

SELF-ACTING WAGON BRAKE—Joseph Rosencrans, of Avoca, N. Y. : I claim the arrangement of means set forth for operating the brake, by the holding back of the team.

STOVES—Geo. H. Russell, of Baltimore, Md. : I claim the combination, with the inner fire drum, A, of the cold air base, D, vertical side pipes, E, E', and elbow, G, with their dampers, G', cylindrical cover, or top drum, with F, its chambers, F', F', and connecting tube, F, horizontal air-space, G, and outlet, I, with air-drums, I, K, passage, J, front vertical register pipes, J, foot warmer connecting pipes, K, K, and foot warmer, L, with its register, I, ventilating registers, R, double smoke-pipes, N, N, P, with dampers set as described, and divided outer smoke drum, O, with its passage, or passages, substantially as and for the purposes set forth.

CARPET FASTENER—A. M. Smith, of New York City : I claim the combination and arrangement of the point, A, lips, B, slot, C, bearing, D, lips, E, E, point, F, hook, G, lips, H, bearings, I, I, substantially as and for the purposes specified.

MANUFACTURE OF BELTING—Chas. E. Smith, of Philadelphia, Pa. : I claim the manufacture of continuous belting, or boards, by uniting pieces of band iron, by lapping and riveting two beveled ends, so as to produce a rhomboidal joint, in the manner and for the purpose substantially as described.

CORDBAGE MACHINERY—Geo. Stephenson, of Northfield, Ind. : I claim the employment of a series of movable bearing crossbars, I, with side pivots or guides, K, the ends of the crossbars being supported by longitudinal slots or grooves, H, in the flyer bars, A, and connected to each other by elastic straps or thongs, L, whereby the crossbars are made to press gently upon the ends of the spools (which are mounted upon the side pivots, K) to resist slightly the rotary motion thereof, and also admit of the occasional removal of one or more of the spools, without disarranging others of the series, the crossbars, spools and elastic straps being arranged in the manner and for the purpose described.

AXLE-BOX FOR RAILROAD CARS—Levi Stevens, of Fitchburg, Mass. : I claim a box made of anti-friction metal and backed with a casing of bronze, the bronze passing through the anti-friction metal, and resting upon the axle, for the purpose described.

CONDENSING STEAM-ENGINES—John Sutton (assignor to himself and DeWitt C. Van Tuij), of New York City : I claim, first, The arrangement of the combined air-pump and condenser piston, K, to act independently of the walking beam of the engine, so that a portion of the exhaust steam, while the piston, F, is first completing and commencing a stroke shall impart a full stroke to the piston, K, as shown and described.

Second, The arrangement and combination of the forked levers, Q, S, the crank, E, lever, R, and piston rod, K', so that by the action of the piston, K, the crank, E, will be assisted in passing the dead points, but during other portions of the crank movement, the parts above named will be disconnected from the crank, E, all substantially as shown and described.

[In this invention, the air-pump and cylinder of a condensing engine are combined, and the cold water injection is so applied that condensation takes place in the air-pump, and the use of a separate vessel as a condenser dispensed with. The air-pump is operated by the direct pressure of the exhaust steam upon its piston without any aid from any other part of the engine, and the surplus of power in the air-pump over and above what is necessary for the discharge of the water of condensation from it is used to help the crank or cranks past the centers.]

MANUFACTURE OF WRENCHES—Geo. C. Taft, of Worcester, Mass. : I claim the peculiar mode of constructing the head and shank of screw wrenches, namely, by first forming or constructing the head, C, and shank or bar, A, separately, as shown and described, and then uniting the head and shank after the shank, A, has been inserted into the depression, D, first made in the head, C, by welding, the whole operation being substantially as described and for the purposes set forth.

SEEDING MACHINES—T. H. Tatlow, Jr., of Palmyra, Mo. : I claim, first, The employment or use of the covering hoe, G, operated from the supporting wheel, C, through the medium of the rollers, G, bar, J, and the bars, F, I, connected by the rod, H, substantially as described.

