



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.

STEAM CULTURE.—It is very difficult to state at what period the application of steam was first made to purposes of agriculture. In 1618, David Ramsey and Thomas Wildgoose took out a patent in England, the first on record in this class. The object of the invention, as stated, "was for the good of the commonwealth, as well as to plough ground without horses or oxen;" and in a later day (1769), Francis Moon secured a patent for a "new invented machine, to go without horses, adapted to wheel carriages in general, also to ploughing, harrowing and every other branch of husbandry." So confident of success was the inventor that he actually sold all his own horses, and advised his friends to do likewise, under the impression that their value would be speedily reduced to one-fourth.

W. J. S., of N. Y.—The conductor of super-atmospheric electricity for land telegraphs which you describe, is also described on pages 190 and 191 of Trumbull's work on Telegraphs, second edition. It has not sufficient novelty to warrant its publication.

BROOMS.—John H. Lentz, of Etowah, Ga., wishes to purchase a machine for making brooms from broom corn, also a lathe for turning out the handles.

G. & T., of N. Y.—We do not know where coil springs can be obtained.

L. G. G., of N. C.—Smee's Electro-Metallurgy is the best one known to us. It can be got from Wiley & Halstead, New York.

J. K., of Ind.—We use Webster's Dictionary altogether. It is the standard in this country.

PORTABLE CORN MILLS.—We are having frequent inquiries for such mills, and we think that some one who makes them will do well to advertise them in our columns.

W. M., of Ohio.—Some turbine wheels have realized 80 per cent of the water power. Address Mr. Boyden, Lowell, Mass., regarding the price he charges.

J. C. T., of N. Y.—Rotary tables are common, but we have never seen one formed of a series of rising concentric circles, as represented in your sketch. If you can show that it is useful, a patent may be secured for it.

J. D. W., of Mo.—You ask "How long it will take an electric current to pass through the entire length of the Atlantic Cable?" It will pass almost instantaneously, but as a primary current generates a counter current, it will take from four to six seconds to send one current after another continuously.

J. H., of Mo.—The inhalation of oxygen has been employed for lung diseases, but never for fevers so far as we know. You seem to suppose that the inhalation of pure oxygen would be better for the health than breathing atmospheric air. This would not be so. By inhaling pure oxygen, the pulse and the blood increase in motion, and life becomes a feverish excitement.

B. J. M., of Pa.—The fluid to which you refer as being used by tinner to ensure the adhesion of solder is the chloride of zinc in solution, which they apply with a feather to the metal.

H. A. S., of N. Y.—Your directions for the use of the Davy lamp are well known and form part of the British Coal Inspectors instructions to miners.

H. B. H., of Pa.—We believe that Carroll Spence is the present American Minister at Constantinople.

C. D., of Pa., and M. J. O., of Mass.—Messrs. Blackie & Son, 117 Fulton street, New York, have published a good work on mechanical drawing. It will undoubtedly aid you in getting a knowledge of this art.

L. & B., of Mass.—The person who first brings an invention to perfection—applies it usefully—is entitled to the patent, and will maintain his right in a court of law. The person who may have talked to others about inventing a similar machine years before, but who never did anything towards completing it, until the patent was secured by another, cannot come in and dispossess the patentee of his right.

P. C. G., of Mass.—The most common cause of the explosions of steam boilers is the want of water in the boiler, whereby the flues become red hot and the metal rendered weak—easily blown to pieces by the pressure of steam generated.

E. J. R., of Va.—The sample of stone sent to us is rock quartz, and has no value whatever.

W. & J., of Ill.—We do not know of any means whereby alcohol impregnated with turpentine can be deprived of its effects.

J. N., of Texas.—We thank you for the information you send us. We are well acquainted with Davenport & Cook's experiments with electro-magnetic engines in 1836. We know nothing of their present whereabouts.

TOBACCO CUTTER.—J. W. Woodburn, of Rome, Pa., wishes to correspond with some one who can supply him with a good tobacco cutter.

T. McE. H., of Wis.—Piesse's Art of Perfumery is published by Lindsay & Blakiston, Philadelphia. Car-nellians are very cheap, and are shaped by being ground with emery powder on steel plates which revolve very rapidly.

W. E. S., of Ill.—We thank you for your club of subscribers. If you give a power of attorney to a party to sell your patent, it should be put upon the Records of the Patent Office.

