

TO CORRESPONDENTS.

W. W. F., of Ala.—We have entered all your subscribers as you requested, and such back numbers as we had on hand we sent to you, and regret at not being able to furnish you with all of them—your subscription with the others we have marked to expire at No. 26 next volume.

P. H. W., of N. Y.—By addressing the "American Gutta Percha Co.," this city, you will get the information you solicit of us.

T. S. I., of Ohio—We are still of the opinion that your steam gauge presents no patentable novelty; still we have no objection to render our services in trying to obtain one for you, and might succeed.

T. W., of Tenn.—The subject on which you make so many inquiries is too bony for us to cope with; if you think of going into the business of bone grinding, you had better address your twenty queries to some concern that can give you practical information—we cannot.

L. B. A., of Pa.—The spring carriage wheel patented by Messrs. Lamb & Root, and illustrated on page 172, Vol. 6, Sci. Am., is almost identical with yours O. M., of Ill.—Your plan for ventilating railroad cars is no doubt new, but we think it has more objectionable features than Paine's, and less practical ones than almost any we have seen.

T. D. S., of Ohio—Agreeable to your request, your description of the pump has been filed for future reference.

I. Z. A. W., of Phila.—We do not think it expedient to publish the engravings of your invention until we get the foreign patents secured, which will be done immediately.

A. M. G., of S. C.—We have sent you a bound copy of Vol. 5 (incomplete) and credited you \$1 in continuation of your subscription.

A. B. B., of N. Y.—The models of your railroad switch came duly to hand; we find your invention has been anticipated by Wm. Colby, of Augusta, Ga., who has secured his invention by an application for a patent.

D. & Co., Va.—Messrs Stillman, Allen & Co., Novelty Works, this city, will furnish you with as good a fan blast as you will be able to find elsewhere.

A. F. T., of N. Y.—On page 5, Vol. 6, Scientific American, you will find an engraving of an axle box which is identical with yours. There would be no chance for a patent should you apply.

A. B., of Mich.—Your inquiry is about the same as many others we have had on the same subject. Irving's boiler is no doubt an excellent kind, but we cannot give a full description of it until the Foreign Patents are issued, which we expect by next steamer. See notice of this invention on page 228, Vol. 8.

R. H., of N. Y.—The best thing you can do for your own benefit is to get an engraving published in our columns.

P. & R., of Ill.—We will get up engravings of your self-loading cart immediately: we had forgotten you. There has been no examination of your case yet.

R. S., of Ind.—We shipped a mortising machine to you by the Pennsylvania and Ohio Transportation Line on the 27th.

Money received on account of Patent Office business for the week ending Saturday, May 28:—

J. Mc., of N. Y., \$10; P. S., of N. Y., \$15. J. K. & W. G., of Pa., \$10; J. H., Jr., Wis., \$25; J. M., of N. J., \$30; W. W., of R. J., \$25; J. R. H., of Me., \$36; J. S., of Va., \$35; S. M., of Pa., \$25; J. B. C., of Ohio, \$50; A. & S., of N. Y., \$20; J. N., of N. J., \$25; G. N., of N. Y., \$20; W. S., Jr., of Pa., \$45.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday May 28:—

P. S., of N. Y.; G. B., of N. Y.; J. K. & W. P. G., of Pa.; W. W., of R. I.; G. M. B., of N. Y.; A. & S., of N. Y.; W. S., Jr., of Pa.; J. G., of N. Y. (2 cases); J. N., of N. J.; W. S., of N. Y.; P. F. C., of Ohio; S. M., of Pa.; G. N., of N. Y.

A Chapter of Suggestions, &c. PATENTERS—Remember we are always willing to execute and publish engravings of your inventions, provided they are on interesting subjects, and have never appeared in any other publication. No engravings are inserted in our columns that have appeared in any other journal in this country, and we must be permitted to have the engraving executed to suit our own columns in size and style. Barely the expense of the engraving is charged by us, and the wood-cuts may be claimed by the inventor, and subsequently used to advantage in other journals.

