems in this country and England are briefly described. There is a chapter on "Some Features of Railroad Engineering," in which the most complete description is that devoted to railroad signaling. The work closes with two chapters, one on the Nicaragua and the other on the Panama canal. This portion of the work is of special interest just now, when the Isthmian canal problem claims so much public attention. The advantages and disadvantages of the two canals are set forth, and the matter is so treated that any layman, who reads them carefully, will find himself in a position to judge for himself of the respective merits of the two routes.

SUCCESSFUL ADVERTISING. How to Accomplish It. By J. Angus MacDonald. A Practical Work for Advertisers and Businessmen. A Most Complete Index of Subjects. Philadelphia: Lincoln Publishing Company. 1902.

Advertising is now so very general, and its fundamental principles so well understood, that a book on the subject should not be without value. The volume which lies before us comes from the pen of a skilled advertising agent. After discussing advertisement building in its general aspects, the author refers to retail advertising all the year round. His next topic deals with special features in retail advertising, after which mail order advertising is discussed. Miscellaneous advertising is the subject of his last discussion. The book tells what it has to tell in a clear way. Not the least valuable feature of the book is a list of "Sayings to Swing Trade."

PLUMBING PROBLEMS. Or, Questions, Answers, and Descriptions Relating to House Drainage and Plumbing, from the Sanitary Engineer. New York: The Engineering Record. 8vo. Pp. 244.

A feature of the Engineering Record is its replies to questions on topics relating to water supply, sewerage, sewage disposal, ventilating, heating, house drainage, and plumbing. The repeated answers to inquiries concerning matters often explained in its columns have here been collected into a book, which will doubtless be useful to those interested in sanitary engineering.

THE HOW AND WHY OF ELECTRICITY. A Book of Information for Non-Technical Readers. By Charles Tripler Child. New York: Electrical Review Publishing Company. 1902. 16mo. Pp. 127.

This volume was perhaps the last work that came from the pen of the late Charles T. Child, technical editor of the Electrical Review. Mr. Child presents in the lucid style which characterized all his written work, something of the properties and generation of electricity and something of the methods by which

(Continued on page 124.)

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NATURE AND THE CAMERA. By A. Radcliffe Dugmore. Illustrated from photographs by the author. New York: Doubleday, Page & Co. 1902. Square 8vo. Pp. viii, 126. Price \$1.35.

Mr. Dugmore is one of our best known photographers of birds and animals. In the volume which lies before us he has collected what may well be considered the best of his work. To accompany his pictures he has written an instructive text. The publishers should be congratulated upon the admirable manner in which they have issued his work.

THE ART OF SUCCESS. By T. Sharper Knowlson. New York and London: Frederick Warne & Co. 1902. 16mo. Pp. xi, 163. Price \$1.

The same methods that characterize the author's "Art of Thinking" will be found in this little volume. The author proceeds by defining success according to its accepted meaning and its applications to various types of successful life. He shows that sometimes there is a success of high quality, where dollars are fewest. But since this idealistic kind of success hardly appeals to the multitude, he confines himself largely to what may be termed business success. After considering the difficulties which are met with, he deals with the constructive side of success, the first point naturally being the need of finding a suitable occupation. As concrete examples are often valuable, he devotes an entire chapter to the success of certain well-known modern business men.

INDEX OF INVENTIONS

For which Letters Patent of the United States were issued for the Week Ending

February 3, 1903.

