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NEW BOOKS, ETC.

THE CARE OF A HOUSE. A Volume of Suggestions. By P. M. Clark. New York: The Macmillan Company. 1903. 16mo. Pp. 283. Price \$1.50.

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THE ENCYCLOPEDIA AMERICANA. A General Dictionary of the Arts and Sciences, Literature, History, Biography, etc., of the world, in sixteen volumes. Editor-in-Chief, Frederick Converse Beach. New York and Chicago: The Americana Company. Vols. III. and IV.

We are very much mistaken if, as the successive volumes of this new encyclopedia appear, the subscribers do not fall more and more in love with the work. The third and fourth volumes have all the characteristics of thoroughness, literary excellence in the articles, beauty of print, artistic merit and appropriateness in the illustrations, and special adaptedness to the purposes of American students and writers so favorably noted in the first and second. Original research is evident on almost every page. The editors have found small use for the mere copyist among their contributors. The work breathes of the spirit of to-day, even in its descriptions of things ancient. When it explores the dark corners of the past it is by the aid of the arc light and radium. In no encyclopedia yet produced on this side of the Atlantic, if anywhere, has there been evident so much independence of mere bookmakers' traditions, such a determination to present the actualities in the world's accumulation of knowledge and the conditions of to-day. The illustrations include splendid full-page portraits of Gov. Bliss, of Michigan; Charlotte Bronte, William Cullen Bryant, Robert Burns, Andrew Carnegie, Thomas Carlyle, and others. The various articles on mechanical industries and natural science are accompanied by excellent photographic and other views. Biographical notices of artists are accompanied by fine reproductions of some of their masterpieces. The double-page maps of countries and cities are numerous and modern.—Pioneer Press, St. Paul.

ELEMENTS OF ELECTROMAGNETIC THEORY. By S. J. Barnett, Ph.D. New York: The Macmillan Company. 1903. 8vo. Pp. 480. Price \$3.

The author says in his preface that he has tried to present in systematic and definite form a simple, rigorous, thoroughly modern introduction to the fundamental principles of electromagnetic theory, together with some of the simpler of the more interesting and important non-technical applications. The work makes no pretense to completeness, but is written for the serious student of physics, who will make liberal use of more detailed treatises of handbooks and of journals as occasion demands. The subject is largely taken up from a mathematical standpoint.

SMALL YACHT CONSTRUCTION AND RIGGING. By Linton Hope. New York: Forest and Stream Publishing Company. 1903. 8vo. Pp. 177. Price \$3.

The author deals with this subject from the keel up, and the detail drawings are most admirable. The book gives precisely the information that inexperienced yacht-builders are sure to desire to know. It is a book that we can commend to all yachtsmen or would-be yachtsmen. There are a number of large-scale plans in a pocket at the back of the book.

HOMOPHONIC CONVERSATIONS IN ENGLISH, GERMAN, FRENCH, AND ITALIAN. Being the Natural Aid to the Memory in Learning Those Languages. By C. B. and C. V. Waite. Chicago: C. V. Waite & Co. N. D. 16mo. Pp. 137. Price \$1.

The distinguishing feature of this work is that the principal words of nearly every sentence have a like sound and a like meaning in the four languages, or at least in three of them. It is manifest that this arrangement will be of great service in enabling the learner to remember, not only the words themselves, but the construction of the sentences as well. It is simply applying the principle of association to aid us in learning the languages. Some of the methods therein taught are extensively practised in every-day life, but this work differs from those in that it contains not a single artificial sentence, hence it is called a natural aid to the memory.

THE AMERICAN STEEL WORKER. By E. R. Markham. New York: The Derry Collard Company. 1903. 12mo. Pp. 343. Price \$2.50.

