

IMPROVED ANTI-FRICTION BEARING.

Cevedra B. Sheldon, New York city.—Good results have lately been obtained with linings for journal boxes, composed of paper and cloth combined with plumbago. Mr. Sheldon's invention proceeds a step further, and obviates the objection of destructibility, which applies to the fragile materials last named above. Plumbago is made into a plastic mass with a suitable cement, and by heavy pressure is forced into the interstices of wire cloth or perforated metal sheets.

IMPROVED TWEER.

Charles M. Morgan, Hesper, Iowa.—The manner of controlling the blast is by raising or lowering a cup, thereby increasing or diminishing the opening for admitting the wind to the fire. Another purpose of the cup is that, by raising or lowering, it loosens the cinders that may have choked up the wind passage to the fire, and causes all fine particles to fall into the chamber below, thereby insuring a clear fire free from dirt. By operating a lever, the valve in the base plate can be moved away from its seat, to allow any dust or cinders that may be in the wind chamber to drop out; and by leaving said valve open when the blast is shut off, a sufficient quantity of air will pass up to keep the fire alive for a long time.

IMPROVED MACHINE FOR POINTING WIRE.

Henry A. Williams, West Medway, Mass.—This invention consists of progressive feeding and turning mechanism, in combination with rolls having tapered grooves, for tapering and pointing wires to make picker teeth, hackle pins, printers' bodkins, taper dowel pins, and the like, the said feed mechanism being so that only a small portion of the wire is at first presented to the rolls. The wire is advanced a little more at each operation, so that, as the size is reduced, the wire feeds into the smaller portion of the grooves, and thus can be reduced to any required size in one groove. This plan saves the necessity of a series of grooves for doing the same work, also the shifting of the work from one groove to another.

IMPROVED EMERY WHEEL.

George H. Peabody, Brooklyn, N. Y.—This wheel is covered with an emery composition formed of powdered rosin, white lead, beach clay, glue, emery, and water, which is applied by tamping it to the surface of the wheel by numerous blows with a small hammer.

IMPROVED GRAIN SEPARATOR.

Michael Laufenburg, San Francisco, Cal., assignor to Treadwell & Co., same place.—A fan blower throws a blast between two separate belts. The upper half of the carrier passes over and under guide rolls at different elevations, so that the straw is shaken repeatedly on the open work belt and the remaining grain caused to fall on a subjacent chute. From this chute the grain is dropped in front of another fan that detaches any dust, and thence into a shaking shoe. By this organization of mechanism the straw undergoes such a thorough sifting that no grain that has been loosened from the head can well be carried off to the stack.

IMPROVED TREADLE.

Henry Reese, Baltimore, Md.—The object of this invention is to lessen the fatigue of operating sewing machines and other devices run by treadle power, by means of a peculiar construction of treadle which prevents the movement of the latter to be made without bending the ankles, and enables the operator to run the machine with a very light expenditure of muscular power. This result is accomplished by a peculiar construction of two independent treadles, hinged or pivoted upon opposite sides of the fulcrum of the main treadle, held in proper horizontal position by means of springs, and arranged adjustably for either foot foremost.

IMPROVED RAILWAY SIGNAL.

Jacob D. Hughson, Prairie City, Ill.—This invention relates to a signal apparatus in which springs, or other analogous means of retracting the bell clapper or hammer, are dispensed with, and two clappers or hammers are so arranged and connected with other parts that they counterbalance each other, to a certain extent, and the rebound of either aids in producing the striking movement of the other: also whereby the signal is always repeated and the sound thus made practically continuous so long as a train is passing.

IMPROVED BALING PRESS.

Christopher C. Campbell, East Chatham, N. Y., and Henry W. King and Allan C. Smith, Caanan, N. Y.—This invention relates to certain improvements in perpetual baling presses, or presses in which the operations of packing the hay into the box and tying it into bales in the baling chamber are performed at the same time; and both followers are detachable, each being taken out successively at the end of the baling chamber and inserted successively in the packing box. The invention consists in the devices for packing the hay or other material in the packing box, which devices are also made to automatically withdraw the follower from the baling chamber and insert it in the packing chamber without handling.

NEW AGRICULTURAL INVENTIONS.

CUTTER BAR FOR REAPERS AND MOWERS.

Thomas Henderson, Black Horse, Md.—The object of this invention is to provide an improved means of attaching the knives of a reaper or mower to the reciprocating bar, whereby the said knives may be more conveniently and safely handled and more readily sharpened. It consists in attaching each alternate knife to a separate bar and then placing and fastening the two bars together so as to form a continuous saw-shaped or serrated cutting edge.

