

Correspondents

Persons who write to us expecting replies through this column, and those who may desire to make contributions to it of brief interesting facts, must always observe the strict rule, viz., to furnish their names, otherwise we cannot place confidence in their communications.

G. & W. B., of Conn.—Brasswork must be perfectly free from grease in order to render it fit for electroplating. It should then be washed in a caustic lye. The acids employed to brighten brasswork are either sulphuric or muriatic; the former is the cheapest. One part of acid to one of warm water is of sufficient strength.

L. B., of Va.—You state that the water in your cistern is ten feet higher than your stable, and yet it sometimes will not flow, and you ask what kind of suction pump is the best to start with? A common hand wooden pump, with flexible suction tube will answer the purpose. The water ceases to flow either from the accumulation of air in some bend of the pipe, or from the want of sufficient pressure on the surface water of the cistern. If the cistern is open at the top, the resistance must be in the pipe.

TALLOW CUTTING MACHINE.—In answer to an inquiry made through our columns for a machine for this purpose, we are informed by Warren Hathaway & Son, of New Bedford, Mass., that they can furnish such a machine.

M. B., of Iowa.—Smec's battery is as good as any other for electroplating, and it is used by silver plating establishments in this city. Mathiot's battery is a good one. Jewelry is colored by enameling, not electro-gilding. The only secret in preparing articles for electroplating is to have their surfaces perfectly free from grease and oxids. There is no periodical published which is exclusively devoted to electro-metallurgy.

H. K., of Wis.—An engine having a piston of 28 inches area, pressure 50 pounds on the square inch, and velocity of piston 400 feet per minute is double the power of one moving 200 feet per minute; but to double the speed of a locomotive, it requires four times the power, because the resistance increases according to the square of the velocity.

W. C. G., of Phila.—The barometer to which you refer is quite different from the one described in your letter, which appears to be an ingeniously constructed instrument of the aneroid character.

R. F. B., of R. I.—Instead of obtaining any benefit from air-tight cylinders, they would prove injurious to any vessel to which you might apply them at any part of her hull. Such buoys are not required at the stern of a ship.

R. J. G., of Ind.—In the case you refer to, the patentee should establish the utility and value of the invention within the territory sold. A method of preserving ice might be valuable in Jamaica, but worthless in Greenland. An English patent does not furnish any greater evidence of the value of an invention than an American patent.

W. A. G., of Ind.—Nasmyth's steam hammer appears to be the one you wish to obtain, if so, communicate with Messrs. Merrick & Co., Philadelphia, who build the same. It appears to us that you should get a large steam engine for operating your rolls and squeezers, as well as hammers in making bar iron. You should, therefore, employ an engineer acquainted with the business to get up the machinery.

W. G. M., of Ohio.—The "still wines" of commerce, when the term is used to distinguish a wine from the sparkling variety (as "still Catawba" and "sparkling Catawba"), have been fermented, and contain alcohol. The juice of the grape cannot be intoxicating without having under one fermentation, this process being necessary to the development of alcohol. Unfermented liquors are merely syrups or cordials, and have no right to be called wines.

A. W., of N. Y.—We do not know any work which gives the pressures that different kinds of wooden tubes are capable of sustaining.

F. B. R., of Mass.—Glue, and especially the strong yellow quality, is the best which you can use for pasting your paper tubes. You can easily keep it warm by the use of a jet of gas or an alcohol lamp.

This following cure for a cold has been on record, says the Evening Post, since 1340:—

- Putte your feet in hot water
As high as your thighs
Wrappe your head up in flannel
As low as your eyes;
Take a quart of rum'd gruette,
When in bedde, as a dose;
With a number four dippe
Well tallowe your nose.

This may be correct, but we hardly think that "number four dips" were known in 1340.

G. E. S., of Pa.—You will find a table on the radius and pitch of wheels, on page 95 of "Templeton's Millwrights' Companion," published by D. Appleton & Co., of this city; the price is one dollar.

J. B., of Conn.—No person has the right to stamp the word "patent" on any article or machine, for which a patent has been obtained, without the consent of the patentee or assignee; nor has he a right to stamp any unpatented article: every offense renders him liable to a fine of \$100. Any invention which has been in public use for more than two years prior to the application for the patent becomes public property.

