

TO CORRESPONDENTS.

G. V. A., of N. Y.—We are constantly receiving letters from our clients, stating that the same parties whom you name have written them under the same pretence. The only object they have is to get you to correspond with them, and then they will inform you that it is indispensable to them that your patent be issued before they consummate the trade, and add in a very insinuating polite manner, that for a small consideration, say \$5 or \$10, remitted by return of mail, they will exert an influence with the Department to get the invention examined immediately, or if a rejected case, they will get it re-examined, which would do about as much good as it would to attempt to bribe the Commissioner with a ten dollar bill. These men have no reputation as Patent Agents, and their mode of pilfering from unsuspecting honest inventors is most reprehensible, and we have often wondered that the respectable agents in Washington have not taken some means to rid themselves of these pests to the profession.

J. S. K., of N. Y.—The product of smoke, obtained as you have described, may be used for agricultural purposes: a bottle of it, sent from Boston, is now in our possession. Soot is used extensively in England by gardeners, and patents have been taken out for conveying smoke from a chimney into water by an air-pump. How does locomotive building get on in Plattsburg?

W. S., of Me.—Ketchum's machine for mowing may be superceded; we certainly hope and expect some great improvements will yet be made on this class of machines. Those now in use are adapted to special locations and conditions. Ketchum's machine, we are informed, does not do as well at the West as Rugg's, Bronson's, and others. It may not be what will suit your market, hence we advise you to make a personal examination before purchasing. Don't adopt Ketchum's, nor any other's, until you are satisfied of its ability to meet the wants of the Maine farmers.

N. W., of Vt.—There is no doubt your improvement in straw cutters embraces the same features as are claimed in the patent of Sinclair & Maynard, Nov. 15th, 1853.—The "flus" are equivalent to the flanges, and serve the same purpose; we cannot advise an application. Macomber's Patent was secured through our agency.

C. D. Y., of Va.—There is no peculiar apparatus for evaporating water, to moisten articles of manufacture, employed here: a shallow pan placed upon a stove, and supplied at intervals with water, will answer your purpose. Steam from the engine boiler is employed for such purposes in large manufactories.

A. H., of Pa.—There you send us appears to be iron in different stages of oxidation. Overman's "Mineralogist" is a good little work, price about \$1. If you wish a copy we will send one on receipt of that amount.

F. McC., of Pa.—A machine having rotating cutting combined with pressure rollers, would infringe upon the Woodworth Patent. We should not feel willing to advise you to construct such a machine as you describe: it would infringe the patent, and you would be sure of prosecution from its owners.

J. H. S., of Pa.—We advise you to send us a model of your machine for examination.

E. P. C., of N. C.—We do not find anything patentable in the indicators which you so fully describe; substantially the same devices are in use.

J. O. A., of Geo.—We do not think your plan can be made to operate, at least this is our opinion.

J. E., of Mass.—We are obliged for your attention: the fact which you state respecting the eye-pointed needle is well understood.

P. W., of Mass.—Your apparatus for operating the ship's rudder is not new: we have seen them operated by means of worm gear taking into cog wheels, as shown in your sketch.

J. W. B., of —.—The exhaust valves require the largest opening in order to relieve the exhaust side of the piston from all resistance as quickly as possible, and therefore require to be raised the highest.

J. H. B., of Mich.—Iron is not equal to copper as a conductor, and never can be.

F. H. Percy—Give us your residence, that we may be able to write you: we are often bothered in this way by our correspondents, who either fail to sign their names to their letters, or do not put down the town and State in which they reside. We are not to blame when correspondents do not comply with these important regards.

J. P. S., of O.—Your apparatus for regulating the relative temperature of the air in dwellings and offices, is new, and if it will operate, it is useful where stoves and furnaces are used.

J. L. M., of Pa.—Your model has been razed so as to meet the requirements of the Office, in dimension, and returned to its place for examination.

D. P. S., of N. C.—The Gardner machine, we believe, would answer your purpose for crushing better than any other we are acquainted with. We know of nothing but quicksilver that will amalgamate with any degree of certainty.

