

Correspondents

W. E. R., of N. Y.—We cannot answer your inquiry about aquarium pebbles. Write to Mr. Butler, Barnum's Museum, this city.

C. C. H., of Ill.—The best cement known to us for uniting two pieces of leather is a very strong solution of isinglass. Gutta percha dissolved in naphtha, we have been informed, is a very superior leather cement, but we have not tried it personally. Leather bands after being cemented should be allowed to dry before they are used.

D. J. B., of Me.—There is no cement which can unite the two pieces of a broken knife or file, and render the tool as strong as before it was broken. Those who informed you of such a cement are mistaken.

D. B. R., of Ill.—Marine glue is made by dissolving india rubber and shellac in naphtha. We are unacquainted with any process for bleaching it white.

J. B. B., of R. I.—We advise shortsighted persons, in all cases, to wear spectacles, and not try experiments for the purpose of obtaining long vision. It can't be done.

J. P., of Ala.—We do not think your article, "Why dust floats in the air," possesses sufficient general interest to warrant its publication in our columns. We know nothing of the sewing machine about which you inquire.

P. H. B., of Mo.—There is no monthly work issued in this country upon the subject of architecture.

W. Fishbach, of Stanardsville, Va., wishes to correspond with manufacturers of screw bolts and nuts for machinery.

A. N., of N. Y.—The mineral you sent us is gneiss, or granite broken up, in its fine state, we could not say which; but it is of no use, except, perhaps, to cover your garden walks.

G. H. G., of Mass.—The lifting power of a wooden box one cubic foot in size, and weighing four pounds, placed under water, is 68½ pounds. The lifting power of any object placed under water is equal to the difference between the weight of that body and an equal bulk of water. A cubic foot of water weighs 62½ lbs.

P. M., of Pa.—You can procure a "barkometer for testing the strength of bark liquor" of Benj. Pike & Son, Broadway, New York.

A. F., of Ill.—We do not know anything about the price, wholesale or retail, of Knapp's rosin oil. It is wholly out of our line of business.

T. B. McC., of Del.—The article you send us is the oxyd of iron mixed with clay. It will make good paint for roofing purposes, but is not well adapted to the finer kinds of work.

T. C. H., of Pa.—A cubic foot of distilled water weighs 62½ pounds avoirdupois at a temperature of 56½° Fah.

E. S., of Ohio.—The reason why water rises above the surface in artesian wells is owing to the fountain-head being higher than the well surface. The fountain-head may be at a great distance—sometimes hundreds of miles—but it must be higher. You will find a series of illustrated articles on this subject in volume 8, Sci. Am. Tubular steam boilers are more expensive than cylinder boilers.

M. B., of N. Y.—Your fountains are not patentable, although we think that the double Hero's fountain is very ingenious, and as you say, would form a very nice toy if you could get them made cheaply. You are aware that thousands are annually made in Nuremberg, and sold in all parts of Europe, but we have never seen any exactly like yours.

J. J., of Me.—You are about right as to the distribution of the force in your machine; but if you work the compressing air pump by an eccentric on the shaft, you will expend as much power as you gain exclusive of friction, so that you will require a small steam engine to keep your perpetual motion at work. We will pay all fees and prepare your case for nothing, when you have made this chimera work successfully.

E. S. H., of N. Y.—There is no process or substance known to us by which cloth can be rendered perfectly waterproof without being air-tight; but it may be rendered partially so, as follows:—Take four ounces of alum and one of the acetate of lead for every ten gallons of water required to cover the cloth, and boil the cloth in this solution for half an hour, then take it out, and dry it at a heat of 212°. Cloth so prepared is rendered water repellent, and if of close texture, cold water will not readily pass through it. The alum and sugar of lead should be dissolved before the cloth is put into the vessel.

V. L. M., of Pa.—No person has a right to republish a work protected by copyright under any plea, without the privilege of the person in whose name the copyright stands. If a controversial pamphlet is thus secured, and the opposing party is desirous of publishing the whole, or any material portion of it, with other matter by way of correction or reply, he will be obliged to get that privilege from the owner, or pay the usual penalty. The fact of its character being slightly altered by changing its title page, or asserting that the additions improved it, would make no difference. The original work is the base upon which your alleged improvements rest, and, as in patent law, you have no right to use the original without the consent of the owner.

