

TO CORRESPONDENTS.

"H. B. of N. Y."—Your drawing and model came all safe and the papers will be made out with all despatch.

"E. L. of Md."—Choose a steam engine, and one of twelve horse power. It will be cheapest in the end.

"J. T. S. of Va."—You will find plenty of mechanics in Boston to take charge of your machine shop.

"R. M. G. of N. Y."—We are sorry to think that you should leave the purely practical, for the vague and unsound. What power can you get above that of the steam, that is, the fountain. We are sorry to say, that many good mechanics have a notion that levers and cranks increase the power. This is all folly, and we exhort you to steer clear of the rock upon which many have split.

"N. W. of Conn."—An invention to accomplish what you propose in the draw rollers, was patented last year, and the Examiner's Report describes it to be near the same. The distance between the draw rollers can be varied at pleasure and there are no less than 4 different parts of the invention, which appears to cover a wide field. An examination at the Patent Office would perhaps be the best mode of procedure for you.

"L. A. B. of N. Y."—Spiral pipes for the throwing of water upwards, have been long known, but a spiral tunnel, to our knowledge, has not been used.

"S. J. of Md."—There is no use in using the nitrate of iron in dyeing the blue.

"Errata"—In answer to a "Subscriber," last week, "cylinder," should have read *cistern*.

"N. K. of N. Y."—It will require a force of two and six-sevenths pounds applied to the largest wheel to *balance* the weight of 10 lbs. as represented in your diagram. The amount of power necessary to draw up the 10 lbs. weight depends of course on the friction of your wheels. They might be so accurately fitted as to require but the addition of one-seventh, of three pounds, when the 10 lbs. weight would rise.

"G. W. H. of N. Y."—Your tailors measuring instrument will appear next week. Circumstances have prevented its appearing in this number.

"G. L. of La."—All that we have got to say about artificial cold will be found in this number.

"T. R. of Va."—The resistance arising from the friction of water flowing through pipes is directly as the velocity of the water and inversely as the circumference of the pipe.

"J. C. C. of Vt."—Cannons are proved by hydraulic pressure, which is calculated by the weight of a perpendicular column of water, the area being equal to the bore and the height equal to the given height.

"C. B. N. of New York"—You will not be allowed to use the Croton water to propel your wheel, it being against the rules of the Company to allow it to be used for such purposes. No person can tell the power, unless they know the quantity of water discharged in a given time (the velocity,) as well as the fall.

"W. B. S. of N. H."—It will not be possible to get a patent, as your principle is the same as others in use, of which there are a great variety.

"G. C. of N. H."—The rule you want is just the same as the rule for calculating the relative diameters and speed of pulleys. See Whitlaw's Treatise.

Pictorial National Library.

A new periodical bearing the above title, has made its appearance upon our table, and from a hasty perusal of it we should pronounce it both useful and entertaining. The number before us is for July, and it contains fine engravings and a good list of contents.—W. H. Simonds publisher, No. 12 School st. Boston. Price only \$2 a year. We shall express our views in a more elaborate manner in some future number.

There fell during the last year, in the city of Savannah, Geo, not less than 59 inches of rain. As much as would nearly have covered the whole surface of the ground, five feet in depth.

Russ Pavement.

The Russ Pavement requires thorough inspection as it progresses, and much care. The last work is reported as having been greatly slighted, the cubes being loosely set together in sand, which will soon wash away and leave the upper surface any thing but perfectly true. Cement should be faithfully used to the last, in order to produce the pavement which is so much admired. We have seen some of the cubes taken up to be relaid a few days after it was thrown open for travel.

Patent Agency.

Applications for Patents made at this office, on the most reasonable terms. Neat drawings, specifications, and engravings of the first character, and cheaper than anywhere else. Notices of new inventions, Agency for the sale of Patent Rights, and all business of that nature, promptly attended to. Those who have patent rights to dispose of will find a good opportunity and field for their sale—such as Horse Power Machines and Waterwheels of every description. The largest circulation in the world for advertisements of inventions, &c.

Advertisements.

This paper circulates in every State in the Union, and is seen principally by mechanics and manufacturers. Hence it may be considered the best medium of advertising, for those who import or manufacture machinery, mechanics tools, or such wares and materials as are generally used by those classes. The few advertisements in this paper are regarded with much more attention than those in closely printed dailies.

Advertisements are inserted in this paper at the following rates:

Table with 4 columns: Rate, Number of insertions, Price, and Terms. Includes rates for one square of eight lines, two do., three do., one month, three do., six do., and twelve do.

TERMS:—CASH IN ADVANCE.

GENERAL AGENTS

- List of general and local agents for the Scientific American across various states, including New York, Boston, Philadelphia, Albany, Baltimore, etc.

CITY CARRIERS.

Persons residing in the city or Brooklyn, can have the paper left at their residences regularly, by sending their address to the office, 128 Fulton st., 3d floor.

To Cotton Manufacturers.

