

TO CORRESPONDENTS.

H. C. H., of Pa.—We do not understand what you mean "by the steam returning to some state of tension which existed before the engine moved."

W. A. E., of Vt.—The proper chemical name for the gum is "anime;" if we can obtain the proper recipe you shall have it.

T. R. W., of R. I.—The pressure of the atmosphere is allowed generally to be 15 lbs. on the square inch at the level of the sea.

A. N., of Pa.—Your improvement in car wheels is new, we think. Why not give your name? It looks very much as though you had appropriated the fruit of another man's brains, and desired "darkness rather than light."

T. P. S., of Mass.—If we had unqualifiedly endorsed the "flax patent" then we might admit of a criticism upon our views, but as the case stands we are not disposed to do so.

J. M. G., of Ohio—The recipe you require is rather long to send in an answer to a correspondent.

W. H. H., of N. Y.—Yours will appear next week. We are much obliged to you for the information.

W. H. P., of Fla.—The water will not back in a stream above the level of the water in the dam, but that level is always changed according to the quantity of water in the stream—that level must determine the question of back water—one easily settled.

R., of Rome—Yours will meet with attention next week.

A. W. A., of New York—Such plans as you propose are now in operation on a number of boilers.

U. B. V., of Va.—Your corrugated propeller appears to be a good idea, and embraces the very principle of construction that nature has provided for fish.

J. M., of New York—We do not know of any benefit arising from printing bills of any tint previous to printing from the plate, that is not obtained now.

L. E. T., of N. C.—The blue vitriol preparation of wood is of no use for yellow or resinous pine, but it is for white pine; the cutler and jointer combined is very good, but with its practical workings we are not acquainted.

J. H. B., of Ind.—A fan operated by clock-work, for ventilating bed rooms, is not a new device; in 1830 a patent was granted for such an apparatus to Commodore Barron.

J. D., of N. Y.—A "plenum" means the opposite of a vacuum,—the smallest space to which a body could be reduced, by the pressure of the united gravity of the solar system.

Money received on account of Patent Office business for the week ending Saturday, May 13:—

S. & H., of Mass., \$20; H. C. S., of Ohio, \$26; D. F. C., of N. Y., \$20; J. B. M., of Geo., \$25; B. M., of N. J., \$20; S. K., of Pa., \$20; W. H. H., of N. Y., \$25; J. E., of N. Y., \$25; W. W., of N. Y., \$55; W. A. P., of Miss., \$22; E. A. H., of Ill., \$30; C. & B., of Ohio, \$30; J. G. M., of Pa., \$10; B. J., of Mass., \$30; F. B. S., of N. Y., \$55; E. & R., of N. Y., \$30; J. J., of Ohio, \$20; J. A. S., of N. Y., \$250; J. M., of N. Y., \$50; J. T., of Mich., \$15; C. & L. B. D., of Pa., \$55; J. R. M., of Ohio, \$57.

Specifications and drawings belong to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 13:—

H. C. S., of Ohio; W. A. P., of Miss.; S. & M., of Ct.; J. H., of Vt.; J. T., of Mich.; J. P., of N. Y.; J. R. M., of Ohio; J. B. M., of Geo.; G. S., of N. Y.; G. P. G., of N. Y.; J. S., of N. C.; J. B. M., of N. Y.; C. E., of Mass.

ADVERTISEMENTS.

Terms of Advertising.

Table with 2 columns: Lines for each insertion, and Price per line. 4 lines, each insertion, 75 cts; 8 lines, each insertion, \$1 50; 12 lines, each insertion, \$2 25; 16 lines, each insertion, \$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.

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

FOR SALE—A valuable India Rubber Patent Right. For further information address FRANCIS D. HAYWARD, Malden, Mass.

AUCTION SALE—The Percussion Cap Machinery and fixtures of Phipps & Titcomb, will be sold at Water Court Hall, Three River Village, Palmer, Mass., June 7th, 1854.

