

TO CORRESPONDENTS.

A. A. R. of Phila.—Do you mean fire gilding of metals or porcelain, or merely electrotyping?  
 B. B., of Pa.—The mere application of an alarm to a prison could not be patented; if you have invented any particular improvement in the alarm, whereby its application is rendered more beneficial, a patent could be secured for it. We should need a sketch to enable us to come to a proper conclusion.  
 B. P., of Winchester.—We know nothing of the establishments to which you refer; we think the steam hammer engines can be adapted to the purposes named.  
 A. C., of Canada.—We do not know of any one who has such a machine as you want.  
 H. U., of Ct.—We have never known of a pump constructed as described in your letter; it is probably new and patentable, its advantages over the common pump we do not perceive.  
 H. S., of N. H.—We cannot discover any thing in your washing machine of a novel character; it is quite common to employ a fluted "rubber" in combination with a fluted stationary bed, the rubber being held in its proper position by means of spiral springs or their equivalents.  
 R. A., of N. Y.—Your observations in regard to how much an object appears magnified contain nothing new, the same ideas are laid down by the ingenious Dr Jurin, in a work entitled "The Microscope Made Easy," by Henry Baker, London, 1744, a copy of this old work is in our possession.  
 M. M., of Pa.—We cannot undertake to enumerate the different modifications which have been made in the steam engine; if you will send us a sketch we can give you a more satisfactory opinion.  
 A. M. G., of P.—There is nothing patentable in the change which you present for the construction of paddle wheels; if you examine page 280, Vol. 5, Sci. Am., you will see something on the subject.  
 G. K. G., of —.—A steam engine is the only power, we can recommend to elevate your spring water; a good wind-mill might answer; if your creek has but a small quantity of water it would be useless to construct a wheel for it.  
 E. J. G., of Ind.—Your boiler we believe could work well, but we have seen one lately, and for which a patent will soon be granted, which meets the same conditions.  
 A. C. C., of Tenn.—There can be no fears about moving the balloon in a direct course, if enough of power can be obtained to propel it. We have seen no plan that presents to us any hopes of success. Some one may soon be discovered. We do not know of any cement in use that will suit your purpose, but we believe that hydraulic cement used in the inside, and the seams pointed with cement made of dry air slacked lime, white lead, and clean sand and first allowed to dry, would answer.  
 J. A. S., of Pa.—We could not furnish you with the first 22 numbers of Vol. 7, unless you take the last part of the volume also; we have less numbers of the first part of the volume than we have of the last.  
 T. J. A., of Ohio.—It matters not how many saws you use in a gang, your claim will cover twenty as securely as it will two.  
 H. L. W., of Geo.—The weight of the balls expressed upon the leverage of the arms of the wheel, comparatively, and the same result is produced by the saw with the balls on it according to its pitch, the same law of mechanics rules in every machine—time, space, and weight are the three elements of calculation.  
 F. P. C., of S. C.—The description you give of the alleged improvement in steam engines is very indefinite, but so far as we comprehend its nature we  
 J. D. W., of N. Y.—You would observe that a correction was made by us respecting Mr. Hudson's letter at his own request.  
 H. W. S., of Ind.—We are unable to find any patentable novelty in your press; it is in substance the same as Brown's Eccentric, but more complicated and less effective for that reason.  
 J. A., of Boston.—We transmitted your papers per Adams & Co.  
 E. W., of Ct.—We are having an engraving of your pistol prepared; it will be published when complete.  
 W. R., of Me.—We think it unnecessary to repeat our opinions respecting the use of hot air as a motor. Whatever we state in the Scientific American as our opinion, is not intended to contradict our private views—we speak as we think; if you do not it is no fault of ours.  
 L. S., of Ind.—We do not know of a more competent person to undertake your agency than Mr. S. O. Hills, No. 12 Platt st., he has several agencies and attends to them faithfully.  
 Money received on account of Patent Office business for the week ending Saturday, April 23:—  
 W. D. E., of Miss., \$30; G. N., of N. Y., \$30; J. W. H., of R. I., \$5; C. P., of Mich., \$30; P. S., of N. Y., \$20; F. O. D., of Pa., \$10; P. G. G., of N. Y., \$150; S. F. A., of N. Y., \$30; T. & D. A. H., of Pa., \$30; W. W. & Co., of Ct., \$175; W. W., of Ct., \$20; J. B., of Mich., \$55; C. M., of Mo., \$46; G. A. B., of Ill., \$25; H. C. S., of Ct., \$30; I. C., of N. Y., \$30; C. O., of Ky., \$25; J. B., of N. Y., \$30; S. M., of Pa., \$30.  
 Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday April 23:—  
 W. W. W., of Ct.; C. P., of Mich.; J. O., of N. Y.; C. M., of Mo.; G. A. B., of Ill.; R. C. W., of Ohio; A. H. R., of Pa.

