

TO CORRESPONDENTS.

T. W. A., of N. Y.—There is no good practical work on mill building—one is much needed.
D. S. H., of Ind.—You can procure a good shingle machine by addressing J. D. Johnson, of Bridgeport, Ct., or Wm. Wood, Westport, Ct.
D. S. G., of Ill.—From the engraving of the drill published in last week's paper you can judge of its applicability to the purpose for which you want it: it is a good article. We cannot answer you about the tire iron.
L. T. R., of Mass.—There is no novelty or utility in your proposed method of shoeing brakes with lead.
R. B., of Ct.—There is no novelty in the idea of applying rollers to journals to relieve friction: this has been frequently done.
J. H. C., of Ohio—We are not acquainted with any plan for raising water in the manner you propose; its advantages are not apparent to us, and we do not think it possesses any patentable novelty.
John Garst, Dayton, Ohio—On the 23d ultimo we sent you \$20—the amount your due on the Prize List.
A. W. B., of Ohio—Your plan for making lead pipe is exactly the same as that which is now generally practiced.
W. A. P., of Miss.—The plan you speak of, to ornament pillars, &c., is not patentable, because it is only a different application of a well known process. We do not believe that it would pay, for the gliding would soon wear off and it would not be possible to renew it again.
H. S., of Ind.—The suction which you speak of, to propel vessels, is the very thing which you should seek to avoid.
C. J. F., of Mass.—There is such an engine here as the one to which you refer, but it never will come into general use.
H. W. O., of Ct.—Fountain pens are well known—they do not supply the want which our article calls for. Yours embraces no patentable feature that we can discover.
T. J., of Miss.—Let no one deceive you about the Erission engine; just wait and watch. The traveling lecturer to whom you have referred has indeed disappeared from public notice. It is not to be regretted; such experiments do good in one sense if they do evil in another. We have perfect confidence in the antidote that we have administered to the public.
A. G., of N. Y.—We have carefully considered the description of your mode of signaling the approach and departure of trains; so far as we can understand it, without the aid of a sketch, we should think it different from any with which we are acquainted. Electricity has been employed for the same purpose, and contrivances operated by other means have also been proposed; you had better send us a model of your plan.
J. B. J., of Ind.—We do not think either of your inventions could be patented; the novelty is so very slight that we cannot advise an application.
A. J. M., of —We will preserve your manuscript and it will be subject to your order for a month at least. We have great confidence in your theory; it is the same as the Chrono-Thermal system of Dr. Dixon—a work republished in this city by Dr. Turner; you should get a copy of it. We answer in the affirmative to your interrogation respecting the eye.
J. R., of V.—Use about one ounce to the gallon of water.
D. C., of N. C.—Your plan for supplying water to boilers is not new, we have seen the same plan nearly, a number of times, but it is not as good as the force pump.
C. J. F., of Ohio—Your plan respecting government agencies in different cities, for the purpose of protecting inventions, could not be easily carried out. You must never say "fail," but toil on and press forward—thereward will come some day. The buffers which you speak of, to lessen the destructive effects of collisions on railroads, have been proposed a number of times. We do not know of any plan like yours for rigging sails.
T. R. J., of Va.—Gypsum is not inoperative in the neighborhood of the sea as a fertilizer, so far as we can learn; we know the opinion is common that fish spoil rapidly when exposed to the rays of the moon, but this opinion may not be correct. What kind of ashes for agricultural purposes do you want.
N. R. G., of N. Y.—There is no good work published on woolen manufacturing in all its branches: such a work is much wanted.
A. S., of Vt.—The cheaper the pencil so much the better; but even if dear we think it should find a ready sale.
C. G., of Wis.—Purchase Smee's "Electro Metallurgy" and it will give you full information on the subject. The apparatus will not cost you more than \$2.
E. A. H., of Ill.—We have examined your stove; it appears to be a good one, but so many stoves have been patented that it is almost impossible to give you any advice on the subject. Your movable grate we consider to be a good arrangement; we never saw one like it.
T. G., of N. Y.—Your plan is not the same as that which is on exhibition at the Crystal Palace, but we saw about on the Erie Canal ten years ago, with the same arrangement as yours—a wheel in an interior case.
M. G. C., of Pa.—In the year 1830 Com. Barron, of the Navy, secured a patent for an apparatus for ventilating bedrooms, etc, in hot climates, essentially the same as the one which you describe. There is no chance for a patent on yours.
W. L. B., of Mass.—There are no objections to the use of "Oscillating Engines," they are coming into use not only by the government, but also for manufacturing purposes.
E. P. H., of Me.—Such a stove as you speak of we think has been patented, but we do not remember the inventor's name—we have seen the stove.
J. M. U., of Ohio—We think your improvement in moulding flasks is new and patentable; you had better send us a model.
J. A. K., of Ct.—There can be no doubt but your invention is a good one, and you should secure a patent as soon as possible, it will not do to delay—is it too valuable to be left to take care of itself. The sooner you secure a patent, the less liability is there for legal contentions about priority. We speak for your benefit; you may take the advice or not.
S. C. W., of N. Y.—Let no man deceive you respecting your machine, it is of no value whatever, and can never be used for any good purpose.
R. J., of Ohio—The great danger to be apprehended from your gunpowder engine is, that it will never be of any benefit to yourself nor any other person, and involves a great leak in your pocket.

