

Correspondents

H. L. S., of N. H.—If a patent is extended, it does not affect the right of parties to run such machines as they had in operation before the extension was granted.

J. W. F., of Minn.—For the information you want address W. B. Leonard, American Institute, New York city.

C. C., of N. Y.—From the seed of the potato we should not have had a useful plant in less than three years; from the tuber we possess it in a single summer.

R. G., of Miss.—The flowering of plants is subject to a law of periodicity and habit. Alpine plants do not wait for the sun's heat, but exert such a struggle to blossom that the flowers are seen among the unmelted snow.

W. S. B., of Mo.—Common plaster will not answer for rough brick walls exposed to the weather, it will soon crack off; and hydraulic cement and sand is still worse. You must make up a cement of boiled linseed oil, containing a drier, (such as litharge), and mix this with some brick dust, dry pipe clay, and fine sand, and put it on with a trowel. The bricks should receive two coats of boiled linseed oil before this cement is put on.

D. J. H., of Ohio.—Cast steel bells are made and sold by Messrs. Naylor & Co., this city. Such bells are cast to weigh from 25 to 6000 pounds, and have been used with success for about six years in the Canadas and in the north of Europe. The price per pound and in these bells are sold is 28 cents for all that weigh over 65 pounds.

H. D. F., of Mass.—We have placed your letter on file, and await your future orders in reference to the progress of your invention.

R. A. D., of Mass.—It is reasonable to suppose that after an application for a patent has been on file for one year, and no patent issued for the invention, that the application has been refused. Still there may be circumstances which will delay a case for that length of time.

S. W., of N. Y.—It is the opinion of many geologists that there was a period in the history of the earth when the atmosphere was more highly charged with carbonic acid gas and moisture than at present, and that plants of a larger species than flourished in luxuriance, their light being obtained through a warm but cloudy atmosphere.

BLACKWOOD'S MAGAZINE.—Published by Leonard Scott & Co., No. 54 Gold street, New York.—The number for this month of this veteran and able magazine, is an able one. The first article is on Dr. Livingston, the Missionary Explorer. Bulwer's novel, "What will he do with it?" is continued, besides there are six sterling essays on various subjects.

THE CHARLESTON MEDICAL JOURNAL AND REVIEW.—Published by Walker, Evans & Co., Charleston, S. C.—Contains seven original essays of a very superior character, besides a great mass of general medical intelligence. This is a most able medical periodical.

THE ECLECTIC MEDICAL JOURNAL. R. S. Newton, M. D., Cincinnati, Ohio.—In this number there are excellent articles on "Mercurials," by Dr. Jones; on "Malpractice Cases," by the editor, and many others of great interest.

HALL'S JOURNAL OF HEALTH, for May, contains some very valuable advice, which, if taken, will help its readers to keep out of the doctor's hands. It is a most useful periodical, and should be in every family.

THE SOUTHERN PLANTER, published at Richmond, Va., for this month, has a digest of all the agriculture of the South, and is always interesting and full of wholesome freshness.

W. T. H., of Ind.—By assuming another person's name in your correspondence with us, hoping thereby to get favors, you have placed yourself beyond the right of consideration from us, and we therefore decline all further correspondence with you.

E. T. Paine, of Charleston, S. C., wishes to purchase the best and most complete machine for cutting and dressing staves thirty-two inches long for cypress or molasses barrels, and also adapted to shingle cutting and dressing.

P. A. R. of Pa.—Conducting water through a coiled tube arranged in the bottom of a well between the head and point of exit, for the purpose of cooling the water is an old idea, and therefore not patentable.

W. S. M., of Conn.—Bevel gear is more expensive at first than belt and pulley for your saw mill, but will not cost so much for repairs, if properly cast and cut. We are in favor of bevel gearing in many cases, but not in all.

S. F. C., of Ohio.—Orpiment is a general name for two sulphurets of arsenic, the yellow or prismatic sulphuret, and the red or ruby sulphuret. They are both used as paints, the yellow being the coloring body of the paint known as "king's yellow."