F. G. R., of Va.—Corn planters, with an apparatus for dropping and distributing guano, plaster, and other composts, are already in existence. They are commended by many, but are generally opposed on the ground that the small quantity they are able to carry is soon exhausted, and that they do not deposit the article in the proper relation to the corn, and relative quantity to the quality of the land in which it is planted. The wonderful steam engine, "coating, independent of working machinery, only fifty dollars," to which you refer, was evidently one of the many rotary

engines which have for many years been got up with a view of superseding the reciprocating engine.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Saturday, May 1, 1858:—

E. J., of Conn., \$30; M. G., of Pa., \$25; W. H., of Ohio, \$30; H. D. W., of Mich., \$30; L. L. C., of N. Y., \$55; J. A., of Pa., \$33; J. B. T., of Pa., \$55; J. & D., of N. Y., \$30; C. D., of N. Y., \$30; O. S., of N. Y., \$30; G. W., of Conn., \$30; J. L., of Mass., \$20; W. C., of Mass., \$25; A. S. S., of Mass., \$25; F. & Co., of Conn., \$25; S. H. Jr., of N. H., \$25; J. C., of N. Y., \$30; E. T. B., of Ga., \$55; E. M., of N. Y., \$30; W. S. H., of N. J., \$10; T. W. Jr., of Conn., \$30; S. T., of Mich., \$25; B. & W., of Pa., \$30; E. S., of La., \$30; T. & S., of Pa., \$10; S. B., of Ohio, \$55; H. & S., of N. Y., \$40; J. M., of Iowa, \$10; A. C., of N. Y., \$25; G. E. C., of Minn., \$33; J. W. W., of Ind., \$30; C. McL., of N. J., \$30; G. M. L. McM., of Ohio, \$25; A. J. D., of Cal., \$5; W. B. C., of Pa., \$30; D. & M., of Ill., \$15; I. C., of N. Y., \$35; J. R., of Ohio, \$30; W. H. R., of Fla., \$100; R. & S., of Ohio, \$25; G. W. S., of Ill., \$25; D. Y. C., of Pa., \$30; B. R., of Mass., \$30; W. H., of N. Y., \$25; J. H. R., of N. Y., \$50; W. G. B., of N. Y., \$25; H. G. D., of Ky., \$25; A. McK., of N. Y., \$25; A. P. & Co., of Cal., \$50.

Specifications and drawings belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, May 1, 1858:—

W. G. B., of N. Y.; J. Y. L., of N. Y.; J. H. R., of N. Y., (2 cases); C. McL., of N. J.; H. G. D., of Ky.; S. H. Jr., of N. H.; A. S. S., of Mass.; F. & Co., of Conn.; J. C., of N. Y.; M. G., of Pa.; W. C., of Mass.; I. C., of N. Y.; G. M. L. McM., of Ohio; B. & W., of Pa.; S. T., of Mich.; E. S., of La.; A. C., of N. Y.; N. H., of Pa.; A. McK., of N. Y.

Literary Notices.

THE NEW YORK PULPIT IN 1858.—A memorial volume, published by Sheldon, Blakeman & Co., No. 115 Nassau street, N. Y. It is known, we presume, to most if not all of the readers of the SCIENTIFIC AMERICAN, that for some months past this city has been the scene of a most remarkable religious revival. The church generally has been stirred, and many who have hitherto lived in a state of careless unbelief have been converted to the Christian religion. Unlike many religious revivals, this one has been attended with comparatively little excitement. The volume before us contains a collection of sermons which have been preached in this city and Brooklyn during the progress of the revival, by some of the ablest divines in the various churches, such as Drs. A. D. Smith, Alexander Burchard, Lathrop, Adams, Cutler, Peck, Prof. Hitchcock, Rev. Mr. Cuyler, and others well known. It is a volume of interest and can be profitably read by all.