A Chapter of Suggestions, &c.

**PATENTERS**—Remember we are always willing to execute and publish engravings of your inventions, provided they are on interesting subjects, and have never appeared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permitted to have the engraving executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to advantage in other journals.  
**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.  
**GIVE INTELLIGIBLE DIRECTIONS**—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure, but no name of State given, and often with the name of the post office also omitted. Persons should be careful to write their names plainly when they address publishers, and to name the post office at which they wish to receive their paper, and the State in which the post office is located.

ADVERTISEMENTS.

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.

**WANTED**—A person to take one-third interest in a Machine Works and Iron Foundry, two and a half hours' ride from New York, established 29 years. Applications in writing may be left at this office addressed to "F. C." care of Munn & Co. A practical machinist would be preferred. 33 2\*

**BOILERS FOR SALE CHEAP**—Suitable for land or marine purposes. Apply between 8 and 6, at **CHARLES MORRIS, 109 East 18th St., Third Avenue.** 1\*

**WANTED**—A situation as Manager or Superintendent of a Gas Works, by a person well acquainted with the construction of gas works, gas manufacture, meters, fittings, &c. Good references can be given. Address "W. H. C.," Kensington, Philadelphia, Pa. 1\*

**JAMES D. JOHNSON, Bridgeport, Ct.,** Proprietor of Wood's Patent Shingle Machine. Persons wishing to purchase rights or machines, can address as above. This is unquestionably the best machine in use for cutting shingles. 33tf

**MELODEONS.**—Patent rights for these instruments in several of the United States, are offered for sale upon reasonable terms. Patented in 1851. Have been thoroughly tested and will be warranted equal in all respects, and in some, superior to any yet offered to the public. Letters addressed **MARVIN SMITH, New Haven, Conn.,** will receive prompt attention, references given. 31 3\*

**MORTISING MACHINE**—"Dear Sirs, I received the Portable Mortising Machine about three weeks ago; I have used it, and am very well pleased with it; it is the best plan of a machine of the kind I have ever seen."  
 W. R. McFARLAND,  
 Nashville, Tenn., 1851.  
 "Since I have been a subscriber to your paper I have purchased one of your Mortising Machines, for which I would not take double its price and do without it."  
 W. M. FLEMING,  
 Elizabethtown, Tenn., Jan. 8 1853.  
 This machine is simple, durable, and effective, and is boxed and shipped for the low sum of \$20.  
**MUNN & CO.**

**WHEELER, WILSON, & Co., Watertown, Ct.,** proprietors and manufacturers of Allen B. Wilson's Patent Stitching Machine. Patented June 15, 1852, it can be seen at the Company's Office 265 Broadway, New York. 30 20\*

**PALMER'S PATENT LEG**—Manufactured by Palmer & Co., at 5 Burt's Block, Springfield, Mass., for New England and New York State, and 376 Chestnut street, Philadelphia; in every instance of competition in the Fairs of the various Institutes of this country, has received the highest awards as "the best" in mechanism, usefulness, and economy. At the "World's Fair," London, 1851, in competition with thirty other varieties of artificial legs (by the best artists in London and Paris), it received the Prize Medal as the best.  
 25 20\* (16e3w)

