

TO CORRESPONDENTS.

G P, of Mich.—We think there is no journal of chemistry and pharmacy published here: the article upon inks you will find in one of our late numbers.

S. V. S., of Pa.—The balance, after paying for the subscribers you sent, we have passed to your credit on subscription, which will render the time of expiration with you No. 52 Vol. 7.

E. S., of Mich.—The best work on Mechanical Drawing, with which we are acquainted, is Minifie's: price \$3, exclusive of postage.

R. C. K., of Fla.—The package of back numbers of the Scientific American, which you ordered sent to your club by vessel, was shipped on the 16th inst., in the bark Glen, addressed as you directed. We thank you very kindly for raising so large a club for us.

A. P. R., of N. S.—We do not think your suggestion about the steam could be made practically useful: we believe it has been tried. The respirator is, without doubt, a useful article; in many places it has been employed to advantage—patents already exist in this country for the same article.

J. S. D., of Tenn.—Your drill is not patentable: Hall's patent covers all the novel points.

A. W., of Pa.—We think such instruments as you require can be had of Benj. Pike, Jr., 294 Broadway. No new publications upon the subject has appeared of late.

D. W., of Mass.—Your inquiry about the shingle machine is not understood by us.

A. C., of Ct.—No wonder we misapprehended the purport of your letter, but it was not our fault. We will be happy to hear of your success with the boiler, but you must consult economy of construction as one element of useful improvements.

H. J., of N. Y.—You ask, 'what would be the increase of power in your re-action wheel, with one discharge, if two openings of discharge are made—and what would be the horse-power moving under a head of 95 feet?' We cannot tell, for you have not stated whether a pint of water or 50 cubic feet are discharged per second: 'the power is as the quantity of water and perpendicular height.'

J. C., of R. I.—We must say, without any further consideration, that no such a thing as a self-acting motive power—perpetual motion—can be constructed: it is against the well-tried laws of mechanics. We have had the same plan as yours submitted to us a number of times—once from Mr. W. Foster, of this city, and once from Mr. J. Harvey, now of Indiana: don't spend money on it, for the power required to raise one of your floats, is just equal to the power required to sink its fellow.

D. P. A., of Ohio.—There is no publication devoted to carving that we know of, and presume there is none.

H. T., of N. Y.—You inquire what we think of it: we reply—well; send a model.

H. F., of Pa.—There is nothing in your arrangement for cutting sausage meat that will interfere with any existing patent, and it appears to us that it has new and patentable features in it: you had better send us a model.

J. M. C., of N. Y.—If your fountain pen is different from others in use, a patent could be obtained for it. The idea of supplying ink to a pen from the stock that retains it when not in use is well known, and patents have been issued for a number.

R. E., of Pa.—We know nothing of the utility of the Digestive Fluid: pepsin relates to a peculiar animal principle secreted by the stomach, and present in the gastric juice. There are many nostrums offered in the market that we have no confidence in; a well bred physician is more competent to prepare remedies than a majority of those claiming to have discovered wonders.

S. W., of N. Y.—There is no patentable combination in your device, and would be rejected for want of novelty.

Money received on account of Patent Office business for the week ending December 20.

C. A. M., of N. Y., \$38; G. W., of N. Y., \$60; C. B., of O., \$50; A. G. B., of Mass., \$50; W. B. O., of Ct., \$30; J. J., of N. J., \$55; W. D., of Pa., \$50; A. S., of Pa., \$10; S. M. P., of Pa., \$20.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Dec. 20:—
C. & J. K., of N. Y.; J. J., of N. J.; S. M. P., of Pa.

An Important Paragraph.

Subscribers names, as they now come in, will be entered to commence with No. 14, the first number on the second quarter, unless the back numbers are expressly ordered.

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.

Sending Receipts.—Postage on Books.

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,—complete sets, bound, \$2.75.
Of Volume 6, all; price in sheets, \$2; bound, \$2.75.

ADVERTISEMENTS.

Terms of Advertising.

