

TO CORRESPONDENTS.

M. A. H., of N. Y.—You cannot get a patent for the eccentric on the main shaft attached to a pitman; it is a common device applied to pumps, stampers, &c., and is common property to apply to any machine for the same purpose. A chimney on a height will give the best draft. A brick flue is better than a pipe of metal in its nature, but it is not of such a good form inside for the draught.

E. W., of N. Y.—Your example about the ball requires to be more carefully repeated. The earth travels in its curved orbit just as far in 24 hours as it would do in a straight line.

A. R., of N. C.—In the discharge of a cannon, the elasticity of the gases suddenly liberated by the ignited powder, acts equally in all directions.

A. B. M., of Texas.—Cast-iron cranes should not be loaded with more than one-tenth of the weight that will break them, and when they are intended to lower heavy bodies by means of brakes, their load should not be more than one-twentieth of the breaking weight.

A. R., of N. H.—The essential principles of statics and dynamics apply equally to fluids and solids.

W. M., of Mo.—The intensity of the magnetic force is greatest at the poles, and diminishes towards the equator.

A., of —The statistics of the P. O. Department would be very useful if printed on the envelopes, but it never would answer to ask for the names of the different places of our country to be printed on them—it would not pay.

J. M. P., of Tenn.—We should not wish to undertake your case after its passage through other hands, as no doubt your agent will do the best he can for you. You could not patent the wheel.

L. K., of N. Y.—We recommend you to obtain Minifie's Mechanical Drawing Book, price \$3.

R. B. W., of N. C.—We do not know of any submarine examiner for sale. Willard Day, of Brooklyn, N. Y., is the patentee of an apparatus for the purpose, and might furnish you with one.

G. W. C., of Pa.—We think your improvement in constructing fire places and flues is new and patentable at least we do not remember to have seen any thing like it.

W. D. Jr., of Pa.—There are some things about your rotary engine which are new to us, but we cannot see what advantage you gain over the one illustrated in No. 18, Vol. 4, Sci. Am.

J. Y. S., of Pa.—We have never known of a cider mill embracing the improvement described in yours of the 11th inst, but it is quite common in oil presses. We have seen them so constructed, therefore you could not obtain a patent for its application to a new purpose.

J. A., of Mass.—Minifie's Mechanical Drawing Book treats upon all branches of the art. The price of the book including pre-payment of postage is \$3.50. We can give no information in regard to the rule. We have placed the \$1 to your credit for an additional six months subscription.

J. D. B., of Ala.—There are no good low priced works upon architecture. The American House Carpenter is useful and is sold for about \$2.

I. W. M., of Vt.—The form of the lathe could not be secured by a patent, the machine could, in our opinion, be secured. The Alcott lathe is a good one, we know of none better, but cannot advise you respecting the market for handles here.

N. A., of Ne.—We have no doubt of the success of your invention when fairly brought out. The cause of its failure is doubtless owing to defective workmanship. The latter is important to the success of every mechanic.

H. B. G., of Ill.—We are not able to give you the required information about the "grits". The paper will be sent to your address regularly. It has been directed to the wrong State.

R. T., of Phila.—Your measuring apparatus appears to be very simple, but we cannot undertake to furnish you with a party who would engage in their manufacture. This object might be accomplished by an advertisement.

A. S. A., of Conn.—You could not patent the application of any well-known method to a new purpose. It is not regarded as an invention. An invention may be publicly used two years before making an application for a patent, but it is not always safe to take advantage of this provision in the law.

J. C. S., of N. Y.—We do not as yet understand the manner in which examinations will be conducted under Mr. Ray's prizes. We suppose the investigations will be conducted a week at least before the close of the exhibition.

C. F. O., of Mass.—If your method of disconnecting car wheels from axles while turning curves would be useful providing it does not increase the liability of throwing the cars off the track. Your suggestions are quite new to us in regard to connecting and disconnecting the wheel. If it has ever been tried we have no knowledge of the fact. Submit the matter to an experimental test, this is the only and surest way.

J. D. R., of Phila.—We will attend to your communication next week.

A. R., of N. Y.—You may depend upon it, the coke brick is all moonshine, so far as cheapness is concerned. Common clay brick can be rendered water-proof in the same manner. The extract in the Post must be taken from a foreign journal.

C. B. G., of Conn.—We do not remember to have seen a carpenter's bevel constructed in the manner shown in your communication. If it is useful a patent might be granted for it. It is a very difficult point to decide what view the Commissioner of Patents might take of it.

R. S. B., of Col. H.—If we published your letter you would regret it; you will find that ice contains 140 deg. of latent heat, the trade winds are not caused by the rotation of the earth on its axis; and the telescope has a 13 feet aperture; all these statements are facts, and you would not like to see authorities quoted to make people smile at the corrector being corrected for his want of correct information.

