

TO CORRESPONDENTS.

W. P., of N. Y.—You are a plain sensible farmer, and ask sensible questions. You remark correctly that some who write on agricultural subjects show remarkable ignorance by dealing in indefinite technicalities.

R. C., of C. W.—You must introduce every new and improved agricultural machine and implement into Canada, that we have here. Never buy a machine for your own use unless it is well made and of good materials.

H. W. B., of Ohio—We cannot tell you whether there is, or is not a single factory for making fine linen fabric in our country.

E. McC., of Va.—Tobacco is now cultivated in many places in New York State; so far as we have been able to learn it is not equal in quality to that of Virginia; however, we cannot tell you if this is correct.

R. S., of Phil.—The prussiate of potash, pounded and made into a paste, with water, is now employed for case-hardening, in place of old boot legs, horns, and hoofs, which were formerly used by tool makers for this purpose.

J. J. W., of N. Y.—It requires but a very limited amount of information to say that such and such is incorrect. When you do so, always be ready with proof to substantiate your opinions.

C. S. W., of Wis.—The water is the power which propels a water wheel; in its own self, the wheel cannot be said to possess any power. The velocity of the water in feet per second, and the quantity which falls in a minute, in pounds, multiplied into one another, and divided by the constant quantity, 33,000, will give you the horse-power of the water.

C. D., of Ohio—It will require more water to condense steam by outside or surface condensation than injection. If you use about five and a half times the quantity of surface of your cylinder, you should obtain a good vacuum.

T. A. W., of N. Y.—The Office require that caveats shall be sworn to as well as applications for patents.

L. E. W., of Vt.—A self-acting pump, whether located in a barn yard or a parlor, must be, strictly speaking, new. If you don't mean what you say, and refer to a pump made to act by the pressure of the animal when it drinks, the idea is not new.

D. V. M., of Ill.—Your supposition is correct. Subscribers to the SCIENTIFIC AMERICAN can have reasonable questions answered by mail or in the columns of the paper gratis. Your sketch shall be examined, and advice given, on its receipt.

O. S., of La.—You can manufacture and sell your filters with safety, whether you get a patent or not, but we shall try hard yet to get a patent for you. Your letter covering \$10 was answered by mail.

J. V. C., of Vt.—Your plan of providing the bore of rifles with projecting ribs, and grooving the ball to fit the ribs, or of making the ribs serve as guides to the ball, is not new. It has been presented to us several times. We have no account of its ever being proved equal to the grooved barrel. \$1 received, all right.

W. R., of Ohio—Placing the working parts of a gun lock outside, instead of imbedding the lock in the gun stock, must, in the alteration of old fire arms be a useful improvement. But it is not patentable, and therefore we cannot advise you to go to any expense in the matter.

J. C., of Tenn.—We have received your last communication on perpetual motion.

P. S., of N. Y.—When you write again, be sure and use a pen, and make your letters clear and distinct, and beware of being long-winded.

H. H. L., of Pa.—The pressure upon each square foot of surface at the center of the earth—calculating the weight of the superincumbent strata—would be 1,492,000x5,280 lbs.—Air submitted to this pressure would produce a most intense heat.

D. R. K., of Pa.—Your suggestion in regard to an improved mode of confining animals within a proscribed range is not new. It is common to attach a rope or chain to a wire or rod, loosely, so that the animal may come from one end to the other, and still be secured by the rope to within a specified distance of the rod. Have you never seen monkeys so tied in a menagerie? the principle is essentially the same, and being old, is not patentable.

J. H. H., of Pa.—The model of Mr. Lindsey's shaker was forwarded to him by Adams & Co's express, on the 5th. We are happy to hear that your Institution is so flourishing. We trust you will have a good exhibition in the mechanical department. A few weeks before the opening remind us of the Exhibition, and we will direct attention to it in our columns.

R. McC., of Tex.—Don't be afraid, for until you make wisers suggestions you need not fear of our republishing them over your signature, or even without any name.

M. N., of Pa.—We are much pleased with your improvement in lathes; we think it is patentable. Your first step will be to send a model, with the Government fee of \$30, to this office.

W. H. K., of Conn.—Your plan for making the looms steam conductors for heating, will involve their being set on an incline, for the purpose of allowing the condensed steam to run down into a receptacle. Otherwise your plan is feasible and good, and a patent may be obtained for it. Every inventor has a full and exclusive right to his own inventions. There are thousands of inventors who have deeply regretted not patenting their inventions in season, —o has stepped in before them, and received profitable patents.