The subscriber will furnish Cotton Manufacturers with his improved Cotton Willow. The fact of its being introduced into most of the best mills in New England is the best proof of its excellence. It is extremely simple in its construction and will do more and better work with a less expenditure of power than any other Willow; it prepares the cotton so much better than any other that there is much less power and repairs needed on the succeeding machinery. It is as safe from fire as a Card, and its form and action are such as to draw all the flyings and dirt from the journals; it will convey the cotton to any desirable distance, short of 250 feet. It can be placed in the basement of a mill or other place nearly worthless for other manufacturing purposes, and will blow the cotton into the rooms above. All necessary information given for placing and operating the machine in any peculiar or difficult situation. EDWARD BACON, Superintendent Quinebaug Manufacturing Co. j24tf

Premium for Back Numbers.

We will pay 10 cents each for 100 copies, Nos. 1 and 16, Vol. 3, Scientific American, delivered at this office, free of expense and in good order. MUNN & CO

STEAM BOILER.

BENTLEY'S Patent Tubular and other Boilers of any size, shape or power, made to order, by SAMUEL C. HILLS & CO. m8 43 Fulton st.



GILROY'S

American and Foreign Patent Agency; and, for the sale of Patents, Manufacturers' Articles, &c 71 Nassau st. corner of John st. New York. Inventors who intend to apply for Patents in Europe may save themselves much disappointment and outlay by calling at this Agency. The undersigned respectfully invites all who may have achieved any discovery in science and arts—all who may have invented or improved any useful machine or manufacture, to communicate with this Agency. The undersigned pledges himself most sacredly never, under any circumstance or pretence whatever, to divulge the secrets or business of any inventor to another inventor; nor will he ever show the drawings or specifications of one party to another party, or give any explanations without permission. His offices, or rooms, are especially adapted to this purpose, being so arranged that each section of the business is managed in a separate apartment, and so that no applicant can possibly get a glance of the drawings or specifications of others. Inventors, from sad experience, know the importance of such an arrangement.

Mechanical drawings of every description executed with despatch, and every information and assistance rendered to Manufacturers, Inventors, Power Loom Makers, &c. Our terms will be according to the nature and extent of the services performed.

For integrity and capability the undersigned refers to:—Horace Greeley, Esq. Tribune Buildings, New York. Wilbur & Scott, (formerly Masters, Markoe & Co.) 15 Stone st. N. Y. Harper & Brothers, 92 Cliff st. N. Y. A. & E. S. Higgins & Co. 62 Broad st. N. Y. John S. Worth, Merchant, 179 Greene st. N. Y. Alderman Wm. Gale, 119 Fulton st. N. Y. W. H. Starr, Esq. Editor Farmer and Mechanic, 69 Beekman st. N. Y. Wm. Sloane, Merchant, 245 Broadway N. Y. Col John Travers, President Phoenix Manufacturing Co. Paterson, N. J. Thomas Rogers, Esq. (Rogers, Ketchum & Grosvenor), Paterson, N. J.—Benjamin Marshall, Esq. Troy, N. Y. Benjamin F. Wolcott, Esq. New York Mills.

Author of the "Art of Weaving," "Practical Treatise on Dyeing and Calico Printing," "Pastoral Life and Manufactures of the Ancients," "Wonders of Nature and Art," &c. All letters must be post paid, and addressed to Clinton G. Gilroy, 71 Nassau st. New York. j17 3w

Ballard's Improved Jack Screw.

PATENTED. THE advantages of this Screw for Stone Quarries, Railroads, Steam Boiler Builders, and for other purposes are superior to any other similar machine. The improvement consists in being able to use either end of the screw, as occasion requires. It is capable of raising the heaviest Locomotive with ease, being portable, strong and powerful, and not likely to get out of order. Many Railroad Companies and Boiler makers have them in use, by whom they are highly recommended.

JACK SCREWS, Of various sizes, power and price, constantly on hand at the manufactory, No. 7 Eldridge street, near Division. m20 tf

Taft's Premium Letter Copying Press.



THE subscriber continues to manufacture his Premium Letter Presses, at Worcester, Mass., and respectfully informs his friends and the trade generally, that he keeps constantly on hand a large assortment, which he offers for sale at reduced prices. Orders by mail will be promptly attended to. GEO. C. TAFT, Worcester, Mass., April 11, 1848. a22 3m

Stave Dressing Machine.

THE undersigned are manufacturing and have now in operation, a machine for Dressing *lined* Staves, which will dress 126 hoghead or 170 barrel staves per hour, with ONE HORSE POWER, and with TWO HORSES WILL DOUBLE THE NUMBER. It will dress crooked and winding staves to perfection, and leave the full thickness on those with thin edge, a desideratum worthy of attention. The machine is simple, compact and durable, and has received the approval of every practical Cooper that has witnessed its operations. We warrant it to perform FULLY equal to our representation and shall be pleased to exhibit it to all who may favor us with a call. For further description and terms, apply to WM & E. T. FITCH, 2d, New Haven, Conn., or GEO. GILBERT, Westville, N. H. Co., Conn. j3 3m*

Tinner's Machines.

A. W. WHITNEY'S Patent Improved Tinner's Machines of every description, constantly on hand and for sale by JOHN M. BRUCE & SONS, a22 3m* 192 Water st., N. Y.