H. & R., of —We do not know where to address you: we are every day receiving letters from persons wanting information, without the least intimation of their address—many letters are of a private nature and cannot well be answered through these columns.
L. S. W., of Md.—Use the eccentric for converting the rotary into rectilinear motion.
J. B. R., of Ala.—It is indeed true, as you say, that any improvement to lessen the running expense of locomotives is valuable, and more valuable when the ability of the engine is for running at high velocities with increased safety. We wish you success. If you try the cement, you will find out that it will not answer the purpose of gold. Your secret is safe so far as we are concerned.
D. D., of N. Y.—It will be very difficult for you to get the pieces of iron which you speak of, but if you write to Bogardus & Hoppin, of this city, they can furnish you with them if they can be furnished at all.
J. C., of N. Y.—White vinegar can be obtained at any of the druggists. All the receipts that may be of value to you will be found, from time to time—for the benefit of our readers—in the columns of the Sci. Am.
Money received on account of Patent Office business for the week ending Saturday, Jan. 28:—
A. A. S., of O., \$30; A. R. H., of Pa., \$25; P. Z. F., of R. I., \$25; H. E. C., of N. Y., \$35; E. H. P., of Ct., \$10; W. M. U., of Vt., \$25; J. McM., of Ky., \$50; G. M. P., of Me., \$30; N. F. T., of Tenn., \$55; W. H. H., of O., \$30; A. J. W., of N. Y., \$25; F. & A., of N. Y., \$25; L. C. C., of Ct., \$20; J. H. R., of N. Y., \$55; J. N., of Mass., \$50.
Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Jan. 28:—
D. A. & A. J. H., of N. J.; J. C. R., of N. Y.; J. H., of N. Y.; T. & A., of N. Y.; E. H. S., of Ohio; W. M. N., of Vt. J. McM., of Ky.; J. H. R., of N. Y.

A Chapter of Suggestions, &c

PATENT LAW AND GUIDE TO INVENTORS—We publish and have for sale, the Patent Laws of the United States—the pamphlet contains not only the laws but all information touching the rules and regulations of the Patent Office. Price 12 1/2 cents per copy.
RECEIPTS—When money is paid at the office for subscriptions, a receipt for it will always be given, but when subscribers remit their money by mail, they may consider the arrival of the first paper a bonafide acknowledgment of the receipt of their funds.
BACK NUMBERS AND VOLUMES—In reply to many interrogatories as to what back numbers and volumes of the Scientific American can be furnished, we make the following statement: Of Vols. 1, 2, 3, and 4—none. Of Vol. 5, all but six numbers, price, in sheets, \$1; bound, \$1.75. Of Vol. 6, all; price in sheets, \$2; bound, \$2.75. Of Vol. 7, all; price, in sheets, \$2; bound, \$2.75. Of Vol. 8, none complete, but about 30 numbers in sheets, which will be sold at 50 cents per set; of Vol. 9, none previous to Jan. 1st, 1854.
GIVE INTELLIGIBLE DIRECTIONS—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure, but no name of State given, and often with the name of the post-office also omitted. Persons should be careful to write their names plainly when they address publishers, and to name the post-office at which they wish to receive their paper, and the State in which the post-office is located.
PATENT CLAIMS—Persons desiring the claim 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 \$1 for fees for copying.
PATENTEE—Remember we are always willing to execute and publish engravings of your inventions, providing they are on interesting subjects, and have never appeared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permitted to have the engravings executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to advantage in other journals.
TO CORRESPONDENTS—Condense your ideas into as brief space as possible, and write them out legibly, always remembering to add your name to the communication; anonymous letters receive no attention at this office. If you have questions to ask, do it in as few words as possible, and if you have some invention to describe come right to the business at the commencement of your letter, and not fill up the best part of your sheet in making apologies for having the presumption to address us. We are always willing to impart information if we have the kind solicited.

