

TREADLE-STAND—Henry C. Spalding, of Brooklyn, N. Y.: I claim a new and improved article of manufacture, a self-sustaining skeleton treadle-frame, composed of sections secured together at right angles, substantially as described, so that the frame is self-braced crosswise, and lengthwise with the table which it supports.

APPARATUS FOR VENTILATING RAILROAD CARS—Robert Taylor, Reading, Pa.: I do not desire to claim broadly the forcing of air into railway cars by a blowing apparatus operating by the axles, as such a device is described in the patents of R. Cook, August 19th, 1851, and J. H. Taylor, October 30th, 1855, nor do I claim an air-pump, or air-pumps, operated by the axles, as they have been heretofore used in connection with pneumatic car-springs.

I also disclaim the rotating, ventilating valves, M, the same or their equivalents having been heretofore used.

But I claim the blowing cylinder, G, hung to one of the trucks of the car, and operated from one of the axles by means of an eccentric, D, or other equivalent device, in combination with the flexible or self-accommodating inlet and discharge pipes, I and H, and the distributing pipes, K, the whole being arranged substantially as and for the purpose set forth.

CHUCK FOR WATCHMAKERS' LATHE—G. H. Waldin, of Burlington, Iowa: I claim the use of the cylindrical core, or spindle, C, in connection with the thumb, d, for containing sealing-wax or its equivalent, the whole constructed and operated as specified.

CEMENTING ROOFS—J. L. G. Ward, of Adrian, Mich.: I do not claim, broadly, the use of alkaline silicates, applied as a protection to the walls or other parts of buildings; but I claim the covering of roofs of buildings by laying bricks or tiles, or slabs of other material, in a bed of cement consisting of an alkaline silicate, and subsequently treating the surface of said cement with an acid which combines with the alkaline thereof, and leaves a surface of pure silica, substantially as described.

[This invention consists in the covering of roofs by burying bricks or tiles in a cement consisting of an alkaline silicate, and subsequently treating the surface of such cement with an acid which combines with the alkali of the cement and forms a salt which when washed away leaves a surface of pure silica that is impervious to water, thus producing a weather-proof roof of a very superior character.]

PESSEAIRS—Francis E. Wells, of Texada, Texas: I claim the combination with the ring, A, of the hinged jointed and slotted standing supports, c, c, and their stems, d, the hinged sliding-support, e, the hinged arm, i, the collar, m, or its equivalent, and the plate, B, the whole applied and operating in relation to each other, substantially as set forth.

[By this invention what is known as the ring-pessary is supported upon the exterior of the body, thus avoiding all except the requisite internal pressure or support.]

APPARATUS FOR HANDLING HIDES—Charles Weston, of Salem, Mass.: I claim the apparatus described, for keeping hides in motion, while exposed to the action of the tanning liquid, the same consisting of parts constructed and arranged, in relation to each other, as described, so as to operate substantially in the manner and for the purposes set forth.

FEEDING MECHANISM FOR SAWING MACHINES—Phillip P. Weis and F. Schutte, of Philadelphia, Pa.: We claim the adjustable frame, N, with its rollers, h, the pressure-frame, P, with its rollers, i, and the feeding-screws, M, in combination, the whole being arranged substantially as and for the purpose specified.

KEY-BOLT FOR ATTACHING CARRIAGE TILLS—G. P. Wilhelm, of Bridgeport, Pa.: I do not claim as new of themselves either the key-bolt or the spiral spring, but I claim the manner described of fastening shafts and poles to carriages by the arrangement of the bolt, B, a spiral spring, c, and clips, c', arranged and operating as set forth.

HARVESTERS—Walter A. Wood, of Hoosick Falls, N. Y.: I claim, first, connecting the bent bar, J, to the axle, and allowing its other end free vertical motion between guides, substantially in the manner described.

I also claim, in combination with the bent bar, J, for sustaining the finger and cutter bars, the continuation of the finger-bar, and its attachment to the main frame, substantially in the manner and for the purpose set forth.

MOWING-MACHINES—Walter A. Wood, of Hoosick Falls, N. Y.: I claim connecting the bent-bar that carries the finger and cutter-bar to the main frame by the spring-plate, M, and the axle by the loop, d, so that the finger-bar may rise and fall independently of the wheel or main frame, or the main frame independently of the finger-bar, substantially as described.

