

TO CORRESPONDENTS.

M. C., of Ill.—The sketch of your improved Corn Planter has been examined, and we are of the opinion that it possesses novel features; it is different from Groshon's. You can send us a model at any time, by express.

H. M. C., of Ohio.—In this section iron is not rolled as you state, the machines now used for that purpose are much more convenient and economical than the one described in your letter. We cannot advise you to apply for a patent, as it is probable that none could be obtained for the mere addition of a supplementary roller.

A. P., of N. C.—Muriatic acid consists of chlorine and hydrogen; it is contained in great abundance in sea water, in combination with soda and magnesia. Oxygenated muriatic acid is another name for chlorine.

S. L., of Ill.—The books have been sent. If your diamond is spoiled in the point, we know of no one who re-points such instruments. The expense will be about as great as a new one, for the edge of a cutting diamond is a natural one.

G. W., of Mass.—It will probably be about 2 months before your application will come up for examination—the applications seem to be accumulating at the office.

E. W., of N. Y.—For particulars concerning back volumes of the Scientific American, see notice in No. 27, Vol. 6. We could not exchange the Scientific American for Sear's works.

C. L. E., of Mich.—We have not the name of Mr. McCaillan upon our books at your place, and the meaning of your letter we do not understand.

A. J., of O.—No doubt but your friend would make a good agent for us, but we do not employ agents to travel and canvass for subscribers for the Sci. Am., as those other papers do; our circulation is maintained and extended by voluntary subscribers and good local agents like yourself.

J. G. E., of N. C.—The \$3 which you enclosed for Mr. Pipkin we have credited to him on account of subscription, as you directed.

G. B., of Ct.—As long as you receive the paper you may conclude that you are not in debt to us. We have but one custom, and by it all our patrons are served alike, viz., when the time has expired for which a person has paid his subscription, we stop the paper until again ordered. We never present bills for unpaid subscriptions.

M. R. L., of Miss.—Your plan of bringing the crank past the "dead points," is ingenious and new; but we do not see what gain is derived; we do not see any loss in the simple crank, and we know of no arrangement to equal it in simplicity and effective action. We would advise you not to waste money on the invention.

E. A. H., of Ill.—The best work on Electricity, &c., is \$1.25; Snow Harris's small work is good, costs 62 cents. We cannot give you the information about the cast and wrought iron.

W. G. G., of N. Y.—We will publish the information you want before closing the articles on Hydraulics.

L. H., of Ohio.—There is nothing novel in your plan for a rotary; spring valves have many times been shown us in connection with this subject. They will not do, this you may depend upon. We should like to entertain the good opinion you speak of, if possible, but we feel confident it cannot be made to work. We examined a rotary, not long since, in operation here, essentially the same as yours. It required too much steam to drive it.

A. D. B., of Geo.—Your polite favor of the 21st ult. is received, with \$4. In regard to the models, you have done perfectly right. No apology is necessary.

H. M., of Vt.—The sketch of the bevel plane has been examined: we regard the contrivance as sufficiently novel to justify an application for a patent, and request you to forward a model. It can be sent by express or otherwise, as you may find it convenient.

S. S., of Pa.—Your gun is very ingenious, and your remarks exhibit a humane heart.

C. W. P., of Pa.—See pages 231 and 233, Vol. 5, Sci. Am., for good whitewash receipts.

G. L. F. B., of Me.—There are various ways of making a door operate a bell when it is opened. We do not see how a claim could be based on your arrangement. The moisture does not affect Maynard's percussion paper. The floating bridge is made to float any train, so as never to sink below the track, although it may be a quarter of an inch above it. It is nothing new.

J. S., of Pa.—There is a most excellent article on Steam and "Stame" in one of the London magazines. There is something about explosions which appears to be inexplicable, but the great root of the evil is recklessness.

T. W., of N. Y.—It is not possible to give a correct rule for calculating the loss of power by back-water, unless the force of the back-water is known, and the amount (weight) of water carried back by the buckets. By a little reflection you will see the force of this. We will give you the other information next week. We did not take into consideration the back lift, because it was not spoken of.

T. J. K., of Va.—A man will lift twice as much with a two foot lever as a foot one, but then he will take double the time: whatever is gained in power is lost in speed. A lever does not create power.

H. U., of N. Y.—The power of the press is not generally required to be more than ten times the multiple of one.

S. P. S., of Ohio.—You will have all the rules you want for calculating the power of wheels, before our articles on Hydraulics are finished.

