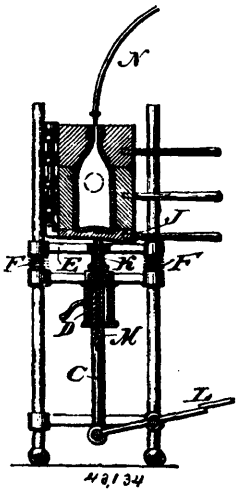
sion and the side flanges being approximately cylindrical, substantially as described for the purpose specified. 2nd. The combination of a pneumatic tyre, a rim formed with a central depression and outwardly extending side flanges and a filling for the said central depression, substantially as described for the purpose specified. 3rd. The combination of a felloe of a wheel, a rim formed in two parts, each having an approximately cylindrical portion and an outwardly extending flange, the said parts of the rim being secured on the felloe with an annular space between said parts, said space forming the central depression in the rim, and a pneumatic tyre secured on the rim by endless inextensible cores at the edges of the tyre cover, substantially as described. 4th. The combination, with a pneumatic tyre, of a hollow rim made of one strip of metal bent to form a central groove and outwardly extending side flanges, the portion of the rim between the said central groove in the side flanges being approximately cylindrical and the edges of the metal strip being joined at the bottom of the groove, substantially as described for the purpose specified. 5th. The combination of a wheel rim formed with a central depression and outwardly extending side flanges, and a pneumatic tyre having its inelastic envelope constructed from a seamless, endless band of textile fabric, substantially as described for the purpose specified. 6th. The combination of a wheel rim formed with a central depression and outwardly extending side flanges, and a pneumatic tyre having a padding of felt interposed between the air tube and the inexpansible jacket, substantially as and for the purpose specified.

No. 43,134. Machine for Making Glass Bottles.

(*Machine pour la fabrication des bouteilles en verre.*)



Thomas W. Synnott, Wenonah, New Jersey, U.S.A., 5th June, 1893; 6 years.

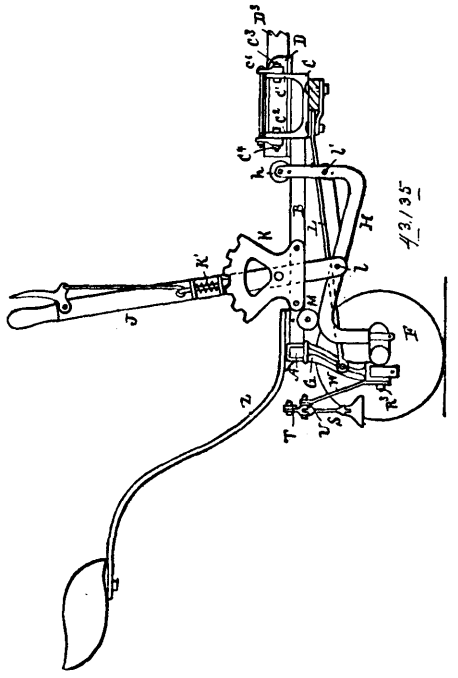
Claim.—1st. In a machine for making glass bottles, a rotatable mould composed of hinged top, side and bottom sections, said side sections having journals extending therefrom and bearings for said journals, substantially as and for the purpose set forth. 2nd. A machine for making glass bottles, having a receiver for compressed air and a hollow plunger which is provided with a port, said plunger freely extending through said receiver, whereby the plunger may be placed in communication with said receiver and air forced into the molten glass in a mould and a rotatable mould mounted above said plunger, substantially as described. 3rd. A machine for making glass bottles, having a mould, said mould having journals thereon and being composed of hinged sections, a frame supporting the same, a movable cross head mounted on said frame, an air receiver and a plunger movable in said receiver, and which is adapted to be passed through said cross head into said mould, substantially as described. 4th. A machine for making glass bottles, having a movable hollow plunger which is adapted to enter the bottle forming mould and an air receiver surrounding and in which said plunger is movable, the plunger having a port in its side leading to the interior thereof whereby communication between the receiver and plunger may be established to direct air into the molten glass with a rotatable mould, substantially as described.

No. 43,135. Disc Harrow and Pole.

(*Herse à disque et timon.*)

Elijah A. Ovenshire, Detroit, Michigan, U.S.A., 6th June, 1893; 6 years.

Claim.—1st. In a disc harrow, the combination with a frame, of harrow sections provided with independent axles E, E¹, having a jointed connection with the frame, forwardly projecting bars B B¹, connected at their rear ends with said frame, shifter bars connected at their rear ends with said axles and having movable engagement upon the bars B B¹, at their forward ends, operating levers to operate the shifting bars, and mechanism to hold the levers in given position, the shifter bars constructed to permit the shifting of the axles horizontally without changing the depth of cut of the harrow



discs, substantially as described. 2nd. In a disc harrow, the combination with a frame, of axles E E¹, provided with cutter discs and jointedly connected with said frame, forwardly projecting bars B B¹, shifter bars connected with said axles at their lower ends and having a movable engagement with the bars B B¹, at their forward ends, operating levers connected with the shifting bars, the body of said shifter bars extending on a horizontal plane when the bars B B¹, are raised to decline rearward, substantially as described. 3rd. In a disc harrow, the combination, with a frame, of axles jointedly connected therewith, forwardly projecting bars B B¹, forming a portion of said frame, shifter bars B B¹, operating levers connected with the shifter bars, rollers connecting the shifter bars with the bars B B¹, said shifter bars having a movable engagement with bars B B¹, substantially as described. 4th. In a disc harrow, the combination with a frame, constructed with forwardly projecting portions B B¹, axles carrying the discs, having a jointed connection with the frame, shifter bars connected with the axles at their rear ends and upon said forwardly projecting bars at their front ends, operating levers engaged with the shifting bars, the engagement of the shifter bars upon the bars B B¹, being vertically adjustable and longitudinally movable, substantially as set forth. 5th. In a disc harrow, the combination of scrapers, said scrapers constructed with a hinged arm S¹, a scraper having a swiveled connection with the the lower end of said arm, said scraper having a spring tension upon the disc, substantially as set forth. 6th. In a disc harrow, the combination of a scraper constructed with arms S¹, S², having a jointed connection, the scraper having a swiveled engagement with the lower end S¹, the arms S¹, S² provided with arms V, V¹, a spring bolt uniting the latter arms, and means to adjust the tension of the spring bolt, substantially as set forth. 7th. In a disc harrow, a ball bearing in combination cones N, N¹, a tubular connection P, having a screw threaded engagement with said cones, one of said cones being adjustable upon said tubular connection, substantially as set forth. 8th. In a ball bearing, the combination of the cones N N¹, a tube having a screw threaded connection therewith, a hub R surrounding the inner ends of said cones, balls located between the inner ends of said cones and said hub, one of said cones being adjustable, substantially as set forth. 9th. In a ball bearing, the combination of the cones N, N¹, a connecting tube P, having a screw threaded engagement therewith, the hub R, engaging the inner ends of said cones, said inner ends spirally recessed and provided with a worm packing in said recess, substantially as and for the purpose set forth. 10th. The combination with an implement of the character described, of an evener plate, a movable pole plate jointedly connected with said evener plate and arranged to be thrown over to one side of the evener plate, substantially as described. 11th. In an implement of the character described, an evener plate constructed with latterally extended arms, a movable pole plate constructed with laterally extended arms, the arms of said evener plate and pole plate jointedly connected at their outer ends, substantially as set forth. 12th. The combination with an implement of the character described, of an evener plate, a movable pole plate hinged to the evener plate, and means to lock the pole plate in