Second, The share, O, provided with the curved bars, J, J, in connection with the shares, M, N, and hoe, G, the whole being arranged for joint operation, substantially as and for the purpose set forth.

[This invention relates to a novel means employed for covering the seed, and also to a novel device for properly preparing the ground in advance of the share that forms the furrow which receives the seed. This invention is designed to cover the seed more perfectly than has hitherto been done by a machine, and to imitate as far as possible the covering of the seed by hand.]

CORN MILLS—J. W. Taylor, of Philadelphia, Pa. : I claim the application and arrangement of the oblique projections, C, to the shell, or concave, A, operating in the manner and for the purpose set forth and specified.

TAILORS' PRESSING MACHINE—J. W. Thorp, of Hillsboro', N. H. : I claim raising the heater from the bottom of the hollow goose, either by means of the projections formed on the bottom of the heater, or by adjusting screws or their equivalents.

BEH HIVES—S. H. Walker, of Somerville, Tenn. : I claim the moth decoy entrances, C, provided with the jutting lips or ledges, B, D, arranged just within the bee entrance, A, across its entire extent, both above and below, substantially in the manner and for the purpose specified.

I also claim the construction and arrangement of the crossbars, R, R, attached to a supporting cross-piece, P, and with open spaces, S, S, around their ends, substantially in the manner and for the purpose set forth.

BORING MACHINE—John Waugh, of Elmira, N. Y. : I claim the arrangement of those mechanical appliances, in a peculiar manner, for a new and useful purpose, substantially as set forth.

GAS REGULATORS—D. Wheeler, of Fairfield, Conn., and Isaac Little, of Bridgeport, Conn. : We claim the combination of a self-acting discharge pipe or siphon, S, T, with the chamber, C, of a gas regulator, substantially as and for the purposes shown and described.

[An inverted siphon is attached to the gas regulator, and arranged relatively to the outlet by which the burners are supplied, and to the other parts of the regulator that while containing a column of water or other liquid sufficient to balance the pressure of the gas, it will constitute a self-regulating means of escape for any water or liquid matter that may result from condensation in the pipes between the regulator and the burner.]

FRICTION SPRING FOR SUPPORTING WINDOW SASH—E. D. Williams, of Philadelphia, Pa. : I claim providing with friction springs having sharpened projections, or spurs, for cutting their own grooves, substantially as set forth.

COTTON AND HAY PRESSES—Samson Wolff, of Vicksburg, Miss. : I claim the combination of a conical spiral wheel or pinion, with an inclined rack when the latter is set oblique to the axis of the pinion, substantially in the manner and for the purpose described.

MOSQUITO BAR—Thos. S. Williams, of Enterprise, Miss. : I claim the folding mosquito net, or bar, constructed substantially as described.

SEATS AND COUCHES FOR RAILROAD CARS—Theodore T. Woodruff, of Philadelphia, Pa. : I claim the combination and arrangement of the two frames with each other and with the supports therefor, connected with each compartment of a car, the said frame, when spread out forming couches for two persons, on the same level with the seats, and when transformed one of the said frames forming seats, and the other, the back for such seats, substantially as described.

I also claim connecting the frame which forms the seats with the frame which forms the backs, by means of links, connected with one of the said frames by means of hinged joints, and with the other of the said frames by means of sliding hinged joints, substantially as and for the purpose specified.

I also claim, in combination with the frame for the main seats, the auxiliary seats, which slide under the frame for the main seats, substantially as and for the purpose described.

An I also claim the frame for an elevated couch, when combined with the car, by means of sliding hinged joints, substantially as and for the purpose specified.

I also claim, in combination with the elevated couch next to the side of the car, or the equivalent thereof, the front elevated couch, so connected with the car, substantially as described, so to admit of being let down to form part of a double couch, and thrown up towards the roof of the car when not wanted as a couch, as set forth.

