

Correspondents

S. N. D., of N.—You are correct in regard to the convenience of drawing up water in buckets with hinged valves in their bottoms...

"A Correspondent" sends us a sketch of a brick machine from Paducah, Ky., but fails to sign his name to his letter.

G. B. D., of Tenn.—We think that "Moseley's Mechanics applied to the Arts," and "Dr. Lardner on the Steam Engine," would suit you.

R. H. L., of Wis.—The best battery for galvanizing purposes is Smee's. You can drill glass with diamond dust and a steel drill.

P. C., of Mass.—Providing funnels with a vent tube at their sides to admit the escape of air or gas from vessels into which liquids are being poured is not new or patentable.

John C. Elder, of Baton Rouge, La., wishes to purchase a spoke-turning machine.

F. A. F., of Mass.—We think that you could obtain amianthus at the store of any large philosophical instrument maker.

W. H. G., of Mass.—The water of the ocean increases in density as you descend and so does anything thrown into it; so the relative density remains the same, and a cannon ball would sink to the bottom.

M. M. K., of Texas.—You propose to employ a number of springs tangent to the circumference of the wheel for the alleged purpose of preventing the jolting of carriages. It is entirely impracticable to undertake such a system.

C. H. N., of Pa.—Robert L. Pell is President of the America Institute. A letter addressed to the care of the Institute would reach him safely.

F. F. A., of Pa.—In volume X. of the Scientific American, we published a history of reaping and mowing machines, and if you refer to it you will find several modifications of the circular cutter.

M. A. W., of Ct.—We have examined a sketch and rough description of your plan for preventing the escaping sparks, &c., from locomotives from coming in contact with houses in the sides of the streets through which they travel, and so far as novel y is concerned we believe it to contain sufficient to form a patentable claim.

J. C. R., of Va.—The alkali will not injure the hide at all, and if you will put about two bushels of wood ashes into your lime with half the quantity of lime usually employed, you will make a much handsomer leather and more durable, with less handling.

Z. Y. X., of Pa.—Professor Rodgers only meant that the stalactites which he had in that particular instance increased at the rate of one-tenth of an inch a year, but they may increase at a greater rate in different localities and under different circumstances.

R. M., of Ind.—In Vol. IX. Sci. Am., you will find an engraving of the engraving and packing machine of N. B. Harris & Co., of Philadelphia.

W. M. P., of C. W.—We should think common glue the best thing you could use to attach paper labels.

G. S. P., of Ill.—The idea of obtaining motive power by atmospheric pressure is an old one. The same power you apply to the air pumps to produce the vacuum would be more advantageously employed, if applied directly to work the engine, as the friction of the air pump causes an additional loss of power, and besides this, many other objections to your method might be stated.

E. C., of Ohio.—To cut files with a diamond is not patentable.

C. F. A., of Boston.—We cannot name such a work as you want. Inquire of some botanic physician in your city.

T. E. M., of R. I.—A patent cannot be obtained for a ship's rudder having the spindle passing through the center of two blades instead of having the spindle at one side of a single blade as is the common custom.

A. F., of Me.—We cannot inform you how to prepare the ergot or spurred rye, which has been recommended for consumptive patients. Physicians ought to be the best judges on these matters.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Saturday, August 14, 1858:—

- K. & B., of N. Y., \$150; M. H. R., of Tenn., \$80; J. W., of Ind., \$30; E. L. L., of N. Y., \$25; F. R., of Mass., \$30; D. R. K., of Conn., \$30; J. A., of Pa., \$25; W. M., of N. Y., \$30; A. H., of N. Y., \$25; W. & J., of Conn., \$30; J. C. McD., of Ohio, \$25; J. C. DeW., of N. J., \$25; J. L., of Ind., \$10; L. H. M., of R. I., \$30; C. P. P., of S. C., \$30; G. F. and M. J., of N. Y., \$60; J. C., of N. Y., \$30; R. M. T., of Mich., \$25; G. H. W., of N. Y., \$55; W. W., of Ct., \$35; L. & D., of N. Y., \$25; A. W., of N. Y., \$70; W. P., of Del., \$25; J. F. B., of Ill., \$30; C. D. M., of R. I., \$30; T. S. B., of N. Y., \$12; S. & E., of Ill., \$30; J. V., of Ill., \$30; F. Y., of Ky., \$30; W. P. A., of N. Y., \$40; B. T. S., of Ill., \$55.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, August 14, 1858:—

H. & P., of Conn.; G. P. P., of R. I.; J. C. D., of N. J.; A. H., of N. Y.; J. A. K., of Mo.; W. W., of Conn.; A. W., of N. Y.; J. D. M., of Mass.; T. S. B., of N. Y.; J. W. N., of Conn.; R. M. T., of Mich.; W. P. A., of N. Y.; J. C. McD., of Ohio; I. H. T., of N. Y.; B. & H., of Mass.; G. H. W., of N. Y.; W. P., of Del.; L. & D., of N. Y.; E. L. L., of N. Y.

