

ADDITIONAL IMPROVEMENTS.

W. C. Banks, of Como Depot, Miss., for an Improvement in Corn Planters. Patented May 1, 1860:

I claim, in connection with the seeding wheel, F, with its flanges, b, spring clearer, d, and adjusting device, C, as therein claimed, the spring holder, r, surrounding a portion of the seeding wheel, to prevent the seeds from dropping from the cells until said cells arrive at or over the exit opening, as fully set forth and represented.

T. J. Jolly, of Olean, Ind., for an Improvement in Machines for Loading Hay. Patented June 26, 1860:

I claim the sectional gathering teeth, F, constructed of stationary sections, f, and sliding sections, f', combined and operating in a machine for loading hay in the manner and for the purpose set forth.

EXTENSIONS.

J. S. Gwynne, of New York City (formerly of Pittsburgh, Pa.), for an Improvement in Separating Oleic and Stearic Acids. Patent dated Sept. 3, 1846:

I claim the application of heat through a liquid or aeriform medium to the mass to be pressed, in such a manner that the said mass before it is subjected to pressure shall be heated gradually and uniformly throughout, to such a degree that while the stearic acid is at no time during the process melted, the oleic acid is rendered fluid enough to be afterwards expressed in the manner above described.

J. H. B. Latrobe, of Baltimore, Md., for an Improvement in Stoves. Patent dated Sept. 5, 1846:

I claim the employment of a stove such as described, so constructed and placed within the ordinary fireplace as to heat the room by its direct radiation as well as by heating air entering the room from outside, as described, serving the double purpose of a stove and hot air furnace.

DESIGNS.

Marie L. Livingston, of New York City, for a Design for a Medallion of Washington Irving.

N. S. Vedder, of Troy, N. Y., assignor to North, Chase & North, of Philadelphia, Pa., for a Design for Stoves:



CORRESPONDENTS sending communications for publication in our columns are requested to avoid writing on both sides of a sheet of paper. This fault, though common to persons unaccustomed to writing for the press, gives great trouble to the printer (especially in long articles), and, when combined with illegibility of handwriting, often causes interesting contributions to be regretfully consigned to our waste-paper basket.

C. C. D., of Ind.—Corn can be kiln dried in a very superior manner in a kiln similar to a malthouse. The floor should be made of tiles, with the flues of the furnaces conducting the hot air running underneath. Corn is often kiln-dried by steam conducted through the grain in pipes. Mr. Bulkley, of Kalamazoo, Mich., is engaged in the business of erecting steam drying kilns, and can give you any further information on the subject. The corn only requires to have its surplus moisture expelled, and is not "roasted like pop corn."

J. P. H., of Va.—You will find a series of articles on boilers, furnaces, and chimneys, in Vol. XIII. (old series) SCIENTIFIC AMERICAN, commencing on page 334. The common rule to be observed in constructing chimneys for stationary engines is to allow 1 1/2 square inches area inside for every pound of coal consumed per hour, and 3 1/2 inches in height. A chimney 80 feet in height by this rule is suitable for burning 300 lbs. of bituminous coal per hour. A chimney 100 feet in height, and 450 square inches area inside, will afford a good draft for your 8 by 100 feet boiler, if you make a good thick wall, and have it plastered smoothly inside. Why do you get such a long boiler? We believe that one 30 feet in length would answer your purpose fully as well.

E. D. & Co., of Pa.—We do not believe that glue can be manufactured economically from old leather, because it requires a great amount of caustic alkali to remove the tannin before the gelatine will dissolve and become glue. The tannin can be removed from leather by strong caustic alkalis and frequent washings.

L. C. H., of Mass.—Bread raised by yeast is the best and most wholesome. If you can get a Frenchman to teach you to make bread, you will beat all Americans.

T. H. McC., of Ill.—The steam and water in a boiler are both of the same temperature at all pressures. If the pressure is 60 lbs. on the square inch, the temperature of steam and water is 305° Fah.

D. T., of Pa.—Your article on flying was crowded out.

H. B., of N. H.—You will find a new mode of silver-plating described in our last issue, page 176.

H. L. P., of N. Y.—The other natural curiosities of Florida would be more interesting; we have heard enough about the silver spring.

J. B. C., of Tenn.—Your article does not raise a doubt in our minds in regard to birds flying by the power of their muscles.

