

Business and Personal.

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Chard's Extra Heavy Machinery Oil. Chard's Anti-Corrosive Cylinder Oil. Chard's Patent Lubricants and Gear Grease.

Now is the best season of the year for painting dwellings, barns, fences, etc., on account of freedom from flies, dust, summer heat, and showers.

LAKE VIEW HOUSE, LIVONIA, N. Y., Feb. 9, 1880. H. W. Johns Mfg Co., 87 Maiden Lane, New York.

DEAR SIR: We have used your Asbestos Liquid Paint on our buildings, and find one coat goes as far and covers as well as two coats of lead and oil.

For best Indirect Radiators, see adv., page 268. An experienced Die Sinker and Tool Maker, able to build light machinery, and invent if required, is open for an engagement.

Wanted—The address of all Parties interested in the Silk Business, in all its branches. E. Side, B'klyn, N. Y.

Wanted—Second-hand, fifty-inch Lathe, and a large Planer. Perkins & Co., Grand Rapids, Mich.

A profitable business for a person with a small capital. Buy a Stereopticon or Magic Lantern, and an interesting assortment of views.

The E. Stebbins Manuf'g Co. (Brightwood, P. O.), Springfield, Mass., are prepared to furnish all kinds of Brass and Composition Castings at short notice.

4 x 6 Engine and Boiler for sale. Geo. F. Shedd, Waltham, Mass.

The "1880" Lace Cutter by mail for 50 cts.; discount to the trade. Sterling Elliott, 262 Dover St., Boston, Mass.

On an allowed Home Patent.—Wanted co-operation on Foreign Patent. Address Trio, Box 62, Austin, Texas.

Hardware Novelty.—Entire U. S. Patent for sale cheap. Address F. A. Heberline, Knox Clarion Co., Pa.

The Tools, Fixtures, and Patterns of the Taunton Foundry and Machine Company for sale, by the George Place Machinery Agency, 121 Chambers St., New York.

For Sale, on account of increase of power, one 24 x 48 Corliss Engine, with three boilers and equipment complete.

Improved Rock Drills and Air Compressors. Illustrated catalogues and information gladly furnished.

Collection of Ornaments.—A book containing over 1,000 different designs, such as crests, coats of arms, vignettes, scrolls, corners, borders, etc.

The Eureka Mowing Machine now is acknowledged as the best in the market. It has taken the first premium in nearly every State Fair this year.

The Boomer & Boschert Press Co. have in daily operation at the Am. Inst. Fair, a complete cider mill and cider jelly manufactory.

Packing once tried always used. Phoenix Packing from 1-16 up in spoons or on coils.

Gas Machines.—Be sure that you never buy one until you have circulars from Terrill's Underground Meter Gas Machine, 39 Dey St., New York.

Experts in Patent Causes and Mechanical Counsel. Park Benjamin & Bro., 50 Astor House, New York.

Corrugated Wrought Iron for Tires on Traction Engines, etc. Sole mfrs., H. Lloyd, Son & Co., Pitts'g, Pa.

Malleable and Gray Iron Castings, all descriptions, by Erie Malleable Iron Company, limited, Erie, Pa.

Caution to the Public.—The world-wide reputation of H. W. Johns' patent Asbestos Steam Pipe and Boiler Coverings has induced unscrupulous persons to infringe our rights, and also to sell and apply worthless articles, representing them as being made of Asbestos.

Wright's Patent Steam Engine, with automatic cut off. The best engine made. For prices, address William Wright, Manufacturer, Newburgh, N. Y.

Rollstone Mac. Co.'s Wood Working Mach'y ad. p. 237. National Institute of Steam and Mechanical Engineering, Bridgeport, Conn.

Wm. Sellers & Co., Phila., have introduced a new injector, worked by a single motion of a lever.

Reed's Sectional Covering for steam surfaces; any one can apply it; can be removed and replaced without injury.

Machine Knives for Wood-working Machinery, Book Binders, and Paper Mills. Also manufacturers of Solomon's Parallel Vice, Taylor, Stiles & Co., Riegelsville, N.J.

Blake "Lion and Eagle" Imp'd Crusher. See p. 269. Apply to J. H. Blaisdell for all kinds of Wood and Iron Working Machinery.

Houston's Sash Dovetailing Machine. See ad., p. 270. The Chester Steel Castings Co., office 407 Library St., Philadelphia, Pa.

Brass & Copper in sheets, wire & blanks. See ad., p. 270. Air Compressors. Clayton Stm. Pump W'ks, B'klyn, N.Y.

Diamond Saws. J. Dickinson, 64 Nassau St., N. Y. The Improved Hydraulic Jacks, Punches, and Tube Expanders.

The "Fitchburg" Automatic Cut-off Horizontal Engines. The "Haskins" Engines and Boilers. Send for pamphlet.

Eagle Anvils, 10 cents per pound. Fully warranted. Gear Wheels for Models (list free); experimental and model work.

The best Truss ever used. Send for descriptive circular to N. Y. Elastic Truss Co., 683 Broadway, New York.

For Shafts, Pulleys, or Hangers, call and see stock kept at 79 Liberty St., N. Y. Wm. Sellers & Co.

Saw Mill Machinery. Stearns Mfg. Co. See p. 269. Ore Breaker, Crusher, and Pulverizer. Smaller sizes run by horse power.

Lightning Screw Plates and Labor-saving Tools, p. 269.

HINTS TO CORRESPONDENTS.

