# Scientific American.

#### TO CORRESPONDENTS.

J. R., of Mass.-You cannot get a tough metal mixed with tin and zinc—it will not do.

S. N. P., of Mo.-We have never seen the same plan of the float and weight, as the one you have sent. Theonly plans in use are the float inside attached to a valve, so as to pull up the valve when the float sinks below a certain level.

F. C. W., of Ohio.-There is not the slightest chance for you to obtain a patent on the washing advertising columns at any price. machine; similar arrangements of crank levers and driving wheels are and have been common for years, and plans much more simple than yours are in use producing like results. You cannot obtain a patent.

E. S. Z., of Md.-You cannot protect yourself in the manufacture of such an article as you speak of; it would be common to all.

A.S., af N.H.-It is doubtful about your being able to obtain a patent. We have seen matches set upon blocks where no waste of wood took place in the preparation, the blocks being split vertically, and left to hang together, substantially the same as yours.

J. T. W., of Ohio-We have transmitted your sketch to Mr. Smith for his attention-

R. & S. H., of Ind.—We suppose the Fair of the American Institute will open about the 1st of October; no announcements have as yet been made. There are machines for folding papers, books, &c. You had better send us a drawing of yours, that we may determine upon the difference between yours and others. The model of the brake can be sent to the American Institute.

A. J. G. of N. Y .- A fee of \$30, paid into the Patent Office, covers as many claims as can be made on the machine.

J. M T., of Ill,-We thank you for the information in regard to the reaper; we would use it, but it would involve us in a personal matter, which we al ways avoid.

C. A. R., of Texas.-We have requested a manufacturer in this city to give such information about the magic lanterns as you desire.

W. M., of Geo.-Reuben Rich's Water Wheel was patented July, 1842.

L. S., of Ohio-We do not know where you can obtain the publications mentioned in yours of the 18th. Mr. H. Bailliere, 290 Broadway, is an importer and publisher of scientific books, and could doubtless

W. P., of Mo.-There is nothing new in your chain paddle wheel. The plan is well known and has been formany years.

P. W. C., of Eastville-We think Mr. Verleger's invention different from Everett's.

B. W. G., of Ct.--The application of gutta percha to the manufacture of chess-men is not patentable.

It could be employed for that purpose, mixed with some non-conducting substance like black lead, as gutta percha softens under slight heat.

A. C., of Ct.-The arrangement for supplying the boiler with water is not patentable, for it has been often done upon the same principle. The principle of Lord Dundonald's Boiler, last week, and Montgomery's this week, in the Sci. Am, embrace that of yours in relation to the circulation of the water.

J. B., of N. J .- If you mean to work the boat by steam, it would be cheaper to propel the boat at once by having the engine on board; but it may not be for the purpose you want it; we shall try and find

Money received on account of Patent Office busi-

Money received on account of Patent Office business or the week ending March 27.

W.S. of N. Y. \$30; J.S. & S. J. M., of Ct., \$20;
M. & T., of Mass., \$10; F. & H, of Mass., \$20; E.
D., of N. Y., \$25; R. F. W.
N. Y., \$25; T.J E., of N. Y., \$30; V. E. R., of Ill.,
\$60; J. H., of O., \$50; W. McQ., of N. Y., \$30; N. B.,
of R. I., \$30; D. S., of N. Y., \$25; J. A. B., of N.
Y., \$20. J. T., of N. Y.. \$30.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending March 27: W. T. P. & R., of N. Y.; J. S. & S. J. M., of Ct; E. H., of N. Y.: C. W. G., of N. Y.; D. S., of N. Y.; J. A. B., of N. Y.; H. G. DeW., of N. Y.

# New Arrangement.

Several of our readers have expressed a wish to subscribe for some literary journal in connection with the Scientific American, not feeling able to take both. We have entered into an arrangement with the publishers of the "American Model Conrier," of Philadelphia, and the "American Union," of Boston, which will enable us to furnish either of the two, with the Scientific American, for \$3 per annum. They are literary journals of the first order and are widely circulated in all sections of the

Parties cannot be allowed an addition of one of the Literary papers, as above, by remitting a single dollar after paying their year's subscription to the Scientific American, and money received under such circumstances will be credited in continuance of the Scientific American.