**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.

**LEE & LEAVITT**—Manufacturers of every description of Cast Steel Saws, No. 63 Water street, between Walnut and Vine, Cincinnati, O. 27 6m\*

**PORTABLE FORGES—REMOVAL.**—The subscriber (successor to E. Flagger), and sole manufacturer of Queen's Patent Portable Forge and Bellows, respectfully gives notice that he will remove his depot for the sale of said Forges to 210 Water street (directly opposite to present location), on the first of May next, where, by the long attested superiority of this Portable Forge over all others for the use of blacksmiths, machinists, jewellers, dentists, braziers, shipping, quarries, public works, &c. &c. he hopes to retain a continuation of the past patronage.  
**FREDERICK P. FLAGLER,**  
 211 Water st until May 1st.

**FRENCH AND ENGLISH PATCHES**—The undersigned are receiving, direct from Paris and Manchester, monthly collections of the styles of calicoes, jacquets, delaines, cottons, woolsens, &c., which are collected in advance of their appearance in market. The Manchester Patterns, comprise, in one collection and subscription of \$100 per annum, all of the above, except woolsens. The terms of the Paris designs are according to the respective classes, and will be furnished on application to  
**CLARK & LAURIE,**  
 124 Front street, N. Y.  
 32 2\*

**BARLOW'S UNSURPASSED Planing Tongueing and Grooving Machines.** Testimonials of the highest character can be given of their superiority over all others in use. For rights or other information. Apply to A. K. Wellington, 184 Twelfth street, New York City. 32tf

**PITTS' SEPARATORS, HORSE POWERS, Corn and Cob Mills, &c.**—The subscriber having recently located at Buffalo, N. Y., and erected a large establishment for the future manufacture of the above machines, desires all orders hereafter addressed **J. A. PITTS, Buffalo, N. Y.** 32 2\*

**THE AMERICAN ENGINEER, DRAUGHTSMAN, and Machinist's Assistant,** designed for practical workingmen, apprentices, and those intended for the engineering profession, illustrated with 200 wood cuts, and 14 large engraved lithographic plates of recently constructed American machinery, and engine work, by Oliver Byrne, 1 Vol., large 4 to. Embracing Mathematical and Drawing Instruments, Geometrical Problems, Brackets and Pillow Blocks, Lubricators, Electric Steam Gauge, Horse Power, Parallel Motions, Indicator, Safety Valves, High Pressure Steam Engines, Steamship Engines and Boilers, Rotary Engines, Locomotives, Screw Propellers, Ericsson's Caloric Engine, &c. &c., price \$5. The work will be sent to any part of the United States, free of postage, upon the receipt of the amount by mail, address **C. A. BROWNE, & CO., publishers, N. W. Corner, of 4th and Arch streets, Philadelphia.** 31 6\*

**STAVE MACHINERY**—We manufacture the improved Mowry Stave Machine for slack work, cutting, dressing, and jointing, at one operation, without any handling of the stave until it is finished, after you place the bolt of wood upon the feeding carriage. The machine feeds itself, cutting, dressing, and jointing in a finished and uniform manner 80 to 100 staves a minute. Any kind of timber fit for a stave may be used, even such as could not be rived, as elm, hickory, beach, &c. The cost of running the machine need not exceed, if it equals, 50cts per M, for cutting, dressing, jointing, removing, and piling up, where a machine is kept steadily at work. For machinery and rights in the State of New York, apply to **CHAS. MOWRY, Auburn, N. Y.;** for machinery and rights elsewhere, to the subscribers, **GWYNNE & SHEFFIELD, Urbana, Ohio.** 30tf