L. R. P., of Me.—Your favor of the 2nd inst., is received and the amount credited to the respective subscribers. We shall examine your diagrams as early as possible.

T. R. C., of Ill.—There are very many machines for drilling and planting corn now in use. We do not remember to have seen one precisely like yours, and think a patent could be obtained on a limited claim. A model will be required.

J. H., of Ohio.—In answer to your favor of the 27th ult., we would state that we have no knowledge of the improvements referred to, and think they could not have amounted to anything practicable, or we should have known it. We are unable to refer you to any new improvements made of late in this branch.

T. L. P., of Md.—The pump you refer to is an excellent one we believe. Mr. W. will be called upon to answer your inquiries.

M. G., of Charleston, S. C.—By macerating a small piece of new-baked bread in cold water, sufficient to dissolve it, the taste of the latter, if alum has been used by the baker, will acquire a sweet astringency; or a heated knife may be thrust into a loaf before it has grown cold, and, if it be free from that ingredient, scarcely any alteration will be seen on the blade; but if the alum has been used, the blade, after being allowed to cool, will appear slightly covered with an aluminous substance.

E. G., of N. Y. City.—A very simple test for lead and copper metals in wine and cider, exists ready formed by nature: pour into a glass of suspected wine, cider, or perry, a few drops of Harrogate or Strathpeffer water; if any lead or copper be present, it will fall down in the state of a black peroxide being combined with the sulphuretted hydrogen, by which these waters are impregnated.

S. H. W., of Mo.—We do not believe you can obtain a patent for your arrangement. Substantially the same device was secured by patent to A. McKinney, of this State, a few months since.

R. E., of Geo.—Non-conductors are substances which carry off free electricity slowly when touched by an electrified body; or, if their condition of electrical indifference is disturbed at one point, they become electrical at that point only; and if the whole surface be excited, and they are then touched by some conductor connected with the ground, they part with their free electricity only at the point of contact. Their characteristic is, that they retain free electricity for a length of time, and that they check its motion.

E. C. & G. A., of Mass.—Your communication of March, in regard to the polishing iron, will come up as soon as possible.

A. E. J., of Miss.—In Reaumer's Thermometer the freezing point is marked 0, or zero, and the boiling point 80 deg. The degrees are continued, of the same size, below and above these points, those below being reckoned negative.

E. B., of Ct.—Your papers have been carefully filed away for future reference. We thought the plan new, and for aught we knew, useful.

Money received on account of Patent Office business since April 2:—

G. J. W., of Me., \$25; W. J. McA., of Ga., \$75; C. L., of Phila., \$25; H. P., of Mass., \$20; J. G., of Mass., \$28; D. A., of N. Y., \$50; M. C. B., of N. H., \$15; G. W., of Ky., \$65; S. C. A., of N. Y., \$30; J. B., of Mass., \$20; W. B., of O., \$20.25.

Specifications and drawings of inventions belonging to parties with the following initials, have been forwarded to the Patent Office since April 2:—

T. & G., of N. Y.; A. S. B., of N. Y.; G. J. W., of Me.; H. P., of Mass.; D. A., of N. Y.; M. C. B., of N. H.; and J. B., of Conn.

New Edition of the Patent Laws.

We have just issued another edition of the 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 regulations of the Patent Office. We shall continue to furnish them for 12 1/2 cts. per copy.

ADVERTISEMENTS.

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One square of 8 lines, 50 cents for each insertion.
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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 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.

Branches of our Agency have been established in London, under the charge of Messrs. Barlow, Payne & Parken, celebrated Attorneys, and Editors of the "Patent Journal"; also in Paris, France, under the charge of M. Gardissal, Editor of the "Brevet d'Invention." We flatter ourselves that the facilities we possess for securing patents in all countries where the right is recognized, are not equalled by any other American house.

MUNN & CO.,
128 Fulton street, New York.

WILLIAM W. HUBBELL—Attorney and Counsellor at Law, and Solicitor in Equity, Philadelphia, Penn.

Patent Claims.

Persons desiring the claims of any invention which has been patented within fourteen years can obtain a copy by addressing a letter to this office; stating the name of the patentee, and enclosing one dollar as fee for copying.