L. A. S., of N. Y.—We sent your note to Mr. Wells, He is a millwright and can doubtless furnish you.

S. C. K., of Wis.—Your favor of the 5th inst. covering 15 came safe to hand Gillespies work on road making is the best one we know of. A. S. Barnes & Co., 51 John street, N. Y., publishers. Price about \$2.

J. S., of N. Y.—You are mistaken about the tin pipes, they are not so good for radiating heat as those made of iron. We could not advise you to use 10 inch tin pipe upon any consideration. You are right about the collapse, if a vacuum is allowed to be formed in such tubes; this can be prevented by having a light valve opening inwards.

S. S., of S. C.—We have referred your letter to a manufacturer for attention.

W. L. B., of Pa.—Your proper course will be to visit large agricultural warehouses like A. B. Allen & Co., or John Mayer & Co., of this city. It would give us considerable trouble to furnish a list as complete as you would require.

F. S. C., of Mass.—We regard your boiler arrangement as a novel contrivance, and have no doubt of its patentability. You will need to test its working capabilities. The two other devices we cannot regard as patentable.

Z. B., of N. Y.—You are right about the decision of the judge respecting the height of a smoke pipe on the Ohio river boats, but the height is an entirely different question from the length. The spiral pipe would increase the evil; the shorter the horizontal flue the better, and the higher the chimney the better. The philosophical reasons were set forth in our last volume while discussing this case.

Money received on account of Patent Office business for the week ending Saturday Oct. 16:—

N. C., of Ct., \$10; A. O., of N. Y., \$50; S. B., of Ind., \$30; J. E., of R. I., \$15; R. & S., of N. J., \$30; W. C., of Ct., \$30; E. Van C., of Pa., \$25; G. P., of N. Y., \$20; S. & K., of Pa., \$20; J. D. C., of N. Y., \$25; T. M., of Pa., \$50; H. F. P., of N. Y., \$7; J. E. W., of Pa., \$30; N. G. N., of Mass., \$30; M. & D., of Mass., \$30; S. R., of N. Y., \$5; J. S., of Mass., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Oct. 16:—

H. C. B., of N. Y.; T. & M., of Mass.; J. F. J., of N. C.; F. S. of Mass.; G. W. S., of Ohio; J. D. C., of N. Y.; H. F. P., of N. Y.; H. & L., of Mass.

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.

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.

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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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 special 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.

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*

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.

AN ARCHITECT wishes to obtain a pupil to learn the art and science of Architecture; terms, &c., will be made known on application by letter (post-paid) to E. B. SON & ENGELBERT, Architects, No. 85 Nassau st., N. Y. 5 2*

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, 6 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.

JOSEPH ADAMS & SONS, Patent Felly Machine.—We are the authorized agents for disposing machines and rights for running the same. This machine is simple in construction and easily kept in repair, and cutting at the rate of 70 fellyes per hour (without saws). All orders for machines and rights for counties, of State, will be promptly attended to, address J. COLTON, 113 Chambers st., N. Y. N. B.—Patent rights or patented articles disposed of in the city and through our agents in the country for a small commission. 5 2*

WANTED—A Wagon and Buggy maker. For particulars, address R. Y. RUSSELL, Newnan, Coweta Co., Ga. 4 3*

BAILEY'S SELF-CENTERING LATHE.—The best in America for Chair Stuffs, 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

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. 3 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; Morticing 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. PURINGTON, Somerset, Mass. All orders promptly fulfilled. 2 10*

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LEONARD'S MACHINERY DEPOT, 109 Pearl-st. and 60 Beaver, N. Y.—Leather Banding Machinery, 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 lathe; 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. 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.

HARRISON'S PATENT GRIST MILL.—The best in the world. There are hundreds of the mills now in use, which are justly acknowledged to be unequalled by any others, for large flouring establishments as well as for farmers' use, to be driven by horse-power. They will grind more grain with a given amount of power, will heat the meal faster, and require but half the sharpening of other mills. Patent rights for California and the Western States, and the mill is also, are for sale at the corner of Court and Union streets, New Haven, Ct., by EDWARD HARRISON. 1 6*

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. 50tf

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

A RARE CHANCE—TO MACHINISTS.—As signee's sale of Machinists' Tools: these tools have been in use about four months, and consist of Planers, Lathes, Drill Presses, and Universal Chucks, which are for sale from 20 to 25 per cent. less than cost. For particulars address (post-paid) JOHN PARSHLEY, New Haven, Ct. 49tf

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 ly

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. Manufacturing Co. 45tf