BACK NUMBERS AND VOLUMES.—In reply to many interrogatories as to what back numbers and volumes of the Scientific American can be furnished, we make the following statement:—Of Volumes 1, 2, 3 and 4—none. Of Vol. 5, all but six numbers, price, in sheets, \$1; bound, \$1.75. Of Volume 6, all; price in sheets, \$2; bound, \$2.75. Of Vol. 7 all; price in sheets, \$2; bound, \$2.75. Of Vol. 8, all the back numbers subsequent to No. 27, but none previous.

PATENT CLAIMS.—Persons desiring the claims 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 enclosing one dollar as fee for copying.

PATENT LAWS, AND GUIDE TO INVENTORS.—We publish, and have for sale, the Patent Laws of the United States. The pamphlet contains not only the laws but all information touching the rules and regulation of the Patent Office. Price 121-2 cts. per copy.

ADVERTISEMENTS.

THE WATER CURE JOURNAL.—A New Volume.—Now is the time to subscribe.—Published monthly, in a beautiful quarto. Illustrated with engravings, exhibiting the Structure, Anatomy, and Physiology of the Human Body, with familiar instructions to learners. It is emphatically a Journal of Health, designed to be a complete Family Guide in all diseases.

Terms.—Only one Dollar a Year, in advance. Address, post-paid, Fowlers and Wells, Clinton Hall, No. 131 Nassau st, New York.

The Water Cure Journal holds a high rank in the science of health; always ready, straightforward and plain-spoken, it unfolds the laws of our physical nature without any pretensions to the technicalities of science, but in a form as attractive and refreshing as the sparkling element of which it treats.—N. Y. Tribune. 38 4

THE PRACTICAL CONSTRUCTION OF MACHINES, or Elements of Mechanism, with numerous specimens of modern machines, remarkable for their utility and ingenuity, illustrated with 243 engravings by T. Baker, Civil Engineer, author of "Railway engineering," &c., 1 Vol., bound in scarlet cloth, \$1. Contents.—wheel work, producing motion by contact; teeth of wheels, hooks, joints, friction wheels, pulleys producing motion by wrapping contact, mechanism for modifying motion, machines commonly used in the arts of construction and for domestic purposes. Pumps and other hydraulic machines, machinery for the manufacturing and refining sugar; on the friction of machinery; self-acting lathes; on the production of brown glazed stone ware, &c., just published by A. HART, corner of 4th & Chestnut st., Philadelphia. 1

THE ILLUSTRATED PHRENOLOGICAL Journal.—Devoted to Phrenology, Physiology, Mechanism, Education, Agriculture, the Natural Sciences, and General Intelligence, profusely illustrated with engravings. Every family, and especially all young men and women, should have a copy. Published monthly at One Dollar a year.—All letters should be post-paid, and directed to FOWLERS AND WELLS, Clinton Hall, No. 131 Nassau street, New York.

Young men about launching forth upon the activities of life, and anxious to start right, and understand their course, will find this Journal a friend and monitor, to encourage them in virtue, shield them from vice, and to prepare them for usefulness and success in life. The various occupations will be discussed in the light of Phrenology and Physiology, so that every one may know in what pursuit he would be most likely to succeed.—PUBLISHERS. 38 4

LOGAN VAIL & CO., No. 9 Gold st, New York.—Agency for Geo. Vail & Co., Speedwell Iron Works, Norristown, N. J., furnish and keep on hand Portable Steam Engines of various sizes, Saw and Grist Mill Irons, Hotchkiss's Water Wheels, Iron Water Wheels of any size, Portable Saw Mills, complete; Bogardus's celebrated Planetary Horse Powers; heaving forgings and castings for steamboats and rolling mills; Ratchet Drills of superior quality for machinists, Saw Gummers, Hand drills, Tyre Benders, and shafting and machinery generally. 38 1y