G. H. C., of N. J.—Your distance indicator for carriages, is not new. Your idea of going around to work in the principal machine shops of the country, to engage in and witness the present methods of constructing steam engines, will be serviceable to you personally, and perhaps enable you to produce a useful work.

Somebody, writing from Chicopee Falls, Mass., has sent us a description of an excellent device of a perspective drawing instrument, but the letter came without signature. F. R., of N. Y.—For information about the Daguerre type, address Mr. Mascher. The suit against Trinity Church is not yet ended.

C. W. & J. L., of Mo.—You ask if there is a suction fan patented; we do not understand what you mean.

T. D., of Ala.—We do not think your plan for a steam boiler possesses patentable novelty; corrugated iron has been used in almost every variety of form for a like purpose, with the size of corrugations varied almost indefinitely.

E. M. S., of N. Y.—We know of no patent on any substance for making eyelets for any purpose.

C. L. Jr., of Ct.—A sash catch operating substantially like yours, has been long in use. The objection to them is, that too much of the frame has to be cut away. Your plan is not patentable.

H. W., of Mass.—The pianoforte business is very dull in this city, at present; the prices for piece-work in some branches have been reduced.

R. C. J., of Conn.—You are perfectly right in your views regarding the great amount of bad joiner work now performed in our country: quantity not quality, appears to be the grand aim. Apprentices are too impatient to do a big day's work. A good joiner is a rarity among our carpenters.

C. D. H., of Pa.—On page 161, Vol. 3, of the SCIENTIFIC AMERICAN, you will see an engraving of a street-sweeping machine, which we judge from your description is essentially the same as your plan. Examine that engraving and see if we are not correct.

D. F., of La.—Ball valves have been used in pumps a number of years—as long ago as 1848, an engraving was published in our columns of a pump having "ball valves," and they were in use long before that.

J. R. A., of N. Y.—In order to get up engravings of your fire engine, we should require the letters patent. It would be three or four weeks after their receipt before we could get the engravings in the paper. The expense would be \$15. We are glad you are so well pleased at the success of your agents.

Samuel Neff, of Newmarket, Va.—Wishes to purchase the best butter worker in use. One capable of working 100 lbs. at a time. Who can furnish him? Address the enquirer, not us.

P. H. W., of N. Y.—For the fine list of subscribers you sent us accept our thanks. Considering the time of year, when every body is busy, or should be, we think you have done remarkably well in getting so good a list. The diagram of your spoke machine shows the most simple constructed machine for the purpose we have ever seen. It is difficult determining whether your patent would probably issue or not, so many have been the cases applied for, still we think yours is different from any we have seen, and we think, if it will operate, it is a capital invention. Send us a model, and we can give you better advice as to its patentability, we have not much doubt but what it is patentable, however, from your description and sketch.

The following French patents, which came out by the Atlantic, last Friday, remain uncalled for, and are subject to the order of the owners:—J. C. Howe, improvement in Fire Arms; H. Berdan, improvement in Life Boats; Daniel Noyes, improvement in Wrought Nail Machinery.

Money received at the SCIENTIFIC AMERICAN Office on account of Patent Office business for the week ending Saturday, May 5:—

- B. B. B., of Tenn., \$25; E. D. C., of N. Y., \$25; A. H., of N. Y., \$30; E. R. N., of Pa., \$25; B. & R., of Mass., \$35; A. L. of Pa., \$30; J. P., of Mass., \$55; J. B., of N. Y., \$32; H. B., of Ct., \$250; H. W., of N. Y., \$30; T. M. C., of Ala., \$25; J. H., of Wis., \$25; G. W. M., of Mich., \$25; E. D. W., of Pa., \$30; P. & S., of O., \$55; J. C. D., of N. J., \$150; W. F. of N. Y., \$10; R. D. H., of N. Y., \$10; J. B., of Ct., \$55; J. E. R., of L. I., \$25; A. & G., of Ind., \$30; A. C., of N. Y., \$55; A. & C. N. C., of N. Y., \$30; A. E. H., of Pa., \$30; C. D. W., of Wis., \$30; J. R. H., of Pa., \$35; J. E. C., of N. Y., \$30; W. F. (2 cases) of Mich., \$20; W. C., of N. J., \$30; L. M., of Wis., \$10; S. H., of Ill., \$20; W. H. B., of Pa., \$30; J. B. L., of N. Y., \$30; H. T. R., of Pa., \$35; V. P. C., of N. Y., \$250; L. M. O., of Ky., \$55; W. A. S., of Mass., \$50; F. C. L., of Pa., \$25; R. K., of N. Y., \$25; H. R., of C. W., \$55.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 5:—

