Recent American and Foreign Patents.

Improved Die for Making Hollow Rings.

Shubael Cottle, New York city, assignor to Mulford, Hale and Cottle, of same place.—This invention has for its object to produce circular and oval hollow rings from a disk of sheet metal, and without any cross seam, for use in manufacturing chains, buttons, studs, and other articles of jewelry. The operation is accomplished by an ingenious series of dies and cutting tools, which force the metal by degrees into the proper shape.

Improved Barbed Stock Fence.

Francis T. Wilson, Ames, Iowa, assignor to himself and E. J. Bartlett, of same place.—This invention consists of barbs combined with the longitudinal rods of a fence, to prevent cattle from rubbing and pressing the rods apart or down to pass the fence. The said barbs consist of short pointed pieces of wire inserted in an eye in the rod, crossing each other, and secured by a staple, so as to point in four directions, and be securely held when the rod is strained up tight.

Improved Saw Sharpener.

Joan Crook and James A. Crook, Augusta, Ohio.—This invention consists of emery wheels adapted for dressing both sides of the teeth and gumming the saw, together with driving gear and adjusting devices, and a spring clamp mounted on a radius bar contrived to be contemporarily attached to the collar of a circular saw, all so arranged that the wheels can be readily applied to the teeth, so as to dress them all alike and do the work expeditiously.

Improved Seed Planter.

William C. Reynolds, Collierstown, Va.—This invention consists in a false bottom, for seeder hoppers, provided with subjacent support and side apertures, designed to relieve the slide from the weight of the seed, and so remove the liability of the aperture to become clogged.

Improved Bandage Winder.

Alfred M. Cone, Corry, Pa., assignor to himself and L. D. Parsons, of same place.—A spindle, made square in cross section, passes through the upper end of a frame and has upon its end a crank, by means of which it is revolved. The bandage is wound around this spindle by revolving the spindle rod. A rod is attached to the frame, and is soldered to the end of the arm, so as to leave a narrow space between the rod and the arm. The cloth or bandage is passed through this space and carried to and around the spindle with any degree of tightness by bearing lightly with the hand upon it below the space or rod. When the bandage has been wound on the spindle, it is readily slipped off.

Improved Steam Condenser.

Edwin O. Brinckerhoff, New York city.—Two steam and watertight cases are placed the one within the other. A space is left between the tops, bottoms, and sides of the said cases. A double-acting pump discharges into two U pipes. The upper end of one of the U pipes and the lower end of the other pass through the side wall of the outer case, and discharge the cold water into the space between the case, whence it escapes continuously through the waste pipe. The upper end of the other U pipe passes through the walls of both the cases, and is connected with the upper end of a coiled pipe, placed within the inner case, and the lower end of which is connected with the steam and watertight box upon which the coil stands. The lower end of the other U pipe passes through the walls of both the cases and enters the box, so as to discharge a stream of cold water directly into the said box. The exhaust steam pipe passes in through the tops of the cases, and discharges the exhaust steam into the upper part of the inner case, where it is immediately condensed by the streams of cold water passing continuously through the space between the cases.

Improved Top Joint for Vehicles.

Thomas F. Darcy, New York city.—This top can be readily raised and lowered by the occupant while sitting in his place on the seat. The knuckle joints of the braces are made so as to fold forward or toward the pivots of the bows, instead of backward, as heretofore, and are attached to a shaft at the lower end, having a spring applied to it, so as to raise and hold the top up. The lever, to press it down, is provided with a lock catch to hold the top down, or in any intermediate position. It is also arranged to lie down on the cushion out of the way when the top is down, and to stand up alongside of the back when the top is up.

Improved Feed Roller for Planing Machines.

Samuel N. Brown and Henry W. Meyer, Dayton, Ohio.—This invention consists of a feed or pressure roller for planing machines, made of an interior cushioning sleeve of elastic material placed firmly upon the shaft, and covered by a series of outer metallic rings.

Improved Resawing Machine.

John Gerhardt, Montreal, Canada, assignor to himself and James Hutchinson, of same place.—This is a simple self-contained gang resawing machine, which can be readily moved about and set up anywhere. It is self-sustaining, requiring no fixtures or fastenings other than its own supports, which consist of a strong horizontal frame of suitable hight, length, and breadth for a resawing machine, on which is the usual upright frame for the saw gate, also the driving machinery, and the feeding and regulating apparatus.

Improved Bench Vise.

