

TO CORRESPONDENTS.

J. W. H., of Pa.—It will be only necessary for you to construct a model representing the wheel attached to the axle

M. P., of N. C.—The patent you refer to was issued Jan. 15, 1851, and the claim will be found on page 150, Vol. 6, Scientific American. We are not aware of any suits having been brought to test the validity of the patent, we know nothing against its character.

S. B. H., of N. Y.—We have for a number of years prosecuted an extensive patent agency business, and secured many valuable inventions, both at home and abroad. We can undertake your business upon such terms as will afford you ample satisfaction.

J. P., of N. Y.—An English patentee proposed to propel carriages or vessels by the action of water kept under pressure in air vessels, the air being condensed by stationary power. A main pipe is to be laid between the rails with branches at suitable distances from which the water is allowed to flow against the carriage while it is passing, and thereby propel it.

R. A. S., of Ohio.—If you are using the ordinary fireplace you will gain considerable by simply lining the back and sides with fire-brick. The expense of alteration is a mere trifle, and you will save considerable heat by it, we should think.

H. A. R., of Mass.—By reference to Vol. 6, Scientific American, commencing with No. 1, you will find an able series of articles upon the Voltaic battery by an able electrotypist, we can furnish the volume in sheets or bound. You should have it.

A. W., of Vt.—We shall be glad to procure for you a second-hand engine and boiler, of the capacity mentioned. We are in a position to obtain a good article, and at a very low price. During the past five years we have been in the habit of attending to such orders, for the accommodation of our subscribers.

A. J. C., of Philadelphia.—A block for docking and building vessels substantially like yours will be found illustrated in Vol. 15, 1835, Franklin Journal. The patent was granted to John Williston, Portsmouth, Va. The rider block surmounts the ground block and is divided into equal parts by a vertical uniform section. We cannot advise you to apply for a patent.

C. C., of N. Y.—The difficulty in the case arose from a delay on the part of the inventor in not getting his patent out in season—one disadvantage of a delay. The original papers were injudiciously prepared, and we amended them at his request. It is paramountly important that the inventor's application should always be well drawn up; loose and ambiguous papers often destroy a patent.

J. W. G., of N. Y.—Yours will appear next week. C. R. M. W.—Yours will also appear. We could not insert them this week.

A. R. P., of Mass.—Yours has been received. E. N., of N. Y.—Leving's sash machine, we believe, is well spoken of, and in our opinion no infringement on the Woodworth patent.

K. S. S., of Charleston.—We shall send you the Sci. Am. one year. The price lists we have been unable to obtain but would advise you to address T. J. Wood, corner of Chatham and Duane sts., he is a dealer in tools.

E. R., of S. C.—We should like to examine a sketch and description of your apparatus. If you can realize all you anticipate, it will be a good invention.

H. M., of N. Y.—We can undertake your foreign business at any time. As soon as you determine how far you will go please notify us, and the business will be pushed forward as rapidly as possible.

T. A. R., of Mo.—Certainly not. The principle is old and well known. 10 years since we saw a machine constructed upon the same principle in the city of Troy. The person is evidently an impostor, and should be overhauled.

J. E. G., of Pa.—The gauge of the Erie Railroad is 6 feet, which is about 1 1/2 feet wider than any other road in the country. It is the longest road in the world.

T. D., of Miss.—Several years since an article appeared in the "Annales des Mines," Vol. 6, touching the quantity of fuel consumed in the cupolas of Birmingham, Manchester, and Newcastle, the proportions were very much greater than since the adoption of the hot air plan. Messrs. Chance and Bro., near Birmingham, manufactured all the glass for the Crystal Palace. They are unquestionably the largest makers in the world, employing 1,200 hands, and consuming hundreds of tons of coal.

R. S., of Ill.—The patent of Rogers in hanging the bed stone (when the shaft or spindle to which the runner is attached, passes through the same) by means of a universal joint in combination with a lever and screw. We have never seen this invention in operation, hence we cannot speak of it more particularly.

E. C. C., of S. C.—We have never seen any such arrangement as you describe. Cams have been employed in various ways, and could only be claimed operating in combination with some other devices, we think yours is new and patentable.

A. K., of N. Y.—If you wish your invention brought into notice get an engraving published in our columns.

J. W. J., of Mass.—House's Telegraph employs the Roman letters of our alphabet. A telegraph to use these characters was also invented in 1841 by Bain.

J. B. J., of Mass.—We have no particular data for the comparative value of certain woods and coal as fuel, but have some general information. It is the general opinion that one ton of anthracite coal is equal to three cords of beech, and two and a half of birch or maple. 168 lbs. of coal is equal to half a ton of Southern pine wood.

