

Correspondents

F. D. of N. Y.—The process of making patent leather is a complicated one. The varnish consists of one pound of ivory black, ten pounds thick copal varnish, twenty pounds of linseed drying oil, and twenty pounds of turpentine.

J. H. H., of Wis.—The best method you can pursue is to wash your level with weak acetic acid applied with a brush; let it dry on, and repeat until you have the shade you want, then lacquer with any varnish you think fit.

J. T. P., of Vt.—To make copal varnish, take hard copal, 300 parts; drying linseed or nut oil, 125 to 250 parts; and oil of turpentine, 500 parts.

J. H. M., of N. Y.—A suitable engraving to illustrate your invention would cost \$15.

D. B. C., of Ohio.—We will receive your State bank bills at par for government fees, as well as for our own; but we would rather have you send us a draft on New York.

R. F. B., of Md.—We have no data from which to obtain a calculation of the strength of hollow globes of wrought iron.

L. H. M., of R. I.—James Harrison, Jr., of this city, has a patent for a machine for making spiralsprings for furniture use.

W. H. B., of Pa.—You will find an article on the subject you refer to, in this week's paper; and you may obtain further information by consulting Scott's Engineer's Assistant.

M. A. K., of Ohio.—You will find your question answered in that to another correspondent—B. A. L., of Conn., in No. 9 of the present volume.

C. G. M., of N. J.—We do not know where you can get a machine for making shoe pegs. They are manufactured in the eastern States, but just where, we are unable to state.

H. H., of Mo.—There is no power in the Patent Office to renew a patent after it has once expired; therefore, if you have neglected to ask for the extension until now, there is no chance for you, unless by special act of Congress.

C. C., of Pa.—Please to send us all the facts in regard to your rejected case. We are inclined to think that by a vigorous prosecution a patent can be obtained. In order to put the case properly into our hands, you will need to revoke the power of attorney given to your former agent, and confer it upon us.

W. C. J., of Kenwood.—Smith Beers, of Naugatuck, Conn., has a patent for an odometer, which we believe to be a good one.

E. G., of —.—Your explanation of the phenomena described by T. McN., of Ill., about the water in a tin dipper not freezing, while the water contained in the bucket in which it was immersed did, is incorrect, because you assume that the dipper and its contained water sunk in the bucket; if we understood our correspondent's letter, it did not. You will find our explanation under his query; and we should like to know your reason for objecting to that explanation.

P. S., of Pa.—The best cement for houses is undoubtedly, the so-called Roman cement, which, we believe, can be procured from any dealer in building materials.

D. W. J., of Ohio.—The mineral which you have found in your locality is heavy spar, or sulphate of baryta. When made artificially (by precipitating baryta from its solution by sulphuric acid), it is much used for paint. As its name implies, it is very heavy, having a specific gravity of about 4.4. At a very high temperature it fuses into a beautiful white enamel.

H. J. E., of Ind.—Your chain propeller for boats is one of the oldest known inventions for this purpose. It has neither novelty nor utility to recommend it.

E. J. N., of Md.—Just at this time we have no patent law pamphlets on hand. They do not contain the form of power of attorney for the sale of patents. The form in general use will answer your purpose.

G. E. D., of Pa.—We are very glad to learn that you intend to canvass for subscribers, in competition for the prizes we offer. There is a good chance to get spending money in this manner, and if you persevere you cannot help but succeed. We shall promptly pay over the cash on the 1st of January next.

F. S., of Va.—We will notice your communication next week. It came a little too late to receive such attention as we wished to bestow upon it.

C. J., of N. Y.—Such a device as you claim is not new. By reference to No. 2, this Vol., SCIENTIFIC AMERICAN, you will find the claim of an extension gas tube, which fully covers yours.

F. M., of Ind.—The advantage of feeding furnaces with hot air is very great, as you save the amount of fuel necessary to heat the air up to the required heat; and it also enters into the furnace hot enough to burn immediately. It takes no more fuel, as it may be warmed by the waste gases from the furnace.

P. B. J., of Ill.—The vine which will grow well in your State, and some excellent varieties of catwaba have already been made there. We understand that the vine culture has been commenced in the environs of Peoria and Nauvoo, and has been very successful.