A. B., of Mich., and F. A. C., of N. Y.—The "vesper light" is a name given to a lamp which generates camphene into gas at the burner, and has no wick. Such lamps appear to be safe, if carefully managed. Common oil cannot be used in this lamp.

J. B., of N. Y.—Soda renders glass fusible according to the quantity used in the composition. Manganese gives glass a deep green color; iron also renders it green in color. Five per cent of lime, and a like quantity of soda and oxide of manganese, will make it according to the color you desire.

J. C., of N. H.—Send us your name that your model may not be lost among the large number we have constantly to take care of. We are of opinion that your paddle wheel possesses no patentable novelty. The concave bucket is quite an old thing. Your press is quite a common device for forming articles of plate metal and not patentable.

W. H., of Ill.—On page 50, this volume, of the SCIENTIFIC AMERICAN, you will find a full description of a very good ice-house.

T. D., of Wis.—You cannot obtain any power to drive machinery by securing a series of buoys on an endless belt, passing over a drum at each end, and making one set of buoys pass through a vessel containing water, while the other set is coming down on the other side. You seem to think that a floatage power will be created by the buoys passing up through the water. This is a mistaken idea. The series of buoys on each side of the belt balance one another, and therefore cannot generate a power. The same idea has been presented to us many times as a means of obtaining "perpetual motion."

W. H. H., of Ohio.—A good work on architectural drawing may be had by applying to Messrs. Appleton, publishers, this city.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Friday, Dec. 31:—

- B. H. H., of R. I., \$30; L. H. & R., of N. Y., \$30; J. B. S., of Texas, \$20; W. B., of N. Y., \$25; W. W. S., of N. Y., \$30; F. V., of Texas, \$43; A. & B. N., of N. Y., \$30; I. B., of Va., \$25; S. D. L., of Mich., \$30; S. B. G., of Conn., \$58; C. D. W., of Ohio, \$30; B. F. S. M., of N. Y., \$25; E. H., Jr., of N. Y., \$100; H. W., of Vt., \$30; G. C., of N. Y., \$30; S. S. B., of R. I., \$20; R. H. K., at Mo., \$25; D. B. DeL., of N. Y., \$30; E. D. J., of Mo., \$25; P. & B., of N. Y., \$30; H. L. W., of Mass., \$10; N. C. S., of Conn., \$30; D. S., of Cal., \$10; J. P., of Cal., \$30; W. P., of Ohio, \$30; H. D., of N. Y., \$30; T. L. B., of Ind., \$30; E. A. S., of Pa., \$20; L. H., of N. J., \$12; A. S., of N. Y., \$40; J. McD., of Mich \$30; O. W. J., of N. Y., \$30; J. H. T., of Ill., \$30; L. P., of N. Y., \$90; F. P. P., of Conn., \$25; W. C. D., of Mass., \$30; J. B. F., of Wis., \$25; W. A. McD., of N. Y., \$30; J. L. P., of N. Y., \$30; P. C. F., of N. Y., \$20; J. R., of Conn., \$20; S. S. M., of Ohio, \$30; W. & L., of Conn., \$35; H. A. R., of N. Y., \$30.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Friday, Dec. 31:—

- L. H., of N. J.; F. P. P., of Conn.; E. D. J., of Me.; J. G. B., of Mo.; W. M., of N. Y.; O. W. J., of N. Y.; H. M. P., of Mo.; J. J., of Ohio; B. F. S. M., of N. Y.; H. A. R., of N. Y.; G. C., of N. Y.; A. M. O., of Conn.

IMPORTANT TO INVENTORS.

AMERICAN AND FOREIGN PATENT SOLICITORS.—Messrs. MUNN & CO., Proprietors of the SCIENTIFIC AMERICAN, continue to procure patents in all the United States and all foreign countries on the most liberal terms. Our experience is of thirteen years' standing, and our facilities are unequalled by any other agency in the world. The long experience we have had in preparing specifications and drawings has rendered us perfectly conversant with the mode of doing business at the United States Patent Office, and with most of the inventions which have been patented. Information concerning the patentability of inventions is freely given, without charge, on sending a model or drawing and a description to this office.

