

TO CORRESPONDENTS.

J. P. N., of N. Y.—Your plan about the hat has suggested itself to us a number of times, but we have never spoken about it, nor have we ever seen the same thing described in print.

G. T. W., of Ct.—If you look on page 222, this volume Sci. Am., you will find the same plan as yours fully described, for extinguishing fires in steam-boats.

S. R., of Mass.—You are not to infer from the remarks made by us that we have not fully answered the question—will saltpetre explode? that is the explosive interrogation. It will when combined with sulphur and charcoal.

G. W. C., of Boston.—To avail yourself of the advantages offered by Mr Ray, you will be required to send a model and explain it to the committee to be appointed by the Institute. The Fair commences Oct. 1st. We cannot answer your other question.

J. W. R., of Ohio.—We cannot give you the information about corn starch. Wheat contains about 65 per cent. of starch, and Indian corn the same, a like process, we suppose, is employed for both.

Composer, of N. Y.—We have not been able to decipher all your letter—the style is very peculiar: we believe it is all correct: if it had been plain we should have published it.

V. E. R., of Ill.—We cannot procure an examination of your case out of its turn. You must patiently await the action of the Patent Office.

A. P., of L. I.—We have never seen a quartz grinder on the same plan as yours; as to its practicability we are unable to decide. Cochran's machine is powerful and very simple in its construction.

S. B., of Ind.—We do not perceive novelty sufficient in your improved shingle machine to warrant an application. Welch & Walker's Shaving Machine we should judge to perform the important functions claimed by you.

F. R. B., of Pa.—We do not perceive anything new or patentable in your plan of rotary; it is not possible to obtain a patent for the mere application of a well-known principle.

H. G., of Mo.—Your improved method of constructing hearths for fire-places, we think is new, it is so far as our knowledge extends. There is as much objection as advantage to your bolts, they could not be drawn when necessary; no patent could be obtained.

J. C., of N. J.—Hollow grate bars are well known. In Vol. 3, Sci. Am., you will find an engraving of them; they are also employed in Dimpfel's Coal Burning Locomotive.

Dr. A. B., of Ohio.—In No. 44 you will find definite information about sewing machines. We cannot think of any concern to refer you in regard to the Gold Seeker.

E. H. B., of Ill.—We could not publish your reply without bringing us into a collision with the party referred to. We have made use of the information elsewhere.

D. H., of Ohio.—Your method of constructing railroad car seats could not be patented, as the same thing is in common use here for office chairs.

C. H. S., of N. Y.—We fail to get a clear understanding of your improvement in machines for cutting grain from the very imperfect sketch. We cannot decide upon it without a model, or a better sketch and description.

S. L., of Mass.—In the hold of a ship, an Annihilator would be very useful; this we have always asserted.

R. M. K., of Pa.—If you use some lime and soda lye, you will find that a caustic effect will be produced, powerful enough for all your purposes.

W. C., of Mich.—You should get an engraving of your invention published in the Sci Am. You will profit greatly thereby, for it will at once spread your invention before the whole country.

W. McA., of Va.—The new patent law of England is much better than the old one, although there are still some very bad features in it. We have no doubt but more patents will be taken out now than before. We will attend to your business at the earliest opportunity. We have great facilities for doing the business well and with despatch.

S. S., of Pa.—Prof. Fyfe has clearly proven the water gas to be inferior to that produced from coal; we have had too much gas from various quarters during the past two years.

J. D., of N. J.—We do not care about ignorant flings, and the person who made the attack, as you have justly remarked, was not worth the expense of ink to answer, for he told untruths, and the oracle that endorsed them is not worthy of credit.

P. B. L., of Vt.—You should not be afraid of a little expense when the certainty of making a good deal by your patent is before you, that is if you are judicious in extending a knowledge of its qualities.

R. W., of Conn.—Do not put yourself to any expense in making a model for your aerial steamship, it will never sail.

A. D. H., of N. Y.—We hope you will send the model soon for your own sake, it is a valuable improvement, and a patent is certain.

A. R., of N. Y.—Cochran's machine is in operation every day, we believe at Waterman's block factory, Williamsburgh, between the hours of 4 and 6 P. M. S. B. R., of R. I.—Your propeller has been examined, and we would refer you to Vol. 5, Sci. Am., for a representation of one like it. If you have got that volume you will see the resemblance, if not we can forward you the History of Propellers.

F. M., of Ct.—You wish to know about your spring and balance wheel being made to drive machinery with a ten horse-power by a one horse-power engine. We say, do not expend a cent on your plan; you cannot do it; to make your spring and wheel give out ten horse-power, you must put ten horse-power into them by your engine.

W. M., of Ga.—A propeller in a trunk or case has been employed on canals. We do not see how an effective propeller can be made as light by your plan as by the present mode. The propellers employed are only sections of a screw, the useless parts being cut away. This certainly is the best plan, and experience has proven it to be so, even when the surface of the screw is greatly reduced.