- B. & R., of Mass.; W. D., Jr., of Pa.; J. B., of Ct.; A. S., of Mich.; E. B. B., of Tenn.; A. H., of N. Y.; E. D. C., of N. Y.; E. R. N., of Pa.; F. C. L., of Pa.; R. K., of N. Y.; T. McC., of Ala.; G. A. M., of N. Y.; G. W. M., of Mich.; S. R., of La.; J. E. C., of N. Y.; J. H., of Wis.; J. P., of Mass.; H. R., of C. W.; P. J. C., of S. C.

Important Items.

PATENT LAWS, AND GUIDE TO INVENTORS.—Congress having adjourned without enacting any new laws pertaining to applications for patents, we have issued a new edition of the old laws, which may be had at our counter or sent by mail. This pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office. Price 12½ cents per copy.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within fourteen years, can obtain a copy by addressing a letter to this office, stating the name of the patentee, and enclosing \$1 for fees for copying.

MODELS.—We are receiving almost daily, models of inventions which have not the names of their inventors marked upon them. This usually prevents us from taking any notice of them whatever. We shall esteem it a great favor if inventors will always attach their names to such models as they send us. It will save us much trouble, and sometimes prevent the model from being mislaid.

Terms of Advertising.

Table with 3 columns: Lines for each insertion, Price per line, Total price. 4 lines for each insertion, \$1.00; 8 lines, \$2.00; 12 lines, \$3.00; 16 lines, \$4.00.

Advertisements exceeding 16 lines cannot be admitted, neither can engravings be inserted in the advertising columns at any price.

All advertisements must be paid for before insertion.

IMPORTANT INVENTION.—Patented 7th June, 1853.—Falconer's Coupling for hose, hydrants, force pumps, etc., is the only coupling likely to supersede the screw coupling. It can be made cheaper than the screw coupling, and excels it in every respect, and after a public trial under the severest tests, it has been adopted under an Act of the Corporation of the City of Washington, for the Fire Department, in place of the screw coupling. For the purchase of rights under the patent, apply to Prof. CHAS. G. PAGE, Washington, D. C.

SHAFER'S STEAM AND VACUUM GAUGES.—Harrison's Water Gauges—on sale by ENGELKE & KAMENA, 13 South William st., N. Y.

American and Foreign Patent Agency.

IMPORTANT TO INVENTORS.—MESSRS. MUNN & CO., 128 Fulton street, New York, Publishers and Proprietors of the SCIENTIFIC AMERICAN, having for many years been extensively engaged in procuring Letters Patents for new mechanical and chemical inventions, offer their services upon the most reasonable terms. Patents promptly secured in the United States, Great Britain, France, Belgium, Holland, Austria, Russia, Spain, and in all countries where they are granted. All business entrusted to their charge is strictly confidential. Private consultations respecting the patentability of inventions are held free of charge, with inventors, at their office, from 9 A. M. until 4 P. M. Parties residing at a distance are informed that it is generally unnecessary for them to incur the expense of attending in person, as all the steps necessary to secure a patent can be arranged by letter. A rough sketch and description of the improvement should be first forwarded, which we will examine and give an opinion as to patentability, without charge. Models and fees can be sent with safety from any part of the country by express. In this respect New York is more accessible than any other city in our country. Circulars of information will be sent free of postage to any one wishing to learn the preliminary steps towards making an application. In addition to the advantages which the long experience and great success of our firm in obtaining patents present to inventors, they are informed that all inventions patented through our establishment, are noticed, at the proper time, in the SCIENTIFIC AMERICAN. This paper is read by not less than 100,000 persons every week and enjoys a very wide spread and substantial influence. Parties intrusting their business in our hands can rely upon prompt and faithful attention.—Most of the patents obtained by Americans in foreign countries are secured through us; while it is well known that a very large proportion of all the patents applied for in the U. S. go through our agency. The offices of Messrs. Munn & Co's American and Foreign Patent Agency are at 128 Fulton Street, New York; London, No. 32 Essex st., Strand; Paris, No. 29 Boulevard St. Martin; Brussels, No. 6 Rue D'Or.