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WANTED—The first 8 Volumes of the Scientific American or Vol. 1 only. DAVID DAVIDSON, 10 Nassau St. N. Y. 21 3c
WANTED—A situation by a man that has superintended a machine shop, pattern shop, smith work, boiler making, building steam engines, paper machines, mill gearing, and machinists' tools; is a mechanical draughtsman, and a steady man. Address, post-paid, "W." York, Pa. 21 2c
MELTING FOR STEAM BOILERS & PIPES—Manufactured by J. H. Bacon, Winchester, Mass., for sale at W. & J. MORRISON'S, No. 9 Maiden Lane, N. Y., and T. C. BAORON & CO.'S, corner of Union and North sts, Boston, Mass. 21 6c

American and Foreign Patent Agency.

IMPORTANT TO INVENTORS.—The undersigned having for several years been extensively engaged in procuring Letters Patent for new mechanical and chemical inventions, offer their services to inventors upon the most reasonable terms. All business entrusted to their charge is strictly confidential. Private consultations are held with inventors at their office from 9 A. M. until 4 P. M. Inventors, however, need not incur the expense of attending in person, as the preliminaries can all be arranged by letter. Models can be sent with safety by express, or by any other convenient medium. They should not be over a foot square in size, if possible.
Having Agents located in the chief cities of Europe, our facilities for obtaining Foreign Patents are unequalled. This branch of our business receives the special attention of one of the members of the firm, who is prepared to advise with inventors and manufacturers at all times, relating to Foreign Patents.
MUNN & CO., Scientific American Office, 128 Fulton street, New York.

PORTABLE STEAM ENGINES—GEORGE VAIL & CO., Speedwell Iron Works, Morristown, N. J. LOGAN VAIL & CO., No. 9 Gold St., N. Y., are prepared to furnish Portable Steam Engines from four to eight horse power, with locomotive boilers. These engines are recommended for their simplicity, durability, and economy, being made from the best materials and designed for practical use. They are placed on wheels convenient to be moved from place to place, and are shipped in working order; for plantation use, machinists, or others wanting small power, these engines will be found superior to any others. A Silver Medal was awarded at the late Fair of the American Institute, and a premium in cash of \$100 at the Maryland State Fair, held at Baltimore in October last. Persons writing us by mail will be particular to give their address in full. 21 1/2

LAWRENCE SCIENTIFIC SCHOOL—Harvard University. The next Term of this Institution will open on the second day of March, 1854, and continue 20 weeks. Instruction by Recitations, Lectures, and Practical Exercises, according to the nature of the study, will be given in Astronomy by Messrs. Bond, Botany by Prof. Gray, Chemistry, analytical and practical by Prof. Shepard, Comparative Anatomy and Physiology, by Prof. Wyman, Engineering by Prof. Eastis, Mathematics by Prof. Pierce, Mineralogy by Prof. Cooke, Physics by Prof. Lovering, Zoology and Geology by Prof. Agassiz. For further information concerning the School application may be made to Prof. E. N. HORSFORD, Dean of the Faculty, Cambridge, Mass. 21 4

MATHEMATICAL AND OPTICAL INSTRUMENTS.—The subscriber begs leave to bring to the notice of the professional community his new and extensive assortment of the above instruments, which he partly imported direct from the most celebrated makers in Europe, and partly had manufactured under his own personal supervision. The undersigned would particularly invite attention to his very large and complete assortment of the justly celebrated Swiss Mathematical Drawing Instruments, for the sale of which, in this country, he has the sole agency, and which he can furnish at \$5 to \$20 per case. These Drawing Instruments received the prize medal at the London and New York Exhibitions. Orders from any part of the Union promptly executed, and price list sent if required.
C. T. AMSLER, 216 so. 224 Chestnut st., Philadelphia, Pa.

AMERICAN RAILROAD JOURNAL—This Journal, the oldest in the world devoted to the Railroad interest, will hereafter contain, in addition to its usual contents, a full and comprehensive department of Railway and Mechanical Engineering, prepared under the direction of a practical engineer and mechanic—improvements in Railways, Railway Equipments, and especially in Locomotives, will be duly described and illustrated. Inventors and improvers will find the Journal the best advertising medium, as it is taken by nearly all the leading Companies in the country. Published every Saturday at No. 9 Spruce st. by JOHN H. SCHULTZ & CO., at \$5 a year in advance. 21 2

MCALLISTER & BROTHER—Opticians and dealers in mathematical and optical instruments. No. 43 Chesnut st., Philadelphia, Pa.—at the old stand established in 1793 by John McAllister, Senr. Mathematical instruments separate and in cases, Tape Measures, Spectacles, Spy Glasses, Microscopes, Thermometers, Salometers, Hydrometers, Magic Lanterns, &c. &c. Our illustrated and priced catalogue are furnished on application, and will be sent by mail free of charge.