One square of 8 lines, 50 cents for each insertion.	
" 12 lines, 75 cts., " "	
" 16 lines, \$1.00 " "	

Advertisements should not exceed 16 lines, and cuts cannot 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 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.

TO STAIR BUILDERS.—The Universal Stair Builder, just published by R. A. CUPPER, Architect, New York, shows plans of the various forms of Stairs, with a new method of sawing the twist part of any handrail and joints, square, from the face of the plank, and to a parallel width, the same as for any horizontal work, which can be done at the saw-mill for one-sixth part of what it costs by hand. The saving of material and labor is from 50 to 100 per cent. The work is beautifully executed, and the diagrams drawn to a large scale, so that the simplest mind can understand it. Price \$6. For sale by Wm Gowans, 178 Fulton st., N. Y.; Benjamin Green, 324 Washington st., Boston, Mass., and at 240 West 26th st., N. Y. Books can be forwarded to any part of the United States, by enclosing the money. 15 3*

WATER POWER, &c., For Sale—Or Lease for a term of years, a small but very valuable Water Power, together with machinery for manufacturing carriage hubs; also three circular saws, one upright saw, and one lathe—all in running order. The water is taken after being used by other machinery, is conveyed in a stone race to and from the building, so that a very trivial, if any expense, can possibly ever accrue. Also two very pretty Cottages, nearly new, and one building lot. The above property is situated in the beautiful and flourishing village of Windham Centre, Greene Co. N. Y., on the Catskill and Ithaca turnpike, 25 miles west of the Hudson river; a plank road from thence to Coxsack is finished to within 9 miles. Most kinds of lumber plenty at from \$5 to \$8 per M. Price for the whole, \$2,000. For other particulars, address DOTY & DOTY, Windham Centre, N. Y.

NOTICE To Railroad Companies.—Mr. Robt. Griffiths has taken measures to procure a patent for his improved machine for Making Railroad Chairs of any kind that can be made of wrought-iron, superior to any now in use, with much less labor than usual. The machine will be ready for operation in a few days, and contracts will be received, and met with immediate attention, by addressing ROBERT GRIFFITHS, care of Reynolds, Kyt & Tatum, Water street, Cincinnati, Ohio. 1*

WANTED.—Estimates for a Steam Saw Mill, of from 25 to 35 horse-power, to be built on the St. Johns River Florida. Estimate No. 1—With steam engine, boiler, pipe, gearing, belting, tools, apparatus, and everything furnished complete, except building materials. Estimate No. 2—Same as above, with the exception of steam engine and boiler, complete, which will be furnished by the owner. Estimate No. 3—For erecting the above, provided all the materials are furnished by the owner, and means of conveyance found. Address (post-paid) Wm. L. M. BUTLER, care of H. H. Salmon, 30 Front st., New York. 1*

VENTILATION.—Mr. Ruttan, of Coburg, Canada, is desirous of an opportunity to direct the erection (for ventilation) of a good dwelling or school house in the city of New York. For particulars inquire at the Scientific American Office. 15 10*

WANTED.—To purchase, 10 or 12 ring and traveller Twist and Milling Frames, of 132 to 160 spindles each, new or second hand, in first rate order—also one pair of hand mules, of 500 to 600 spindles, each second-hand. Address DAVID TRAINER, Marcus Hook, Pa. 15 4*

HAWKIN'S Stave Dressing Machine.—Is now in operation in the city of Milwaukee, Wis., and will dress from 6 to 8000 staves per day, ready for the truss hoops, and at one operation. Rights for States and Counties, and also machines, for sale, apply to WM. HAWKINS, Patentee, Milwaukee, Wis. 15 20*

ADIRONDAC American Cast Steel.—This steel has recently been greatly improved in uniformity, soundness, strength, and toughness. It is purely American, and will be sold as low as the imported; this improved quality is warranted superior to any other in market. Friends of home industry are requested to try this new and uniform steel.