UNITED STATES PATENT OFFICE.

Washington, April 23, 1855. ON THE PETITION of Hiram Dillaway, of Sandwich, Mass., praying for the extension of a patent granted to him on the 21st Aug., 1841, for an improvement in the construction of molds for pressing glass, for seven years from the expiration of said patent, which takes place on the 31st day of August, 1855—

It is ordered that the said petition be heard at the Patent Office, on Monday, the 5th of August next, at 12 o'clock M.; and all persons are notified to appear and show cause, if any they have, why said petition ought not to be granted.

Persons opposing the extension are required to file in the Patent Office their objections, specially set forth in writing, at least twenty days before the day of hearing; all testimony filed by either party to be used at the said hearing must be taken and transmitted in accordance with the rules of the office, which will be furnished on application.

The testimony in the case will be closed on the 26th of July; depositions, and other papers relied upon as testimony, must be filed in the office on or before the morning of that day; the arguments, if any, within ten days thereafter.

Ordered also, that this notice be published in the United States Intelligencer, and Evening Star, Washington, D. C.; Daily Republican, Baltimore; Pennsylvania, Philadelphia, Pa.; Scientific American, New York, and Post, Boston, Mass., once a week for three successive weeks previous to the 5th day of August next, the day of hearing.

S. T. SHUGERT, Acting Commissioner of Patents. P. S.—Editors of the above papers will please copy and send their bills to the Patent Office, with a paper containing this notice.

THE CHEAPEST HORSE POWER KNOWN.—Patented April 1st, 1855.—Simpson's horse power has not a gear wheel about it, and it can be constructed and kept in repair by an ordinary mechanic. It costs less and furnishes a larger percentage of power than any horse power known. For the purchase of rights for the District of Columbia, Maryland, Delaware, New Jersey, Pennsylvania, New York, Ohio, and the New England States, apply to Prof. CHAS. G. PAGE, Washington, D. C.

STEAM ENGINES FOR SALE.—Very cheap—one 30, two 40 one 5, and two 5 horse power; also two 100 and 150 horse power. J. C. PORTER, 25th street, and 11th avenue, N. Y.

STAFFORD'S HALF HUNDRED RECEIPTS.—A pamphlet of 60 valuable pages, containing more than 50 new and valuable receipts. This book should be in the hands of every mechanic, farmer, and thrifty housekeeper. Enclose one letter stamp in a letter directed to J. R. Stafford, No. 4 New street, New York, and the return mail will bring you the book with the postage paid thereon.

SEVEN FINE VOLUMES of the London and Glasgow Practical Mechanic's Journal, for sale; being the work from the beginning up to present time; containing about 3000 engravings, illustrative of all the most prominent British and American patented mechanical inventions from March, 1848 to March, 1855, including a list of English patents, together with a vast amount of scientific and other interesting information. Price \$20. The containing monthly numbers can at all times be had in New York. Address and remit to MUNN & CO., Scientific American Office.

GRAIN MILLS.—EDWARD HARRISON, of New Haven, Conn., has on hand for sale, and is constantly manufacturing to order a great variety of his approved Flour and Grain Mills, including Bolting Machinery, Elevators, complete with Mills ready for use. Orders addressed as above to the patentee, who is the exclusive manufacturer, will be promptly filled with the latest improvements. Cut sent to applications, and all mills warranted to give satisfaction.

A COPY OF APPLETON'S DICTIONARY of Machines, Mechanics, Engine-work, and Engineering, for sale; in two large volumes, 2000 pages and 4000 engravings. Price \$5. Also a copy of Ure's celebrated Dictionary of Arts, Manufactures, and Mines; two large volumes 2000 pages 1000 engravings. Price \$5. Address and remit to MUNN & CO., Scientific American Office, New York.

OFFICE OF THE HYDRAULIC WORKS.—No. 25 Broadway, New York. Steam Pumping Engines, for steamers, wrecking purposes irrigating and draining lands, deep mining shafts, quarries, and excavations, railroad stations, tanneries, factories, public institutions, hotels, gas works, &c. Also a large and improved class of Pumping Engines, for supplying cities, towns and villages. Apply H. R. WORTHINGTON.

