

numbers. We have always freely criticised the proceedings of the American Institute, from the laudable motives of stirring up the members to do something worthy of note.

TO CORRESPONDENTS.

J. H. C., of Ky.—You would see by the last number of the Sci. Am., which was printed before your letter came, that your plan for keeping butter is not exactly new.

G. J. M., of Ct.—We have never seen the galvanic pile employed to deposit iron on copper; and the reason, we presume, is, that it does not require the expense of the battery to do so.

J. L. H., of N. Y.—Either Parker's, Reuben Rich's Vandewater's, Jagger, Treadwell & Perry's, or Caleb Rider's, are good wheels, and will answer your purpose.

B. M. H., of —Your two spike drums, will be the exactly the same as the mill now used for breaking coal. It does not require four times the power to give a double velocity in machines, where the resistance is the same at every point, as in a double machine, with one moved with half the velocity.

E. H. B., of Ill.—The paper of Lieut. Hunt was an able one, but with its conclusions we do not agree; in some parts he was, we believe, reported incorrectly.

C. W. of Pa.—We cannot recommend a better plan than Bulkley's, to season it with currents of hot air is very good and not patented.

J. B. A., of N. Y.—You will find in the Scientific American three weeks ago, a very excellent plan for preventing boilers from scaling.

M. F. N., of Md.—The Pennsylvania Polytechnic, we believe, is in operation in Philadelphia. You speak truly about young mechanics; more of them would go to college to learn science, if languages were left out; this they now can do at Yale, and Cambridge—Lawrence School.

H. F. N., of Ohio.—Your governor is the very same as that employed on clocks for the same purposes.

D. A. W., of Vt.—We cannot give you the relative strength of the extracts you speak of, or we should do so; the pamphlet is not yet published. It does not hurt sumac to boil it for cotton; it is best it should be.

R. C. L., of Ala.—The advantage to be gained by a rotary engine is the applying rotary motion direct to a shaft; the motion has to be changed in a reciprocating one. The essential points to be aimed at are evenness of wear in all parts, and a small amount of friction surface. There are many simple rotary engines in use; success, surely, is all that is desired. We cannot answer you about Bristol's engine at present.

W. G. B., of Ga.—The best work for you is Scott's Engineers Assistant, but it costs \$24, we believe.

J. L. H., of N. Y.—Perhaps you have all the power your fall can give, if not, put two wheels on one shaft, on Parker's plan.

E. S. P., of Tenn.—Your alleged improvement in horse powers contains no patentable features. We have seen the same thing before.

E. W. C., of N. J.—Thompson obtained a patent last year, for an auger for boring Artesian Wells. We know nothing of a caveat having been filed.

E. W. S., of Mass.—We are not in possession of any information respecting the patent saws of Nova Scotia, and cannot, therefore, advise with you in regard to securing patents for them.

J. R., of Ill.—Black's Work on Brewing is as good as any. It is sold by Appleton & Co., 200 Broadway.

J. V., of N. H.—We do not know where Porter's Patent Press is made.

W. D., Jr., of Pa.—Your announcement of a new thing. If you can make it operate well, it would supersede all others in use, as they are liable to such objections as you enumerate.

J. H. K., of Pa.—Your plan of Paddles is not new, excepting the angle, which is wrong. It would not do to lift the stern, for that would make the bow dive into the water; the very thing that should be avoided.

W. O. G., of Conn.—We have never known of a ditching machine constructed as described in your letter of the 10th inst. You had better try it.

J. S. L., of N. Y.—We know nothing of Stoddard's machine. Wood's patent, sold by J. D. Johnson, Bridgeport, Conn., is a good machine.

J. E., of Mass.—If your pegging machine interferes with Gallahue's, you cannot use it; if it is different from his and all others, a patent can be secured for it.

D. B., of Mass.—You had better forward us a model of your corn husking machine. We should think it new judging from the meagre description given in your letter.

W. G. McA., of Tenn.—We have very carefully examined the sketch of your machine for splitting bars of wrought iron. It could not be patented, as it contains the same features as are found in shears for cutting iron in common use.