M. K., of Mass.—We have known of two cannons being fixed on a swivel central, to be fired one after the other. Your idea appears rational. A very simple tool has been used in this city for widening the bottom of a drilled hole. The telegraphic wire will not act if it be made red-hot for some length. Are you sure that the steam would not generate electricity if the boiler had the arrangement you speak of? we think it would.

H. R., of C. W.—Your article on Ventilation will appear next week.

J. W. H., of N. Y.—The first 25 numbers of Vol. 4 we cannot supply complete.

J. M. W., of C. W.—The back numbers to April 25 have been sent by mail, and if we are not mistaken your friend took the previous numbers with him.

C. H. T., of L. I.—We believe Dewey's Rake to be a very good one, but you can find out more about the different kinds by calling at John Mayer & Co.'s Agricultural Warehouse, 197 Front st.

J. G. M., of Mass.—If you will deliver the volumes to us free of charge we will sell them for you.

Money received on account of Patent Office business or the week ending May 29:

G. W. M., of Tenn., \$55; J. D., of Pa., \$15; J. A. J., of N. Y., \$25; H. P. O., of Ct., \$30; D. D., of Pa., \$25; G. S., of N. C., \$40; J. J. H., of N. Y., \$15; W. S., of Pa., \$12; D. L., of Vt., \$30; D. A., of Vt., \$30; B. H., of O., \$50; J. H. G., of O., \$20; R. E. L., of Ill., \$55; M. W. S., of Mass., \$32; C. M. M., of Pa., \$30; J. M., Jr., of N. Y., \$30; G. B. P., of Pa., \$17.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending May 29:

G. N., of N. Y.; J. A. J., of N. Y.; T. H. D., of N. H.; D. D., of Pa.; J. H. G., of O.; R. E. L., of Ill.; G. B. P., of Pa.

An Important Paragraph.

Whenever our friends order numbers they have missed—we always send them if we have them on hand. We make this statement to save time and trouble, to which we are subjected in replying when the numbers called for cannot be supplied.

The Post Office Laws do not allow publishers to enclose receipts; when the paper comes regular subscribers may consider their money as received.

Subscribers ordering books or pamphlets are particularly requested to remit sufficient to pay postage.

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 12 1/2 cts. per copy.

ADVERTISEMENTS.

Terms of Advertising.

Table with 2 columns: Lines for each insertion, Price. 4 lines, 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 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 Filton street, New York.

SECOND-HAND MACHINERY, TOOLS, &c.

One Steam Engine, 4 horse power, Grasshopper pattern, in complete order, \$150; 4 horse Cylinder Boiler, with safety and check valves, \$75; No. 2, new, Dick's Patent Punching Press, \$100, maker's price \$175. One Dick's Patent Bank Note or Tobacco Press, platen 24 by 30 inches, very powerful, \$125; one india rubber belt, 20 inches by 175 feet long, \$75; 10 tons English Blister Steel, at 6 cents per lb., 1 1/2 to 2 in. by 1 1/2 inch. Second-hand Engines, Boilers, Lathes, blacksmiths' tools, machinery, grease, etc., constantly on hand and for sale by W. M. D. ANDREWS, 187 Cherry and 452 Water sts., N. Y. Scrap Iron taken in exchange. 1\*

PORTER'S PATENT GRADUATING VALVE

FORGE TUYERE—Illustrated in this paper Sept. 6, 1851, gives a sure, quick, and clean heat, and is warranted to save full 25 cts. per day to each fire. Two sizes manufactured. Price \$6 to \$8. For sale, wholesale and retail, at No. 9 Gold st. W. J. & J. H. BURNETT. 38 4\*

NEWELL'S PARAUPTIC BANK LOCK

—These Locks, which have been tested by the most skillful mechanics of Europe and this country, still remain invulnerable to their combined efforts, proving its superiority over all others. For sale by DAY & NEWELL, 589 Broadway, N. Y. 38 3\*

TO CARPENTERS AND DEALERS IN PATENT RIGHTS

—The whole right and title to the Patent Blind and Shutter Fastener, which was illustrated in No. 37 Vol. 7 of the Scientific American, will be sold cheap to a cash customer, or the owner of the patent will sell single States (not in smaller quantities) if desired. The invention is a good one; the claims are broad, and it is not an infringement of any existing patent, as decided by parties who have investigated the matter thoroughly. For particulars concerning the purchase of rights, etc., address "DESALX," box 773, P. O., New York City. 38 3\*