C. S. A., of D. C.—We are not in possession of any accounts of experiments which describe the velocity of air in a vacuum, through a tube five miles long. Some experiments were made in France to drive machinery by compressed air, at the end of a pipe one and a half miles long; the experiments were a failure, but there is a compressed air engine working in a coal mine in Glasgow, Scotland. About the breaking of the tube, is certainly an exaggeration. There is a want of information on the subject you speak of.

S. T. McE., of Ga.—There is not a single good work in existence on Millwrighting such as you want. We know nothing about a patent of one Killgo. We cannot see anything in the sketch you have sent us, to warrant you to conclude that a patent might be secured; a model, however, would enable us to judge better of its utility, but we do not advise you to go to much expense for this.

R. W., of N. Y.—There is authority for your assertion, about the benefits conferred upon society by a cheap scientific paper like the Sci. Am. Our next Volume will be still better than this; we have improved, and intend to keep improving; we are advocates of progress and improvement, and intend to exhibit a good example. We hope to see the hollow brick come into use soon; we want to see all frame houses abolished especially in cities and villages; they are the fruitful causes of extensive conflagrations.

Money received on account of Patent Office business for the week ending Saturday, Aug. 7:

R. H. T., of N. Y., \$40; C. B. H., of N. Y., \$30; M. H. C., of Pa., \$30; W. W. W., of N. Y., \$30; L. P. & W. P. D., of N. Y., \$25; R. M. W., of Va., \$20; S. K. W., of S. C., \$30; T. S., of Pa., \$30; G. P., of Md., \$20.

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 back numbers at subscription price.

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.

ADVERTISEMENTS.

Terms of Advertising.

Table with 2 columns: Number of lines, Price per line. 4 lines for each insertion, 50 cts. 8 lines, \$1.00. 12 lines, \$1.50. 16 lines, \$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 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.

PATENT RIGHTS FOR SALE.—The subscriber having secured a patent on his improvement in operating doors to houses, would like to dispose of town, county, or State rights, on very cheap terms. The invention is a good one, and has fourteen years protection by Letters Patent. Engravings of this invention will be found in another column of this paper, and for further particulars address WM. RIPPON, Providence, R. I. 48 4*

IMPORTANT TO ENGINEERS, MACHINISTS and Draughtsmen.—The subscribers have ready 7 parts of the celebrated Treatise on "American Engineering," viz., Division A, River Boat Engines, parts 1 and 2, containing each two plates 24 by 30, being the side and front elevations of the steamboat Rein-deer's beam engines; parts 3 and 4, each four plates, being details of the same. Division D, Stationary Engines, each two plates 24 by 30; part 1, vertical steam engine, by Ehma Banks & Co., N. Y.; part 2, high-pressure engine, by Glute Bros., Schenectady Division C, No. 1, of Locomotives, has the Columbia River R. R., also the celebrated prize locomotive "Bavaria," now in operation on the Vienna and Trieste (Austria) R. R.; each Division, of 6 parts, will be complete in itself. Any person forwarding us 6 subscriptions, for either part, will be entitled to an extra copy. Price for each part \$1. HENRY S. SANUELS & CO., Publishers, 8 Park Place, N. Y. 1*

EVERETT'S PATENT CARRIAGE COUPLING, for turning in a small space with large fore-wheels (see Sci. Am., No. 36, Vol. 6). For rights or agencies to sell the same in the New England and North Western States, also California and Oregon address EDWARD EVERETT, Quincy, Illinois; or in the Southern and South-western States, also Pennsylvania, Ohio, Kentucky, and Tennessee, address CHARLES EVERETT, Washington, D. C. 43 3eow*

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 \$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. 38 eowtf.

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. 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

IRON FOUNDRY MATERIALS—viz.: good American Pig Iron—grey, mottled and white; No. 1 Scotch Pig Iron, of favorite brands. Pulverized Sea Coal, Anthracite Charcoal, Soapstone, and Black Lead Facings. English and Scotch patent Fire Bricks—plain, arch, and circular, for cupolas. Fire Sand and Fire Clay. Iron and brass moulding sand, Core sand and flour; always on hand and for sale by G. O. ROBERTSON, 135 Water street (corner of Pine), N. Y. 47 6*

DIG IRON MANUFACTURED WITHOUT A BLAST.—Persons taking an interest in this matter, or desiring to participate in bringing this new process to perfection, will please to address the subscriber, post-paid. C. S. QUILLIARD, Rondout, Ulster Co., N. Y. 47 4*

JOHN W. GRIFFITHS—Ship Builder and Marine Architect, 658 Fourth st., N. Y., furnishes models and draughts of all description of vessels, with the computation of stability, capacity, displacement, and necessary amount of propulsion. Propelling power located and proportionally adapted to the form of the vessel, whether sailing or steaming. Mr. G. also superintends the construction of vessels, and may be consulted upon all subjects pertaining to the various departments of the science or practice of ship building. Draughts forwarded by letter to all parts of the world, and to any desired scale; all letters must be post-paid. 46 5*

PATENT DRAWING BOARDS.—23 by 29 inches; with scales of degrees in inches, minutely divided. Also paper fasteners attached, and T. rule. Complete for \$10. Sent by Express Direct (post-paid) to H. W. CHAMBERLIN, 45 tf Pittsfield, Mass.

