

40,966.—Car Coupling.—John Van Dyne, Crum Elbow, N. Y.: I claim the arrangement of the cam, F, jaws, B, and springs, C, with the guides, D, D', head, A, and shackle, E, in the manner herein shown and described.

[The object of this invention is to simplify the car coupling by dispensing with certain parts thereof, and at the same time render the coupling more efficient than it originally was.]

40,967.—Tool for Fastening Boiler Tubes.—Aaron Van Gyuysling, North Greenbush, N. Y.:

I claim, first, The application of the handle, F, to the sleeve, A, to operate in combination with the segmental expanders, D, and conical mandrel, C, in the manner and for the purpose substantially as described.

Second, So arranging the segmental expanders, D, in relation to each other and to the sleeve, A, that the same when not expanded leave no gaps between their adjoining edges, and when expanded they embrace the largest possible part of the inner surface of the tube as set forth.

This invention is intended as an improvement on a tool for attaching tubes to boilers, on which a patent was granted to Thomas Frosser, April 17, 1849. The improvement relates to the slotted sleeve which forms the guide for the segmental expanders, and which is provided with a handle so that after the conical mandrel has been inserted, the tool can be turned, and that by this action the joints between the tools and tube-stub is rendered smooth, free from ridges or wrinkles and perfectly tight.]

40,968.—Confining the ends of Elliptic Springs.—Richard Vose, New York City:

I claim the combination of curved, tension-spring plates, with elastic bearing plates, in the construction of a tension elliptic spring, when said tension plates are self-retained in their proper positions, and left free to expand independently of each other, substantially as is herein set forth and described.

I claim also, the use of hollow end caps to retain and secure the ends of the elastic plates, in an elliptical or semi-elliptical tension plate spring, substantially in the manner and for the purpose herein set forth.

40,969.—Shingle Machine.—Martin Weaver, Millersburg, Pa. Ante-dated Dec. 1, 1863:

I claim, first, The combination of the horizontal circular saw, C, adapted to cut on both sides of the horizontal endless chain, E, and gage-blocks, K, all arranged and operating as herein set forth.

Second, The combination of the tables, N, N', with the rollers, M, M', endless chain, F, gage blocks, K, K', and double-acting saw, C, all constructed and operating as described.

[By means of this invention shingles are sawn at two places on a shingle machine as fast as two operators can place the blocks in position.]

40,970.—Portable Photographic Gallery.—Samuel Weaver, Gettysburg, Pa.:

I claim the enlargement of a portable daguerrean gallery or house, by means of the elongated sliding bars, C, friction roller boxes, D, movable slides, G, and friction rollers, E, as arranged, and operating substantially in the manner herein specified.

40,971.—Vegetable Cutter.—Amos H. Wellington, Woodstock, Vt.:

I claim my improved machine or combination and arrangement of the vertical conical hopper, B, the two retainers or cutting boards, L, L', and a vertical hollow cone or frustum, C, provided with knives having throats opening into the interior space or chamber of the said cone or frustum, the whole being substantially as and for the purpose and to operate as hereinbefore specified.

40,972.—Shuttle Fastening.—Gilbert D. Whitmore, Boston, Mass.:

I claim the above-explained improved blind fastener, having a handle, E, and two or any other suitable number of inclined cam slots, e, e', made and applied together and arranged with respect to a spring-bolt, A, and its case, B, substantially in manner and so as to operate therewith and with catches, F, H, disposed as specified.

40,973.—Cultivator.—Erastus Wilcox, Delhi, Iowa:

I claim the combination and arrangement of the frame, A, B, B', bars, D, D', and adjustable standards, F, F', wheels, H, H', in inclined bars, T, T', standards, N, N', and T', bars, L, L', and handles, J, J', on shovel stocks, Q, Q', with cultivating shovels, S, S', the whole constructed as described.

40,974.—Fan Blower.—William Winter, Plainfield, N. J.:

I claim the annular air-chamber, A, and double conical cavity, B, with central aperture, C, in combination with triangular rotary wings, B', constructed and operating substantially as and for the purpose shown and described.

40,975.—Cast-iron Building Pieces.—Robert Wood, Philadelphia, Pa.:

I claim building pieces consisting of hollow cast-iron shells, having projections and holes arranged substantially as and for the purpose herein set forth.

