

TO CORRESPONDENTS.

J. H., of Me.—You will not invalidate your claims to a patent by introducing your invention now. We have enrolled your name upon our subscription list, H. M., of Ind.—Such engravings of your invention as will answer our purpose to publish in the Scientific American, will cost you \$10 We can get unsuitable engravings for handbills, etc., for \$6.

A. W. F. F., of Va.—One pound of coke will evaporate 12 lbs. of water, but only 9 lbs. of water are evaporated in a locomotive boiler. It is surely possible to get a better per centage from the fuel.

H. G. B., of Ind.—Dalton has evaporated 10 lbs. of water by one of charcoal; 12 lbs. of water can be evaporated by one of coke; he tested the quality of different kinds of fuel.

J. F. H., of E. G.—Your shoulder brace is very good; the yellow coloring property of the Barbary bark has been long known. Be careful in your experiments with potassium and sodium; amorphous phosphorus is the best thing yet discovered for making the matches.

E. W. S., of Pa.—Your plan for increasing the draught of steamboats will answer very well, it is the same as that used for locomotives, except yours has an adjustable mouth, which so far as we know is patentable as you apply it.

R. M., of D. C.—Yours will receive attention next week.

A. F. W., of Pa.—We cannot refer you to any work for working drawings of paper machinery as used at present in the manufacture. The Cornish double beat is excellent.

B. F. R., of Pa.—You will not get half the power of your water from a Barker's mill; get a re-action wheel. The Barker mill, however, may do all your work, and you perhaps can build it yourself; if you knew the quantity of water discharged we could tell the power, not otherwise.

M. K., of N. Y.—Prof. Page's engine has been patented in Europe, but not here; a battery has but one negative and one positive pole, your idea about three we cannot understand. The bar can certainly be divided into three separate parts; but you cannot get them to work as you propose; they will all move together in one direction.

C. S., of Mass.—There is always danger of life from lightning passing into telegraph offices, if the conductors are not sufficient to carry off the discharge to the ground. We have not received minute information about the telegraph office at Buffalo. Some telegraph instruments have been destroyed. It is possible for operators to be vigilant at all times. Your suggested improvement can be easily tried, and you should do so.

S. D., of Ct.—No patent could be secured for a clothes pin made as represented in your sketch.

A. C. C., of Ky.—Your letter, containing \$3 for expense on model, is received.

J. W. M., of N. H.—We have carefully examined the sketch of your alleged improvement in ship's rudders; it contains nothing new or patentable.

G. L. J., of Ohio.—It is impossible for us to form an opinion respecting the novelty of your invention without a sketch and proper description of it. You could easily construct and send us a model which we advise you to do.

M. & C., of Cincinnati.—We shall examine your communication of the 18th, and will write you soon.

W. W., of Pa.—We certainly think there is no doubt about your getting a patent, but what could you do with it. It has reference to no interest in this country, therefore a patent would be valueless.

Money received on account of Patent Office business for the week ending Saturday, May 31:—

B. & W., of Ct., \$30; F. G. W., of N. Y., \$300; S. & McK., of N. Y., \$55; J. C., of N. Y., \$27; W. G. M., of N. Y., \$30; J. E. A., of N. Y., \$15; A. D. G., of N. Y., \$30; D. McM., of —, \$10; C. B., of Mass., \$30; L. Z. A. W., of Pa., \$100; T. R., of N. Y., \$40; H. C., of N. Y., \$30; W. S., of N. Y., \$45; E. & K., of N. Y., \$67; J. G., Jr., of N. Y., \$34; W. C., of Ga., \$21.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday May 21:—

M. B. F., of N. Y.; M. & S., of N. Y.; I. C., of N. Y.; J. R., of Mich.; M. & T., of N. H.; A. C. K., of N. Y. (2 cases.)

A Chapter of Suggestions, &c.

PATENTERS—Remember we are always willing to execute and publish engravings of your inventions, provided 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 engraving 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.

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 claims 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 one dollar as fee for copying.

ADVERTISEMENTS.

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, 128 Fulton street, New York.

GARDINER'S PATENT MAGNETIC GOLD Washer, Amalgamator and Separator.—This is the most perfect machine for Gold Mining that has been invented; it performs the operation of washing the earth or pulverized quartz rock, amalgamating and magnetic separation of black sand or oxide of iron, all at one movement, saving every particle of gold dust, however minute. With this machine two men can perform as much work per day as ten by any other process, and save all the gold. A full explanation of its operation will be given by the manufacturer. The public are invited to examine. Price \$250. Iron Retorts at wholesale and retail. NORTON & GARDINER, 47 Dey street, N. Y.

TO PATENTEES AND OTHERS.—A man of energy, indefatigable perseverance and good address, is open to devote his whole time upon commission to anything likely to be very remunerative. Address "Industry," at W. H. McDonald's Advertising House, 102 Nassau street, N. Y.

