

RE-ISSUES.

1,560.—Grain Drain.—Benjamin F. Field, Sheboygan Falls, Wis. Patented June 3, 1862:

I claim, first, The seed box or hopper, A, when so attached to the frame, B, by hinges or any equivalent device, that it may be turned completely upside down, in the manner and for the purpose set forth. Second, The combination of the grain measuring slide, G, screw, I, thumb-nut, g, index, L, and dial, N, with the bottom, a, and shut-off slide, I, when arranged in the manner and for the purpose set forth. Third, The combination of the compartments, E, F, false bottom, e, slides, G, I, tubes, J, J, and chute, O, when arranged as described. Fourth, The registers consisting of elliptically-formed plates, p, secured in an oblique position on a horizontal shaft, q, arranged to operate in the manner and for the purpose set forth.

1,561.—Sugar Mold Carriage.—Theodore A. Havemeyer (assignee of T. A. Havemeyer & H. Schnitzpan), New York City. Patented March 18, 1862. Re-issued Sept. 22, 1863:

I claim, first, The employment or use in a sugar-mold carriage of a series of arms, A, arranged or applied in pairs in such a manner as to be capable of being adjusted toward and from each other to grasp and retain molds of different sizes, substantially as set forth. Second, In combination with the adjustable plates, G, H, the frame, A, provided with recesses, k, to receive the tips, l, of the molds as specified. Third, Providing the frame, A, with a recess, e, at its front part or end substantially as shown, to receive the castor-wheel, C, when said frame recess and castor wheel are used in combination with or applied to a sugar mold carriage, for the purpose herein specified. Fourth, The hollow post, E, arranged to receive the arbor, c, of the castor wheel, C, and attached to the frame, A, to support the front end of the plates, G, H, substantially as set forth. Fifth, The combination, construction, and arrangement of the parts herein shown and described to operate as and for the purpose specified.

1,562.—Sewing Machine.—Charles Parham, Philadelphia, Pa. Patented Nov. 21, 1854:

I claim, first, So forming and constructing the shuttle driver of a sewing machine, that whilst it performs the required duty of driving the shuttle, it serves to maintain the latter in the desired proximity to the plate, C, as set forth. Second, The combination of the driver, A, shuttle, B, and station-plate, C, the whole being formed and arranged substantially as described so as to retain the shuttle during its flight, in its proper position for the purpose specified.

1,563.—Button.—Willard Robinson (assignee of John Hatch), Attleboro, Mass. Patented Feb. 20, 1845, and extended:

I claim the improved manufacture of a pantalon button, as made of two metallic plates and having two or more cycles each of which is formed with a counterlink in each of the plates, and with the counterlink of one plate arranged in reverse of that of the other, substantially as described.

1,564.—Sunt Mill and Grain Separator.—Daniel Ehaw, Chicago, Ill. Patented April 6, 1852:

I claim the combination and joint operation of a sunt mill and an exhaust fan, grain separator, substantially as herein specified and set forth.

DESIGNS.

1,837.—Bottle.—E. D. Loveridge, Buffalo, N. Y.:

1,838.—Stove Plate.—Robert Ham [assignor to Frederick H. Sheldon & Chauncey O. Green], Troy, N. Y.:

EXTENSION.

6,830.—Flour Packer.—Nathan Kinman, Buffalo, N. Y. Patented Oct. 30, 1849:

I claim, first, The packing apparatus consisting of a combination of the tube, b, and inclined blades for condensing the flour and returning it while moving the barrel, substantially in the manner and for the purposes set forth.

Sec. 2d, I claim the hollow shaft for expelling the air from the barrel in packing as above described, I also claim the self-acting clutch in combination with the packing apparatus in the manner above made known.

IMPORTANT TO INVENTORS.

PATENTS FOR SEVENTEEN YEARS.

Messrs. MUNN & CO., PROPRIETORS OF THE SCIENTIFIC AMERICAN, continue to solicit patents in the United States and all foreign countries, on the most reasonable terms. They also attend to various other departments of business pertaining to patents, such as Extensions, Appeals before the United States Court, Interferences, Opinions relative to Infringements, &c. The long experience Messrs. MUNN & Co. have had in preparing Specifications and Drawings 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.



Persons having conceived an idea which they think may be patentable, are advised to make a sketch or model of their invention, and submit it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent free of charge. Address MUNN & CO., No. 37 Park Row, New York.

THE EXAMINATION OF INVENTIONS.

Persons having conceived an idea which they think may be patentable, are advised to make a sketch or model of their invention, and submit it to us, with a full description, for advice. The points of novelty are carefully examined, and a written reply, corresponding with the facts, is promptly sent free of charge. Address MUNN & CO., No. 37 Park Row, New York.

PRELIMINARY EXAMINATIONS AT THE PATENT OFFICE.

The service we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similar invention from the records in our Home Office. But for a fee of \$5, accompanied with a model of drawing and description, we have a special search made at the United States Patent Office, and a report setting forth the prospects of obtaining a patent, &c., made up and mailed to the inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Seventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made through this office. Address MUNN & CO., No. 37 Park Row, New York.

