

TO CORRESPONDENTS.

G. G., of Mass.—A balance-wheel will be of no service to you whatever.

F. R. B., of N. Y.—We are well aware of the facts relative to obtaining the full power of the water. We do not know that we rightly understand your last question; how can each end of the partition of your tube, as you state, form an axis? If you use a spiral tube with two arms, it is the same as Whitelaw and Stirratt's wheels.

C. H. J., of S. C.—Large stoves, with drums to expose a great amount of radiating surface, are the best heaters when wood is used for fuel. Neither steam nor hot water will answer your purpose. Perhaps you would like to try a general "heater," in your basement for the purpose of heating with hot-air, this may answer very well in your climate. We have handed your letter to another party as requested.

R. McC., of N. Y.—Your steam engine should be about 10 horse-power, with 50 lbs. pressure on the square inch of piston. There is no positive rule for the horse-power of an engine now, that is, as it respects its dimensions. T. F., of Mass.—The best mode of preserving hams is to rub them well with the best quality of salt every day for a week, and also rub in some ground pepper and cloves before you hang them up.

J. S., Jr., of Phila.—We cannot furnish the information sought about the furnace of Chance, but we can about Howell's. The coal was used in the latter furnace in conjunction with a blast, the furnace being lined with fire-brick. Howell was a native of Philadelphia.

M. F., of Ind.—By the employment of your two wheels, an over and undershot you lose one half of the effect from the high when the water is discharged from the overshoot. One large overshoot wheel is far better than your two; it requires just as much power to pump up the water as the effect obtained from it. Your plan is not a good one, we can assure you.

L. L. W., of Mass.—A patent can be obtained for a useful composition alone.

R. B. B., of Mo.—The extract to which you refer was taken from a foreign paper, and we have heard nothing more about it since.

C. B. K., of Ill.—As the pressure of steam increases, so does its temperature. For tables of this increase and rate of expansion, consult any good work on steam and steam engines. The temperature will be increased by heating the steam apart from the water.

S. G. C., of Pa.—We do not discover the slightest novelty in your device for feeding water to boilers without the aid of the force pump. We have seen essentially the same thing before.

Wm. Wood of Columbia, Tenn., wants a first-rate machine for turning spokes. Some manufacturer will please communicate with Mr. Wood.

Oran Cole, of Detroit, Mich., wishes to purchase a machine capable of turning ax and hammer handles. Mr. Cole will be the humble servant of any one who will furnish him with the information.

H. S. of Va.—You can dissolve shellac in a strong solution of soda or pearlash, but we prefer alcohol. The varnish thus made is useful for many purposes.

E. H. Jr., of Ala.—We are not acquainted with Mr. A. You can obtain the oxyd of gold by following the direction on another page.

M. R., of Me.—We are fearful that your brake would not possess sufficient power to stop the speed of the train as soon as required. As auxiliary to a steam brake upon the locomotive (a cumbersome expedient) it might, however, be useful. We should think it possessed sufficient novelty to warrant an application if its utility were determined.

W. A. P., of Miss.—There never has been any difficulty in making the paddles dip and lift vertically: your plan, however, is new to us. We have never known of the steam being used directly, as is set forth in your description. We do not like your plan, as the radial paddle-wheel is far better than any other kind.

Money received on account of Patent Office business for the week ending Saturday, Feb. 4:—

P. S., of Ct., \$55; D. B. H., of S. C., \$20; A. J., of Ind., \$0; J. A. S., of N. Y., \$100; G. H., of R. I., \$30; W. H. H., of O., \$25; P. W., of Mass., \$30; J. S., of Md., \$30; W. H. A., of N. Y., \$55; J. C., of N. J., \$30; C. W., of Conn., \$25; T. R., of N. J., \$12; S. B. C., of Pa., \$55; S. M., of N. Y., \$15; J. C., of N. Y., \$30; J. W., of Mass., \$30; R. P. B., of N. Y., \$30; J. M. N., of Vt., \$30; G. S., of N. Y., \$30; A. E., of N. Y., \$35; H. T., of N. Y., \$12; W. H. S., of N. Y., \$20.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Feb. 4:—

W. H. S., of N. Y.; T. B. S., of N. J.; T. R., of N. J.; C. W., of Ct.; J. H., of N. Y.; W. H. H., of Ohio; H. T., of N. Y.; A. E., of N. Y.; G. S., of N. Y.; L. C. C., of Ct.