PREMIUM SLIDE LATHE.

THE subscriber is constantly building his improved Lathes of all sizes, from 7 to 30 feet long, and can execute orders at short notice.

JAMES T. PERKINS, Hudson Machine Shop and Iron Works, Hudson, N. Y. m11

Thredgold's Carpentry.

ONE copy of this valuable work may be had upon application at this Office. It is entirely new and published in 1847. Price \$3. m20 3t

Johnson & Robbins,

Consulting Engineers and Counselors for Patentees. Office on F street, opposite Patent Office, Washington, D. C. j17 tf

Agricultural Implements.

Inventors and Manufacturers of superior Agricultural Implements may find customers for their goods by applying at the Agricultural Warehouse of S. C. HILLS & CO. 43 Fulton st. m8

Gutta Percha Bands.

THE undersigned have been appointed Agents by the American Gutta Percha Company, and are now in readiness to furnish Bands and Belting of any size or length, at the following

SCALE OF PRICES PER FOOT.

Table with 3 columns: Inches, Cents, and Inches. Cnts. showing pricing for various band widths and lengths.

All Bands of extra thickness will be made by special agreement. Light Bands for Cotton Mills furnished at short notice. Address MUNN & CO. New York. m18

Lap welded Wrought Iron Tubes FOR TUBULAR BOILERS,

From 1 1/4 to 6 inches diameter, and any length, not exceeding 17 feet.

THESE Tubes are of the same quality and manufacture as those extensively used in England, Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER, Patentee, d26 28 Platt street, New York

Johnson's Improved Shingle Machine.

THE Subscriber having received Letters Patent for an improvement in the Shingle Machine, is now ready to furnish them at short notice, and he would request all those who want a good machine for sawing shingles, to call on him and examine the improvements he has made, as one eighth more shingles can be sawed in the same given time than by any other machine now in use. Augusta, Maine, Oct. 1, 1847. J. G. JOHNSON.

GENERAL PATENT AGENCY. REMOVED.

THE SUBSCRIBER has removed his Patent Agency from 139 Water to 43 Fulton street. The object of this Agency is to enable Inventors to realize something for their inventions, either by the sale of Patent Goods or Patent Rights. Charges moderate, and no charge will be made until the inventor realizes something from his invention. Letters Patent will be secured upon moderate terms. Applications can be made to the undersigned, personally or by letter post paid. SAMUEL C. HILLS, Patent Agent. m8

A. W. Whitney,

Manufacturer of Machines for Working TIN AND SHEET IRON, On a new and improved Plan. Also, makes to order Engine and other Lathes of improved construction. All order by mail, or otherwise, will meet with prompt attention by addressing A. W. WHITNEY. Woodstock, Vt., April 17, 1848. a22 3m*



The above is prepared to execute all orders at the shortest notice and on the most reasonable terms.

To Mill Owners.

HAVILAND & TUTTLE'S Patent Centre Vent Pressure Water Wheel.—These wheels are now in successful operation in many towns in Maine, Massachusetts, and Rhode Island, and are found to surpass in power and facility of adaptation any water wheel now in use. This wheel was awarded the silver medal at the Fair of the American Institute recently held in New York and a diploma at the Mechanics' Fair in Boston.

The wheels are manufactured and for sale by the FULTON IRON FOUNDRY CO., South Boston, Mass.,—where the wheels can be seen and any information concerning them had. Patent Rights for different States, Counties, &c. for sale, as above. m25 6m*

Machinery.

PERSONS residing in any part of the United States who are in want of Machines, Engines, Lathes, or ANY DESCRIPTION of MACHINERY, can have their orders promptly executed by addressing the Publishers of this paper. From an extensive acquaintance among the principal machinists and a long experience in mechanical matters they have uncommon facilities for the selection of the best machinery and will faithfully attend to any business entrusted to their care. MUNN & CO. a16

SPRING STYLE HATS.

I AM now prepared to offer my old and new customers—for Gentleman and Youth—for Spring and Summer, at wholesale and retail, a very extensive assortment of Hats and Caps—at prices which cannot fail to suit the most economical and prudent purchaser. Store and Chambers—173 Washington street, Boston. W. M. SHUTE. m20 7t*

Important to the Public.

IT must not only be important, but interesting to the public to know at what establishment in New York Hats or Caps of the best quality and latest style can be purchased at the cheapest price. This place is Knox's, where may be found every variety of a Hat from a shilling Palm Leaf to a Five Dollar Beaver, or a Cap from a two shilling oil cloth to a beautiful new style cloth for \$1.50. Knox's is the place—128 Fulton street. m20 3m

TALBOT'S PATENT REVOLVING BLIND

HINGE. Important to Builders and others. THESE Hinges are for opening, closing, locking and completely regulating the blind upon the interior of the house without raising the sash. They are adapted to any kind of house, or style of finish. All communications, whether for the purchase of the article, or of Town, County or State rights, addressed to the subscriber, or to J. W. Ingell & Co., Taunton, Mass., will be promptly and satisfactorily attended to. j3tf L. T. TALBOT, Taunton, Mass.