

CORRESPONDENTS

J. R. H., of Pa.—To enable us to get up suitable engravings of your water wheel, for publication, it would be necessary for you to send us a working model or the Letters Patent.

C. C., of N. Y.—We would recommend you to have a preliminary examination made of your invention at the Patent Office before applying for a patent.

S. C. H., of Wis.—Wortz's pump was a simple spiral or volute curved pipe, which, being moderately rotated, dipped up the water at its periphery and discharged it at its center.

J. S. C., of Baltimore.—The pressure of water is just in proportion to its perpendicular height. A column of four feet exerts four times the amount of pressure on its foot as a column of one foot high.

J. E. M., of Ga.—Sand is employed in welding iron, to prevent oxyd forming, which would render the metal incapable of welding.

C. W. J., of Wis.—The steam pumps so well known and in such general use in this region, are direct-acting steam engines having no cranks.

M. H., of Pa.—Get a treatise on dialing, and it will impart to you all the information required respecting the shadows cast by the sun from perpendiculars.

H. H., of N. Y.—The fine polish on steel instruments to which you refer, is given by burnishing them with agate stones manufactured for the very purpose.

H. H. T., of Mass.—Heated and compressed air in a tight vessel will burst it—like steam—whenever the pressure becomes greater than the cohesive strength of the vessel.

J. H., Jr., of Ohio.—Many farmers now unload their hay and grain from wagons in their barns, by machinery, consequently a machine embracing this object merely is not patentable.

"Gas."—Wm. G. Ross, of St. Nicholas Mills, above Quebec, Canada, has in use an apparatus for lighting his mills, made from iron. It does not operate with satisfaction; he is, therefore, desirous of getting something more simple and economical.

J. W. Terry, of Wallhalla, S. C., wishes to purchase the best mill for grinding oak bark, to be operated by water power. He also wants the best machine for riving and shaving shingles.

B. D. Berry, of Edwardsville, and John Milner, of Greenfield, will please inform us in what State they reside, as we wish to address to them a communication.

H. H., of Boston.—The pianoforte patent to which you refer, has, we understand, been recently sold in England for \$10,000. Your improvement being apparently a good one, there is no reason why you should neglect to secure an English patent for it.

J. M. W., of N. Y.—The Ambrotype Manual is published by J. M. Fairchild & Co., this city.

W. W., of N. J.—A circular saw made in sections is stated to be less liable to buckle than a saw of a single plate, and if a section be broken it can easily be replaced.

P. M., of Ill.—We sometimes, at the request of correspondents, direct the attention of inventors to "new inventions wanted." Those, therefore, who have machines for supplying such wants should take proper measures for bringing them before the public by having them illustrated, that their merits may be made known to all, and that the public may judge for themselves.

J. J. C., of Md.—In the latest edition of "Brewster's Optics" the stereoscope and the magic lantern are described.

T. J. C., of Ga.—You should try and perfect your saw governor so as to make it self-acting. Give the matter your attention, and you may yet produce the valuable improvement you desire.

J. J. B., of Ky.—The claim of G. W. Fulton for hydraulic propulsion is limited to a combination of pipes for discharging the water, and for an arrangement to reverse the current. Without drawings you could not understand the nature of the invention.

Money received at the Scientific American Office on account of Patent Office business for the week ending Saturday, April 25, 1857.—

J. D. M., of Conn., \$25; A. W., of Pa., \$65; W. E. Jr., of Ill., \$55; G. & Co., of Ill., \$25; C. W. & Co., of Pa.,

\$250; S. & T., of Conn., \$25; R. W. B., of Pa., \$25; H. & G., of Mich., \$30; C. M. Y., of N. Y., \$25; A. P., of N. J., \$25; W. H. McN., of N. Y., \$250; S. I., of L. I., \$30; D. S. McN., of N. Y., \$55; P. E. H., of N. Y., \$25; W. A. J., of La., \$45; W. G. C., of N. Y., \$250; C. A. P., of N. Y., \$63; T. S. W., of N. Y., \$50; J. A. D., of N. Y., \$10; C. H. T., of L. I., \$30; I. A. R., of Mass., \$30; L. F., of Mass., \$27; E. T. L., of N. Y., \$30; N. T., of Me., \$30; A. C. R., of Conn., \$50; T. P., of N. Y., \$70; G. & L., of Va., \$10; E. F., of Ill., \$27; W. E., of Ill., \$25; J. L. S., of N. C., \$30; S. R. H., of N. Y., \$100; A. C. C., of Mich., \$30; C. D., of N. J., \$20; E. B. B., of N. Y., \$30; C. S., of N. Y., \$25; B. I. L., of Mass., \$25.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, April 25, 1857: J. D. M., of Conn.; W. Y. G., of Ky.; T. B., of Mass. (2 cases); R. W. B., of Pa.; E. B. B., of N. Y.; C. S., of N. Y.; C. M. Y., of N. Y.; A. P., of N. J.; J. N. W., of Ill.; B. I. L., of Mass.; G. I. M., of Conn.; T. S. W., of N. Y.; P. E. H., of N. Y.; D. S. D., of N. Y.; A. C. R., of Conn.; L. F., of Mass.; J. W., of Ky.; W. E., of Ill.