A Chapter of Suggestions, &c

PATENT LAWS.—The seventh edition of the American Patent Laws and Guide to the Patent Office, published by us, having been exhausted, we shall not be able to furnish orders under ten days or two weeks. Those who have remitted money for copies will be supplied immediately on the issuing of a new edition.

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.

PATENTERS.—Remember we are always willing to execute and publish engravings of your inventions, providing they are of interesting subjects, and have never appeared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permitted to have the engravings executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to advantage in other journals.

TO CORRESPONDENTS.—Condense your ideas into as brief space as possible, and write them out legibly, always remembering to add your name to the communication, anonymous letters receive no attention at this office if you have questions to ask, do it in as few words as possible, and if you have some invention to describe come right to the business at the commencement of your letter, and do not fill up the best part of your sheet in making apologies for having the presumption to address us. We are always willing to impart information if we have the kind solicited.

BACK NUMBERS AND VOLUMES.—In reply to many interrogatories as to what back numbers and volumes of the Scientific American can be furnished, we make the following statement: Of Vols. 1, 2, 3, and 4—none. Of Vol. 5, all but six numbers, price, in sheets, \$1; bound, \$1.75. Of Vol. 6, all; price in sheets, \$2; bound, \$2.75. Of Vol. 7, all; price, in sheets, \$2; bound, \$2.75. Of Vol. 8, none complete, but about 30 numbers in sheets, which will be sold at 50 cents per set; of Vol. 9, none previous to Jan. 1st, 1854.

GIVE INTELLIGIBLE DIRECTIONS.—We often receive letters with money enclosed, 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. Persons should be careful to write their names plainly when they address publishers, and to name the post-office at which they wish to receive their paper, and the State in which the post-office is located.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given, but when subscribers remit their money by mail, they may consider the arrival of the first paper a bonafide acknowledgment of the receipt of their funds.

ADVERTISEMENTS.

Terms of Advertising.

Table with 2 columns: Number of lines and Price. 4 lines, for each insertion, 75 cts; 8 lines, 1.50; 12 lines, 2.25; 16 lines, 3.00.

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 inserting.

American and Foreign Patent Agency.

IMPORTANT TO INVENTORS.—The undersigned having for several years been extensively engaged in procuring Letters Patent for new mechanical and chemical inventions, offer their services to inventors upon the most reasonable terms. All business entrusted to their charge is strictly confidential. Private consultations are held with inventors at their office from 3 A. M. until 4 P. M. Inventors, however, need not incur the expense of attending in person, as the preliminaries can all be arranged by letter. Models can be sent with safety by express, or any other convenient medium. They should not be over 1 foot square in size, if possible.

Having agents located in the chief cities of Europe, our facilities for obtaining Foreign Patents are unequalled. This branch of our business receives the special attention of one of the members of the firm, who is prepared to advise with inventors and manufacturers at all times, relating to Foreign Patents.

MUNN & CO., Scientific American Office, 128 Fulton street, New York.

\$500 REWARD.—For an Invention to Prevent the Alteration of Bank Notes. To Chemists and others. In order to prevent the loss and annoyance occasioned by the ALTERATION of Bank Notes either by changing the name of the Bank, or the denomination of the Bill, as practiced by counterfeiters, and to prevent the circulation of altered notes, the undersigned has offered a reward of five hundred dollars for the invention of a safe and reliable method of securing the alteration of bank notes, such as, by causing the invention of materials, such as, paper, of a nature to afford either in any combination of them, the desired protection—the Executive Committee of the Association of Banks for the Suppression of Counterfeiting, will pay the sum of Five Hundred Dollars to any person who shall invent the best mode, in the opinion of the Committee, of accomplishing the object named. All plans to be submitted to the undersigned on or before the 25th day of March next, and to be accompanied with such explanations of the materials and processes as the party applying may be willing to disclose. Each applicant to lodge with the Treasurer of the Association, Henry M. Fishback, Esq., for the term of three months, the sum of one hundred dollars, which shall be paid to any person who shall, during that time, alter, by removing and printing anew, any material portion of a bill or note prepared in accordance with the plan submitted, in such a manner that the alteration would, in the judgment of the Committee, be likely to pass unsuspected for one or at the end of said three months, no one has been able to effect such alteration, and the Committee are satisfied that the materials proposed will stand all the tests which the present knowledge of chemistry affords, then the hundred dollars will be returned, and the reward paid over to the successful applicant, and the hundred dollars deposited by each of the other applicants to be returned to them respectively. Per order of the Executive Committee, J. M. GORDON, Secretary.

