

TO CORRESPONDENTS.

R. M. L., of Me.—Chloroform was discovered by Dr. Simpson, of Edinburgh, but its application for surgical purposes is claimed by two individuals—Dr. Jackson and Dr. Morton, both Americans; Dr. Jackson was awarded a gold medal by the Paris Academy of Sciences, and received the honor of being entitled the first discoverer, but his claim is disputed by Dr. Morton.

I. E. C., of Md.—We should think your improvement novel and worthy of a patent, although it is difficult to decide without a sketch and description. J. S. is not the person you mention. You had better send us a model.

C. W. M., of Vt.—The use of glass tubes to indicate the height of steam and water in boilers, is well known, and could not be patented.

J. N., of Wis.—You are correct about the force of the water that would pass through the tube; but as action and re-action are equal, you would get the full benefit of it by allowing it to act upon the water at the stern of the vessel, upon the principle of a re-action wheel. This would save all your machinery, which will no doubt operate, but no benefit can be derived even from this, as the water running through the tube will resist the progress of the vessel just in proportion to the power that can be derived from it.

L. D., of Conn.—You wish for information that would require a whole copy of our paper to give. Quartz is the basis of all glass, and you would have to learn the crystal manufacture before you could master your business. Quartz can easily be melted with the blow-pipe.

J. D., of Ohio.—The only way, to our knowledge, of bringing back brittle gold, is to heat it over again, and cool it in the atmosphere.

S. W. H., of R. I.—The matches which we have seen, made without sulphur, were of candle-box wood, dipped in phosphorus and the chlorate of potash.

J. N., Jr., of Md.—The mechanical construction of your pumps is different from any we have seen, but the principle is essentially like Read's and others—well known.

M. M. M., of Vt.—We suppose a tubular boiler would be best for your use. Messrs. Stillman, Allen & Co., Novelty Iron Works, this city, can furnish you. The cylinder of the engine might be 30-inch stroke and 12-inch bore. Builders can tell you better than we can.

T. W., of Ala.—Your quantity of water per minute is very small; it is scarcely one horse actual power; 210 gals. per minute, and 24 feet fall, is of the following horse-power, 210 multiplied by 10, multiplied by 24, divided by 33,000 is equal to 1.52, a little over one-half nominal horse-power. A gallon of water is 10 lbs; 33,000 lbs. lifted one foot high, per minute, is a horse-power; about 30 per cent. is deducted from the nominal horse-power for friction, &c. If the 210 gallons fell per second, you would have sixty times the power.

M. L., of Boston.—We could not find out your inventions at the Fair. If Mr. W. had called or shown us the model, it would be more proper than for us to go in search of it; although we often do such things it is not right to ask us; we have too many calls to attend to them all without serious loss of time; we are, however, always willing to notice all new and useful inventions.

E. B., of N. Y.—The prizes mentioned by you were offered by F. M. Ray, of this city. You are too late, as the committee have already passed their examination.

O. L., of Pa.—The idea you suggest in regard to cigars is new to us, but we doubt whether a patent could be secured for it. The principle is similar to the celebrated Meerschaum pipes, which are said to relieve tobacco of everything unpleasant, they are made of a kind of clay which consists of a hydrate of magnesia combined with silex.

W. E., of Tenn.—If you will again consider the subject of paddle wheels, you will see that your plan will not work well. We see nothing new in it.

J. C., of Geo.—We shall write you by mail in regard to the machine for cross grooving.

Dr. B. H. W., of Ky.—It will be impossible for us to advise you respecting the stove dressing machine simply upon a written statement. This class of inventions has received much attention, and it is difficult to produce any decided novelty. From what we could judge by examination of the rough model you sent us some time since, we thought the contrivance new but by far too complex. The reduction of its parts may strip it of its novelty. We can scarcely judge without a clearly described drawing or model.

J. Y., of Ohio.—The model of your improvement came duly to hand, and the business will receive early attention. The specification will soon be sent to you for signature and oath.