T. B. RUSSELL, Manufacturer of Philosophical Apparatus and Inventors' Models, No. 7 Washington street, Salem, Mass.

MATHEMATICAL INSTRUMENTS.—The undersigned furnishes, free of charge on application to all part of the United States, his new Illustrated Catalogue of Mathematical, Optical, and Philosophical Instruments. C. T. AMSLER, 31 eow 3m 211 Chestnut st., Philadelphia, Pa.

MACHINIST'S TOOLS.—SHRIVER & BROS., Cumberland, Maryland, have on hand finished Engine Lathes, 13 feet bed, swing 28 inches; 10 feet bed, swing 24 in.; 8 feet bed, swing 19 in.; 6 1/2 feet bed, swing 16 in. Also Power Planers, plane 9 1/2 feet by 33 inches, and 6 1/2 feet by 33 in., together with Drills, Hand Lathes, &c.

MACHINERY.—S. C. HILLS, No. 12 Platt st., N. Y. dealer in Steam Engines, Boilers, Planers, Lathes, Chucks, Drills, Pumps, Mortising, Tenoning, and Sash Machines Woodworth's and Daniel's Planers; Dick's Punches, Presses and Shears; Cob and Corn Mills; Harrison's Grist Mills; Johnson's Shingle Mills; Belting, Oil, &c.

JOHN PARSHLEY, NEW HAVEN, Conn. Manufacturer of Machinists' Tools. Has on hand, and is finishing, all sizes of Engine and Hand Lathes, Iron Planers, Upright Drills, Bolt and Gear Cutters, Universal and Scroll Chucks of the best quality and latest style, at extremely low prices for approved paper, and still lower for cash.

N. B.—It is now admitted by all that New Haven is the best place to buy good machinists' tools for 25 per cent less than any other place in the United States, as it was the first place and still is the only place where the tool business is pursued in a systematic way, which always gives good work and at a low price. And I know that I can sell (when quality and capacity is considered) ten or fifteen per cent lower than any other tool builder in New Haven, as my business is large, and I make all of my own castings, and also 19-20ths of all the tool castings made in New Haven. Hence no one pretends to compete with me. Cuts of tools, with descriptions and prices, can be had by addressing as above.

POWER PLANERS.—Persons wanting Iron Planers of superior workmanship, and that always give satisfaction, are recommended to the New Haven Manufacturing Co., New Haven, Ct.

MACHINISTS' TOOLS.—Meriden Machine Co. have on hand, at their New York Office, 15 Gold st., a great variety of Machinists' Tools, Hand and Power Punching Presses, Forging Pumps, Machine Belting, &c., all of the best quality. Factory West Meriden, Conn.

TO LET.—Light Rooms with steady power, on Canal Elm, and Walker, streets, at very low rates. Situation central. Engine, buildings, and occupants first class. Facilities for exhibiting new machines, by Mr GAUDU 102 Walker st.

ANDREWS & JESUP.—Commission Merchants. Cotton and Woolen Machinery, Steam Engines, Machinists' Tools, Belting, &c. Importers and Dealers in Manufacturer's Articles, No. 57 Pine st., N. Y.

IMPROVED PORTABLE CIRCULAR Saw-mills, Manufactured by W. HERRICK, near the Depot, Northampton, Mass. N. B. Saw Mandrills, Saws, improved Saws and Upsets furnished and warranted. Orders filled for any part of the United States.

SMITH'S WATER-TUYERES.—Prosser's Patent. These Tuyeres are made of wrought-iron, and are warranted not to crack by the most intense heat. Also Water-backs and Tables, for kitchen ranges, hotels, and restaurants, &c., requiring a constant supply of hot water. THOS. PROSSER & SON, 23 Platt st., New York.

STAVE DRESSER AND JOINTER.—For tight work decidedly the best and cheapest in use. Machines can be seen in operation at SHAW & KIBBEE'S, Shook Manufacturing, Buffalo, N. Y., and models may be seen at the office of the agent, JAMES S. POLHEMUS, 117 Pearl street, New York, or whom, or to the patentees, H. & L. D. WOOD, Jackson Street, Mechanicsville, Pa., communications may be addressed.

