

41,815.—Preparation of a Phosphate of Lime for Culinary and other Purposes.—E. N. Horsford, Cambridge, Mass., assignor to John H. Cheever, New York City.

I claim this double phosphate of lime of the composition and preparation substantially as above described for the uses above set forth.

41,816.—Current Water Wheel.—Jerome B. Howe (assignor to himself and Josiah C. Richards), Middleville, Mich.:

I claim in the construction of a submerged vertical shaft current water-wheel, the combination of the hinged buckets, d d, and braces, e e, arranged and operating substantially as and for the purposes herein specified.

41,817.—Lock.—Casper Jagy & Frederick Denzler (assignors to Walter K. Marvin), New York City:

We claim the tumbler, I, provided with the pendents, J, in combination with the plate, D, bolt, B, and knob arbor, G, all arranged to operate in the manner substantially as and for the purpose herein set forth.

41,818.—Cutting Tool for Turning.—Asa S. Libby, Manchester, N. H., assignor to Gordon McKay, Boston, Mass.:

I claim the described cutting tool when constructed and made so as to operate substantially as set forth.

41,819.—Apparatus for distilling and rectifying Whiskey and other Spirits.—Elijah Freeman Prentiss, Philadelphia, Pa., and Robert Adam Robertson, Liverpool, England:

We claim, first, The arrangement and combination of the chambers, 1 and 2, whereby the liquid to be distilled is made to act as a cooling medium in chamber 1, and as a regulating medium in chamber 2, substantially in the manner described.

Second, The employment of chamber No. 2, in combination with the regulator or its equivalent for maintaining any constant or desired temperature, substantially as described.

Third, The construction of the shelves in chamber, 4, substantially as described.

Fourth, The employment of one or more perforated cases, U, or its equivalent, in connection with either or both of the chambers, 2 or 3, for deodorizing, purifying, or flavoring the distilled spirit while in the vaporous condition, and before condensation, substantially as described.

Fifth, We claim the employment of chamber, 3, for raising the wash before it is introduced into chamber, 4, to a greater heat than said wash gets in chamber, 2, substantially in the manner described.

41,820.—Card Games.—C. W. Saladee (assignor to Samuel Hart & Isaac Levy), Paducah, Ky.:

I claim a "card register" (for registering the "points" and "games" in games at cards), when constructed and operating substantially as set forth.

41,821.—Water Wheel.—D. S. Stephens (assignor to himself and Charles Seymour), La Porte, Ind.:

I claim, first, The bucket, B, placed longitudinally on the shaft, A, with inclined planes, a, between them, in combination with the curved or spiral buckets, C C placed at each end of the buckets, B, and the latter encompassed by chutes, E, all being placed within a box or penstock, D, and arranged as and for the purpose specified.

Second, The inclined planes, a, placed on the shaft, A, between the buckets, B, when used in connection with the buckets, C C, box or penstock, D, and chutes, E, substantially as and for the purpose set forth.

[This invention relates to an improved water-wheel of that class in which the direct and reactive force of the water is obtained, and it consists in the employment or use of a series of buckets which are placed longitudinally on the shaft with inclined planes between them in combination with a series of curved or spiral buckets at each end of the longitudinal buckets, the latter being encompassed by chutes for directing the water properly upon them, and all placed within a box or penstock, whereby it is believed that an economical wheel is obtained and one that will give out a large percentage of the effective power of the water.]

41,822.—Machine for making Augers.—Mary Tower, (administratrix of the estate of Isaiah Tower, deceased), Rochester, N. Y.:

I claim a series of plates constructed and operating in the manner and for the purpose substantially as herein described and represented.

41,823.—Cement for sealing Preserve Cans.—Joseph B. Wilson (assignor to himself and John B. Moore), Fisherville, N. J.:

I claim a sealing cement composed of the ingredients and in the manner described.

DESIGNS.

1,904.—Jacket for Lamp Burners.—Charles Deavs (assignor to Archer & Pancoast), New York City:

1,905.—Spool-holder for Sewing Machines.—John G. Folsom, Winchendon, Mass.:

1,906.—Macaroni Spoon.—Webb Harding, Cambridge, Mass.:

1,907.—Floor-cloth Pattern.—John Neil (assignor to Wm. M. Brasher & S. H. Herriman), Clinton, Mass.:

1,908.—Floor-cloth Pattern.—Joseph Robley (assignor to Brasher, Herriman & Co.), Brooklyn, N. Y.:

EXTENSION.

