

Business and Personal.

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Prof. Hallock's class in Practical Chemistry and Physics begins September 25. Laboratory 155 West 43d Street, New York.

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Manufacturers of outfits for cleaning privies will please communicate with G. Caen, San Antonio, Texas.

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Foreman wanted to take charge of our Press and Die Departments. Address, stating experience, etc., Niagara Stamping and Tool Company, Buffalo, N. Y.

American Fruit Drier. Free Pamphlet. See ad., p. 173.

Fire Brick, Tile, and Clay Retorts, all shapes. Bornerg & O'Brien, M'rs, 23d St., above Race, Phila., Pa.

Drop Forgings of Iron or Steel. See adv., page 174.

For best Portable Forges and Blacksmiths' Hand Blowers, address Buffalo Forge Co., Buffalo, N. Y.

Paragon School Desk Extension Slides. See adv. p. 174. Brass and Copper in sheets, wire & blanks. See ad. p. 174.

The Chester Steel Castings Co., office 407 Library St., Philadelphia, Pa., can prove by 15,000 Crank Shafts, and 10,000 Gear Wheels, now in use, the superiority of their Castings over all others. Circular and price list free.

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Eagle Anvils, 10 cents per pound. Fully warranted.

Bostwick's Giant Riding Saw Machine, adv. page 173.

Tight and Slack Barrel machinery a specialty. John Greenwood & Co., Rochester, N. Y. See illus. adv. p. 173.

Draughtsman's Sensitive Paper, T. H. McCollin, Phila., Pa.

For Mill Mach'y & Mill Furnishing, see illus. adv. p. 172.

Drop Hammers, Power Shears, Punching Presses, Die Sinks. The Pratt & Whitney Co., Hartford, Conn.

Woodwork'g Mach'y. Rollstone Mach. Co. Adv., p. 173.

Common Sense Dry Kiln. Adapted to drying of all material where kiln, etc., drying houses are used. See p. 174.

To Inventors.—Wanted, the most simple and inexpensive process by which coffee can be roasted in lots of 20 to 75 pounds. Heat to be cheaper than that of coal. Address "Opportunity," Box No. 77, Brooklyn, E. D., N. Y.

The American Machine Co., N. E. cor. Lehigh Ave. and American St., Philadelphia, Pa., is prepared to execute contracts for the manufacture of light machinery.

Cope & Maxwell M'fg Co.'s Pump adv., page 157.

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For Pat. Safety Elevators, Hoisting Engines, Friction Clutch Pulleys, Cut-off Coupling, see Frisbie's ad. p. 157.

Red Jacket Adjustable Force Pump. See adv., p. 158.

Mineral Lands Prospected, Artesian Wells Bored, by Pa. Diamond Drill Co. Box 423, Pottsville, Pa. See p. 158.

4 to 40 H. P. Steam Engines. See adv. p. 94.

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C. B. Rogers & Co., Norwich, Conn., Wood Working Machinery of every kind. See adv., page 142.

Lightning Screw Plates, Labor-saving Tools. p. 126.

Engines, 10 to 50 horse power, complete, with governor, \$250 to \$550. Satisfaction guaranteed. Six hundred in use. For circular address Heald & Morris (Drawer 127), Baldwinville, N. Y.

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[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH

Letters Patent of the United States were Granted in the Week Ending

August 22, 1882,

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 25 cents. In ordering please state the number and date of the patent desired and remit to Munn & Co., 261 Broadway, corner of Warren Street, New York city. We also furnish copies of patents granted prior to 1866; but at increased cost, as the specifications not being printed, must be copied by hand.

Table listing inventions with patent numbers and names, including items like Air compressor, Ax making machine, Bag holder, Baking pan, etc.

Table listing inventions with patent numbers and names, including items like Lamp, electric, T. A. Edison, Copper lined boiler, W. L. Brownell, Corset, G. W. Carter, etc.

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 B represents that part of the packing which, when in use, is in contact with the Piston Rod. A, the elastic back, which keeps the part B against the rod with sufficient pressure to be steam-tight, and yet creates but little friction.  
 This Packing is made in lengths of about 20 feet, and of all sizes from 1/4 to 2 inches square.  
**JOHN H. CHEEVER, Treas. NEW YORK BELTING & PACKING CO., 29 Park Row, New York.**  
**SPECIAL NOTICE.**—Owing to the recent great fire in the "World" Building, our office has been removed as above.