WANTED.—A situation as Constructor or Superintendent in a machine work, by an engineer who has been brought up in one of the largest establishments in Europe. He is competent to take charge of pattern shop, foundry, and machine shop, and can produce the very best references from Europe and America. He wishes to be employed for marine engine work, only. For particulars address "Constructor," box 650 Philadelphia P. O. Communications will be properly attended to. 38 2*

FINE BRICKS.—Fire Sand, and Moulding Sand, for Iron and Brass Founders, for sale by G. O. ROBERTSON, 135 Water st, corner of Pine, New York. 38 8*

AMERICAN PIG IRON.—Viz., Armenia, William Penn, Allentown, Swede, Durham, Sterling and Mount Hope brands; also No. 1 soft Scotch Pig Iron, all in yard here, and for sale by G. O. ROBERTSON, Office 135 Water st, corner of Pine, New York. 38 4*

NOTICE.—FOR SALE, a vertical Double Cylinder Engine, of three horse power, with Boiler, Governor, and Force Pump, all complete and in working order (has been used but a few weeks), for the low sum of \$200. For further information address DANIEL FAY, North Blanford, or Wm. FAY, Chester Factories, Mass. 38 2*

GERMAN BLACK LEAD.—The best kind for polishing stoves, for sale in bulk by G. O. ROBERTSON, 135 Water st, corner of Pine, N. Y. 38 8*

IRON FOUNDERS' FACING MATERIALS.—Viz., Pulverized Black Lead, Soapstone, Hard-ware Charcoal, Anthracite, and Sea Coal, of approved quality, for sale by G. O. ROBERTSON, office 135 Water st, corner of Pine, New York. 38 8*

SAND PAPER, GLUE.—"Excelsior" Sand and Emery Papers, "Abbott's" Manila Sand, and Match Papers, Emery Cloth, Emery, Emery Grit, Pumice Stone ground and in lump, of very superior quality; also Glue of Upton's, Cooper's, and all other brands, in quantities to suit purchasers, at the manufacturers' lowest prices, for sale by WILLIAM B. PARSONS, 290 Pearl st, (corner Beekman) N. Y. 37 3*

SPOKE MACHINES, SPOKE MACHINES.—The best and most perfect machine now in use, designed expressly for turning spokes of all sizes, is the one invented by Jenkins & Knight, and patented in January last. The Machine is capable of turning 200 spokes in an hour, and finishes the spoke including the shoulder. The subscribers, who are now the sole owners of the patent, are prepared to receive applications for machines or territorial rights. M. SCHOMMAKER & J. M. COOPER, Kingston, N. Y. 35 5*

PORTABLE STEAM ENGINES.—The subscriber is now prepared to supply excellent Portable Engines, with Boilers, Pumps, Heaters, etc., all complete, and very compact, say 1, 2, 2 1-2, 3, 4, 6, 8, and 10 horse-power, suitable for printers, carpenters, farmers, planters, &c., they can be used with wood, bituminous, or hard coal; a 2 1-2 horse engine can be seen in store, it occupies a space 5 feet by 3 feet, weighs 1500 lbs., price \$240; other sizes in proportion. S. C. HILLS, Machinery Agent, 12 Platt st, N. Y. 27c0ft

PIG IRON.—American and Scotch, of favorite brands; also Cupola Fire Bricks, Fire Clay, Sand and Foundry Facings of every approved description, for sale by G. O. ROBERTSON, & CO., office 135 Water street, (corner of Pine), N. Y. 31 6c0w*

GARDINER'S PATENT MAGNETIC GOLD Washer, Amalgamator and Separator.—This is the most perfect machine for Gold Mining that has been invented; it performs the operation of washing the earth or pulverized quartz rock, amalgamating and magnetic separation of black sand or oxide of iron, all at one movement, saving every particle of gold dust, however minute. With this machine two men can perform as much work per day as ten by any other process, and save all the gold. A full explanation of its operation will be given by the manufacturer. The public are invited to examine. Price \$250. Iron Retorts at wholesale and retail. NORTON & GARDINER, 47 Dey street, N. Y. 37ft