WANTED.—A man as manager or chief superintendent in an iron manufacturing establishment in this State. Address "Iron," box 80 New York Post Office.

TO SHIP CARPENTERS, HOUSE CARPENTERS, and Machinists.—A respectable young man, 17 years of age, wishes to apprentice himself to either of the above trades; he can be highly recommended, and give the most respectable city reference. Address JAMES LONERGAN, 34 Henry st. Willing to go to the country.

SAND PAPER, GLUE—"Excelsior" Sand and Emery Papers, "Abbott's" Manilla Sand, and Match Papers, Emery Cloth, Emery, Emery Grit, Pumice Stone ground in lump, of very superior quality; also Glue of Upton's, Cooper's, and all other brands, in quantities to suit purchasers, at the manufacturers' lowest prices, for sale by WILLIAM B. PARSONS, 290 Pearl st., (corner Beekman) N. Y.

PATENT HYDRANTS AND COCKS.—Bartholomew's Patent Self-acting Double and Single Hydrants and Cocks are in extensive use and much approved of, are strong, durable, not likely to get out of order, always shut when not in use, not likely to freeze, avoid waste of water, do not burst pipe. The hydrants are cheaply repaired without digging up; double hydrants supply two lots and sixty tenants. The cocks are adapted for water closets, require no care in using; always shut, being self-stopping, give a good supply; the double valve cock avoids the expense and space of cistern, and gives a uniform supply each time used. One service pipe will supply twenty, do not freeze nor overflow, and make the cheapest and best job. Plumbers only supplied at the factory, 84 Marion st., N. Y. City. All work warranted.

SPOKE MACHINES, SPOKE MACHINES.—The best and most perfect machine now in use, designed expressly for turning spokes of all sizes, is the one invented by Jenkins & Knight, and patented in January last. The Machine is capable of turning 200 spokes in an hour, and finishes the spoke including the shoulder. The subscribers, who are now the sole owners of the patent, are prepared to receive applications for machines or territorial rights. M. SCHOMMAKER & J. M. COOPER, Kingston, N. Y.

NEW WORKS ON CIVIL ENGINEERING.—The Field Practice of Laying out Circular Curves for Railroads; by John C. Trautwine, C. E.; second edition, in pocket-book form. A New and Rapid Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Diagrams; by John C. Trautwine, C. E., with 10 copper-plates. Price \$1 each; postage on the Curves, 5 cents, and on the Excavations and Embankments, 8 cents. The postage may be remitted or not, as the Post Office does not require pre-payment. For sale by Wm. HAMILTON, Hall of the Franklin Institute, Phila.

CLOCKS FOR CHURCHES, COURT HOUSES AND OTHER PUBLIC BUILDINGS. Time-Pieces for Session and Vestry Rooms, Hotels, Railroads, etc.; Regulators for astronomical purposes, jewellers, and others, when the most perfect time is desired. The improvements introduced by the subscribers, enable them to warrant an accuracy of time-keeping, unequalled (so far as they can learn) in Europe or America. Glass dials, for illuminating and other kinds, furnished. Address SHERRY & BYRAM, Oakland Works, Sag Harbor, Long Island. "At the Oakland Works of Sherry & Byram there are made some of the finest clocks in the world." —Scientific American.

PIG IRON.—American and Scotch, of favorite brands; also Cupola Fire Bricks, Fire Clay, Sand and Foundry Facings of every approved description, for sale by G. O. ROBERTSON, & CO., office 135 Water street, (corner of Pine), N. Y.

PALMER'S PATENT LEG.—Manufactured by Palmer & Co., at 5 Burt's Block, Springfield, Mass., for New England and New York State, and 376 Chestnut street, Philadelphia; in every instance of competition in the Fairs of the various Institutes of this country, has received the highest awards as "the best" in mechanism, usefulness, and economy. At the "World's Fair," London, 1851, in competition with thirty other varieties of artificial legs (by the best artists in London and Paris), it received the Prize Medal as the best.

BEARDSLEE'S PATENT PLANING Tongue and Grooving Machines.—These celebrated machines have now been generally introduced in various portions of the United States. More than thirty are now in successful practical operation in the State of New York alone. As an illustration of the extent of work which they are capable of performing, with unrivalled perfection, it is sufficient to state that, within the last six months and a half, over five millions of feet of spruce flooring have been planed, tongued and grooved by one of these machines at Plattsburgh, N. Y., never running to exceed ten hours a day. The claim that the Beardslee machine was an infringement upon the Woodworth patent, has been finally abandoned; and after the proofs had been taken, the suit instituted by the owners of that patent was discontinued, and the whole controversy terminated on the first of November last. Applications for machines or rights may be made to the subscriber, GEO. W. BEARDSLEE, 57 State street, or No. 764 Broadway, Albany.