F. P., of N. C.—Parson's saw mill, illustrated on page 252, Vol. 6, Sci. Am., is probably as good a mill as you will be able to find for your business: address S. E. Parsons Wilkesbarre, Pr.

J. S., of O.—The question of pre-invention, between yourself and Clemens, for the car ventilator, is to be settled only at the Patent Office: he may have invented it before you.

C. L. Jr., of Ct.—Ericsson employs the pipes, but not as a substitute for the regenerator, but simply to receive the cold air and heat it while passing through them. Your hint might have directed his attention to this use of them.

S. P. B.—Your ideas concerning a reaper are none of them new; rotary sickles like yours have been repeatedly tried and abandoned; your rake is an old device, you could get no patent, and if you could it would not be worth having.

A. P. C., of N. Y.—There is no real safety in any device for preventing railroad collisions except "double tracks," let them be properly built, properly guarded at the turnouts, and collisions will be among things that were. Double tracks will also remove the great cause of detention.

R. S. Penn.—The only source to which we look with hope for a new motive power is electro-magnetism, and we fear it will be long before an engine is constructed on this principle sufficiently powerful and economical to compete with steam.

N. Y., of Ohio—We cannot supply you with Vol. 5, we have none on hand. \$7 received.

E. L., of Ct.—We have seen the same plan for hanging saws as the one you submit for examination: it is old and well known.

J. M. P., of Geo.—"Ewbank's Hydraulics" contains a description of Montgolfier's Hydraulic Ram. Price of this work \$2.50

J. W. C., of Miss.—In the fourth volume of this paper you will find an engraving of a rotary engine embracing the same features as are contained in yours: it is neither new, useful, nor patentable.

G. H., Sen., of Miss.—By consulting the earlier history of railways you will find that, in several instances, the tread of both the running and driving wheels of cars were grooved and the rail made to fit therein, for the purpose of increasing the adhesion of the wheel to the rail in ascending inclines. We discover nothing new or patentable in your plan.

J. B. M., of Pa.—Some three years since, while on a visit to the Worcester Co. Agricultural Fair, we saw a boot crimping machine, constructed in the manner substantially as shown in your sketch. We do not remember the inventor's name, but it embraced your device.

J. B. S., of Pa.—There is no advantage that we can discover in making the outside of a rim of a water wheel smooth, and hanging the buckets on an endless chain. This device is old: see Rees' and Barlow's Cyclopedias, or Vol. 3, Sci. Am.

N. P. A., of N. Y.—There is no patentable feature in your printing press, and feeding the paper in an endless web is well known.

Money received on account of Patent Office business for the week ending Saturday, Dec. 17:—

W. McC., of N. Y., \$20; W. & G., of Pa., \$50; W. N. R., of Wis., \$25; G. M. C., of N. Y., \$20; S. G. B., of N. Y., \$30; R. & M., of Ill., \$32; B. & Co., of N. Y., \$150; W. H., of N. Y., \$10.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Dec. 17:—

T. G., of N. J.; C. W., of N. Y.; W. N. R., of Wis.; R. & M., of Ill.

A Chapter of Suggestions, &c

PATENT LAWS, AND GUIDE TO INVENTORS.—We publish and have for sale, the Patent Laws of the United States—the pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office. Price 12 1/2 cents per copy.

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.

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, all; price, in sheets, \$2; bound, \$2.75; of Vol. 9, none.

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.

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 on 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.

ADVERTISEMENTS.

Table with 2 columns: Lines, 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 insertion.

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 9 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 especial 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, 123 Fulton street, New York.

