

TO CORRESPONDENTS.

D. D. S., of Conn.—We are not acquainted with what you want; but it appears to us that it would be no difficult matter to gear a loom to accomplish your object.

J. D. C., of Pa.—Your self-acting Fire Alarm is essentially the same as one described in volume 3, of this journal; Invented by Messrs. Tomlinson & Hopkins, of Conn.

J. J. S., of N. Y.—We cannot furnish the information about the matter which you desire.

E. D. W., of Montreal.—We are not acquainted with a better publication upon Drawing than Minnie's work. Chapman's book, when finished, will be an excellent work; but he is now abroad and will not complete it for some time to come. J. S. Redfield, of this city, has published three or four numbers.

H. A. B., of Brooklyn.—The person on the car in motion It makes no matter how swift he is capable of jumping, he must do so along with the train, or he will find it difficult to pick himself up afterwards.

W. H., of Mass.—It makes no matter if a man has obtained a patent, he cannot prevent you from employing the same process, if that process is old and well-known. If it has been in use in a foreign country, the patent can be sustained, if it has never been patented, or published; but if it has, in either case it will nullify the patent. To be upheld by law a patent must be for a "new and useful" invention. We will look up the cases with which you are very intelligently acquainted.

J. C., of Ohio.—We will do as you have requested. Your opinion about the Hillo-type, corresponds with our own. We have never seen a statement made by any one who had seen the whole process.

D. C., of Me.—Your's will receive attention.

C. W. F., of Me.—Your's is under consideration.

A. W. T., of Mass.—Brass tubing is made from sheet metal, by cutting up the sheet in long strips and bending them round a central coil or mandril, whose thickness equals the intended internal diameter of the pipe. The two opposite edges are made to lap over each other, and in that state are soldered together. When soldered, the tube is cleaned and brightened by means of dilute acid, and is then ready for drawing. The drawing is effected by a mandril being passed through the tube, which is drawn forcibly through a circle smaller than its external diameter, and being pressed closely on every side, its internal and external surface become regular and smooth.

J. J., of Pa.—Your's will receive attention. The question had nothing to do with momentum, merely the revolution, as we stated; if the small wheels slide over its surface, in every revolution, how much does it roll? the whole revolution which will make it to describe a line as long as the large wheels.

H. L., of Ga.—Gutta Percha is hardened by mixing it with black lead. It can be obtained in this city, of Armstrong & Co., "the Gutta Percha Co."

A. A., of Md.—You might, perhaps, sell your eagle to Barnum, if it is a good specimen; but you would not earn a day's board by exhibiting it here three months. The rent of Castle Garden is about \$100 per day; so you can calculate yourself what the probable chances would be for making money in exhibiting your eagle at that place, as you suggest.

J. B. C., of Tenn.—Our opinions are unchanged. The force of the artisan did not cease before the effect was produced; but his effort did. If you call a medium which carries the force, inertia, then you are right; but we do not view it in this light. "Inertia is that quality of matter by which it is incapable of spontaneous change." This is the best definition of it, if it is a resisting quality, than it is active, and very badly named; and should be called the law of "repulsion."

Money received on account of Patent Office business for the week ending Saturday, Nov. 20:—

A. H. B., of N. Y., \$200; G. W. W., of N. Y., \$30; W. C., of Conn., \$20; B. F. C., of N. Y., \$30; C. F. B., of R. I., \$20; S. K., of N. Y., \$30; G. P., of N. Y., \$20; J. E. A., of Ct., \$20; H. B. G., of N. H., \$25; D. & L. C., of Conn., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Nov. 20:

J. B. A., of Pa.; R. & S., of Pa.; W. C., of Conn.; H. A., of N. Y.; C. F. B., of R. I.; J. C., of N. Y.; J. L. B., of Ohio; T. M., of Pa.; J. E. A., of Conn.; H. B. G., of N. H.; D. & L. C., of Conn.; W. G. H., of Pa.

A Chapter of Suggestions, &c.

CHEAP POSTAGE.—The postage on the Scientific American, to subscribers residing within the State of New York, will be but 13 cts. per annum henceforth, instead of 13 cents per quarter as formerly, and will be delivered at the most remote parts of the United States for 26 cts. per annum, whereas the postage formerly demanded at distant offices was \$1.20 per annum. The saving produced by the reduction of newspaper postage under the new statute, is no inconsiderable item, and many who could not afford to subscribe for the Scientific American, under the old law, can now withstand the expense.