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

| | |
|-----------------------------------------------------------------------|---------|
| Accumulator mechanism, M. J. Whitlock | 719,628 |
| Acid mordant and making same, organic, W. Beckers | 719,555 |
| Addition tester, H. E. Brown | 719,734 |
| Adhesive applying apparatus, A. N. & E. J. Barnes | 719,554 |
| Advertising or other purposes, optical device for, R. C. T. Evans | 719,771 |
| Alarm system, electric time, E. T. Ackerman | 719,551 |
| Aluminum, producing, H. F. D. Schwahn | 719,598 |
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| Binder, H. P. Jones | 719,673 |
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| Book for county records, etc., abstract, J. E. Lutz | 719,481 |
| Book, loose leaf, S. Seemann | 719,886 |
| Book, manifold sales, H. H. Winslow | 719,930 |
| Boot or shoe cleaner, L. C. Smith | 719,894 |
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| Box fastener, C. B. Baldwin | 719,553 |
| Brake mechanism, J. King | 719,813 |
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| Brush, automatic bicycle, J. M. Peterson | 719,808 |
| Brush, bath, L. Lauterbach | 719,596 |
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| Buckle, trace, J. B. Bunkers | 719,737 |
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| Calipers, Z. T. Furbish | 719,783 |
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| Exhibitor, A. G. & D. H. McCulloch | 719,843 |
| Expansion bolt, W. C. Boone | 719,426 |
| Explosive engine, J. Willoughby | 719,547 |
| Eye-glass nose guard, A. G. French | 719,789 |
| Eyelet machine, I. W. Gies | 719,788 |
| Eyeletting machine, G. Knight | 719,475 |
| Fabric marking machine, A. J. Schmedel | 719,516 |
| Fan attachment, W. C. Norman | 719,688 |
| Farrier's knife, P. E. Heller | 719,797 |
| Feed box, W. R. Howard | 719,468 |
| Fence, hedge, M. Neil | 719,605 |
| Fence post, F. E. Gregory | 719,789 |
| File binder, E. A. Sharp | 719,888 |
| Filter and extractor press, J. G. Crossman | 719,438 |
| Filter, oil, Norcutt & Hessel | 719,848 |
| Fire alarm apparatus, automatic, H. Plowman | 719,504 |
| Fire and burglar alarm, I. S. Bunker | 719,563 |
| Fire escape, L. Cassanova | 719,646 |
| Fire escape balcony, movable, M. L. Cronin | 719,755 |
| Fire extinguisher and alarm, automatic, A. D. Lofner | 719,946 |
| Fire extinguishing compound, J. B. Miller | 719,533 |
| Fire hose coupling, E. Mayer | 719,829 |
| Fire kindler, S. Murdock | 719,839 |
| Firearm, magazine, J. D. Pederson | 719,955 |
| Fireproof floor and ceiling construction, Simpson & Shoemaker | 719,892 |
| Fish hook, C. J. Trakel | 719,704 |
| Fish net, G. L. Plumley | 719,862 |
| Fish trap, floating, A. C. Burdick | 719,738 |
| Fishing rod, folding, H. M. McNamee | 719,603 |
| Flue, smoke, D. Einstein | 719,652 |
| Flushing apparatus closet, F. Light | 719,598 |
| Folding chair, A. D. Truesdell | 719,908 |
| Folding gate, J. W. Sharrard | 719,621 |
| Foliage and making same, artificial, C. E. Akeley | 719,632 |
| Foot and body warmer, portable, F. Batter | 719,638 |
| Friction brake, R. R. Osgood | 719,853 |
| Fruit picker's receptacle, J. J. Jones | 719,810 |
| Furnace, See Electric furnace | |
| Furnaces, chiller or hot metal car for blast, E. A. Weimer | 719,706 |
| Galvanic battery, H. Halsey | 719,659 |
| Game apparatus, W. C. Farnum | 719,448 |
| Game apparatus, D. Gailey | 719,456 |
| Game apparatus, F. W. Baynes | 719,719 |
| Garbage can or receptacle, E. L. Schiefer | 719,515 |
| Garbage crematory, C. A. Williams | 719,545 |
| Garbage plant, C. S. Wheelwright | 719,542 |
| Garden tool, J. E. Beebe | 719,723 |
| Garment clasp, E. H. Gysling | 719,462 |
| Garment fastenings, card or mount for, O. A. De Long | 719,442 |
| Garment sections, marking and folding, P. J. Menabue | 719,485 |
| Gas generating apparatus, acetylene, J. J. Hendler | 719,665 |
| Gas generator, acetylene, A. Davis | 719,570 |
| Gas generator, acetylene, Atkin & Eagle-son | 719,633 |

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