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 office a year ago, which covered all the points repre sented 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 answe 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 fea-ture 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 office.

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., \$30

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 II 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

country.

hand. We make this statement to save time and

tage

American Patent Laws, which was delayed until after the adjournment of the last Congress, on account of an expected modification in them. The pamphlet contains not only the laws but all information touching the rules and regulation of the Patent Office. We

hall continue to furnish them for 12 1-2 cts. per copy ADVERTISEMENTS.

Terms of Advertising.						
41	ines,	for each	insertion,	-		50cts.
8	"	"		-	-	\$1,00
12	41	41		-	-	\$1,50
16	**	**	44	-	-	\$2,00
Advertisements exceeding 16 lines cannot be ad-						
mitted	; nei	ither can	engraving	s be	inse	rted in the

advertising columns at any price. 1.400 Advertisements already paid for will be conti-

ued until the expiration of the time for which they are paid, at former rates, and then discontinued, unless the parties manifest a desire to have them continued at the advance rate, and remit according ly.

All advertisements must be paid for before in serting.

American and Foreign Patent

American and Foreign Patent Agency INPORTANT TO INVENTORS....The under-signed having for several years been extensively engaged in procuring Letters Patent for new mecha-nical and chemical inventions, offertheir services to inventors upon the most reasonable terms. All business entrusted to their charge is strictly confi-dential. Private consultations are held with inven-tors at their office from 9 A. M., until 4 P. M. In-ventors, however, need not incur the expense of at-tending in person, as the preliminaries can all be ar-ranged 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 Eu-rope, 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 manu-facturers at all times, relating to Foreign Patents. MUNN & CO., Scientific American Office, 125 Fultor street, New York.

128 Fulton stratt, New York. New HAVEN MANUFACTURING COM-pany, Tool Búilders, New Haven, Conn., (suc-cessors 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 alsomanufacturing 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. 25tf

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 con-tractfor, and build at their own risk, bridges extend-ing 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, econ-omy and durability, have secured it the favorable notice and admiration of many of our most skillful and scientific men. Those interested in Bridge build-ing, may address either of the proprietors. AMMI WHITE, 17 Prospect street, Boston. JOSHUA P. THAYER, Cambridgeport, Mass. 25 3*

J. ADAMS & SONS, AMHERST, MASS.— D. Patent Felly Machine. Belden & Colton, 98 Chamber st, New York; John B. Wynn, Anterson 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. 254* Machines.

ENGINEER AND SAWYER WANTED.— Wanted to go to a beautiful and healthy situa-tion in Florida, a practical Engineer and Sawyer, who is capable of taking charge of, and putting in opera-tion, a small steam engine and portable saw mill. Moderate terms: good references required. Ar Moderate terms; good references required. Ap-ply to F. G. JENNE, 142 Bridge st, Brooklyn. 1*

POST'S PATENT SLIDING DOOR FRONTS **DOST'S PATENT SLIDING DOOK 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 invent-ed and patented by the subscriber, who is now pre-pared to sell rights. Messrs. Quarterman and Son, 114 John st, N. Y., are general agents. Address, (post-paid) Wm. POST, Architect, Flushing, L. L. 251f

paid) Wm. POST, Architect, Flushing, L. I. 2516 TMPROVEMENT IN PIANOFORTENE-CHRO MATIC KEVS.—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 pianowill 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 octaye chromatic keys is 75 cts. 24 2*

TO BLACKSMITHS-Porter's Patent Gradua-ting Forge Tuyere, which has been proved to save \$75 per annum to each fire, and which was il-lustrated 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 based we always send them if we have them on based based and retail at 258 Third st., near Avenue C, and No. 9 Gold st. New York. All orders or letters requesting information, addressed to W.J. & J. H. BURNETT, at the latter place, will meet with resumpt attention 24 2* with prompt attention. 24 2*

nand. 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-tage. 24 4*

New Edition of the Patent Laws. We have [just issued another edition of the Imerican Patent Laws, which was delayed until after he adjournment of the last Congress, on account of Borom Hendles, Hee Handles, Fork Handles and Borom Hendles

Rods and Rounds; Hoe Handles, Fora Lucashies Broom Handles. This Lathe is capable of turning under two inches diameter, with only the trouble of changing the dies and pattern to the size required. It will turn smooth over swells or depressions of 3-4 to the inch and work as smoothly as on a straight line—and does excellent work. Sold without frames for the low price of \$25—boxed and shipped with directions for setting up. Address (post.paid) MUNN & CO. At this Office.