Consultation may be had with the firm, between nine and four o'clock, daily, at their principal office, 123 Fulton street, New York. We established, over a year ago, a Branch Office in the City of Washington, on the corner of F and Seventh streets, opposite the United States Patent Office. This office is under the general superintendence of one of the firm, and is in daily communication with the Principal Office in New York, and personal attention will be given at the Patent Office to all such cases as may require it. Inventors and others who may visit Washington, having business at the Patent Office, are cordially invited to call at our office.

Inventors will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

We are very extensively engaged in the preparation and securing of patents in the various European countries. For the transaction of this business, we have offices at Nos. 66 Chancery Lane, London; 28 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we may safely say that three-fourths of all the European patents secured to American citizens are procured through our Agency.

Circulars of information concerning the proper course to be pursued in obtaining patents through our Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the principal office or either of the branches.

FRANCIS' GALVANIC PROCESS FOR THE alleviation of pain in extracting teeth, with Clark's patented improvements. The city of Philadelphia has just awarded the Scott legacy medal and premium to this invention. A machine, with full instructions how to use, accompanied with a license for the full term of the patent, will be sent to any address on the receipt of \$60, or, without the machine, on the receipt of \$50. The patent has been sustained in a recent suit in the United States Court.

JAMES J. CLARK, Assignee and Patentee, 703 Spruce st., Philadelphia. 12 2

PATENT RIGHT FOR SALE.—THE BEST suction pumps now in existence are those of Henry Zeug, of Elizabethport, N. J., which have been illustrated and described in No. 17 of this paper. They are of immense value for ships' pumps, one man being able to operate the largest one of them and to lift the water to any height. They never get out of order. For fire engines they are invaluable, as they give out 50 per cent more water and require 50 per cent less power than common force pumps. This is done by perfectly excluding the external air, and as no air-chamber is required no pressure of air is to be overcome. These pumps are applicable for hydraulic presses, with the same advantage. For particulars, please address the patentee, HENRY ZEUG, Elizabethport, N. J. 12 3

MARRIED LIFE: ITS DUTIES AND Dangers.—Just published by the American Female Guardian Society, "Home Whispers," by M. W. Sent by mail, post-paid, on receipt of price, 75c. gilt \$1. Sold by booksellers generally, and at the office of the Advocate and Guardian, 29 East Twenty-ninth street, New York. The Advocate and Guardian is an interesting family paper, 16 pages, semi-monthly, (384 pages a year), at \$1 single copy; 10 copies, to one address, \$5 a year. All the profits of our publications are devoted to the "Home for the Friendless."

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WHEELER & WILSON'S SEWING MACHINES.—Price greatly reduced for New Style, price \$50. Office, No. 343 Broadway, New York. Diagram of the Lock Stitch made by this Machine. This

is the only stitch that cannot be raveled, and that presents the same appearance upon each side of the seam. It is made with two threads, one upon each side of the fabric, and interlocked in the center of it. Send for a circular. 6 tf

HOYT BROTHERS, MANUFACTURERS OF patent-stretched, patent-riveted, patent-joined, Oak-Leather Belting; Store, 28 and 30 Spruce street, New York. 210, 212, 214 and 216 Eldridge st., New York. A "Treatise on Machinery Belting" is furnished on application, by mail or otherwise.—gratis. 16 12

INGOT COPPER, SPLICER, BANCA TIN, Lead, Antimony, Rabbit Metal, Mount Hope Cut Nails, Ames' Shovels and Spades, for sale by JOHN W. QUINCY & CO., No. 98 William st., New York. 13 6w tf\*

DINNER AND GAS AT ONCE.—THE GAS Generating and Cooking Range Co. are prepared to supply their apparatus on demand. Circulars sent postfree. No. 512 Broadway, New York. 16 4

