

TO CORRESPONDENTS.

T. B. H., of Ala.—Colt's revolving pistols, at retail, are worth from \$20 to \$25. If you have plenty of timber, a picket fence will be the cheapest for you; all depending, of course, upon the amount of labor bestowed upon it.

L. A. O., of N. Y.—We shall answer your letter as soon as we hear from the party.

H. V., of Pa.—We regret to state that the number you order cannot be supplied.

A. S., of Ind.—Your Flying Machine is under consideration; it appears rather feasible at first sight, and perhaps will prove to be all you expect of it.

T. L., of Va.—Next week you will see an article on the subject. The fact is, that there are various opinions about such things.

J. D. R., of Phila.—We refer you to the opinion of Faraday—the best of authority. We have not time, just now, to look over and refer to the place in our columns for his opinion, but if you look carefully over the back numbers of this volume, you will find it.

W. L. G. J., of Ct.—The envelopes are cut out by dies on the machine, and folded by machinery also; several are cut out at once by some machines. Great improvements have been made within the past three years.

S. N. D., of N. Y.—Yours next week.

C. H., of N. J.—Yours has been received and will meet with just attention.

L. R., of N. Y.—We are not able to solve your queries; they are far beyond the reach of our experience or mental grasp. No man can tell wherein the power of electricity consists, he only knows there is such a power by its effects, and that power exhibited when the electric forces are disturbed—non-static.

E., of N. Y.—The question you present has nothing to do with a vessel, it merely respects the power of the engines. There can be no difference in the power of a high pressure and a low pressure engine of the same size cylinders and length of stroke, if the high pressure uses steam at 26 lbs, and at the other at 13 lbs. on the square inch, because the vacuum is held to be about the value of 13 lbs. There would be a very great difference in the duty, however, and that in favor of the low pressure.

H. W. G., of N. C.—We procured a finely bound copy of Black "On Brewing," and sent it, paid, to Mr. L., bearing the inscription you requested. The funds sent were sufficient to cover all expenses.

A. G. B., of N. H.—Saw sets are in use, but yours may be different from any other. You had better forward one to us for examination.

S. H., of N. H.—Malleable iron is made from pig by a process of heating which takes some days to perform. The art must be learned to be performed. The annealing of castings is done by placing the articles in the annealing oven at the proper heat, and allowing them to cool gradually. Charcoal pig is the best for the purpose; good foundry scraps are preferable.

W. F., of S. C.—We are unable to answer your enquiry; it is too indefinite for us to comprehend its meaning.

P. F. D., of Wis.—Under the present post office law we are prohibited from sending circulars, and we hope you will send on the club without it.

W. S. & M. W., of O.—It would give us great pleasure to inform you whose machine for planing and matching boards, etc., is the best, but the newly patented and good machines for the purpose are so numerous that it is difficult for us to recommend one over another. For the most improved machinery for that branch of business, see files of the Scientific American for the past five years.

J. E. A., of Ct.—For an iron wheel, constructed nearly as you describe yours, and embracing the whole principle of your invention, see the patent of Lamb & Root, granted Jan. 1, 1851.

T. J. S., of N. Y.—The noiseless wheels referred to on page 292 Sci. Am., are not made in this country that we are aware of. A patent was taken out in England for it, but we think no application for one has been made here.

W. F. L., of N. Y.—The effect of peaches on the teeth to cleanse them, is no doubt owing to the same cause as that spoken of about the strawberry, a mild vegetable acid.

C. F. M., of Ill.—Do you mean, "Can Mr. Page stop a person from running a circular saw?" No.

J. M. & M. O. P., of Mass.—We cannot give you such a receipt. The best you can use is printer's ink. But that will rub off when wet; good black paint only will stand the water.

F. T. K., of N. H.—At present we do not know of a good work for making colors to print woolen goods. The art of printing on woolen goods is comparatively new, in comparison with that of calico. The same substances used to dye the wool are employed to make the colors, only they are boiled down, made strong, and thickened with gum. The steaming is a necessary process to incorporate the color with the fibre. If we find a suitable work we will let you know.