MACHINES FOR CORKING BOTTLES—Lewis L. Chichester, of New York, N. Y., (assignor to David L. Wintringham), of Jersey City, N. J.: I do not claim, broadly, the employment or use of toggles for operating the bar, F, for they are a well-known mechanical device, and have been used for analogous purposes; but I claim the toggles, E, E, frame, G, and bar, F, provided with the plungers, d, in combination with an adjustable bottle-stand, K, and bar, C, provided with the tubes, a, a', a'', for the purpose specified.

I further claim the particular manner of adjusting the bottle-stand, K, to wit: attaching the same to the frame, G, by means of the lever, I, bar, J, arms k, k, cross-bars, m, and plates, l, substantially as shown and described.

[In this invention toggles are employed, connected with a lever-frame and driving-bar in connection with an adjustable bottle-stand, so that corks may be driven into bottles with great facility, and the same machine rendered capable of corking different sized bottles, and also of driving the corks a greater or less distance into the necks of the bottles.]

CATAMENIAL BANDAGES—Charles E. Clark, (assignor to himself and George W. Clark), of Boston, Mass.: I claim my improved manufacture of menstrual receiver, as made of two inflatable, water-proof crescent-shaped vessels, united by a water-proof system, and arranged together and with the septum, and provided with means of supplying them with air, and discharging it therefrom, substantially as specified.

ELECTRO-MAGNETIC FIRE-ALARM APPARATUS—Moses G. Farmer, of Salem, Mass., (assignor to William F. Channing), of Boston, Mass.: I claim the combination of two or more key-boards or fire-alarm strikers, constructed and operating substantially as described, with one or more electro-telegraphic alarm-machines, in the same closed electric circuit or independent closed electric circuits by means of a mechanism that will make and break a circuit, as shown and described.

RAILROAD CAR SEATS AND COUCHES—Jonathan Good, (assignor to himself and E. L. H. Dabbs), of Philadelphia, Pa.: I claim the arrangement and combination of the pivoted horizontally and vertically-moving plate, C, curved ratchet plates, J, rack extension, D, and union, G, as and for the purpose shown and described.

[This is an improved sleeping-car which has seats that change to comfortable couches at night, and in which there is room for the traveler to stow away his clothes.]

STRAW-CUTTERS—William Hinds, (assignor to Jerome Hinds), of Little Falls, N. Y.: I claim the arrangement of the cutters, c, c, in combination with the cutter, m, fig. 1, constructed substantially as and for the purpose set forth.

MACHINE FOR FINISHING CARBOYS—Lyman Hyde, of Ellenville, N. Y., (assignor to the Ellenville Glass Company): I do not claim the shears or formers, C, for they have been previously used, but I claim the shears, C, treadle, P, or its equivalent, mandrel, b, and furnace, B, placed within a suitable frame, A, and arranged for joint operation, substantially as and for the purpose set forth.

The object of this invention is to enable heads similar to those on the necks of bottles and small glass vessels to be formed on the ends of the necks of carboys and other large glass vessels of similar or approximate form. Large vessels of this sort have hitherto been "unfinished," as it is technically termed, that is to say, the ends of the necks have been left plain without a head or finish, in consequence of the inability of the workman to reach the neck of the carboy and perform the necessary work; the finish on the vessels being hitherto done exclusively by manual labor. This invention performs the operation perfectly by mechanical means.]

BED-BOTTOM—A. W. Morse, (assignor to himself and R. B. Robie), of Eaton, N. Y.: I claim the combination and arrangement of the rods, B, gear-wheels, A, staples, G, pins, H, wires, C, or their equivalents, lever, F, ratchet roller, D, pawl, E, for the purpose of giving the proper tension leathways and sideways simultaneously, substantially as set forth.

BLACKING—L. R. Rockwood, (assignor to J. L. Cough), of Worcester, Mass.: I claim edge blacking, when composed of the mentioned materials in the proportions and manner substantially as set forth and described.

RE-ISSUE.

EXTENSION FINGER-RINGS—Samuel Friend and George Seiler, of New York, N. Y. Patented December 21, 1855: We claim a divided spring-ring constructed substantially in the manner and for the purposes specified, whereby by the springing of the ring permits the same to pass the joints as set forth.

