

NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.

IMPROVED BENCH PLANE.

Jackson Gorham, Crawfordville, Ga., assignor to himself and Charles E. Smith, of same place.—This invention consists of a stud applied on the top of a smoothing plane stock near the heel, and adapted to fit between the thumb and forefinger of the right hand, while the palm bears against the heel of the stock, whereby the pressure of the hand is distributed over a larger surface, and is thus diminished on the small area heretofore employed for driving the plane by pressing against the heel of the stock. It also affords a bearing or rest for a part of the hand not heretofore having any support on the stock, and therefore making the work easier.

IMPROVED LATH MACHINE.

Edmund H. Hancock, Augusta, Ga.—The invention consists in placing edge-serrated planes in advance of a saw, to cut grooves, in attaching the upper grooving plane to a pivoted shoe provided with a handle, and in combining collared rolls with spiral feed rolls having a right-angled groove next to the collars. The sides of the grooves of the rollers, next to the guide collars, are cut at right angles to the axis of the collars, the taper being all on the other sides, whereby they draw towards the collars better than if beveled alike on both sides. Guard fingers prevent the saws from throwing sticks back against the attendant, which is a common occurrence in gang saw machines, particularly when the saws are out of order: these fingers are pivoted to the frame over the way where the stuff passes, and rest on the stuff in such manner that the friction of a piece of lath or other object pushing back under them causes them to bind it fast and thus stop it.

IMPROVED BRAKE FOR LIGHT VEHICLES.

Charles H. Appel and Joseph S. Rothenberger, Shimerville, Pa.—This improved brake has all of its parts connected with the shafts and front axle, so that the springs are subjected to no strain when the brake is operated, and the arrangement of the parts such that they are out of the way and not liable to be bent or broken from contact with any object. In applying the brakes there is no strain upon the springs, as there must necessarily be when the brake is attached to or connected with the body of the vehicle.

IMPROVED SAW SET.

Christopher Heinen, Fort Laramie, Wyoming Ter.—In this saw set a number of teeth may be set in opposite direction at one operation of the device, and the same be adapted to set any kind of saw by inserting the dies fitted to the saw. The invention consists of a lower base part and a swinging lever part, with removable dies, gage piece, and regulating screw. The saw is set into the dies from right to left, and the lever then brought down to set the teeth. The person operating the set stands in front of the same, adjusts the saw, and brings the lever down without changing his position, setting the teeth thereby directly at one operation, in opposite direction, without reversing the saw or saw set.

IMPROVED ELEVATOR.

John G. Kurtz, Milton, Pa.—This is an improved elevator for use by carpenters, masons, and painters, for raising their materials and themselves upon buildings, in stores, hotels, and other buildings, and by firemen and others; and it consists in a standard made in sections, and provided with a T groove, the jointed rack bar, and the gear wheel, in combination with each other and the frame, and a mechanism for turning the said gear wheel; in the combination of the springs, the pins, and the cam levers, whether the second set of springs be used or not, with the hinged ends of the sections of the standards; in the combination of the bar, the arm, and a platform, gallery, or cage with grooved standard, and with the jointed rack bar and the gear wheel; and in the combination of the spool and the coiled spring with the jointed rack bar.

IMPROVED DUST GUARD FOR CARS.

William Carr, New York city.—The inventor's object is to furnish for the traveling public a portable dust guard for railroad cars, which may be readily attached to the window of a car so as to prevent the annoyance by cinders, while it also may be used as a fan and readily folded up after use, for being carried in the pocket. The invention consists of a guard made of a number of folding pieces or strips, that are rigidly connected by a clamp piece, pivoted to one strip and fitting over the ends, which folds with the strips when released. When the dust guard is detached, it may be used as a fan, and finally be folded into narrow compass, for being carried in the pocket, by releasing the clamp piece from the ends and folding it alongside of the strips. The strips may also be made available for advertisements, so that the dust guard may be used as a convenient advertising medium for the traveling public.

IMPROVED PRIVY SEAT.

Peter D. Howard and Matt. Allard, La Porte, Iowa.—Should a person attempt to stand upon this seat, to use the privy, the seat will tilt, and thus the seat will always be kept clean.

IMPROVED WAGON BRAKE.

Frank Funk, Beverly, Ill.—This invention consists of a lever connected with a fulcrum bar and brake rod, all so arranged that the power is gradually increased, as the brake is pulled by the brake rod connected with it against the wheel. The propelling lever is provided with a longitudinal projection or detent to lock the brake by engaging with a rack bar attached to the side of the wagon.