**WOODBURY'S PATENT PLANING MACHINES**—I have recently improved the manufacture of my Patent Planing Machines, making them strong and easy to operate, and am now ready to sell my 24 inch Surfacing Machines for \$700, and 14 inch Surfacing Machines for \$650 each. I will warrant, by a special contract, that one of my aforesaid machines will plane many boards or plank as two of the Woodworth machines in the same time, and do it better and with less power. I also manufacture a superior Tongueing and Grooving Machine for \$350, which can be either attached to the Planing Machine, or worked separately. **JOSEPH P. WOODBURY, Patentee, Border st, East Boston, Mass.** 29tf

**THE NEW HAVEN MANUFACTURING COMPANY, New Haven, Conn.,** having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weigh from 1400 to 1500 lbs., of the best French burr stone, 30 inches in diameter; snugly packed in a cast-iron frame, price of mill \$200, packing \$5. Terms cash. Further particulars can be had by addressing as above, post-paid, or to S. C. Hills agent N. H. M. Co., 12 Platt st, N. Y. 28tf

**ENGINEERING**—The undersigned is prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, high and low pressure engines, boilers, and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Ashcroft's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewall's Sallinometers, Dugdon's Hydraulic Lifting Press, Roebling's Patent Wire Rope for hoisting and steering purposes, &c. etc.  
**CHARLES W. COPELAND,**  
 29 13\* Consulting Engineer, 64 Broadway.

**THE NEW HAVEN MANUFACTURING CO.** No. 2 Howard st, New Haven, Ct., are now finishing 6 large Lathes, for turning driving wheels, and all kinds of large work; these lathes weigh 9 tons, and swing 7 1-3 feet, shears about 16 feet long. Cuts and further particulars can be had by addressing as above, post-paid, or to S. C. Hills, agent N. H. M. Co., 12 Platt st, N. Y. 28tf

**BALLOONS.**—A splendid tri colored French flag-silk balloon for sale. Also a plain silk one, used several times, but in good order. Each of them large enough, when inflated with coal gas, to ascend with a man. Instruction given gratis.  
 31 4\* **JOHN WISE, Aeronaut, Lancaster, Pa.**

**AARON KILBORN, No. 4 Howard st, New Haven, Conn.,** manufacturer of Steam Engines, Boilers, &c. Noiseless fan blowers and machinery in general. 25 10\*

**PIG IRON**—American and Scotch, of favorite brands; also Cupola Fire Bricks, Fire Clay, Sand and Foundry Facings of every approved description, for sale by **G. O. ROBERTSON, & CO., office 135 Water street, (corner of Pine), N. Y.** 31 6eow\*

**BEARDSLEE'S PATENT PLANING Tongueing and Grooving Machines**—These celebrated machines have now been generally introduced in various portions of the United States. More than thirty are now in successful practical operation in the State of New York alone. As an illustration of the extent of work which they are capable of performing, with unrivalled perfection, it is sufficient to state that, within the last six months and a half, over five millions of feet of spruce flooring have been planed, tongued and grooved by one of these machines at Plattsburgh, N. Y., never running to exceed ten hours a day. The claim that the Beardslee machine was an infringement upon the Woodworth patent, has been finally abandoned; and after the proofs had been taken, the suit instituted by the owners of that patent was discontinued, and the whole controversy terminated on the first of November last. Applications for machines or rights may be made to the subscriber, **GEO. W. BEARDSLEE, 57 State street, or No. 764 Broadway, Albany.** 15tf

**T. J. SLOAN'S PATENT HYDROSTAT**—For the Prevention of Steam Boiler Explosions. The undersigned having made extensive arrangements for the manufacture of these machines, are now prepared to receive orders for the immediate application of the same to boilers of every description. They have endeavored to place the instrument within the reach of all, by selling it at a very low price, the cost of one horse-power being only \$20, five horse-power, \$30, and so on, according to the capacity of the boiler. **SLOAN & LEGGETT, Proprietors and Manufacturers, foot of East 25th st, New York.** 30tf