MINING MACHINERY.—Of most approved construction, furnished by LANG, COOK & CO. Hudson Machine Works, Hudson, N. Y. 15 6m

VALUABLE SAW AND PLANING MILL.—On the River at Burlington, N. J., for sale. THOS DUGDALE & SON, Burlington, N. J. 15 2*

WANTED.—A complete set of the first 8 Vols. Scientific American. DAVID DAVIDSON, 109 Nassau st. 15 2*

EAGLE FOUNDRY.—Steam Engine and Millwright Establishment for sale.—The subscriber offers for sale his well known establishment on Gadsden's Wharf, Charleston, S. C., convenient to the river for steamboat work or shipping and receiving machinery, &c. The workshop, tools, patterns, &c. are in good order and calculated for the manufacture of all kinds of engines, railway work, and machinery of every description. For terms, which will be made easy, and possession given immediately, apply to JAMES McLEISH, 15 6* Charleston, S. C.

PLANING MACHINE.—A new patented Planing Machine, by L. Gilson, of Boston, Mass., calculated for wheelwrights, car and sash manufacturers, &c. &c. It will plane any given circle, and on bevels from 45 deg. to an upright: the machine planes lumber out of winding and straight stuff. The cylinder is a rotary one, which the cutters are fastened. For particulars address JOEL WHITNEY, 15 2* Agent, Winches, R. Mass.

MAGNETIC IRON ORE.—For sale, 10,000 tons of the celebrated Ames Vein situated at Franklin, N. J., belonging to the New Jersey Franklinite Co.: apply to HOLDANE & CO., 91 Washington st., N. Y. 15 2*

FRANKLINITE IRON ORE.—For sale, 5,000 tons of this superior ore for mixing in blast furnaces from the mines of the New Jersey Franklinite Company, Sussex Co., N. J., to be delivered at the mines or in the city of New York: apply to HOLDANE & CO., 91 Washington st., N. Y. 15 2*

UNITED STATES PATENT OFFICE, Washington, Dec. 2, 1853.

ON THE PETITION of Henry Burden, of Troy, New York, praying for the extension of a patent granted to him on the 2nd day of September, 1840, and ante-dated 2d March, 1840, for an improvement in Machinery for making Hook-headed spikes for twenty years from the expiration of said patent, which takes place on the 2nd day of March, eighteen hundred and fifty-four.

It is ordered that the said petition be heard at the Patent Office on Monday, the 13th day of February 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, Intelligencer, and Evening Star, Washington, D. C.; Evening National Argus and Pennsylvania, Philadelphia, Pennsylvania; United States Argus, and Scientific American, New York; Boston Post, Boston, Massachusetts; Atlas, Albany, New York; Morning Post, Pittsburg, Pa.; and Commercial Ohio, once a week for three successive weeks previous to the thirtieth day of February next.

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. 14 3

EUROPEAN PATENTS.—MESSRS. MUNN & CO. pay special 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.

TO INVENTORS.—The "Inventors Protective National Union," composed of inventors only, is now organized. You are invited to become members by sending your address, the names of your inventions, and \$5. to the Superintendent or Secretary, your name and inventions are recorded in the book of the Constitution and By Laws, from which time you can participate in all the advantages of the Society. Copies of the Constitution and By Laws will be sent to inventors, on application, gratis. L. B. PAGE, Superintendent, Crystal Palace, New York. HAMOND HOWE, Sec'y, Washington City. 14 3*

MARK'S ARTIFICIAL LEG.—Made by Marks, 137 Broadway, N. Y. This newly invented and improved leg, is considered superior to any other, for ease, and natural motion, durability, and beauty. D. B. MARKS & A. MARKS, inventors. 14 2*

TO MANUFACTURERS AND MILLERS.—For sale, a valuable Mill Seat, within one mile of the city of Troy, N. Y. It comprises two Flouring Brick Mills, each of which have four run of stone, and are capable of doing the best of grinding. Two wood dwelling houses, and one barn, with considerable land adjoining the whole. The stream upon which the above seat is situated is known as the Poestenkill, and furnishes strong power of 22 feet head, so that the mills can be converted, if the purchaser wishes, into other branches of manufacture. The buildings are well situated, and the facilities a manufacturer would have are very great, owing to the position of Troy as a noted and increasing railroad center, and the accessibility to and from the city of the property. The object of a sale is to break up the heirs. For plans and further particulars apply to or address T. M. C. BUCKLEY, Troy, N. Y. 14 4