IMPROVED CHIMNEY COWL.

Jacob M. Davies, Enon Valley, Pa.—This invention consists of a pipe elbow, fitted to turn on a spindle on the top of the chimney, constructed with that portion through which the smoke escapes in a form calculated to be equally as efficient as the hood or funnel commonly used to facilitate the discharge of the smoke, and to be less liable to catch the wind, when contrary and shifting gusts prevail, and conduct it down the chimney into the room, which is so common with the ordinary cowls.

NEW AGRICULTURAL INVENTIONS.

IMPROVED ANIMAL TRAP.

Jacob W. Wilson, Summerford, Ohio.—This trap is so constructed as to close when the animal enters the first compartment, to prevent his escape, and set itself when the animal enters the second compartment or cage. The invention is formed by the combination of the swinging gates, the cranks, the connecting rods, the weighted platforms, and the bent arm with the box of the trap and with the gate hung in the opening through the partition of said box.

IMPROVED POTATO DIGGER.

Edward Bartlett, Renfrew, Ontario, Canada.—This invention consists of arrangements of colters for cutting along the sides of the row of potatoes, a scoop for digging them up, a revolving spout or reservoir for separating them from the earth, beaters for preventing the clogging of vines and wood on the scoop, a contrivance of the separators for discharging the potatoes into a spout, apparatus for separating and discharging the vines and weeds, and a discharging apparatus for removing the filled boxes which receive the potatoes from the spout, also supporting, operating and adjusting devices.

IMPROVED WEANING BIT FOR ANIMALS.

George W. Ingersoll and Harvey L. Fisher, Toledo, Iowa, assignors to Jacob L. Neff and Henry Giebert, of same place.—This is an improved weaning or anti-suction bit for calves, by which the animal is prevented from sucking, and no incumbrance caused to the same in eating and drinking. The invention consists of an outer hollow tube with air holes at the central part, and open ends with an interior revolving tube with central air holes and open weighted ends. The air holes are not liable to get clogged, so as to exclude the air and supply the air at every attempt at sucking, thereby preventing it and weaning the animal. When the animal holds its head in a downward position for eating and drinking, the inner tube is turned by the weights, and the air supply interrupted as the connection of holes of the inner and outer tubes is discontinued. This automatic interruption of the air supply of the bit forms the main feature of the invention, as thereby not the slightest inconvenience to the animal in drinking is produced, and the same is not compelled to put its whole nose into the water to exclude the air, which forms a serious objection to the bits at present in use. The friction of the inner and outer tubes prevents the clogging of the air holes, and secures, in connection with the weighted tube, the reliable working of the bit, namely the opening of the air supply holes to prevent sucking, and the closing of the same during eating and drinking.

IMPROVED HARROW.

Jackson De Moss, Noblesville, Ind.—This invention is a harrow or pulverizer, which is claimed to thoroughly pulverize the ground and adjust itself to an irregular surface, so that it will level down a ridge or fill up a dead furrow with equal effectiveness, which may be easily cleared of rubbish, raised to pass an obstruction, and may be easily loaded upon and unloaded from a vehicle for transporting it from place to place. By removing the teeth from the central beam the harrow may be used for cultivating small corn, or other small plants planted in rows, loosening the soil upon both sides of the row at the same time; and by removing a pin from a hook, the harrow will come apart, and may be easily loaded upon a vehicle.

IMPROVED WAGON COVER.

Charles Cremer, Red Bluff, Cal.—This is an improved cover for the boxes of wagons, cars, and other vehicles for transporting swine, calves, sheep, fowls, etc., constructed so as to allow the air to have free passage to the animals, while confining them securely. The invention consists in the combination of the net, the four rods, the connecting snap hooks and rings, and the holding snap hooks, with the body or box of a wagon, car, or other vehicle. By this construction the animals are securely confined, and at the same time have the benefit of a free circulation of air. The rear end board of the box may be removed to allow some of the animals to be taken out or others put in, while guarding against the escape of any.

IMPROVED SULKY PLOW.

Alexander Hamilton, Harrisburg, Ark.—This sulky plow is constructed that the plows may be readily raised from the ground, drawn back from an obstruction, and adjusted to work any desired depth in the ground.

IMPROVED PLOW STOCK.

James A. Price, Houston, Tex.—This improved plow stock is so constructed that any kind of a plow and standard may be applied to it, according to the kind of plowing to be done. Each plow is designed to be attached to its own standard.

IMPROVED GATE.