Money received on account of Patent Office business since August 16:

J. J. A., of N. Y., \$40; M. & F., of L. I., \$30; J. B., of N. Y., \$20; C. C., of Mass., \$20; W. & M., of N. Y., \$55; A. S., of N. Y., \$25; B. & N., of Ga., \$5; S. C., of Ct., \$30; J. S. P., of N. Y., \$500; J. O., of N. Y., \$15; W. Van A., of N. Y., \$250; E. D., of Ga., \$3.

Specifications and drawings of inventions belonging to parties with the following initials, have been forwarded to the Patent Office during the week ending August 16:—

S. I., of N. Y.; J. H. G., of N. Y.; C. C., of Mass.; E. W., of Ct.; J. S., of Ct.; B. & N., of Ga.; W. & M., of N. Y.; E. W., of Me.; E. D., of Ga.

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, price, in sheets, \$2; bound, \$2.75.
Of Volume 6, all back Nos., at subscription price

New Edition of the Patent Laws.

We have just issued another edition of the American Patent Laws, which was delayed until after the adjournment of the last Congress, on account of an expected modification in them. The pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office. We shall continue to furnish them for 12-1-2 cts. per copy.

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.

ADVERTISEMENTS.

Terms of Advertising:

Table with 2 columns: Description of ad space and Price.
One square of 8 lines, 50 cents for each insertion.
" 13 lines, 75 cts., " "
" 16 lines, \$1.00, " "

Advertisements should not exceed 16 lines, and cuts should not be inserted in connection with them at any price.

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 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. In the item of charges alone, parties having business to transact abroad, will find it for their interest to consult with us, in preference to any other concern. MUNN & CO., Scientific American Office, 128 Fulton street, New York.

CHANCE FOR A MACHINIST TO COMMENCE BUSINESS.—For sale, at No. 2 Bethune st., N. Y., all the tools belonging to a snug small machine shop, with good will of the business. There is a slide, back gear, and hand lathe; a boiler, and one of Wiley's improved 3 horse-power engines, and patterns for making the same, together with a drill, and all the tools, in good order, to carry on the business, which is now very good and can easily be increased. Price only \$1200. Also for sale a first rate 30 horse-power engine and boiler for \$1200. 49 2\*

A. B. WILSON'S SEWING MACHINE.—We are now selling the rights for territory for this incomparable machine at low rates. We furnish to the parties the best and only practical Sewing Machine—not larger than a lady's work-box—for the trifling sum of \$15. Examine for yourselves at 195 and 197 Broadway, room 23, Franklin House Buildings, N. Y. GEO. R. CHITTENDEN, Agent. 48 2\*

PROPERTY FOR SALE.—In Clinton County, Pa., consisting of 3 1/4 acres of land, with a valuable water privilege, the improvements being a two story frame building, 24 by 60 feet, suitable for a factory or shop, and a good dwelling house, stable, &c. For further particulars address G. S. GARTH, Mill Hill, Clinton Co., Pa. 48 2\*

JACK-SCREW FOR RAISING BUILDINGS, Locomotive Engines, and other heavy bodies, also double and single threaded vice screws, mill screws for raising mill stones, cheese presses, carpenter's clamps, and music stool screws, all of which are warranted to be superior articles: manufactured and for sale wholesale and retail by Tolman & Brown, Hindsdale, N. H. We have examined the screws manufactured by Messrs. Tolman & Brown, and believe them to be of the finest quality, both as regards the workmanship and durability. MUNN & CO. 48 4\*

CHICAGO SEED STORE AND AGRICULTURAL Warehouse.—The undersigned have formed a co-partnership under the name and style of Starkweather & Hooker, for the purpose of establishing a Depot in Chicago for the purchase and sale, on commission or otherwise, of Seeds, Agricultural and Horticultural Implements, Machines, &c., of every description, respectfully soliciting the attention of agriculturists and manufacturers of implements, to our establishment, and give assurance that every facility will be offered for ready sales on the most advantageous terms. C. R. STARKWEATHER, 43 4\* J. W. HOOKER.