No attention will be paid to communications unless accompanied with the full name and address of the writer.

Names and addresses of correspondents will not be given to inquirers. We renew our request that correspondents, in referring to former answers or articles, will be kind enough to name the date of the paper and the page, or the number of the question.

Correspondents whose inquiries do not appear after a reasonable time should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them.

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from \$1 to \$5, according to the subject, as we cannot be expected to spend time and labor to obtain such information without remuneration.

Any numbers of the SCIENTIFIC AMERICAN SUPPLEMENT referred to in these columns may be had at this office. Price 10 cents each.

(1) H. A. asks: How can I fix a mirror from which some of the quicksilver has been scratched? A. Remove the silvering from the glass around the scratch so that the clear space will be about a quarter of an inch wide.

English Patents Issued to Americans.

From September 28 to October 1, 1880, inclusive. Blacking brush, E. L. Wood, Eastland City, Texas. Compound for preventing pain, H. E. Dennett, Boston, Mass.

Magneto-electric machine, T. A. Edison, Menlo Park, N. J. Mail bag, C. J. Becktel et al., Muncie, Ind. Pianoforte, A. Hellig, Little Ferry, N. J.

INDEX OF INVENTIONS FOR WHICH Letters Patent of the United States were Granted in the Week Ending September 28, 1880, AND EACH BEARING THAT DATE.

[Those marked (r) are reissued patents.] A printed copy of the specification and drawing of any patent in the annexed list, also of any patent issued since 1866, will be furnished from this office for one dollar.

Acid from sludge acid, recovering sulphuric, E. Clark, 232,685. Air engine, E. Thuemmler, 232,690. Annunciator for fire alarm telegraphs, F. W. Griswold, 232,707.

Augers, manufacture of mining, D. W. Siprell, 232,767. Axle box, car, W. G. Mitchell, 232,743. Ball trap, Kerstetter & Fagley, 232,728.

Basket, folding, H. H. Cammann, 232,680. Basket, metallic, J. B. F. Page, 232,752. Bath chamber, portable, J. N. Lee, 232,731.

Bed bottom, spring, J. M. Stark, 232,657. Bedstead, folding, S. S. Burr (r), 9,393. Blasting, R. F. L. Hallock, 232,640.

Bomb, H. S. Foster, 232,694. Bottle stopper, P. Miles, 232,618. Brick machine, rotary, Smith & Glaze, 232,760.

Brush for cleaning castings, J. H. Davis, 232,600. Brush, helical wire, F. F. Field, 232,636. Bucket bottom, well, Johnson & Eccleston, 232,726.

Bumper, spring, R. W. Irwin, 232,723. Bung for beer kegs, faucet, C. H. Shaw, 232,653. Burglar alarms, indicator for electric, A. Bradford, 232,591.

Calendar, F. Ratcliff (r), 9,390. Cant hook, M. Bellanger, 232,627. Car coupling, D. S. Bailey, 232,538.

Car coupling, J. Candy, 232,594. Car coupling, J. Coart, 232,687. Car door, D. F. Van Liew, 232,662.

Car, sleeping, T. Clarke, 232,686. Car, stock, L. Leber, 232,732. Car, stock, S. H. McGibeny, 232,611.

Jug, covered, I. W. Knowles, 232,730. Label, tobacco, P. J. Sorg, 232,771. Lamp chimneys, mechanism for opening the base of, J. Adams, 232,625.

Lamp, electric, J. C. Jamin, 232,610. Lamp, reservoir, O. Sweeney, 232,778. Lamp supporting device, A. Roelofs, 232,761.

Lead and crayon holder, A. C. Hafely, 232,607. Liquid drawing and measuring device, S. W. Cox, 232,680. Locomotive, F. M. Stevens, 232,776.

Locomotive exhaust apparatus, E. Longstreth (r), 9,389. Locomotive fire box, Taylor & Burgess, 232,780. Mat, J. H. Robertson, 232,760.

Meat, fruit, etc., press, B. A. Stevens, 232,619. Microphone, J. P. Livermore, 232,734. Milliner's steamer and presser, T. Hicks, Jr., 232,716.

Millstone dress, A. D. Farling, 232,608. Mining machine, G. D. Whitcomb, 232,792. Mop head, J. K. Collins, 232,688.

Nail extractor, A. F. Gerald, 232,706. Nickel plating, solution for, C. G. Pendleton, 232,615. Nickel, solution for the electro-deposition of, J. H. Potts, 232,755.

Ore crusher frame, E. S. & H. H. Blake, 232,640. Oyster float, T. McCosker, 232,740. Packing band, J. Z. Gifford, 232,704.

Painting pottery, T. J. Wheatley, 232,791. Paper, machine for waxing or varnishing, J. W. Sutton, 232,777. Peg and peg wood, F. F. Raymond, 2d., 232,617.

Pen, cattle, J. N. Chew, 232,683. Pen, stylographic fountain, C. H. Downes, 232,683. Pencil sharpener, slate, J. W. Hyatt, 232,721.

Pencils, machine for the manufacture of, slate, J. W. Hyatt, 232,720. Plaited puffing, machine for making, S. E. Barney (r), 9,391. Plow and seed planter, combined listing, Cooper & Bostwick, 232,689.

Plow attachment, C. E. Worline, 232,796. Polishing machine, M. R. Chase, 232,682. Printing machines, ink roller attachment for, G. A. Miller, 232,744.