

TO CORRESPONDENTS.

J. F. H., of —. We have seen colors made by all the means and from the matters you have described, excepting the sample from hydrofluosilic acid.

N. A. E., of La.—It is very difficult to understand your meaning, but we suppose that you want to know the balance pressure for the valve, so as to get the proper area of piston; that area must be equal to that of the valve, if the pressure is the same on both.

M. K., of Ind.—We have not yet been able to satisfy ourselves about the best limekiln for your purpose.

S. B. P., of N. Y.—We do not know of any work upon bird stuffing which can be relied upon. We presume there is no publication devoted to this art.

J. W. C., of Pa.—We can give you the name of Wm. Silver, Jr., Pittston, Pa., as a manufacturer of powder. The information which you need he may be able to supply.

G. O. B., of Va.—One of the best brick machines in use in this section is R. A. Ver Valens, made at Haverstraw, N. Y. It is well liked in this section, but we are not certain that it will suit your region; you had better apply to him for more information.

G. F. H., of R. I.—If the wheel is perfectly inelastic, its top will move in unison with the bottom; if elastic, it has a tendency to move faster. All parts, top and bottom, of common carriage wheels move with the same velocity.

T. B., of Brooklyn—Your proposal is a good one, but it appears to us that we have read of the floors of houses in Paris being constructed in the same manner. We cannot lay our hand on the information at present.

E. G., of N. J.—Did you suffer the india ink to dry thoroughly before you attempted to wash it out? We can show its indelible qualities on some of our draughtsmen's shirts that have been washed a great many times.

J. B. T., of Miss.—Yours is a singular question, namely, whether a bell hung high or low will be heard further. If a bell were hung a mile high it would not be heard so far away as one 100 feet high; neither would one if hung low down in a valley.

E. P., of Phila.—There is paper to be purchased at various stores for taking the impression of leaves; it is of all colors. We cannot give you an opinion which is the best work on American Botany.

O. B. O., of Pa.—Salt water is employed in boilers of ocean steamers; excepting a few that may have outside condensers.

C. M., of Pa.—Your fall being 110 feet, and the quantity of water falling per second, being 4 1/2 gallons, the nominal power of the water is 9 horse. A hydraulic engine well made, might be of considerable benefit to you.

F. G. G., of N. Y.—The best red ink for printing is carmine; you can mix it with any quick dryer.

Money received on account of Patent Office business for the week ending Saturday, May 6:—

W. S., of N. J., \$55; W. B. B., of N. Y., \$20; H. & J. B., of Ct., \$30; T. E. R., of N. Y., \$30; W. H., of N. C., \$30; N. F. M., of R. I., \$25; D. K., of Ind., \$30; H. F. B., of Ind., \$53; J. B. B., of Ohio, \$25; N. W., of Ct., \$25; E. O. P. A., of Mass., \$25; J. L. R., of Mass., \$39; E. W. G., of Mass., \$15; M. V. B. D., of R. I., \$30; R. L. S., of Pa., \$30; W. J. S., of N. Y., \$30; A. H. B., of N. J., \$350; J. P., of N. Y., \$60; W. H. W., of Pa., \$30; D. & Co., of N. Y., \$35; W. D. A., of N. Y., \$55; C. R., of Ga., \$40; J. C. R., of Ind., \$25; R. M., of Ohio, \$30.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 6:—

W. G., of N. Y.; J. S. B., of O.; N. F. M., of R. I.; J. C. R., of Ind.; S. F., of Ct.; E. W. G., of Mass.; W. D. A., of N. Y.; N. W., of Ct.; J. J. W., of L. I.; A. V., of O.; E. O. P. A., of Mass.

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 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.

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.

REMITTANCE—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 per insertion. 4 lines, for each insertion, 75 cts; 8 lines, 1 1/2; 12 lines, 2 1/4; 16 lines, 3 1/4.

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.

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

RARE CHANCE—For sale, a Patent Right recently granted for a most useful invention. For further information address W. L. No. 3 Christopher st., where a machine may be seen in operation.

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 candies.

SMOOTHING IRONS—To any person who will forward me \$10, I will forward a set of patterns and a right to sell one thousand of my Flat-Iron Heaters any where in the United States.

MECHANICAL ENGINEER—offers his services as Engineer and Draughtsman in a Foundry and Machine Shop, references will be given; inquire at this office.

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 COCKS for Steam Engines, drying establishments, or Chemical Works. They are warranted superior to any valve or cock in use.

FULTON FOUNDRY AND MACHINE WORKS City, N. Y. The subscribers are prepared to contract for Sugar Mills and Mining Machinery of every description.

DR. LITTLE'S AUTOMATIC LIGHTNING PRESS will be publicly shown in New York shortly. The cylinders of this press can be made to feed itself at the rate of 100,000 sheets each per hour.