STEAM ENGINES FOR SALE.—A one, two, three, and four horse power engine, of simple construction and substantially made; they may be had separately or with boilers, and can be shipped without taking in pieces to pack. I am also prepared to do all kinds of light machinery work on reasonable terms. Orders, post-paid, promptly attended to. Address CONRAD SIMON, Louisville, Ky. 30 2*

LAWRENCE SCIENTIFIC SCHOOL.—Harvard University, Cambridge, Mass.—Special Students attend daily, from 9 o'clock, A. M., till 5 o'clock, P. M., in the laboratories, and under the direction of the following Professors:—Louis Agassiz, Professor of Geology and Zoology; Jeffries Wyman, M. D., Professor of Comparative Anatomy; Henry L. Eustia, A. M., Professor of Engineering and Physiology; Eben Norton Horsford, A. M., Professor of Chemistry. Instruction is also given by Prof. Pierce in Mathematics; Prof. Lovering, in Physics, and the Messrs. Bond at the Astronomical Observatory. All lectures delivered to under-graduates of the College are free to members of the Scientific School. For further information apply to E. N. HORSFORD, 29 6*

LATHES FOR BROOM HANDLES, Etc.—We continue to sell Alcott's Concentric Lathe, which is adapted to turning Windsor Chair Legs, Pillars, Rods and Rounds; Hoe Handles, Fork Handles, and Broom Handles.

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

PORTABLE GRIST MILLS.—Of the best construction, at the following prices:—12 inch hand mill, \$40; 16 in. do., \$45; 18 in. Burr stone, power, \$90; 24 inch do., \$100; 30 in. do., \$150. \$15 additional for the gearing of the 18 and 24 inch; the 12 and 16 inch are geared with cranks. The 30 inch is driven from the spindle; 18 in., 2 horse power, will grind 4 bushels per hour; 24 in., 3 horse, 5 bushels; 30 in., 4 horse, from 6 to 8 bushels; speed, 300 revolutions per minute. Address (post-paid) to MUNN & CO. at this Office.

IRON FOUNDERS MATERIALS.—viz., fine Ground and Bolted Sea Coal, Charcoal, Lehigh Soapstone and Black Lead Facings of approved quality. Iron and brass founders' superior Moulding Sand, Fire Clay, Fire Sand, and Kaolin; also best Fire Bricks, plain and arch shaped, for cupolas &c.; all packed in hogheads, barrels or boxes for exportation, by G. O. ROBERTSON, 4 Liberty Place, near the Post Office, N. Y. 22 3m*

MATAFAN MACHINE WORKS.—Corner of Second and A sts., South Boston. The undersigned have recently enlarged their business and are now prepared to offer a great variety of Machinists' Tools, viz., Engine and Hand Lathes, iron Planing and Vertical Drilling Machines, Cutting Engines, Slotting Machines, and Universal Chucks; also Mill Gearing and Wrought Iron Shafting made to order. 22 12* GEO. HEPWORTH & SON.

SASH AND BLIND MACHINE.—Patented by Jesse Leavens, Springfield, Mass. The machine planes, molds, mortises, bores, tenons, copes, franks, cuts off, rips up the stuff, planes the blinds, shades, and sets out the sash. The machine is 4 by 5 feet, weighs 800 lbs., requires two horse-power to drive it, and cost \$300 cash—extra charge for the right to use. Shop, town, county, and State rights for sale. Orders from abroad will be promptly attended to by addressing JESSE LEAVENS, Palmer Depot, Mass. 27 8*

FELLY CUTTING MACHINE.—Messrs. JOSEPH ADAMS & SONS, Amherst, Mass., offer for sale town, county, and State rights, or single machines, with the right to use, of their unrivalled Felly Cutting Machine, illustrated in No. 5, Vol. 6, Scientific American. It is portable, easily kept in order, requires but little power to drive it, and will execute in the most rapid and perfect manner, cutting 60 good fellys in one hour.

STEAM ENGINE FOR SALE.—We have for sale a 12 horse-power Horizontal Engine, complete, with fue boiler, second-hand, newly re-fitted, in excellent condition, has not been used to injure it; solid cast iron frame, manufactured by the "Novelty Works," this city. Its original cost was \$1,450, and will now be sold for \$900 cash, the owner having no further use for it. Apply to MUNN & CO. 27tf

WOODWORTH'S PATENT PLANING MACHINES: 1851 TO 1856.—Ninety-nine hundredths of all the planed lumber used in our large cities and towns continues to be dressed with Woodworth's machines. Persons holding licenses from the subscriber are protected by him against infringement on their rights. For rights in the unoccupied counties and towns of New York and Northern Pennsylvania, apply to JOHN GIBSON, Planing Mills, Albany, N. Y. 28 7eow*