SELF-ACTING PRESSES—Lester L. Bond, of Chicago, Ill., assignor to himself and Giles B. Williams, of New York City : I claim, first, The arrangement for connecting the press beam, B, with the levers, D, D, by the connecting bars, E, E, whereby the press is made to operate from above and below.

Second, The socket shoe, I, and the ratchet plate, H, or their mechanical equivalents, for altering and saving the power of the press, substantially as set forth and specified.

MACHINES FOR MAKING UPHOLSTERY SPRINGS—C. A. Young and S. W. Young, of Providence, R. I. : We claim, first, The cutters, or, attached to the machine, and arranged relatively with the rolls, D, D, and bar, J, when the movable cutter, R, is actuated automatically by suitable mechanism to cut the springs as formed from the continuous wire.

Second, The bar, J, attached to the lever, H, or other part of the machine or framing, when provided with a bend, I, to project over the uppermost roller, D, for the purpose of guiding and ensuring the turning or bending of the wire, T, as set forth.

Third, The plates, N, P, when used in connection with the shears, O, R, for the purpose of cutting off the springs and bending them, therefor, simultaneously and substantially as described.

[A patent was granted, this inventor Sept. 28, 1858, for a machine for making upholstery springs, and this invention is an improvement upon it. The invention consists in a cutting attachment applied to the machine and arranged to operate automatically for the purpose of cutting off the springs and bending their ends as they are formed from a continuous wire, and there is a great improvement in the part which bends the wire.]

MACHINES FOR MEASURING CLOTH—John W. Drummond, (assignor to Horace H. Day), of New York City : I claim the combination of the measuring wheel, substantially as described, in combination with the spring block, or the equivalent thereof, for holding the cloth to the periphery of the wheel, and for stopping the said wheel the moment the cloth has passed off, substantially as described.

COFFEE POTS—D. G. Fletcher, (assignor to himself and Henry Weiskopf), of Racine, Wis. : I claim the box like strainer, D, arranged with a hinged top, C, so that access can be had to the same from the inside as well as from the outside, and that the same can easily be cleaned, substantially as described.

[This is a very good coffee pot, in which all the aroma is preserved and the whole flavor of the coffee is retained.]

REFRIGERATOR—Wm. H. Lazelle, (assignor to himself and Elbridge B. Lazelle), of Boston, Mass. : I claim the combination and arrangement of the siphon pipe, I, water space, F, and ice box, C, open and beveled at one end, substantially as set forth and for the purposes described.

DRY GAS METERS—Hugh Logue, (assignor to himself and Daniel P. Vandergriff), of Philadelphia, Pa. : I claim so constructing one of the partitions between two of the chambers of a dry gas meter that it may afford a passage for the gas from the inlet pipe to the central opening of the valve seat, substantially as and for the purpose set forth.

HEMP BRAKE—Henry F. Mann, (assignor to himself and Wm. J. Walker), of Lanore, Ind. : I claim, first, The combination of the adjustable cams or arms, C, with the breaker, as constructed, the whole being arranged and operated substantially as described.

Second, The adjustable spring, H, as arranged and operated for the purposes set forth.

MACHINE FOR CUTTING INDIA-RUBBER INTO THREADS—Henry Messer, of Roxbury, Mass., assignor to Charles Rice, of Boston, Mass. : I claim the arrangement and combination of the rotating table, D, and the adjustable cutters, O, S, substantially as and for the purposes shown and described.

GRINDING MILLS—A. Orvis, of Niagara, N. Y., assignor to himself and Downs and Co., of Seneca Falls, N. Y. : I claim the construction and arrangement of cylinder, D, and concave, F, with supplementary cylinder, G, whereby the rhomboidal teeth, F, and G, serve to adjust the parts to efficient action by means of the longitudinal movement of the collar, E, on the shaft, B, substantially as set forth.

I also claim the peculiar conformation of the grinding surfaces of the cast-iron cylinder, B, and concave, F, consisting of the alternate intersection of the raised and depressed corrugations thereof, in the manner and for the purpose shown and described.