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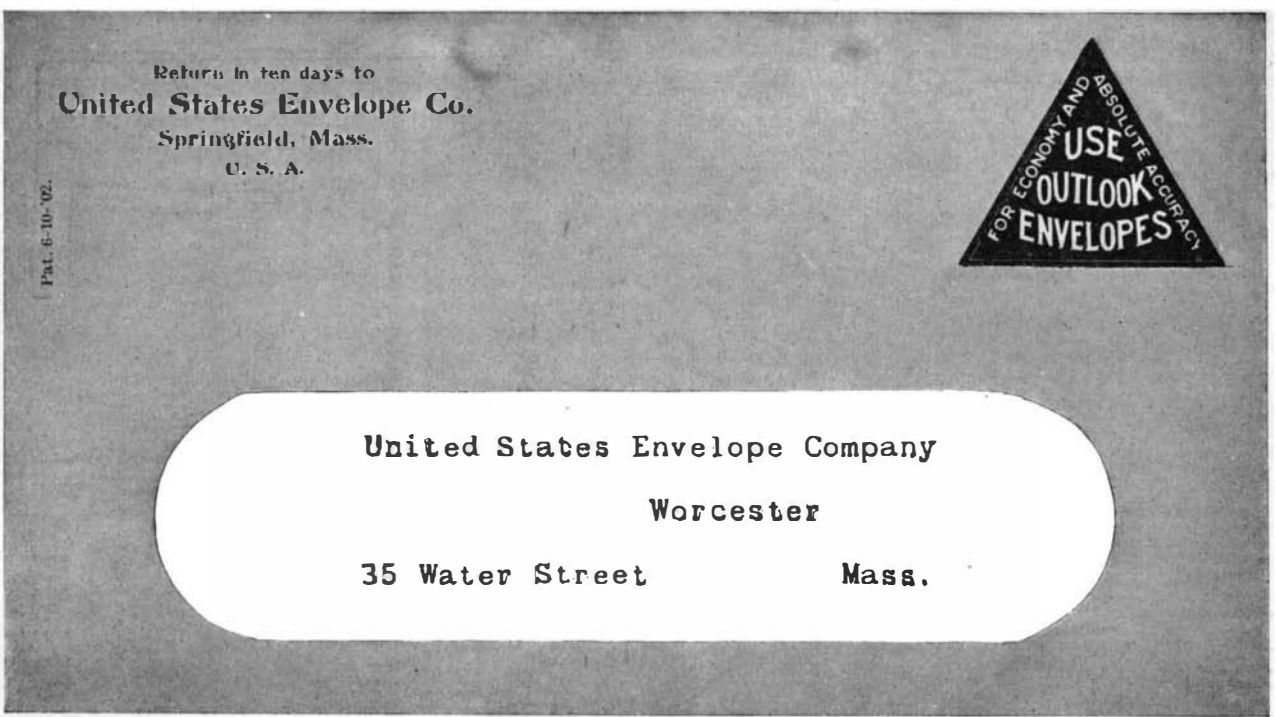
INDEX OF INVENTIONS

For which Letters Patent of the United States were issued for the Week Ending November 3, 1903, AND EACH BEARING THAT DATE