PATENT HYDRANTS AND COCKS.—Bartholomew's Patent Self-acting Double and Single Hydrants and Cocks are in extensive use and much approved of, are strong, durable, not likely to get out of order, always shut when not in use, not likely to freeze, avoid waste of water, do not burst pipe. The hydrants are cheaply repaired without digging up; double hydrants supply two lots and sixty tenants. The cocks are adapted for water closets, require no care in using; always shut, being self-stopping, give a good supply; the double valve cock avoids the expense and space of cistern, and gives a uniform supply each time used. One service pipe will supply twenty, do not freeze nor overflow, and make the cheapest and best job. Plumbers only supplied at the factory, 84 Marion st, N. Y. City. All work warranted. 35 4*

BEARDSLEE'S PATENT PLANING Tongueing and Grooving Machines.—These celebrated machines have now been generally introduced in various portions of the United States. More than thirty are now in successful practical operation in the State of New York alone. As an illustration of the extent of work which they are capable of performing, with unrivalled perfection, it is sufficient to state that, within the last six months and a half, over five millions of feet of spruce flooring have been planed, tongued and grooved by one of these machines at Plattsburgh, N. Y., never running to exceed ten hours a day. The claim that the Beardslee machine was an infringement upon the Woodworth patent, has been finally abandoned; and after the proofs had been taken, the suit instituted by the owners of that patent was discontinued, and the whole controversy terminated on the first of November last. Applications for machines or rights may be made to the subscriber, GEO. W. BEARDSLEE, 57 State street, or No. 764 Broadway, Albany. 15ft

BARLOW'S UNSURPASSED Planing Tongueing and Grooving Machines. Testimonials of the highest character can be given of their superiority over all others in use. For rights or other information. Apply to A. K. Wellington, 184 Twelfth street, New York City. 32ft

WOODBURY'S PATENT PLANING Machines.—I have recently improved the manufacture of my Patent Planing Machines, making them strong and easy to operate, and am now ready to sell my 24 inch Surfacing Machines for \$700, and 14 inch Surfacing Machines for \$650 each. I will warrant, by a special contract, that one of my aforesaid machines will plane any boards or plank as two of the Woodworth machines in the same time, and do it better and with less power. I also manufacture a superior Tonguing and Grooving Machine for \$850, which can be either attached to the Planing Machine, or worked separately. JOSEPH P. WOODBURY, Patentee, Border st, East Boston, Mass. 29ft

THE NEW HAVEN MANUFACTURING Company, New Haven, Conn., having purchased the entire right of E. Harrison's Flour and Grain Mill, for the United States and Territories, for the term of five years, are now prepared to furnish said mills at short notice. These mills are unequalled by any other mill in use, and will grind from 20 to 30 bushels per hour of fine meal, and will run 24 hours per day, without heating, as the mills are self-cooling. They weigh from 1400 to 1500 lbs., of the best French burr stone, 30 inches in diameter: snugly packed in a cast-iron frame, price of mill \$200, packing \$5. Terms cash. Further particulars can be had by addressing as above, post-paid, or to S. C. Hills agent N. H. M. Co., 12 Platt st, N. Y. 28ft

ENGINEERING.—The undersigned is prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, high and low pressure engines, boilers, and machinery of every description. Broker in steam vessels, machinery, boilers, &c. General Agent for Ashcroft's Steam and Vacuum Gauges, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gauge, Sewall's Salinometers, Dudgeon's Hydraulic Lifting Press, Roebbling's Patent Wire Rope for hoisting and steering purposes, etc. CHARLES W. COPELAND, Consulting Engineer, 64 Broadway. 29 13*

WHEELER, WILSON, & Co.—Watertown, Ct., proprietors and manufacturers of Allen B. Wilson's Patent Stitching Machine. Patented June 15, 1852, it can be seen at the Company's Office, 265 Broadway, New York. 30 20*