Important Items

COMPLETE SETS OF VOLUME XII EXHAUSTED.—We regret that we are no longer able to furnish complete sets of the present volume. All the back numbers previous to January 1st (No. 17) are entirely exhausted.

GIVE INTELLIGIBLE DIRECTIONS.—When we 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.

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PATENT LAWS AND GUIDE TO INVENTORS.—This 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. A Circular, giving instructions to inventors in regard to the size and proper construction of their models with other useful information to an applicant for a patent, is furnished gratis at this office upon application by mail.

RECEIPTS.—When money is paid at the office for subscription, 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 bona fide acknowledgment of the receipt of their funds.

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 date of patent when known, and enclosing \$1 as fee for copying.

INVENTORS SENDING MODELS TO OUR ADDRESS should always enclose the express receipt, showing that the transit expenses have been prepaid. By observing this rule we are able, in a great majority of cases, to prevent the collection of double charges. Express companies, either through carelessness or design, often neglect to mark their paid packages, and thus, without the receipt to confront them, they mulct their customers at each end of the route. Look out for them.

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Terms of Advertising.

Twenty-five cents a line each insertion. We respectfully request that our patrons will make their advertisements as short as possible. Engravings cannot be admitted into the advertising columns.

All advertisements must be paid for before inserting.

IMPORTANT TO INVENTORS.

THE UNDERSIGNED having had ELEVEN years' practical experience in soliciting PATENTS in this and foreign countries, beg to give notice that they continue to offer their services to all who may desire to secure Patents at home or abroad.

Over three thousand Letters Patent have been issued, whose papers were prepared at this Office, and on an average *three* of all the Patents issued each week, are on cases which are prepared at our Agency.

ABLE CORPS of Engineers, Examiners, Draughtsmen, and Specification writers are in constant employment, which renders us able to prepare applications on the shortest notice, while the experience of a long practice, and facilities which few others possess, we are able to give the most correct counsels to inventors in regard to the patentability of inventions placed before us for examination.

Private consultations respecting the patentability of inventions are held free of charge, with inventors, at our office, from 9 A. M., until 4 P. M. Parties residing at a distance are informed that it is generally unnecessary for them to incur the expense of attending in person, as all the steps necessary to secure a patent can be arranged by letter. A rough sketch and description of the improvement should be first forwarded, which we will examine and give an opinion as to patentability, without charge. Models and fees can be sent with safety from any part of the country by express. In this respect New York is more accessible than any other city in our country.

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In addition to the advantages which the long experience and great success of our firm in obtaining patents present to inventors, they are informed that all inventions patented through our establishment, are noticed, at the proper time, in the SCIENTIFIC AMERICAN. This paper is read by not less than 100,000 persons every week, and enjoys a very wide spread and substantial influence.

Most of the patents obtained by Americans in foreign countries are secured through us; while it is well known that a very large proportion of all the patents applied for in the U. S., go through our agency.

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A BARGAIN AT STAKE.—A splendid creek water power, capable of grinding 150 bushels of grain per day, or any other work in proportion; conveniently situated; connected with a small farm, good dwelling, out buildings, orchards, &c. For particulars, address H. T. SMITHSON, Roswell, Cobb co., Ga. 34 2\*

INGERSOLL'S IMPROVED HAY PRESS.—The best portable Hand Power Press in use for the purposes of Baleing Hay, Straw, Broom Corn, Husks, Hair, Hides, Moss, Hemp, Rags, Wool, Cotton, &c. Prices from \$50 to \$200. Also an improved press for ornamental work. Price \$50 and \$65. Also Ingersoll's Patent Tree Saw, for sawing down trees. This is a perfectly portable machine, and has been thoroughly tested during the past winter. Price \$75. All orders filled promptly. Also State and County rights for sale. Circulars containing full information sent on application to the FARMER'S & MECHANIC'S MANUFACTURING CO., Green Point, Kingsco., L. I. 34 2\* eow

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