## 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 par ticularly requested to remit sufficient to pay pos-

### ADVERTISEMENTS.

Terms of Advertising. 4 lines, for each insertion, 8 " \$1,00 12 " " \$1,50 16 " 66 - - \$2.00

Advertisements exceeding 16 lines cannot be admitted; neither can engravings be inserted in the

All advertisements must be paid for before in

Zinc Paints—THE NEW JERSEY ZINC CO.
will supply their pure Zinc Paints at the following prices:—No. 1, white ground in oil, 9c per lb.; No. 3 do. 7c. per lb.; brown and black, 5 1-2c. per lb.; thy white zinc 6c. per lb. White zinc paint after several years use in Europe and the United States, has been found to retain its protective properties longer than any other paint, and for whiteness and brilliancy is unrivalled; it is free from poisons; while the same weight covers from 40 to 100 per cent. more space according to surface than the same weight of lead paint. Their Brown and Black zinc paints form a hard metallic coating upon wood, brick, iron, &c, which defies the corroding action of salt water. Dealers supplied on liberal terms by MANNING & SQUIER, 1\* Agents, No. 45 Dey street, New York.

STATE AGRICULTURAL WAREHOUSE-LONGETT & GRIFFING Assistant D LONGETT & GRIFFING, dealers in Agricultural Implements, No. 25 Cliff st., (near Fulton), New York. Field and Garden Seeds. Guano and other Fertilizers.

G. NORCROSS'S ROTARY PLANING
MACHINE UNEQUALLED—This machine
took the first medals awarded to Rotary Planers at
the Fair in Boston and at the American Institute, in
the Fall of 1850. The Circuit Court. in the Eastern
Circuit, held at Boston on the 24th Feb., before his
honor Judge Sprague, decided, after a long and tedious litigation of two years, that the Norcross Machine does not infringe the Woodworth Patent; this
was on a motien for a permanent injunction, which
was refused without ordering a jury trial. Rights
to use this patent are for sale by N. G. NORCROSS,
Lowell, Mass.

To LUMBERMEN-E. H. & S. E. PARSONS, inventors of the Salf strain To LUMBERMEN—E. H. & S. E. PARSONS, inSaw Frames, for saw-mills, combining the advantages of both the muley and gate mills and superior to
either, reducing the wear and tear to about onefourth. The saw will bear as much feed, and is as
easily kept in order, and is warranted to saw the
same amount of lumber with one-fourth less power.
They may be seen in snccessfuloperationat the Empire Works, Binghampton, Broome Co., N. Y., where
they are manufactured, and at Frankfort, Ky., and
Cass, Tenn, For further particular address (postpaid) Wilkesbarre, Pa.

29 5\*

DRAUGHT BOARDS, PATENT-23 by 29 inches, various scales, else 1 Dinches, various scales; also Paper Fasteners, all for quick work, superior to fig. 3 in Sci. Am, No. 2 Vol. 3. \$10, with T Rule. Sent by Express, Direct (post-paid) to H. W. CHAMBERLIN, Pittsfield, Mass.

MPORTANT TO IRON FOUNDRIES—The Galvanic Alloy Manufacturing Co., Nos. 401, 403, and 405 Cherry st., N. Y., will furnish the Aerosta tic Fan Blower at \$55, and with patent fitting at \$65, that produce sufficient blast for the longest 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 \$\$50 to \$100. The wings, being only about an inch in width (planned upon entirely new and mathematical principles), produce double the blast withhalf the power of other blowers. Warranted in all cases, or they may be returned and the money refunded.

29tf.

NSTITUTE FOR SURVEYORS AND ENGI-INSTITUTE FOR SURVEYORS AND ENGINEERS, West Bloomfield, N. J.—The next session of this Institute will commene May 1st, and continue five months. The course of study embraces Trigonometry, Mensuration of Surfaces and Solids, Heights, and Distances; Navigation, Surveying, Conic Sections, Descriptive and Spherical Geometry, Industrial Chemistry, Physics, Industrial Physics, Mechanical Philosophy, Architecture, Steam Engines, Mechanical and Architectural Drawing, &c., &c.—Terms—For board, washing, fuel, lights, and tuition, per Session of five months, \$125. No extras. References—Geo. Gifford, 17 Wall st.; S. R. Parkhurst; Maj. J. D. Stevens, U. S. Engineer; J. W. Adams, 25 Nassau st. WARREN HOLT, Principal. 29 2\*

MECHANICAL DRAWINGS-J. H. BAILEY Maraughtsmen, agent for the sale of patent rights' inventions, machinery, &c.; office Tryon Row, Harlem Railroad Buildings, opposite City Hall. 1\*

BAILEY'S LATHE—For Turning Broom and other Handles, Chair Stuff, straight, swelled, or tapering, warranted to do twice the work of any other lathe. Address L. A. SPALDING, Lockport, N. Y.