Money received on account of Patent Office (business for the week ending Saturday, Oct. 15):—

E. M., of N. J.; \$30; D. A. H., of N. Y.; \$60; J. N. P., of Mass.; \$45; T. W. K., of N. Y.; \$30; L. and M. T., of Wis.; \$20; S. B. C., of Mass.; \$30; K. and F., of Mass.; \$30; A. C. G., of N. Y.; \$30; J. P. M., of N. Y.; \$60; J. D., of Pa.; \$30; J. B. L., of O.; \$35; G. W. B., of N. Y.; \$55; S. H., of N. Y.; \$55; J. W., of C. W.; \$30; S. W., of L. I.; \$65; C. G., of S. C.; \$54.77; R. R. of N. Y.; \$57; N. R., of Ill.; \$20; W. E. O., of N. Y.; \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Oct. 15:—

D. A. H., of N. Y.; (2 cases); E. M., of N. J.; W. E. O., of N. Y.; J. W. P., of N. Y.; S. W., of L. I.

A Chapter of Suggestions, &c.

MISSING NUMBERS—Mail Subscribers who have failed to receive some of the numbers of Vol. 8 are informed that we are able to supply them with any of the numbers, from 1 to 52, EXCEPT the following, and these we are ENTIRELY out of—Nos. 2, 4, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 47, 48, 49, 50.

TO CORRESPONDENTS.—Condense your ideas into as brief space as possible, and write them out legibly, always remembering to add your name to the communication; anonymous letters receive no attention at this office. If you have questions to ask, do it in as few words as possible, and if you have some invention to describe, come right to the business at the commencement of your letter, and not fill up the best part of your sheet in making apologies for having the presumption to address us. We are always willing to impart information if we have the kind solicited.

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.

BINDING.—We would suggest to those who desire to have their volumes bound, that they had better send their numbers to this office, and have them executed in uniform style with their previous volumes. Price of binding 75 cents.

FOREIGN SUBSCRIBERS.—Our Canada and Nova Scotia patrons are solicited to compete with our citizens for the valuable prizes offered on the present volume. [It is important that all who reside out of the States should remember to send 25 cents additional to the published rates for each yearly subscriber—that amount we are obliged to pre-pay on postage.]

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.

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.

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.

ADVERTISEMENTS.

Table with 3 columns: Lines, Price per line, Total price. 4 lines, 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 inserting.

American and Foreign Patent Agency.

IMPORTANT TO INVENTORS.—I have been 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.

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

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.

WE WANT TO CONTRACT FOR TUBULAR BOILERS from 5 to 20 horse power. Address HALL & BOLLINGER, Fayetteville, N. C. 53*

PARSONS' SELF-STRAINING SAW.—Requires only ten pounds' weight to strain it, and combines the advantages of both muley and gate or sash mills. It will bear as much feed, is as easily kept in order, will cut as much lumber with one-fourth less power, and is successful in use in five States. A working model is in the Crystal Palace, where further information can be had, or of the proprietor at Wilkesbarre, Penn. JAMES JONES, S. E. PARSONS, Agent. 63*

WINNOWER MACHINES.—State, County, and Town Rights for sale of the Patent Winnower Machines, illustrated in No. 2, Vol. 8, Scientific American. Address SAMUEL CANBY, Patentee, Elliptical Mills, Me. 54*

BRISTOL'S ROTARY ENGINE.—Reasons why it should be used as compared with the common engine.—It is much more simple in construction, and costs much less, particularly as capacity is increased. One of the kind now in use, requires no foundation, it only being necessary to secure the line of shaft, and block the cylinder from rolling. It will not weigh to exceed one-third as much, nor take more than one-third the room. It can be reversed at any time by a single movement of the hand without risk of injury. There are no parts liable to breakage or derangement; if the shaft gets out of line it is of no consequence. The ordinary friction is much less, and there is none of what is termed load friction, which is usually estimated at about 14 per cent. of the whole power. The steam is used upon precisely the same principle, with less loss in space. The attention of those interested in the use of steam is called to an engine now in the Crystal Palace of about 30 horse-power. Persons at a distance desiring more full information will please address me to the care of Messrs. Munn & Co. R. C. BRISTOL, Patentee. 1