Literary Notices.

THE NEW AMERICAN CYCLOPEDIA—Volume III.—Beam—Browning, D. Appleton & Co., 346 and 348 Broadway, New York. Edited by George Ripley and Charles A. Dana.

NORTH CAROLINA UNIVERSITY MAGAZINE for August, published by J. M. Henderson, Chapel Hill, N. C. This interesting magazine, which certainly does credit to the young students brains of North Carolina, contains a very good essay on the "Life and Character of Samuel Johnston," and a lively little sketch informing the reader "How Zibes got Kicked," together with many other articles of interest and merit.

THIRTIETH ANNUAL FAIR OF THE AMERICAN INSTITUTE at the Crystal Palace, in the city of New York.—The Managers announce that the Exhibition will be opened on Wednesday, the 15th day of September next. The Palace will be prepared for the reception of goods on and after the 7th of Sept.

GRANULAR FUEL IS THE GROWTH of swamp lands and the trimmings of trees cut into lengths adapted for kindling purposes or summer fuel—about four inches. This article is preferred to charcoal or split wood for kindling coalfires, no shavings being required.

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.

EXCELSIOR BOLT CUTTERS—WE CAN confidently recommend these excellent machines, believing they are the most durable and effective screw cutters yet invented. They cut a smooth and firm V-thread on bolts and rods of any length at one cut, and no back motion is required, as the dies can be withdrawn when the screw is cut.

J. & WM. W. CUMBERLAND'S IMPROVED Patent Metallic Oil, for machinery and burning. Warranted to last longer than sperm oil.

WARTH'S SELF-ACTING WOOD-TURNING LATHES.—The most practical new in use. Any 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.

PATENT RIGHT—FOR SALE—A VALUABLE patent right for England for an article introduced in this country sufficiently to fully test its merits. Apply to TUTTLE & BAILEY, No. 301 Pearl st., New York.

EIGHTH WONDER OF THE WORLD.—Map of the Submarine Telegraph between America and Europe, with its various communications on the two continents for sale, wholesale and retail by McKee & Stilwell, Sole Agents, at their news depot, No. 89 Nassau st., Sun Buildings. Booksellers and news agents can be supplied, at 60 per hundred; single copies 10 cents. Single copies mailed to any part of the country. Stamps can be remitted. MCKEE & STILLWELL, News Depot, Sun Building.

\$1,500. A RARE CHANCE IS OFFERED to any man with a small capital to buy shares in several valuable patents, on which at least \$20,000 may be realized in less than two years. Address N. P. L., Boston, Mass.

HARRISON'S GRIST MILLS—20, 30, 36 AND 48 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, Bolters, Elevators, Belting, &c., &c. Apply to S. C. HILLS, E. Platt st., New York.

1858. NINTH EXHIBITION OF THE CHICAGO MECHANICS' INSTITUTE. The Ninth Exhibition of American Manufactures and Mechanical Arts, under the direction of the Chicago Mechanics' Institute, for the promotion of the Mechanical Arts, will be opened at Chicago on Saturday evening, September 4th, and continue to Friday evening, September 17th, 1858.

SUNDIALS—9 INCH DIAMETER, MOUNTED on an iron Doric column, 3 feet. Equation of time tables engraved on the dial plate, also a reflector inserted, showing the course of the clouds. New design, accurate and highly ornamental.

CROSSETT'S PATENT STAVE CUTTER.—Patented July 1, 1844; re-issued March 2, 1858; renewed and extended June 26, 1858. The above mentioned machine is warranted to cut more and better staves than any other machine in the United States, and is the most simple, cheap, and durable.

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

AMERICAN WATER WHEEL CO. MANUFACTURERS of Warren's Turbine Water Wheel—Warren & Damon's patent. Three hundred and twelve of these turbines are now in successful operation in cotton and wool factories, flour mills, saw mills, &c., and are utilizing from 75 to 88 per cent of the power of the water under all heads, from one to thirty feet.