IMPROVED GRATED ENTRANCE TO BEEHIVES.

John S. Harbison, San Diego, Cal., assignor to himself and Andrew Harbison, Newcastle, Pa.—This invention consists of positive gaged passages, of sufficient thickness to permit the rounding of the corners, thereby enabling the bees to pass safely with their loads of pollen, while at the same time gagging the passages to the size of the worker bees. The object is to restrain either the queen or drones from leaving their respective apartments, either in the act of swarming or otherwise.

IMPROVED ROAD SCRAPER.

William H. Bowman, London, O.—A revolving scraper is pivoted to a handle frame, which has an independently swinging front ball that breaks, by a curved end at one side only, the connection of scraper and handles. This is done by pressing on a sliding spring rod and releasing the retaining latches of the scraper. The catches are jointly operated by their fulcrumed connecting lever rods, and lock into a notched casting at each corner of the scraper. The face plates of the handles are recessed to receive the sliding rods which operate the lower catches.

IMPROVED MILK AND CHEESE PAN.

Henry W. Horton, Binghamton, N. Y.—This pan is seated in another receptacle, into which steam is admitted for heating or water for cooling. The novel features are an overflow pipe having a detachable upper portion, to allow access to a series of inlets, through any one of which the water can be made to escape by plugging the passages below. The end pieces of the supporting frames are made in sections, so fitted together that any number of the sections can be put in to make them of any length required for pans of any width.

IMPROVED TOBACCO SUCKER GERM DESTROYER.

Joseph H. Knaus and John R. Harford, New Franklin, Mo.—In using the instrument, the fork of a bar is placed against the tobacco stalk, directly over the sucker germ, and is pressed against said stalk with sufficient force to force the forked bar upward and cause a cutter to project against said germ. A cross bar is then drawn upward with the fingers, which rotates the rod and cutter, and cuts out and destroys the germ, so that it will not grow again.

IMPROVED HAY RACK.

Joseph Hall, Riverside, Neb.—This invention consists of improvements in parts of the hay rack for which a patent was granted to the same inventor, May 1, 1875: said improvements being hook bolts instead of hooks, and other devices, the general end of which is to render the apparatus more substantial.

IMPROVED CHEESE TURNER.

Charles Barlow, Cookshire, Canada.—This invention allows the cheeses to be turned and greased without removing them from the shelves; and the general arrangement is such that each shelf may be readily brought into such position that the cheeses upon it may be conveniently reached.

IMPROVED GRAIN BAG.

Constantin Lazarevitch, Brooklyn, N. Y.—In this improved grain bag, the necessity of sewing up the mouth of the grain bag is obviated. A funnel-shaped part is formed above the mouth of the bag, the mouth being made narrower by closed shoulders on each side of the funnel. The funnel is reversed and forced into the grain, closing thereby the bag securely.

NEW TEXTILE MACHINERY.

IMPROVED FELTING MACHINE.

Jeremiah J. O'Sullivan, Brooklyn, N. Y.—By this invention the inventor claims to dispense with putting in layers, breaking down, stopping off, hardening off, tip-hardening, and all other handling usual in the old process of hat-hardening. The process is as follows: First, having raised the upper cone from the perforated cone, the hat body is placed over the latter. The upper cone being set in position, steam is admitted to the perforated cone. This heats and moistens the hat body; and while this is going on, the upper cone is given a rapid reciprocating motion. The cones, being perfectly true, will cause the whole hat to be finished with an evenness heretofore unable to be obtained.

NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.

IMPROVED VEHICLE TOP PROP BLOCK.

Andrew Butterfield, Huntsville, Ala., assignor to himself and I. McKibbin, of same place.—This inventor proposes a spring extension of the block up along the bow, and a cushion on the end for the bow to rest on, whereby the spring extension takes the strain off the bows when the top is down, and prevents them from springing and breaking. The top is also preserved, and has an easy and graceful vibrating motion.

BRACKET BAND FOR VEHICLE WHEELS.

John G. Lefter, Philadelphia, Pa.—The object of this invention is to provide a ready means for repairing the hubs of vehicle wheels by strengthening the connection between the hub and spokes. The invention may also be applied to advantage in new wheels for additional strength; and it consists in a bracket band, or a band which is made to encompass the hub, with bracket extension for each spoke provided with a screw eye or bolt hole, so that when the spoke is inserted in its socket and fastened by a bolt or screw to the bracket extension, it is securely held to the hub against all shrinkage, wear, and rattling.