WATTS & BELCHER, Manufacturers of Steam Engines, Lathes, Planing Machines, Power Presses, and Mechanics' Tools of all descriptions: Washington Factory, Newark, N. J. 38 13\*

MILLWRIGHT AND MACHINIST.—The undersigned begs leave to draw the attention of all who may have occasion to use machinery to his new and extensive arrangements for furnishing Steam Engines and Boilers of various sizes, mill gearing and wrought-iron Shafting; Log, Circular, Veneer, Scroll, and Slitting Saws, and other machinery connected with a manufacturing establishment, upon the most favorable terms at his works, corner Eleventh avenue and West 29th st. THOS. J. WELLS. 46 4\*

MORTISING MACHINE.—See Sirs: I received the Portable Mortising Machine about 3 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., June 22, 1851. The above machines are for sale by MUNN & CO., price \$20—boxed and shipped. 48 2f

MECHANICS' FAIR.—The Middlesex Mechanic's Association will open their first exhibition for the encouragement of the mechanic arts and manufactures in the city of Lowell, on Tuesday, Sept. 16, 1851. The Committee of Arrangements for this proposed Fair, respectfully invite and solicit all persons engaged in the various branches of mechanism, manufactures, science, and art, to present specimens of their various products for exhibition and premium. Ladies are cordially invited to present specimens of their ingenuity and taste. Premiums will be awarded as the articles presented may merit. Articles for exhibition should be sent on or before Sept. 10th. For more particular information or copies of the circular, address (post-paid) J. A. Beard, Esq., Supt., Lowell, Mass. By order, OLIVER M. WHIPPLE, Chairman. M. C. BRYANT, Sec'y. 40 10

RAILROAD CAR MANUFACTORY.—TRACY & PALES, Grove Works, Hartford, Conn. Passage, Freight and all other descriptions of Railroad Cars, as well as Locomotive Tenders, made to order promptly. The above is the largest Car Factory in the Union. In quality of material and in workmanship, beauty and good taste, as well as strength and durability, we are determined our work shall be unsurpassed. JOHN R. TRACY, THOMAS J. PALES. 39 2f

WANTED.—A situation is wanted by a person capable of planning and constructing furnaces for smelting iron ore, or erecting rolling mills. He is an experienced mechanic, thoroughly conversant with the iron business, and would like a permanent situation in some of the Southern States. Address M. E., Dover, N. J. 45 10\*

LAW'S PLANER FOR PLANK, BOARDS, &c., is now attracting much attention on account of its effectiveness, the excellence of its work, its simplicity, and consequent economy. Machines are now in operation in Brooklyn, New York City, and at various points South and West. Rights or machines for sale by H. LAW, 23 Park Row. 45 1f

INDUSTRIAL EXHIBITION.—The "Maryland Institute for the Promotion of the Mechanic Arts," will hold its Fourth Annual Exhibition of American Manufactures, Machinery, &c., in the splendid new Hall, now being finished at Baltimore, from 20th Oct. to 18th Nov. next. Mechanics, manufacturers, and others are cordially invited to send specimens of their best productions, in competitions for the Gold and Silver Medals, Diplomas, &c. Steam power, labor, &c., is offered free to depositors. Great care will be taken that fair play shall be shown to all the exhibitors. Those desiring to deposit articles are required to notify the Committee at once, stating the nature of the goods, and the probable amount of room required to display them to advantage. Circulars containing full particulars, rules, &c., with a view of the Institute's new Hall, may be had by addressing the Agent, J. S. Selby, or the undersigned, who will promptly give any other information to those who desire it. See editorial columns of Sci. Am., of Aug. 2, 1851. ADAM DENMEAD, Chairman Com. on Ex. 46 5

1851 TO 1856—WOODWORTH'S PATENT PLANING, TONGUEING, AND GROOVING MACHINE.—Ninety-six hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's Patent Machines. Price of the machines from \$150 to \$800. For rights in the unoccupied Counties and towns of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y. 46 4\*

SCRANTON & PARSHLEY, Tool Builders, New Haven, Conn., have on hand six 12 ft. slide lathes, 28 in. swing; also four 8 ft. do., 21 in. swing, with back and screw gearing, with all the fixtures; one 5 ft. power planer; 12 drill presses, 4 bolt cutting machines, 30 small slide rests; 5 back geared hand lathes, 21 in. swing; 15 do. not geared; 8 do. 17 in. swing on shears 5 1-2 feet; 25 ditto with and without shears, 13 in. swing, counter shafts, all hung if wanted suitable to the lathes. Scroll chucks on hand; also index plates for gear cutting. Cuts of the above can be had by addressing as above, post-paid. 47 f