Columbian Bank, Boston, Mass., Jan. 24, 1854.

THIS IS TO CERTIFY that I have had in use one of Parson's Self-straining and Self-ranging Saw Frames, during the last year, and find the same to be an improvement upon the old fashioned Saw Gate: my mill had two English Gats. Wheels entirely similar, and geared precisely in the same manner, the only difference being that the water gate to one of the mills vented about 500 inches, and the other about 400 inches, the consequence was that the mill venting most water did a proportionably larger amount of work. The gate venting the least was changed for one of E. & S. Parson's saw frames: the result was highly satisfactory—the mill containing said frame cutting about one-third more lumber than the English Gate, with the larger amount of water. EDWARD J. FARNHAM, Wellsville, Alleghany Co., N. Y.

The above certificate refers to the saw mill referred to on page 64, present volume Scientific American. For machines or rights, address S. E. PARSONS, Wilkesbarre, Pa.

NEW HAVEN MANUFACTURING COMPANY.—New Haven, Conn., (successors to Scranton & Parshley) have on hand Power Planers, to plane from 3 to 12 feet; slide lathes from 6 to 18 feet long; 3 sizes of hand lathes, with and without shears; and counter shafts; universal chucks & drill presses, index plates, bolt cutters, and slide rests. The N. H. M. Company also have the right for Harrison's Patent Flour and Grist Mill for the term of five years, and are prepared to furnish these superior mills at short notice. They are unequalled by any other mill, and will grind from 20 to 30 bushels per hour, and will run without heating, being self-cooling. They weigh about 1400 lbs., are of the best French burr stone, 30 inches in diameter; are snugly packed in a cast-iron frame, price of mill \$200, packing \$5. For cuts, prices, and further particulars apply post-paid, as above, or to S. C. HILLS, agent N. H. M. Co., 12 Platt st., N. Y.

FOR SALE.—An Established Steam Planing Mill and Sash Factory, in one of the healthiest of our Southern cities. There are Beardslee's, Woodworth's, and Daniel's Planing Machines, of the best make. All of Fay's machines for the manufacture of sashes and blinds. Leaven's Patent Sash Machine, circular saws, &c. The engine is forty horse power, boilers newly new. One of the proprietors being about to retire from business, the whole or one half will be sold on advantageous terms. Address P. E. HAMM, Esq., City Treasurer's Office, Philadelphia.

TO PIPE MAKERS.—And Iron Founders generally.—G. Peacock's Patent Core Bar, for making all kinds of branches, elbows, curve pieces, or straight pipe of all shapes and sizes. This improvement has been put to the greatest test, never failing to save fifty per cent. Apply to G. PEACOCK, West Troy, N. Y.

WANTED.—The first 8 Volumes of the Scientific American, or Vol. 1 only. DAVID DAVIDSON, 109 Nassau st., N. Y.

UNITED STATES PATENT OFFICE.

Washington, Jan. 26, 1854.

ON THE PETITION of Allen & Wm. A. Crowell, of Salisbury, Conn., praying for the extension of a patent granted to them on the 20th day of June, 1840, for an improvement in Churns, for seven years from the expiration of said patent, which takes place on the 20th day of June, eighteen hundred and fifty-four—

It is ordered that the said petition be heard at the Patent Office on Monday, the 29th day of May 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.

Ordered, also, that this notice be published in the Union, Intelligence, and Evening Star, Washington, D. C.; Pennsylvania, Philadelphia, Pa.; Scientific American, New York; and Enquirer, Cincinnati, Ohio, once a week for three successive weeks previous to the 20th day of May next, the day of hearing.