HUNT'S MERCHANTS' MAGAZINE for May, 143 Fulton street, New York.—The new publishers, Geo. W. and J. A. Wood, have secured the services of Thomas F. Kettell, Esq., as editor, who keeps up the character of the articles in a style worthy the late Mr. Hunt himself.

A MANUAL OF HORTICULTURE. Fowler & Wells, New York.—This is a new work, full of practical suggestions and valuable hints for the cultivation of the garden, what, how and where to plant. The chapter on the Flower garden is especially good.

THE ATLANTIC MONTHLY for May contains a splendid article on "Intellectual Character," and many others of great worth. It has just completed its first volume, and certainly has proved a success.

THE ECLECTIC MAGAZINE.—The May number contains a very excellent selection of articles, one entitled "Photographs for our Bibles," being especially worthy of perusal.

TERMS OF ADVERTISING.

Twenty-five cents per line each insertion. We respectfully request that our patrons will make their advertisements as short as possible. Engravings cannot be admitted into the advertising columns. * All advertisements must be paid for before inserting.

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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 twelve 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 have lately established a Branch Agency on the corner of F. and Seventh streets, Washington (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.

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; 29 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.

Communications and remittances should be addressed to MUNN & COMPANY, No. 128 Fulton street, New York.

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.

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

WILEY & HALSTED, 351 BROADWAY, N. Y., publish the following valuable works on Architecture, Engineering, &c.—Cottage Residences, by Downing, \$2. Wrightwick's Hints to Young Architects, \$1 50. Fairbairn on the Application of Cast and Wrought Iron to Building Purposes, \$2. American House Carpenter, by Hatfield, \$2 50. Mahan's Civil Engineering, \$2. Industrial Drawing, \$2. Mosely's Principles of Engineering and Architecture, \$3 50. Ventilation in American Dwellings, by Reid, \$2. Smith's Manual of Topographical Drawing and Linear Perspective, \$1 50 each. Smee's Metallurgy, \$1 25. American Engineering, by Weissenborn, \$1 per number. For sale, a few copies of Duggan's celebrated work on American Engineering, Bridge Building, &c., as far as complete, 1 vol., bound, \$15, or \$13 for fifteen numbers.

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MCALLISTER & BROTHER, Opticians, 728 Chestnut st., Philadelphia, Pa. "Remarks on the Construction of Lightning Rods, &c.," sent by mail free of charge.

IMPORTANT TO GAS AND STEAM FITTERS.—Hudgin's Patent Coupling for pipes can be seen at Messrs. ARCHER, WARNER & CO'S, 376 Broadway, State, County and National rights are for sale. This invention (Pat. April 6, 1858) greatly facilitates the work of attaching branches and making extensions. Persons desiring to purchase this invention can communicate with the patentee by leaving their address at ARCHER, WARNER & CO'S, No. 376 Broadway, New York.

MACHINISTS' TOOLS FOR SALE AT HALF PRICE.—I will sell the remainder of the tools belonging to the estate of John Farshley at half price, if called for soon. Said tools are new and in good order. They consist in part as follows:—One 16 foot planer, one 4 foot planer, 10 hand lathes, 2 spliner drills, 13 No. 1 drills, 1 bolt header, 1 shaft straightener, plane centers and jaws, chucks, all sizes, &c., &c. N. D. SPERRY, Trustee, New Haven, Conn.

A SAFE, GOOD BUSINESS, REQUIRING SMALL CAPITAL.—Any person living within four or five miles of a town, containing 3,000 or more inhabitants, can secure to themselves a good business by purchasing the right, with requisite machinery for cutting Daniel's Granular Fuel. This fuel consists of the swamp growth of brushwood and twigs, and trimmings of trees cut into lengths of about four inches. The machine will cut up with two horse power and two men 1,000 bushels per day. The material wherever introduced is preferred to charcoal or split wood for kindling coal or wood fires, and is found to be a most superior article for a summer fuel. As a patent is secured for cutting this material by machinery, all parties who purchase territory can have exclusive sale in that territory. All communications addressed to B. D. WASHBURN, Taunton, Mass., General Agent for the United States, will meet with prompt attention.

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