KETCHUM'S MOWING MACHINE—Also various Reaping and Mowing Machines, combining all the latest improvements. New York Agricultural Warehouse and Seed Store, 189 and 191 Water street.

ENGINEERING—The undersigned is prepared to furnish plans for every description of machinery, water wheels, turbines, and to consult with parties to make experiments and scientific investigations, and to superintend the construction of works.

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.

CIRCULAR SAW MILLS—The undersigned are manufacturing, and keep constantly on hand, "Child's Premium Double and Single Circular Sawing Machines." The best machine in use for sawing lumber from logs of all sizes, and warranted capable of cutting more lumber in a given time than any other mill.

PORTABLE STEAM ENGINES—The subscriber is now prepared to supply excellent Portable Engines, with Boilers, Pumps, Hoists, etc., all complete and very compact.

DIG IRON—The subscriber has always on hand a stock of the best brands of American and Scotch Pig Iron, for sale at the lowest market price.

UNITED STATES PATENT OFFICE.

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, 1844.

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.

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

The testimony in the case will be closed on the 16th of June; depositions and other papers relied upon as testimony must be filed in the office on or before the morning of that day; the argument, if any, within ten days thereafter.

Ordered, also, that this notice be published in the Union, Intelligence, and Evening Star, Washington, D. C.; Pennsylvania Packet, Philadelphia; 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.

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

UNITED STATES PATENT OFFICE.

ON THE PETITION of Simon Fairman, of Stafford, Connecticut, praying for the extension of a patent granted to him on the 18th day of July, 1840, for an improvement in "the expanding and contracting, or universal chuck for lathes," for seven years from the expiration of said patent, which takes place on the 18th day of July, next, hundred and fifty-four, (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.

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

The testimony in the case will be closed on the 15th of June; depositions, and other papers relied upon as testimony, must be filed in the office on or before the morning of that day; the arguments, if any, within ten days thereafter.

Ordered, also, that this notice be published in the Union, Intelligence, 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 26th day of June next, the day of hearing.

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

HARRISON'S PATENT MILLS—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.

EDWARD HARRISON, Sole manufacturer and proprietor of the patent, New Haven, Conn.

1854—MICHIGAN CENTRAL R. R. LINE.—D. W. WHITING, Freight Agent for Railroad and the enormous new steamers, "Plymouth Rock," "Western World," "May Flower," and also Generals Forwarder, will forward freight of any kind, by any mode of conveyance, to any destination, with dispatch and at the lowest rates.

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.

KIPP'S BEST CAST STEEL.—Suitable for Mint and Plate's Rollers, also of large size (72x28 inches diam.) for rolling iron, copper or brass.

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 by 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 BELLOWS—(Queen's patent). The best forge in market for Blacksmiths, Boilers, Contractors on Railroads and Public Works, Copper-smiths, Gas Fitters, &c.

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 Joiner 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.

NEW HAVEN MANUFACTURING COMPANY.

New Haven, Conn. (successors to Scranton & Parshley) have on hand Power Planers, to plane from 8 to 12 feet; slide lathes from 6 to 18 feet long; 8 sizes of hand lathes, with and without shears; and counter shafts; universal chucks; drill presses; index plates; bolt cutters, and slide rests.

PORTABLE STEAM ENGINES.—GEORGE VAIL & CO., Speedwell Iron Works, Morristown, N. J. LOGAN VAIL & CO., No. 8 Gold st., N. Y., are prepared to furnish Portable Steam Engines from four to eight horse power, with locomotive boilers.

JOHN PARSHLEY, No. 5 and 7 Howard st. New Haven, Ct., manufacturer of Machinists' Tools and Steam Engines, has now finishing 36 Engine Lathes, 6 feet shears, 4 feet between centers, 15 inches swing, and weighs about 1100 lbs.

\$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 for castings for railroads, bridges, buoys, gas pipes and posts, water pipe, cast-iron ornaments, floors, cannon, &c.

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, \$15.

WHITE STRAW PAPER.—For Newspapers.—A Miller, the patentee, having established his process at Nixon & Xenour's Mills, Manayunk, 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 furnish specifications, estimates, plans in detail, or detail of steamships, steamboats, propellers, high and low pressure engines, boilers and machinery of every description.

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.

STATIONARY STEAM ENGINES.—The subscriber is now prepared to furnish, with or without pumps, boilers, &c., Horizontal Engines on iron bed frames, good strong, substantial, plain finished engines that will do good service, say from 4 horse, \$210, to 30 horse, \$1037; they have Judson's patent valves, and will be warranted to work well.

A. B. ELY, Counsellor 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, 107 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.

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.