# Scientific American.

### TO CORRESPONDENTS.

G W. S., of N. J.—You must submit your plans to Mr. Ray, at the opening of the next fair of the American Institute. As yet they appear to be crude, and must needs require more thought. The suggestions do not seem to meet the necessity in the case.

C. L., of Ohio.-We have examined yours of the 17th inst, and would state that the employment of a mirror for the purpose described, is absurd, and of no value. No corporation would place any reliance upon it, or the self-acting switch, as there are a vast number of the latter patented but not used. The plan to prevent breakage of wheels and axles is not so simple as the one noticed in our last number, and we cannot recommend it.

G. W. S., of N. J.-We had a pendulum in our of fice a year ago, which covered all the points represented in yours. It was lefthere by an inventor from the interior of the State. Have not learned of

his having done anything with it.

I. H. B., of Ohio.—We think your saw-filer new and patentable, but would scarcely dare venture to praise or condemn it. There are more simple contrivances employed for the purpose, which we believe work well. You can determine its utility by practice alone. \$1 received.

W. B. N., of Ten .- The loss allowed between the boiler and cylinder of a high pressur engine is about 3 per cent. A square yard of heating surface is allowed for a horse power.

W. M., of Ill.—We could not give you the information by word; it is of a kind which alone can be ac quired by practice. Try and get a good sawyer.

E. T., of Va.—You will gain some power by the use of your re-action wheel. A model showing the improvement is all that is required, but we give you no encouragement about getting a patent.

G. W. C., of-A steam engine of ten horse power would answer your purpose. The cost, boiler and all, would be about \$1000. for a good one. We are not acquainted with the price of machinery for kiln drying grain, &c.

I. R. K., of Geo.—The apparatus will not answer for making gas from pitch pine, but the common gas retorts will. The gas from oil does not require to be purified like coal gas. We do not know what price Booth's apparatus could be procured for. We believe, if resin is cheap in your place, that the common gas apparatus—the same as that used in cities, but smaller, would be found profitable and pleasan by you. Many of the factories here use coal gas. If a person is desired to put up either a coal or oil apparatus, an advertisement in our columns would, we believe, find the man.

B. E. P., of Vt -Tell your friend not to expend a single penny on machinery for pumping up water by chain pumps in expectation of gaining any power. A water wheel cannot pump up quite so much water as it takes to move it, and it makes no matter what kind of pumps are used. This is according to the principles of mechanics.

C. H. S., of La.-We have your favor of the 8th inst. You had better correspond with F. H. Smith, of Baltimore, about the machine. We shall send the paper 6 months to Mr. R.

C. C., of Mass.—The spring you suggest is not new; it has been long known. Hammers are sold so very cheap, that it would scarcely pay to construct such a handle as you offer for consideration. We do not think a patent could be obtained for it.

W. N., of Ill.-The weight on the sash is an ad vantage to prevent vibration of the frame, but then it must be proportioned to the work it has to do. We like the frame saw best.

H. G., of Mo.—We do not perceive any new feature in your method of constructing blinds, or in operating them. Iron plates are much in use here, both for outside and inside blinds, and the rack and pinion for operating them is well known, but little used. The same device you describe was at one time employed on the wooden blinds of our own

Money received on account of Patent Office busi or the week ending February 28.

C. P., of N. Y., \$30; E. N., of N. H., \$35; C. W G., of N. Y., \$30; S. T. F., of Ms., 20; D. H, of Va.,

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Feb. 28:-J. M., Jr., of Ct.; S. B., 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 Courier." of Philadelphia, and the "American U of Boston, which will enable us to furnish either of a set of 1 octave chromatic keys is 75 cts. 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

hand. We make this statement to save time and

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 touch. ing the rules and regulation of the Patent Office. We hall continue to furnish them for 12 1-2 cts. per copy

### ADVERTISEMENTS.

### Terms of Advertising 4 lines, for each insertion, 50cts 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.

Advertisements already paid for will be continued until the expiration of the time for which they are paid, atformer rates, and then discontinued, unless the parties manifest a desire to have them continued at the advance rate, and remit according-

All advertisements must be paid for before in serting.

American and Foreign Patent

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, offertheir 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 Fultor street, New York.

NEW HAVEN MANUFACTURING COMpany, Tool Rüilders, 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 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.

