

TO CORRESPONDENTS.

E. P., of Tex.—The second half of that \$5 bill came safely by Saturday week's mail.

M. D. W., of O.—We obtained a patent on the same invention for B. D. Sanders, of Hollidaysbury Va., in 1849, there would be no hope for you should you apply.

P. L., of B. Island.—You cannot employ a soft bar of iron in the tube, for the mercury will perforate the iron and flow through it. The permeability of metals by mercury is the subject of an interesting paper by Prof. Horsford. It is difficult to make a good working thermometer.

A. J. M., of S. C.—You had better keep your back numbers and read them, but if you are not disposed to do so, return them to our office, and we will credit your account with them.

C. L., Jr., of Ct.—We had an order for those back volumes before yours was received.

W. M., of Boston.—Have you tried any experiments with the thermometer to produce the effects spoken of? We do not see how it can operate as anticipated, for the increase of temperature is so small in proportion to the increase of steam pressure, that it will not prove to be a sensitive alarm. We do not advise you to make application for a patent until you have tested its merits.

A. R. M., of Ct.—Do you mean the Mitsr Bevel? If so, we have seen a number with a sector arc on them.

A. G., of D. C.—It is not our province to enter into a personal controversy with D. E., he has a perfect right to his opinion, although wrong. We make out the contents of 1 ball 6 inches dia., and 2 of 5 inches dia., to be 249.9976 cubic inches—a very different sum from that presented to us in both cases.

R. H., of Wis.—You can obtain such information about the Whitelaw & Stirratt Wheel as you solicit, of John Finley, Cold Spring, N. Y.

E. B., of N. H.—The principle upon which you propose to construct a planing machine, is, we think, now employed for cutting out staves and shingles, and its application to board dressing could not be patented. Perhaps you might send us a sketch and description of it for further examination.

I. H. G., of Iowa.—We have no disposition to take the case out of the hands of your chosen agents; they will doubtless manage for you the best they can. The Patent Office is about four months behind, we should judge. \$1 received and credited.

S. S. B., of N. Y.—Is your gold not too much alloyed? We have never understood there was any difficulty in getting it malleable. Three grains of copper to the ounce of gold, and sometimes ten are employed by the beaters. We shall make inquiries on the subject.

A. B., of Pa.—You can solder any piece of iron on another, by taking a solution of the chloride of tin, and wetting the gun barrel with this on the spot you wish to solder, by a hair pencil, then place on the bar and solder like a piece of tin. Potassium is found in wood, it becomes potash by burning, which is effected by the combination of the oxygen with the metal undergoing combustion.

G. McP., of E. Tenn.—We have no interest in the Sash and Blind Machine, and cannot give the required information; you had better address the advertiser.

S. G., of Pa.—Thos. Blanchard, of Boston, Mass., took out a patent for bending wood some two years ago. A. W. Johnston, of St. Georges, Del., has also a patent for the same purpose.

N. F. McC., of Miss.—We think you had better furnish us with sketches and a description of your improvements that we may be able to judge more correctly respecting them. We should think your gin new and patentable.

J. E., of R. I.—We have carefully examined the sketch and description of your alleged improvements in stop-motion for power looms, and think it sufficiently novel to warrant an application for a patent. There are many different devices for the purpose, and it is not so easy to decide fully, still we have seen many but none like yours.

J. N., of Va.—Mr. Hoyt has remitted the 75 cents expense on minerals.

J. N. F., of Washington.—By stepping into the Patent Office you will find a number of switches operated by the locomotive. If yours is different from any other, a patent can be obtained for it.

C. L. A., of D. C.—We have been told that the principal projector was Mr. St. John, but the project has more than one head connected with it.

G. J. M., of Conn.—Overman's Metallurgy is as good a work in one volume as you can get. It is published by Appleton & Co., this city.

G. & S., of Ohio.—Your assignments we have forwarded to the Patent Office, and your advertisement you will find under this proper head. It is not possible to get up good engravings from a daguerreotype plate; you had better send good drawings or a model.

D. T., of Canada.—We find you were correct; the mistake occurred with our book-keeper in not properly writing the address.

S. L. H., of Ill.—Your device for converting reciprocating into rotary motion, is one of the oldest inventions for the purpose on record. It is a very inefficient substitute for the crank, and passed to condemnation many years before your time.

Money received on account of Patent Office business of the week ending Saturday, July 10:

C. W. B., of Mass., \$25; H. L. F., of Ill., \$25; F. B. H., of Ind., \$60; J. H. V., of N. Y., \$50; C. W. G., of N. Y., \$20; A. H., of Ky., \$25; C. P. L., of Ga., \$20; B. H., of O., \$5; E. S., of Ct., \$30; J. L.

B., of O., \$10; J. G., of Mass., \$30; N. G. D., of L. I., \$35.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the two weeks ending Saturday, July 10:

D. P. G., of Ind.; H. L. F., of Ill.; T. H. D., of N. H.; C. W. B., of Mass.; D. P., Jr., of N. Y.; N. G. D., of L. I.; B. H., of O.; C. P. L., of Ga.; J. P. P., of L. I.