PROPOSALS will be received at the Engineer's Office, Huntington, Pa., until Monday, June 5, for the Superstructure of Bridges and Trestle Work of the Huntingdon and Broad Top Railroad.

A PRACTICAL PAPER MAKER, who has secured a license to use Mellor's process of making Straw Paper, and who superintended its establishment at Mansunk wishes to connect himself with a manufacturer. Address "A. B.," Strange Bro., 21 Park Place, N. Y.

SPECTACLES—And Surgical Operations Useless. The Blind May See. It is gratifying for us to be able to announce to the public that the utility of our Patent Eye Cups is now an experiment. The wonderful, almost miraculous, effects produced by their use, are coming daily to our knowledge.

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. 12, 1850, for a Rotary Planing Machine for Planing Boards and Planks, is not an infringement of the Woodworth Patent.

VALUABLE MILL PROPERTY FOR SALE.—Sited 3 miles north of Salem, Oahu Co., Ohio, in a good section, for grinding twin of burr-run by steam and water; 3 small dwelling houses, good orchard, 12 acres of land, &c., all of which will be sold on and favorable terms.

TO CANDY MANUFACTURERS.—For sale or rent a beautiful three story brick dwelling and store house, together with a two story brick shop, used for the manufacture of candles.

FOR SALE.—By the Baltimore and Ohio Railroad Co., 24 Crate Cars, adapted to railroad purposes, which will be sold at a reasonable price.

GRIFFITH'S PATENT VALVE COOKS for Steam Engines, dyeing establishments, or Chemical Works. They are warranted superior to any valve or cook in use.

FULTON FOUNDRY AND MACHINE WORKS. S. W. corner of Green and Morgan streets, Jersey City, N. J. The subscribers are prepared to contract for Sugar Mills and Mining Machinery of every description.

ENGINEERING.—The undersigned is prepared to furnish plans for ever description of machinery, water wheels, turbines, and to consult with parties to make experiments and ascertain the value of water power.

TO YOUNG MEN.—Pleasant and Profitable Employment.—Young Men in every neighborhood may obtain healthful, pleasant, and profitable employment, by engaging in the sale of useful and popular Books, and canvassing for our valuable Journals.

SEWING MACHINE.—The Office and Warerooms of the Wheeler & Wilson Manufacturing Company, for the sale of their Sewing Machines, is removed to No. 343 Broadway, where the public are invited to call and examine them in practical operation.

1854 WOODWORTH'S PATENT PLANING MACHINE.—Twenty-nine hundredths of all the planing lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines.

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.

IRON FOUNDERS' MATERIALS, viz: Pulverized Sea Coal, Black Lead, Soapstone, Anthracite and Charcoal Fagings. Also, best Imported Fire Bricks, Fire Clay, Fire Sand, and Moulding Sand, for sale by G. O. ROBERTSON.

MACHINERY.—S. C. HILLS, No. 13 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; Best's Patent Corn Mill; Burr Mill and Grinding Stones; Lead and Iron Pipe, &c. Letters, to be noticed, must be post-paid.

PASSAIC WORKS.—Passaic street, Newark, N. J.—Manufacture and have on hand, Steam Engines of the most approved construction and various sizes. Also Machinists Tools of all kinds; Lathes, Planing Machines, Drills, &c., machine for Enameling Carriage Cloth, and Machinery of every description.

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.

PORTABLE STEAM ENGINES.—The subscriber is now prepared to supply excellent Portable Engines, with Boilers, Pumps, Heaters, &c., all complete, and very compact, say 2, 2 1/2, 3, 4, 6, 8, and 10 horse-power, suitable for printers, carpenters, farmers, planters, &c. They can be used with wood, bituminous, or hard coal; a 1 1/2 horse engine can be seen in store, it occupies a space 5 feet by 3 feet, weighs 1500 lbs., price \$240; other sizes in proportion.

ON THE PETITION OF FONES MCCARTHY, of Putnam County, Florida, praying for the extension of a patent granted to him on the 3rd of July, 1840, for an improvement in the Cotton Gin, for seven years from the expiration of said patent, which takes place on the 3rd day of July, 1854.

