

USEFUL HINTS TO OUR READERS.

BACK NUMBERS AND VOLUMES OF THE SCIENTIFIC AMERICAN.—New subscribers to the SCIENTIFIC AMERICAN can be furnished with the back numbers of this volume by signifying their wish to receive them, otherwise their paper will be sent from the date of receiving the subscription.

SUBSCRIBERS TO THE SCIENTIFIC AMERICAN who fail to get their papers regularly will oblige the publishers by stating their complaints in writing. Those who may have missed certain numbers can have them supplied by addressing a note to the office of publication.

GIVE INTELLIGIBLE DIRECTIONS.—We often receive letters with money inclosed, requesting the paper sent for the amount of the enclosure, but no name of State given, and often with the name of the Post-office also omitted.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was prepaid has expired; and the publishers will not deviate from that standing rule in any instance.

RATES OF ADVERTISING.

THIRTY CENTS per line for each and every insertion, payable in advance. To enable all to understand how to calculate the amount they must send when they wish advertisements published, we will explain that ten words average one line.

LABORATORY OF CHEMISTRY.—CONSULTATIONS and advices on chemistry applied to arts and manufactures, agriculture, metallurgy, mining surveys.

WANTED—A SITUATION AS SUPERINTENDENT in an Iron Foundry, by a man of steady habits, who has had over 30 years' experience as molder.

WANTED—A PARTNER, WITH SEVERAL thousand dollars, in a well-established Foundry and Machinery concern; or I will sell or exchange for an improved Farm said Foundry, Tools, Patterns, &c., with a good run of custom.

POCO METALLIC PAINT—POSSESSING ADVANTAGES over all others—viz: varieties of color, finer ground and cheaper.

FOR SALE—THREE PIN MACHINES (FOWLER'S PATENT) for making solid head pins—makes Nos. 3, 4 and 5 pins; all new and in good order.

BOILER PLATE PUNCHES.—RUST'S PATENT, manufactured and sold by the proprietor of the patent, S. C. HILLS, No. 12 Platt-street, New York. Price \$150.

A FINE LATHE FOR SALE—5 1/2 FOOT BED, 6-inch swing; made by Stewart, and never used. Cost over \$300, and will be sold for \$150.

SOMETHING NEW.—JUST OUT, GENTLEMEN'S Water-proof Cloth Coats, Sporting Coats and Leggings, and a variety of new styles of Water-proof Clothing, from the new factory of the N. H. Hayward Company.

\$1 COPYING PRESS, WITH WRITING CASE.—Portable and durable, and copies letters instantly and perfectly. Sent post-paid, with copying book, for \$1 27.

GREAT CURIOSITY.—MAGIC CIGAR CASES, with secret drawers, sent free on receipt of twelve red postage stamps, to any part of the United States.

HAYDEN SANDERS & CO., No. 306 PEARL-street, New York, manufacture every variety of brass work for portable steam engines, whistles, valves, oil cups, gage cocks, &c.

WANTED—A SAW GUMMER THAT WILL run a saw and not bend it. Address H. E. SAWINS, Matteson, Branch county, Mo.

WANTED TO PURCHASE—THE PATENT right of some improved process for tanning leather without the use of bark. Address, with full particulars, Box No. 627, Charleston, S. C.

PORTER'S IMPROVED GOVERNOR.

The reputation of these governors is well established. Parties troubled with unsteady power may send for them in entire confidence. They never fail. The numerous valves in use are all equally good, if well made; the form of the opening is immaterial.

I have long done with troubling my customers for certificates; but am able to refer to a large number of parties now using this governor in a majority of the States of the Union.

CHARLES T. PORTER, No. 285 West Thirteenth-street, corner of Ninth-avenue, New York City.

SWISS MATHEMATICAL DRAWING INSTRUMENTS of the finest finish, in large quantities, constantly on hand, for sale by JAMES W. QUEEN & CO., No. 924 Chestnut-street, Philadelphia.

5,000 AGENTS WANTED—TO SELL FIVE new inventions—one very recent, and of great value to families. All pay great profits to agents.

BROWN & GARRISON'S AGENCY FOR THE sale of Patent Rights and all Labor-saving Articles, No. 126 Randolph-street (P. O. Box No. 1,219), Chicago, Ill.

MACHINERY.—S. C. HILLS, NO. 12 PLATT-street, New York, dealer in Steam-engines, Boilers, Planers, Lathes, Clucks, Drills, Pumps, Mortising, Trenching and Sash Machines, Woodworth's and Daniel's Planers, Dick's Patches, Presses and Saws; Cob and Corn Mills; Harrison's Grist Mills; Johnson's S. Single Mills; Heating, Oil, &c.

A GOOD CHANCE FOR MANUFACTURING.—The subscribers have for sale a very valuable property, comprising about 13 acres, suitable for Cotton, Paper or any other manufacturing purposes. There are several large springs of pure Water on the premises.

FOR THE DEAF—FOR THE DEAF.—ARTIFICIAL ears; entirely concealed. Call at, or address, HASLAM BROS., No. 420 Broadway, New York, for a descriptive and illustrated circular.