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 Volumes 1, 2 and 3—none. Of Volume 4, about 20 Nos., price 50 cts. Of Volume 5, all but four numbers, price, in sheets, \$1. Of Volume 6, all; price in sheets, \$2; bound, \$2.75. Of Vol. 7, all; price in sheets, \$2; bound, \$2.75.

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.

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 regulation of the Patent Office. Price 121-2 cts. per copy.

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 fifty cents additional to the published rates for each yearly subscriber; that amount we are obliged to pre-pay on postage.]

INFALLIBLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired, and the publishers will not deviate from that standing rule in any instance.

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 the funds.

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.

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 do 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.

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.

ADVERTISEMENTS.

Terms of Advertising.

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All advertisements must be paid for before inserting.

50-HORSE STEAM-ENGINE FOR SALE.—A new and superior Engine and Boilers, with all connections, &c., complete, and ready to be put in operation without further additions. The above, with plain exterior finish, is made of the best of materials and with the utmost attention to perfection of construction, arrangement and workmanship. For further particulars, apply to J. CUMMINGS, Columbia Foundry, Duane-street, New York. 1*

SECOND HAND MACHINES FOR SALE Cheap. A double-rigged Scroll Saw, 1 power Mortise Machine, 1 circular Saw, mandrell, bench, &c., 1 upright Saw for slitting panel stuff, 1 Lathe, Tools, &c.; 1 Boring Machine for Blinds: all in perfect running order. For further particulars, apply in person or by mail (post paid) to HENRY E. ACKEN'S Steam Sash Blind and Door Factory, Sing Sing, N. Y. 11 2*

TWO FOUNDRY MEN AND MACHINISTS.—Metallic Letters and Figures to put on Patterns.—Roman Style.—Size, 5-16, 3-8, 7-16, and 1-2, price 3c. each; 9-16, 5-8, and 3-4, 4 cts.; 1 in., 6 cts.; 1 1-4 7 cts.; 1 1-2 8 cts.; 2 in., 10 cts. N. B.—The above are the sizes on the face of the Letters. Also, Gothic Style.—Size, 1-4 and 1-2, Price 3 cts. each.—(Roman Style) Branding Irons—1-4, 3-8 and 1-2 in. 4 cts. each; 5-8, 5 cts., and 3-4 in. 6 cts. Manufactured by COWING & CO., Seneca Falls, N. Y. Orders solicited. They can be sent to all parts of the Union, either by Mail or Express. We weigh all Packages and send them the cheapest way. 11 2*

COTTON MACHINERY FOR SALE.—Four Filling Frames, of 144 spindles each, made in the best manner and nearly new; price \$1 per spindle; other machinery for sale equally low. Apply to E. WHITNEY, New Haven, Conn. 11 6*

IRON FOUNDERS MATERIALS.—viz.: American hard white and grey Pig Iron; No. 1 Scotch Pig Iron, Iron and Brass Moulding Sand; Fire Sand and Fire Clay; Core Sand and Flour. English and Scotch patent Fire Bricks—plain, arch, and circular, for cupolas. Pulverized Soapstone and Black Lead. Sea Coal, Anthracite and Charcoal Foundry Facings of approved quality, always on hand and for sale by G. O. ROBERTSON, office 135 Water street, (corner of Pine), N. Y. 11 6*

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.

STEAM ENGINES FOR SALE.—We offer for sale two Engines and Boilers, as follows: one 8 horse, horizontal, cylinder 7 inches bore, 16 inch stroke, on a cast-iron bed, fly wheel, driving pulley, governor, pump, pipes, etc.; has never been used. The Boiler has been used by the maker about one year. It is cylinder, horizontal, 16 feet long, 30 inch diameter, has a steam chamber, try-cocks, check and safety valves: price, \$900. One 7 horse Horizontal Engine, 6 inch bore, 16 inch stroke, cast iron bed-plate, driving pulley, etc. Boiler horizontal, tubular, and has everything complete for putting it in operation. The engine is new, the boiler has been used, but is in good order. Price \$500. They are rare bargains, and will give satisfaction to the purchaser, being much less than new ones can be obtained. Address MUNN & CO.