40,976.—Refrigerator.—W. M. Baker (assignor to himself and W. R. Heath), Walpole, Ind.:

I claim the air-tubes, I, J, and air-chamber, H, in combination with the ice-chamber, D, and ventilator, K, all being arranged in relation with the inner case, B, to operate in the manner substantially as and for the purpose herein set forth.

[This invention relates to an improvement on a refrigerator for which Letters Patent were granted to this inventor, bearing date July 13, 1863. The object of the invention is to supply the interior of the refrigerator with cold dry air and to carry off from the former all gaseous impurities.]

40,977.—Cooling and Discharging Fermented Liquors.—Felix Brunnon (assignor to himself and Joseph N. Naglee), Philadelphia, Pa.:

I claim a vessel, A, of any suitable form for containing ice and water, and the weighted inverted vessel, D, in combination with the cocks and tubes herein described, or any equivalent to the same, the whole operating substantially as described, for the purpose specified.

40,978.—Primed Metallic Cartridge.—Silas Crispin, New York City, assignor to Thomas Poultney, Baltimore, Md.:

I claim, first, The combination of a thin-wrapped metal and paper cartridge case with a primer, so securely fastened together as to form a primed expanding wrapped metal and paper cartridge, substantially as above described.

Second, The combination of a thin-wrapped metal cartridge case and a primer, so securely fastened together as to constitute a primed expanding wrapped metal cartridge, substantially as described.

40,981.—Lever Jack.—Thomas M. Kane (assignor to himself and Ogden Howell), Goshen, N. Y.:

I claim the construction of the uprights, in combination with the lever block and clevis, when constructed, arranged and combined as herein described and for the purposes set forth.

40,982.—Fan Blower.—M. V. Noble, St. Anthony, Minn., assignor to himself, J. C. Nobles and Eliza C. Suydam:

I claim, in combination with a fan case having closed eyes, and a divided fan, the double sets of inlet and exit air ducts or passages, C, C' and D, D', constructed, arranged and operating together for the purpose of drawing in and forcing through it counter currents of pure and impure air, substantially as and for the purpose described.

40,983.—Mode of Fastening Bales of Merchandise.—T. W. Reilly (assignor to Hector H. McClean), New Orleans, La.:

I claim the buckle, A, with tongues, d, d', and center piece, C, as fully represented in the drawings.

40,984.—Manufacture of Artificial Stone.—F. M. Ruchhaupt, New York City, assignor to J. G. Kershaw, Philadelphia, Pa.:

I claim the manufacture of artificial stone from lime, clay and gelatinous silicic acid, mixed and pressed substantially as set forth, for the purpose specified.

40,985.—Hoop Skirt.—S. S. Sherwood, Acquackanonk, N. J., assignor to himself and Alexander Douglas, English Neighborhood, N. J.:

I claim the combination with the tapes, A, A', woven with loops or their equivalents, B, B', of the cords or strands, F, F', when the latter are secured outside of the tapes, and not through them, substantially as and for the purposes set forth.

40,986.—Turbine Water Wheels.—Seth Whalen, Balston Spa, N. Y., assignor to himself and Hannah Whalen, Burnt Hills, N. Y.:

I claim the guide wheel, g, with the chutes, l, l', and central discharge wheel, k, with the buckets, A, A', substantially as specified, in combination with the stop water or cap, i, extending from the guide wheel, g, to the shaft, h, as and for the purposes specified.

I also claim the follower blocks, n, and keys or wedges, 5, in combination with the stop water or cap, l, for the purposes and as specified.

40,987.—Mill for Grinding Fruit, Grain, &c.—Wm. N. Whiteley, Jerome Fassler and O. S. Kelly, Springfield, Ohio:

First, We claim the three grinding rollers in combination with the metal segments, k, k', constructed substantially as described for the purposes set forth.

Second, In combination with the frame and grinding rollers arranged substantially as described, we claim arranging the gearing which communicates motion to or between the rollers on the ends of the shafts outside of the journal boxes and frame, substantially as described.