DESIGN.

STEREOSCOPE CASES—William Loyd, of Philadelphia, Pa.

ADDITIONAL IMPROVEMENT.

IMPROVEMENT IN SPRING-BED BOTTOMS—Henry F. Smith, of Washington, D. C. Patented October 6, 1857: I claim the supporting the fixed end of the longitudinal slats in spring-bottom beds by means of longitudinal spring-bars, substantially as described, so that the elasticity or yielding of both ends of the slats may be equalized for the purpose 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.

American Influence Abroad.

Virgil, in his day, sang songs and lauded high arms and prowess, deeds of heroism and martial glory, and it has long been an established idea that the greatness and the glory of a nation which hand it down to posterity are deeds upon the battle-field, and honors won by human bloodshed. This idea is false—a slander on mankind—a disgrace to the race. All the nations and cities of antiquity are preserved in our memories more by the works of their artisans and artists, than by their conquests or heroes. Who but the deep student knows aught of Babylonish arms? but every one is familiar with the hanging gardens of that famous city. The history of the early rulers of Egypt is shrouded in mystery; but the Lake of Meros, the Pyramids, and her excavated sepulchres remain as testimonials of her greatness. Greece, Rome, and the early Germanic Empire have all left their mark upon succeeding ages, by real work that was done in them, and the skill which their artificers possessed.

And so it is with us. The value of labor and its productions is daily becoming more felt, and hourly receiving a wider acknowledgement. Though we have few conquests of arms to boast of, and no graves of mighty dead to revere—save one, and that we have too little patriotism to buy at once—though we have no long line of ancestral greatness to look back to; yet we have educated labor to be proud of, and skilled work that is winning for America a name among the nations of the world of more value to real progress than conquest, shrines or ancestry. Americans, by their mechanical skill, are contesting in the glorious field of the liberal arts, and are gaining peaceful victories on the continent of Europe of more importance to the world than Austerlitz or Waterloo. Reaping machines are greater civilizers than swords, and Yankee unpickable locks greater securities to property than jails or gallows. We are led to these observations by the number of pat-

ents which our countrymen are continually securing in foreign countries—a number which is daily on the increase; and a few important ones, recently secured in England through the Scientific American Patent Agency, we will now proceed to notice:—

Stephen D. Carpenter, of Madison, Wis., has patented an improvement in operating railway brakes by electro-magnets. The mechanism employed is rendered very simple, and facility is afforded for graduating the pressure of the brakes upon the wheels. The brakes are attached to horizontal bars placed before and behind the wheels, and are suspended from centers above the wheels. Electro-magnets are adapted to the brake-bars by means of links and screw bolts, so as to admit of adjustment when required. The electro-magnets are supported in a horizontal position by means of pendant springs or arms, which will allow them to move a sufficient distance in a horizontal direction to bring the brakes against the peripheries of the wheels. The electro-magnets are connected by means of suitable wires with a battery, and when the circuit is closed, they will be attracted towards each other, and will then draw up the brakes against the wheels, and retard the carriages.

William Clemson, of East Woburn, Mass., has patented an improved method of grinding circular saws. The object of this invention is to grind these articles to a uniform thickness, and with their faces perfectly even or free from the wavy appearance so frequently produced by some of the methods of grinding generally practised, and to finish them perfectly from the center or eye. One of the improvements consists in grinding one side of a saw at a time, while its opposite side is supported by a roll, which has a rotary motion at the requisite speed for the purpose of causing the saw to rotate at the speed desired. Another improvement consists in the employment of a rotating clamp applied to the saw during the grinding process, in such a manner that it derives rotary motion from the saw through the agency of friction, and by the momentum acquired by such rotary motion is caused to control and render uniform, or nearly so, the velocity of the rotation of the saw, notwithstanding any differences of thickness of the saw-plate, and consequent tendency to variation in the action of the feed roll or other feeding contrivance upon the thicker and thinner portions of the plate. The spindle which carries the saw is, together with the friction clamp, mounted in a movable or traveling frame, whereby the saw may be moved up to the grinding surface as the grinding operation proceeds. The saw is also arranged to rotate in and during the grinding process upon a flat pivot, which is of sufficient width in one direction to fill the eye of the saw and steady the saw as it rotates, and is thin enough in a transverse direction to permit the grindstone to operate over the whole surface of the saw.