BARLOW'S UNSURPASSED Planing Tongue and Grooving Machines. Testimonials of the highest character can be given of their superiority over all others in use. For rights or other information. Apply to A. K. Wellington, 184 Twelfth street, New York City.

WOODBURY'S PATENT PLANING Machines.—I have recently improved the manufacture of my Patent Planing Machines, making them strong and easy to operate, and am now ready to sell my 24 inch Surfacing Machines for \$700, and 14 inch Surfacing Machines for \$650 each. I will warrant, by a special contract, that one of my aforesaid machines will plane many boards or plank as two of the Woodworth machines in the same time, and do it better and with less power. I also manufacture a superior Tonguing and Grooving Machine for \$350, which can be either attached to the Planing Machine, or worked separately. JOSEPH P. WOODBURY, Patentee, Border st., East Boston, Mass.

THE NEW HAVEN MANUFACTURING Company, New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the term of five years, are 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: snugly 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.

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 Ashcroft's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewall's Salinometers, Dudgeon's Hydraulic Lifting Press, Roebbling's Patent Wire Rope for hoisting and steering purposes, &c. &c. CHARLES W. COPPLAND, Consulting Engineer, 64 Broadway.

WHEELER, WILSON, & Co.—Watertown, Ct., proprietors and manufacturers of Allen B. Wilson's Patent Stitching Machine. Patented June 15, 1852, it can be seen at the Company's Office, 265 Broadway, New York.

STAVE AND BARREL MACHINERY.—We manufacture Stave and Barrel Machinery, for making everything in the cooper line, from the smallest white lead keg up to the largest cask in general use, all of which are warranted to hold the most subtle liquids. Applicants can see the machinery in operation by calling on us at our shop in Elmira, five minutes' walk north of the New York and Erie Railroad Depot, or by applying to us by mail can get all the requisite information respecting machinery and rights. Sample of the work can be seen by calling at the office of this paper. WM. TRAPP & CO., Patentees and Proprietors.

ATMOSPHERIC TELEGRAPH.—The English Patent (just issued) is now offered for sale at the Company's office, 24 Merchant's Exchange, Boston, Mass. I. S. RICHARDSON, Agent A. T. Company.

TO STOVE MANUFACTURERS.—The subscribers would call the attention of stove manufacturers to a new process of obtaining slot for covers for the reception of lifting handles, for which he has just obtained a patent; some of the qualities for which he claims an advantage over the old process of chills, wires, &c., is the preventive of cracking, saving the expense of wire, and on moulding, giving a neater and prettier cover; it is now in use in Southern and New York State Furnaces, and gives universal satisfaction, furnace, county or State rights sold on reasonable terms. All letters addressed to me at Albany, N. Y., will receive prompt attention. THADEUS A. SMITH.

JAMES D. JOHNSON, Bridgeport, Ct., Proprietor of Wood's Patent Shingle Machine. Persons wishing to purchase rights or machines, can address as above. This is unquestionably the best machine in use for cutting shingles.

WOODWORTH'S PLANING MACHINES ON hand and manufactured to order, of superior quality at reduced prices, warranted perfect; also steam engines and other machinery. Also Rotary Stave Dressing Machines, capable of dressing staves with the natural growth of the timber, the only one ever invented capable of accomplishing that purpose. Rights for sale in various States. JOHN H. LESTER, 57 Pearl st, Brooklyn, L. I.

MACHINE FOR MAKING RAILROAD Chairs.—Having built one of my patent machines for making Railroad Chairs, and operated it in presence of several scientific mechanics, who pronounce it the most perfect machine ever made for the purpose, I am anxious to sell rights upon reasonable terms; 4000 perfect chairs can be made in one day, with only one-third the usual labor. ROBERT GRIFITHS, Newport, Ky., opposite Cincinnati.

PERUVIAN GUANO.—Just received, per ship Grecian, first quality of Peruvian Guano. No. 1 Super-phosphate of Lime constantly on hand; also Agricultural and Horticultural Implements and Field and Garden Seeds: the largest and most complete assortment to be found in the United States. R. L. ALLEN, 189 and 191 Water st., New York.

NEW METHOD FOR MAKING WROUGHT-IRON direct from the Ore.—The proprietors of James Renton's Patent, who have purchased Alex. Dickerson's patent for the above purpose, are desirous of introducing the invention into general use, and invite parties who may wish to negotiate for rights for States and counties, or for furnaces, to make immediate application, and to examine the furnace which is in successful operation at the American Iron Company's Works, Newark, N. J. The invention is exciting considerable interest; gentlemen from all parts of the country, who are engaged in the manufacture of iron, have examined the furnace in its workings, and give it their decided commendation. A circular, giving more minute information, will be sent to those desiring it. The rights for several States and counties have already been disposed of. Applications for rights in the State of New Jersey may address the Hon. J. M. QUINCY, President of the American Iron Company. Inquiries or applications for other States may be made to A. H. BROWN, Newark, N. J., Office 107 Market st.