Third, We claim, in combination with the ribbed segment, N, the spiral crushing and feeding roller arranged over the grinding rollers, H and H', substantially as described and shown, to crush and feed the apples, or fruit, into a worm gear, G, and to feed the same into the mill. We claim two spiral-ribbed grinding rollers running together at different velocities, with the ribs of one roller crossing the ribs of the other at an angle where the grinding is effected, in combination with the crushing and feeding roller arranged above them.

Fifth, We claim the combination of the hopper, Q, ribbed segment, N, segments, R, R', and rides, L, L', with the roller, M, forming the crushing box, constructed so as to be readily removed, as described, for washing and cleaning the mill.

40,988.—Metallic Cartridge.—T. J. Rodman, Watertown, Mass., and Silas Crispin, New York City, assignors to Thomas Poultney, Baltimore, Md.:

We claim, first, The thin metal-wrapped cartridge case, made substantially in the manner described and for the purpose set forth.

Second, The combination of a wrapped metal cartridge case combined with an internal or external strengthening disk or cups, whether this disk or cup is made of paper, metal or an elastic material, substantially as above described.

40,989.—Sewing Machine.—William Stanley (assignor to himself and others), New York City, assignor by mesne assignments of A. H. Hook, New York City. Patented Nov. 30, 1859:

I claim the combination of the levers, m, n, arm, k, spring, o, and cam, p, constructed and arranged substantially as and for the purpose set forth.

The combination of the two washers or plates, z, z', concave at the center and rounded at their outer edges, with a center pin, and any suitable means to give such plates pressure, substantially as and for the purposes set forth.

40,990.—Spindle Bolsters of Spinning Machines.—Richard Fethney, Manchester, England, assignor to Lewis Leigh, Seymour, Conn. Patented in England Nov. 5, 1861:

I claim, first, The tubular bolster for spindles, herein described, provided with spherical bearing fitting a recess in the spindle rail, for the purposes and substantially as specified.

Second, I claim the means, substantially as described, for preventing the rotation of said bolster and retaining it in its recess in the spindle rail as set forth.

I also claim imparting an irregular motion, substantially such as herein described, to the jacks, by means of eccentric cog wheels, substantially as and for the purpose specified.



O. M. B., of Conn.—By covering the surface of your galvanizing vessel with powdered charcoal, lampblack or soot, you need not be troubled with disagreeable fumes.

O. E. M., of Ill.—We have never seen a casting (part of which was chilled) rendered malleable, with the chilled part preserved in the original condition.

T. C., of R. I.—You state that an article recently patented in England has been introduced and sold here, and you ask—"if I obtain an assignment from the patentee and take out a patent here, can I prevent the further manufacture of the article by other parties?" We reply you can; but the inventor must make the application for the patent in his own name and assign the whole right to you, in which case the patent would issue to you as assignee.

T. G. S., of C. W.—We have no business information concerning House's mode of operating window blinds. Unless you get the facts from him we do not know in what other way you can do so.

L. D. G. of N. J.—Address J. C. Hoadley & Co., Lawrence, Mass., for a small engine for farm purposes. We are glad to see that you are so sensible as to contemplate using steam on your farm instead of depending on hand labor. English farmers are derided sometimes for their oldfogy ideas, but they are about twenty-five years ahead of their brethren in our country in this respect. Knitting machines are in practical operation, and there are many that come within the range of ordinary family use. The wind dial and register is about a century old, if not more.

C. E. F., of N. Y.—Your method of expressing cider appears to be new, and we do not see any reason why the plan would not work well, though there may be practical difficulties which could only be found out by experiment.

R. S. S. H., of Md.—The *New England Farmer* is published in Boston. You had better send on \$2 and subscribe for it, and we have no doubt the editor will answer your enquiry.

A. C. E., of Mass.—You ask if there would be much risk in your going to Buffalo "to get a situation as second engineer on a propeller." You are just as competent to answer such a question as we are. We know nothing whatever about situations on Buffalo propellers.

H. H., of Ohio.—If an invention has been in use in your town for five years a valid patent could not be obtained for it—you can continue the use of the invention without danger of molestation. We thank you for your efforts to increase the circulation of our paper in your neighborhood.