BALL'S OHIO MOWER.—THE MOST SUCCESSFUL one in the world. Awarded the first premium at the Syracuse trial, and equally as good a reaper as a mower. Patent fee, \$30. Manufacturers wanted. E. BALL, Patentee and Manufacturer, Canton, Ohio. 16 4

\$5,000 DOUCEUR.—THE UNDERSIGNED, the inventors and manufacturers of the "New Patent Safety Fuse Train," offer the above sum to any party or parties who will engage, by a practical method, to render their Fuse Train perfectly impervious to water, thoroughly adapted to submarine purposes, and fitted for government use, with Gutta Percha, or any other covering. The test to abide the decision of a duly qualified committee of government officials. Apply at the Brooklyn Navy Yard, from 10 A. M. till 4 P. M. at the new machine shop, or at the office, 134 Mercer street, New York. Samples will be given to parties for covering. 16 4

CORLISS' PATENT STEAM ENGINES.—On application, pamphlets will be sent by mail containing statements of the responsible manufacturing companies where these engines have been furnished, for the saving of fuel, in periods varying from 2 1/2 to 5 years. (The "James' Steam Mills," Newburyport, Mass., paid \$19,724 22, as the amount saved in fuel during five years. The cash price for the new engine and boilers was but \$10,500.) These engines give a perfectly uniform motion under all possible variations of resistance. Two hundred and fifty, varying from about 20 to 500-horse power, are now in operation. Boilers, shafting, and gearing. CORLISS STEAM ENGINE CO., Providence, R. I. 15 26\*

WATER POWER AND MILL SITE FOR SALE.—The Society for Establishing Useful Manufactures at Paterson, N. J., propose to lease for 21 years, renewable for ever, a mill lot with six feet of water, to be taken from the first or upper canal, and discharged into the second or middle canal. The head and fall is about 24 feet. The mill lot is well adapted for any manufacturing business. This property is ready to enter on—is at Paterson, and convenient to the city of New York, with railroad and canal conveyance, in the heart of a large manufacturing population, and all the advantages incident to such a locality. For particulars apply at the office of the Society, Paterson, N. J. 12 6\*

GREAT FAIR AND EXHIBITION OF THE AMERICAN UNION for Inventors, Manufacturers, Mechanics, &c., at No. 620 Broadway, New York. This fair is now open to the public; but inventors and others are allowed to send in articles for competition at any time previous to the 20th of January next. Diplomas, &c., will be awarded during the month of March, but the Exhibition will be continued during the year 1853, at No. 620 Broadway. Address communications to J. L. RIKER, Director, American Union, New York. 17 4

HOWE'S WEIGHING SCALES.—STRONG & ROSS' PATENT. Having received first-class premiums from the Vermont State Fair, New York State Fair, Virginia State Central Fair, United States Fair, Virginia State Fair, and Franklin Institute Fair, within sixty days, we have now only to invite the public to examine our large stock of scales of every variety, and also to test the principle of a six-tun scale, set up on the floor of our store, as well as to examine certificates of their superiority from many of our leading houses. FRANK E. HOWE, No. 435 Broome st., first door from Broadway, New York. 13 13\*

CLAY RETORTS.—THOS. HOADLEY, PATENTEE OF THE PATENT FRYING GAS RETORTS.—MANUFACTORY Nos. 32 and 34 Front st., Cleveland, O. 9 12\*

ENGINE LATHES, PLANERS, DRILLS, Woodworth Planing Machines, and a large assortment of tools for working in iron and wood, at greatly reduced prices, at the Machinery Depot, 135 North 3d st., Philadelphia, Pa. CHAS. H. SMITH. 13 6\*

HARRISON'S GRIST MILLS.—20, 30, 36 AND 45 inches diameter, at \$100, \$200, \$300 and \$400, with all the modern improvements. Also, portable and Stationary Steam Engines of all sizes, suitable for said Mills. Also, Rollers, Elevators, Belting, &c., &c. Apply to S. C. HILLS, 12 Platt st., New York. 1 3w

GAGE COCKS, OIL CUPS, GAS COCKS, Steam Gages, Globe, Angle and Governor Valves, Flange Cocks, Pumps, &c., manufactured and for sale by HAYDEN, SANDERS & CO., No. 306 Pearl st., New York. 16 13eow\*