I claim the combination and arrangement of the two concaves, F and G, spout, J, and divided winged partition, R, or its equivalent, whereby the operation of cracking and grinding in said concaves may be conjoint or separate, as substantially in the manner and for the purposes shown and described.

I claim the automatic rafter, V, arranged and operated substantially as described, for the purpose of keeping the bolt free from obstructions and rendering its action efficient, as set forth.

SOFA BEDSTEAD—Wm. H. Tendler, (assignor to himself and John F. Moeschlin), of Cambridge, Mass. : I claim the improved sofa bed, constructed not only with each of its arm-rests formed in two parts and hinged together, arranged and applied to the back B, and bed-frame, A, as described, but with its seat hinged to the bed-frame, so as to be capable of being moved with respect to it, and the arm-rests, as specified.

I also claim the combination of the pillow and foot-rests, I, M, E, and F, with the arm-rests and seat-frame or seat applied to the frame, A, the whole being made to operate together essentially as explained.

MILL DRIVERS—Ferdinand Walters, (assignor to C. F. Walters and S. E. Stout), of Covington, Ky. : I claim the driver, D, constructed and arranged, with reference to the shaft, C, and cap, C, substantially as and for the purpose set forth.

HEEL BOOTS AND SHOES—Alford B. Wilton, (assignor to himself and Charles Adams), of Dorchester, Mass. : I claim the improvement of the dressed or concave elastic heel, as made with the air-channel, B, leading into of the concavity, A, and arranged substantially as described.

RE-ISSUES.

CRACKER MACHINE—John McCollum, of New York City. Patented March 23, 1853 : I claim the combination of adjustable springs with a cracker cut-r and its resisting surface or bed, substantially as herein before described and substantially for the purposes set forth.

MACHINE FOR CREASING AND BLACKING LEATHER FOR HARNESS—Adolph Stempel, of New York City. Patented Nov. 2, 1858 : I claim, first, The pressure roller, F, and the creasing and embossing rollers, I, in combination with the color fountains, K and L, and felt rolls, M, M, arranged to operate as and for the purpose set forth.

Second, The arrangement of the embossing rollers, I, with their projection flanges, K', to operate in combination with the guides, d', substantially in the manner and for the purpose specified.

[On page 75 of the present volume of the SCIENTIFIC AMERICAN we noticed an invention by this gentleman for the same purpose as the present one, which consists in the employment of creasing or embossing rollers and a pressing roller, combined and arranged with two color fountains and felt distributors, the whole being arranged for creasing, embossing and coloring leather straps. There is a particular arrangement of the embossing rollers, in combination with guides, the rollers being provided with grooved edges, thus enabling it to its work perfectly.]

PLATES FOR BOILER HOLES AND TOPS OF STOVES—David Stuart and Richard Peterson, of Philadelphia, Pa., assignees (through mesne-assignment) of John B. Chollar, of Albany, N. Y. Patented February 6, 1849 : I claim constructing a cross piece for cooking stoves and ranges with a hollow chamber and with the openings, e, e, to allow air to pass into the said chamber, substantially as set forth.

GRINDING AND POLISHING KNIVES—James Dodge, of Waterford, N. Y., assignor to himself and David Blake, of Albany, N. Y. Patented October 12, 1853 : I claim grinding and polishing articles and forming their surfaces upon or against the periphery of a grindstone or polishing wheel, or other analogous reducing surface, by attaching them to the periphery of a revolving drum or cylinder, substantially as set forth.

I also claim making matrices in the periphery of a wheel to which a series of articles to be ground are attached, said matrices being adapted to give the required shape to the articles to be ground, so as to grind, polish and shape such articles in a uniform manner, substantially as and upon the principles set forth.

I also claim, in combination with said matrices, attaching and supporting the articles to be ground upon the cylinder in such manner as to allow them to rock or accommodate themselves thereon, whereby their surfaces may be shaped either convex, flat or concave, substantially as set forth.

