

tion of cane sugar or cane sirup with corn sirup, substantially as set forth.

45,562.—Method of Removing Harbor Obstructions.—John D. Hall (assignor to himself and Osborn Conrad), of Philadelphia, Pa.:

I claim the employment of a cannon, in connection with the jaw, B, and the adjustable inclined plane or spars, A, and fork, n, atached to a monitor or other vessel, for the purpose of removing obstructions from harbors, channels, etc., substantially as described.

45,563.—Brick-pressing Machine.—James Hotchkiss (assignor to himself and Ezra Buss), of Springfield, Ohio:

I claim imparting the pressure to the bricks by means of two stationary pressure wheels, P Q, between which the mold wheel passes continuously, substantially in the manner herein specified.

I also claim such arrangement of the pressure wheel, P Q, that the upper wheel shall simply hold the lids closely and firmly down upon the mold wheel, while the active pressure is produced by the lower wheel, lifting the followers, substantially as herein set forth.

I also claim regulating the pressure and the thickness of the bricks by adjusting the bearing blocks, r r, of the lower pressure wheel, Q, as herein described.

I also claim hinging the lids, F G H I, to the mold wheel, so that they shall swing and shut directly down over the molds, and be raised directly up therefrom, substantially as and for the purpose herein specified.

I also claim the arrangement of the cam guides, M N, in combination with lids, F G H I, substantially as and for the purpose herein specified.

I also claim the construction and arrangement of the cam tracks, m n p, in combination with the followers, substantially as herein set forth.

I also claim the combination of the vertically-closing and opening lids, F G H I, with the forms for imprinting on the lower surfaces thereof, for the purpose herein specified.

45,564.—Raising and Lowering Window Sashes.—John M. Merryman, of Indianapolis, Ind., assignor to himself and Wm. Gorsuch, of Richmond, Ind., and Kilby Ferguson, of Indianapolis, Ind.:

I claim the use and application of one continuous cord, c, in the manner and for the purposes as herein described.

45,565.—Machine for Cutting Objects with Straight Sides and Semi-Circular Ends.—Charles W. Packer (assignor to himself and George Bates), of Philadelphia, Pa.:

I claim, first, A slotted plate with straight parallelled edges and semi-circular ends, guided by the pin, h, and strip, p, in combination with the rotary cutters, or their equivalents.

Second, So constructing the said plate of two pieces, I and I', that it can be elongated or shortened at pleasure.

45,566.—Detached Shirt Collar and Bosom.—Celius E. Richards, of North Attleboro', Mass., assignor to Wm. H. Conant, of Boston, Mass., and Geo. A. Shephardson, of Attleboro', Mass.:

I claim, first, Stamping the collar and bosom in one piece, substantially as set forth.

Second, In combination with such collar and bosom and the cravat bow, made as described, I claim the cord, D, and fastening, C, or its equivalent, the same being substantially as and to operate in manner and for the purpose as explained.

45,567.—Sabot for Projectiles for Rifled Ordnance.—C. W. Stafford (assignor to American Projectile Company), of New York City:

I claim the cup-shaped packing disk, D, provided with an annular flange, F, fitting upon a wedge-shaped rebate, G, as herein described and for the purpose set forth.

45,568.—Apparatus for Vaporizing and Aerating Volatile Hydro-carbons.—Levi Stevens, of Pitchburg, Mass., assignor to himself and John D. Sargent, of Boston, Mass.:

I claim the combination of a flowage regulator, for the purpose hereinbefore explained, with an apparatus for vaporizing and aerating a volatile hydro-carbon, the said regulator being made to receive the hydro-carbon from a reservoir, and to operate substantially as hereinbefore described.

I also claim the flowage regulator, made substantially as hereinbefore explained, and with its inlet air to be either stationary or capable of being adjusted in manner and for the purpose as set forth.

I also claim the improved hydro-carbon vaporizer, constructed substantially as described, with the chamber, r, the foraminous plates, l and m, and the pipes, n, o, arranged and combined together, and with the surrounding case or vessel, z, in which they are placed, substantially as described.

45,569.—Method of Preparing and Preserving Food.—John McCall, of London, Eng., and Bevan G. Sloper, of Walthamstow, Eng., assignors to Charles J. William J., and Charles H. Underwood, of Boston, Mass. Patented in England April 9, 1864:

We claim the within-described constructed food tablets, prepared substantially in the manner set forth.

RE-ISSUE.