J. B., of Ill.—There is no water in the moon—the dark spots being valleys, not lakes.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Saturday, May 8, 1858:—

- I. F. B., of Ga., \$25; L. & G., of Conn., \$30; C. C. W., of N. J., \$55; B. H. W., of Mo., \$55; B. B. M., of Fla., \$25; K. F., of Wis., \$25; J. O., of Md., \$10; J. M. N., of Iowa, \$58; A. M. P., of N. Y., \$25; S. W., of N. Y., \$250; T. S., of N. Y., \$25; G. B. B., of Conn., \$25; G. W. C., of Ill., \$60; G. W. L., of Texas, \$33; A. H., Jr., of Conn., \$57; A. J. B. F., of Ind., \$25; S. N. C., of Ill., \$12; J. C. B., of N. Y., \$35; J. & H., of N. Y., \$60; A. D. B., of Mass., \$25; G. H., of Mass., \$60; D. B. W., of N. Y., \$25; W. R., of Mich., \$30; M. J. S., of Ill., \$30; A. W. W., of Conn., \$37; G. G., of Ill., \$5; L. H., of La., \$33; S. T., of N. J., \$55; J. M., of N. J., \$30; H. H. L., of R. L., \$30; H. & W., of Mich., \$30; A. E. P., of Vt., \$27; H. S. E., of Mass., \$30; S. M. C., of Wis., \$25; J. S. B., of S. C., \$30; S. C. C., of Mich., \$30; C. D., of L. I., \$25; J. & D., of N. Y., \$25; J. E., of N. Y., \$55; J. H. C., of N. Y., \$110; G. H. L., of N. J., \$18; A. D. B., of N. Y., \$55.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 8, 1858:—

A. J., of Ill.; G. B. B., of Conn.; L. & G., of Conn.; R. & S., of Ohio; B. B. M., of Fla.; N. C., of Ohio; K. F., of Wis.; S. N. C., of Ill.; G. W. S., of Ind.; D. B. W., of N. Y.; A. D. B., of Mass.; A. M. P., of N. Y.; E. V. S., of Miss.; A. J. B. F., of Ind.; C. D., of L. I.; J. M. C., of Wis.; G. G., of Ill.; J. & D., of N. Y.; A. W. W., of Conn.; W. D., Jr., of Pa.; N. W. B., of Vt.; H. S. F., of Mass.; J. M. N., of Iowa; J. E., of N. Y.; A. D. B., of N. Y.; W. B., of N. Y.; L. E. H., of N. Y.

Literary Notices.

THE NEW AMERICAN CYCLOPEDIA. D. Appleton & Co., Broadway, New York. The appearance of the second volume of this valuable national work, embracing words from ARA to BEA, again calls upon us to give a notice of it. Of the gentlemen who are employed to collect the matter we can say that they have, as a body, done their work well, although in some instances they have not said quite enough about their subject. As the work progresses there is more interest awakened in its success, and it assumes more distinctly the position of "The American Cyclopaedia." A new and valuable feature of this work is its biographical articles which are not confined to the "mighty dead" alone, as is usual, but the "famous living" are also noticed, among which the account of Agassiz is remarkably interesting; in fact, all the biographies are honorable to their authors. A full account of the Atlantic Ocean is in this second volume, the commercial history as well as the science of which is included in the article. The publishers and editors seem to be sparing no pains to make the work one of standard value and sterling merit.

A WOMAN'S THOUGHTS ABOUT WOMEN. By the Author of "John Halifax, Gentleman." Ridd & Carlton, 310 Broadway, New York. That women labor under many social disadvantages, no one is prepared to deny, and this lady knowing this, and feeling it deeply, writes a book of sound, sober, sensible advice. It is a book that must do good, for it tells the sex to have more self-reliance, and to believe more truly in her holy mission that she may act more consistently with her end, ever bearing with her an elevating influence of modesty, courage and charity. Heartily we recommend all to read it, and that carefully.

