

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 152, 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 Meerscham 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.

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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.

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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 6\*

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, 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 8eowtf.

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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. 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

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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.

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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

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