SLAUGHTER & PERRY'S IMPROVED COR-DAGE MACHINE.—The Patent Right to this valuable machine, for New York, the New England and Southern States, are for sale. Machines in operation can be seen at Todd, MacLay & Co.'s, Paterson, N. J.; Clark's Mills, Oneida Co., N. Y.; W. A. Richardson's, Louisville, Ky., and at the subscribers' in Fredericksburg, Va. Address F. & J. W. SLAUGHTER. 7 5*

PATENT EXCELSIOR STRAW, HAY, AND CORNSTALK CUTTER.—Premiums awarded at the following Fairs:—Pennsylvania Agricultural Society, Lancaster, Pa.; New York State Agricultural Society, Utica, N. Y.; Rhode Island Ag. Soc., Providence, R. I.; Georgia Ag. Soc., Macon, Ga.; South Carolina Ag. Soc., Charleston, S. C.; Franklin Institute, Philadelphia, Pa.; Provincial Agricultural Association, of Toronto, Canada, West. Having increased our facilities for manufacturing, we shall hereafter be able to execute all orders promptly. E. T. TAYLOR THOMAS & CO., 125 Pearl st., N. Y. 10 4*

IMPORTANT TO IRON FOUNDRIES.—The Galvanic Alloy Manufacturing Co., Nos. 401, 403, and 405 Cherry st., N. Y., will furnish the Aerostatic Fan Blowers at \$55, and with patent fitting at \$65, that produce sufficient blast for the largest cupola, melting 3 and 4 tons of iron per hour; taking less than one half the power of those now in use, that cost from \$80 to \$100. The wings, being only about an inch in width (planned upon entirely new and mathematical principles), produce double the blast with half the power of other blowers. Warranted in all cases, or they may be returned and the money refunded. 35 cowlf.

MACHINISTS' & MANUFACTURERS' Tools. O. SNOW & CO., Union Works, Meriden, Ct. Having increased their facilities for manufacturing Lathes, Planers, &c., have now on hand, finished and finishing off, Slide Lathes, a variety of sizes and lengths at prices varying from \$125 to \$800, according to size and finish; also Hand and Power Planers for iron, 2, 3, 4, 6, and 10 feet beds; also Milling Machines, Hand Lathes with or without iron beds, comprising six different sizes, all of the most approved construction and warranted of the best quality of work. 9 7*

PALMETTO IRON WORKS FOR SALE.—The proprietors being desirous to close their business, offer for sale their Establishment, with the entire stock of Tools, Patterns, and Materials. A fine opportunity is now offered to capitalists and others interested, to secure an admirable business stand. Apply at the Iron Works, Pinckney street, or by letter to WM. S. HENEREY, Charleston, S. C. 9 4*

SHINGLES, SHINGLES, SHINGLES.—WOOD'S latest improvement in Shingle Machines is becoming more generally used than any other ever invented, and is unquestionably the best machine now in use; it produces shingles from all kinds of timber in a very perfect and rapid manner. Machines and rights for sale. Apply to JAMES D. JOHNSON, Bridgeport, Ct. 9 7f

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. 9 7f

EXHIBITION OF WORKS OF AMERICAN Industry at Washington City.—The first exhibition of the Metropolitan Mechanics' Institute will be opened on Thursday, the 24th of February, 1853, in the new and splendid hall of the east wing of the Patent Office, one of the largest and most magnificent rooms in the United States, being 275 feet long by 70 feet wide. To this exhibition the manufacturers, mechanics, artists, and inventors, from all portions of the Union, are cordially invited to contribute. The hall will be opened for the reception of goods on Monday, the 14th of February, and the exhibition will positively close on or before Thursday night, March 17. Circulars, containing detailed instructions, will be forwarded and any further information given, on application (post-paid) to the Corresponding Secretary, Charles F. Stansbury, to whom all communications on the business of the Institute should be addressed 8 7f

THE TROY IRON BRIDGE CO. are prepared to erect Iron Bridges or Roofs, of 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. 7 20*