CHARLES MASON, 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.

WANTED.—A situation by a man that has superintended a machine shop, pattern shop, smith work, boiler making, building steam engines, paper machines, mill gearing, and machinists' tools; is a mechanical draughtsman, and a steady man. Address, post-paid, "W." York, Pa.

WELTING FOR STEAM BOILERS & PIPES.—Manufactured by J. H. Bacon, Winchester, Mass. for sale at W. & J. MORRISON'S, No. 9 Maiden Lane, N. Y., and T. C. BACON & CO.'S, corner of Union and North sts., Boston, Mass.

LAWRENCE SCIENTIFIC SCHOOL.—Harvard University. The next Term of this Institution will open on the second day of March, 1854, and continue 20 weeks. Instruction by Recitations, Lectures, and Practical Exercises, according to the nature of the study, will be given in Astronomy, Mensura, Botany, Prof. Horsford, Comparative Anatomy and Physiology, by Prof. Wyman, Engineering by Prof. Eustis, Mathematics by Prof. Pierce, Mineralogy by Prof. Cooke, Physics by Prof. Lovering, Zoology and Geology by Prof. Agassiz. For further information concerning the School application may be made to Prof. E. N. HORSFORD, Dean of the Faculty, Cambridge, Mass.

AMERICAN RAILROAD JOURNAL.—This Journal, the oldest in the world devoted to the Railroad interest, will hereafter contain, in addition to its usual contents, a full and comprehensive department of Railway and Mechanical Engineering, prepared under the direction of a practical engineer and mechanic. Improvements in Railways, Railway Equipments, and especially in Locomotives, will be duly described and illustrated. Inventors and improvers will find the Journal the best advertising medium, as it is taken by nearly all Railroad Companies and Engineers in the country. Published Saturday at No. 9 Spruce st. by JOHN H. SCHULTZ & CO., at \$5 a year in advance.

MALLISTER & BROTHER.—Opticians and dealers in mathematical and optical instruments, No. 48 Chesnut st., Philadelphia, Pa.—at the old stand established in 1796 by John Mallister, Senr., Mathematical instruments separate and in cases, Tape Measures, Spectacles, Eye Glasses, Microscopes, Thermometers, Salometers, Hydrometers, Magic Lanterns, &c. &c. Our illustrated and priced catalogue are furnished on application, and will be sent by mail free of charge.

WANTED.—A good permanent situation, either to run a stationary engine or take charge of machinery, where capability and a faithful discharge of duty would meet with a liberal recompense, by a person who is and has been for several years past, running a locomotive on one of the railroads of New York. Good references given. Address J. C. GORDON, 438 Fourth Avenue. (On parle Francais)

SHINGLE MACHINES.—Wood's patented improvement in Shingle Machines, is unquestionably the best ever offered to the public. The undersigned is now at the West, offering rights in this machine for sale. It is a rare opportunity for a safe and profitable investment in a machine without a rival, for the purpose to which it is applied. Parties wishing to correspond with me can do so by addressing J. D. JOHNSON, Bridgeport, Ct.

FOR SALE.—140 Acres of Choice Land, situated within 1 mile of Wooster, O., on the O. and P. R. R. There is on the premises a woolen factory and one set of machinery; the water power is always sufficient for one set, and for two-thirds of the year for much more. There is also a good saw mill and dwelling for operatives. Terms.—One half down and the balance to suit purchaser. THOMAS STIBBS, Wooster, Ohio.

2000 BOOKS AND PRINTS.—STEARNS & CO'S Mammoth Catalogue of Books and Prints, will be sent GRATIS to all who may order it. It is invaluable as a work of reference. Postage on the Catalogue only 8 cts. Address STEARNS & CO., 17 Ann street, N. Y.

EUROPEAN PATENTS.—MESSRS. MUNN & CO. pay especial attention to the procuring of Patents in foreign countries, and are prepared to secure patents in all nations where Patent Laws exist. We have our own special agents in the chief European cities; this enables us to communicate directly with Patent Departments, and to save much time and expense to applicants.

MINING MACHINERY.—Of most approved construction, furnished by FRED'K COOK & CO. Hudson Machine Works, Hudson, N. Y.