STEAM WHISTLES.—ALL SIZES OF THE most improved patterns constantly on hand. Brass Lift and Force Pumps, (single and double-acting) Ship Pumps, &c., a full assortment. Manufactured by HAYDEN, SANDERS & CO., 306 Pearl st., New York. 16 13 eow

A MESSIEURS LES INVENTEURS.—Avis important.—Les inventeurs non familiers avec la langue Anglaise, et qui prefereraient nous communiquer leurs inventions en Francais, ne nous adresser dans leur langue natale. Envoyez nous un dessin et une description concise pour notre examen. Toutes communications seront traitées en confidence. MUNN & CO. Scientific American Office, 123 Fulton Street, New York.

Zur Beachtung für Erfinder. Erfinder, welche nicht mit der englischen Sprache bekannt sind, können ihre Erfindungen in der deutschen Sprache maden. Schreiben von Erfindungen mit kurzen, deutlich gezeichneten Beschreibungen beliebe man an uns zu adressieren an MUNN & CO., 123 Fulton Str., New-York. Auf der Office wird deutsch gesprochen.

The best thing of its size and price.—Sent by first mail.

THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS FOR 1853.—Containing practical information for the farmer and horticulturist. Embellished with 144 engravings, including Houses, Farm Buildings, Implements, Domestic Animals, Fruits, Flowers, &c. Price, 25 cents. Address LUTHER TUCKER & SON, Albany, N. Y.

\* Agents wanted in all parts of the country, to whom twelve copies will be sent postpaid for \$2, and larger quantities by express on still more favorable terms. 12 5\*

OIL! OIL! OIL!—FOR RAILROADS, STEAMERS, and for machinery and burning. Pease's Improved Machinery and Burning Oil will save fifty per cent., and will not gum. This oil possesses qualities vitally essential for lubricating and burning, and found in no other oil. It is offered to the public upon the most reliable, thorough and practical test. Our most skillful engineers and machinists pronounce it superior and cheaper than any other, and the only oil that is in all cases reliable and will not gum. The Scientific American, after several tests, pronounced it "superior to any other they have ever used for machinery." For sale only by the inventor and manufacturer F. S. PEASE, 51 Main street, Buffalo, N. Y. N. B.—Reliable orders filled for any part of the United States and Europe. 14 13

STEAM ENGINES, STEAM BOILERS, Steam Pumps, Saw and Grist Mills, Marble Mills, Rice Mills, Quartz Mills for gold quartz, Sugar Mills, Water Wheels, Shafting and Pulleys. The largest assortment of the above in the country, kept constantly on hand by WM. BURDON, 102 Front street, Brooklyn, N. Y. 1 26

HARRISON'S 20 AND 30 INCH GRAIN Mills constantly on hand. Address New Haven Manufacturing Co., New Haven, Conn. 14 13

MACHINE BELTING, STEAM PACKING, ENGINE HOSE.—The superiority of these articles, manufactured of vulcanized rubber, is established. Every belt will be warranted superior to leather, at one-third less price. The Steam Packing is made in every variety, and warranted to stand 300 degs of heat. The hose never needs stiling, and is warranted to stand any required pressure; together with all varieties of rubber adapted to mechanical purposes. Directions, prices, &c., can be obtained by mail or otherwise, at our warehouse, NEW YORK BELTING AND PACKING COMPANY. JOHN H. CHEEVER, Treasurer, N. S. 37 and 38 Park Row, New York. 14 13

FOR SALE—THREE SLABBING MACHINES with cutters, which have been used in the manufacture of screw wrenches; one nearly new, and all in good order. Also, one large Iron Planing Machine, three Engine Lathes, and a lot of small tools used in making wrenches. Inquire either in person or by letter of PETTIBONE & DODGE, No. 77 John st., New York, or of A. P. & E. H. PLANT, Plantsville, Conn. 16 4\*

PRIMI, WOLFENDEN & CO., MURFREESBORO, Tenn., Machinists and Iron Founders. We are prepared to repair all kinds of machinery. We will also sell on commission all kinds of machinery suitable to this location. Manufacturers would do well to consult us, as we are all practical machinists. 17 3\*