S. D. C., of Va.—The percentage of power given out by a water wheel in proportion to the power of the water is ascertained by a friction brake applied to the shaft. You should bear in mind that power means velocity multiplied into weight, not velocity itself.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Saturday, September 18, 1858:—

A. H. G., of N. Y., \$30; S. K. B., of Ill., \$30; W. M. W., of N. Y., \$30; W. R. C., of Iowa, \$25; W. Y. G., of Ky., \$30; M. L., of Vt., \$25; W. H., of Pa., \$25; H. C. S., of Ohio, \$250; W. H., of Ill., \$25; G. H. M., of N. Y., \$25; M. & B., of N. Y., \$25; J. T. D., of N. Y., \$55; P. W. G., of Ill., \$20; J. W. Van D., of Mo., \$55; E. P. C., of Mass., \$25; H. & K., of Ill., \$30; E. M., of N. Y., \$30; P. C. F., of N. Y., \$10; W. T. B., of Ohio, \$25; R. H. M., of N. Y., \$30; G. W. S., of Ill., \$25; A. C. B., of Mo., \$25; J. D. R., of Pa., \$25; W. H. B., of N. Y., \$25; C. C., of Conn., \$52; A. S., of Ill., \$25; H. S., of N. Y., \$30; E. A. G., of Pa., \$25; J. A. D., of Ky., \$20; E. M. & J. E. M., of N. Y., \$30; H. M. C., of Mich., \$25; G. L. D., of Vt., \$40; J. W., of R. I., \$35; C. E. B., of N. Y., \$30; W. W., of N. Y., \$30; J. M., of N. Y., \$50.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, September 18, 1858:—

A. S., of Ill.; J. A. D., of N. Y.; W. T. B., of Ohio; J. D. R., of Pa.; J. M., of N. Y., (2 cases); H. M. C., of Mich.; A. W., of Ga.; A. C. B., of Mo.; W. B. B., of Conn.; C. C., of Conn.; E. A. G., of Pa.; M. L., of Vt.; W. H., of Ill.; W. R. C., of Iowa; W. H., of Pa.; G. W. S., of Ill.; H. G., of Ill.; H. C. S., of Ohio; M. & B., of N. Y.; W. H. B., of N. Y.; W. B. C., of Pa.; E. P. C., of Mass.; J. F. D., of N. Y.

Literary Notices.

THE STORY OF THE TELEGRAPH, AND A HISTORY OF THE GREAT ATLANTIC CABLE. By Chas. F. Briggs and Augustus Maverick. New York: Rudd & Carlton, 310 Broadway. The small portion of this work which is devoted to general information concerning electric and magnetic telegraphs is very meager and incomplete, while that relating to the history of the Atlantic Telegraph is full and comprehensive. All the interesting and valuable information which the newspapers have given forth since the first projection of the enterprise is in this work condensed and properly arranged, so that it forms a convenient and concise handbook of this great triumph of science over the difficulties of nature. The work is embellished by some engravings and a portrait of Cyrus W. Field.

THE EDINBURGH REVIEW. Published by L. Scott & Co., No. 54 Gold street, New York. This is the nestor of Reviews, but though the oldest it is as vigorous as the youngest in our language. The number for the present quarter contains an able leader on the masonic geologist, Hugh Miller; also, a keen criticism on Thiers' History of the French Consulate and Empire, and a very able essay on the "Progress of Physical Science."

BLACKWOOD'S MAGAZINE.—This monthly, also published by L. Scott & Co., always contains able contributions. "What shall we do with it?" by Bulwer, is continued to part 16. There is a robust and spicy article on "London Exhibitions and London Critics," and several other interesting articles.

VALUABLE HINTS TO OUR READERS.

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 bona fide acknowledgment of the receipt of their funds. The Post Office law does not allow publishers to enclose receipts in the paper.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within fifteen 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.

BINDING.—We would suggest to those who desire to have their volumes bound, that they had better send their numbers to this office, and have them executed in a uniform style with their previous volumes. Price of binding 75 cents.

AMERICAN AND FOREIGN PATENT SOLICITORS.—Messrs. MUNN & CO., Proprietors of the SCIENTIFIC AMERICAN, continue to procure patents for inventors in 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 description to this office.

Consultation may be had with the firm, between nine and four o'clock, daily, at their principal office, 128 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.