PRINCE CHARLES, OR THE PRETENDER, is the title of an interesting tale published by Dick & Fitzgerald, of 18 Ann street, New York, and written by that very popular author, J. F. Smith. The tale is written with his usual vigor, and is highly interesting.

THE CRANBERRY AND ITS CULTURE. By B. Eastwood. A. O. Moore, New York. This is a book full of practical instruction for the treatment and development of the cranberry vine, and to all growers of that luscious fruit must prove an invaluable handbook of sound information.

CORNELL'S FIRST STEPS IN GEOGRAPHY. D. Appleton & Co., Broadway, New York. This is an excellent little book arranged in the form of question and answer for teaching children geography. It is full of illustrations which cannot fail to interest the juvenile learner.

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TERMS OF ADVERTISING.

Twenty-five cents per line each insertion. We respectfully request that our patrons will make their advertisements as short as possible. Engravings cannot be admitted into the advertising columns.

* * All advertisements must be paid for before inserting.

WHEELER & WILSON MANUFACTURING COMPANY'S SEWING MACHINES.—Highest Premiums awarded 1857, by the American Institute, N. Y., Maryland Institute, Baltimore, and at the Maine, Connecticut, Michigan and Illinois State Fairs. Office, 343 Broadway, New York. Send for a circular.

We prefer them for family use.—[Tribune.] They are the favorites for families.—[Times.] It is without a rival.—[Scientific American.] Equal to nine seamstresses.—[Home Journal.] Most honorable to American genius.—[Independent.] The machine, for family use.—[Advocate & Journal.] Will give entire satisfaction.—[Observer.] The best ever invented.—[Christian Inquirer.] In looking for the best, see these.—[Examiner.] Indispensable in every family.—[The Preacher.]

FIREARM CHALLENGE.—L. H. GIBBS, OF New York, has accepted Lieut. Symmes' challenge, to fire with their breech-loaders, on the 26th, 26th, and 27th of May, near Boston, Mass. The stakes are \$500 a side. The distances are 100, 300, and 600 yards; and the firing to be 300 shots, without cleaning. All interested in such things are invited to attend, at the time and place mentioned above.

FOR SALE.—A SUIT OF SUBMARINE ARMOR, Air Pump and Hose. Price \$150. Apply to GEORGE C. HOWARD, No. 17 South 18th st., Philadelphia, Pa.

PHILADELPHIA RIVET WORKS.—MANUFACTURERS of the celebrated P brand boiler tank gasometer rivets, of every diameter, length, and head. PHILLIPS & ALLEN.

THE PRACTICAL MECHANICS' JOURNAL.—Wiley & Halsted, 351 Broadway, New York, are the agents for the United States for this valuable Journal, (which is issued monthly,) and supply the same at \$3 per year—subscriptions payable strictly in advance. A specimen number will be sent and prepaid on the receipt of 25 cents in postage stamps. Vols. 1 to 10, in full cloth binding, can be supplied for \$5 50 each, or in numbers for \$3. No. 1 of Vol. XI commences with the April number for 1858. Scientific catalogues are furnished gratis, and mailed and prepaid on receipt of postage stamp.

IMPORTANT TO INVENTORS.

AMERICAN AND FOREIGN PATENT SOLICITORS.—Messrs. MUNN & CO., PROPRIETORS of the SCIENTIFIC AMERICAN, continue to procure patents for inventors in the United States and all foreign countries on the most liberal terms. Our experience is of twelve years' standing, and our facilities are unequalled by any other agency in the world. The long experience we have had in preparing specifications and drawings has rendered us perfectly conversant with the mode of doing business at the United States Patent Office, and with most of the inventions which have been patented. Information concerning the patentability of inventions is freely given, without charge, on sending a model or drawing and description to this office. Consultation may be had with the firm, between nine and four o'clock, daily, at their principal office, 123 Fulton street, New York. We have lately established a Branch Agency on the corner of E. and Seventh streets, Washington (opposite the United States Patent Office). This office is under the general superintendence of one of the firm, and is in daily communication with the Principal Office in New York, and personal attention will be given at the Patent Office to all such cases as may require it.