HOW TO MAKE AN APPLICATION FOR A PATENT.

Every applicant for a patent must furnish a model of his invention if susceptible of one; or, if the invention is a chemical production he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the inventor's name marked on them and sent, with the Government fees,

by express. The express charge should be pre-paid. Small models from a distance can often be sent cheaper by mail. The safest way to remit money is by a draft on New York, payable to the order of MUNN & CO. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but, if not convenient to do so, there is but little risk in sending bank-bills by mail, having the letter registered by the postmaster. Address MUNN & CO., No. 37 Park Row, New York.

The revised Patent Laws, enacted by Congress on the 2d of March, 1861, are now in full force, and prove to be of great benefit to all parties who are concerned in new inventions.

The duration of patents granted under the new set is prolonged to SEVENTEEN years, and the Government fee required on filing an application for a patent is reduced from \$30 to \$15. Other changes in the fees are also made as follows:—

Table listing fees for patent applications: On filing each caveat, \$10; On filing each application for a Patent, except for a design, \$15; On issuing each original Patent, \$20; On appeal to Commissioner of Patents, \$30; On application for Re-issue, \$30; On application for Extension of Patent, \$50; On granting the Extension, \$50; On filing a Disclaimer, \$10; On filing application for Design, three and a half years, \$10; On filing application for Design, seven years, \$15; On filing application for design, fourteen years, \$30.

The law abolishes discrimination in fees required of foreigners, excepting natives of such countries as discriminate against citizens of the United States—thus allowing Austrian, French, Belgian, English, Russian, Spanish and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (but in cases of decisions on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.)

During the last seventeen years, the business of procuring Patents for new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the inventors throughout the country we would state that we have acted as agents for at least TWENTY THOUSAND inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of inventors and patentees at home and abroad. Thousands of inventors for whom we have taken out patents have addressed to us most flattering testimonials for the services we have rendered them, and the wealth which has inured to the inventors whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in our extensive offices, and we are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

REJECTED APPLICATIONS.

We are prepared to undertake the investigation and prosecution of rejected cases on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of reference models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prosecuted, are invited to correspond with us on the subject, giving a brief history of the case, including the official letters &c.

CAVETS.

Persons desiring to file a caveat can have the papers prepared in the shortest time by sending a sketch and description of the invention. The Government fee for a caveat, under the new law, is \$10. A pamphlet of advice regarding applications for patents and caveats, printed in English and German, is furnished gratis on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

FOREIGN PATENTS.

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: No. 66 Chancery Lane, London; 39 Boulevard St. Martin, Paris; and 24 Rue des Eperonniers, Brussels. We think we can safely say that TRADE-POWERS of all the European Patent-offices to American citizens are procured through the Scientific American Patent Agency, No. 37 Park Row, New York.

Inventors 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.

Circulars of information concerning the proper course to be pursued in obtaining patents in foreign countries through our Agency, the requirements of different Government Patent Offices, &c., may be had gratis upon application at our principal office, No. 37 Park Row, New York, or any of our branch offices.

ASSIGNMENTS OF PATENTS.

Assignments of patents, and agreements between patentees and manufacturers are carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park Row, New York.

It would require many columns to detail all the ways in which inventors or patentees may be served at our offices. We cordially invite all who have anything to do with patent property or inventions to call at our extensive offices, No. 37 Park Row, New York, where any questions regarding the rights of patentees will be cheerfully answered.

Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 37 Park Row, New York.



R. W., of N. Y.—Bricks with a hole through a portion of them for the purpose of securing lightning rods are old. Such brick are used in England for this purpose.

H. J. S., of Maine.—The black letters which you notice upon tool handles are burned in with a branding iron. We supposed every body knew how it was done.

C. C., of Mass.—We would advise you not to delay your application for a patent on the horse-shoe machine. Inventors not unfrequently become involved in interference cases, and incur considerable expense by neglecting to apply promptly for their patents.

J. H. W., of Ohio.—It will not be safe for you to try and restore the blue color on the barrel and iron parts of your revolver; nor the plating upon its lock. A blue color is given to steel by heating it to a certain degree (about 500° Fah.) after being polished. A piece of horn rubbed over polished heated iron gives it a dark shining surface. Keep your pistol clean, and use a mixture of sweet oil and beeswax for rubbing it up, and never allow it to become rusty again.

W. W., of N. Y.—We really cannot comply with your moderate request of allowing you "only three pages" to demolish the old theories respecting the mechanism of the heavens.

J. D. McG., of Pa.—Silvered glass is coated inside, not outside, as you suppose. You will find a mode of silvering glass described on page 244, present volume of the SCIENTIFIC AMERICAN.

E. A. R., of N. Y.—We cannot recommend for the library which you mention any "complete work on natural philosophy," because most of those which are published under the definition of "natural philosophy" are merely elementary school books, of which there are several very good of their kind, which you can obtain at any of our large book stores. Natural philosophy embraces all the physical sciences, and a good elementary work on the single science of chemistry alone embraces several large volumes.