The annexed letter from the late Commissioner of Patents we commend to the perusal of all persons interested in obtaining patents:—

Messrs. MUNN & Co.—I take pleasure in stating that while I held the office of Commissioner of Patents, MORE THAN ONE-FOURTH OF ALL THE BUSINESS OF THE OFFICE came through your hands. I have no doubt that the public confidence thus indicated has been fully deserved, as I have always observed, in all your intercourse with the Office, a marked degree of promptness, skill, and fidelity to the interests of your employers. Yours, very truly, CHAS. MASON. Communications and remittances should be addressed to MUNN & COMPANY, No. 128 Fulton street, New York.

MACKINTOSH & WADSWORTH'S PATENT Variable Governor, Cut-off Valve, equally adapted to the common slide valve or puppet valve engine, also to the oscillating, cutting off the steam at any point, from the common current to three-fourths of the stroke, as the varying pressure of the steam in the boiler, or the varying amount of work to be done, requires. Shop, county and State rights for sale. For illustration see Sci. Am., Vol. XIII, No. 51. For full particulars address CRIDGE, WADSWORTH & CO., Pittsburgh, Pa.

SECOND-HAND MACHINERY AT VERY low prices for cash.—Steam Engines, Slide Lathes, Planing Machines, Drills, Slotting Machines, &c.; also, a variety of Mortising, Tenoning, and Sash Machines, &c., all warranted in good running order. Address CHARLES G. WILLCOX, 87 North Third st., Philadelphia, Pa.

ASSIGNEE'S SALE.—On the 16th day of October, 1858, will be sold at public sale upon the premises, in the borough of Mount Joy, Lancaster county, Pa., the Mount Joy Car and Agricultural Implement Manufacturing, consisting of a two-story brick shop, 146 by 40 feet, with frame saw-mill 100 by 25 ft., and brick engine and boiler house attached, brick foundry 70 by 40 feet, warehouses, stable, &c., siding to railroad, cranes, &c. Also 50-horse engine, belting and gearings, lathes, planers, boring mills, &c., for iron and wood, and a large stock of patterns, all nearly new. Situated in one of the best agricultural districts in the Union, on the great Pennsylvania Central Railroad. For further information apply to the undersigned, assignees of Samuel Kohr and wife, at Mount Joy, aforesaid. Sale to commence at 1 o'clock, P. M. of said day. Sale of lumber, castings, and other materials, finished and unfinished work, &c., on the 18th and 19th of October next. JACOB R. HOFFER.

WOODWORTH PLANING MACHINES.—Sash, Tenoning and Mortising Machines, Steam Engines, Slide Lathes, Drills, &c., at greatly reduced prices. Address CHARLES H. SMITH, 135 North Third st., Philadelphia.

STEAM ENGINES, SLIDE LATHES, Planing Machines, Drills, &c.—Orders taken for all descriptions of machines for working in wood or iron. Address CHARLES H. SMITH, Machinery Depot, 135 North Third st., Philadelphia.

RIGHTS FOR SALE.—SMITH'S PATENT Foot-Warming Device, for blacksmith's use. New, useful, and just in season. Patented August 31, 1853. State rights, or the whole of the United States for sale low. Address GEORGE W. SMITH, Aurora, Dearborn co., Ind.

TO LUMBER MERCHANTS.—FOR SALE.—The Pontiac Mills, Ottawa river, Canada, with extensive limits. Mill cost \$150,000, but will be sold at a great sacrifice, to wind up the estate. Liberal terms of payment. Apply to JAMES DOYLE, Asst. Mgr. G. E. HENRY McKAY, Montreal, or to GORDON & BRUCE, New York City.

TO BRICKMAKERS.—EVERY MAN WHO has witnessed our machine—when operated by only three horses it turns out the most solid and perfect bricks at the rate of sixty per minute—pronounce it not only superior, but altogether beyond and above comparison with any other in use. For particulars address the undersigned at Philadelphia. J. W. & E. C. JAYNE.

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 for cash. Also one new first-class Woodworth Planing and Matching Machine. Address FRANKLIN SKINNER, Agent, 14 Whitney avenue, New Haven, Conn.