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business we have offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we may safely say that three-fourths of all the European patents secured to American citizens are procured through our Agency.

Circulars of information concerning the proper course to be pursued in obtaining patents through our Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the principal office or either of the branches. Communications and remittances should be addressed to MUNN & COMPANY, No. 123 Fulton street, New York.

The annexed letter from the late Commissioner of Patents we commend to the perusal of all persons interested in obtaining patents:—

Messrs. MUNN & CO.—I take pleasure in stating that while I held the office of Commissioner of Patents, MORE THAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE came through your hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours, very truly, CHAS. MASON.

NEW YORK WIRE RAILING CO.—Composite Iron Railing (secured by letters patent) is the strongest iron fence made of wrought iron. Its durability is equivalent to its strength; its beauty shows for itself; and as to price, it is cheaper than any iron railing manufactured. We are prepared to furnish all styles of wire and cast iron railings, &c., iron gates, verandahs, farm fences, iron bedsteads, iron furniture, iron foundry work. The public is respectfully informed that we are the only persons lawfully authorized to sell Wickersham's Folding Iron Bedsteads. Catalogues containing several hundred designs of iron work, furnished on application. HUTCHINSON & WICKERSHAM, No. 312 Broadway, New York.

RIGHTS FOR SALE OF A PATENT SELF-REGULATING WINDMILL, that has been well tested. It operates safely, and makes a steady power in the hardest gales. Great inducements given to agents and dealers. Address A. G. Field, Quincy, Ill.

IMPORTANT TO GAS AND STEAM FITTERS.—Huddell's Patent Coupling for Pipes can be seen at Messrs. ARCHER, WARNER & CO'S, 376 Broadway, State, County and Town rights are for sale. This invention (Pat. April 6, 1853,) greatly facilitates the work of attaching branches and making extensions. Persons desiring to purchase this invention can communicate with the patentee by leaving their address at ARCHER, WARNER & CO'S, No. 376 Broadway, New York.

MACHINISTS' TOOLS FOR SALE AT HALF PRICE.—I will sell the remainder of the tools belonging to the estate of John Parsley at half price, if called for soon. Said tools are new and in good order. They consist in part as follows:—One 16 foot planer, one 4 foot planer, 10 hand lathes, 2 spliner drills, 13 No. 1 drills, 1 bolt header, 1 shaft straightener, plane centers and jaws, chucks, all sizes, &c., &c. N. D. SPERRY, Trustee, New Haven, Conn.

A SAFE GOOD BUSINESS, REQUIRING A SMALL CAPITAL.—Any person living within four or five miles of a town, containing 3,000 or more inhabitants, can secure to themselves a good business by purchasing the right, with requisite machinery for cutting Daniel's Granular Fuel. This fuel consists of the swamp growth of brushwood and twigs, and trimmings of lengths of about four inches. The machine will cut up with two horse power and two men 1,000 bushels per day. The material wherever introduced is preferred to charcoal or split wood for kindling coal or wood fires, and is found to be a most superior article for a summer fuel. As a patent is secured for cutting this material by machinery, all parties who purchase territory can have exclusive sale in that territory. All communications addressed to D. WASHBURN, Taunton, Mass., General Agent for the United States, will meet with prompt attention.

MACHINISTS' TOOLS.—A FULL SUPPLY OF every variety, and superior quality, now on hand, and made to order, at short notice. Railroads supplied. Also one 8-horse upright engine, in complete order; price \$300. No. 479 First ave., New York.

5000 AGENTS WANTED.—TO SELL FIVE NEW INVENTIONS.—Agents have made \$25,000 on one. No other agency so good. Send stamp and get 80 pages particulars gratis. EPHRAIM BROWN, Lowell, Mass.