BELLOWS' PATENT DRY CLAY BRICK MACHINE.—The undersigned has invented a machine that for cheapness, simplicity, durability, and the production of a superior article, is unequalled.

LANE & BODLEY, MANUFACTURERS OF Wood-working Machinery and Circular Saw Mills. Especial attention given to hub, spoke, felloe, and wheel machinery.

WROUGHT IRON PIPE, CAST IRON PIPE, Galvanized Iron Pipe (a substitute for lead), Stop Cocks and Valves, Boilers and Boiler Flues.

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

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.

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.

IRON PLANERS AND ENGINE LATHES of all sizes, also Hand Lathes, Drills, Bolt Cutters, Gear Cutters, Chucks, &c., on hand and finishing.

S. D. BARNETT, MALLEABLE AND GREY Iron Foundry, H. H. corner of McWhorter st. Newark, N. J. Orders promptly attended to.

SECOND-HAND MACHINISTS' TOOLS—Viz. Engine and Hand Lathes, Iron Planers, Drills, Chuck Lathes, Gear Cutter and Vises, all in good order, and for sale low for cash.

ECCENTRIC SCREW AND GRIPPING WRENCH—Hyde's patent—for sale by all hardware stores. Proprietors, GRAY BROTHERS, New York City.

PATENT OFFICE MODELS CAREFULLY made on scientific principles, at low prices, by H. SHLARBAUM & CO., 300 Broadway, New York. References at the office of this paper.

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

PUSEY'S HORSE POWER GOVERNOR—See cut in No. 45, Vol. XIII, Sci. Am. Shoprights for sale, to build in combination with the powers. Independent governors manufactured exclusively, and for sale by the patentee, LEA PUSEY, near Wilmington, Del. Agents wanted.

CLOCKS—TOWN CLOCKS OF ALL SIZES, Regulators and Timepieces for all purposes. Dials for illuminating. VOSBURGH & CO., Agents, No. 36 Liberty street, New York. JOHN SHERRY, Manufacturer, Sag Harbor, N. Y.

MARYLAND INSTITUTE, BALTIMORE.—The Managers of this Institute, encouraged by the success of former efforts, announce, with confidence of continued success, their Eleventh Annual Exhibition, to be opened in the Institute's spacious building on the 5th of October, and continue open four weeks.

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 above in the country, kept constantly on hand by WM. BURDON, 102 Front street, Brooklyn, N. Y.

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.

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.

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.

LAP-WELDED IRON BOILER TUBES.—Prosser's Patent.—Every article necessary to drill the tube-plates and set the tubes in the best manner.

WELLINGTON MILLS EMERY—Consumers will look for copyright label on each case, by whomsoever sold, and they will be sure of the best emery. Casks contain 200 pounds each.

SLIDE LATHES, IRON PLANERS, UP RIGHT DRILLS, Slotting and Boring Machines, Universal Chucks, and a large assortment of machinery tools, at greatly reduced prices.

BELTING AND PACKING—Niagara Falls Paper Manufacturing Co., Niagara Falls, Aug. 20, 1858. United States Gutta Percha Co. We duly received the Gutta Percha Belting ordered from you, and after giving it a thorough test the past winter, on our heaviest engines, constantly exposed to water, ice and oil, and making 140 to 160 revolutions per minute; and again on two of our largest "Gwynne Pumps," making from 600 to 700 revolutions per minute, they have given us entire satisfaction.

FOR SALE BY THE UNITED STATES VULCANIZED GUTTA PERCHA CO., No. 68 Liberty street, New York.

NEW ORLEANS—VOSE & WEST, Commission Merchants for the sale of Machinery, Agricultural Implements, &c., New Orleans. Refer to W. P. Converse & Co., 42 Pine street, New York.

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

EVERY MILLWRIGHT, ALL MILL-OWNERS, and those interested in hydrodynamics, should become acquainted with the merits and principles of the improved Fournayron 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.

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

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.

VAIL'S SPEEDWELL IRON WORKS, Morristown, N. J., manufacture Cast-iron Patent Double-acting Balance Valve Oscillating Steam Engines both stationary and portable, Knowles' Patent Muley, Portable, Gang and Re-sawing Mills, Sugar and Churn Cane Mills and Sugar Pans, Grist Mills, Mill Irons, Rich's Water-wheels, Forgings and Castings.

CORLISS PATENT STEAM ENGINES—About 250, 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.