It is ordered that the said petition be heard at the Patent Office on Monday, the 26th of June 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.

Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.; Pennsylvania, Philadelphia, Pa.; Scientific American, New York; Daily Courier, Buffalo, N. Y.; Floridian and Journal, Tallahassee, Fla., once a week for three successive weeks previous to the 26th day of June next, the day of hearing.

Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.; Pennsylvania, Philadelphia, Pa.; Scientific American, New York; Daily Courier, Buffalo, N. Y.; Floridian and Journal, Tallahassee, Fla., once a week for three successive weeks previous to the 26th day of June next, the day of hearing.

ON THE PETITION OF CHARLES SPAFFER, administrator of George Spafford, late of Windham, Connecticut, praying for the extension of a patent granted to him on the 2nd day of September, 1840, for an improvement in "machines for boiling and washing raw or manufacturing paper" for seven years from the expiration of said patent, which takes place on the 2nd day of September, eighteen hundred and fifty-four.

It is ordered that the said petition be heard at the Patent Office on Monday, the 13th 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.

Ordered, also, that this notice be published in the Union, Intelligencer, and Evening Star, Washington, D. C.; Evening Argus, Philadelphia, Pa.; Scientific American, New York; Daily Courier, Buffalo, N. Y.; and Post, Boston, Massachusetts once a week for three successive weeks previous to the 13th day of Aug. next, the day of hearing.

HARRISON'S PATENT MILL.—Received the highest premium at the World's Fair; 250 have been sold in two years. The stones are French burr; the frames and hoppers cast-iron, the spindles solid cast steel.

1854—MICHIGAN CENTRAL R. R. LINE.—D. W. WHITING, Freight Agent for Railroad and the enormous new steamers "Plymouth Rock," "Western World," and "May Flower,"—and also General Forwarder, will forward freight of any kind, by any mode of conveyance, to any destination, with dispatch and at the lowest rates; has trucks and machinery and (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, Freight Agent, goods consigned take precedence with the above boats in all cases.

STAVE AND BARREL MACHINERY.—HUTCHINSON'S PATENT.—This machinery, which received the highest award at the Crystal Palace, may be seen there in operation during the ensuing season. Cutting, Joining and Grooving Staves and Turning Heads prepared by this process are worth to the cooper from 30 to 40 per cent more than when finished in another way.

KRUPP'S BEST CAST STEEL.—Suitable for Mint and Plaster's Rollers, also of large size (72x18 inches diam) for rolling iron, copper or brass. Pistons of Steam Engines, and Shafts for Steamboats, not exceeding six tons weight in one piece.

KETCHUM'S IMPROVED MOWING MACHINE with entire change of Gear. The only successful grass cutter now known; warranted capable of cutting and spreading from ten to fifteen acres of any kind of grass, per day, in as good a manner as is done with a scythe.

MODELS.—Of all kinds made and warranted to answer the requisitions of the Patent Office. Post-paid communications strictly confidential. Address J. G. ARNOLD, Worcester, Mass.

PORTABLE FORGES AND BELLOW.—(Queen's patent). The best forge in market for Blacksmiths work, Boiler Makers, Mining, Quarrying, Shipping, Plantations, Contractors on Railroads and Public Works. Copper-smiths, Gas Fitters, &c. Also an improved Portable Melting Furnace for Jewellers, Dentists, Chemists, &c., both of which are constructed with sliding doors to protect the fire from wind and rain when used outdoors, and for perfect safety and free escape of smoke when used indoors.

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

STAVE MACHINERY.—The "Mowry Stave Cutter and Jointer Combined," which received the highest award at the Crystal Palace, is the only machine that ever undertook to joint a stave properly at the same time that it was cut and dressed, without rehandling. One man tends the machine and turns out from a solid block of wood ninety staves a minute, ready for the truss hoop.