AMERICAN ENGINEERS ASSISTANT.—Lately published.—The American Engineer, Draftsman and Machinist's Assistant, designed for Practical Working-men, Apprentices, and those interested in the Engineering profession, illustrated with 200 wood cuts, and 14 large engraved Lithographic Plates, of recently constructed American Machinery and Engine Work; by Oliver Byrne. Embracing—Mathematical and Drawing Instruments, Geometrical Problems, Brackets and Pillow Blocks, Lubricators, and Electric Steam Trains, Horse Power, Parallel Motion, The Indicator, Safety Valves, High Pressure Engines, Steamship Engines and Boilers, Rotary Engine, Locomotives, Screw Propellers, Ericsson's Caloric Engine, &c., &c. The work is published in one large 4to vol., handsomely bound, and sold at the low price of \$5. On receipt of the amount, by mail, a liberal discount made to Agents and Booksellers. Address, C. A. BROWN & CO. Publishers, N. W. Cor. of 4th and Archstreets, Philadelphia. 1

UNITED STATES PATENT OFFICE, Washington, Sept. 28, 1853.

ON THE PETITION of Herrick Aiken, of Franklin, New Hampshire, praying for the extension of a patent granted to him on the twenty-seventh day of Dec. 1839, in an improvement in constructing sockets for holding tools, for seven years from the expiration of said patent, which takes place on the twenty-seventh day of December, eighteen hundred and fifty-three—

It is ordered that the said petition be heard at the Patent Office on Monday, the 15th of December 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 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.; Pennsylvania Philadelphia, Pennsylvania Evening Post, and Scientific American, New York; Boston Post, Boston, Massachusetts; and Patriot, Concord, New Hampshire; Enquirer, Cincinnati, Ohio, once a week for three successive weeks previous to the second Monday of January next, the day of hearing.

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. 63

WATTS, BELCHER & CO.—Machinists, Manufacturers of Steam Engines, Lathes, Planing Machines, and Machinist's Tools of all descriptions. Jobbing promptly attended to. Passaic Works, Passaic, N. J. W. M. WATTS, ZACHARIAH BELCHER, & E. O. WATTS. 64*

TO INVENTORS.—Every description of Models and Patterns made in the best manner and on reasonable terms. T. M. CRACKLES, 38 Hamilton Avenue, between President and Vanbrunt streets, Brooklyn. 1*

FARMER—WANTED.—By a young man familiar with the latest improvements in Agriculture, a situation as Superintendent of a farm at a liberal salary, or a furnished farm to work at a percentage. Address A. G. F., at V. B. Palmer's Advertising Agency, Tribune Buildings. May be seen at the Girard House until the 22nd inst., between the hours of 7 and 10 A. M., on enquiring at the office. 65*

TO INVENTORS.—A gentleman who designs travelling through the manufacturing districts of England, to introduce an invention, would negotiate with any person having a valuable patent, for its introduction and sale there. Application may be made by letter, in the first place, directed to box 1536, Boston Post Office. 1*

MATHEMATICAL OPTICAL INSTRUMENTS.—The subscriber begs leave to bring to the notice of the professional community, his new and extensive assortment of the above Instruments, which he partly imported direct from the most celebrated makers in Europe and partly had manufactured under his own personal supervision. The undersigned would particularly invite attention to his very large and complete assortment of the justly celebrated Swiss Mathematical Drawing Instruments, for the sale of which in this country he has the sole Agency, and which he can furnish at from \$5 to \$200 per case. Orders from any part of the Union promptly executed, and price list sent if required. 360w C. T. AMELINE, 224 Chestnut st., Philadelphia. 66*