MORSE'S AIR DISTRIBUTOR—For Burning Sawdust and Tan to generate steam—no steam saw mill is complete without it. Rights to use it in the State of New York for sale by L. A. SPALDING, Lockport, N. Y; or JOHN A. CAMPBELL, Buffalo,

PORTER'S GRADUATING VALVE TUYERE each fire wholesale and retail day to each fire. For sale, wholesale and retail, a No. 9 Gold st. W. J. & J. H. BURNETT. 284\*

SCHENCK'S MACHINERY DEPOT, No. 64 CHENCK'S MACHINERY DEPOT, No. 64
Courtland st., N. Y.—Has on hand a great variety of Slide and Hand Lathes, Upright Drills, Steam Engines, of 51-2 and 6 horse power, and will receive order for engines of any size; Universal Chucks, Iron Planers, White's Patent Lathe for turning Railroad Car Axles, Hand Punches, and Shears; F. Harriss & Son's Saut and Scouring Machines; Fairman's Chuck Lathe for Boring Car Wheels, &c., all of which I will sell as low and upon as accommodating terms as any house in the city.

27 5\*
SAM. B. SCHENCK.

MORTISING MACHINE.—Dear 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., 1851.

This machine is simple, durable, and effective, and is boxed and shipped for the low sum of \$20.

MUNN & CO.

TEAM ENGINES AND BOILERS—The pa-TEAM ENGINES AND BOILERS—The patentee is now ready to supply orders for steam engines with Ayer's Patent Improved Boiler of any size required. These boilers occupy but little space, an be set up without brick work, and will make more steam with the same fuel than any other boilers. A self-acting feeder furnishes a constant supply of water, preventing thereby, in a great degree, the danger of explosion. Where doubts are entertained as to the superiority of these boilers, I will be content to receive for the right one-fourth of the value of the fuel saved by their use. Portable engines furnished to order. E. AYER, Patentee, Norwich, Conn. 267\*

JOHN W. GRIFFITHS—Ship Builder and Ma-rine Architect. 658 Fourth of N. W. 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 impulsion. Propelling power located and proportionably 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 13\*

EONARD'S MACHINERY DEPOT. 109 Pearl-st and 60 Beaver, N. Y.—Leather Banding Manufactory, N. Y.—Machinists'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.

27tf P. A. LEONARD.

COTTON MACHINERY—One new Ring and Traverser Warp Frame, 156 spindles, and three new Looms, built in the best manner by the Mateawan Co., and for sale at 60 Beaver st., N. Y., by P. A. LEONARD.

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

CLOCKS FOR CHURCHES, PUBLIC BUILDINGS, RAILROAD STATIONS, &c., and REGULATORS FOR JEWELLERS.—The undersigned having succeeded in counteracting entirely the influence of the changes of the temperature upon the pendulum, and introduced other important improvements in the construction of clocks, are prepared to furnish an article superior to any made in the furnish an article, superior to any made in the United States, (the highest grade warranted to vary less than two minutes in twelve months). Glass dials for illumination furnished. Address SHERRY & BYRAM, Oakland Works, Sag Harbor, Long Island, N. Y.

and, 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." of Commerce.

THE SUBSCRIBER is now finishing four 14
horse engines, with boiler and apparatus all complete—price \$1200 each. Several 6 horse engines extremely low: also, several of smaller capacity, completely; also, several power plainers, now finishing. Galtznized chain for waterelevators, and all fixtures—price low—wholesale and retail. Orders, post paid, will receive prompt attention. AARON KILBORN.
No. 4 Howard st., New Haven, Ct. 23 10\*

TO FELLOE AND SNATH MAKERS—The undersigned having purchased the entire right of A. W. Johnson, for his machine for bending carriage felloes, &c., are now prepared to sell State or county rights for said machine; having used said machine for several years, we know it to be a saving in timber of 30 per cent, and more expeditious. Persons can see one of the machines at work at the manufactory of W. S. Johnson & Co., St. George's, Del.; also felloes of allkinds. Shafts and carriage stuff always on hand, and at prices to suit dealers in the above.

WM. G. JOHNSTON & Co., 22 10\*

St. George's, Del. above. 22 **1**0\*

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 our new and extensive assortment of fine English (Stubbs) and Swiss Files and Tools; also our imported and own manufactured Mathematical Drawing Instruments of Swiss and English styles—which we offer at very reasonable prices. Orders for any kind of instruments will be promptly executed by SIBENMANN & QUARTIER, Importers of Watchmakers' and Jowellers' Files and Tools and manufacturers of Mathematical Instruents, 15 John st. 23 13\*

TRON FOUNDERS MATERIALS—viz.: fine pulverized Sea Coal, Anthracitic and Charcoal, Black Lead and Soapstone Facings. Iron and brass moulding sand; Core sand and flour; English Fire Bricks for cupolas, &c. Fire Sand and Clay—for sale by G. O. ROBERTSON Liberty place, (near the Post Office) N. Y. 23 10\*