Carloss Burton, New Baltimore, Ohio.—The stationary jaw of the vise is made angular to overlap a portion of the end and top of the bench. Upon the plate are cast arms, which are let into the top of the bench, and the ends of which are widened to give them a firm hold upon the said top. The movable jaw of the vise is placed in a horizontal position. To the rear part of the movable jaw are attached two rods, which pass through the stationary jaw, and which keep the movable jaw always parallel to the stationary jaw, or nearly so. The work, when long, is clamped between and held by dogs, one of which is inserted in a hole in the movable jaw, and the other is inserted in one or the other of the holes formed to receive it in the top of the bench.

Improved Railway Tie.

Samuel L. Porter and Duane Peck, Rochelle, Ill.—The bed pieces are of cast iron, with flat top part and flaring supporting sides, that rest upon the gravel, tamped firmly below them. The bed pieces are of equal size, forming a broad and solid base for the rails. Diagonally crossing braces connect the bed pieces across the track, and interlock with short side extensions of the bed pieces below the rails. Other devices secure the rigid and strong lateral connection of the bed pieces. The rails are secured on the flat top of the bed pieces by longitudinal guide flanges. This mode of fastening the rails, together with the rigid support of the bed pieces, prevents effectually the well known moving of the track in endwise direction for certain distance.

Improved Propelling Wheel for Canal Boats.

Gustav Heydrich, New Ulm, Minn.—This wheel is rotated in a central wheel box of the boat, and is provided with hollow sleeves that extend radially from the hub and guide sliding propelling arms. Said arms are released from the pressure of spring levers acting thereon, by an arc-shaped side flange of the wheel casing, so that they engage the bottom of the canal and propel the boat.

Improved Hair Cutters' Gage.

Alexander G. Wilkins, Meadville, Pa.—This invention consists of a slotted gage, composed of parallel ribs, which are bent of one piece to form a point, heel, and top part, the heel and point fitting the convexity of the head, while the curved or bent ribs guide the head and hold it in position for the cutting action of the shears supported on the upper or top part of the gage. The handle is attached to the rear ends of the ribs, and provided with adjusting devices, by which the ribs may be set nearer together or farther apart, for cutting the hair to any required length.

Improved Seed Planter.

John G. Garner, Pittsburgh, Texas.—In this seed planter, the dropping disks are mounted loosely on a driving axle, so as to be shifted thereon, and interchangeable hoppers are provided, adapted for one or both disks, respectively.

Improved Brick Kiln.

William Bull, Ewell, England.—The kiln may be of any continuous form. At the bottom of each wall, openings are left at intervals of three feet. The floor is built between the parallel walls of the kiln, and the openings are carried across the whole width through the flooring, and covered in with bricks. A few inches above each ash flue, a firing flue is left for the insertion of the fuel. The bricks to be burnt are set close together in walls, one brick's length in thickness, parallel to the kiln walls. Between the walls of green bricks and the kiln walls, spaces are left for draft passages. Opposite each firing flue an opening is left in the walls of green bricks, the whole taken together forming a combustion chamber for the fuel, which is inserted through the firing flues. These walls of green bricks are carried up to within about a foot of the top of the kiln. The whole is then covered over with a layer of bricks, flat, on which is spread a layer of ashes. At intervals of forty feet, a width of about eighteen inches of the brick flat is open, over which, when required, a movable chimney on wheels, extending the entire width of the kiln and with outlets, may be placed as an escape flue for the steam and waste products of combustion.

Improved Truss Bridge.

John B. Winters, Attica, Mich.—This invention consists, essentially, of plates and rods for coupling the stress and sway braces to the chords; also, plates for coupling the chords to the caps. The construction is very simple, and the arrangement of the plates allows of fitting in the braces with but little labor.

Improved Screw-Threading Device.

Charles W. Roberts, Cohoes, N. Y., assignor to Norman W. Frost, same place.—The vise plate is made adjustable on the bed. The lower jaw is stationary, and made in two parts, connected together. The upper jaw is fastened to the sliding block, which is attached to the vise screw. This jaw works down between the two parts of the lower jaw. Each of the jaws has a V-shaped opening, the sides of the V being serrated so as to effectually hold the tube within the angular openings, and keep it from turning. The hub of the die wheel works on a stationary screw block as the wheel is turned, and draws the dies on the tube. The tube is held stationary in the jaws of the vise, and the feed block is held stationary on the tube by a set screw. Suitable adjustment adapts the machine to different sized tubes.

Improved Lamp Burner.