STEAM ENGINES AND TOOLS

—One Horizontal Steam Engine, of superior workmanship, 12 inch cylinder, 3 feet stroke; heavy bed frame of 4,600 lbs., the whole well finished. One Steam Engine, as above, 10 inch cylinder, 3 feet stroke. A sample of the above engines may be seen at work in Mr. Bogardus's, corner Duane and Centre sts., N. Y.; also at Messrs Platt & Bros, Maiden Lane. Two 6 1/2 Planing Machines, of the most improved English pattern, strong and heavy. Six 2 feet 4 in Planing Machines, will plane 12 inches wide, work with quick motion, well adapted to locomotive tools and engine work. Also a variety of Lathes, Boiler Punches, Presses, and other tools, for sale by the Matteawan Machine Co., Dutchess Co., N. Y., 1 mile from the H. R. B. Depot, at Fishkill. A. L. ACKERMAN, Agent. 36 3\*

NOTICE TO IRON FOUNDERS

—The advertiser wishes the situation of "Charge of a Foundry," having had long experience at it, and several years' experience in charge of a machine shop doing new work and repairs. For reference, address A. F. Pierce, Esq., Norwich, Ct., post-paid. 36 4\*

IRON FOUNDERS 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. 36 6\*

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. 25tf

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. 27tf P. A. LEONARD.

TO BUILDERS AND WORKERS IN WOOD

—We are selling a very simple durable, and effective Working Machine for \$20, boxed ready for shipment. We have sold a large number within the last year, and they have given satisfaction. We furnish three chisels and a lever to operate them. Address MUNN & CO.

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. 28tf

CHILDS & TAINTER, Worcester Mass., Build-

ers of Daniel's Planing Machines, either with or without modern improvements. This planer is the greatest labor-saving Planing Machine ever applied to both square timber and boards. Read's feed motion (perfectly practical for all purposes without extra charge) gives the advantage of planing when the carriage is moving both forward and back. The carriage may be run rapid or slow, either way; is drawn from its centre underneath, the pinion working above the rack, secure from shavings, and no belts or gears under the machine. Built heavy and substantial at reasonable notice. 37 3\*

DRAUGHT BOARDS, PATENT

—Which dispense mostly with the use of Case Instruments, which at best are tedious. The Board combines the use of several valuable instruments. \$10, complete. Sent by Express, Direct (post-paid) to H. W. CHAMBERLIN, Pittsfield, Mass. 37 2\*

BEARDSLEE'S PATENT PLANING MA-

chine, 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 abovementioned 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. 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 W. M. WOOD, Westport, Ct. All letters will be promptly attended to. 22tf

THE EXCELSIOR Sand and Emery Papers.

Are offered as new and superior articles, being manufactured by an improved process; the paper is made from the best Manila hemp, and consequently is very strong and lasting; the grit is of the sharpest and most enduring kind, and is firmly attached to the paper with a remarkable evenness of surface; their freedom from ridges, stripes, and other imperfections, recommend them to the notice of consumers. These papers have been used by many of our first mechanics, and are pronounced superior to all others. Every sheet is stamped W. M. B. PARSONS, and warranted. Samples furnished at the office, No. 284 Pearl street, New York. W. M. B. PARSONS, 14 6m\*

P. W. GATES'S PATENT DIES FOR CUT-

TING SCREWS.—Patented May 8th, 1847.—This Die cuts Screws of any size, V or square thread, by once passing over the Iron. Also, Lead Screws for Lathes, Hoisting Screws, &c. All orders for Dies and Taps, with or without machines, will meet with prompt attention by addressing P. W. Gates, or Gates & McKnight, Chicago; Marshall, Bement & Colby, Philadelphia; Woodburn, Light & Co., Worcester, Mass. References.—All the principal machine shops in New York, Philadelphia, and Boston. 13 6m\*

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 Casting and Machinery made to order at short notice. Steam engines furnished cheaper than can be had elsewhere, of the same quality. 30tf

JOHN W. GRIFFITHS—Ship Builder and Ma-

rine 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 impulsion. 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. 27 18\*

IMPORTANT TO IRON FOUNDRIES.—The

Galvanic Alloy Manufacturing Co., Nos. 401, 403, and 405 Cherry st., N. Y., will furnish the Acrostatic Fan Blower at \$55, 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 cowntf.

MANUFACTURE OF PATENT WIRE Ropes

and Cables—for inclined planes, suspension bridges, standing rigging, mines, cranes, derrick, tillers &c.; by JOHN A. ROEBLING; Civil Engineer—Trenton N. J. 47 1y\*

A. B. ELY, Counsellor at Law, 46 Washington

st., Boston, will give particular attention to Patent Cases. Refers to Munn & Co., Scientific American. 13

TRACY & FALES, RAILROAD CAR MANU-

FACTORY—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 COM-

pany, Tool Builders, New Haven, Conn., (successors to Scranton & Parshley) have now on hand \$25,000 worth of Machinist's Tools, consisting of power planers, to plane from 5 to 13 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. 25tf