ATMOSPHERIC TELEGRAPH.—The English patent (just issued) is now offered for sale at the Company's office, 24 Merchant's Exchange, Boston, Mass. I. S. RICHARDSON, Agent A. T. Company. 35ft

JAMES D. JOHNSON, Bridgeport, Ct., Proprietor of Wood's Patent Shingle Machine. Persons wishing to purchase rights or machines, can address as above. This is unquestionably the best machine in use for cutting shingles. 33ft

WOODWORTH'S PLANING MACHINES ON hand and manufactured to order, of superior quality at reduced prices, warranted perfect; also steam engines and other machinery. Also Rotary Stave Dressing Machines, capable of dressing staves with the natural growth of the timber, the only one ever invented capable of accomplishing that purpose. Rights for sale in various States. JOHN H. LESTER, 57 Pearl st, Brooklyn, L. I. 35 10*

NEW WORKS ON CIVIL ENGINEERING.—The Field Practice of Laying out Circular Curves for Railroads: by John C. Trautwine, C. E.; second edition, in pocket-book form. A New and Rapid Method of Calculating the Cubic Contents of Excavations and embankments, by the aid of Diagrams: by John C. Trautwine, C. E., with 10 copper-plates. Price \$1 each; postage on the Curves, 5 cents, and on the Excavations and Embankments, 8 cents. The postage may be remitted or not, as the Post Office does not require pre-payment. For sale by Wm. HAMILTON, Hall of the Franklin Institute, Phila. 35 3m

NEW METHOD FOR MAKING WROUGHT-IRON direct from the Ore.—The proprietors of James Renton's Patent, who have purchased Alex. Dickerson's patent for the above purpose, are desirous of introducing the invention into general use, and invite parties who may wish to negotiate for rights for States and counties, or for furnaces, to make immediate application, and to examine the furnace which is in successful operation at the American Iron Company's Works, Newark, N. J. The invention is exciting considerable interest; gentlemen from all parts of the country, who are engaged in the manufacture of iron, have examined the furnace in its workings, and give it their decided commendation. A circular, giving more minute information, will be sent to those desiring it. The rights for several States and counties have already been disposed of. Applications for rights in the State of New Jersey may address the Hon. J. M. Quinby, President of the American Iron Company. Inquiries or applications for other States may be made to A. H. BROWN, Newark, N. J., Office 107 Market st. 34ft

STAVE MACHINERY.—We manufacture the improved Mowry Stave Machine for slack work, cutting, dressing, and jointing, at one operation, without any handling of the stave until it is finished, after you place the bolt of wood upon the feeding carriage. The machine feeds itself, cutting, dressing, and jointing in a finished and uniform manner 80 to 100 staves a minute. Any kind of timber fit for a stave may be used, even such as could not be rived, as elm, hickory, beech, &c. The cost of running the machine need not exceed, if it equals, 50 cts per M, for cutting, dressing, jointing, removing, and piling up, where a machine is kept steadily at work. For machinery and rights in the State of New York, apply to CHAS. MOWRY, Auburn, N. Y.; for machinery and rights elsewhere, to the subscribers, GWYNNE & SHEFFIELD, Urbana, Ohio. 30ft

J. SLOAN'S PATENT HYDROSTAT.—For the Prevention of Steam Boiler Explosions. The undersigned having made extensive arrangements for the manufacture of these machines, are now prepared to receive orders for the immediate application of the same to boilers of every description. They have endeavored to place the instrument within the reach of all, by selling it at a very low price, the cost of one horse-power being only \$20, five horse-power, \$30, and so on, according to the capacity of the boiler. SLOAN & LEGGETT, Proprietors and Manufacturers, foot of East 25th st, New York. 30ft

