

Second, The descending flue, D, in combination with the said plates, c, d, the gas pipe, B, containing the gas burners, and the oven, C, substantially as and for the purpose herein described.

44,373.—Row or Scull Lock.—Joseph W. Norcross, Boston, Mass., assignor to W. W. Wilcox and Joseph Hall, Jr., Middletown, Conn.:

I claim the movable or yielding jaw, b, with the retaining spring, C, applied in combination with the universal joint and with the oar, in the manner and for the purpose substantially as herein shown and described.

[This invention consists in the combination with the oar and row or scull lock of a universal joint arranged in such a manner that the oar is prevented from being thrown out of the row lock by the force of the sea or by any other accident, and yet it can be moved freely in either direction; it consists further in the application of one or two movable or yielding jaws in combination with the universal joint and bar in such a manner that the oar can be instantly shipped or unshipped, as circumstances may dictate.]

44,374.—Thresher and Separator.—Samuel Pelton, Trenton, N. J., assignor to Fell, Pelton, & Brearley:

I claim, first, The combination of two straw shakers, E, E', suspended by hangers, a1 a2, and moved simultaneously in opposite directions by a double crank shaft and pitman rods, substantially as and for the purpose set forth.

Second, I claim the combination of the shaker, E', and grain board, G', having a combined vertical and longitudinal motion, so as to toss the straw one way and grain the other, substantially as explained.

Third, I claim the automatic blast regulator consisting of valves, K2 k3 k4, pivoted rod, k2, and weights, k3 k4, the whole being arranged to operate substantially as and for the purpose explained.

44,375.—Spring Mattress.—R. Stillwell (assignor to himself and Alexander D. Farrell), New York City:

I claim constructing the mattress frame in five sections, of which, when folded, the central one forms the lower section, the adjacent sections, d and f, the sides, and the end sections, c and g, the top, so as to allow the ends to be hooked together and the mattress to assume a rectangular shape, for convenience in packing away or for transportation.

Also the combination of the breaks, c d e f g, with the lips, i, of the hinges, h, constructed and operating in the manner and for the purpose substantially as set forth.

[The object of this invention is to produce a spring mattress, with stuffing, which can be conveniently folded to reduce it to a convenient size for packing, and to make the breaks in the mattress so that the center of the bed retains its full strength, and the stuffing at that part of the mattress is not affected by the folding, and at the same time the head piece can be raised to a convenient inclination.]

44,376.—Atmospheric Railway.—Alexander Allison and James Halliwell, London, Great Britain:

We claim, first, The valve, a, whether employed for railway or other purposes, and when used in combination with the chamber, w, or without said chamber, constructed substantially as described.

Second, The curved bar, e, for removing the valve, a, from the aperture, d, and returning the same after the passage of the piston rod, f, substantially as described.

Third, The elastic packing bands, j, when used on a piston head, for the purpose and substantially in the manner specified.

Fourth, The cone valve, h, whether used in a solid piston head or in combination with the elastic band, j, constructed and arranged for the purpose and substantially in the manner specified.

Fifth, The device for operating the cone valve, h, constructed and arranged substantially in the manner specified.

Sixth, The frame, f, with guide rollers, s, so arranged with reference to the bottom of the carriage, P, as to allow the piston, D, to follow the dip of the tube at the crossings, and to prevent any vertical motion of the carriage affecting the said piston.

Seventh, The frame, f, with guide rollers, r, so arranged with reference to the frame, f', as to prevent the oscillation of the carriage, P, being communicated to the piston, D.

Eighth, The branching of the tube, A, at N, Fig. 5, and the branching of the aperture, d, at y, in connection with the dip of said tube for the purpose of conveniently shunting the train or passing from one line of rails to another.

RE-ISSUES.

1,769.—Harvester.—Robert Brown, Newark, Ohio. Patented June 18, 1861:

I claim rigidly connecting the rake frame which is supported on the main frame of the machine, with the hinged finger beam in such a manner that the rake shaft does not change its relative position to said finger beam when the latter is raised or lowered in passing over uneven ground, substantially in the manner and for the purposes herein set forth.

I also claim securing both the finger-bar and rake frame to a hollow shaft, L, the journals, l, of which run in bearings, M, in the main frame and the shafts constitute bearings for the journals, h, of the crank shaft, as herein shown and described and for the purposes set forth.

I also claim the reel attachments, o m p, constructed, combined and arranged in the manner specified to enable the attachment of any desired number of arms.

1,770.—Grain and Grass Harvester.—J. Russell Parsons, Hoosick Falls, N. Y., assignee of Benjamin T. Rouey, Bristol. Patented March 11, 1856:

I claim, first, The gear or main frame in combination with the movable or cutter frame, by means of lugs and beveled projections, the whole being arranged and constructed substantially in the manner and for the purposes set forth.

Second, In combination with a master guard tooth or shoe of a cutting apparatus, which is free to conform itself both longitudinally and laterally to the undulations of the ground, a roller located in reference to the cutters, and operating substantially as described.

Third, Combining a supplementary frame supporting an endless belt and a cutting apparatus which conforms itself to the surface of the ground, with wheels supporting it and actuating a belt, as described.

DESIGNS.

1,987.—Pump.—George Cowing, Seneca Falls, N. Y.:

1,988.—Aquarium of Fish Tank.—George T. Palmer, Brooklyn, N. Y.:

1,989.—Skate.—Robert S. Stenton, West Farms, N. Y.:

1,990.—Ruffle.—Samuel Trischet, New York City:

Binding the "Scientific American."

It is important that all works of reference should be well bound. The SCIENTIFIC AMERICAN being the only publication in the country which records the doings of the United States Patent Office, it is preserved by a large class of its patrons, lawyers and others, for reference. Some complaints have been made that our past mode of binding in cloth is not serviceable, and a wish has been expressed that we would adopt the style of binding used on the old series, i. 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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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, 1858, 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.

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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.

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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.

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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
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On application for Re-issue.....	\$30
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