CLOCKS FOR CHURCHES, COURT HOUSES, &c.—Regulators for Astronomical purposes, Jewellers; also Time Pieces for Session Rooms, Railroad Stations, Offices, &c., which for accuracy of time and durability have proved (it is believed) equal to any made in Europe or this country. Glass Dials for illumination, and other kinds furnished. Address SHERRY & BERAM, Oakland Works, Sag Harbor, N. Y.

MACHINERY.—S. C. HILLS, No. 12 Platt-st., N. Y. dealer in Steam Engines, Boilers, Iron Planers Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Machines; Woodworth's, Daniel's, and Law's Planing Machines; Dick's Presses, Punches, and Shears; Mortising and Tenoning Machines; Belting; Machinery Oil, Beal's Patent Cob and Corn Mills; Burr Mill and Grindstones; Lead and Iron Pipe, &c. Letters, to be noticed, must be post-paid.

1854. WOODWORTH'S PATENT PLANING, TONGUING, GROOVING, RABBETING and Moulding Machine, of all the planing lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines. Price from \$150 to \$800. Two machines are at the Crystal Palace. For rights in all parts of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y.

IRON FOUNDERS' MATERIALS, viz: Pulverized Sea Coal, Black Lead, Soapstone, Anthracite and Charcoal Sandings. Also, best imported Fire Bricks, Fire Clay, Fire Sand, and Moulding Sand, for sale by G. O. ROBERTSON, 139 Water street, corner of Pine.

THE NEW YORK WEEKLY SUN.—Established

in 1836, is the first dollar-a-year Weekly Newspaper ever published. Independent of all political parties and cliques, sustained by all the resources of the Sun Establishment in its collections of the latest news from every part of the world, ever offering something new in the way of stories and bon-mots, reports of inventions, Prices Current, Markets, Re-apes, Marriages and Deaths, &c. it is undoubtedly the best as well as the cheapest Newspaper in the world. Nearly every number of the Weekly Sun contains one or more pictorial embellishments, which, of themselves, offer a fair equivalent for the price of subscription. The postage to any place in the State of New York is only 13 cents per year; out of the State, but in the United States, 25 cents a year. For a single copy, one year, in advance, \$1; club of 6 copies, \$5; club of 12 copies, \$10; club of 20 copies, \$15. Specimen copies sent gratis when desired. MOORE, BEACH, Publisher, corner of Nassau and Fulton sts., New York City. 197

WEIGHING AND PACKING MACHINE.—This machine is particularly adapted for the weighing and packing of ground spices, coffee, teas, saleratus, cream tartar, British luster, arrowroot, drugs, prepared flour, farina, starch, cocoa, oat meal, yeast powders, seeds, snuff, ground herbs, or any like material, which may require to be put in packages, from ounces to pounds. Its advantages over the old method of packing by hand, are manifest. One of these machines will, with the aid of one person, weigh accurately, and pack neatly, from 4 to 5,000 packages per day. It requires very little power to run it, and is not liable to get out of repair. Having purchased the exclusive right to manufacture and sell throughout the United States, we are prepared to execute orders for machines or sets of sectional rights, on reasonable terms. N. B. HARRIS & Co., Proprietors of the Excelsior Steam Spice Mills, Philadelphia, Pa. 12 13

PORTABLE STEAM ENGINES.—GEORGE VAIL & CO., Speedwell Iron Works, Morristown, N. J. LOGAN VAIL & CO., No. 9 Gold st., N. Y., are prepared to furnish Portable Steam Engines from four to eight horse power, with locomotive boilers. These engines are recommended for their simplicity, durability, and economy, being made from the best materials and designed for practical use. They are placed on wheels convenient to be moved from place to place, and are shipped in working order. For orders for machines or sets of others wanting small power, these engines will be found superior to any others in use. A Silver Medal was awarded at the late Fair of the American Institute, and a premium in cash of \$100 at the Maryland State Fair, held at Baltimore in October last. Persons writing us by mail will be particular to give their address in full.