H. H. A. B., of Mass.—Your article was prepared once for the printers, with an editorial in reply, but it got postponed, and you have doubtless seen the whole subject discussed since in our paper with a full illustration of Stevenson's wheel. Theoretically, the whole power, not half merely, can be imparted by percussion.

J. P. M., of Ill.—We do not believe that what you call hair snakes are formed from horse hairs. In order to convince people of that, it would be necessary to conduct your experiments in such a manner as to leave no possibility for the reptile to be produced in the ordinary way.

W. B. L., of Ill.—Your engine of 14 inch stroke may be run at the rate of 173 revolutions per minute—a 400 foot speed of piston. This is believed to be a good speed for such engines.

A. P., of Ga.—We have found no difficulty in dissolving india-rubber perfectly in refined turpentine. Cut the rubber into shreds, place it in the turpentine in a close vessel heated to about 90° or 100°, and stir occasionally, and if the rubber is pure it will not be long before it is perfectly dissolved.

C. K., of C. W.—We have never seen pans made of sheet iron employed for boiling down maple sap. We believe they would soon wear out, as the sap would exert a slight, acidulous action upon the metal. The best thing you can do, next Spring, is to make an experiment with one or two pans twelve feet long, four feet wide and one foot deep. This is the only safe way for you to proceed, and the expense will not be very great.

H. F. N., of Ohio.—Benzole will destroy the gloss of oil in painting, like turpentine, but is very dear in comparison with it. We do not know a good substitute, all things considered, for turpentine in oil painting.

L. P. L., of M. H.—An inferior kind of wood may be easily made to imitate mahogany by those who are skillful in the art of staining. Common white wood is now made to resemble maple, black walnut, rosewood and mahogany, in all our cabinet manufactories. The mahogany stain is made with a strong decoction of fustic, a little redwood and logwood, mixed with some varnish.

J. S. D., of N. J.—The teeth of saws are cut by the manufacturer with large punching machines. You will find an illustration and description of the operations on page 126, Vol. XIV. (old series) of the SCIENTIFIC AMERICAN.

J. M. K., of Conn.—Warm turpentine will soften hard putty, but you will find it much easier to scrape the putty off your broken window, with a knife, than to soften it with any solvent known to us.

J. E., of N. C.—The most recently published work on dyeing in our country, you can obtain from J. Wiley, 56 Walker-street, this city; its price is \$5.

G. H., of Summit.—Your phonometer appears to be new, and we should think a patent could be obtained for it. When you write to us again, please advise us in what State you reside.

J. D., of Mass.—To enable us to judge of the probable novelty of your inventions we shall require sketches and descriptions of each. These you can prepare and send us by mail.

W. B., of Pa.—Your suggestion will be complied with so far as is in our power.

M. J., of Mass.—We have never been at Sevastopol, but have been informed that the American company employed for raising the sunken vessels in that harbor, first inclose them with tarpaulins, then pump out the water; after which they are raised without much difficulty with water camels.

F. B., of N. Y.—Take plaster-of-paris and make it into the consistency of putty, with a strong solution of alum, and then bake it in a fire for half an hour. When cool, reduce it to powder, then mix it to the consistency of paste with water and burr grit, to fill up the holes in your millstones. This is the best cement for the purpose known to us.

H. C., of N. Y.—If the patentee to whom you refer proposes to apply for an extension of his patent, he should do so within the next two months. We are prepared to undertake the case, and will attend to it at once. Let him send us a complete statement of his receipts and expenditures, also what efforts he has put forth to introduce his invention into use. Of the value of the invention there cannot be much doubt.

O. G., of Pa.—Our pamphlet of advice to inventors contains all the information you desire about caveats. We send you one by mail, free of charge.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, Sept. 8, 1860:—

