# Scientific, American.

## 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. Jack son 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 improve ment 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 ever 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, dippedin phosphorus and the chlorate of potash.

J. N., Jr., of Md.-The mechanical construction of your pump is different from any we have seen, but the principle is essentially like Read's and otherswell 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 lit tle 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.

0. 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. F., 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 re gard to the machine for cross grooving.

Dr. B. H. W., of Ky,-It will be impossible for us to advise you respecting the stave 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 t e 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 without a clearly describ judge ing or

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 describe a helical patch 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 imnediately. 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 unintention. ally.

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 ad vise we could.

W R. of Conn.-You ask. " what is a horse pow er?" 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., \$65; B. J. D., of Md., \$20; W. G. H., of Pa, \$47; S. W. of Ill, \$20; A. H. C., of N. Y., \$25; 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 infuture 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 coun try 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 upor 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 a furnished me 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 sn sheets. \$2; bound, \$2,75

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.

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## American and Foreign Patent Agency

Agency IMPORTANT TO INVENTORS.---The under-signed having for several years been extensively engaged in procuring Letters Patent for new mecha-nical and chemical inventions, offer their eervices to inventors upon the most reasonable terms. All business entrusted to their charge is strictly confi-dential. Private consultations are held with inven-tors at their office from 9 A. M.; until 4 P. M. In-rentors, however, need not incur the expense of at-tending in person, as the preliminaries can all be ar-ranged by letter. Models can be sent with safety by express or any other convenient medium. They should not be over 1 footsquare in size, if possible. Having Agents located in the chief cities of Eu-rope, 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, sepecial attention of one of the members of the firm, who is prepared to advise with inventors and manu-facturers at all times, relating to Foreign Patents. MUNN & CO., Scientific American Office, 128 Fulton street, New York.

**PATENT BOX ANDAXLE.**—Patented by King-ston 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. V. 11\*\* N. Y. 1t\*

A NOTHER GREAT DISCOVERY-By manu-facturing 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. Ad-dress A. M. MORSE, box 755, Rochester, N. Y. 7 2\*

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BAILEY'S SELF-CENTERING LATHE-The D best in America for Chair Stuff, Wagon Thills, Rake, Fork, Hoe, and Broom Handles. Persons wish-

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BALLOONS-Of any size made to order, warran-ted; 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 punctu-ally atteaded to. Address JOHN WISE, Aeronaut, Laprestar, Pa. 6 #

**BEARDSLEE'S PATENT PLANING MA-**Boards and Plank.—This recently patented machine is now in successful operation at the Machine shop and Foundry of Messra. F. & T. Townsend, Albany N. Y.; where it can be seen. It produces work supe-rior 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; Al-bany. GEO. W. BEARDSLEE. 25tf

MACHINERY.-S. C. HILLS, No. 12 Platt-st. N. 1911 Y. dealer in Steam Engines, Boilers, Iron Pla-ners, Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Ma-chines; Woodworth's, Daniel's and Law's Planing machines; Dick's Presses, Punches and Shears; Mor-ticing 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 network must be net reid noticed must be post-paid. 1tf

BLACK LEAD CRUCIBLES, and all kinds of B 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. 210\*

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45t1 **PATENT CAR AXLE LATHE**—I am now ma-nufacturing, and have for sale, the above lathes; weight, 5,500 lbs., price \$600. I have also for sale my patent engine acrew lathe, for turning and chucking tapers, cutting acrews 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\*

DAINTS, &c. &c.-American Atomic Drier Graining Colors, Anti-friction Paste, Gold Size, Zinc Drier, and Stove Polish. QUARTERMAN & SON, 114 John st., 1tt Painters and Chemists.

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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 8-4 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. At this Office.

DRAWING BOARDS-Patent; 23 by 29 inch-Descriptive Circulars sent on application; \$10 for Board and T Rule. Sent by Express. Address, postaid, CHAMBERLIN & CO., Pittsfield, Mass. 50tf

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**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, renders, 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 pro-secution. All the necessary fixtures for making 2000 lbs. per day, will cost not to exceed \$75; two per-sons 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

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 se cure 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 Broad way was proposed some years ago. Mr. Osborn, of Albany, N. Y., has brought the plan before the pub lic again, at the present Fair of the American Institutue. It will not do until our sewers are differently built-the tunnel would be flooded at high tides, for regulation of the Patent Office. Price 121-2 cts. per copy. our streets are not much higher than high water.

#### 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.

Wepublish, 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

CHAS. W. COPELAND, Consulting and Me-chanical Engineer, Surveyor of Steam Machine-ry, &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 Gau-ges, Indicators, Sewell's Salinometers, etc., etc., on sale. 50 Seow\*

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L OGAN VAIL & CO., No. 9 Gold street, New Lyork, 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, & Gearing, Shafting, large and small cast kind, &c. Gearing, Shafting, large and small, cast or of wrought iron. 11 ly

NEW HAVEN MANUFACTURING COM-pany, Tool Builders, New Haven, Conn., (suc-cessors to Scranton & Parshley) have now on hand \$25,000 worth of Machinist's Tools, consisting of ImportanceFOUNDRIES—The<br/>Galvanic Alloy Manufacturing Co., Nos. 401, 403,<br/>and 405 Cherry st., N. Y., will furnish the Aerosta-<br/>tic Fan Blower at \$55, and with patent fitting at<br/>\$45, that produce sufficient blast for the largest cu-<br/>pola, melting 3 and 4 tons of iron per hour; taking<br/>that cost from \$80 to \$100. The wings, being only<br/>about an Inch in width (planned upon entirely new<br/>ranted in all cases, or they may be returned and the<br/>money refunded.\$25,000 worth of Machinist's Tools, consisting of<br/>gaver planers, to plane from 5 to 12 feet; slide lathes<br/>from 6 to 18 feet long; 3 size hand lathes, with or<br/>the allot sees, sinder plates, bolt cutters, and 3 size slide<br/>atter stat cost from \$80 to \$100. The wings, being only<br/>about an Inch in width (planned upon entirely new<br/>las with half the power of other blowers. War-<br/>and mathematical principles), produce double the<br/>blast with half the new may be returned and the<br/>money refunded.\$25,000 worth of Machinist's Tools, consisting of<br/>fwom of Nachinist's Diane from 5 to 12 feet;<br/>slide lathes<br/>from 6 to 18 feet long; 3 size hand lathes, with or<br/>thour; taking<br/>presses, index plates, bolt cutters, and 3 size slide<br/>all of the above tools are of the bestquality, and are<br/>addressing as above, post-paid. Warehouse No. 12<br/>Platt st., New York, S. O. HILLS, Agent N. H Marig<br/>Co.