SECOND-HAND MACHINISTS' TOOLS.—Viz., Engine and Hand Lathes, Iron Planers, Drills, Chuck Lathes, Gear Cutters and Vises, all in good order, and for sale low. Also, one new first-class Woodworth Planing and Matching Machine. Address FRANKLIN SKINNER, Agent, 14 Whitney avenue, New Haven, Conn. 14 13

CARY'S CELEBRATED DIRECT ACTING Self-Adjusting Rotary Force Pump, unequalled in the world for the purpose of raising and forcing water, or any other fluid. Manufactured and sold by CARY & BRAINARD, Brockport, N. Y. Also for sale by J. C. CARY, 240 Broadway, New York City. 12 tf

PATENT COMPOSITION BELTS.—PATENT PACKING.—The Company have on hand and are ready to supply all orders for their superior Composition Machine Belting. They are proof against cold, heat, oil, water, gases, or friction, and are superior to leather in durability, and much cheaper in cost. The composition gives to these belts uniform durability and great strength, causing them to hug the pulley so perfectly that they do more work than any other belts of the same inches. The severest tests and constant use in all sorts of places during the last 14 months has proved their superiority, and enables the Company to fully guarantee every belt purchased from them. Manufacturers and mechanics are invited to call, examine, and test these belts. The Patent Packing for planed joints is in every way superior to any other article ever used for that purpose. A liberal discount allowed to the trade. "New York and Northampton Belting and Hose Co." E. A. STERN, Treasurer, 217 Fulton st., New York. 16 tf

COAL OIL AND RETORTS.—THE UNDERSIGNED offers his services as an Engineer and Expert relating to machinery and processes in the above business. Terms moderate. JOSEPH E. HOLMES, Newark, Ohio. 13 10\*

FELT FOR STEAM BOILERS, PIPES, Ship-sheathing, and all varieties of felting manufactured to order by JOHN H. BACON, Winchester, Mass. 14 13\*

SECOND-HAND SLIDE LATHES, IRON Planers, Steam Engines, Upright Drills, Boring Mills, Woodworth Planing Machines, Sash, Tenoning and Mortising Machines, for sale by CHARLES G. WILLCOX, 135 North 3d st., Philadelphia, Pa. 13 6\*

FOR SALE—SECOND-HAND MACHINISTS' TOOLS.—One large boring mill for car wheels, weight, 4,000 lbs.; cost \$800—price, \$250. One large boring mill (English) for car wheels, weight, 2,000 lbs.; cost \$400—price, \$100. One screw lathe, 8 feet bed, 20 inch swing, weight, 1,500 lbs.; cost \$350—price, \$150. Also one 10 ft planer; cost \$850—price, \$350. Apply to GEO. S. LINCOLN & CO., Hartford, Conn. \$10 13t\*

IRON PLANERS AND ENGINE LATHES of all sizes, also Hand Lathes, Drills, Bolt Cutters, Gear Cutters, Chucks, &c., on hand and finishing. These tools are of superior quality, and are for sale low for cash or approved paper. For cuts giving full description and prices, address "New Haven Manufacturing Co., New Haven, Conn." 14 13

WOODWORTH PLANERS.—IRON FRAMES to plane 15 to 24 inches wide.—at \$30 to \$110. For sale by S. C. HILLS, 12 Platt street New York. 1 26

BARREL MACHINERY.—THE UNDERSIGNED, being sole proprietor of Crozier's Patent Barrel Machinery (universally acknowledged to be superior in every particular, to any ever before offered to the public), is prepared to fill orders for the same at sight. The above machinery is adapted for all sizes and varieties of work. The above machinery is in successful operation in Oswego and Rochester, N. Y., Detroit, Mich., Chicago, Ill., Milwaukee, Wis., St. Louis, Mo., Camden, N. J., Philadelphia, Pa., Augusta, Ga., and different parts of Canada. For machines and rights, address PETER WELCH, Oswego, N. Y., or STANLEY & GODDAR, New York City. 11 35\*