TRACY & FALES, RAILROAD CAR MANU-FACTURY—Grove Works, Hartford, Conn. Pas-senger, Deight, and all other descriptions of railroad cars and locomotive tenders made to order promptly

Post's PATENT SLIDING DOOR FRONTS

-for stores and Public Position. The 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 and Son, 114 John st, N. Y., are general agents. Address, (postpaid) Wm. POST, Architect, Flushing, L. I. 25tf

NEW HAVEN MANUFACTURING COMpany, Tool Builders, New Haven, Conn., (successors to Scranton & Parshley) have now on hand \$25,000 worth of Machinist's Tools, consisting of power planers, to plane from 5 to 12 feet; slide lathes from 6 to 12 feet; slide 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 bestquality, 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.

BEARDSLEE'S PATENT PLANING MA-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. foundry—or at his residence hanv. GEO. W. BEARDSLEE.

DAINTS, &c. &c.—American Atomic Drier, Graining Colors, Anti-friction Paste, Gold Size, Zinc Drier, and Stove Polish. QUARTERMAN & SON, 114 John st., 23tf Painters and Chemists.

MACHINERY.—S. C. HILLS, No. 12 Platt-st. N. Y. dealer in Steam Project. MACHINERY.—S. C. HILLS, No. 12 Platt-st. N. Y. dealer in Steam Engines, Boilers, Iron Planers, Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Machines; Woodworth's, Daniel's and Law's Planing machines; Dick's Presses, Punches and Shears; Morticing and Tennoning 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.

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 Eastern Express, Boston, Mass. All letters will be promptly attended to.

2110\* DANIEL BELCHER.

Wood's IMPROVED SHINGLE MACHINE WOOD'S IMPROVED SHINGLE MACHINE
We 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-raid) JAMES D. JOHNSON, Bridgeport, Ct.; or W.M. WOOD, Westport; Ct.,
All letters will be promptly attended to. 22tf

THE EXCELSIOR Sand and Emery Papers. 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 freeness 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 WM. B. PARSONS, and warranted. Samples furnished at the office, No. 187 Water street, New York. WM. B. PARSONS, 14 6m\* Sole Proprietor.

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 promptattention 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\*

MACHINIST'S TOOLS.---Marshall, Bement & Colby, (successors to E. D. Marshall & Co.) Callowhill street, west of Schuylkill Third, Philadelphia, Pa., are prepared to make to order, and keep on hand Machinist's Tools, such as Planing and Compound Planing Machines, on a new and improved plan, Slide and Hand Lathes, Upright and Horizontal Drills, Upright Boring Machines, Improved Screw and Bolt Cutting Machines, with P. W. Gates' Patent Dies and Taps, or with the common Dies, Gear Cutting Engines, Slotting and Paring Machines. Also keep on hand Washburn & Whiton's Patent Scroll Chucks, of all sizes. All orders by letter or otherwise will of all sizes. All orders by letter or otherwise will receive their prompt attention. E. D. MARSHALL, WM. B. BEMENT, G. A. COLBY. 21 10 \*

CHAS. W. COPELAND, Consulting and Mechanical Engineer, Surreyor of Steam Machinery, &c., No. 68 Broadway, N. Y., superintends the construction of steam vessels and steam engines, and 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, steamengines, boilers, &c. 21 10\*

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

PATENT CAR AXLE LATHE—I am now manufacturing, and have for sale, the above lathes; weight, 5,500 pounds, price \$600. 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.

T OGAN VAIL & CO., No. 9 Gold street, New I ork, agents for George Vail & Co., Speedwell Iron Works, have constantly on hand Saw Mill and Grist Mill Irons, Press Screws, Bogardus' Horse-Powers, and will take orders of Machinery of any kind, of iron and brass; Portable Saw-mills and Steam Engines, Saw Gummers of approved and cheap kind, &c. Gearing, Shafting, large and small, cast or of wrought iron.

11 1y

HAWKIN'S Stave Dressing Machine—Is now in operation in the city of Milwaukie, 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, Milwaukie, Wis. 15 20\*

1852 TO 1856.---WOODWORTH'S PA-tent Planing, Tongueing, Grooving, Ra-beting, and Moulding Machines.—Ninety-nine hun-dredths of all the planed lumber used in our large cities and towns continues to be dressed with Wood-worth's Patent Machines. Price from \$150 to \$760. beting, and Moulding Machines.—Ninety-nine hundred machines, of the best construction, capable of drilling holes from one-eighth inch to three inches diameter, with a suitable feed, manufactured and for sale at the Atlas Foundry, corner of Green and Wayne sts., Jersey City. JOHN D. WARD. 27 4\*