Uriah W. Hardy, Albion, Ill.—This is an improved farm gate that may be readily opened and closed by a person on horseback, and from the seat of a vehicle. Fulcrumed levers that extend alongside of the road operate, by rods, bars, cords, or chains, a folding or weighting gate. A separately pivoted latch piece at the upper part of the gate locks into the recessed post when the gate is lowered.

IMPROVED MILK COOLER.

Thomas Sexsmith, Oneonta, N. Y.—This consists of an elevated cooling compartment in the bottom of the pan which holds the milk, into which the cooling medium is delivered by an inlet pipe, so arranged that the said medium is discharged directly upward from the mouth of the pipe against the shell of the compartment. The discharge passage leads out from the bottom of said compartment, to which the warmer part is forced by the incoming part being discharged between it and the shell of the compartment. The invention also consists of a contrivance for mounting the pans on their supporting stools, so that they can be readily leveled up in case the stools are not level.

IMPROVED GRAIN SEPARATOR.

Thomas C. Jory and John W. Jory, Salem, Oregon.—This separator is designed especially for cleaning wheat, but will, by proper adjustment, separate oats from wild oats. It involves in construction the following four principal features: First, a regulating and distributing feeder, by which the same amount of grain flows from the hopper at each turn of the crank, and is evenly distributed over the entire surface of the cleaning apparatus; second, an arrangement by which cockle and other small seeds are separated from wheat, the same being a revolving cylindrical screen, through which, as it revolves, the grain is conveyed by a spiral flange closely fitted to its inner surface throughout its entire length, and a plain hollow cylinder of sheet iron, surrounding the screen and concentric with it, and having a flange working in the opposite direction to receive and discharge the seeds, small grain, etc., at the opposite end. Thus the wheat flows from one end of the revolving cylinder, and the small seeds from the other, and both may be collected in proper receptacles. Third, an arrangement for keeping the screening apparatus clean by a vertical shake communicated to it (as is also its rotary motion) by cam wheels revolving under each end of the screen. Fourth, the carrier is kept free from wild oats, etc., by means of stirrup-shaped knockers, which strikes a quick, light stroke on the under surface of the carrier at each descent of the screen, from which it takes its motion.

NEW HOUSEHOLD INVENTIONS.

IMPROVED FOLDING CHAIR.

Adile Mattheissen, Cornwall on the Hudson, N. Y.—This chair has a back piece, to which are hinged the seat and arms. The front legs are hinged to the seat, and a brace is pivoted to the back legs in such a way as to be capable of holding the various parts in their places. The principal object of this invention is to furnish a convenient nursery chair, which can be folded and placed in a trunk.

IMPROVED DESK.

Charles A. Atkinson, New York city.—This consists in a desk made in sections, so constructed that they may be connected and disconnected at will; and in the combination with the main desk, of one or more side sections or wings, so constructed and hinged that they may be closed against the sides of the said main desk, moved forward to expose their contents, and swung back out of the way while still exposing their contents.

IMPROVED COMBINED DISH AND CLOTHES WASHER.

Asberry C. Jackson, Orange, Texas.—This is a detachable clothes washing attachment for a sink, and a tilting shelf, upon which dishes may be placed for draining off the water into the sink. The wash pan and the draining shelf are surrounded on the sides and top by a cabinet case, which is located in this relation thereto for convenience in storing away the dishes.

IMPROVED FOLDING CHAIR.

Frank F. Parker, Gardner, Mass.—This consists of a folding chair made of a back section, that is pivoted by its recessed ends to fixed projecting pins of the swinging rear leg section, while the front leg section is extended above the seat pivoted to the back, and hinged by a lateral cross piece to staples of the rear leg.

IMPROVED APPARATUS FOR AUTOMATICALLY LIGHTING AND EXTINGUISHING GAS.

Asahel P. Bell, Manchester, and Thomas Thorp, Whitefield, England.—In this invention, a metal cap is secured to the gas main, and wool or other fibrous material acts as a filter for the gas. A receptacle, made of earthenware or other suitable material, contains mercury. The gas from the main passes into the receptacle through vertical holes, all of which may be left open, or some may be closed according to the differences of pressure in the gas main. A center piece, in a recess in the receptacle, contains a chamber for mercury, and this chamber has an orifice, above which is a hollow cylinder, and a second orifice, in which the burner for the flaring jet is fixed. At the lower side is a pipe mouth valve, through which the gas passes into a tube provided with an ordinary burner. A hollow cylinder is fixed to a metal shell suspended to the burner by wire, and a loop of platinum wire, connected thereto, is carried over the burner. When the gas is at its maximum pressure, it depresses the mercury in the center compartment of the receptacle, thereby uncovering a valve and allowing the gas to enter the tube. A small portion of it passes through an aperture to a small interior burner, and this portion of gas is then ignited by the jet and a second platinum wire. The flaring jet from the small principal burner then ignites the gas issuing from the burner. When the cylinder is heated by the wire passing through the flame, the inclosed air expands and expels the mercury, which falls into the chamber and closes the aperture and shuts off the gas.