PALMER'S ARTIFICIAL LEGS.—Manufactured at Springfield, Mass., and 376 Chestnut st., Philadelphia, by Messrs. Palmer & Co.—All orders from New York and New England must be made to Palmer & Co., Springfield, Mass.—"I have examined carefully the Artificial Leg, invented by Mr. B. F. Palmer; its construction is simple and its execution beautiful, and what is most important, those who have the misfortune to require a substitute for a natural limb, and the good fortune to use it, all concur in bearing practical testimony to its superiority in comfort and utility. VALENTINE MOTT. New York, Jan. 29, 51." 39 6meow\*

CHILD'S PREMIUM SAW MILL.—To Plank Road Contractors and Lumbermen generally.—The subscriber having obtained a patent for improvements in circular saw mills, by which large timber can be cut with as great facility as small, and with one half less power, and one-third less waste of timber than by ordinary mills, offers mills and rights on reasonable terms. For illustration see Scientific American of March 15th, 1851. O. C. CHILD. Granville, Ill., May, 26, 1851. 39 9eow\*

CLOCKS FOR CHURCHES, PUBLIC Buildings, Railroad Stations, &c.—The undersigned having succeeded in counteracting, effectually, the influence of the changes of temperature upon the pendulum, and introduced a new regulator, by which great accuracy of time is produced, also the retaining power (which keeps the clock going while being wound) are prepared to furnish Clocks superior to any made in the United States. Ample opportunity will be afforded to test their performance, and those not proving satisfactory, when completed may be rejected. Astronomical Clocks made and warranted equal to any imported. Glass (illuminated) Dials of the most beautiful description furnished. Address SHERRY & BYRAM, Oakland Works, Sag Harbor, L. I.

"Mr. Byram has established his reputation as one of the first clock makers in the world."—[Scientific American.] "Mr. Byram is a rare mechanical genius."—[Journal of Com. 29 12eow\*

KELLY & CO., New Brunswick, N. J., Foundry and Machine Shop, manufacturers of Stationary Engines, India Rubber Machinery, Mill Gearing and Stove Castings, &c. Articles made in the machinery line to order with dispatch and in the most workmanlike manner. Parties wanting machinery or castings made will be waited on within any reasonable distance. Orders solicited. 47 12\*

MANUFACTURE OF PATENT WIRE Ropes and Cables, for inclined planes, suspension bridges, standing rigging, mines, cranes, derrick, tilters, &c., by JOHN A. ROEBLING, Civil Engineer, Trenton, N. J. 47 1ye

A CARD.—The undersigned beg leave to draw the attention of architects, engineers, machinists, opticians, watchmakers, jewellers, and manufacturers of all kinds of instruments, to his new and extensive assortment of fine English (Stubs) and Swiss Files and Tools, also his imported and own manufactured Mathematical Drawing Instruments of Swiss and English style, which he offers at very reasonable prices. Orders for any kind of instruments will be promptly executed by F. A. SIBENMANN, Importer of Watchmakers' and Jewellers' Files and Tools, and manufacturer of Mathematical Instruments, 154 Fulton st. 42 3m\*

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 above-named foundry, or at his residence, No. 764 Broadway, Albany. GEO. W. BEARDSLEE. 43 f

TO PAINTERS AND OTHERS.—American Anatomic Drier, Electro Chemical graining colors, Electro Negative gold size, and Chemical Oil Stove Polish. The Drier, improves in quality, by age—is adapted to all kinds of paints, and also to Printers' inks and colors. The above articles are compounded upon known chemical laws, and are submitted to the public without further comment. Manufactured and sold wholesale and retail at 114 John st., New York, and Flushing, L. I., N. Y., by QUARTERMAN & SON, Painters and Chemists. 48 f