Money received at the Scientific American Office on account of Patent Office business, for the week ending Saturday, November 14, 1857:—

H. A. S., of Vt., \$25; D. G., of Pa., \$30; A. B. C., of Ga., \$30; L. K., of Ohio, \$40; A. J. G., of Mass., \$25; E. L. T., of N. Y., \$50; N. A., of Conn., \$50; A. M., of N. Y., \$30; D. E., of Ohio, \$30; J. G., Sen., of R. I., \$25; W. R. M., of Ohio, \$55; D. W., of N. Y., \$30; W. A. F., of Conn., \$30; D. H., of Ky., \$55; H. T. S., of Mich., \$35; D. B., of R. I., \$30; N. R. A., of N. Y., \$30; D. & R., of N. J., \$55; H. M., of N. Y., \$25; F. O. D., 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 Saturday, November 14, 1857:—

F. O. D., of N. Y.; A. J. G., of Mass.; C. R., of N. Y.; H. A. S., of Vt.; H. H., of N. Y.; D. & B., of N. J.

Literary Notices.

MUSPRATT'S CHEMISTRY.—G. B. Russell and Bros., 290 Broadway, New York. This work is gradually progressing, and although it has already arrived at Part 32, it has only begun to treat of "Glass." It will be voluminous in form, and no doubt perfect of its kind when complete; but we are afraid that by the time it arrives at Z, much of the matter classified under A will be old and require to be re-written.

THE ATLANTIC MONTHLY is the title of a new magazine just commenced by the eminent publishing house of Phillips, Sampson & Co., of New York. The number contains ably written articles, superior, in fact, to the ordinary run of contributions to magazine literature. In reference to the merits of particular articles every reader must judge for himself.

THE WESTMINSTER REVIEW, for October, (American reprint) published by Leonard Scott & Co., New York, contains a very good article on the "History of Civilization in England," and many others, one of which is a severe and just criticism of Mrs. Browning's new poem, "Aurora Leigh."

THE ECLECTIC MEDICAL JOURNAL.—R. S. Newton, M. D., Cincinnati. The November number contains an excellent paper, by Professor G. W. L. Bickley on "Female Medical Colleges," and much interesting matter on the medical sciences.

TO OUR SUBSCRIBERS.

GIVE INTELLIGIBLE DIRECTIONS.—We often receive letters with money enclosed, requesting the paper sent for the amount of the enclosure, but no name of State given, and often with the name of the Post Office also omitted. Persons should be careful to write their names plainly when they address publishers, and to name the Post Office at which they wish to receive their paper, and the State in which the Post Office is located.

RECEIPTS.—When money is paid at the office for subscription, 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.

SUBSCRIBERS TO THE SCIENTIFIC AMERICAN who fail to receive their papers regularly, will oblige the publishers by stating their complaints in writing. Those who may have missed certain numbers can usually have them supplied by addressing a note to the office of publication.

EVERY SUBSCRIBER would do well to try and get one or more of his neighbors to send their names with his own, even if he has no wish to avail himself of our club rates. The larger the package of papers sent to one address, or the same Post Office, the greater is the certainty of getting the paper regularly. A single paper is sometimes mislaid or overlooked in sorting the mails at some one of the intermediate post offices through which it has to pass; while, on the contrary, we have noticed that a large package seldom fails to reach its proper destination.

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.

IMPORTANT TO INVENTORS.

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, 123 Fulton street, New York. Our branch offices are corner of F and Seventh streets, Washington, D. C.; No. 66 Chancery Lane, London; 29 Boulevard Saint Martin, Paris; and 3 Rue Thiers, Brussels. Circulars of information concerning the proper course to be pursued in obtaining patents through our Agency, the requirements of the Patent Office, etc., may be had gratis upon application to the principal office or either of the branches. Communications and remittances should be addressed to MUNN & CO., No. 123 Fulton st., 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. August 14, 1857.

SWISS DRAWING INSTRUMENTS.—A full stock of these celebrated instruments always on hand. C. T. AMSLER, (formerly Amsler & Wirtz), Philadelphia, Pa.

READ—NEW CATALOGUE, FOURTH EDITION, with two hundred and fifty illustrations of Mathematical, Optical and Philosophical Instruments, and attachment of a large illustrated 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, or money, which amount will be deducted from the bill if an order is sent. C. T. AMSLER, 635 Chestnut st., Philadelphia, Pa.

\$100. PREMIUM PATENT CARPENTER'S GAGE.—Three gages in one. State rights for sale very cheap. The best gage known. Address M. BRYANT, Brooklyn, N. Y.

AGENTS WANTED IN ALL THE CITIES and towns throughout the United States, to sell Wright's Patent Sectional Spring Bed Bottom. Address W. WRIGHT, No. 102 West Fortieth street, New York City.

ALCOTT'S CONCENTRIC LATHE.—THIS Lathe is capable of turning under 2 inches in diameter with only the trouble of changing the dies and patterns to the size wanted. It will turn smooth over swells or depressions of 1/4 to the inch, and work as smoothly as on a straight line, and does excellent work. Price \$25, (without frames), boxed, and shipped with directions for setting up. For sale by MUNN & CO., 123 Fulton st., New York City.