IMPROVED EXTENSION BEDSTEAD.

Rudolf Rigl, Döbling, Austria, assignor to Franz Xaver Katzmayer, Vienna, Austria.—This invention is an iron sofa bed, for hotels, boarding houses, etc., that may be readily changed from a sofa to a single bed, or to two connected beds, or to two entirely detached beds, as desired, the whole forming a strong, compact, and convenient sofa bed for various purposes. When the sofa covering is taken off, a telescoping section may be used as a single bed. When it is desired to make two separate beds, the sliding action is taken out of the frame, and a foot support clamped or otherwise attached to the end section that has been taken out of the main frame. The sliding section forms thereby a separate bed, which may be put up in a different room from the main frame, to be replaced at any time by detaching the end support and sliding the bed section back into the main frame, storing the whole in convenient manner below the covering, and allowing the use of the bed as a sofa.

IMPROVED COMBINED STOVE PIPE THIMBLE AND REGISTER.

Charles Pettit, Erieville, N. Y., assignor to himself and Levi P. Greenwood.—This invention consists of a large tube extending through the ceiling and floor, and having a top and bottom plate, through the center of which the pipe passes in a center tube, which is surrounded by a larger tube and a dead air space, or a lining of non-combustible material, to confine the heat, so as to prevent the heating of the floor through the outer tube. The top and bottom plates are provided with openings to allow the air to pass for ventilating and for heating, and one is provided with a register.

IMPROVED SEWER GAS TRAP.

John M. Falk, New York city.—This invention consists of a trap, similar in form to the ordinary trap, or of any other approved form, except that it is preferably larger, and located near the sewer, from the upper end of which is an escape pipe for the gas that may work through the trap, and with or without another trap above the escape pipe to check the gas escaping through the first trap and cause it to escape through the pipe provided for it, which pipe may discharge in any convenient place, such as the gutter or the chimney of the house.

IMPROVED SUMMER STOVE.

Charles H. Chase, Newport, R. I.—In this invention, a fire pot, of any suitable form or construction, large enough to cover the pot hole of an ordinary stove, is made flat on the top, and has an opening therein, in which a cooking pot may be set, and which may be closed by the cover removed from the pot hole of the ordinary stove on which the stove is set. The smoke passes through a damper into a diving flue to escape into the large stove, so that the flue of the latter serves for the flue of the summer stove. An oven may be used in connection with this stove for baking. It is detachably set on the top of the stove, and has a flue passing around it from the opening through its bottom, where the smoke enters, to another opening, where it escapes into the diving flue and passes off as when the oven is not used, the damper being closed when the oven is used.

IMPROVED STEAM WASHER.

Cyrus C. Carter, Neeleyville, Ill.—This invention is claimed to be so constructed as to enable the clothes to be washed evenly and thoroughly, with much less fuel and in much less time than when they are washed in the ordinary way. It consists in an improved steam washer, formed of the flat base or bottom, the inclined sides, the V-shaped concave top, the rounded and inclined ends, and the vertical plates, and provided with the holes to adapt it for use. In using the steamer, water is put into it and heated. The steamer is then placed in the boiler, the clothes are put around and over it, and in a few minutes the clothes will be thoroughly and evenly cleaned, and may be wrung out to dry, the peculiar form of the steamer causing the steam to pass through all parts of the said clothes.

IMPROVED WASHING MACHINE.

John Zeller, Stouchsburg, Pa.—This machine is so constructed as to rub the clothes in a manner analogous to hand rubbing, will enable soiled parts to be rubbed longer than the cleaner parts, and will not injure the clothes.

IMPROVED FRUIT AND JELLY MASHER AND STRAINER.

Adolph Conrady, Cincinnati, Ohio.—This consists in a metal cup with perforated sides, in which is a press follower, with a screw for working it. The screw is mounted in a cross-tree, detachably connected to the top of the cup, so as to be readily attached and detached, to facilitate the application and removal of the follower for filling and clearing out the cup.

IMPROVED COOKING STOVE.

John C. McClamroch, Edina, Mo.—This relates to an ash box located below the perforated bottom of the ash pit, and provided with a register in its side to admit air, so that the ash box may be utilized as a fire box.