John Gleason, Brooklyn, N. Y.—This invention has for its object to prevent the upper part of a lamp from being heated by the burner, and thus guard against explosion, and at the same time produce a better light. The invention consists in a safety extension collar, formed of the double walled body, having its outer wall finely perforated and a single hole in its inner wall. It is provided at its ends with collars to adapt it to be interposed between the burner and collar of a lamp. The hole in the inner wall of the extension collar also allows any explosive gas that may be formed in the lamp to escape, thus further guarding against explosions. It is made so as to go on all lamps, from the largest to the smallest, and is particularly adapted for gas fixtures, and intended to take the place of gas in stores, as any kind of illuminating oil or liquid gas can be burned with perfect safety, with or without chimneys. A sample burner will be forwarded on receipt of fifty cents, on application to the inventor, at 390 Hicks street, Brooklyn, N. Y.

Improved Garter.

Lucius F. McDonald, Belfast, Me.—A short piece of elastic webbing is looped around a metallic loop, and its ends are secured to each other and to a buckle by a metal plate, which is looped around the tongue bar of the buckle, and has a short slot for the passage of the tongue of said buckle. Around the metal ring is also passed a light sheet metal plate, the ends of which are bent together, and receive between them the end of the leather strap. Upon the side edges of the plate are formed lips, which are bent down upon the upper end of the said plate. The ends of the plate and the lips are pressed down upon the end of the strap, and are further secured in place by punching.

Improved Dumping Car.

John E. Bemis, Chicago, Ill.—The object of this invention is to so improve the platform dumping car which was patented to same inventor under date of May 5, 1874, that the mode of throwing the tilting platform in and out of gear with the trucks is simplified, and the dumping and discharging of the load facilitated. The motion of the cars, by means of a slight backing of the locomotive, tilts the platform and dumps the load on the same, in the manner set forth in the aforesaid patent. After the load is discharged the platform tilts back on the trucks, and is carried into regular position by the forward motion of the locomotive.

Improved Device for Filling Bags.

Junior D. Platt, Plattsville, Ill.—The stand is made adjustable by means of a screw clamp, to which it is attached, so as to be placed in any convenient position on the counter or shelf. A pivot pin in the lower end of the stand passes through the clamp, and allows the stand to be turned in either direction, as may be required. This stand is curved in its upper part, and its upper end has a flaring horizontal band, which receives and supports a funnel.

Improved Harrow and Planter.

Beauman Butler, St. Johnsbury Center, Vt.—The cross bars are armed with harrow teeth and cultivator or drill teeth, according to the kind of work to be done. There are also scraper bars, and a tongue roller extending across from one to the other of the runners. The front scraper is arranged vertically on pivots, and is armed with a metal plate at the front. There is also a foot lever, extending backward and resting on the first cross bar, to be pressed down by the driver to hold the scraper to its work, its office being to crush the clods and otherwise smooth the surface in advance of the teeth. The scraper may be used in rear of the harrow teeth, and provided with a suitably arranged lever for operating it. The hind scraper is a broad plank, armed with a metal plate, and arranged obliquely to the surface, the front edge being the highest, to run over and press down the lumps smoothly. It is also arranged on pivots at the upper edge to adjust the bearing portion higher or lower, as required, and it is provided with adjusting holders.

Improved Bird Cage Attachment.

George Fliedner, Portland, Oregon.—This is a crib for cages, for holding pieces of cake, apple, sugar, and the various articles which are usually placed between the wires of cages, and consequently not securely confined.

Improved Butter Worker.

Joseph Thompson, Albany, Wis.—In using the machine the butter to be worked is placed in the box between a grate and one of the followers. The cover is then closed, and a lever is operated, moving the followers back and forth through the box, and forcing the butter back and forth through the grate, working it thoroughly and bringing it to a uniform color in a very short time.

Improved Friction Drum.

Joseph S. Mundy, Newark, N. J.—This invention relates to improvements in friction drums for pile drivers and hoisting machines, and consists in the construction of the friction pulleys, and in the mechanism at the other end of the drum, by means of which the drum is made to take more or less friction, as may be required.

Improved King Bolt Bearing.

Gilbert J. Orr, New York city.—This is a bush in the axle hole for the king bolt, to take the wear to which the axle itself is subject without it, and be removed for the substitution of a new one when too much worn, to save the loss of the axle. It also consists of a nut for fastening the bush in the axle, and an inverted cup screwing on this nut to form a cup around the bolt above the axle, to contain absorbent material to be saturated with lubricating material.

Improved Toy Gun.

Wilhelm Wiedemann and Lewis Lindsey, Lawrence, Kan.—The barrel is formed of two parts, with a narrow open slit between them. The projectile is impelled by means of an elastic cord passed through the barrel, and its ends attached to a wire crosshead, which latter passes through the long slit. The wire crosshead also passes through a catch block, which, when drawn back, catches over the point of a tumbler, which latter is held in position by a trigger and spring. When the trigger is pulled the tumbler is released, the catch block slips from its end, and away goes the crosshead with the projectile before it.