**W. P. N. FITZGERALD, Counsellor at Law** has recently resigned the office of principal Examiner of Patents, which he has held for many years, and is ready to assist, professionally, in the preparation and trial of patent causes before the U. S. Courts in any of the States, and before the Supreme Court of the United States. He also acts as Counsel in cases before the Patent Office, and on appeals therefrom, but does not prepare applications for Patents. Office corner of E and 8th sts., Washington, D. C. 18tf

**MACHINERY.**—S. C. HILLS, No. 13 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, Planes and Shears; Mortising and Tenoning machines; Belting; machinery oil, Seal's patent Cob and Corn mills; Burrmill and Grindstones; Lead and Iron Pipe &c. Letters to be noticed must be post-paid. 27tf

**A. B. ELY, Counsellor at Law, 52 Washington st., Boston,** will give particular attention to Patent Cases. Refers to Munn & Co., Scientific American. 16tf

**LEONARD'S MACHINERY DEPOT, 109 Pearl-st. and 60 Beaver, N. Y.**—Leather Banding Manufactory, N. Y.—Machinist's 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.  
**P. A. LEONARD.** 27tf

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**BOSTON BELTING COMPANY**—No. 37 Milk street, Boston, Manufacturers of Machine Belting, Steam Packing, Engine and Conducting Hose, and all other articles of Vulcanized India Rubber, used for mechanical and manufacturing purposes. 28tf

**COTTON MACHINERY**—Of the most approved plans, from the best shops in the country—drawings, specifications, and general arrangements for the machinery, furnished at the lowest rates, by **W. B. LEONARD, and E. W. SMITH, 75 Merchants' Exchange, New York.** 28tf

**THE TROY IRON BRIDGE CO.** are prepared to erect Iron Bridges or Roofs, or any kind of bearing trusses, girders, or beams, to span one thousand feet or under, of any required strength, in any part of the country. Their bridges will be subjected to severe tests, and can be built for about the price of good wooden ones. Address **BLANCHARD & FELLOWS, Troy, N. Y.** 30 10\*

**NORCROSS ROTARY PLANING MACHINE,**—Decided by the Circuit Court not to infringe the Woodworth Machine—I now offer my Planing Machines at a low price; they are not surpassed by any machines as to amount or quality of work. Tongueing and grooving machines also for sale, doing one or both edges as desired; 80 machines now in operation. Address me at Lowell, Mass.  
 27 10\* **N. G. NORCROSS.**

**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. 1\*

**C. B. HUTCHINSON'S PATENT STAVE Cutting Machines,** the best in use, and applicable alike to thick or thin staves; also his Head Cutting and Turning, and Stave Jointing Machines. For machines or territorial rights, apply to **C. B. HUTCHINSON & CO., Syracuse, N. Y.** 8tf

**J. D. WHITE'S PATENT CAR AXLE LATHES**—also Patent Engine Screw Lathes, for boring and turning tapers, cutting screws, &c. We manufacture and keep constantly on hand the above lathes; also double slide Chuck and common Hand Lathes, Iron Planers, S. Ingersoll's Patent Universal Ratchet Drill, &c. Weight of Axle Lathe, 5,500 lbs; price \$600; Engine Screw Lathe, 1400 to 7,000 lbs; price \$225 to \$675.  
**BROWN & WHITE,**  
 27tf Windsor Locks, Conn.

**COCHRAN'S CRUSHING MACHINE**—Can be seen in daily operation in Thirteenth street, between 9th and 10th avenues. Parties in want of a machine for crushing and pulverizing quickly and cheaply Quartz Rock, Iron, Lead, Copper, and Silver Ores, and other mineral substances equally hard, are invited to witness the operation of these powerful and simple, but yet effective machines. For further particulars apply to **E. & J. BUSSING & CO., No. 32 Cliff st, Y. N.** 23tf

**PATENT LAWS OF THE UNITED STATES,** and information to inventors and patentees; for sale at the Scientific American office. Price 12 1-2 cents.