INVENTORS TAKE NOTICE.—PERSONS having implements patented, or intending to apply for patents, in housekeeping articles, and wishing to have them introduced, will address I. S. CLOUGH, New York City.

WANTED.—A SITUATION BY AN EXPERIENCED Pattern Maker, who understands mechanical drawing. Address R. E. S., Louisville, Ky.

TO INVENTORS AND THE PUBLIC.—We offer our faithful services to construct models and scientific instruments of every description with care and dispatch. Address H. SILLARBAUM & CO., No. 300 Broadway, New York City.

CARRIAGE AXLE AND WHEEL BOX.—Makers of light or heavy work, in any part of the United States are interested, and requested to send their address to A. C. GARRATT, 83 Eustis st., Roxbury, Mass.

A NEW AND IMPROVED RECIPE FOR making superior Honey, equal to that made by bees, and at less than one-half the cost, and eight other new and improved recipes of rare value for \$1. E. A. WATSON, Cleveland, O.

5,000 AGENTS WANTED.—TO SELL three new and unequalled inventions, wanted and selling everywhere. My agents have cleared over \$20,000 on them. Diplomas, silver medals and four patents granted on them. For four stamps you'll receive forty pages particulars. Best agency in the country. EPHRAIM BROWN, Lowell, Mass.

READ ALL YE THAT ARE FOND OF FISHING.—I will send for \$1 a secret art of catching fish in any water as fast as you can pull them out. This is no humbug. Address N. R. GARDNER, Peace Dale, R. I.

D. DE FORREST DOUGLASS, MANUFACTURER of Artificial Legs, Springfield, Mass.

STEAM PUMPS, BOILER FEED PUMPS, Stop Valves, Oil Cups, Cocks, Steam and Water Gages, sold by JAMES O. MORSE & CO., No. 79 John street, New York.

NOW OPEN AT THE CRYSTAL PALACE.—Day and Evening, from 9 A. M., until 10 P. M.—The Twenty-ninth Annual Fair of the American Institute. This unequalled display of the products of our National Skill and Industry is now permanently open. Dodworth's Cornet Band will be in attendance every evening, and on Tuesday and Friday evenings of each week will perform a grand Instrumental Concert by programme. Champney's moving Panoramas of the Rhine will be exhibited each day at noon, at 4 P. M., on Monday and Saturday evenings at 8 o'clock.—Members can procure their tickets at the Palace.

LAP-WELDED IRON BOILER TUBES.—Prosper's Patent.—Every article necessary to drill the tube-plates and set the tubes in the boiler. THOS. PROSSER & SON, 28 Platt st., New York.

BOILER FLUES.—ALL SIZES, AND ANY length desired, promptly furnished by JAMES O. MORSE & CO., No. 79 John street, New York.

BALL'S OHIO MOWER.—WITH OR WITHOUT the Reaping Attachment. For territory or shop rights apply to SAXTON & ROFF, Canton, Ohio.

WROUGHT IRON PIPE.—PLAIN AND GALVANIZED, sold at wholesale, by JAMES O. MORSE & CO., No. 79 John street, New York.

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.

ENGINEERING.—THE UNDERSIGNED IS prepared to furnish specifications, estimates, plans in general or detail of steamships, steamboats, propellers, 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 Gages, Allen & Noyes' Metallic Self-adjusting Conical Packing, Faber's Water Gage, Sewell's Salmometers, Dudgeon's Hydraulic Lifting Press, Roebing's Patent Wire Rope for hoisting and steering purposes, Machinery Oil, of the most approved kind, etc. CHARLES W. COPELAND, Consulting Engineer, 64 Broadway.

HARRISON'S 30 INCH GRAIN MILLS.—Latest Patent.—A supply constantly on hand. Price \$200. Address New Haven Manufacturing Co., New Haven, Conn.

MACHINERY.—S. C. HILLS, NO. 12 PLATT street, New York, dealer in Steam Engines, Boilers, Planers, Lathes, Chucks, Drills, Pumps; Morrell's, Jennings, 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; Belting, Oil, &c.

A HANDSOME REWARD!

\$1,500 IN CASH PRIZES.—THE PROPRIETORS OF THE SCIENTIFIC AMERICAN, desirous of increasing their circulation, and doing away with the system of employing traveling agents to solicit subscriptions, offer the following splendid prizes for FIFTEEN of the largest lists of mail subscribers received at this office before the 1st of January, 1858:—

- For the largest List.....\$300
For the 2d largest List.....250
For the 3d largest List.....200
For the 4th largest List.....150
For the 5th largest List.....100
For the 6th largest List.....90
For the 7th largest List.....80
For the 8th largest List.....70
For the 9th largest List.....60
For the 10th largest List.....50
For the 11th largest List.....40
For the 12th largest List.....35
For the 13th largest List.....30
For the 14th largest List.....25
For the 15th largest List.....20

Names of subscribers can be sent in at different times and from different Post Offices. The cash will be paid to the orders of the successful competitors immediately after the 1st of January, 1858. Circulars giving further particulars may be had gratis by sending to the publication office, 123 Fulton street.