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

Table listing inventions with patent numbers, including Accumulator plate or grid, J. von der Poppenburg; 1-Acetylaminoo-2-4-diaminobenzene, O. Dresel; Acid ester and making same, trinitroethylcyclohexenoncarboxylic, Merling & Weide; Acid making anthraquinone alpha disulfonic, R. E. Schmidt; Air and separating oxygen therefrom, apparatus for liquefying, E. C. Thrupp; Amusement, mechanical, O. B. Danner; Anesthetic administering apparatus, G. H. Hurd; Anesthetic apparatus, V. Knowles; Animal trap, G. E. Alphin; Apparel, wearing, A. E. Tabor; Asphalt surfacing apparatus for heating, J. W. Nesmith; Assay furnace, crucible, C. N. Anthony; Auger, well, C. N. Hutchins; Automobile steering mechanism, L. Mott; Awning fixture, A. De Simone; Axle, rotary, C. Faulkner; Back band hook, I. G. Carmack; Back band hook, J. W. Hazlewood; Ball, See Golf ball; Band cutter and feeder, O. W. Brown; Barrer and door holder, folding, C. P. & F. E. Howard; Basket, J., Jr., & W. Brown; Bath fluids, means for introducing gases into, L. von Orth; Battery, J. W. Gladstone; Battery, Schaul & Loewenstein; Battery charging system, secondary, H. P. Maxim; Battery grid, G. H. Rabenalt; Bearing, W. D. Richter; Bearing, antifriction, F. M. Carroll; Bed, folding, C. P. Brown; Bed rail, W. D. Hall; Bells, orchestra, C. H. Agne; Billiard cue tip, H. Seelinger; Binder, temporary, E. A. Trussell; Blowpipe, oxyhydrogen, W. H. Murphy; Boilers, compound for the removal and prevention of incrustation in steam, W. B. Fitzpatrick; Boiler water purifier, L. V. Holmes; Bolster, C. P. Hutton; Bolt cutter, N. Lamb; Bolt holder, wrench, and bolt extractor, combined, G. W. Sedelmeyer; Bomb, despatch, H. B. Littlepage; Bookkeeping, E. E. Crandall; Boot tree, W. F. Packard; Boring or planing concave or cylindrical surfaces, automatic tool for, Knight & Benjamin; Bottle, non-refillable, E. Hearns; Bottle washing apparatus, E. F. Eick; Bouquet holder, fountain, E. Buchan; Brake beam fulcrum block, R. P. Lamont; Brake operating apparatus, Canfield & Murray; Bread mixer and kneader, J. F. Stevens, reissue; Brick for heating purposes, porous, J. J. Lawler; Brick kiln, J. W. Aregood; Brick truck, A. A. Scott; Broom filling table, rotary, L. J. Remmele; Broom or brush, rotary, L. J. Remmele; Buckle, harness, E. Davidson; Buckle opening device, G. F. Carey; Buffing pad holder, T. Robinson; Building block and wall, F. E. Kieder; Building structure, Ellinger & Koczynski; Bunsen burner, A. H. Humphrey; Burial casket, P. J. McGuire; Burner, A. J. Coghe; Buttonhole cutting and stitching machine, E. B. Allen; Cable grip, W. O. Gunckel; Camera plate holders, light excluding attachment for, R. A. Bacon; Candle molding apparatus, J. Burpitt; Canned goods processing apparatus, R. D. Braley; Cap or closure, screw, J. C. Potter; Car brake operating mechanism, railway, J. H. Bruce; Car, convertible, R. Rommer; Car, convertible passenger, A. Kimble; Car coupling, G. Wiley; Car coupling, J. E. Strauss; Car coupling, S. E. Jackman; Car, dump, H. S. Hart; Car grain door, railway, F. Hachmann; Car, metallic, J. A. Driver; Car roof, S. Herbert; Car seat, H. White; Car ventilator, exhaust, L. C. Lanphear; Carburer, explosion engine, F. H. Smith; Carburer, apparatus, W. Kahle; Carding engine puppet, W. H. Eddy; Carpets, floors, etc., pneumatic device for cleaning, A. Lotz; Carrier. See Cash carrier; Cart or wagon, dumping, T. M. Murphy; Carriage, gun, W. C. Bush; Cash carrier, W. L. Churchill; Casting hollow metal bodies, apparatus for, P. de Hemptinne; Ceiling or floor construction, H. Eggert; Cement, manufacture of Portland, H. K. G. Bamber; Chain, conveyor, M. Garland; Chain wrench, G. W. Buford; Churn, W. L. Bashford; Cigar band, L. M. Weiler; Cigar machine, E. Kuhne; Cigar or pipe tray, J. B. Crapp; Cigar pressing apparatus, R. Woerner; Circuit controller, alternating current, C. D. Ehret; Circuits, potential regulator for alternating current, H. R. Stuart; Class, G. M. Hubbard; Clothes line apparatus, Knight & Roby; Clutch, E. C. Henn; Coat breast stay, M. M. Marks; Cock, water gate, C. C. Wakefield; Coin controlled machine coin controlled feeding apparatus, E. S. Scheble; Computing machine, J. W. Todd; Concentrator, J. J. Montgomery; Confectionery, manufacture of sweetsmeats or similar articles of, E. W. Barratt; Converter coupling universal, T. H. Tracy; Conveying and loading machine, J. A. Low; Cooking utensil, C. D. Augur; Cooking utensil, A. G. Boone; Cord knoter, wringing, F. Terwilliger; Core and tire, resilient, C. Miller;

(Continued on page 360)



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