PAGE'S PATENT PORTABLE CIRCULAR SAW MILL, and Portable Steam Engines and Boilers mounted on substantial wheels, ready to saw lumber, thrash wheat or gin cotton. Our Mills will saw from 2,000 to 10,000 feet per day. Address GEO. PAGE & CO., Baltimore, Md.

PATENT OFFICE MODELS CAREFULLY made on scientific principles, at low prices, by H. SILLARBAUM & CO., 300 Broadway, New York. References at the office of this paper.

ANOTHER WONDER.—BALDWIN'S Turbine Water Wheel (represented in No. 51, Volume XII, Sci. Am.) gives from 75 to 97 per cent of power, according to the size of wheel and head employed. Usual sizes, with 4 to 25 feet fall, give 80 to 90 per cent. For information address S. K. BALDWIN, Laconia, N. H.

WOODWORTH PLANERS.—IRON FRAMES to plane 18 to 24 inches wide—at \$90 to \$110. For sale by S. C. HILLS, 12 Platt street New York.

PORTABLE STEAM ENGINES.—S. C. HILLS, 12 Platt street, New York, offers for sale these Engines, with Boilers, Pumps, Heaters, &c., all complete, suitable for printers, carpenters, farmers, planters, &c. A 2 1/2 horse can be seen in store; it occupies a space 5 by 3 feet; weight, 1,500 lbs.; price, \$340. Other sizes in proportion.

STEAM ENGINES, STEAM BOILERS, Steam Pumps, Saw and Grist Mills, Marble Mills, Rice Mills, Quartz Mills for gold quartz, Sugar Mills, Water Wheels, Shafting and Pulleys. The largest assortment of the above in the country, kept constantly on hand by WM. BUKDON, 102 Front street, Brooklyn, N. Y.

HARRISON'S 30 INCH GRAIN MILLS.—Latest Patent.—A supply constantly on hand. Price \$300. Address New Haven Manufacturing Co., New Haven, Conn.

THE WORKS OF THE AUBIN GAS CO.—(General Office, No. 44 State st., Albany, N. Y.) as now perfected, are adapted to all materials and localities, and are in successful operation in villages, factories, and private dwellings. For full information as to cost, probable income of public works, &c., apply as above. For plans, &c., see SCIENTIFIC AMERICAN of March 13th.

SECOND-HAND MACHINISTS' TOOLS.—Consisting of 20 Engine Lathes, 9 Iron Planers, 4 Upright Drills, Hand Lathes, Chuck Lathes, Gear Cutters and Vices, all in good order, and for sale low for cash. For particulars, address FRANKLIN SKINNER, 14 Whitney avenue, New Haven, Conn.

MACHINE BELTING, STEAM PACKING, ENGINE HOSE.—The superiority of these articles, manufactured of vulcanized rubber, is established. Every belt will be warranted superior to leather, at one-third less price. The Steam Packing is made in every variety, and warranted to stand 300 degs. of heat. The hose never admits oiling, and is warranted to stand any required pressure; together with all varieties of rubber adapted to mechanical purposes. Directions, prices, &c., can be obtained by mail or otherwise, at our warehouse. NEW YORK BELTING AND PACKING COMPANY. JOHN H. CHEEVER, Treasurer, No. 6 Day street, New York.

PECK'S PATENT DROP PRESS.—FOR Jewellers, tin and copper workers, gun and other forgings, &c., manufactured by the patentee, MILO PECK & CO., New Haven, Conn.

NEW HAVEN MANUFACTURING CO.—Machinists' Tools: Iron Planers, Engine and Hand Lathes, Drills, Bolt Cutters, Gear Cutters, Chucks, &c., on hand and finishing. These tools are of superior quality, and are for sale low for cash or approved paper. For cuts giving full description and prices, address "New Haven Manufacturing Co., New Haven, Conn."

ENGRAVING ON WOOD AND MECHANICAL DRAWING, by RICHARD TEN BYCK, Jr., 123 Fulton street, New York, Engraver to the Scientific American.