WHITE'S TUBULAR SUSPENSION Bridge.
The subscribers would respectfully announce that they have recently obtained Letters Patent for that they have recently obtained Letters Patent for the above invention, and are now prepared to contractfor, and build at their own risk, bridges extending any required length short of two thousand feet at one span, and sustaining any specified weight. The principles involved in the construction of this bridge, combining as it does the practicability of spanning long reaches, together with strength, economy and durability, have secured it the favorable notice and admiration of many of our most skillful and scientific men. Those interested in Bridge building, may address either of the proprietors. AMMIWHITE, 17 Prospect street, Boston. JOSHUA P. THAYER, Cambridgeport, Mass. 25 3 \*\*

ADAMS & SONS, AMHERST, MASS.—
Patent Felly Machine. Belden & Colton, 98
Chamber st, New York; John B. Wynn, Anderson
C. House, S. C.; Agentsforsale of rights of machines
and territory. W. Fishman & Co, Baltimore, Md.;
P. A. Leonard, New York City; Agents for sale of
Machines.

ENGINEER AND SAWYER WANTED.—
Wanted to go to a beautiful and healthy situation in Florida, a practical Engineer and Sawyer, who is capable of taking charge of, and putting in operation, a small steam engine and portable saw mill.

Moderate terms: good references required Annual controls and processed and post of the controls of the control of the controls of the control of the controls of the control of the Moderate terms; good references required. Apply to F. G. JENNE, 142 Bridge st, Brooklyn. 1\*

POST'S PATENT SLIDING DOOR FRONTS POST'S PATENT SLIDING BOOK 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 and Son, 114 John st, N. Y., are general agents. Address, (postpaid) Wm. POST, Architect, Flushing, L. I. 2516

paid) Wm. POST, Architect, Flushing, L. I. 2516

IMPROVEMENT IN PIANOFORTER—CHRO
MATIC KEYS.—The difficulty of effecting rapid
movements on the chromatic scale in running the
fingers over the keys of the instrument, is well
known to every practical musician, and this exercise
requires playing many years to become perfect in it.
By the invention of the chromatic keys, every pupil
playing the piano will learn the chromatic scale and
each difficult chromatic passage, in a few hours, with
a rapidity of movement equal to the greatest pianists.
This invention is simple cheap, and useful. More
information may be obtained by letter addressed to
the inventor, W. F. FURGANY, Albany, N. Y., who
has taken measures to secure a patent. The price of
a set of 1 octave chromatic keys is 75 cts. 242 94

To BLACKSMITHS—Porter's Patent Graduating Forge Tuyere, which has been proved to save \$75 per annum to each fire, and which was illustrated and described in the Scientific American of Sept. 6, 1851,—is now manufactured in thiscity, and Au Important Paragraph.

Whenever our friends order numbers they have missed—we always send them if we have them on always send them if we have the weak the we have the we ha with prompt attention. 24 2\*

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 posticularly requested to remit sufficient to pay postage.

Rods and Rounds; Hoe Handles, Full American 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.

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 51-2 feet in length. Persons wishing castings can send patterns to Eastern Express, Boston, Mass. All letters will be promptly attended to.

21 10\*

DANIEL BELCHER.

METALLIC LETTERS AND FIGURES FCR
PATTERNS.—
Price 3cts. 3cts. 3cts. 3cts. 4cts. 4cts. 4cts.
Size, 5-16 3-8 7-16 1-2 9-16 5-8 3-4
Gets., 1 in; 7cts., 1-14 in;; 8cts., 1-2 in; 10cts., 2
in. Also Gothic Style: 3cts, 1-4 in; 4cts., 1-2 inch.
Manufactured by COWING & CO., Seneca Falls, N.
V. Orders solicited. They can be sent to any part
of the Union, either by Mail or Express, as all packages are weighed and sent the cheapest way. 224\*

THE SUBSCRIBER is now finishing four 14 rse engines, with boiler and apparatus all com--price \$1200each. Several 6 horse engines explete-price \$1200each. Several of horseenginesex-tremely low: also, several of smaller capacity, com-pletely; also, several power plainers, now finishing. Galvanized chain for water elevators, 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 Architects, Sculptors, &c...-The Commissioners of the Greene and Pulaski Monument Lottery Fund, offer Three Hundred Dollars for an approved design for a Monument, to be erected to the memory of Count Pulaski, in Chippewa Square, Savannah. Architects, Sculptors, Designers, &c., are invited to offer plans and specifications for selectmen, and to evince their own taste and judgment as to design, with no other limit than the cost, which must not exceed \$17,000. Designs will be received until the 1st day of April, 1852, by the subscriber, from whom any further information may be had.

WM. P. BOWEN, Secretary.