B. B., of Md.—The noticing of a claim does not secure the invention; those which we notice have all paid their fees for the patents. We have never seen a machine exactly like yours, but we have seen a concave and convex with spikes working into one another for grinding corn. You will see an engraving of this mill on page 49, Vol. 4, Scientific American.

G. W. S., of Boston.—A tunnel to relieve Broadway was proposed some years ago. Mr. Osborn, of Albany, N. Y., has brought the plan before the public again, at the present Fair of the American Institute. It will not do until our sewers are differently built—the tunnel would be flooded at high tides, for our streets are not much higher than high water.

J. E. C., of Md.—Your wagon arrangement is new to us, and we believe it is patentable; but it will make the wagon more expensive, and carmen have evinced some partiality for the one which swings on an axis.

H. B., of Wis.—We are much obliged to you for your kindness. You have misinterpreted us in respect to the centrifugal force (according to Newton) increasing with the velocity. We only have asserted that there is no such a thing as an independent force called centrifugal. Be cautious about publishing your ideas on force. You know the moon describes a helical path in its annual processions.

C. H. S., of La.—The Plow, Loom, and Anvil is published at No. 9 Spruce street, this city, and the Franklin Journal is published by the Society of the Franklin Institute, in Philadelphia.

S. R., of Md.—We will attend to your business immediately. We do not exactly understand from your letter whether Mr. C. has received the note we sent him or not.

W. B., of Ala.—We do not like the idea of paying postage on your letter for the privilege of giving information in no way interesting to us. We have several times been so treated, we hope unintentionally.

A. B., of Vt.—Your article partakes of a party character, consequently it cannot find place in our columns.

B. W. W., of Tenn.—We will endeavor to gain you the desired information.

R. S. K., of N. Y.—We hope you will not put your machine in operation until you have faithfully counted the cost. We have given you the best advice we could.

W. R., of Conn.—You ask, "what is a horse power?" we had thought that no one, a reader of the Sci. Am., would have been under the necessity of asking it. It is 33,000 lbs. lifted one foot high in one minute.

Money received on account of Patent Office business for the week ending Saturday, Oct. 23:—

A. A. D., of Ga., \$40; T. S., of Ill., \$50; R. C. B., of Ill., \$200; J. Y., of O., \$85; B. J. D., of Md., \$20; W. G. H., of Pa., \$47; S. W. of Ill., \$20; A. H. C., of N. Y., \$35; J. H., of Mass., \$35; S. B. H., of N. Y., \$10; E. L. G., of N. J., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Oct. 23:

H. F. P., of N. Y.; F. I. P., of N. Y.; F. T., of N. Y.; S. W., of Ill.; A. H. C., of N. Y.; E. L. G., of N. J.

Cheap Postage—Important to Subscribers.

The amended postage law, as enacted by the last Congress, having gone into effect on the 1st inst., we take occasion to make an extract from one of the sections, from which our mail patrons will see that the item of postage on the Scientific American will in future be less by one-half than formerly.

"Any periodical or newspaper, under three ounces in weight, can be sent to any part of the United States for one cent, and if paid quarterly or yearly in advance, either at the office of mailing or delivery, will be transmitted by the mails for half a cent each number; that is, for a daily paper, the postage will be only thirty nine cents a quarter, or one dollar and fifty cents a year; a weekly paper or periodical will be charged only six and a half cents a quarter, or twenty-six cents a year. If the weight does not exceed an ounce and a half, it may be circulated in the State where published at half of the above rates."

According to the above extract, subscribers to the Scientific American, residing in the State of New York will receive their papers by mail at thirteen cents per annum, instead of thirteen cents per quarter as formerly, thus reducing the cost of the Scientific American thirty-nine cents per annum to mail subscribers—an item worth saving.

Subscribers in the most remote part of the country will be required to pay but six and a half cents per quarter in future for the Scientific American, and although some postmasters may insist upon higher rates, our patrons should resist the attempt to extort money from them by any pretended construction of the more obscure points in the statute which tends to such an end.

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 4 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.

Prizes.