HOUSEHOLD ARTICLE FOR EVERYDAY use.—Patent for sale.—A self-soaping Scrubbing Bath or Nail Brush. Can be got up cheap, an excellent opportunity to make money. Patent granted May 23, 1880.

NEW AND PERFECT BARREL MACHINERY, consisting of a Head-turner, Stave-dresser, Joister and Crozer, and especially adapted to rice, sugar and molasses hogsheads, and to light or slack work of every description.

CHARLES A. SEELY, CHEMIST, NO. 424 Broadway, New York.—Analyses of ores, minerals, articles of commerce, &c. Advice and instruction in chemical processes generally; advice on chemical patents.

SAVE YOUR STEAM.—HOARD & WIGGIN'S Improved Steam Trap Valve, for relieving steam pipes, cylinders, &c., of condensed water. By its use the boiler pressure is kept up, the full heat maintained, and a large saving in fuel made.

LUBRICATING COAL OIL—FOR RAILROADS, Cotton and Woolen Factories, Steamboats, &c.; free of chemicals and odor. Price—50 cents per gallon, by the barrel.

MACHINISTS' TOOLS FOR SALE.—TWO double-gear screw-cutting slide lathes, swinging from 20 to 24 inches and shears 12 to 16 feet long; one double-gear slide lathe, 4 feet diameter and 20 feet long; four planing machines, various sizes; three card wheel boring machines, three card axle lathes, three shop cranes, &c., &c.

CHESTER GUILD & SONS, MANUFACTURERS OF BELTING LEATHER, 16 Blackstone-street, Boston, Mass.

BACK NUMBERS AND BOUND VOLUMES OF the NEW SERIES of the SCIENTIFIC AMERICAN can always be had of A. WINCH, No. 330 Chestnut-street, Philadelphia, Pa.

GALVANIZED IRON PIPE—CHEAPER AND better than lead for water. It is used in the cities of Brooklyn and Hartford for water pipes in dwelling houses.

Sur Beachtung für Erfinder. Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen.

MACHINE BELTING, STEAM PACKING, EN

GINE HOSE.—The superiority of these articles, manufactured of vulcanized rubber, is established. Every belt will be warranted superior to leather, at one-third less price.

OIL! OIL! OIL!—FOR RAILROADS, STEAMERS, and for Machinery and Burning. Pease's Improved Machinery and Burning Oil will save fifty per cent., and will not gum.

WOODWORTH PLANERS—IRON FRAMES TO plane 18 to 24 inches wide, at \$80 to \$110 For sale by S. C. HILLS, No. 12 Platt-street, New York.

GUILD & GARRISON'S STEAM PUMPS FOR all kinds of independent Steam Pumping, for sale at 55 and 57 First-street, Williamsburgh, L. I., and 74 Beekman-street, New York.

IRON PLANERS, ENGINE LATHES, AND OTHER Machinists' Tools, of superior quality, on hand and finishing, and for sale low; also Harrison's Grain Mills. For descriptive circular, address New Haven Manufacturing Co., New Haven, Conn.

SOLID EMERY VULCANITE.—WE ARE NOW manufacturing wheels of this remarkable substance for cutting, grinding and polishing metals, that will outwear hundreds of the kind commonly used, and will do a much greater amount of work in the same time, and more efficiently.

FOR SALE—JOHNSON'S PATENT FOR AN improved steam generator and superheater, warranted not to consume more than one pound of coal per horse-power per hour.

DUDGEON'S PORTABLE HYDRAULIC JACKS, for raising heavy weights, boilers, locomotives, cars, stone, stowing cotton, pulling, &c. Frames and platens for stationary pressing, of different sizes, made to order.

\$1.200 A YEAR MADE BY ANY ONE AT cutting Stencil work; large and small Steel Dies, whole Letters, two Alphabets, Figures and Border Tools, with 16 Chisels and Gouges for large work, with a quantity of stock sufficient to retail for \$150.

NEW SHINGLE MACHINE—THAT WILL RIVE and Shave 24,000 Shingles in a day, for sale by S. C. HILLS, No. 12 Platt-street, New York.

GREAT CURIOSITY.—PARTICULARS SENT free. Agents wanted. SHAW & CLARK, Biddeford, Maine.

READY THIS DAY.—NEW EDITION, REVISED and Enlarged.—"Wells' Every Man his Own Lawyer and United States Form Book." A complete and reliable guide to all matters of business negotiations for every State in the Union.

PORTABLE STEAM ENGINES, COMBINING the maximum of efficiency, durability and economy with the minimum of weight and price.

PUMPS! PUMPS!! PUMPS!!!—CARY'S Improved Rotary Force Pump, unrivaled for pumping hot or cold liquids. Manufactured and sold by CARY & BRAINERD, Brockport, N. Y.

WROUGHT IRON PIPE, FROM ONE-EIGHTH of an inch to eight inches bore, with every variety of fittings and fixtures, for gas, steam or water.

MESSEURS LES INVENTEURS—AVIS IMPORTANT.—Les inventeurs non familiers avec la langue Française et qui préféreraient nous communiquer leurs inventions en Français, peuvent nous adresser dans leur langue natale.