NEW CHEMICAL AND MISCELLANEOUS INVENTIONS.

IMPROVED BAGGAGE CHECK.

John F. Wheeler and Henry A. De Haven, San Quentin, Cal.—In this improved baggage check a duplicate is taken off from and applied in an instant to the main check, and is carried about by the checker. The slotted main check is attached, by a belt and tag, to the trunk. A spring around the eye of the slot retains the tag, and serves also to lock the duplicate check that slides, by a projecting stud and fastening knob, in the slot of the main check.

IMPROVED LOCOMOTIVE HEAD LIGHT.

William P. Mills, Frank Bell, and James Carey, Jackson, Mich.—This invention consists of side openings through the reflector and the case of the ordinary head light, together with contrivances for setting in different glasses for train signals. Instead of the colored lanterns now specially used on trains for that purpose, and thus, by making the head light do the duty of the signal lanterns, save the cost and attendance of them. The inventor claims that the head light affords greater certainty, because it is less liable to go out; and if it does, it is where it will be noticed at once by the engineer, whereas the location of the lanterns used is such that they are not always in view, and at best they are more uncertain as to burning than the head lights are.

IMPROVED CAN-SEALING DEVICE.

Richard Wells, Baltimore, Md.—This invention relates to certain improvements in that class of devices for sealing cans, in which the air is first exhausted by mechanical means, and the can then hermetically sealed. It consists in a plug of metal or other suitable material, screw-threaded so as to be securely and permanently located in the cork stopper or cover of the can. The said plug is hollow, and is also screw-threaded upon its inner surface, into which an interior plug carrying an elastic stopper is secured. This interior plug is provided with side grooves for the escape of the air, and has a squared recess in its top to receive the end of a wrench or turning shaft, which passes through a detachable chamber having communication with the exhausting apparatus.

IMPROVED GUN WIPER.

Evander M. Gregg, Mars Bluff, Ky.—The invention relates to means for swabbing out a gun barrel so as to conveniently liberate the adhering matter on the inside, and consists in a piece of metal having at one end a socket, into which is screwed a bolt, between whose head and a flange are arranged a series of rubber disks with spaces and washers between them. The attachment has also at the upper end a socket in which is secured the small end of the ramrod. The disks can be expressed outwardly so as to form a larger circumference, by merely screwing up the bolt, while, by removing the latter, the disks and washers may both be changed.

IMPROVED LAMP EXTINGUISHER.

Charles J. Knapp, 45 Beekman street, New York city.—This is an ingenious and practical extinguisher for kerosene lamps, claimed to obviate the dangers that attend blowing out either up or down through the chimney. It is applicable to any of the burners now made, and appears to be an improvement of merit. Standards are applied to the narrow sides of the wick tube, and provided at the upper ends with pivoted caps that are operated to close over the wick tube, or are opened by a forked and weighted lever with cap connecting links. The caps, when closed above the wick tube, extinguish the flame.

IMPROVED BIRD CAGE.

Robert C. Breck, Bridgewater, Mass.—Two compartments are made in the cage to receive the food and water vessels. When the food or water is to be replenished, the outer door of the compartments is raised until caught and held by a catch. This leaves the inner door closed, and the outer side of the compartment open, so that the food or water can be put in or taken out, or the compartment cleaned, without any danger of the bird getting out. Triangular plates are pivoted at their angles to the bars of the cage at the upper and lower ends of an opening. The sides of the plates, adjacent to the pivoted angles, are connected by wires, and to the lower plate are attached pins to receive fruit or other articles for the bird to eat. This device may be turned out so that the pins will be without the cage, when fruit maybe placed upon them; and when the device is turned inward, the pins will be within the cage, so that the bird can conveniently reach them while standing upon the perch.

IMPROVED SPRING BALANCE FOR EXTENSION CHANDELIERS.

Lyman T. Lawton, West Meriden, Conn., assignor to himself, P. J. Clark, and Joseph Kintz, of same place.—This is a spring top in the bottom of the case of a spring drum, in combination with notches in the drum, and having a cord depending from it, all so contrived that the stop will be caused to engage the drum by its spring, to hold it so as to prevent a heavy chandelier from falling or a light one from rising. It can be readily pulled out of the notches by the cord, to allow of adjusting the chandelier.

IMPROVED BROOM-SEWING MACHINE.

Henry Behren, Columbus, Ohio.—In this machine the jaws may be readily thrown into position for sewing the different seams, and may be opened for taking out the work without requiring the troublesome changing of the pins of different lengths that have to be changed after each seam. To this end jaws are provided with pivoted pawls that lock into racks and notched plates at the sides of the machine.