1855.—WOODWORTH'S PATENT Planing, Tonguing, and Grooving Machines.—The subscriber is constantly manufacturing, and has now for sale the largest and best assortment of these unrivaled machines to be found in the United States. Prices from \$85 to \$1450. Rights for sale in all the unoccupied Towns in New York and Northern Pennsylvania, JOHN GIBSON, Planing Mills, Albany, N. Y.

NEW HAVEN MFG CO.—Machinists' Tools. Iron Planers, Engine and Hand Lathes, Drills, Bolt Cutters, Gear Cutters, Chucks, &c., on hand and finishing. These Tools are of superior quality, and are for sale low for cash or approved paper. For cuts giving full description and prices. Address, "New Haven Manufacturing Co." New Haven, Conn.

MACHINE GROUND CIRCULAR SAWS.—Patent applied for. Mill men would do well to try these saws, they are perfectly free from thin or thick places, can be used thinner and with less set, and run faster than any other saws hitherto made. All saws of this class warranted perfectly true. HENSHAW & CLEMSON, 31 Exchange street, Boston.

IRON PLANERS.—Of various sizes and superior workmanship on hand and finishing. For sale low for cash. We confine ourselves solely to building Planers, and can warrant every machine, Lathes, Drills, Gear Cutters, Chucks, &c., of the best quality, furnished at very low prices. Address THOMPSON, SKINNER & CO., New Haven, Conn.

A CLIPPER AMONG THE MONTHLIES.—The Nautical Magazine, devoted exclusively to Maritime Enterprises, embracing shipbuilding, commerce, navigation, and marine engineering, enlarged 96 pages. This work contains draughts of some of the finest vessels of the age, with other engravings, and is one of the most valuable publications in the country. Terms, single copies \$5 per annum, or \$2.50 per volume. Club Rates.—Five copies for \$20; thirteen copies for \$50. Sample copies sent when ordered. Address GRIF FITHS & BATES, Editors and Proprietors, 115 and 117 Nassau st., New York.

NEEDLE-POINTED CARD CLOTHING.—FOR Garding Flax, Tow, Hemp, and Jute. English Leather and Wire warranted. Also improved Cotton Willows and Pickers. RICHARD KITSON, Manufacturer, Lowell, Mass.

TECHNICAL DICTIONARY.—In the English, French, and German Languages; by Messrs. Tolhausen and Cardissal, Civil Engineers. Ready (part) French, English, German, price \$18; (second part) English, French, German, price \$18. These volumes are designed for the general use of Engineers, Artists, Manufacturers, Foremen, Artisans, in short, of all those who, in some way or other are concerned in Arts and Manufactures. The present work is the key through which the foreign reader may penetrate into a language which he may know but imperfectly; it is the instantaneous translator of the corresponding technical term, or its equivalent, in the three great industrial languages. For sale at this office.

HARRISON'S GRAIN MILLS.—Latest Patent.—\$1000 reward offered by the patentee for their equal. A supply constantly on hand. Liberal Commissions paid to agents. For further information address New Haven Manufacturing Co., New Haven, Conn., or to B. C. HILLS, our agent, 12 Platt Street, New York.

1855.—D. W. WHITING, Forwarding and Commission Merchant, Buffalo, N. Y.—Particular attention given to manufacturers' goods and wares, and shipped at the lowest rates by any line, as directed. Mark plainly, "care D. W. WHITING, Buffalo, N. Y."

NORCROSS ROTARY PLANING MACHINE.—The Supreme Court of the U. S., at the Term of 1853 and 1854, having decided that the patent granted to Nicholas G. Norcross, of date Feb. 15, 1850, for a Rotary Planing Machine for Planing Boards and Planks, is not an infringement of the Woodworth Patent. Rights to use N. G. Norcross's patented machine can be purchased on application to N. G. NORCROSS, 208 Broadway, New York. Office for sale of rights at 208 Broadway, New York; Boston, 27 State street, and Lowell, Mass.

A. B. ELY Counsellor at Law, 53 Washington st., Boston. Will give particular attention to Patent Cases. Refer to Messrs. Munn & Co., Scientific American.

VAIL'S CELEBRATED PORTABLE STEAM Engines and Saw Mills, Bogardus' Horsepowers, Smut Machines, Saw and Grist Mill Irons and Gearings, Saw Gummers, Ratchet Drills, &c. Orders for light and heavy forging and castings executed with dispatch. 8 1/2 yd LOGAN VAIL & CO., 9 Gold st., N. Y.