QUINCY & DELAPIERRE,
Warehouse 81 John st., N. Y. 15 6*

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 Manilla 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 Blanchard & Parsons, and warranted. Samples furnished at the office, No. 187 Water street (2nd story), New York. 14 6m* **BLANCHARD & PARSONS.**

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

TRAUTWINE ON RAILROAD CURVES.—By John C. Trautwine, Civil Engineer, Philadelphia; just published and for sale by WM. HAMILTON, Actuary of the Franklin Institute. Price \$1. "This is a really good work, and we heartily recommend it to our civil engineers."—[Scientific Am.] "We have carefully examined this work, and regard it as the best that has yet appeared on the subject." &c.—[Am. Railroad Jour.] 8 10*

POST'S PATENT SLIDING DOOR FRONTS.—For Stores and Public Buildings; a new, cheap, and simple fixture for securing store fronts, which renders them fire and burglar proof, has been invented and patented by the subscriber, who is now prepared to sell rights. Messrs. Quarterman & Son, 114 John st., N. Y., are general agents. Address (post paid) Wm. POST, Architect, Flushing, L. I. 6 8m

PROFESSOR ALEX. C. BARRY'S TRICOPHEROUS OR MEDICATED COMPOUND.—Professor Barry does not hesitate to put his Tricopherous, for the two grand requisites of efficacy and cheapness, against any preparation for cleansing, renewing, preserving, and strengthening the Hair, that has ever been advertised or offered for sale. He challenges the associated skill and science of the medical world to produce, at any price, an embrocation that will reduce external irritation, cure ordinary cutaneous diseases and severe cuts, sprains, pains, &c. Sold in large bottles, price 25 cents, at the principal office, 137 Broadway, New York, and by the principal merchants and druggists throughout the United States, Canada, Mexico, West Indies, Great Britain, France, &c. 4 12*

BILLINGS PATENT BAND WRENCH, for Wagons and Carriages.—This article is fully described and illustrated by engravings in No. 7, Vol. 7, of the Scientific American. The Patent Band Wrench applies to wagons and carriages where the common square nut is used. They are perfectly tight and prevent all dust and dirt from reaching the axle. The wheel is taken off by means of a small pocket key. A Silver Medal was awarded this article by the American Institute at their late Fair in this city. The Bands are manufactured by the Patent Band Wrench Co., located at Claremont, N. H. Smith Van Horn & Co. are the agents for this city. Orders addressed to them, as above, will meet with prompt attention. **A. M. BILLINGS,** 12tf General Agent for the Co.

ENGELBRECHT & HOOVER, No. 257 Broadway, (Opposite the Park), New York, in the business of a general Patent Agency, and matters connected with the purchase and sale of inventions and patents. At the above establishment any acknowledgment good invention, or Letters Patent, can be purchased or sold for any portion of the United States or Europe. 12 4*

DR. T. F. ENGELBRECHT, T. D. HOOVER.

PATENT CAR AXLE LATHE.—I am now manufacturing, and have for sale, the above lathes; weight, 5,500 pounds, price \$800. I will furnish a man with each lathe, who will turn and finish axles for 50 cents each, if desired. 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. 7 6m*

THE SUBSCRIBER has on hand several improved Steam Engines of superior quality, and made of the best materials, particularly adapted to manufacturing, saw mills, flour mills, &c. He will also make to order, at the shortest notice, engines and boilers of from 2 to 50 horse power, with all their appendages; prices reduced. Also, shafting, mill gearing, saw mills, presses, drills, &c. He has also facilities for furnishing lathes, planes, and scroll chucks, of the most approved styles and patterns, at short notice. Chain pumps always on hand, wholesale and retail, at No. 4 Howard st., New Haven, Ct. 10 7* **AARON KILBORN.**

1851 TO 1856.---WOODWORTH'S PATENT Planing Machines.—Ninety-nine hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's Machine. Price of the machine 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. 9 10*

