

RE-ISSUES.

W. M. Arnall, of Sperryville, Va., for an Improvement in Grain Separators and Cleaners. Patented May 1, 1860:

I claim, first, The combination of the distributing and equalizing cylinder, I, with the separating cylinders, D and E; the same being used as and for the purpose specified.

Second, The arrangement of the cylinder, I, and adjusting spring, N, or their equivalents, with the cylinders, D and E, and with the brush, F, when the same are used substantially as and for the purpose specified.

A. E. Bonham, of Elizabethtown, Ohio, Administrator of the estate of J. H. Bonham (deceased), late of the same place, for an Improvement in Seeding Machines. Patented December 8, 1857:

I claim a revolving, peripheral seed-discharger having its axis in a horizontal position and in a line with the forward motion of the machine, or in a position suitably approximating thereto.

I also claim adjusting the said seed-discharger to different positions approximating to said horizontal and line-of-motion position.

In combination with a revolving, peripheral seed-discharger having its axis placed as above specified, I also claim adjusting or regulating the quantity of seed discharged through the said seed-discharger.

I also claim the conducting spout, L, in combination with the stopper block, G, and fitting pins, N, arranged and operating substantially as and for the purpose specified.

N. G. Norcross, of Lowell, Mass., for an Improvement in Circular Sawmills. Patented Jan. 15, 1850:

I claim, first, The application to circular saw frames of rocker boxes and a swing frame, for the purpose of affording and play to the arbor, as set forth.

Second, The application of a re-acting agent to the central part of a circular saw through the medium of the mandrel or by any other substantially equivalent means, for the purpose of restoring the saw to line after it has been deflected.

Third, Suspending a circular saw frame in position and restoring it to line by means of the driving belt arranged and operating substantially as set forth.

W. H. Seymour, of Brockport, N. Y., assignor to himself, D. S. Morgan, A. Palmer, of the same place, and S. G. Williams, of Janesville, Wis., for an Improvement in Reaping Machines. Patented July 8, 1851:

I claim, first, Supporting the arm or lever of a vibrating sweep rake at each end, substantially as described.

Second, Operating an automatic sweep rake by gearing on both ends thereof, in combination, with the platform of the harvesting machine, for delivering the grain in gavel, substantially as described.

W. H. Seymour, of Brockport, N. Y., assignor to himself, D. S. Morgan, A. Palmer, of the same place, and S. G. Williams, of Janesville, Wis., for an Improvement in Reaping Machines. Patented July 8, 1851:

I claim the combination of the arm, rod or lever which carries a vibrating sweep rake in combination with a guide rod which forms a movable fulcrum for the rake head, substantially as described for the purpose set forth.

W. H. Seymour, of Brockport, N. Y., assignor to himself, D. S. Morgan, A. Palmer, of the same place, and S. G. Williams, of Janesville, Wis., for an Improvement in Reaping Machines. Patented July 8, 1851:

I claim the arrangement of a quadrant-shaped platform immediately behind the cutting apparatus, so as to receive the cut grain as it falls, and from which it is discharged in the arc of a circle substantially as described.

Charles Van De Mark, of Oaks Corners, N. Y., for an Improved Method of Uniting the Panels of Portable Fences. Patented June 2, 1857:

I claim forming or providing the ends of the panels or sections of a fence with hooks and eyes, substantially as specified, to receive each other respectively in succession and thereby to sustain and lock the said panels or sections together in the manner and for the purposes set forth.



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. H. M., of N. H.—The best coating that we can recommend for iron hoops to prevent them from rusting, is black asphaltum or copal varnish. It should be put on as hot as possible and allowed to dry perfectly before the hoops are used.

E. G. M., of Pa.—Make the stem or handle one inch thick and four inches long, and give to each of the balls a diameter of 7/8 inches, and your dumb-bell, when cast of iron, will weigh 112 lbs.

B. H. N., of Mass.—The explosive matter of torpedoes is fulminating silver. This substance, while wet, is mixed with sand or pounded glass and wrapped in tissue paper. Torpedoes might be made larger than they usually are. Fulminating silver is one of the most dangerously explosive substances known; none but experienced chemists should meddle with it.

S. R., of Pa.—Any metal which is smooth is suitable for molds for plaster-of-paris. The surface should be oiled before use.