MACHINERY.—S. C. HILLS, No. 12 Platt-st., N. Y. dealer in Steam Engines, Boilers, Iron Planers, Lathes, Universal Chucks, Drills, Kasse's, Von Schmidt's and other Pumps; Johnson's Shingling Machines; Woodworth's, Daniels', and Law's Planing Machines; Dick's Presses, Punches, and Shears; Mortising and Tenoning Machines; Belling Machinery Oil, Beal's Patent Cob and Corn Mills; Burr Mill and Grindstones; Lead and Iron Pipe, &c. Letters, to be noticed, must be post-paid. 170w

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STEAM ENGINES FOR SALE.—Two new and three second-hand high-pressure, with boilers complete. Also new Gear Lathes, and other machinery. Inquire at J. Burns' Engineers and Contractors Office, 122 Broadway corner of John street, New York. 62*

COCHRAN'S QUARTZ CRUSHER.—These machines having proved by practical operation at various gold mines their superiority over all others, for pulverizing Quartz Rock, are recommended with confidence to parties in want of such machinery. A machine can be seen in daily operation in this city, on application to JOHN S. BUSSING & CO., 48t 32 Cliff street, N. Y.

EUREKA GOLD SEPARATOR.—This machine has been thoroughly tested by scientific and practical gold miners, and pronounced far superior to any Anagator yet known—an Anagator taking up but three feet square, and very trifling power, is capable of amalgamating one ton per hour, with great ease and perfection, without any loss of quicksilver whatever. They are portable, and delivered in boxes ready for shipment. Price \$300 each. Further information can be obtained on application to JOHN S. BUSSING & CO., 48t 32 Cliff street, N. Y.

NEWELL'S PATENT SAFETY LAMP AND Lamp Feeder.—A new article warranted to prevent all accidents from the use of Burning Fluid, Carbonic Phenol and other explosive compounds, used for the production of light. For sale, wholesale and retail, by NEWELL, CALDWELL, & COFFIN, 28 Broadfield street, Boston, and by G. W. McCREADY, 40 Broadway, N. Y. 45*

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 Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are equipped by any other mill in use, and will grind from 25 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-heating, and weigh from 150 to 1500 lbs. of the best flour, and will produce 17 diameter singly packed iron rollers, and price of mill \$200, packing \$5. Terms of sale, particulars can be had by addressing as above, or to S. C. HILLS, agent N. H. M. Co., 12 Platt-st., New York. 51*

NEW HAVEN MANUFACTURING COMPANY—Tool Builders, New Haven, Conn., (successors to Scranton & Parshey) have now on hand \$25,000 worth of Machinist's 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 shears; counter shafts to fit all sizes and kinds of universal chuck gear cutting engines; drill presses, index plates, bolt cutters, and 3 size slide rests. 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. Cuts 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. 51*

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. 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, another more than twelve millions of feet 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. GEO. W. BEARDSLEE. 1t

1853 WOODWORTH'S PATENT PLANING, Moulding, Tonguing, Grooving, Rabeting, and Grooving Machine.—Ninety-nine hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines. Price from \$150 to \$800. Two machines are at the Crystal Palace. For rights in all parts of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y. 1 aut*

PATENTS OF INVENTION.—ISAAC B. FUTVOYE, Patent Agent, Quebec, undertakes to prepare letters patent of invention for the Province of Canada. I. B. F. will dispose of any kind of Patented Articles on Commission. 4t

A. B. ELY, Counsellor at Law, 52 Washington street, Boston, will give particular attention to Patent Cases. Refers to Messrs. Munn & Co., Scientific American. 16t

LEONARD'S MACHINERY DEPOT, 109 Pearl Street, and 63 Beaver, N. Y.—Leather Banding, Marlin Sewing, 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. P. A. LEONARD. 1t

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PALMER'S PATENT LEG.—Manufactured by Palmer & Co., at No. 5 Burr's Block, Springfield, Mass., for New England and New York States, and 376 Chestnut street, Philadelphia; in every instance of competition in the fairs of the various Institutes of this country, it 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. 45 10*

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IRON FOUNDERS' MATERIALS.—Fitz 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. O. ROBERTSON, 135 Water street, corner of Pine. 12*

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