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. 11tf

BALLOONS.—I am prepared to manufacture Hydrogen Balloons of from 1 pound to 50,000 lbs. ascending power to order. Balloons capable of carrying up one or two persons always on hand. The Balloons will be of the most perfect construction, so that any person can, with certainty and safety ascend with them. Instructions to insure success given to purchasers gratis. **JOHN WISE,** Lancaster, Pa. 9 10*

TO BLACKSMITHS AND SPRING MAKERS.—The undersigned has an application for a patent now pending at the U. S. Patent Office for an improved Elliptic Spring Joint. Its expense is only one-fourth as much as that of those in common use. Upon the receipt of one dollar, a fine descriptive engraving of this joint with directions for constructing the same, will be sent to any person so remitting, and also one individual right to make, use, and vend the same, as soon as the patent is issued. This is an untried invention; it has been tested with perfect success, and reliable certificates from those who have used this joint, will be given on application, post-paid, to S. S. BARRY, Brownhelm, Lorain Co., Ohio. 13 3*

P. W. GATES'S PATENT DIES FOR CUTTING 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*

CHAS. W. COPELAND, Consulting and Mechanical Engineer, Surveyor of Steam Machinery, &c., No. 68 Broadway, N. Y.—Superintends the construction of steam vessels, and steam engines and machinery of every description; specifications and contracts prepared; also, general plans and drawings in detail furnished. Steam engines surveyed and valued, and condition reported. Mr. C. also acts as agent for the purchase and sale of steam vessels, steam engines, boilers, &c. 14 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. 9tf

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.** 5tf

WATTS & BELCHER, Manufacturers of Steam Engines, Lathes, Planing Machines, Power Presses, and Mechanics' Tools of all descriptions. Orders respectfully solicited and punctually attended to. Washington Factory, Newark, N. J. 7 20*

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. 9tf

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; Mortising and Tennoning 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. 1tf

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. N. Y. 11f

MALLEABLE IRON FOUNDRY, EASTON, Mass.—The subscriber continues to manufacture castings of every variety, for machinery and other purposes, of the best quality, at the above establishment, we have facilities for making castings 5 1-2 feet in length. Persons wishing castings can send patterns to Easton Express, Boston, Mass. All letters will be promptly attended to. 8 10* **DANIEL BELCHER.**

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. JOHN-SON,** New Haven, Ct.; or **WM. WOOD,** Westport, Ct.; All letters will be promptly attended to. 37tf

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 tennoning 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 presses. Leather Banding of all widths made in a superior manner; manufacturers' Findings of every description. **P. A. LEONARD.** 10tf

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*

RAILROAD CAR MANUFACTORY—TRACY & FALES, 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 not be surpassed. **JOHN R. TRACY,** 39tf. **THOMAS J. FALES.**

BEST CAST STEEL AXLES AND TYRES, (a new article), for Railroad Carriages and Locomotives. The quality of this steel is sufficiently attested in the announcement that it has carried off the first prizes awarded at the World's competition of 1851, in London. The axles are in general use on the Continent, and are now offered in competition with any other that can be produced; and to be tested in any way that may be desired by the engineers of the United States, either by impact or by torsion. This steel is manufactured by Fried Krupp, Esq., of Essen, in Rhenish Prussia, represented in the United States by **THOS. PROSSER & SON,** 28 Platt-st., N. Y. 2tf.

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, circular and tower cupola—for sale by **G. O. ROBERTSON** Liberty place, between 57 and 59 Liberty-st. (near the Post Office) N. Y. 7 12*

MCCORMICK'S PATENT REAPERS AND MOWERS.—1700 of these machines, for which the great Medal of the World's Fair was awarded, are being manufactured at Chicago, Ill. with the intention of supplying the South-eastern States for the next harvest. The gold medal of the Chicago Institute was recently awarded for this Reaper and Mower, tested against two other mowers, in cutting prairie grass; and the first premium of the State Agricultural Societies of Wisconsin, Michigan and Pennsylvania, were also awarded at their late Fairs. Price \$120 at Chicago, and \$122 delivered at Philadelphia; terms otherwise accommodating. 9tf