W. F., of N. Y.—Tin roofs need to be kept well painted. The fact that you use the rain water from the roof for culinary purposes should not delay the painting. Use good linseed oil and ochre. Until the paint is quite dry, the water should be filtered through fresh charcoal to free it from all odor or bad taste. Whether the tin is painted or not has little to do with the necessity of a lightning-rod. A lightning-conductor of hoop iron would be better than none at all, and, for the same weight of metal, might be more efficient than a rod; but the same amount of surface would be preferable in a rod. The thin edges of hoop iron, acting like a point, would favor a lateral discharge.

W. H. Y., of N. Y.—The diagram of your alleged improvement (conveyed to us by your brother) presents much novelty; but we think it lacks practical utility. We are acquainted with those who have spent a great deal in experimenting to perfect a mode of accomplishing the results which you have imperfectly attained. A gentleman of much scientific ability, residing in your city, has, we understand, devoted nearly his whole time latterly to experiments of this kind. In practice, we think you will find a horizontal movement far preferable to a vertical action. In either case, there must be danger of the piston or plunger becoming excessively heated, notwithstanding a proper use of lubrication. Inform us as to your success as you progress. Such subjects not only interest ourselves, but a majority of our readers.

E. M., of Conn.—The solder which you have sent us appears to be the kind that is employed for brass work, and which is made as follows:—Take 8 ounces of copper and 1 of zinc, and melt the former in a crucible; while doing so, heat the zinc in another crucible up to about 212°, and then add it to the copper and put on the lid. Now shake the crucible for about five minutes and pour out the molten alloy through the twigs of a birch broom into water, when it will be divided into grains and made fit for soldering.

J. R. M., of Maine.—You are quite right about the supposed difference of temperature in the ends of an egg being caused by the air sack at one end, which is a non-conductor. We do not believe that the waters of the sea are diminishing by flowing into volcanoes, combining with red-hot metals and being decomposed. This will not account for the gradual rising of the coast of Denmark out of the sea, as some other coasts—such as New Jersey—are sinking in the same ratio.

W. P., of Ohio.—You are generous in your offer of 5 per cent for our services, if we can sell your meteorite, of 163 lbs., to some European agent for its weight in gold. We respectfully decline; as business of this character is not in our line. The "solid men of Boston"—the members of its Society of Natural Sciences, who recently petitioned the authorities at Washington to have a meteorite brought all the way from the Rocky Mountains—may assist you to a favorable transaction.

G. S. A., of Pa.—We do not know of any wooden covering having been used for hay-cocks in the field; cloth is very often used. Any one would have a right to make wooden caps for the purpose.

O. M. B., of Mass.—The best mixture known to us for preserving the standard cast iron weights to which you refer from rusting, is by applying to them hot linseed oil containing a very minute quantity of beeswax; then allow them to dry perfectly before they are used.

N. A., of Kansas.—The philosophy of kyanizing timber is to apply a solution—such as the sulphate of copper—which will unite with the albumen of the wood and form an insoluble compound, and a poisonous one also, to insects and vegetable fungi, which are liable to attack and destroy the wood.

W. W. S., of Conn.—Cohesive attraction cannot be said to be greater in hard than soft steel, or vice versa. It simply means the tenacity which atoms exhibit in adhering together. The breaking weight of iron and steel is the co-efficient of their cohesive force, when this term is employed in a mechanical sense.

P. H., of N. Y.—A telegraph office in a building does not increase the danger from lightning. You can easily convey the current which comes on the wires into the ground. Put up a 3/4-inch thick iron or a 1/2-inch copper rod on your building; allow it to project 10 feet above the chimney; connect all the parts perfectly, and carry it into the ground for about 10 feet, and you will have a good conductor.