STEAM WHISTLES.—IMPROVED PATENTERS manufactured by HAYDEN, SANDERS & CO., 306 Pearl street, New York.

WOODWORTH PLANING MACHINES.—Having over \$40,000 worth now completed, I will sell, from this time henceforth, at a very reduced price, and am ready to construct any sizes not on hand at short notice. JOHN H. LESTER, 57 Pearl st., Brooklyn, Long Island.

LAP-WELDED IRON BOILER TUBES.—Prosser's Patent.—Every article necessary to drill the tube-plates and set the tubes in the best manner. THOS. PROSSER & SON, 28 Platt st., New York.

OIL! OIL! OIL!—FOR RAILROADS, STEAMERS, and for machinery and burning. Pease's Improved Machinery and Burning Oil will save fifty per cent., and will not gum. This oil possesses qualities vitally essential for lubricating and burning, and found in no other oil. It is offered to the public upon the most reliable, thorough and practical test. Our most skillful engineers and machinists pronounce it superior and cheaper than any other, and the only oil that is in all cases reliable and will not gum. The Scientific American, after several tests, pronounced it "superior to any other they have ever used for machinery." For sale only by the inventor and manufacturer, F. S. PEASE, 61 Main st., Buffalo, N. Y. N. B.—Reliable orders filled for any part of the United States and Europe.

VAIL'S SPEEDWELL IRON WORKS, Morristown, N. J., manufacture Craig's Patent Double-acting Balance Valve Oscillating Steam Engines both stationary and portable, Knowles' Patent Muley, Portable, Gang and Re-sawing Mills, Sugar and Chinese Cane Mills and Sugar Pans, Grist Mills, Mill Irons, Rich's Water-wheels, Forgings and Castings. Orders for the above, and all descriptions of labor-saving machinery will receive prompt attention. JOHN H. LIDGERWOOD & CO., No. 9 Gold street, New York.

MACHINERY.—IF YOU WANT THE BEST Portable or Stationary Steam Engines, Woodworth's or Daniels' Planers, or any other kind of machinery for working wood for the least amount of money, address HARRISON FLINT, Danbury, Conn.

CORLISS' PATENT STEAM ENGINES.—About 250, most of them from 40 to 400 horse power, are now in operation. On application, pamphlets will be sent (by mail), containing statements of responsible manufacturing companies where these engines have been furnished, for the saving of fuel, in periods varying from 2 1/2 to 5 years. Boilers, shafting, and gearing. CORLISS STEAM ENGINE CO., Providence, R. I.

PEA SHELLING MACHINE.—PATENTED by W. J. Stevenson, March 30, 1858. This machine is admirably adapted to the use of hotels, dining saloons, boarding houses, private families, pea growers, and pea preservers. State rights for sale. Address the patentee at No. 438 Third avenue, New York City. See engraving on page 34, Vol. XIII, SCIENTIFIC AMERICAN.

C. HECKMANN, MANUFACTURER OF MACHINERY.—of brass, copper, and iron wares, at Hamburg, Germany, recommends himself for the manufacture of steam boilers, Roberts' apparatus, machinery and apparatus for sugar refineries, breweries and distilleries, of the most approved constructions; also for the whole planning of any factory with drawings and mountings. All orders will be executed with promptness and on the cheapest terms. Inquiries must be made prepaid.

FOR SALE.—RIGHTS IN TWO PATENTS FOR Steam Engine improvements, being a valuable variable cut-off, and practical direct connection of piston rods with crank, effecting great saving in construction and fuel. Interests given to capitalists. Inquire of B. ACKERMANN, 710 Broadway, New York.

WELLS' PATENT SINGLE AND DOUBLE CIRCULAR SAW MILLS, with simultaneous and independent hand and self setting head blocks and patent friction feed, universally admitted the best mills extant for manufacturing lumber. Self-acting shingle and lath machines, jointers, saw mauls with Wells' patent self-adjusting boxes. Saw tables, saw-sets and swages manufactured by H. WELLS & CO., Florence, Mass.