THE NEW HYDROPATHIC COOK BOOK, with Three Hundred Recipes for Cooking on Hygienic Principles, containing also a Philosophical Exposition of the Relations of Food to Health; the Chemical Elements of Proximate Constitution; and Elementary Principles; the Nutritive Properties of all kinds of Aliments; the Relative Value of Vegetable and Animal Substances; the Selection and Preservation of Dietetic Materials, &c. &c. By R. T. TRALL, M. D. With One Hundred Illustrative Engravings. 1 vol., 12mo. Price, delivered free, 57 cents. Published by FOWLER & WELLES, No. 131 Nassau st., New York. Boston, No. 142 Washington st.; Philadelphia, No. 231 Arch st. 14 4.

EXCELIOR!—MOORE'S RURAL NEW-YORKER.—It is the leading American Weekly Agricultural, Literary, and Family Newspaper. This is no vain assumption, but fully sustained by its high reputation, great popularity, and extensive circulation. It embraces more agricultural, horticultural, scientific, educational, literary, and news matter, interspersed with numerous appropriate and costly engravings, than any other journal in the Union—rendering it unequalled in variety and usefulness of Contents. An actual increase of nearly seven thousand subscribers during the past year, stimulates and enables us to make the Fifth Volume, for 1854, superior to its predecessors. With a corps of six able editors, and every facility for publishing in the best style, we are determined that the "Rural" shall excel in both contents and appearance. Terms—\$2 a year; \$1 for six months—in advance. Great reduction to agents and clubs. Large premiums to agents and those forming clubs. Specimens sent free; give us your address. Subscription money, properly enclosed, at our risk, if addressed to D. D. T. MOORE, Rochester, N. Y. 13 3*

SAVE YOUR FUEL.—And have your Engine regulated at the same time. Tremper's Spiral Governor and Steam Economizer can now be furnished to any amount, and of the best materials and manufacture. Orders should be addressed to Newburgh, N. Y., instead of Buffalo, as heretofore, and will be promptly attended to. JOHN TREMPER. 13 5*

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, iron 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 40 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 the machines or sale of sectional rights, on reasonable terms. N. B. HARRIS & Co., Proprietors of the Excelsior Steam Spice Mills, Philadelphia, Pa. 12 13

ROBT. GRIFFITHS.—Has put up a Railroad Chair Machine, at the Fountain Green Rolling Mill, and it gives full satisfaction as to its capability for doing work well: it is a good machine, and will make six to seven tons of chairs per day on a side, by running the whole machine constantly the day through, it will make from 12 to 14 tons of chairs in one day. Address ROBERT GRIFFITHS, Allegheny City, Pa. 13 3*

BAKER'S IMPROVED STEAM BOILER FURNACE, as used at the Crystal Palace, &c. Apply to J. AMORY, 28 State st, Boston, General Agent. 11 1f

IRON FOUNDERS' MATERIALS, viz: Pulverized Sea Coal, Black Lead, Soapstone, Anthracite and Charcoal Facings. Also, best imported Fire Bricks, Fire Clay, Fire Sand, and Moulding Sand, for sale by G. D. ROBERTSON, 13 13eov 135 Water street, corner of Pine.

Hudson Machine Works and Iron Foundry.—At Hudson City, N. Y., are prepared to contract for castings for railroads, machinery, cast-iron pipes and posts, water pipe, cast-iron ornamental floors, cannon, &c. Steam engines and boilers, high and low pressure, sugar mills, Cornish lifting and forcing pumps for mines; stamps, mortars, and mining machinery; also superior hydraulic pumps and presses, and superior teaching tools made to order. Especial attention given to the making of patent machines. Orders by mail will receive prompt attention. LANG, COOK & CO. T. H. LANG, (late foreman at the New York Novelty Works), F. COOK, H. McLELLAND. 72m

