

(40) W. W. W. writes: Can I get any more heat from steam at 50 or 60 pounds pressure...

(41) J. B. asks for a good receipt for a preparation to keep water out of a coat...

(42) J. W. asks for a simple and easy plan of procuring sample of water from bottom of a well...

(43) F. J. C. asks for information about the reversing gear on Maxim's steam launch...

(44) J. S. asks: 1. What is the area of a safety valve 4 inches in diameter...

(45) S. C. writes: 1. I am running a steam pump; the size of steam cylinder, 8 inches bore...

(46) F. S. asks: 1. In calculating the horse power of compound engines, how is the pressure...

(47) T. D. M. asks: 1. What action would electricity have on a fur-bearing animal killed by it?

(48) J. A. asks: Where can I obtain the latest and best information on the reduction of silver ores?

(49) C. E. B. writes: 1. You refer in issue of Nov. 18, 1882, page 329, of SCIENTIFIC AMERICAN...

(50) H. C. A. asks for a receipt for removing lard oil stains from linen table covers...

(51) C. W. asks for a receipt for making the cement for putting gum soles on shoes...

(52) W. H. R. asks how to wash or erase ink from paper, ledger books, etc?

(53) F. R. H. asks for a process for treating barytes with oil of vitriol and steam to purify it...

(54) P. H. I. asks: 1. If a phosphorus lamp of any degree of light can be made by pouring boiling hot sweet oil into a bottle with a small piece of phosphorus in it...

(55) E. N. H. asks: What is the composition of Seidlitz powders, and in what proportions?

(56) E. S. asks how to electroplate articles that are non-conductors of electricity, such as leaves, fishes, insects, etc?

(57) G. M. asks for a method of crystallizing tin plate. A. Heat the plate until the tin begins to melt...

(58) E. H. B.: The following is a good fireproof cement: 1. Iron filings, 140 parts; hydraulic lime, 20; quartz sand, 25; sal ammoniac, 3.

(59) J. C. asks If there is any process known by which we can dissolve india-rubber or gutta-percha?

(60) D. H. V. asks for the best method of cleaning bronze statuary or other bronze ornaments...

(61) O. N. N. asks how to soften tin that has been hardened by being heated too often...

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

M. M.—The sample you sent is composed of iron pyrites (sulphide of iron) in clay, and has no value, containing no gold or silver.

Business and Personal.

The Charge for Insertion under this head is One Dollar a line for each insertion; about eight words to a line.

Rare Chance.—To rent, brick building, 38x80, located on one of the leading railroads. New England city, 20,000 inhabitants...

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25' Lathes of the best design. G. A. Ohl & Co., East Newark, N. J.

Pure Grain Nickel, Rolled and Cast Anodes, Pure Nickel Salts. Greene, Tweed & Co., 118 Chambers St., New York.

Mfr's desiring a first-class specialty in hardware, on royalty, address W., Drawer 23, Goshen, Ind.

Physicians acquainted with Dr. Elmore's Rheumatic Goutaline pronounce it the only real remedy for rheumatic disorders ever discovered...

Drop Forgings. Billings & Spencer Co. See adv., p. 413.

For Pat. Safety Elevators, Hoisting Engines, Friction Clutch Pulleys, Cut-off Coupling, see Frisbie's ad. p. 414.

Mineral Lands Prospected, Artesian Wells Bored, by Pa. Diamond Drill Co. Box 423, Portsville, Pa. See p. 412.

C. B. Rogers & Co., Norwich, Conn., Wood Working Machinery of every kind. See adv., page 414.

For Power & Economy, Alcott's Turbine, Mt. Holly, N. J. 4 to 40 H. P. Steam Engines. See adv. p. 412.

"How to Keep Boilers Clean." Book sent free by James F. Hotchkiss, 84 John St., New York.

Scientific Books. See page 395. Catalogues free. E. & F. N. Spon, 44 Murray Street, N. Y.

Engines, 10 to 50 horse power, complete, with governor. \$250 to \$550. Satisfaction guaranteed. More than seven hundred in use.

Brass Finishers' Turret Lathes, 13 1/2 x 4, \$165. Lodge, Barker & Co., 189 Pearl St., Cincinnati, O.

Wanted.—Patented articles or machinery to make and introduce. Gaynor & Fitzgerald, New Haven, Conn.

To stop leaks in Boiler Tubes use Quinn's Patent Ferrules. Address S. M. Co., So. Newmarket, N. H.

Latest Improved Diamond Drills. Send for circular to M. C. Bullock Mfg. Co., 80 to 88 Market St., Chicago, Ill.

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Assays and Analyses of ores and all commercial products. Advice given and investigations made in all branches of chemical industry. Send for circular. N. Y. Assay Laboratory, 40 Broadway, New York.

Guild & Garrison's Steam Pump Works, Brooklyn, N. Y. Steam Pumping Machinery of every description.

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Presses & Dies. Ferracute Mach. Co., Bridgeton, N. J. Cope & Maxwell Mfg Co's Pump adv., page 12.

Curtis Regulator, Float, and Expansion Trap. See p. 12. Steam Hammers, Improved Hydraulic Jacks, and Tube Expanders. R. Dudgeon, 24 Columbia St., New York.

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Barrel, Key, Hoghead, Stave Mach'y. See adv., p. 12. Magic Lanterns and Stereopticons of all kinds and prices. Views illustrating every subject for public exhibitions. Sunday schools, colleges, and home entertainment. 116 page illustrated catalogue free. McAllister, Manufacturing Optician, 49 Nassau St., New York.

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For best low price Planer and Machiner, and latest improved Sash, Door, and Blind Machinery, send for catalogue to Rowley & Hermance, Williamsport, Pa. The Sweetland Chuck. See illus. adv., p. 14.

The Porter-Allen High Speed Steam Engine. South-work Foundry & Mach. Co., 430 Washington Ave., Phil. Pa. Knives for Woodworking Machinery, Bookbinders, and Paper Mills. Taylor, Stiles & Co., Riegelsville, N. J.

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