Meat-cutting Apparatus.—John G. Perry, South Kingston, R. I. Patented Feb. 26, 1850. Re-issued Feb. 25, 1862:

I claim, first, The use and employment of the studs, s s s, Fig. 3, with one or both of the discharge openings, L L, substantially as described and for the purpose herein set forth.

Second, I claim combining the knives and space blocks with the case of a meat-cutter, in the manner substantially as herein described and for the purposes set forth.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and enclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of \$2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper when the time for which it was pre-paid has expired.

MODELS are required to accompany applications for Patents under the new law, the same as formerly, except on design patents, when two good drawings are all that are required to accompany the petition, specification and oath, except the Government fee.

RECEIPTS.—When money is paid at the office for subscriptions, 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* acknowledgement of our reception of their funds.



PATENTS

GRANTED.

FOR SEVENTEEN YEARS!

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In connection with the publication of the SCIENTIFIC AMERICAN, have acted as Solicitors and Attorneys for procuring "Letters Patent" for new inventions in the United States and in all foreign countries during the past seventeen years. Statistics show that nearly ONE-THIRD of all the applications made for patents in the United States are solicited through this office; while nearly THREE-FOURTHS of all the patents taken in foreign countries are procured through the same source. It is almost needless to add that, after seventeen years' experience in preparing specifications and drawings for the United States Patent Office, the proprietors of the SCIENTIFIC AMERICAN are perfectly conversant with the preparation of applications in the best manner, and the transaction of all business before the Patent Office; but they take pleasure in presenting the annexed testimonials from the three last ex-Commissioners of 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.

Judge Mason was succeeded by that eminent patriot and statesman, Hon. Joseph Holt, whose administration of the Patent Office was so distinguished that, upon the death of Gov. Brown, he was appointed to the office of Postmaster-General of the United States. Soon after entering upon his new duties, in March, 1859, he addressed to us the following very gratifying letter:

MESSRS. MUNN & CO.—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as Solicitors of Patents, while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (as 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.

Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows:

MESSRS. MUNN & CO.—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.

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.

As an evidence of the confidence reposed in their Agency by inventors throughout the country, Messrs. MUNN & CO. would state that they have acted as agents for more than 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 they have taken out patents have addressed to them most flattering testimonials for the services rendered them; and the wealth which has inured to the individuals whose patents were secured through this office, and afterwards illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! Messrs. MUNN & CO. would state that they never had a more efficient corps of Draughtsmen and Specification Writers than those employed at present in their extensive offices, and that they are prepared to attend to patent business of all kinds in the quickest time and on the most liberal terms.

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The service which Messrs. MUNN & CO. 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 they may acquire of a similar invention from the records in their Home Office. But for a fee of \$5, accompanied with a model, or drawing and description, they 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 the Branch Office of Messrs. MUNN & CO., corner of F. and Seventh streets, Washington, by experienced and competent persons. Many thousands of such examinations have been made through this office, and it is a very wise course for every inventor to pursue. 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 Messrs. 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.

Patents are now granted for SEVENTEEN years, and the Government fee required on filing an application for a patent is \$15. Other changes in the fees are also made as follows:—

On filing each Caveat.....	\$10
On filing each application for a Patent, except for a design.....	\$15
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The 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 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 (except in cases of designs) on the above terms. Foreigners cannot secure their inventions by filing a caveat; to citizens only is this privilege accorded.

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EXTENSION OF PATENTS.

Many valuable patents are annually expiring which might really be extended, and if extended, might prove the source of wealth to their fortunate possessors. Messrs. MUNN & CO. are persuaded that very many patents are suffered to expire without any effort at extension, owing to want of proper information on the part of the patentees, their relatives or assigns, as to the law and the mode of procedure in order to obtain a renewed grant. Some of the most valuable grants now existing are *extended patents*. Patentees, or, if deceased, their heirs, may apply for the extension of patents, but should give ninety days' notice of their intention.