Savannah, Geo., Jan. 13, 1852. 21 6\*

TO INVENTORS....I beg respectively to suggest that the establishment of a National Inventor's Institute, with regularly organized branches, would be the best means to assist your efforts to superintend your interests. and protect your patent rights. JAMES NIXON, Potosi, Wisconsin. 215\*

TO FELLOE AND SNATH MAKERS—The undersigned having purchased the entire right of A. VV. 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 assaving 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.; aiso felloes of all kinds. Shaftsand carriages tuir always on hand, and at prices to suit dealers in the above.

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

St. George's, Del.

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.

with 1t. It is the dest plan of a machine, which 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.

A CARD—The undersigned begs 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 (Stubbs) and Swiss Files and Tools; also his imported and own manufactured Mathematical Drawing Instruments of Swiss and English styles—which he offers at very reasonable prices. Orders for any kind of instruments will be promptly executed by F. A. SIBEN-MANN, Importer of Watchmakers' and Jewellers' Files and Tools and manufacturer of Mathematical Instruments, 154 Fulton st. 23 13 \*

RON FOUNDERS MATERIALS—viz.: fine pulverized Sea Coal, Anthracite 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\*

REWARD—One hundred dollars for complete working drawings, with elevation of the same, of the most elaborate and best proportioned Stationary Horizontal High Pressure Engine; bore 12 inches, stroke 30 inches. The design must combine with ornament, simplicity and cheapness of construction, and yet be susceptible of extreme finish, with as little hand labor as practicable. Fifty dollars reward, also, for the best Upright Engine, with same combinations, bore 10 in. stroke 20. The above are wanted for a special object, and the different designs will be submitted to a competent committee, who will make the awards. Heater, pump, and connections, and fly-wheel must be included.—Refer to W. B. Leonard, 60 Beaver st., N. Y. Open till March. Mail to A. Z. & Co., New York. 24 3

VENTILATION—In reference to the advertise-ment which I have had in this paper for some time, and also in reference to the reward offered by F. M. Ray "for the best method of excluding dust from cars when in motion," I beg to inform car building companies, railroad companies, and steamboat companies, that my patent includes the Ventilation of all these vehicles, and covers the whole ground of excluding dust," &c. I expect to be in New York and Boston some time next month, of which notice will be given in some of the daily papers, as also of the place where I maybe found.

Coburg, Canada, Feb., 1852.

10 Torman building to include the Ventilation of the Coburg, Canada, Feb., 1852.

TO COTTON MANUFACTURERS AND MACHINISTS—The undersigned having had thirty-five years' experience in the manufacturing and machine business, is desirous of obtaining a situation as foreman or agent in the above branches; would have no objects to go South or West; the best of reference can be given. Letters addressed to CHARLES E. MOORE, Groveville, Mercer Co., N. J., will be attended to promptly.

New Edition of the Patent Laws.

We have fjust issued another edition of the Imerican Patent Laws, which was delayed until after the adjournment of the last Congress, on account of the Adjournment of the last Congress, on account of the Room Handles, Fork Handles and Rounds; Hoe Handles, Fork Handles and Rounds; Hoe Handles, Fork Handles and Rounds of Macros F. & Thompsond Albartance and Rounds of 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

WATTS & BELCHER, Manufacturers of Steam W Engines, Lathes, Planing Machines, Power Presses, and Mechanics' Tools of all descriptions Orders respectfully solicited and punctually attended to. Washington Factory, Newark, N. J. 720\*

PAINTS, &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 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 Beal's patent Cob and Corn mills; Burr mill and Grindstones; Lead and Iron Pipe &c. Letters to be noticed must be post-paid.

Woodworth's Planing Machine-V For sale, the right to use this justly celebrated labor-saving machine in the following States, viz., Pennsylvania west of the Allegheny Mountains, Virginia west of the Blue Ridge, Ohio, Indiana, Kentucky, Tennessee, Wisconsin, Iowa, Missouri, Arkansas, Texas, Louisiana, Florida, Alabama, and Mississippi. For particularsapply to the Proprietor, ELISHA BLOOMER, 208 Broadway. 17 12\*

Wood's IMPROVED SHINGLE MACHINE WOOD'S IMPROVED SHINGLE MACHINE
W—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, New Haven, Ct.; or WM. WOOD, Westport; Ct.,
All letters will be promptly attended to. 22tf

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 sharpestfand mostenduring 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, 146m\*

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 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\*

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 1. 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 receive their prompt attention. E. D. MARSHALL, WM. B. BEMENT, G. A. COLBY.

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, 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 Enginer—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.

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 & Gearing Shafting large and small coat kind, &c. Gearing, Shafting, large and small, or of wrought iron.

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\*

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