STAVE MACHINERY.—We manufacture the improved Mowry Stave Machine for slack work, cutting, dressing, and jointing, at one operation, without any handling of the stave until it is finished, after you place the bolt of wood upon the feeding carriage. The machine feeds itself, cutting, dressing, and jointing in a finished and uniform manner 80 to 100 staves a minute. Any kind of timber fit for a stave may be used, even such as could not be rived, as elm, hickory, beach, &c. The cost of running the machine need not exceed, if it equals, 50cts per M, for cutting, dressing, jointing, removing, and piling up, where a machine is kept steadily at work. For machinery and rights in the State of New York, apply to CHAS. MOWRY, Auburn, N. Y.; for machinery and rights elsewhere, to the subscribers, GWYNNE & SHEFFIELD, Urbana, Ohio.

J. SLOAN'S PATENT HYDROSTAT.—For the Prevention of Steam Boiler Explosions. The undersigned having made extensive arrangements for the manufacture of these machines, are now prepared to receive orders for the immediate application of the same to boilers of every description. They have endeavored to place the instrument within the reach of all, by selling it at a very low price, the cost of one horse-power being only \$20, five horse-power, \$80, and so on, according to the capacity of the boiler. SLOAN & LEGGETT, Proprietors and Manufacturers, foot of East 35th st., New York.

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; Morticing and Tenoning machines; Belting; machinery oil, Beal's patent Cob and Corn mills; Burmill and Grindstones; Lead and Iron Pipe &c. Letters to be noticed must be post-paid.

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

LEONARD'S MACHINERY DEPOT, 109 Pearl-st. and 60 Beaver, N. Y.—Leather Banding Manufactory, N. Y.—Machinist's 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.

PAINTS, &c. &c.—American Atomic Drier Graining Colors, Anti-friction Paste, Gold Size, Zinc Drier, and Stove Polish. QUARTERMAN & SON, 114 John st., Painters and Chemists.

COTTON MACHINERY.—Of the most approved plans, from the best shops in the country;—drawings, specifications, and general arrangements for the machinery, furnished at the lowest rates, by W. B. LEONARD, and E. W. SMITH, 75 Merchants' Exchange, New York.

THE TROY IRON BRIDGE CO. are prepared to erect Iron Bridges or Roofs, or any kind of bearing trusses, girders, or beams, to span one thousand feet or under, of any required strength, in any part of the country. Their bridges will be subjected to severe tests, and can be built for about the price of good wooden ones. Address BLANCHARD & FELLOWS, Troy, N. Y.

FALES & GRAY (Successors to TRACY & FALES), RAILROAD CAR MANUFACTURERS.—Grove Works, Hartford, Connecticut. Passenger, freight, and all other descriptions of railroad cars and locomotive tenders made to order promptly.

C. B. HUTCHINSON'S PATENT STAVE Cutting Machines, the best in use, and applicable alike to thick or thin staves; also his Head Cutting and Turning, and Stave Jointing Machines. For machines or territorial rights, apply to C. B. HUTCHINSON & CO., Syracuse, N. Y.

J. D. WHITE'S PATENT CAR AXLE LATHES.—also Patent Engine Screw Lathes, for boring and turning tapers, cutting screws, &c. We manufacture and keep constantly on hand the above lathes; also double slide Chuck and common Hand Lathes, Iron Planers, S. Ingersoll's Patent Universal Ratchet Drill, &c. Weight of Axle Lathe, 5,000 lbs; price \$600; Engine Screw Lathe, 1400 to 7,000 lbs; price \$225 to \$675. BROWN & WHITE, Windsor Locks, Conn.

COCHRAN'S CRUSHING MACHINE.—Can be seen in daily operation in Thirteenth street, between 9th and 10th avenues. Parties in want of a machine for crushing and pulverizing quickly and cheaply Quartz Rock, Iron, Lead, Copper, and Silver Ores, and other mineral substances equally hard, are invited to witness the operation of these powerful and simple, but yet effective machines. For further particulars apply to E. & J. BUSSING & CO., No. 32 Cliff st., N. Y.

THE NEW HAVEN MANUFACTURING CO. No. 2 Howard st., New Haven, Ct., are now finishing 6 large Lathes, for turning driving wheels, and all kinds of large work; these lathes weigh 9 tons, and swing 7 1/2 feet, shears about 16 feet long. Cuts and 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.

LEE & LEAVITT—Manufacturers of every description of Cast Steel Saws, No. 53 Water street, between Walnut and Vine, Cincinnati, O.