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 of advertisement, Price per line. 4 lines, for 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 especial 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.

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

G WYNNE & 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*

STEAM ENGINE AND BOILERS.—Superior Portable and Stationary Engines, with Ayer's Patent Improved Boilers, of any size required, will be furnished to order by the patentee. These boilers occupy but little room, can be set up without brick-work, and will make more steam with the same fuel than any other boilers. E. AYER, Patentee, Norwich, Ct. 44 3

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.

REJECTION OF LANGDON'S APPLICATION, noticed in the Scientific American July 30, nearly 40 pages. I will send one copy, post-paid, for eight three cent stamps, or 50 copies by Express for \$5. The information contained is useful and important to patentees. Address GEO. W. BEARDSLEE, Albany, N. Y. 48 2

SHERRY & BYRAM'S AMERICAN CLOCKS, FOR CHURCHES, PUBLIC BUILDINGS, RAILROAD STATIONS, &c. REGULATORS FOR JEWELLERS, and other styles, designed for Banks, Offices, etc., also Astronomical Clocks. The undersigned have introduced such improvements in the construction of their clocks, as to be enabled to warrant them the most durable and accurate (highest grade to vary less than two minutes in twelve months), of any others now in use. Glass dials for illumination furnished at short notice. Address SHERRY & BYRAM, Oakland Works, Sag Harbor, Long Island, N. Y.

"At the Oakland Works of Sherry & Byram there are made some of the finest clocks in the world."—Scientific American. "Mr. Byram is a rare mechanical genius." [Jour. of Commerce. 41 7eow*

THREE STEAM BOILERS FOR SALE.—One of Ericsson's improved tubular 20 horse-power for \$650; one upright tubular six horse-power for \$275; one second-hand tubular boiler, four horse-power for \$150. LAPHAM & WELCHMAN, 42 4* 27th st., near 11th avenue.

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*

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.

EXCELLENT SAW GUMMERS FOR SALE.—Very low, by G. A. KIRTLAND, 205 South street, N. Y. 41 6*

DRAUGHT BOARDS, PATENT.—23 by 29 inches. Ready sales their best recommendation. Cheapest instruments in use. Complete for \$10. Sent by Express. Direct (post-paid) to H. W. CHAMBERLIN, Pittsfield, Mass. 40 tf

MARYLAND INSTITUTE FAIR.—The Board of Managers of this Institute will hold the Fifth Annual Exhibition in the Grand Saloon of the Institute Building, in the City of Baltimore, commencing on the 4th day of October next. The great facility thus afforded for a splendid display of American Manufactures, they hope, will be a sufficient inducement for the Manufacturers, Mechanics, Artists, Inventors, and others throughout the United States, to contribute such specimens of their industry, skill, and ingenuity, as shall be alike honorable and creditable to the mechanical genius and refined taste of the country. The Hall will be open for the reception of goods on Monday the 27th Sept. next, from which time to Thursday night, Sept. 30, articles intended for competition and premium must be deposited. The balance of the week will be devoted to the reception of articles intended for exhibition only, free of charge. After which time depositors will be subject to a charge of 50 cents to \$1. On Monday, Oct. 4, at 7 o'clock, P. M., the Exhibition will be open for the reception of visitors. Circulars containing the regulations and arrangements established by the Standing Committee on Exhibitions, can be had by addressing (post-paid) JOHN S. SELBY, Actuary of the Maryland Institute, by whom any information required will be promptly given. 39 7

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. WOOLCOCK & OSTRANDER 57 Ann street, New York. State and County Rights for sale. 40 13

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. 40 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 Round; 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 \$28—boxed and shipped with directions for setting up. Address (post-paid) MUNN & CO. At this Office.

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*

TO STEAM ENGINE BUILDERS, OWNERS, and Engineers.—The subscriber having taken the agency of Aschroft's Pressure Gauges, would recommend their adoption to those interested. They have but lately been introduced into this country, but have been applied to many of our first-class river and ocean steamers, and on several rail roads, on all of which from their simplicity, accuracy, and non-liability to derangement, they have given the utmost satisfaction. CHAS. H. COPELAND, Consulting Engineer, 64 Broadway, N. Y. 43 5*

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, Kases, 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; Mortising 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. 25 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

THEODOLITES, RAILROAD TRANSITS, AND LEVELS.—Drawing Instruments, Microscopes, Telescopes, Electro-Magnetic Machines, Galvanic Batteries, Daguerreotype apparatus, Barometers, Thermometers, &c. Manufactured and for sale wholesale and retail by JOHN ROACH, Optician, 79 Nassau st., N. Y. 42 5*

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

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. 27 18*

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. 27tf 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*

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 1y*

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 Gummings 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. Man'g Co. 26tf