Edward Dugdale, of Burlington, N. J., has patented an improved method of constructing grates for furnaces, locomotives, stoves, &c., which consists in the employment of a series of flexible bars, composed of chains, metal rope, or linked rods, arranged side by side, and attached securely by their ends at the back and front or sides of the fire-box or furnace, with sufficient slackness to permit them to swing or be shaken, either by the movement of the furnace, as in the running of a locomotive, or by suitable mechanical means, for the purpose of causing them to work against or relatively to each other in such a manner as to prevent the adhesion of "clinkers" to them, and to cause the ashes and dirt from the fire to work down between and through them, and thus make their escape from the fire.

Martial Dimock, of Mansfield Center, Ct., has patented an improvement in sewing machines, relating especially to that class in which a needle with an eye near the point is used to carry a thread through the cloth to

be sewed, whether one or two threads be employed. This part of the invention consists in the employment of a pair of elastic nippers applied on the opposite side of the cloth or material to that on which the needle enters it, and operating in combination with the needle to seize the thread as it is protruded through the cloth, and draw it away from the needle in such a direction and to such a distance as to leave plenty of room for the passage, between it and the needle, of the looper, shuttle or other contrivance operating in combination with the needle to effect the enchainment of the single thread or the interlacing of the two threads, thereby preventing the failure of the looper, shuttle, or equivalent to enter the loop, and the consequent missing or dropping of stitches. A second part of the invention consists in a looper of novel description, operating in combination with a needle having an eye near the point to sew with a single thread in what is known as the chain and tambour stitch.

Messrs. Lindsay & Geddes, of Westville, Conn., have obtained a patent for some improvements in the machinery employed in the manufacture of paper. The invention is, in making the "lip" or basin which conducts the pulp from the vat to the endless wire apron of two parts, and in connecting these parts with the "deckles," which, as well as the "deckle straps," are, by a novel mechanism, rendered susceptible of lateral adjustment. The "deckles" determine the width of the pulp on the endless wire apron, and consequently also that of the paper, and as the two parts of the "lip" or basin which conducts the pulp to the apron are connected to the "deckles," one to each, the said two parts of the "lip" or basin will be moved simultaneously with the "deckles," and consequently the "lip" or basin will expand or contract in width, so as to correspond with the width or space between the "deckles." The machine is also provided with a novel way of adjusting the usual gage employed for the even distribution of the pulp on the endless wire apron.

Such inventions as these, useful and new, are the best means we can adopt to keep our place in the ranks of the nations; and we hope that our citizens will ever be sending their improvements across the sea.

Steam Traveling on Ice.

A very novel steamer is now being constructed at Prairie du Chien, on the Upper Mississippi, by Norman Wiard, of that place. It is designed for traveling on the ice, and making rapid journeys on the frozen rivers and lakes of the north-western territories. It is 70 feet long, 12 feet beam, and is supported on a pair of large skate runners, like a common ice-boat. The bottom of the hull and part of the sides are of iron; it is to have a driving wheel at the stern, operated by two locomotive engines and will be enclosed like a railroad car. It is to be steered by a gripping rudder, and will have a steam brake of great power. A speed of 40 miles per hour is expected to be attained by it on smooth ice; and it will also dash through snow three and four feet in depth. There are 40 mechanics now engaged upon it and it is expected to be completed early this month. It is contemplated that it will carry the mails and 75 passengers on the Upper Mississippi from Prairie du Chien to St. Paul—300 miles—in one day. If this steam-ice-boat is successful it will introduce a new era in winter traveling in the north.

FIRE-PROOF PAINT.—At a recent fire in Flushing, L. I. some canvas roofing was found to be nearly fire-proof; in a few places the canvas was destroyed, leaving a shell of paint perfectly untouched, and with few exceptions the whole roofing was untouched by fire. The *Flushing Journal* informs us that the canvas had been painted with fire-proof paint by Mr. Quarterman, of 114 John St., this city, and we take great pleasure in recording the efficiency of his invention.