

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.

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.

ALCOTT'S CONCENTRIC LATHES—FOR Broom, Hoe and Rake Handles, Chair Rounds, &c.—price \$35 and all other kinds of wood-working machinery, for sale by S. C. HILLS, No. 12 Platt-street, New York.

POCO METALLIC PAINT—POSSESSING ADVANTAGES over all others—viz: varieties of color, finer ground and cheaper. STRATTON & CO., Agents, No. 1 Pine-street, New York.

GROVER & BAKER'S SEWING MACHINES for all kinds of sewing with two spools without rewinding and with the only finished and elastic double back-stitch which cannot be harmed by washing and ironing.

COLD IRON BAR CUTTERS.—NO MACHINE Shop, large or small, should be without them. For circulars, address GRESHAM & HUBBARD, No. 1329 Pennsylvania-avenue, Philadelphia, Pa.

AN INFALLIBLE GUIDE TO DISCOVER THE AGE of Horses up to 30 years, with unerring accuracy, can be had by inclosing \$1 to the subscriber. The book, containing 46 engravings, and pronounced by the most eminent veterinary surgeons of the United States to be the best ever published on the subject, will be promptly forwarded to any part of the Union and the Canadas on receipt of the above amount.

TO DYERS AND CALICO PRINTERS.—PROCESSES to prepare and use Aniline, Benzine, Niter Benzine, Violet of Aniline, Fuchsine, &c. Price, \$5. Address Professor H. DUSSAUCE, Chemist, New Lebanon, N. Y.

BOILERS FOR SALE.—NEW AND SECOND-HAND Boilers, of all descriptions and completed; also, Boilers taken in exchange. Inquire of or address WM. FINNEY & CO., No. 187 Water-street, Brooklyn, L. I.

QUARTZ CRUSHERS OR STONE-BREAKING MACHINES.—Information wanted of machines fitted for breaking up stone for road purposes. Address J. H. McH., Pikesville, Baltimore county, Md.

ROOFING.—THE ADVERTISER BEING ABOUT to cover a large dwelling house, wishes information with regard to galvanized iron and other kinds of new roofing material. Address J. H. McH., Pikesville, Baltimore county, Md.

LABORATORY OF CHEMISTRY.—CONSULTATIONS and advices on chemistry applied to arts and manufactures, agriculture, metallurgy, mining surveys. Information on chemical fabrics, with drawings, such as colors, varnishes, coal oils, paper, gas, candles, soaps, dyeing, animal black, manures, acids, alkalies, salts, india-rubber, gutta-percha, &c. Address Professor H. DUSSAUCE, chemist (from the Conservatoire Imperial of Arts and Manufactures, Paris), New Lebanon, N. Y.

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

FOR SALE.—THREE PIN MACHINES (FOWLER'S pattern) for making solid head pins—makes Nos. 3, 4 and 5 pins; all new and in good order. Also, one sticker to stick the pins in the paper. Also, one hair-pin machine, capable of making 100 perfect hair-pins per minute; wire straighteners; all the fixtures complete for starting the business. For further particulars address E. IVINS, corner of Fifth-street and Columbia-avenue, Philadelphia, Pa.

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 openings is immaterial. The governors are warranted to work perfectly with any and all valves, which move freely and close tolerably tight.

CHARLES T. PORTER, No. 235 West Thirtieth-street, corner of Ninth-avenue, New York City.

5,000 AGENTS WANTED—TO SELL FIVE new inventions—one very recent, and of great value to families. All pay great profits to agents. Send four stamps and get 80 pages particulars. EPHRAIM BROWN, Lowell, Mass.

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.

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. The Building is four stories high, 52x50 feet; the basement walls are 2 1/2 feet thick; the whole building is put up in the most substantial manner.

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. Hayward Company. For sale by the New York agent, at No. 181 Broadway.

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 22, 1860. Address WM. TUSCH, Box No. 773 New York Post Office.

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.

PORTABLE STEAM ENGINES—6, 8 AND 10-horse, at \$500, \$625 and \$780. For sale by S. C. HILLS, No. 12 Platt-street, New York.

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 safe Foundry, Tools, Patterns, &c., with a good run of custom. Location second to none in the United States, especially for Steamboat Machinery. Address F. SIMON, P. O. Box No. 178, Paducah, Ky., or C. SIMON, Agent.

WANTED—A SITUATION AS SUPERINTENDENT in an Iron Foundry, by a man of steady habits, who has had over 20 years' experience as molder. Good reference can be given, if required. Address J. N., Providence (R. I.) Post Office.

SWISS DRAWING INSTRUMENTS.—CATALOGUE (seventh edition), containing over 250 illustrations of Mathematical, Optical and Philosophical Instruments, with attachment of a large sheet representing the genuine Swiss Instruments in their actual size and shape, will be delivered on application to all parts of the United States, gratis, by C. T. AMSLER, No. 635 Chestnut-street, Philadelphia, Pa., established agency for the Swiss Drawing Instruments since 1848.

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.

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.

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 fuel heat maintained, and a large saving in fuel made. Several thousand of these trap valves are in successful use, and we offer them with entire confidence that they will accomplish all that we claim for them. For an illustrated circular or a trial machine, address—J. W. HOARD, Providence, R. I.

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

GALVANIZED IRON PIPE—CHEAPER AND better than lead for water. Is used in the cities of Brooklyn and Hartford for water pipes in dwelling houses. Sold at wholesale by JAMES O. MORSE & CO., No. 76 John-street, New York.

Zur Beachtung für Erfinder. Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Mittheilungen in der deutschen Sprache machen. Eigigen den Erfindungen mit kurzen, deutlich gesprochenen Beschreibungen versehen man zu abdrucken an Munn & Co., 37 Park Row, New-York.