GWYNNE & SHEFFIELD, Manufacturers of Stave Machinery, Urbana, Ohio.—Our machine for slack work, called the Mowrey Stave Cutter, will cut, dress, and joint, at one operation, from the bolt of wood, in a perfect manner, at the rate of 80 staves per minute, more staves in ten hours than 100 men can set up into barrels in the same time, and at small cost. We are also prepared to furnish the Judson Stave Dresser, for tight barrel work, and other stave Machinery. 44 4*

AARON KILBORN, 4 Howard street, New Haven, Ct., manufactures Steam Engines, Shafting, Presses, Fan Blowers, Lathes, Planers, Artesian Wells, Chain and Force Pumps, Pipe, Heating Apparatus for Houses, etc. 42 10*

PATENT ALARM WHISTLE.—Indicators for speaking pipes, for the use of hotels, steamships, factories, store-houses, private dwellings, etc. etc. This instrument is intended to supersede the use of the bell, being more simple in its arrangement, more effective in its operation, and much less liable to get out of order, being directly connected with the speaking pipe, it requires no lengthy wires in its use, which are continually getting out of order or breaking. There have been several hundreds of them fitted up in this city and vicinity with the greatest success. They can be attached to pipes, which are already fitted up without damage to buildings, and for much less than the cost of a bell, and warranted to operate. The public are invited to call and examine them at the factory of the patentees. WOOLCOCKS & OSTRANDER, 57 Ann street, New York. State and County Rights for sale. 40 13

FOR SALE.—A complete set of tools for the manufacture of Spring Head Callipers and Dividers, four sizes each. To any person wishing to engage in the manufacture of such articles, an opportunity is offered for purchasing the tools at a very reasonable rate. Inquire of W. J. JOHNSON, Holyoke, Mass. 45 4*

TO BRIDGE BUILDERS.—WANTED, an experienced Bridge Builder, to take the building of the Plank Road Bridge over the Sallapooza River, near Montgomery, Alabama. Address "W." box 564, New York Post Office, with references. 47 2*

CHILD & TAINTER, Worcester, Mass., Builders of Daniel's Planers, with Read's feed motion, which gives the advantage of planing both ways, and of running slow or fast, either way. 45 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 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. 26 tf

WOOD'S IMPROVED SHINGLE MACHINE.—Patented January 8th 1850, is without doubt the most valuable improvement ever made in this branch of labor-saving machinery. It has been thoroughly tested upon all kinds of timber and so great was the favor with which this machine was held at the last Fair of the American Institute that an unbought premium was awarded to it in preference to any other on exhibition. Persons wishing for rights can address (post-paid) JAMES D. JOHNSON, Bridgeport, Ct.; or WM. WOOD, Westport, Ct. All letters will be promptly attended to. 22tf

TO INVENTORS.—The subscribers will enter into arrangements, on the most reasonable terms, for furnishing Drawings, Patterns, and Models, believing that they have one of the most thorough and scientific men, in that line of business, to be found in New York. Their object is merely to fill up time, they not having sufficient work of their own to keep him in steady employment, and do not like to have him leave for fear they could not obtain his services when required. Apply at Dunlop's Manufacturing Emporium, No. 36 Gold street. 41 13* FRASER & EVERITT.

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. 23tf

CHARLES F. MANN, FULTON IRON WORKS, Below the Troy and Greenbush Railroad Depot, Troy, N. Y.—The subscriber builds Steam Engines and Boilers of various patterns and sizes, from three horse power upward; also, his Portable Steam Engine and Boiler combined, occupying little space, economical in fuel, safe, and easily managed; Double Action Lift and Force Pumps; Fixtures and Apparatus for Steam or Water; Tools for Machine Shops; Shafting and Pulleys for Factories. Brass Castings and Machinery made to order at short notice. Steam engines furnished cheaper than can be had elsewhere, of the same quality. 30tf

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.

1852 TO 1856.—WOODWORTH'S PATENT Planing, Tonguing, Grooving, Rabeting, and Moulding Machines.—Ninety-nine hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines. Price from \$150 to \$760. For rights in the unoccupied towns and counties of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y. 26tf

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 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*

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

TRACY & FALES, RAILROAD CAR MANUFACTORY—Grove Works, Hartford, Conn. Passenger, freight, and all other descriptions of railroad cars and locomotive tenders made to order promptly. 26tf

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. Mann & Co. 45tf