CORLISS' PATENT STEAM ENGINES.—About 350, most of them from 40 to 400 horse power are now in operation. On application, pamphlets will be sent (by mail), containing statements of responsible manufacturing companies where these engines have been furnished, for the saving of fuel, in periods varying from 2 1/2 to 5 years. Boilers, shafting, and gearing. CORLISS STEAM ENGINE CO., Providence, R. I.

WOODBURY'S IMPROVED WOODWORKING Planing, Tonguing and Grooving Machines, are warranted to be vastly superior to any other machines in this country. When exhibited, they have always received the highest premium. Two gold medals have been awarded. Six patents have been granted to secure the improvements on these machines. All sizes constantly for sale, by JAMES A. WOODBURY, 69 Sudbury street, Boston.

RIVETS.—IRON BRIDGE, SHIP GIRDER, Boiler, Tank, Tender, Gasometer, and Stove Rivets. Railroads, Locomotive and Machine Shops, Gasometer Manufacturers, &c., supplied with every kind of rivet used in the trade. PHILLIPS & ALLEN, Rivet Works, Pennsylvania avenue, west of 22d st., Philadelphia.

ENGRAVING ON WOOD AND MECHANICAL DRAWING, by RICHARD TEN EYCK, Jr., 128 Fulton street, New York, Engraver to the Scientific American.

CRIDGE, WADSWORTH & CO., MANUFACTURERS of improved patent Oscillating Steam Engines, with variable governor cut-off. Shop, county, and State rights for sale. Also one-half the patent for Great Britain. For illustration see Sci. Am., Vol. 13, No. 51. Circulars with testimonials, &c., sent by mail on application to CRIDGE, WADSWORTH & CO., Pittsburgh, Pa.

ENGRAVING OF EVERY DESCRIPTION.—MacIntery, Patents, Maps, &c., by WM. J. BARBER, No. 23 North Sixth street, Philadelphia, Pa.

READ THIS.—HUGHES' MISSOURI HAND Corn Planter—took first premium at United States Fair, September, 1857, in trial test—now challenges all others. Patented November, 1855, and September, 1857. County and State rights for sale. Send for a circular. Real estate taken in exchange for rights. Address D. W. HUGHES, Palmyra, Mo.

EVERY MILLWRIGHT, ALL MILL-OWNERS, and those interested in hydrodynamics, should become acquainted with the merits and principles of the Improved Fourneyron Turbine Water Wheel, or the "Universal Turbine," a wheel the most economical in the use of water, and giving the highest percentage, with a partially raised gate, of any yet discovered. It gives from 75 to 97 per cent of power, according to the size of wheel and head employed. For information address S. K. BALDWIN, Laconia, N. H.

N. B.—For low falls of one, two, or three feet, also for any fall, it will surpass all others.

WARTH'S SELF-ACTING WOOD-TURNING LATHES.—The best and most practical now in use; one boy will accomplish the work of four men. State and County rights for sale. Address A. WARTH, care W. H. Bertling, 23 Chambers st., New York, or the manufacturers, who have machines of all sizes on hand. Also a general assortment of machinists tools. Circulars sent. Address CARPENTER & PLASS, 479 First ave., New York.

WOODWORTH PLANERS.—IRON FRAMES to plane 18 to 24 inches wide—at \$90 to \$110. For sale by S. C. HILLS, 12 Platt street New York.

IMPROVED WOODWORTH AND DANIELS' PLANING MACHINES, with Read's feed works, and Gibbs' patent oval-hollow arm, made by J. A. FAY & CO., Worcester, Mass.

MACHINERY.—S. C. HILLS, No. 12 Platt street, New York, dealer in Steam Engines, Boilers, Planers, Lathes, Chucks, Drills, Pumps; Mortising, Tenoning, and Sash Machines, Woodworth's and Daniel's Planers, Dick's Punches, Presses and Shears; Cob and Corn Mills; Harrison's Grist Mills; Johnson's Shingle Mills; Bellong, Oil, &c.

FIFTH EDITION.—CATALOGUE CONTAINING 250 illustrations of Mathematical, Optical and Philosophical Instruments, with attachment of a large sheet representing the Swiss instruments in their actual size and shape, will be delivered, on application, to all parts of the United States, by sending 12 cents in postage stamps. C. T. ASMELER, No. 635 Chestnut st., Philadelphia.

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, 81 Main st., Buffalo, N. Y. N. B.—Reliable orders filled for any part of the United States and Europe.