- A. C., of Mass., \$30; I. M., of Ohio, \$30; J. H. B., of N. Y., \$30. M. A. R., of N. Y., \$25; B. F. C., of Conn., \$35; B. F. K., of R. I., \$35; H. B., of Ill., \$30; G. W. H., of Pa., \$30; S. L. B., of S. C., \$25; W. H., of Ill., \$35; D. & W. B., of Iowa, \$25; W. L., of Conn., \$30; L. S. G., of Ky., \$40; G. N. C., of Conn., \$30; J. E. S., of Maine, \$33; L. W. E., of Mich., \$30; J. Y., of Ohio, \$30; C. W. S., of Ala., \$30; J. H. B., of Ohio, \$30; D. D., of Pa., \$30; J. H. B. S., of Ga., \$30; J. F. E., of N. Y., \$30; W. H. S., of N. Y., \$25; O. B. L., of N. Y., \$30; D. E. T., of N. Y., \$30; G. P. R., of Mass., \$25; G. J. C., of Vt., \$35; C. C. S., of Fla., \$30; J. S. N., of Cal., \$45; W. S. K., of Conn., \$30; A. H., of N. Y., \$15; J. C. C., of Conn., \$380; C. W. F., of Ill., \$30; J. R., of Mass., \$30; J. M., of Maine, \$35; T. J. W., of Conn., \$30; J. T. M., of Ill., \$30; H. W., of N. J., \$30; G. C. A., of Ky., \$25; H. C., of Conn., \$30; E. S., of N. Y., \$25; D. A. P., of Ind., \$25; C. A. W., of N. J., \$30; D. M., of N. Y., \$30; J. E. A., of Ill., \$35; E. R. P., of N. Y., \$30; J. H., of Ind., \$30; J. D. E., of Mass., \$30; J. D., of Pa., \$50; J. C., of Iowa, \$35; J. L. G., of Ga., \$5; P. D. V., of N. Y., \$10; W. H. T., of Ohio, \$30; S. C. St. J., of N. Y., \$30; W. A. C., of Ill., \$350; W. W. G., of Mass., \$50; G. W. R., of N. Y., \$30; S. C. S., of N. Y., \$30; U. B., of Mass., \$30; T. M. T., of Ohio, \$35; M. & S., of Ga., \$40; L. N. Y., of Ind., \$15; E. T., of Maine, \$35; J. & E., of Ill., \$25.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, Sept. 8, 1860:—

- M. & S., of Ga.; S. J. H., of N. Y.; T. M. T., of Ohio; U. B., of Mass.; E. T., of Maine; J. H. D., of N. Y.; G. C., of N. Y.; C. C., of N. Y.; J. M. B., of Maine; G. J. C., of Vt.; A. K., of Wis.; C. P. R., of Mass.; G. C. G., of N. Y.; H. L. N., of N. Y.; J. & D., of Pa. (3 cases); J. L. G., of Ga.; D. F. E., of Mass.; G. D. W., of Mich.; J. C., of S. C.; P. D. V., of N. Y.; D. A. B., of Ind.; M. A. R., of N. Y.; D. P., of Ill.; B. F. K., of R. I.; D. A. P., of Ind.; B. F. C., of Conn.; E. S., of N. Y.; C. S. S., of N. Y.; J. C. C., of Conn.; H. C., of N. C.; G. C. A., of Ky.; J. A. B., of N. Y. (2 cases); J. N. Y., of Ind.; E. R. P., of N. Y.; W. H. S., of N. Y.; J. & E., of Ill.; D. H., of N. Y.; S. H. & M. C. W., of Mass.; J. E. A., of Ill.

NEW BOOKS AND PERIODICALS RECEIVED

THE LONDON QUARTERLY REVIEW, for July; republished by L. Scott & Co., No. 54 Gold-street, New York.

Messrs. L. Scott & Co. are rapidly putting forth their reprints of the English reviews for the coming quarter. These publications have been long issued with such regularity that the announcement of their issue has become almost unnecessary, as readers know confidently when to expect them. The following is an abstract of the present number of the "London Quarterly": I. The Missing Link and the London Poor; II. Joseph Sealger; III. Workmen's Earnings and Savings; IV. The Cape and South Africa; V. Arr Schaffer; VI. Stonehenge; VII. Darwin's Origin of Species; VIII. The Conservative Reaction. This number commences a volume. They are also the publishers of the "Edinburgh," "North British" and "Westminster Reviews" and "Blackwood's Magazine," all of which are obtained for \$10 per annum—one "Review," \$3.

ATLANTIC MONTHLY; published by Ticknor & Fields, Boston, Mass.

By missing the July and August numbers of the "Atlantic," we lost our interest in the "Professor's Story," and consequently find the September number rather dull.

REVUE UNIVERSELLE des Mines, de la Métallurgie, des Travaux Publics, des Sciences et des Arts appliqués à l'Industrie; sous la direction de M. Ch. De Cuyper, Professeur ordinaire à la Faculté des Sciences de l'Université de Liège, Inspecteur des études à l'École des Arts et Manufactures et des Mines. Published by E. Noblet, editor and proprietor, Paris and Liège.

Our correspondent who was so anxious to find an article in this valuable periodical, from an extract which he saw in the SCIENTIFIC AMERICAN, will doubtless be able to procure the desired number of H. Bussange & Son, of this city.