B. HUTCHINSON'S PATENT STAVE CUTTING MACHINES.—The best in use, and applicable alike to thick and thin staves, for barrels, hoops, and posts, water pipe, cast-iron ornamental floors, cannon, &c. Steam engines and boilers, high and low pressure, sugar mills, Cornish lifting and forcing pumps for mines; stamps, mortars, and mining machinery; also superior hydraulic pumps and presses, and superior teaching tools made to order. Especial attention given to the making of patent machines. Orders by mail will receive prompt attention. LANG, COOK & CO. T. H. LANG, (late foreman at the New York Novelty Works), F. COOK, H. McLELLAND. 72m

VALVE GEARING.—The undersigned is prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, light and low pressure engines, boilers and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Ashcroft's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewell's Salmometers, Dudgeon's Hydraulic Lifting Press, Roebling's Patent Wire Rope for hoisting and steering purposes, &c. CHARLES W. COPELAND, Consulting Engineer, 64 Broadway. 7 13*

NICHOLS' PATENT PARAGON SAFETY GLASS LAMP.—These beautiful glass lamps protect against breakage as well as against explosion. They are infinitely superior to all others. Orders addressed to the N. E. or Sandwich Glass Co., Boston, Mass., will be promptly answered. 10 10*

THE NEW HAVEN MANUFACTURING CO.—New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territory, for the term of five years, and now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weigh from 1400 to 1500 lbs. of the best French burr stone, 30 inches in diameter; gear teeth packed in a cast-iron frame, price of mill \$200, packing \$5. Terms cash. Further particulars can be had by addressing as above, post paid, or to S. C. HILLS, agent N. H. M. Co., 12 Platt st., N. Y. 5 1f

NEW HAVEN MANUFACTURING COMPANY.—Tool Builders, New Haven, Conn., (successors to Scranton & Parshey) have now on hand \$25,000 worth of Machinists' Tools, consisting of power planers, to plane from 5 to 12 feet; slide lathes from 6 to 18 feet long; 3 size hand lathes, with or without shafts; counter shafts to fit all sizes and kinds of universal chuck gear teeth; engines; drill presses, index plates, belt cutters, and 3 sizes lathes.—The Company are also manufacturing steam engines. All of the above tools are of the best quality, and are for sale at 25 per cent less than any other tools in the market. Cut and list of prices can be had by addressing as above, post paid. Warehouse No. 1 Platt st., New York, S. C. HILLS, Agent N. H. Manufacturing Co. 5 1f

PLANING, TONGUING, AND GROOVING.—BEARDSLEE'S PATENT.—Practical operators 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. They work from 100 to 200 feet, lineal measure, per minute. One machine has planed over twenty millions of feet during the last two years, and another the same number of feet of 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. 1 1f 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. 16 1f

LEONARD'S MACHINERY DEPOT, 109, Pearl St., and 60 Beaver, N. Y.—Leather Banding Manufacturer, Y. Machinists' Tools, a large assortment from the "Lowell Machine Shop," and other celebrated makers. Also, a general supply of mechanics' and manufacturers' articles, and a superior quality of oak-tanned Leather Belting. P. A. LEONARD. 11f

OGAN, VAIL & CO., No. 9 Gold st., New York.—An 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 Mills, 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 Gunners, Hand Drills, Taps, Benders, and shafting and machinery generally. 33 1y

SCALLERTON & BROTHER.—Opticians and Dealers in mathematical instruments, 45 Chesnut st., Philadelphia, Pa. Mathematical instruments separate and in cases, Protractors, Spacing Dividers, Drawing Pens, Ivory Scales, Tape Measures, Salometers, Spy Glasses, Microscopes, Hygrometers, &c., &c. An illustrated and priced catalogue will be sent by mail free of charge. 40 6m*

ROBBIS 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. THOMAS CORSON & WEST. 41 15*

MECHANICAL DRAWINGS.—J. H. BAILEY, Mechanical or Architectural Drawings executed in all kinds of perspective. Office Tryon Row, No. 5, opposite the City Hall. 11 4*