IMPROVED GALLEY SUPPORTER.

William S. B. King, Brooklyn, E. D., N. Y.—This is an improved device for supporting a galley upon a compositor's case while correcting, so that access to all the type boxes is always free. An illustrated description of the invention will be found on page 402, volume XXXIII.

IMPROVED STUD AND BUTTON.

John B. Bennett and Walter Bennett, Halifax, N. S.—This stud has a head having a recess in its under side; a stem, provided with a pin attached to said head; and a back disk provided with a tube having a horizontal flange on its upper end, which enters the recess in the button head. The flange and tube are slotted for the reception of the pin on the stem, which serves to lock the two parts together.

IMPROVED OIL-BURNING STOVE.

Edwin G. Adams, Cohoes, N. Y.—This stove includes devices whereby oil is forced out of its reservoir and to the surface of water where it is burned. The dampers may be adjusted to leave any desired amount of fire surface.

IMPROVED CAROUSAL OR ROUNDABOUT.

Robert Steel, Philadelphia, Pa.—This is an improved device intended to take the place of the horse carousals or roundabouts now in use in parks and other places of amusement for children to ride upon. It consists in the combination of a rigged vessel with a revolving wheel and its driving mechanism, so that it travels over a cloth painted to represent waves.

IMPROVED HEAT INDICATOR FOR STOVES.

Alfred J. Jourde, St. Louis, Mo.—This invention relates to a thermometer attached to a stove for indicating the inside temperature of the same, so as to admit the proper regulation of the heat, produce a saving of fuel, and indicate also the proper heat for cooking and baking. The instrument is screwed, by a threaded tube of the graduated plate, back of the mercury, into a hole of the stove, and retained by projecting seats at suitable distance from the same.

IMPROVED COMB.

John T. O'Donoghue, New York city.—This is a comb, of metal or any suitable substance, having a hollow head, in which a heating iron of the handle is placed for heating the comb and keeping it warm while using it. By the use of a heated comb, the heat, it is claimed, draws the sap and oil from the scalp into the hair, and thus restores color, vitality, and vigor.

IMPROVED TRUNK.

William J. Large, Brooklyn, N. Y.—This is a new arrangement of two trays, which are so connected by hinges that the upper tray may be conveniently turned up to allow of access to the lower one. New devices are also provided for holding the trays in place.

IMPROVED ICE CREAM FREEZER.

Sylvain M. Gosson, Whistler, Ala.—This ice cream freezer will enable ice cream of any desired number of different flavors to be kept distinct and separate while being frozen. It combines several novelties in mechanical construction, the principal of which is a ring can divided into compartments, in which buckets holding the material to be frozen are placed.

MANUFACTURE OF ANTIQUE COLORED GLASS.

James Baker, New York city.—By this method of turning or spinning the fused glass of any color or tint into disk or oval shape, concentric streaks are formed around the bull's eye at the issuing orifice of the rod, while at the same time different shades are formed by the slightly diminishing thickness of the glass disk from the center toward the circumference. This admits of bringing a certain shading into the glass pieces employed. The peculiar concentric structure of the glass disk produces a brilliant sparkle and semi-transparent effect, which approaches the warm and effective coloring of antique glass, and furnishes thereby colored glass of superior quality for church windows and other ornamental purposes.

IMPROVED POCKET BOOK FASTENERS.

Daniel M. Read, New York city.—This inventor has patented two ingenious devices for securing the flaps of pocket books. The first comprises a spring-pressed sliding catch bar, a series of ratchet teeth formed on a slotted base plate, and a catch pin engaging with the ratchet teeth. The book may by this be drawn snugly together without withdrawing the catch from the lock; and the outer surface of the lock appears entirely smooth, and without any projecting knob or handle. The second device consists essentially in the provision of a pivoted spring pressed cap or catch retaining plate, which is extended in rear of its pivot, so that it can be operated by the thumb or finger to release the catch on the flap from the fastener on the body of the pocket book. With this construction, the fastener may be unfastened with gloved hands without inconvenience, and without injuring the gloves.

IMPROVED MINERS' LAMP.

James C. Marshall, Girardville, Pa.—This invention consists of a spring, in combination with the hook by which the lamp is hooked to the hat. The spring holds a fold of the hat between it and the hook, and thus sustains the lamp when the miner is at work.

IMPROVED SYRINGE.

Charles E. Koechling, New York city.—This syringe is provided with a conical stopper of elastic material back of the nozzle, adapted and fitted for insertion in a bottle, so that it may be directly filled from the latter.