1854.—MICHIGAN CENTRAL R.R. LINE.—D. W. WHITING, Freight Agent for R.R. and the enormous new steamers "Plymouth" and "Western World," and also General Forwarder, will forward freight of any kind, by any mode of conveyance, to any destination, with the lowest dispatch, at low rates. His trucks and machinery (having been a practical machinist has all the skill necessary) for the safe and expeditious handling of any machine or heavy article, such as Locomotives, Steam Engines and Boilers, Engine Lathes, Church Bells, Saws, &c. Mark packages care "D. W. Whiting, Buffalo;" goods consigned take precedence with the above boats in all cases.

IRON DRILLS.—Portable drills for drilling iron.—They are the most simple and convenient drill in use, having a newly invented feed motion, simple and efficient in its operation. They are constructed of iron, and weigh 80 lbs. We can recommend them as a first rate article. Price \$25. Address MUNN & CO., at this office.

JOHN PARSHLEY, No. 5 and 7 Howard st., New Haven, Ct., manufacturer of Machinists' Tools, and Steam Engines, has now finishing off 25 Engine Lathes, 6 feet shears, 4 feet between centers, 15 inches swing, and weighs about 1100 lbs. These Lathes have back and screw gear, jib rest, with screw feed, and the rest is so arranged that the tool can be adjusted to any point the work may require, without unfastening the tool, hence they possess all the good qualities of the jib and the weight lathe; they are of the best workmanship. Price of Lathe with count shaft and pulleys, \$155 cash. Cuts, with full description of the lathe, can be had by addressing as above, post-paid. Also four 30 horse power vertical Steam Engines with two cylinders. Price of engine with pump and heater, \$800 cash. For particulars address as above.

BAKER'S IMPROVED STEAM BOILER FULLY TO J. AMORY, 28 State st., Boston, General Agent.

C. B. HUTCHINSON'S PATENT STAVE Cutting Machines.—The best in use, and applicable alike to thick and thin staves, for barrels, hogheads, &c.; also his Head Cutting and Turning, and Stave Jointing and Crozing Machines. This machinery reduces the expense of manufacturing at least fifty per cent. For machines or territorial rights, apply to C. B. HUTCHINSON & CO., Syracuse, N. Y.

ENGINEERING.—The undersigned is prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, high and low pressure engines, boilers and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Asbury's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewell's Salinometers, Dudgeon's Hydraulic Lifting Press, Roebling's Patent Wire Rope for hoisting and steering purposes, &c., &c. CHAS. R. BROWN, Consulting Engineer, 64 Broadway.

PLANING, TONGUING, AND GROOVING.—BEARDSLEE'S PATENT.—Practical operation of these Machines throughout every portion of the United States, in working all kinds of wood, has proved them to be superior to any and all others, the work they produce cannot be equalled by the hand plane. The work from 100 to 200 feet, lineal measure, per minute. One machine has planed over twenty millions of feet during the last two years, another more than twelve millions of feet Spruce flooring in ten months. Working models can be seen at the Crystal Palace where further information can be obtained, or of the patentee at Albany, N. Y. GEO. W. BEARDSLEE.

A. B. ELY, Counsellor at Law, 52 Washington street, Boston, will give particular attention to Patent Cases. Refers to Messrs Munn & Co., Scientific American.

LEONARD'S MACHINERY DEPOT, 109, Pearl st., and 60 Beaver, N. Y.—Leather Banning Manufactory, N. Y.—Machinists' Tools, a large assortment from the "Lowell Machine Shop," and other celebrated makers. Also a general supply of mechanics' manufacturers' articles, and a superior quality of oak-tanned Leather Belting.

LOGAN, VAIL & CO., No. 9 Gold st., New York.—Agency for Geo. Vail & Co., Speedwell Iron Works, Morristown, N. J., furnish and keep on hand Portable Steam Engines of various sizes, Saw and Grist Mill Irons Hotchkiss's Water Wheels, Iron Water Wheels of any size, Portable Saw Mills, complete; Bogardus's celebrated Planetary Horse Powers; heating forges and castings for steamboats and rolling mills, Ratchet Drills of superior quality for machinists, Saw Gummers, Hand Drills, Tappet Rodders, and shafting and machinery generally.

NORRIS WORKS, Norristown, Pa. The subscribers build and send to any part of the United States, Pumping, Hoisting, Stamping, and Portable Engines, and Mining Machinery of every description.