MONEY RECEIVED

At the Scientific American Office on account of Patent Office business, for the week ending Saturday, July 14, 1860:—

- S. A. Co., of N. Y., \$250; S. B., of Ohio, \$25; D. R., of N. Y., \$25. A. S. B., of Iowa, \$106; C. F., Jr., of Ohio, \$30; R. M. L., of Minn., \$18; M. G. W., of Ill., \$40; E. T., of Maine, \$30; J. W. K., of N. Y., \$30; J. Y., of Pa., \$55; D. L., of Pa., \$30; C. & M., of N. Y., \$30; T. T. S., of Pa., \$90; T. W. McD., of Ill., \$25; E. S. B., of N. Y., \$25; J. H. B., of N. Y., \$30; W. C. W., of Ill., \$30; G. M., of Va., \$35; H. H. E., of Ill., \$15; C. H. L., of R. I., \$25; O. M. M., of N. Y., \$30; F. W., of N. Y., \$25; A. S., of N. Y., \$25; J. M. S., of N. Y., \$95; R. M. G., of N. Y., \$25; S. B., Jr., of N. J., \$35; S. L., of Ohio, \$30; J. A., of Ill., \$25; H. N. D., of N. Y., \$35; W. H., of Ill., \$25; J. K., of Mass., \$35; W. C. W., of Ill., \$30; A. A., of Conn., \$30; H. R., of N. Y., \$30; H. F. W., of Pa., \$35; C. L. A., of N. Y., \$30; J. H. B., of Iowa, \$25; E. H., of Maine, \$30; P. F., of Miss., \$25; T. S., of Pa., \$30; J. G. R., of Maine, \$35; B. S. P., of Conn., \$20; J. E. T., of La., \$30; M. C. B., of Mo., \$10; R. H., of Conn., \$35; C. & N., of Oregon, \$100; M. F. J., of Tenn., \$25; D. S. H., of N. Y., \$25; J. K., of N. Y., \$35; O. F. B., of N. Y., \$25; J. H. W., of N. Y., \$25; J. O., of Conn., \$25; N. J., of N. Y., \$25; M. K. P., of N. Y., \$38; F. M. G., of Ga., \$35; C. H. B., of Mass., \$25; G. W. R., of N. Y., \$55; H. H. H., of Pa., \$35; G. B. M., of Mich., \$30; W. V. G., of Conn., \$30; J. D. T., of Mass., \$30; E. G. B., of Mich., \$25; P. L., of N. Y., \$30; J. L. B., of Ohio, \$15; P. N. B., of N. Y., \$50; W. E. F., of Mass., \$30; P. & R., of Mo., \$56; W. Van D., of N. Y., \$25; H. & H., of Ind., \$10; J. J., of Vt., \$35; F. E. M., of N. Y., \$30; O. & H., of Ill., \$25; C. A. D., of Cal., \$25; W. L., of Pa., \$30.

Specifications, drawings and models belonging to parties with the following initials have been forwarded to the Patent Office during the week ending Saturday, July 14, 1860:—

- D. S. H., of N. Y.; S. B., of Ohio; C. H. B., of Mass.; L. A. F. DeC., of France; D. R., of N. Y.; P. F., of Miss.; E. S. B., of N. Y.; A. S. B., of Iowa (2 cases); M. K. P., of N. Y.; M. & R., of Va.; C. H., of Ga.; C. H. L., of R. I.; F. W., of N. Y.; J. A., of Ill.; A. S., of N. Y.; J. M. S., of N. Y.; W. H., of Ill.; G. W. Van D., of N. Y.; T. W. McD., of Ill.; McC. & B., of Mo.; B. S. P., of N. Y.; T. M., of Conn.; O. & W., of Ill.; M. F. J., of Tenn.; H. N. B., of N. Y.; J. K., of N. Y.; O. F. B., of N. Y.; H. Y. W., of N. Y.; H. H. H., of Pa.; J. H. B., of Iowa; J. O., of Conn.; R. M. G., of N. Y.; N. J., of N. Y.; E. G. B., of Mich.; S. B., Jr., of N. J.; R. H., of Conn.; H. H. E., of Ill.; J. H. W., of N. Y.

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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.

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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-HOUR OF 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.

Immediately after the appointment of Mr. Holt to the office of Postmaster-General of the United States, he addressed to us the subjoined 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, W. D. BISHOP.

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

STEVENSON'S JONVAL TURBINE WATER Wheel, which gave a useful effect of 9077 per cent of the power employed at the late trial of Water Wheels at the Fairmount Works, Philadelphia, March 9, 1860, are manufactured by J. E. Stevenson, Novelty Iron-works, New York. J. E. STEVENSON.

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