J. H. V., of Cal.—Tapered bolts for the monitor turrets have been proposed scores of times by different persons.

A. C. C., of Wis.—You can obtain sufficient draft under your boiler by employing a blower, which may be preferable to the use of a tall chimney in your situation. For some marine boilers 9 square inches of space is allowed in the chimney per horse-power; and about double this for the fine area. There is no rule followed universally respecting the height of boiler chimneys. Rules are given for their height and width in all hand-books for mechanics, which you can consult—4 feet in height being allowed for a horse-power to a land engine, and about the same collective area inside as that of the boiler flues.

W. J. V., of N. Y.—We do not know where pearl white door knobs are manufactured. You should apply to some hardware dealer.

C. T., of Pa.—Numbers of vessels are planked wholly with white oak. The Italian frigate recently built by Mr. W. H. Webb, in this city, is planked with a fine quality of the kind of timber you mention.

G. K. S., of Mich.—The Patent Office Reports for 1861-2 are not yet issued. They were delayed for want of an appropriation by Congress to print them. We expect they will now be issued very soon. We cannot furnish official reports of any kind. We can only get what we want ourselves.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, Nov. 4, to Wednesday, Nov. 11, 1863:—

- List of names and amounts received: H. L., of N. Y., \$30; O. S., of N. Y., \$30; B. & M., of N. Y., \$13; G. S., of N. J., \$12; T. N. & J. N. C., of N. Y., \$30; J. O. L., of Mo., \$20; A. W., of Iowa, \$20; M. E. M., of N. Y., \$16; L. O. O., of Pa., \$16; G. W., of Iowa, \$20; L. S., of Germany, \$16; D. G. G., of N. Y., \$20; R. H., of Mass., \$16; J. M. F., of Ohio, \$25; W. L. E., V., of N. Y., \$25; H. H., of R. I., \$32; J. D. H., of Pa., \$16; R. T., of N. Y., \$16; B. & B., of Ind., \$12; G. C. K., of N. Y., \$25; G. P. G., of N. Y., \$50; C. E. L., of N. Y., \$41; H. T. L., of N. J., \$38; W. W. T., of Wis., \$20; T. T., of Pa., \$30; E. H. B., of Pa., \$16; A. C. T., of Ill., \$20; O. D., of Mo., \$20; W. & C., of N. Y., \$20; J. F., of N. S., \$20; W. R., of England, \$20; W. & B., of Mass., \$20; P. H., of Pa., \$16; C. B. G., of N. Y., \$41; J. S. W., of Pa., \$16; E. H., of Cal., \$20; B. N. T., of Wis., \$15; J. W., of Iowa, \$25; H. & D., of N. Y., \$25; H. S., of N. Y., \$25; N. B. H., of N. Y., \$22; J. D. E., of N. Y., \$25; E. H., of N. Y., \$20; G. E. H., of N. Y., \$20; L. B., of N. Y., \$20; J. I. G., of Ohio, \$16; J. A. & J. V. M., of Ind., \$30; J. M., of Cal., \$20; N. B. H., of N. Y., \$22; D. E. C., of N. Y., \$16; E. S., of N. Y., \$10; G. S., of Pa., \$16; C. W. B., of Conn., \$10; A. G., of Pa., \$19; J. L. K., of N. J., \$16; O. D., of Mich., \$16; T. F. B., of N. Y., \$25; J. B., of La., \$12; M. W. B., of Ind., \$44; J. M., of Conn., \$30; C. J., of Conn., \$25; T. H., of N. H., \$16; R. & Y., of N. Y., \$40; C. O. A., of N. Y., \$217; B. & G., of Conn., \$16; B. W., of N. Y., \$16; J. A., of N. Y., \$16; J. K. B., of Ohio, \$25; P. F., of N. Y., \$150; J. B. G., of Mich., \$16; O. F., of Iowa, \$65; A. S. H., of Mich., \$16; J. J. G., of Pa., \$30.

Persons having remitted money to this office will please to examine the above list to see that their initials appear in it, and if they have not received an acknowledgement by mail, and their initials are not to be found in this list, they will please notify us immediately, and inform us the amount, and how it was sent, whether by mail or express.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office, from Wednesday, Nov. 4, to Wednesday, Nov. 11, 1863:—

- List of initials: G. C. K., of N. Y.; H. & D., of N. Y.; H. L., of N. Y.; C. E. L., of N. Y.; G. P. G., of N. Y. (2 cases); H. S., of N. Y.; O. S., of N. Y.; N. B. H., of N. Y.; B. & M., of N. Y.; H. T. L., of N. J.; J. D. E., of N. Y.; G. S., of N. J.; C. E. L., of N. Y.; N. B. H., of N. Y.; L. D. B., of Ind.; J. D. H., of Pa.; J. M., of Conn.; A. & F., of England; T. F. B., of N. Y.; J. W., of Iowa; W. H. T., of Cal.; J. B., of La.; J. K. B., of Ohio; J. M. F., of Ohio; B. & B., of Wis.; J. A. H., of Mass.; W. L. R. V., of N. Y.; W. M. B., of Ind.; O. J., of Conn.

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