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Messrs. MUNN & CO. are prepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of their Washington Agency to the Patent Office affords them rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Their success in the prosecution of rejected cases has been very great. The principal portion of their 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 MUNN & CO., on the subject, giving a brief history of the case, inclosing the official letters, &c.

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Messrs. MUNN & CO., 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 Eperonniers, Brussels. They think they can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are procured through their agency.

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.

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Inventors who come to New York should not fail to pay a visit to the extensive offices of MUNN & CO. They will find a large collection of models (several hundred) of various inventions, which will afford them much interest. The whole establishment is one of great interest to inventors, and is undoubtedly the most spacious and best arranged in the world.

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Persons who are about purchasing patent property, or patentees who are about erecting extensive works for manufacturing under their patents, should have their claims examined carefully by competent attorneys, to see if they are not likely to infringe some existing patent, before making large investments. Written opinions on the validity of patents, after careful examination into the facts, can be had for a reasonable remuneration. The price for such services is always settled upon in advance, after knowing the nature of the invention and being informed of the points on which an opinion is solicited. For further particulars address MUNN & CO., No. 37 Park Row New York.

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It would require many columns to detail all the ways in which the Inventor or Patentee 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 y questions regarding the Rights of Patentees, will be cheerfully answered.

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would adopt the style of binding used on the old series, 4 e., heavy board sides covered with marble paper, and morocco backs and corners.

Believing that the latter style of binding will better please a large portion of our readers, we commenced on the expiration of Volume VII., to bind the sheets sent to us for the purpose in heavy board sides, covered with marble paper and leather backs and corners.

The price of binding in the above style is 75 cents. We shall be unable hereafter to furnish covers to the trade, but will be happy to receive orders for binding at the publication office, No. 37 Park Row, New York.

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B. T. L., of R. I.—Indian ink is a mixture of lamp-black and glue, with the addition of camphor and other substances in small quantities. It is said that the attempts to imitate it in this country and Europe have not been entirely successful.

C. F., of Ill.—The profession of civil engineer has furnished to skillful men constant and we believe remunerative employment. We judge from this that the future will be equally encouraging.

E. H., of N. Y.—We cannot inform you where chilled iron has been used on journals under water. It would last longer than common cast-iron if the scale was not broken from the peculiar vitreous or glassy texture of the outside.

J. A. S., of Ill.—We do not know what became of "Paine's Spray Engine," but we imagine it died a natural death. The difficulty of preventing the heaters from burning out rapidly has not yet been overcome practically.

Money Received.

At the Scientific American Office, on account of Patent Office business, from Wednesday, March 2, 1864, to Wednesday, March 9, 1864:—

- H. W. K., of N. Y., \$25; Mrs. S. A. M., of N. Y., \$50; A. S. E., of N. Y., \$12; A. S., of N. Y., \$20; D. P., of N. Y., \$25; E. W. B., of N. Y., \$20; W. U., of Ohio, \$50; F. B. & D. F., of N. Y., \$10; A. C., of N. Y., \$16; J. T. E., of N. Y., \$16; W. B. I., of N. Y., \$16; L. R., of N. Y., \$150; J. H. S., of Ill., \$45; D. M., of N. Y., \$31; J. B. W., of N. J., \$16; P. B., of N. J., \$20; A. L., of W. Va., \$20; T. S. W., of Ohio, \$25; G. B. McD., of Ky., \$20; J. McK., of N. Y., \$41; W. F., of Mass., \$62; W. & V., of N. J., \$16; E. S. H., of N. J., \$25; S. S., of N. Y., \$16; F. J. N., of Mo., \$25; J. R. B., of Pa., \$16; W. W., of N. Y., \$28; W. A., of Wis., \$16; D. D. G., of Wis., \$25; O. J. E., of Cal., \$25; J. S., of N. Y., \$25; A. A., of N. Y., \$25; F. A. De M., of N. Y., \$25; P. B., of N. Y., \$41; D. M., of N. Y., \$25; W. H., of N. Y., \$25; J. B., of N. J., \$16; S. & G., of Pa., \$45; L. & L., of Mass., \$20; F. K., of N. Y., \$16; C. A. S., of N. Y., \$16; E. C., of Mich., \$20; M. T., of Iowa, \$20; C. T., of N. J., \$20; A. T. T., of N. Y., \$16; E. S. H., of N. Y., \$20; H. S. R., of N. Y., \$16; O. D. D., of Mich., \$45; T. R.,