BAILEY'S SELF-CENTERING LATHE.—The best in America for Chair Stuff, Wagon Thills, Rake, Fork, Hoe, and Broom Handles. Persons wishing this Lathe, warranted to do twice the work of any other lathe, by applying to L. A. SPALDING, Lockport, N. Y., can be supplied. The following certificate of Birge & Brother, extensive chair manufacturers, at Troy, N. Y., is to the point:—"After making a perfect and thorough trial of Bailey's Self-Centering and Self-Adjusting Lathe, we can cheerfully recommend it as in every way calculated to perform its work in the best manner—as it is the best Lathe we have ever used in our manufactory; and having used many different kinds, we feel safe in asserting that it is probably the best machine of the kind in use. BIRGE & BROTHER, Francis Miller, Lucius Foot, Turners for B. & B." 3 3m

BALLOONS.—Of any size made to order, warranted; also Wise's complete work on Aeronautics; price \$2, sent postage free to any part of the United States. A 25 feet Balloon on hand. Orders punctually attended to. Address JOHN WISE, Aeronaut, Lancaster, Pa. 6 6*

BEARDSLEE'S PATENT PLANING MACHINE, for Planing, Tonguing and Grooving Boards and Plank.—This recently patented machine is now in successful operation at the Machine shop and Foundry of Messrs. F. & T. Townsend, Albany N. Y.; where it can be seen. It produces work superior to any mode of planing before known. The number of plank or boards fed into it is the only limit to the amount it will plane. For rights to this machine apply to the patentee at the abovesaid foundry—or at his residence, No. 764 Broadway, Albany. GEO. W. BEARDSLEE. 23 7f

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 Tennoning machines; Belting; 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. 1 7f

BLACK LEAD CRUCIBLES, and all kinds of melting pots, of superior quality, made to order and warranted equal to any of the kind made in the United States, by D. H. PURINTON, Somerset, Mass. All orders promptly fulfilled. 2 10*

LEONARD'S MACHINERY DEPOT, 109 Pearl-st. and 60 Beaver, N. Y.—Leather Banding Manufactory, N. Y.—Machinists' 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. 7 7f

PATENT CAR AXLE LATHE.—I am now manufacturing, and have for sale, the above lathes; weight, 5,500 lbs., price \$600. I have also for sale my patent engine screw lathe, for turning and chucking tapers, cutting screws and all kinds of common job work, weight 1500 lbs., price \$225. The above lathe warranted to give good satisfaction. J. D. WHITE, Hartford, Ct. 39 26*

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. 1 7f

LATHES FOR BROOM HANDLES, Etc.—We continue to sell Alcott's Concentric Lathe, which is adapted to turning Windsor Chair Legs, Pillars, Rods and Rounds; Hoe Handles, Fork Handles and Broom Handles. This Lathe is capable of turning under two inches diameter, with only the trouble of changing the dies and pattern to the size required. It will turn smooth over swells or depressions of 3-4 to the inch and work as smoothly as on a straight line—and does excellent work. Sold without frames for the low price of \$25—boxed and shipped with directions for setting up. Address (post-paid) MUNN & CO. At this Office.

DRAWING BOARDS.—Patent; 23 by 29 inches, with extensive Scales and Sheet Fastener. Descriptive Circulars sent on application; \$10 for Board and T Rule. Sent by Express Address, post-paid, CHAMBERLIN & CO., Pittsfield, Mass. 50 7f

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. 1 7f

IMPORTANT TO SOAP MAKERS.—Letters Patent of the United States having been issued to Wm. McCord on the 27th of July, for a valuable improvement in Soap, all manufacturers, vendors, and users are hereby cautioned against the use of Kaolin, or other equivalent aluminous minerals combined with ammonia, as they will, by so doing, infringe this patent, and subject themselves to prosecution. All the necessary fixtures for making 2000 lbs. per day, will cost not to exceed \$75; two persons only required to attend the manufacture. Rights to manufacture this the most valuable soap, are offered for sale on reasonable terms. Apply to WM. McCORD, 141 Sullivan st., N. Y. 4 7f

POSTAGE STAMPS.—Post Office Stamps, of the denomination of 1, 3, or 12 cents, may be had at par by addressing MUNN & CO., Scientific American Office.

A. B. ELY, Counsellor at Law, 46 Washington st., Boston, will give particular attention to Patent Cases. Refers to Munn & Co., Scientific American. 13 7f

NEW HAVEN MANUFACTURING COMPANY, Tool Builders, New Haven, Conn., (successors to Scranton & Parshley) have now on hand \$25,000 worth of Machinists' 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 Co. 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. 12 Platt st., New York, S. C. HILLS, Agent N. H. Man'g Co. 45 7f