G. W. F., of Ohio.—We cannot tell you how to split stones by chemical means so as to be of any practical value.

H. W. F., of C. W.—Clean your coins with dilute sulphuric acid; one part of acid in ten of water will answer very well. If there are dates upon them this will bring them out, if not, not. Nothing can bring out the date of coin which has been worn off; there are some old coin washers in this city, we are told, who have a simple method for bringing out dates—that is to manufacture 'em.

J. L. H., of Mich.—"Campin's Practical Mechanics," contains a portion of the information you seek. We cannot see how it is that correspondents write to us for information upon matters that we have just printed whole columns about in the *SCIENTIFIC AMERICAN*. A little more attention would save trouble on all sides.

Money Received.

- At the Scientific American Office, on account of Patent Office business, from Wednesday, Dec. 16, to Wednesday, Dec. 23, 1864:—
J. O. H., of Pa., \$44; B. E., of N. Y., \$25; J. M., of N. Y., \$25; L. S., of N. Y., \$41; H. E., of Conn., \$16; L. O. C., of Pa., \$20; W. H. B., of Cal., \$20; E. C., of N. Y., \$40; W. F. O., of Mass., \$45; O. & E. P., of Mass., \$20; R. T., of N. Y., \$20; G. B., of N. J., \$16; J. E., of N. Y., \$16; R. H., of Mass., \$20; G. G. H., of Conn., \$45; C. C. C., of N. Y., \$45; J. E., of N. Y., \$160; F. M. C., of Conn., \$50; V. H. H., of N. Y., \$12; S. L., of Ohio, \$16; D. & K., of Cal., \$30; G. B. M. D., of Ky., \$16; G. R. V., of N. Y., \$30; H. C., of Ohio, \$47; H. W. B., of Iowa, \$16; E. M. K., of Iowa, \$16; J. T., of Ind., \$16; A. & H., of Conn., \$30; T. A. M., of Pa., \$16; C. W., of Mich., \$25; A. J. M., of N. Y., \$32; J. B. H., of R. I., \$100; W. H., of N. Y., \$12; W. L., of N. Y., \$48; W. M. K., of N. Y., \$41; J. B. Jr., of N. Y., \$20; H. S. B., of La., \$15; R. S. C., of Iowa, \$45; W. M. D., of N. Y., \$41; B. A. H., of Iowa, \$45; E. C. C., of Ill., \$41; T. R. C., of Mass., \$45; G. S. P., of Mass., \$20; W. H., of N. Y., \$22; N. C. W., of N. Y., \$25; H. H. H., of Ohio, \$16; D. L., of Vt. \$20; C. T., of N. J., \$16; M. B., of Ky., \$26; J. W. P., of Mass., \$35; J. Z., of Ill., \$15; H. S. S., of Mass., \$16; A. L. S., of Conn., \$25; G. T. B., of Mass., \$16; R. G., of Mass., \$20; G. S., of Maine, \$16; T. J. B., of Wis., \$16; A. A., of Ill., \$16; N. J. A., of Ill., \$16; P. B., of N. J., \$25; G. C., of Conn., \$16; S. D. T., of Mass., \$16; M. H. M., of Ohio, \$16; F. C., of Mass., \$35; A. S., of N. Y., \$20; F. B., of Bavaria, \$16; J. T. L., of N. Y., \$12; J. D., of N. Y., \$20; P. S. F., of N. Y., \$45; J. C., of N. J., \$20; S. B., of N. Y., \$20; M. P., of Conn., \$20; H. & H., of N. Y., \$25; P. C., of N. Y., \$98; W. F., of Mo., \$20; L. C., of Russia, \$16; E. & H., of Mass., \$20; W. X. S., of Mass., \$20; E. W., of N. Y., \$16; G. O. W., of Mass., \$25; B. & G., of Conn., \$25; J. P. B., of Ill., \$50; A. G. W., of Cal., \$30; J. W. D., of Mich., \$15; T. & S., of Wis., \$16; G. H. S., of Conn., \$16; S. D. D., of Iowa, \$16; S. & S., of Ill., \$15; T. S. M., of Ohio, \$16; T. J. T., of Md., \$16; G. H. E., of Mass., \$15; N. H. R., of N. J., \$16; J. S., of Mo., \$16; W. H., of Pa., \$16.

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