We hope our friends in the country will avail themselves of the above liberal offer, and while they oblige us they will be benefited to a far greater extent than themselves. MUNN & CO., Publishers. See Prospectus on the next page.

CLOCKS.—TOWN CLOCKS OF ALL SIZES; also Regulators for Jewelers, Railroad Offices, &c., believed equal to any made. Dials for illumination. VOSBURGH & CO., Agents, 123 Liberty street, New York. JOHN SHERRY, Manufacturer, Sag Harbor, N. Y.

RECIPE FOR MAKING ARTIFICIAL HONEY.—As good in looks and taste as that made by bees, and which does not cost over six cents per pound.—sent for \$1. Address N. R. GARDNER, Peace Dale, R. I.

WELCH & GRIFFITHS.—ESTABLISHED 1830.—Manufactures of Improved Patent Ground and Warranted Extra Fine Cast Steel Saws, of the various kinds now in use in the different sections of the United States and the Canadas, and consisting of the celebrated Circular Saw, Graduated Cross Cut and Fenon, Gang, Mill, Pit, Segment, Billet and Fellow Saws, &c., &c. For sale at their warehouse, No. 48 Congress street, Boston, Mass.

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

EXCELSIOR STEAM PUMPS, DIRECT and Double-Acting, manufactured and sold at 55 and 67 First st., Williamsburgh, N. Y., and 301 Pearl st., New York. May be seen in operation at J. O. Morse & Co., 79 John st., New York. GUILD, GARRISON & CO.

FORBES & BOND, ARTISTS, 89 NASSAU street, New York, Mechanical and General Draughtsmen on wood stone, &c.

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.

WEST PHILADELPHIA CHEMICAL WARE Pottery.—Acid and fire-proof ware of all shapes and sizes, up to 200 gallons, made to order; warranted to resist acids of all kinds, and stand changes of temperature, from extreme heat to cold. MORO PHILLIPS, 27 North Front st.

SECOND-HAND MACHINISTS' TOOLS.—Consisting of 20 Engine Lathes, 9 Iron Planers, 4 Upright Drills, Hand Lathes, Chuck Lathes, Gear Cutters and Vices all in good order, and for sale low for cash. For particulars, address FRANKLIN SKINNER, 14 Whitney avenue, New Haven, Conn.

WOODWORTH'S PATENT PLANING MACHINES, of every kind and all prices. A large assortment on hand; and I am prepared to construct any machine to order from ten days to two weeks, and guarantee each machine to be perfect in its construction, and give purchasers entire satisfaction. The patent has expired, and will not be renewed. I make this business exclusive, manufacturing nothing but the Woodworth Machines, and for that reason can make a better article for less money; and with my fifteen years' experience I fully guarantee each machine to come up to what I am willing to recommend, and is that each machine shall be more than equal to any other manufactured for the same price. JOHN H. LESTER, 57 Pearl street, Brooklyn, N. Y., three blocks above Fulton Ferry.

ENGRAVING ON WOOD AND MECHANICAL DRAWING, by RICHARD TEN EYCK, Jr., 123 Fulton street, New York, Engraver to the Scientific American.

SAWS.—HOE & CO.'S PATENT GROUND SAWS, Plastering Trowels, &c., can be had, wholesale and retail, at the principal hardware stores, at the sales-rooms of the manufacturers, 29 and 31 Gold street, or at the works corner of Broome, Sheriff and Columbia sts., New York. Illustrated catalogues, containing prices and information interesting to sawyers generally, will be sent by post on application.

NEW HAVEN MANUFACTURING CO.—Machinists' Tools, Iron Planers, Engine and 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."

WASHINGTON IRON WORKS.—MALLERY, HAINES & CO., and HIGHLAND IRON WORKS.—STANTON, MALLERY, HAINES & CO., of Newburgh, N. Y.—Are extensively engaged in manufacturing all kinds of Steam Engines, Machinery and General Mill Work. They are also partners of the firm of STANTON, SNOW & CO., Car Wheel Manufacturers, Newburgh, N. Y., and are prepared to furnish Railroad Cars and Car Wheels of superior construction. From the cheapness of real estate and reasonable price of labor, as well as their great facilities of transportation by two railroads and the Hudson river, they are enabled to fill orders at the lowest prices and on the most reasonable terms.