TELESCOPE WANTED—In good order, at a moderate price; may be second hand. Address "Telescope," office of "Public Ledger," Philadelphia. 1

WANTED—A good permanent situation, either to run a stationary engine or take charge of machinery, where capability and a faithful discharge of duty would meet with a liberal compensation, by a person who is and has been for several years past, running a locomotive on one of the railroads out of New York. Good references given. Address J. C. GORDON, 428 Fourth Avenue. (On parle Francais.) 21 4

SHINGLE MACHINES—Wood's patented improvement in Shingle Machines, is unquestionably the best ever offered to the public. The undersigned is now at the West, offering rights in this machine for sale. It is a rare opportunity for a safe and profitable investment in a machine without a rival, for the purpose to which it is applied. Parties wishing to correspond with me can do so by addressing J. D. JOHNSON, Bridgeport, Ct. 21 1/2

FOR SALE—40 Acres of Choice Land, situated within 1 mile of Wooster, O., on the O. and P. R. R. There is on the premises a woolen factory and one set of machinery; the water power is always sufficient for one set, and for two-thirds of the year for much more. There is also a good saw mill and dwellings for operatives. Terms—One half down and the balance to suit purchaser. THOMAS STUBBS, Wooster, Ohio. 20 3

WANTED—A Saw for Splitting Boards and Plank, self-feeding. Address GEORGE STARR, Danbury, Ct. 20 2

1854—MICHIGAN CENTRAL R.R. LINE and the enormous new steamers "Plymouth" and "Western World," and also General Forwarder, will forward freight of any kind, by any mode of conveyance, to any destination, with dispatch and at the lowest rates; has trucks and machinery (having been a practical machinist all his skill necessary) for the safe and expeditious handling of any machine or heavy article, such as Locomotives, Steam Engines and Boilers, Engine Lathes, Church Bells, Safes, &c. Mark packages care "D. W. Whitting, Buffalo," goods thus consigned take precedence with the above boats in all cases. 19 1/2

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EUROPEAN PATENTS.—MESSRS. MUNN & CO. pay especial attention to the procuring of Patents in foreign countries, and are prepared to secure patents in all nations where Patent Laws exist. We have our own special agents in the chief European cities; this enables us to communicate directly with Patent Departments, and to save much time and expense to applicants.

MINING MACHINERY.—Of most approved construction, furnished by FRED'K COOK & CO, Hudson Machine Works, Hudson, N. Y. 16 6m

THE NEW YORK WEEKLY SUN—Established in 1836, is the first dollar-a-year Weekly Newspaper ever published. Independent of all political parties and cliques, sustained by all the resources of the Sun Establishment in its collections of the latest news from every part of the world, ever brings something new in the way of stories and bon-mots, reports of inventions, Prices Current, Markets, Receipts, Marriages and Deaths, etc., it is undoubtedly the best as well as the cheapest Newspaper in the world. Nearly every number of the Weekly Sun contains one or more pictorial embellishments, which, of themselves, offer a fair equivalent for the price of subscription. The postage to any place in the State of New York is only 18 cents per year; out of the State, but in the United States, 26 cents a year. For a single copy, one year, in advance, \$1; club of 6 copies, \$5; club of 12 copies, \$10; club of 20 copies, \$15. Specimen copies sent gratis when desired. MORSE'S BEACH, publisher, corner of Nassau and Fulton sts, New York City. 16 1/2

WEIGHING AND PACKING MACHINE—This machine is particularly adapted for the weighing and packing of ground spices, coffee, teas, saleratus, cream tartar, British luster, arrowroot, drugs, prepared flour, farina, starch, cocoa, oat meal, yeast powder, seeds, snuff, ground herbs, or any like articles which may require to be put in packages, from ounces to pounds. Its advantages over the old method of packing by hand, are manifest. One of these machines will, with the aid of one person, weigh accurately, and pack neatly, from 400 to 5000 packages per day. It requires very little power to run it, and is not liable to get out of repair. Having purchased the exclusive right to manufacture and sell throughout the United States, we are prepared to execute orders for the machines or sale of sectional rights, on reasonable terms. N. E. HARRIS & Co., Proprietors of the Excelsior Steam Spice Mills, Philadelphia, Pa. 12 13

IRON DRILLS.—Portable drills for drilling iron.—They are the most simple and convenient drill in use, having a newly invented feed motion, simple and efficient in its operation. They are constructed of iron, and weigh 80 lbs. We can recommend them as a first rate article. Price \$25. Address MUNN & CO., at this office.