THE GRAEFENBERG THEORY AND PRACTICE OF MEDICINE.—On the 1st day of May, 1860, the Graefenberg Company's Sales-rooms, Consulting Offices and Medical Institute were removed from No. 34 Park-row to—

No. 3 Bond-street, New York, (first door from Broadway,) in order to afford greater facilities and a more central location, demanded by the rapid increase of confidence in the Graefenberg Theory and Practice. The Graefenberg Theory and Practice, and the use of their medicines, together with complete symptoms of all diseases incident to this country and climate, the best method for their prevention and cure, will be found in the "Graefenberg Manual of Health."

This valuable family medical work, containing 300 pages, has been revised and improved, and elegantly illustrated with beautifully colored engravings of the human system. Sent by mail to any part of the country, on receipt of 25 cents. It is a complete guide to all diseases and their cure. Address JOSUA F. BRIDGE, M. D., Resident and Consulting Physician, Graefenberg Co., No. 3 Bond-street, New York. One of the leading journals says of the Graefenberg Manual of Health:—"This is the only medical book for family and general use ever published. It is written in plain language, free from scientific terms, and condenses more practical medical information than can be obtained anywhere else, unless a regular medical course of education is undergone. The popularity of this admirable and commendable work is well shown by this being the twenty-fourth edition. It contains a number of colored anatomical plates, and is a complete family physician. It is at once simple, popular, plain and scientific; and the mother, with such an adviser, is prepared at once to apply the proper remedies in case of sudden sickness in the family. In the country, a copy of the 'Manual of Health' is indispensable, and every family should possess one. It will save a hundred times its cost in doctors' bills, and what is far better, will be the means of preserving many valuable lives to their families and relatives."

MACHINE BELTING, STEAM PACKING, ENGINE 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. The Steam Packing is made in every variety, and warranted to stand 300 degs. of heat. The Hose never needs oiling, and is warranted to stand any required pressure; together with all varieties of rubber adapted to mechanical purposes. Directions, prices, &c., can be obtained by mail or otherwise at our warehouse. NEW YORK BELTING AND PACKING COMPANY. JOHN H. CHEEVER, Treasurer, 14 13 Nos. 37 and 38 Park-row, New York.

OIL! OIL! OIL!—FOR RAILROADS, STEAMERS, and for Machinery and Buring. Pease's Improved Machinery and Buring Oil will save fifty per cent., and will not gum. This Oil possesses qualities vitally essential for lubricating and Buring, and found in no other oil. It is offered to the public at the most reliable, thorough and practical test. Our most skillful engineers and machinists pronounce it superior to and cheaper than any other, and the only oil that is in all cases reliable and will not gum. The SCIENTIFIC AMERICAN, after several tests, pronounces it "superior to any other they have ever used for machinery." For sale only by the Inventor and Manufacturer, F. S. PEASE, No. 61 Main-street, Buffalo, N. Y.

WOODWORTH PLANERS—IRON FRAMES TO plane 18 to 34 inches wide, at \$30 to \$110. For sale by S. C. HILLS, No. 12 Platt-street, New York.

STOVER MACHINE COMPANY, NO. 13 PLATT-street, New York.—Manufacturers of Stover's Patent Eagle Molding Machine, for cutting and planing irregular forms of every description.—Illustrated in No. 25, Vol. I., Scientific American—and of the Stover & Coffin Patent Combination Planing Machine.—Illustrated in No. 19, Vol. II., Scientific American. Also, all kinds of Wood and Iron labor-saving machinery, Railroad Supplies, &c. &c.

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. 1 26

STEAM HAMMERS.—THE UNDERSIGNED, makers of the celebrated Naproth hammers, having a full assortment of patterns, continue to furnish them at reduced prices, and of every size, from 5 cwt. upwards. The large number hitherto made by them, and in successful operation, precludes the necessity of presenting any recommendations. They are also patentees and exclusive makers, for the country, of what is generally known as the "Corbin" or inverted Hammer, one of which, of six tons, falling six feet, has been in operation at the Franklin Forge, New York, since 1849. [1 rowth] MEERICK & SONS, Philadelphia.

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. All interested can see them in operation at our warehouse, or circulars describing them will be furnished by mail. NEW YORK BELTING AND PACKING CO., 14 13 Nos. 37 and 38 Park-row, New York.

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, containing simple instructions to enable all classes to transact their business in a legal way without legal assistance. Also, containing the laws of the various States and Territories concerning the Collection of Debts, Property Exempt from Execution, Lien Laws, Laws of Limitation, Laws of Contract, Legal Rates of Interest, License to Sell Goods, Qualifications of Voters, &c. &c. No man or business woman should be without this work; it will save many times its cost, much perplexity and loss of time. 12mo., 406 pages, law binding; price \$1. Sent postpaid. Agents wanted for this and other popular publications. Address JOHN G. WELLS, Publisher, corner of Park-row and Beekman-streets, New York.

PUMPS! PUMPS!! PUMPS!!!—CARY'S IMPROVED Rotary Force Pump, unrivaled for pumping hot or cold liquids. Manufactured and sold by CARY & BRAINERD, Brick-park, N. Y. Also, sold by J. C. CARY, No. 2 Astor House, New York City.

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. Sold at the lowest market prices by JAMES MORSE & CO., No. 76 John-street, New York.

MESSEURS LES INVENTEURS.—AVIS IMPORTANT.—Les inventeurs non familiers avec la langue Anglaise qui prefereraient nous communiquer leurs inventions en Francais, peuvent nous adresser dans leur langue natale. Envoyez-nous un dessin et une description concise pour notre examen. Toutes communications seront recues en confiance. MUNN & CO., Scientific American Office, No. 37 Park-row, New York.