MACHINERY.—S. C. HILLS, No. 12 Platt Street, N. Y., dealer in Steam Engines, Boilers, Iron Planers, Lathes, Universal Chucks, Drills, Kases, Von Schmidt's, and other Pumps, Johnson's Shingle machines, Woodworth's, Daniel's and Law's Planing machines, Dick's Presses, Panches, and Shears; Mortice and Tenoning Machines, Belting machinery; Beal's patent Cob and Corn Mills; Burr Mill, and Grindstones, Lead and Iron Pipe, &c. Letters to be noticed must be post paid. 38 f

IRON FOUNDERS MATERIALS—viz., fine ground and Bolted Sea Coal, Charcoal, Lehigh, Soapstone, and Black Lead Facing. Iron and brass moulding Sand; Fire Clay, Fire Sand, and Kaolin; also English, Scotch, and Welsh Fire Bricks—plain, arch, crotch, circular, and tower cupola, for sale by G. O. ROBERTSON, Liberty Place, between 57 and 59 Liberty st., (near the Post Office), N. Y. 44 12\*

AARON KILBORN, No. 4 Howard street, New Haven, has on hand, and is now finishing, five 14 horse power engines; price, including boiler and all fixtures, \$1200; twelve of from 12 to 4 horse-power, all of the most approved patterns, iron bed frame and pulley balance wheel. Galvanized Chain, and fixtures for chain pumps always on hand and for sale. 45 10\*

LAP-WELDED WROUGHT IRON TUBES for Tubular Boilers, from 1 1/4 to 7 inches in diameter. The only Tubes of the same quality and manufacture as those so extensively used in England, Scotland, France and Germany, for Locomotive, Marine, and other Steam Engine Boilers. THOS. PROSSER & SON, Patentees, 28 Platt st., New York. 16 f

LATHES FOR BROOM HANDLES, Etc. We continue to sell Alcott's Concentric Lathes, 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.

MONTGOMERY MANUFACTURING CO'S Iron Works, Montgomery Ala. Capital invested, \$250,000. Steam Engines and Boilers, Reuben Rich's cast-iron centre vent water wheel and iron scroll saw complete (the very best wheel in use), sugar mills, saw and grist mill irons of most approved patterns, iron and brass castings of every variety, &c. Orders promptly executed, and upon terms as favorable as can be secured from the best northern establishments. When required, deliveries made (through their agents) at Mobile or New Orleans. Address GINDRAT & CO., Agents. 42 3m\*

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 in which this machine was held at the last Fair of the American Institute, that an unbought premium was awarded it in preference to any other on exhibition. Persons wishing for rights can address, (post-paid) JAMES D. JOHNSON, Easton, Conn., or Wm. WOOD, Westport, Ct. All letters will be promptly attended to. 37 f

LEONARD'S MACHINERY DEPOT, 109 Pearl st. 60 Beaver, N. Y.—The subscriber is constantly receiving, and offers for sale, a great variety of articles connected with the mechanical and manufacturing interest, viz., Machinists' Tools—engines and hand lathes, iron planing and vertical drilling machines, cutting engines, slotting machines, bolt cutters, slide rests, universal chucks, &c. Carpenters' Tools—mortising and tenoning machines, wood planing machines, &c. Steam Engines and Boilers, from 5 to 100 horse power. Mill Gearing, wrought iron shafting, brass and iron castings made to order. Cotton and Woolen Machinery furnished from the best makers. Cotton Gins, hand and power, and power presses. Leather Banding of all widths, made in a superior manner; Manufacturers' Findings of every description. P. A. LEONARD. 48 f

GREAT REDUCTION IN PRICE.—The most valuable book of the day, containing domestic and medical recipes, rules with regard to the recovery and preservation of health, an account of the different medical theories of the day, useful tables, &c., entitled "THE GRAEFENBERG MANUAL OF HEALTH." It is complete in one volume of seven parts, and is beautifully printed upon fine paper, in a convenient form of 300 pages. The immense success which has attended the sale of previous editions, has warranted a reduction in the price of this (the 7th) edition, from 60 to 25 cts. per copy. Any number of copies, from one upward, will be forwarded upon the receipt of the money, (post-paid). Address THE GRAEFENBERG COMPANY, 214 Broadway, N. Y., or this Office. 38