Our subscribers will please to consider the great inducement offered to clubs, and to keep in mind the valuable prizes offered for the four largest lists of mail subscribers.

ADVERTISEMENTS.

Terms of Advertising.

Table with 2 columns: Lines for each insertion, Price. 4 lines for each insertion, 50 cts. 8 " " " " \$1.00. 12 " " " " \$1.50. 16 " " " " \$2.00.

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. 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.

PATENT BOX AXDAXLE.—Patented by Kingston Godard, of Philadelphia, June 15, 1852, on exhibition at the American Institute. Application for purchase of rights to manufacture and use, or complete sets, must be made to GEO. C. HOWARD, Schuy'l Fifth and Market sts. Phila. J. C. H. is staying for a few days at the United States Hotel, N. Y. 1t*

ANOTHER GREAT DISCOVERY.—By manufacturing of an article of daily use, affording a profit of 500 per cent.; Receipt sent to any place on receiving one dollar by mail, postage paid. Address A. M. MORSE, box 755, Rochester, N. Y. 7 2*

THE TROY IRON BRIDGE CO. are prepared to erect Iron Bridges or Roofs, or 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 & TELOUR, Troy, N. Y. 7tf

SLAUGHTER & PERRY'S IMPROVED CORRIDGE 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, Coeida Co. N. Y.; W. A. Richardson's, Louisville, Ky., and at the subscribers' in Fredericksburg, Va. Address F. & J. W. SLAUGHTER. 7 5*

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. 13tf

\$500—SEVEN HORSE POWER.—We have for sale a first rate 7 horse-power Engine and Boiler, fitted with governor, pump, fly-wheel, safety valve, grate bars, etc., all complete to be set immediately to running. The cylinder of the engine is six inches bore, and the stroke of the piston is 16 inches. The engine is attached to a cast-iron bed plate, and is one of Mann's best make. The boiler is an upright, 8 feet high, and 3 feet in diameter, composed of 50 flues, having all the connecting pipes complete and ready to be set up and attached to the engine in half an hour's time. The engine and boiler at the price above named (\$500) is astonishingly cheap for its worth, and we hope soon to receive an order for them. Boxed and shipped for \$500. Address MUNN & CO., Scientific American Office.

IRON FOUNDERS MATERIALS—vis.: 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. 3 8*

CHAS. W. COPELAND, Consulting and Mechanical Engineer, Surveyor of Steam Machinery, &c., No. 64 Broadway, N. Y., superintends the construction of steam vessels, steam engines, and machinery of every description; specifications and contracts prepared; also general plans and drawings in detail furnished. Steam engines surveyed and valued, and condition reported. Mr. C. also acts as agent for the purchase and sale of steam vessels, steam engines, boilers, &c. Steam and Vacuum Gauges, Indicators, Sewell's Salinometers, etc., on sale. 50 5eow*

IMPORTANT TO IRON FOUNDRIES.—The Galvanic Alloy Manufacturing Co., Nos. 401, 403, and 405 Cherry st., N. Y., will furnish the Aerostatic Fan Blower at \$55, and with patent fitting at \$85, that produces 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. 38 8owtf.

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. 8 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 abovenamed foundry—or at his residence No. 764 Broadway; Albany. GEO. W. BEARDSLEE. 23tf

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; Mortising and Tenoning 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. 1tf

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. 45tf P. A. LEONARD.

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 enginescrew lathe, for turning and chucking tapers, cutting screws and all kinds of common job work, weight 1,500 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. 1tf

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. 30tf

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. 1tf

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. 47tf

LOGAN VAIL & CO., No. 9 Gold street, New York, agents for George Vail & Co., Speedwell Iron Works, have constantly on hand Saw Mill and Grist Mill Irons, Press Screws, Bogardus' Horse-Powers, and will take orders of Machinery of any kind, of iron and brass; Portable Saw-mills and Steam Engines, Saw Gummers of approved and cheap kind, &c. Gearing, Shafting, large and small, cast or of wrought iron. 11 1y

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. 45tf