Improved Fruit Picker.

Benjamin F. Price, Mount Sterling, Ill., assignor to himself and A. A. Hill, of same place.—The invention consists of jaws pivoted to each other, made the one with a double concave edge and the other with a single concave edge, and provided with rubber springs, in combination with a flexible tube, staff, and operating cord. The jaws can be drawn together to cut the stems of the fruit by pulling upon the said cord.

Improved Tag.

Cevedra B. Sheldon, New York city.—This invention consists in attaching the card to the twine by folding the corners of the card over the ends of the twine, at an obtuse angle to the parallel sides of the same, and fastening the said corners, with the inclosed ends of twine, with suitable adhesive matter.

Improved Shoe.

George D. Hill, Baltimore, Md.—The invention consists in first sewing together the ordinary in and out soles by a seam at the heel, and then sewing them, together with an extra insole, by an independent sole seam.

Improved Sash Fastener.

John Berndt, Denver, Col.—The invention relates to an upper and lower sash connected by a cord so as to be clamped and held at different elevations, and consists in bringing down the cord through a vertical hole in the top of the lower sash and partly through a munnion thereof, the pulley being arranged within a slot, and the clamp attached to the surface of the munnion.

Improved Curtain Fixture.

George C. Mathers, Louisville, Ky.—This invention relates to certain improvements in curtain fixtures, and it consists in the combination with a notched disk journaled in a slotted bearing, of a stationary detent, an endless cord, and two small friction wheels, the said wheels being arranged to one side of the disk, and the said cord passing around the same in such a manner as to form a laterally drawing loop, which, when a draft is exerted upon the cord, brings the disk away from the detent, and the journal of the disk in a portion of the slotted bearing where it is free to revolve.

Improved Wedge.

Charles McDermott, Oakland Station, Ark.—This invention is a wedge constructed with a chamber or cavity. The head and inclined sides of the wedge are formed, preferably, of a single plate of wrought metal, and the straight or parallel sides of triangular plates, the same being welded firmly together. The wedge is hence cheaper, lighter, and more convenient to handle or transport than the ordinary solid wedge. It may be also driven with greater ease, by reason of its inertia being more readily overcome by the blow of the maul.

Improved Wagon.

Jacob Becker, Jr., Seymour, Ind.—The invention consists in a very novel simple construction of wagon brake, whereby the holding back of the horses automatically applies the brake, while the tongue may be locked by a slide so as not to apply the brake. It also consists in a new mode of coupling the reach, in pivoting the doubletree, and in preventing the bolster from rocking.

Improved Wheel Plow.

Peterson Prawl and Francis H. Wemple, Waverly, Ill.—Both the transporting wheels run in the bottoms of furrows, so as to have smooth and level paths, and thus cause the plow to run true and steady. There is a pivoting connection between the axle and the beam, to enable the plow to be turned in smaller space than would otherwise be possible. The axle may be turned by turning an arm through the medium of a lever, to which is attached a lever pawl, the engaging end of which takes hold of the teeth in a curved bar. To move a small wheel down to support the machine in a level position while being turned, the pawl is released from the notched bar, and the lever is moved forward until the lower side of the small wheel is in the same horizontal plane with the lower side of the large wheel.

Improved Cotton Auger.

Albert O. Schultz, Memphis, Tenn.—This invention consists of a cotton auger with upper and tapering blade, and intermediate upward-inclined teeth, being provided with symmetrically fluted sides for reducing the cross section, and giving thinner and more pointed teeth and blades.

Improved Hand Fire Engine.

Henry Neumeyer, Millerstown, Pa.—This consists of a tank and three, more or less, single-acting force pumps combined so as to throw a single and continuous stream of water from a hose pipe. The cranks are so constructed that, while connected with the shaft, they may be slipped from the ends thereof and turned round into the tank, so as to be out of the way when they are not in use.

Improved Cotton Seed Planter.

Benjamin F. Miller and William J. Reeves, Gatesville, Tex., assignors of one half their right to James M. Morris and Edward A Jones.—The teeth are attached to a shaft which revolves in bearings in the sides of the hopper, in such positions that the teeth may project through a slot in the bottom of the hopper, so as to force the cotton seeds out through said slot. To a sliding rod within the hopper are attached one, two, or more crosspins, which keep the seed in the lower part of the hopper stirred up so that the teeth may carry it out, uniformly and without fail.