BAKER'S IMPROVED BOILER FURNACE.—As used at the Crystal Palace; orders received for Stationary, Marine, or Locomotive Furnaces on this plan, and also for the rights for towns, counties, or States; certificates can be shown of furnaces in use for stationary, marine, and locomotive furnaces, with saving from 30 to 50 per cent, in fuel.

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

NEW HAVEN MANUFACTURING COMPANY.—New Haven, Conn., (successors to Saranodon & Parshley) have on hand Four Planers, to plane from 3 to 12 feet; slide lathes from 6 to 18 feet long; 3 sizes of hand lathes, with and without screws; and counter shafts; universal chucks; arbor 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.

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.

JOHN FARSHLEY, No. 5 and 7 Howard St., New Haven, Ct., manufacturer of Machinists' Tools, and Steam Engines, has now finishing off 25 Engine Lathes, 4 feet shears, 4 feet between centers, 15 inches swing, and weighs about 1100 lbs. These Lathes have back and screw gear, rib rest, with screw feed, and the rest is so arranged that the tool can be adjusted at any point the work may require, without unfastening the tool, hence they possess all the good qualities of the job and the weight lathes of the best workmanship.

\$100 REWARD.—To the Manufacturers of Bank Note Paper. The Executive Committee of the Association of Banks for the Suppression of Counterfeiting, hereby offer a reward of One Hundred Dollars for the best specimen, in the opinion of the Committee, of Bank Note Paper, of not less than five hundred sheets, which may be submitted to them on or before the 1st day of January next.

SCREW CUTTING MACHINES, with P. W. Gates' Patent Dies.—The subscribers keep constantly on hand three sizes of the above-named machines, to wit—No. 1 machine, 10 sets dies and taps from one-half to two inches, \$350; No. 2, 8 sets dies and taps, one-half to one and a half inches, \$250; No. 3, 6 sets dies and taps, three-eighths to one inch, \$150.

HUDSON MACHINE WORKS and Iron Foundry.—At Hudson City, N. Y., are prepared to contract for castings for railroads, bridges, buildings, gas pipes and posts, water pipes, cast-iron cranes, flour, cannon, &c. Steam engines and boilers, high and low pressure, sugar mills, Corn-shaft lifting and forcing pumps for mines; stamps, mortars, and milling machinery; also superior hydraulic pumps and presses, and superior machinists' tools made to order.

MACHINERY FOR SALE.—The following machines are for sale at the "Scientific American" Office:—Alcott's Concentric Lathe, price \$25. Portable Mortising Machine, \$20. Bushnell's Iron Drill, \$25.

WHITE STRAW PAPER.—For Newspapers.—A Mellier, the patented boiling established his process at Nixon & Binou's Mills, where the paper for the Philadelphia Ledger has been made daily from straw since the 12th of April, is now ready to sell licenses and make arrangements for establishing the process elsewhere.

ENGINEERING.—The undersigned is prepared to detail of steam, gas, and water engines, 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 & Neaves' Metallic Self-adjusting Conical Packing, Baber's Water Gauge, Sewell's Salmometers, Dudgeon's Hydraulic Lifting Press, Eucor's Patent Wire Rope for hoisting and steering purposes, &c. &c.

PLANING, TONGING, 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 equaled by the hand plane.

STATIONARY STEAM ENGINES.—The subscriber is now prepared to furnish, with or without frames, foot strong, substantial, plan finished engines that will do good service, say from 4 horse, \$215, to 30 horse, \$1,037; they have Judson's patent valves, and will be warranted to work well.

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

WROUGHT IRON DIRECT FROM THE Ore.—The owners of James Renton's Patent are now prepared to sell rights for this most valuable invention. Apply to JAMES RENTON, Cleveland, Ohio, or to A. H. BROWN, 137 Market st., Newark, N. J.

BAKER'S IMPROVED BOILER FURNACE.—As used at the Crystal Palace; orders received for Stationary, Marine, or Locomotive Furnaces on this plan, and also for the rights for towns, counties, or States; certificates can be shown of furnaces in use for stationary, marine, and locomotive furnaces, with saving from 30 to 50 per cent, in fuel.

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