GAS LAMPS—George H. Bechtel, of Philadelphia, Pa., assignee (through mesne-assignment) of Horatio G. Skyles, of said Philadelphia. Patented Aug. 7, 1849 : I claim, first, For ming a valve within the adjustable gas chamber, P, and a seat for the said valve on the tube which contains the wick, I, so as to regulate and extinguish the light when required, whether the said valve be raised and arranged in the manner described, or other means substantially the same, by which similar results may be produced.

Second, The employment of the safety valve, C, D, E, in combination with the guard, T, constructed substantially as described.

Third, I also claim the guard, T, in combination with the combined burner and generator, arranged and operating in the manner and for the purpose set forth.

Fourth, I likewise claim combining the generator, Q, R, burner, P, ring, U, and guard, T, in a single piece, made to ascend and descend simultaneously in the manner and for the purpose substantially as set forth.

ADDITIONAL IMPROVEMENT.

APPARATUS FOR EVAPORATING SACCHARINE JUICES—Lyman P. Harris, of Newburgh, Ont., Canada, Jan. 13, 1859 : I claim, first, The application of one or more dampers, H, to the movable furnace, A; also the cooling surface on the evaporator connected therewith, for the purposes set forth.

Second, I claim the movable flue, I, as described.

Third, I claim the broad hook or supporter, K, or its equivalent, as set forth.

INVENTIONS EXAMINED AT THE Patent Office, and advice given as to the patentability of inventions, before the expense of an application is incurred. This service is carefully performed by Editors of this Journal, through their Branch Office at Washington, for the small fee of \$5. A sketch and description of the invention only are wanted to enable them to make the examination. Address MUNN & COMPANY, No. 37 Park-row, New York.

Literary Notices.

FROM WALL STREET TO CASHMERE—By John B. Ireland. A Journal of Five Years in Asia, Africa and Europe. S. A. Rollo & Co., No. 29 Park Row, publishers.

This work contains 520 pages, and is profusely illustrated with spirited wood cuts, prepared from sketches by the author, the last one being called "Preparation for a Suttee," a process of cruelty which has long been abolished by the British Government, and the picture, although original, reminds us much of one which was published in the missionary tracts of our juvenile days. The author does not fail to allude to any peculiar merit in his voluminous notes of travel, either as regards literary skill or novelty, and in this respect it is but candid to say that there are few intelligent travelers who could not, by care and pains-taking, produce an equally readable work. This volume is tastily got up in blue and gold, and reflects much credit upon its publishers.

THE AMERICAN STAIR BUILDER.—The art of Stair-building is one of the most intricate branches of joiner-work, and requires great skill and long practice to master; in no department of mechanism is practical mathematics so much employed to advantage, therefore every good work on this art is of great importance, because it imparts information which has taken years of practice to acquire, and thus it is like a valuable labor-saving machine. This we apprehend, from an inspection of its contents, is the character of the "American Stair Builder," a new book by W. P. Estebrook and James H. Moncton, architects and builders, this city. Baker & Godwin, publishers. It is an exposition of the whole subject, illustrated with numerous diagrams and plates, and presents an experience of twenty-five years' practice in the art.

BOOKS AND PERIODICALS RECEIVED.

THE HARP OF A THOUSAND STRINGS. A book of fun. Published by Dick & Fitzgerald, No. 18 Ann-street.

BLACKWOOD'S MAGAZINE, for this month. Published by Leonard Scott & Co., No. 64 Gold-street. A renowned monthly magazine.

THE GAS-METER CHECK BOOK, by E. E. Perkins. A useful book for gas consumers. Published by M. Haskell & Co., No. 103 Fulton-street.

PRAIRIE FARMING IN AMERICA, by James Caird, M. P., an intelligent Scottish agriculturist, who visited our country to examine its agricultural condition and capacity. Published by D. Appleton & Co., Broadway, I. INVENTION, par Ch. Desnos-Gardisail, Ingenieur Civil, 29 Boulevard St. Martin, Paris.