MACHINERY.—S. C. HILLS, No. 12 Platt-st. N. Y. dealer in Steam Engines, Boilers, Iron Planers, Lathes, Universal Chucks, Drills; Kase's, Von Schmidt's and other Pumps; Johnson's Shingle Machines; Woodworth's, Daniel's and Law's Planing machines; Dick's Presses, Punches and Shears; Mortising and Tenoning machines; Belting; machinery oil, Beal's patent Cob and Corn mills; Burr mill and Grindstones; Lead and Iron Pipe &c. Letters to be noticed must be post-paid. 27ft

A. B. ELY, Counsellor at Law, 52 Washington st., Boston, will give particular attention to Patent Cases. Refers to Munn & Co., Scientific American. 16ft

LEONARD'S MACHINERY DEPOT, 109 Pearl-st. and 60 Beaver, N. Y.—Leather Banding Manufactory, N. Y.—Machinists' Tools, a large assortment from the "Lowell Machine Shop," and other celebrated makers. Also a general supply of mechanics' and manufacturers' articles, and a superior quality of oak-tanned Leather Belting. P. A. LEONARD. 27ft

PAINTS, &c. &c.—American Atomic Drier; Graining Colors, Anti-friction Paste, Gold Size, Zinc Drier, and Stove Polish. QUARTERMAN & SON, 114 John st., Painters and Chemists. 37ft

COTTON MACHINERY.—Of the most approved plans, from the best shops in the country;—drawings, specifications, and general arrangements for the machinery, furnished at the lowest rates, by W. B. LEONARD, and E. W. SMITH, 75 Merchants' Exchange, New York. 23ft

THE TROY IRON BRIDGE CO. are prepared to erect Iron Bridges or Roofs, or any kind of bearing trusses, girders, or beams, to span one thousand feet or under, of any required strength, in any part of the country. Their bridges will be subjected to severe tests, and can be built for about the price of good wooden ones. Address BLANCHARD & FELLOWS, Troy, N. Y. 30 10*

FALES & GRAY (Successors to TRACY & FALES), RAILROAD CAR MANUFACTURERS—Grove Works, Hartford, Connecticut. Passenger, freight, and all other descriptions of railroad cars and locomotive tenders made to order promptly. 11ft

C. B. HUTCHINSON'S PATENT STAVE Cutting Machines, the best in use, and applicable alike to thick or thin staves; also his Head Cutting and Turning, and Stave Jointing Machines. For machines or territorial rights, apply to C. B. HUTCHINSON & CO., Syracuse, N. Y. 36ft

J. D. WHITE'S PATENT CAR AXLE LATHES.—also Patent Engine Screw Lathes, for boring and turning tapers, cutting screws, &c. We manufacture and keep constantly on hand the above lathes; also double slide Chuck and common Hand Lathes, Iron Planers, S. Ingersoll's Patent Universal Ratchet Drill, &c. Weight of Axle Lathes, 5,000 lbs; price \$600; Engine Screw Lathes, 1,400 to 7,000 lbs; price \$225 to \$675. BROWN & WHITE, Windsor Locks, Conn. 27ft

COCHRAN'S CRUSHING MACHINE.—Can be seen in daily operation in Thirteenth street, between 9th and 10th avenues. Parties in want of a machine for crushing and pulverizing quickly and cheaply Quartz Rock, Iron, Lead, Copper, and Silver Ores, and other mineral substances equally hard, are invited to witness the operation of these powerful and simple, but yet effective machines. For further particulars apply to E. & J. BUSSING & CO., No. 32 Cliff st., N. Y. 35ft

THE NEW HAVEN MANUFACTURING CO. No. 2 Howard st. New Haven, Ct., are now finishing 6 large Lathes, for turning driving wheels, and all kinds of large work; these lathes weigh 9 tons, and swing 7 1-3 feet, shears about 16 feet long. Cuts and further particulars can be had by addressing as above, post-paid, or to S. C. Hills, agent N. H. M. Co., 12 Platt st, N. Y. 28ft

LEE & LEAVITT.—Manufacturers of every description of Cast Steel Saws, No. 53 Water street, between Walnut and Vine, Cincinnati, O. 27 0m*