TO TIN PLATE AND SHEET IRON WORKERS.—ROYS & WILCOX, Mattabessett Works, East Berlin Station, on the Middletown Rail Road, manufacture all kinds of Tools and Machines of the best quality, both in material and workmanship. This establishment being the only one where both tools and machines are manufactured, superior inducements are offered to the trade; all work warranted, with fair use. Agents in most of the principal cities of the United States and Canada. Orders promptly attended to. F. ROYS, E. WILCOX, 7 1amly

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 his new and extensive assortment of fine English (Stubs) and Swiss Files and Tools, also his imported and own manufactured Mathematical Drawing Instruments of Swiss and English style, which he offers at very reasonable prices. Orders for any kind of instruments will be promptly executed by F. A. SIBENMANN, Importer of Watchmakers' and Jewellers' Files and Tools, and manufacturer of Mathematical Instruments, 154 Fulton st. 29 3m*

DICK'S GREAT POWER PRESS.—The public are hereby informed that the Mattewan Company, having entered into an arrangement with the Patentee for the manufacture of the so-called Dick's Anti-Friction Press, are now prepared to execute orders for the following, to which this power is applicable, viz.—Boiler Punches, Boiler Plate Shears, Saw Gummers, Rail Straighteners, Copying and Sealing Presses, Book and Paper Presses, Embossing Presses, Presses for Baling Cotton and Woollen Goods—Cotton, Hay, Tobacco, and Cider Presses; Flaxseed, Lard, and Sperm Oil Presses; Stump Extractors, &c. &c. The convenience and celerity with which this machine can be operated, is such that on an average, not more than one-fourth the time will be required to do the same work with the same force required by any other machine.

WILLIAM B. LEONARD, Agent,
13tf No. 66 Beaver st., New York City.

MACHINES FOR CUTTING SHINGLES.—The extraordinary success of Wood's Patent Shingle Machine, under every circumstance where it has been tried, fully establishes its superiority over any other machine for the purpose ever yet offered to the public. It received the first premium at the last Fair of the American Institute—where its operation was witnessed by hundreds. A few State rights remain unsold. Patented January 8th, 1850.—13 years more to run. Terms made easy to the purchaser. Address, (post-paid) JAMES D. JOHNSON, Redding Ridge, Conn., or Wm. WOOD, Westport, Conn.—All letters will be promptly attended to. 10tf

GURLEY'S IMPROVED SAW GUMMERS.—For gumming out and sharpening the teeth of saws can be had on application to G. A. KIRTLAND, 205 South st., N. Y. 10tf

SCRANTON & PARSHLEY, Tool Builders, New Haven, Conn., will have finished 2 Power Planers ready to ship by the 1st of Feb., that will plane 9 feet long, 31 inches wide, and 24 inches high, with angle feed; counter shaft, pulleys, and hangers; splining and centre heads, with index plate, and weigh over 5,000 lbs.; also 2 power planers that will plane 5 feet long, 23 in. wide, and 20 in. high, with counter shaft, pulleys, and hangers, and weigh 2,400 lbs.—These planers are 25 per cent. lower than any others built. Cuts can be had by addressing as above, post paid. 19tf

TO PAINTERS AND OTHERS.—American Anatomic Drier, Electro Chemical graining colors, Electro Negative gold size, and Chemical Oil Stove Polish. The Drier, improves in quality, by age—is adapted to all kinds of paints, and also to Printers' inks and colors. The above articles are compounded upon known chemical laws, and are submitted to the public without further comment. Manufactured and sold wholesale and retail at 114 John st., New York, and 1 Flushing, L. I., N. Y., by QUARTERMAN & SON, Painters and Chemists 22tf

MACHINERY.—S. C. HILLS, No. 12 Platt Street, 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 Tenoning Machines, Belting, machinery oil; Beal's patent Cob and Corn Mills; Burr Mill, and Grindstones, Lead and Iron Pipe, &c. Letters to be noticed must be post paid. 20tf

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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 be unsurpassed. JOHN R. TRACY, THOMAS J. FALES. 16tf

FOWLERS & WELLS, Phrenologists and Publishers, Clinton Hall, 131 Nassau st., New York—Office of the Water Cure and Phrenological Journals. Professional examinations day and evening. 3 6m

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