THE WORKS OF THE AUBIN GAS CO., (General Office, No. 44 State st., Albany, N. Y.) as now perfected, are adapted to all materials and localities, and are in successful operation in villages, factories, and private dwellings. For full information as to cost, probable income of public works, &c., apply as above. For plans, &c., see SCIENTIFIC AMERICAN of March 13th.

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.

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

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 oiling, 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, No. 6 Dey street, New York.

WAILS' SPEDWELL IRON WORKS, Morristown, N. J., manufacture Craig's Patent Double-acting Balance Valve Oscillating Steam Engines both stationary and portable, Knowles' Patent Muley, Portable, Gang and Re-sawing Mills, Sugar and Chinese Cane Mills and Sugar Pans, Grist Mills, Mill Irons, Rich's Water-wheels, Forgings and Castings. Orders for the above, and all descriptions of labor-saving machinery will receive prompt attention. JOHN H. LIDGERWOOD & CO., No. 9 Gold street, New York.

WROUGHT IRON PIPE, CAST IRON PIPE, Galvanized Iron Pipe (a substitute for lead), Stop Cocks and Valves, Boilers and Boiler Flues. Pumps of all kinds sold at the lowest market rates by JAMES O. MORSE & CO., 76 John st., and 29, 31 and 33 Platt st., New York.

TO IRON FOUNDERS AND PIPE MANUFACTURERS.—I will sell the right to use and furnish the best Core Bars extant, for molding all kinds of Green Sand Cores on a hollow bar, for three-inch pipe and upwards. GEO. PEACOCK, Dalton, Ga.

LAP-WELDED IRON BOILER TUBES.—Prosser's Patent. Every article necessary to drill the tube-plates and set the tubes in the best manner. THOS. PROSSER & SON, 23 Platt st., New York.

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.

PECK'S PATENT DROP PRESS.—ALL sizes, used for stamping copper or tin ware, silver ware ornaments, spoons, &c., and for forging gun work, lock work, carriage clips, &c. Also power and foot punching presses, and oval die chucks. Manufactured by MILO PECK & CO., 3 Whitney avenue, New Haven, Conn.

STEAM WHISTLES.—IMPROVED PAT-terns for locomotive and stationary engines. A large assortment constantly on hand. Manufactured by HAYDEN, SANDERS & CO., 306 Pearl st., New York.

5,000 AGENTS WANTED.—TO SELL four new inventions. Agents have made over \$25,000 on one. Better than all other similar agencies. Send four stamps and get eighty pages particulars, gratis. EPHRAIM BROWN, Lowell, Mass.

IRON AND COMPOSITION CASTINGS, Chilled Rolls, Mill Gearing, Fan Blowers, Trip Hammers, Shafting, Shears, Presses, India Rubber Calenders, Grinding and Cutting Machines, Turbine and Center-wheel Water Wheels, also contracts made for Breast and Overshot Wood Wheels, also orders taken for the manufacture of patented machinery of all kinds, by the BIRMINGHAM IRON FOUNDRY, Birmingham, Conn.

J. & WM. V. CUMBERLAND'S IMPROVED Patent Metallic Oil, for machinery and burning. Warranted to last longer than sperm oil. Manufactured only by the New York Cumberland Metallic Oil Works, foot of East 24th st., Office, No. 205 Broadway, New York. Under the inventor's superintendence, N. B.—See that our brand "New York Cumberland Metallic Oil Works, foot of East 24th street," is upon every package, however small.

GUILD & GARRISON'S STEAM PUMPS for all kinds of independent steam pumping, for sale at 55 and 57 First street, Williamsburgh, L. I., and 301 Pearl street, New York.

WELLINGTON MILLS EMERY.—CONsumers will look for copyright label on each cask, by whomsoever sold, and they will be sure of the best emery. Casks contain 200 pounds each. Testimonials of its superiority from Collins' Axe Co., and many others. GEO. H. GRAY & DANFORTH, Boston, Mass.

These machines have no rival.—(Scientific American.) WHEELER & WILSON'S SEWING MACHINES, 343 Broadway, New York, received the highest premiums awarded in 1857 by the American Institute, New York; Maryland Institute, Baltimore; and at the Maine, Connecticut, Illinois, and Michigan State Fairs. Send for a circular containing editorial and scientific opinions, testimonials from persons of the highest social position, &c.

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."