THE CANADIAN AGRICULTURIST. Toronto, C. W. QUARTERLY JOURNAL OF AGRICULTURE. Ben. Ferley Poore, editor, Washington, D. C.

NATIONAL RECORDER. Washington, D. C.

HUMPHREY'S JOURNAL OF THE DAGUERRETYPE AND PHOTOGRAPHIC ARTS. J. H. Ladd, publishers, 37 Lis penard street, New York.

THE AMERICAN JOURNAL OF PHOTOGRAPHY AND THE ALLIED ARTS. C. A. Seely, A. M., Editor. S. J. & Garbanati, publishers, 424 Broadway, New York.

WILSON'S BUSINESS DIRECTORY for 1859-60. John F. Trow, printer, 379 Broadway, New York.

PHYSICAL PERFECTION. By D. H. Jacques. Fowler & Wells, publishers, Broadway, New York.

THE LONDON QUARTERLY REVIEW, with an interesting series of articles. L. Scott & Co., New York.

AMERICAN HOMEOPATHIC REVIEW for June. J. T. Smith & Co., Broadway, New York.

HALL'S JOURNAL OF HEALTH; a capital and spirited publication. Henry B. Price, New York.

AGRICULTURAL REVIEW. A valuable agricultural journal. Prof. Charles A. Cameron, Dublin, Ireland.

"The Strongest Man in the World" Prostrated.

[Dr. George B. Winship attempted to lecture last evening at Mercantile Hall, on "Physical Education." The hall was filled to overflowing, attracted no doubt by the fame of the lecturer in relation to his prodigious feats of strength, it having been claimed for him that he was the "strongest man in the world." Dr. Winship commenced reading his lecture promptly at eight o'clock, and had proceeded but a few moments before his voice began to fail and became weak and tremulous; and before the audience generally were aware of it, he dropped directly on the platform. Several gentlemen rushed to the platform and immediately bore him to the adjoining ante-room, where Dr. Walter Channing and others attended upon him.

It was soon announced that he would go on with the lecture in a few moments. He appeared, and after apologizing to the audience, said it was the first time he had ever fainted. He then proceeded with his lecture, and had read but a few pages when he again became overpowered, retiring just in time to save himself from another swoon. By the advice of physicians present, he was dissuaded from attempting to go on with his lecture, and it was announced that it would take place at some future time.

The audience on retiring were allowed to receive tickets or their money, most of them taking the former. It is said that on being taken from the ball his heart had nearly ceased to beat. Dr. W. accounts for the unfortunate affair on the ground that the atmosphere of the hall was close and impure. [His friends] however, regard it as caused by the peculiarity of appearing before a public audience for the first time.

Dr. W. has for several years given much attention to the subject of physical education. He is twenty-five years of age, five feet seven inches in height, and weighs one hundred and forty-three pounds. He graduated at Cambridge five years ago. He can raise a barrel of flour from the floor on to his shoulder; can raise himself with either little finger, till his chin is half a foot above it; can raise 200 pounds with either little finger; can lift with the hands 926 pounds dead weight, without the aid of straps or belts of any kind. Topham, the strongest man of England, could raise only 800 pounds in the same way; and the celebrated Belgian giant could lift only 800.] Dr. W. was prepared to exhibit all these feats, but the unexpected turn which events took prevented it. The strong man proved an infant.—Boston Atlas.

Ozone. What it is.

This peculiar substance, according to Professor Faraday, in a late lecture, is oxygen gas, under electrical excitement. It can be formed by passing the electric spark directly through the gas or by making the electric current pass over the exterior of a tube containing oxygen. Ozone destroys the colors of vegetable substances and attacks with avidity metals that simple oxygen will not act upon. It has also been found by very recent experiments that electrolyzed hydrogen possesses greater powers of reduction, than simple hydrogen. Hitherto no useful application of ozone has been made to the arts, but we think the time is not far distant, when some new discovery will enable it to be made very cheap; it will then supply the place of chlorine as a bleaching agent.