JOHN PARSHLEY, No. 5 and 7 Howard st., New Haven, Ct., manufacturer of Machinists' Tools, and Steam Engines, has now finishing up 25 Engine Lathes, 6 feet shears, 4 feet between centers, 15 inches swing, and weighs about 1100 lbs. These can be had back and screw gear, with screw feed, and the rest is so arranged that the tool can be adjusted to any point the work may require, without unfastening the tool, hence they possess all the good qualities of the job and the weight lathe; they are of the best workmanship. Price of Lathe with count shaft and pulleys, \$155 cash. Cuts full description of the lathe, can be had by addressing as above, post-paid. Also four 30 horsepower vertical Steam Engines with two cylinders. Price of engine with pump and heater, \$800 cash. For particulars address as above. 19 1/2

BAKER'S IMPROVED STEAM BOILER FURNACE, as used at the Crystal Palace, &c. Apply to J. AMORY, 28 State st, Boston, General Agent. 11 1/2

C. B. HUTCHINSON'S PATENT STAVE Cutting Machines.—The best in use, and applicable alike to thick and thin staves, for barrels, hogheads, &c., also his Head Cutting and Turning, and Stave Jointing and Crozing Machines. This machinery reduces the expense of manufacturing at least fifty per cent. For machines or territorial rights, apply to C. B. HUTCHINSON & CO., Syracuse, N. Y. 21 1/2

ENGINEERING.—The undersigned is prepared to furnish specifications, estimates, plans in general, or details of steamships, steamships, machinery, boilers, pressure engines, boilers and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Ashcroft's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewell's Sallinometers, Dudgeon's Hydraulic Lifting Press, Hoelbling's Patent Wire Rope for hoisting and steering purposes, &c., &c. CHARLES W. COPELAND, Consulting Engineer, 64 Broadway. 10 1/2

THE NEW HAVEN MANUFACTURING CO.—New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill for the United States and Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weigh from 1400 to 1500 lbs., are the best French made, and are packed in a cast-iron frame, price of mill \$200, packing \$5. Terms cash. Further particulars can be had by addressing as above, post-paid, or to S. C. HILLS, agent N. H. Manufacturing Co., 12 Platt st., N. Y. 5 1/2

NEW HAVEN MANUFACTURING COMPANY.—Tool Builders, New Haven, Conn. (successors to Scranton & Parshley) have now on hand \$25,000 worth of Machinists' 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 all size slitters. The Company 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. Warehouse No. 12 Platt st., New York, S. C. HILLS, Agent N. H. Manufacturing Co. 5 1/2

PLANING, TONGUING, AND GROOVING—BEARDSLEE'S PATENT.—Practical operation of these Machines throughout every portion of the United States, in working all kinds of wood, has proved them to be superior to any and all others. The work they produce cannot be equalled by the hand plane. They work from 100 to 200 feet, lineal measure, per minute. One machine has planed over twenty millions of feet during the last two years, another more than twelve millions of feet Spruce flooring in ten months. Working models can be seen at the Crystal Palace, where further information can be obtained, or of the patentee at Albany, N. Y. 1 1/2 GEO. W. BEARDSLEE.

A. B. ELY, Counsellor at Law, 52 Washington street, Boston, will give particular attention to Patent Cases. Refers to Messrs Munn & Co., Scientific American. 16 1/2

LEONARD'S MACHINERY DEPOT, 109, Pearl St., and 83 Beaver, N. Y. Leather Banding Manufactory, N. Y.—Machinists' 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. P. A. LEONARD. 17

LOGAN, VAIL & CO., No. 9 Gold st., New York.—Agency for Geo. Vail & Co., Speedwell Iron Works, Morristown, N. J., furnish and keep on hand Portable Steam Engines of various sizes, Saw and Grist Mill Irons, Hotchkiss's Water Wheels, Iron Water Wheels of any size, Portable Saw Mills, complete; Bogardus's celebrated Planetary Horse Powers; heating forges and castings for steamboats and rolling mills, Ratchet Drills of superior quality for machinists, Saw Gummers, Hand Drills, Type Binders, and shafting and machinery generally. 20 1/2

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