MALLEABLE IRON FOUNDRY, EASTON, Mass — The subscriber continues to manufac-ture castings of every variety, for machinery and other purposes, of the best quality, at the above es-tablishment. 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. 21 10* DANIEL BELCHER.

METALLIC LETTERS AND FIGURES FOR PATTERNS.— Price 3cts. 3cts. 3cts. 3cts. 4cts. 4cts. 4cts. Size, 5-16 3-8 7-16 1-2 9-16 5-8 3-4 6cts., 1 in.; 7cts., 1 1-4 in.; 8cts., 1 1-2 in.; 10cts., 2 in. Also Gothic Style : 3cts, 1-4 in.; 4cts., 1-2 inch. Manufactured by COWING & CO., Seneca Falls, N. Y. Orders solicited. They can be sent to any part of the Union, either by Mail or Express, as all pack-ages 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 expletepiete-price \$1200each. Several 6 horse engines ex-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, &cc.---The Commissioners of the Greene and Pulaski Monu-ment 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 select-men, 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 sug-gest that the establishment of a National Inven-tor's Institute, with regularly organized branches, would be the best means to assist your efforts to su-perintend your interests. and protect your patent rights. JAMES NIXON, Potosi, Wisconsin. 215*

The Second Section Sector Se

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. B. McFABLAND.

with it. It is the cess pice of a machine of a machine of a machine is imple, 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.

MUNN & CO.

A CARD-The undersigned begs leave to draw the attention of architects, engineers, machi-nists, opticians, watchmakers, jewellers, and manu-facturers 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 instru-ments 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*

TRON FOUNDERS MATERIALS-viz. : fin LEVEN FOUNDERS MATERIALS-viz.: fine pulverized Sea Coal, Anthracitc 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. 2310*

Returns Returns Retur

WENTILATION—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 buildfrom cars when in motion," I beg to inform car build-ing companies, rait for a 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. H. RUTTAN. Coburg, Canada, Feb., 1852. 24 5*

To COTTON MANUFACTURERS AND MA-CHINISTS-The undersigned having had thirty-five years' experience in the manufacturing and ma-chine 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, Groreville, Mercer Co., N. J., will be at-tended to promptly. 24 4*

BEARDSLEE'S PATENT PLANING MA-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 supe-rior 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; Al-bany. GEO. W. BEARDELEE. 22tf

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 Pla-ners, Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Ma-chines; Woodworth's, Daniel's and Law's Planing machines; Dick's Presses, Punches and Shears; Mor-ticing 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. 13 tf

Woodworth's planing MACHINE-W For sale, the right to use this justly celebra-ted labor-saving machine in the following States, viz., Pennsylvania west of the Allegheny Mountains, Virginia west of the Blue Ridge, Ohio, Indiana, Ken-tucky, Tennessee, Wisconsin, Iowa, Missouri, Arkan-sas, Texas, Louisiana, Florida, Alabama, and Missis-sippi. For particularsapply to the Proprietor, ELI-SHA BLOOMER, 208 Broadway. 17 12*

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 prefer-ence 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. 221f

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 consequent is svery strong and lasting; the grit is of the sharp-estgand mostenduring kind, and is firmly attached to the paper with a remarkable evenness of surface; their freeness from ridges, stripes, and other imper-fections, recommend them to the notice of consu-mers. 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 CUT-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) Cal-lowhill 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 PatentScroll Chucks, 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 Me-chanical Engineer, Surveyor of Steam Machine-ry, &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. 21 10*

MANUFACTURE OF PATENT WIRE Ropes bridges, standing rigging, mines, cranes, derick, til-lers &c.; by JOHN A. ROEBLING; Civil Engineer-Trenton N. J. 47 1y*

PATENT CAR AXLE LATHE—I am now ma-nufacturing, 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. 7 6m*

DGGAN VAIL & CO., No. 9 Gold street, New York, agentsfor 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 SteamEngines, Saw Gummers of approved and cheap kind & Gearing Shafing large and small cast all, cast 11 ly kind, &c. Gearing, Shafting, large and small, or of wrought iron. 11

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. 13tf

Scientific American.