1,834.—Railroad Car Axle Boxes.—R. N. Allen, of Cleveland, Ohio.—Patented March 23, 1858:

I claim, first, Constructing the cavity on the inside of the case, E, in such manner as to allow an easy adjustment of collars or washers on the axle, through the front opening of the case, substantially as set forth.

Second, I claim the employment or use of the collar or washer, F, in combination with the case, when said collar or washer is adjusted to and in its place on the axle through the front opening of said case, substantially as and for the purpose set forth.

Third, I claim the movable brace, G, and the end of the key, C, in combination for holding the washers in their place against the back end of the case, substantially as set forth.

Fourth, I claim the described curved surface on the upper side of the bearing box, B, on either side of the key, C, or on the inner surface of the case, in combination with the bearing box or key, for the purpose set forth.

1,835.—Apparatus for Forming Collars.—Solomon S. Gray, of Boston, Mass. (Div. A.) Patented July 5, 1864:

I claim, first, The combination of the former, D, with the elastic band or its equivalent when operating substantially as herein described.

I also claim holding the strip or collar by its two ends, while the former is being forced into or through it, to mold it to the desired form, substantially as described.

I also claim leaving that portion of the strip or collar that is to be molded unclamped or free, while the other portion is firmly held, so that a former moving past it may mold or stretch said free portion, as described.

1,836.—Apparatus for Forming Collars.—Solomon S. Gray, of Boston, Mass. (Div. B.) Patented July 5, 1864:

I claim, as an article of manufacture, a paper, or a paper and cloth collar, having its upper or turned over portion, molded or stretched, substantially as and for the purpose herein set forth.

1,837.—Apparatus for Boring Artesian Wells.—Henry Hannen and John Parker (assignees by mesne assignment of Jesse N. Bolles), of Philadelphia, Pa. Patented April 14, 1857:

I claim, first, The combination of a drill or cutter, A, with tubular rods, through which the detritus is caused to pass upward, and to be discharged at the point described, substantially as specified.

Second, One or more valves, f, arranged within the tubular drill rods of a well-boring machine, substantially as and for the purpose set forth.

Third, The drill or cutter, A, composed of the portions, a, a, and cross piece, b, constructed and arranged substantially as and for the purpose set forth.

1,838.—Harvesting Machines.—A. Kirbey and David M. Osborne (assignees of Wm. A. Kirbey, aforesaid), of Auburn, N. Y. Patented July 2, 1861. Re-issued June 9, 1863:

I claim, first, In combination with an automatic rake, an adjusta-

ble shaft, for the purpose and in the manner substantially as described.

Second, In combination with an adjustable shaft of an automatic rake, the universal joint, k', for the purpose and in the manner substantially as described.

Third, In a harvesting machine, having an adjustable connection between that part which carries the automatic rake, and that part which carries the gearing, the adjustable shaft and universal joint, substantially as and for the purpose described.

1,839.—Revolving Fire-arms.—The Brooklyn Fire-arms Company (assignee by mesne assignment of Frank P. Slucom), of Brooklyn, N. Y. Patented April 14, 1863:

I claim, first, The construction of a revolving fire-arm, with independent longitudinally-movable chambers, in combination with openings in the sides of the cylinder of sufficient size to permit the lateral insertion of metallic cartridges, without removing the chambers entirely from the cylinder.

Second, The stationary piston, applied in combination with the revolving cylinder, and its independently-movable chambers, substantially as and for the purpose herein described.

Third, The projection, f, f, on the longitudinally-movable chambers, D D, in combination with the longitudinal openings, C C, of the cylinder, substantially as and for the purpose herein specified.

Fourth, The notches, z z, in the sides of the longitudinal openings, C C, of the cylinder, in combination with the projections, f, f, in the longitudinally-movable chambers, substantially as and for the purpose herein set forth.

DESIGNS.

2,016.—Match Box.—Edward Burke, of Philadelphia, Pa.

2,017.—Trade Mark.—Israel A. Powell, of Lawrenceville, Ill.



PATENTS

GRANTED

FOR SEVENTEEN YEARS.

MUNN & COMPANY,

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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 employees.

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 (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.
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 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.

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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.....	\$20
On application for Re-issue.....	\$30
On application for Extension of Patent.....	\$50
On granting the Extension.....	\$50
On filing a Disclaimer.....	\$40
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 Patent Laws, enacted by Congress on the 2d of March, 1861, 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 invention by filing a caveat; to citizens only is this privilege accorded.

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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 is \$10. A pamphlet of advice regarding applications for patents and caveats is furnished gratis, on application by mail. Address MUNN & CO., No. 37 Park Row, New York.

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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.

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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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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 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.