- of N. Y., \$164; S. & B., of N. Y., \$101; A. T., of Pa., \$32; J. A. H., of Mo., \$16; S. W., of Mass., \$44; A. H. W., of N. Y., \$16; E. S. A., of Ill., \$16; A. R. S., of Pa., \$16; W. S. N., of Mo., \$16; C. B. G., of Iowa, \$25; G. W. & H. H. F., of N. Y., \$25; J. F. C., of N. Y., \$22; B. M. F., of N. Y., \$25; C. A., of N. Y., \$25; J. G., of N. Y., \$25; W. H., of Pa., \$20; E. F., of N. Y., \$41; J. B. R., of N. Y., \$16; P. B., of N. Y., \$41; H. T. S., of Pa., \$20; J. McF., of N. Y., \$16; W. R., of Wis., \$45; N. & H., of N. J., \$20; F. C. P., of N. Y., \$20; F. H., of N. Y., \$45; L. B. S., of Conn., \$20; H. O. G., of Ill., \$70; C. B. H., of Mass., \$20; W. R. of N. Y., \$31; B. M., of Ohio, \$16; J. W. R., of N. J., \$16; J. A. T., of Mass., \$11; W. C. G., of N. Y., \$19; W. O., of Mass., \$16; U. B. V., of Pa., \$16; B. & W., of Pa., \$28; O. W., of N. Y., \$25; H. & R., of Pa., \$16; E. B., of Ind., \$16; H. & S., of Ill., \$35; C. G. H., of Kansas, \$16; W. A. B., of Vt., \$25; H. N. T., of Vt., \$25; L. H., Jr., of N. J., \$16; A. P., of Pa., \$25; W. S. W. Jr., of Ill., \$25; C. B. H., of N. Y., \$10; H. & L., of Conn., \$25; A. G. T., of Ill., \$20; R. M., of N. Y., \$16; G. H., of Maine, \$25; S. E. T., of Pa., \$25; F. J. T., of Conn., \$25; J. W. H., of N. Y., \$25; J. N. H., of Ind., \$25; O. S. Jr., of Iowa, \$25; C. W., of Iowa, \$16; J. W., of Mass., \$16; A. G. W., of Cal., \$10; J. M. C., of Oregon, \$25; H. L., of Minn., \$16; A. I., of Ind., \$16; V. H. H., of N. Y., \$16; D. M., of Mass., \$10; S. C. K., of Mass., \$16; O. A. K., of R. I., \$20; N. S. W., of Conn., \$16; D. B. L., of N. Y., \$16; B. F. T., of Mich., \$16.

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 acknowledgment by mail, and their initials are not to be found in this list, they will please notify us immediately, stating 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, March 2, 1864, to Wednesday, March 9, 1864:—

- P. B., of N. Y.; W. B., of N. Y.; H. W. K., of N. Y.; J. S., of N. Y.; G. W. & H. H. F., of N. Y.; Mrs. S. A. M., of N. Y. (2 cases); A. A., of N. Y.; J. F. C., of N. Y.; A. S. H., of N. Y.; F. A. DeM., of N. Y.; B. M. F., of N. Y.; A. & S., of N. Y.; C. A., of N. Y.; D. P., of N. Y.; D. M., of N. Y.; J. G., of N. Y.; A. S. G., of Ill.; W. A. B., of Vt.; G. E. H., of Maine; C. W. W., of Vt.; S. E., of Pa.; J. P., of Mass.; H. & L., of Conn.; O. W., of N. Y.; D. D. G., of Wis.; C. B. G., of Iowa; F. J. N., of Maine; E. S. H., of N. J.; S. W., of N. J.; H. A., of N. Y.; O. S. Jr., of Iowa; W. W., of N. Y.; W. H. B., of Ill.; B. & W., of Pa.; O. J. B., of Cal.; J. W. H., of N. Y.; C. P. L., of Conn.; J. N. H., of Ind.; F. J. T., of Conn.; A. P., of Pa.; J. M. C., of Oregon; T. R., of N. Y. (4 cases); J. McK., of N. Y.; D. M., of N. Y.

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