WHAT MAY BE LEARNED FROM A TREE; by Harland Coultas. Published by D. Appleton & Co., New York.

The traveler, in his journey, experiences an exquisite sensation of pleasure, when, unexpectedly, some scene of surpassing beauty meets his gaze; perhaps at the top of a mountain, perhaps at the end of a narrow defile. It is all one where the scene is found; the sensation is the same. As it is with the explorers of natural scenery, so it is with those who journey among books. In the above modest title, Mr. Coultas has given to science a useful production, and to literature an elegant entertainment. He is the author of several works on botany, but this one he esteems the most highly. A tree is his subject, and he gives us its "life-history." He traces it from the first manifestations of vitality in the germinating seed until the period of maturity, when it puts forth flowers and fruit. "A tree," he says, "is indisputably the most highly-developed form which vegetable life assumes. In the appearance of one which has stood for centuries, there is something noble and majestic. It is God's own architecture. This mass of vegetable matter is only earth and air which has undergone transformation; the material dikes of wandering zephyrs and rushing storms—of gently-descending night winds and angry thunder showers—has been here, on this spot, metamorphosed." This author traces (scientifically and historically) the life of a tree, from the planting of a beech-nut in the soil until it has grown to be a lofty temple of Nature, with the birds singing and the squirrels playing among its waving branches.

USEFUL HINTS TO OUR READERS.

BOUND VOLUMES.—Persons desiring the first volume of the New Series of the SCIENTIFIC AMERICAN can be supplied at the office of publication by all the periodical dealers. Price, \$1.50; by mail, \$2, which includes postage. The volume is complete, complete, can be furnished by mail; price \$1. Vol. II. is now bound and ready for delivery. The price for this volume is the same as that charged for Vol. I.

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

IMPORTANT TO INVENTORS.

THE GREAT AMERICAN AND FOREIGN

PATENT AGENCY.—Messrs. MUNN & CO., Proprietors of the SCIENTIFIC AMERICAN, are happy to announce the engagement of HON. CHARLES MASON, formerly Commissioner of Patents, as associate counsel with them in the prosecution of their extensive patent business. This connection renders their facilities still more ample than they have ever previously been for procuring Letters Patent, and attending to the various other departments of business pertaining to patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c. &c. The long experience Messrs. MUNN & Co. have had in preparing Specifications and Drawings, extending over a period of fifteen years, has rendered them perfectly conversant with the mode of doing business at the United States Patent Office, and with the greater part 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, No. 37 PARK ROW, NEW YORK. We have also established 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 wish Washington, having business at the Patent Office, are cordially invited to call at this office.

They are very extensively engaged in the preparation and securing of Patents in the various European countries. For the transaction of this business they have Offices at Nos. 66 Chancery Lane, London; 29 Boulevard St. Martin, Paris, and 26 Rue des Epéronniers, Brussels. We think we may safely say that three-fourths of all the European Patents secured to American citizens are procured through our Agency.

Invents will do well to bear in mind that the English law does not limit the issue of patents to inventors. Any one can take out a patent there.

A pamphlet of information concerning the proper course to be pursued in obtaining patents through their Agency, the requirements of the Patent Office, &c., may be had gratis upon application at the Principal Office or either of the Branches. They also furnish a Circular of Information about Foreign Patents.

The annexed letters, from the last three Commissioners 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 our intercourse with the Office, a marked degree of promptness, skill and fidelity to the interests of your employers. Yours, very truly,

CHAS. MASON, Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, he addressed to us the following very gratifying testimonial:—

Messrs. MUNN & Co.—It affords me much pleasure to bear testimony to the able and efficient manner in which you have discharged your duties of Solicitors of Patents while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and I doubt not, justly deserved) the reputation of energy, marked ability and uncompromising fidelity in performing your professional engagements. Very respectfully,

Your obedient servant, J. HOLT.

Messrs. MUNN & Co.—Gentlemen: It gives me much pleasure to say that, during the time of my holding the office of Commissioner of Patents, a very large proportion of the business of inventors before the Patent Office was transacted through your agency, and that I have ever found you faithful and devoted to the interests of your clients, as well as eminently qualified to perform the duties of Patent Attorneys with skill and accuracy. Very respectfully,

Your obedient servant, WM. D. BISHOP.

Communications and remittances should be addressed to MUNN & CO., Publishers, No. 37 Park-row, New York.