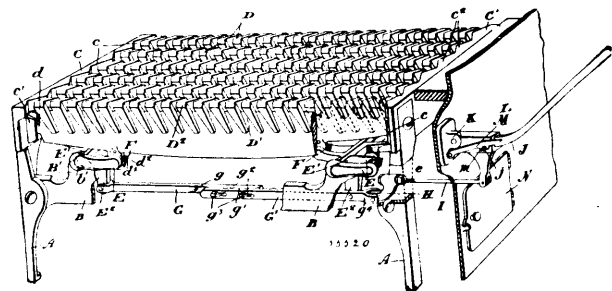


forth. 4th. An insole consisting of the combination of two parts, one provided with a rib defining groove and the other a flat piece united to the grooved side thereof, and two rows of stitching, one on each side of the rib, said stitches passing entirely through both parts of the insole, substantially as set forth. 5th. In a shoe, of a combination with an insole provided with a rib defining groove, of a filling of cork, or other material, located between the walls of the rib and having its surface flush, or nearly flush with the top of the rib, substantially as set forth.

#### No. 55,520. Grate. (Grille.)

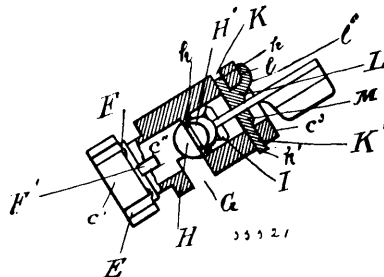


Henry Truesdell and Walter Redpath, both of Toronto, Ontario, Canada, 5th April, 1897; 6 years. (Filed 22nd March, 1897.)

**Claim.**—1st. A grate for stoves, furnaces and heaters, comprising a plurality of grate bars suitably supported and having a series of wings at the upper part of the longitudinal portion of the bar extending from end to end thereof, projecting laterally from each side and above the top of the bar, connected across the tops in the centre, and arranged so that the wings extend obliquely from top to bottom towards the front of the grate, as and for the purpose specified. 2nd. A grate for stoves, furnaces and heaters, comprising a plurality of grate bars suitably supported and having a series of wings at the upper part of the longitudinal portion of the bar flat at the top and each broad V-shaped in plan extending from end to end thereof, projecting laterally from each side and above the top of the bar, connected across the tops in the centre, and arranged so that the wings extend obliquely from top to bottom towards the front of the grate, as and for the purpose specified. 3rd. A grate for stoves, furnaces and heaters, comprising a plurality of grate bars suitably supported and having a series of wings at the upper part of the longitudinal portion of the bar extending from end to end thereof, projecting laterally from each side and above the top of the bar, connected across the tops in the centre, and tapered from top to bottom so as to be narrower at the bottom and form enlarged tapered openings between the wings on each side of the bar with the broadest portion at the bottom, the wings being arranged to extend obliquely from top to bottom towards the front of the grate, as and for the purpose specified. 4th. In combination, the grate bars suitably supported upon the rocking bars journaled in the frame, the broad V-shaped wings forming the top of the grate bars, the back end bar of the frame provided with V-shaped notches and the front end bar of the frame provided with V-shaped projections, all arranged as and for the purpose specified. 5th. In combination, the grate bars suitably supported upon the rocking bars journaled in the frame, the broad V-shaped wings forming the top of the grate bars, the back end bar having the vertical guides into which the back end of the grate bar extends and has vertical movement, and the front end bar having guides into which the front end of the grate bars extend and has vertical movement, as and for the purpose specified. 6th. In combination, the grate bars suitably supported upon the rocking bars journaled in the frame, the broad V-shaped wings forming the top of the grate bars, the back end bar of the frame provided with V-shaped notches, the guides situated beneath the centre of the notches, the front end bar of the frame having V-shaped projections and the guides situated beneath the apex of such projections, as and for the purpose specified. 7th. The combination with the grate bars having downwardly extending lugs, the rocking bar and rocking arms suitably journaled in the frame, the trunnions formed in the end of the rocking arms and the gravity hook held on the lugs of the grate bar and designed to drop and swing beneath the trunnions so as to hold the bars in position, as and for the purpose specified. 8th. In combination, the grate bars, the rocking bar and oppositely set rocking arms for each alternate pair of grate bars, the downwardly extending arms from the rocking arms, the connecting rods having corrugated inner edges, one of the arms having slots and bolts extending through such slots into the other arm, as and for the purpose specified. 9th. In combination, the grate bars, the rocking bars and the oppositely set rocking arms for each alternate pair of grate bars, the downwardly extending arms from the rocking arms, the connecting rod for the downwardly extending arms, the forward extension to the connecting rod, the crank operating arm suitably pivoted on the front, the pin on such arm and the pivoted locking arm having a jaw designed to straddle such pin and thereby lock the grate bars in position, as and for the purpose specified.

#### No. 55,521. Non-Refillable Bottle.

(Appareil pour empêcher le remplissage des bouteilles.)



James Joseph Moran, Loretto, Ontario, Canada, 5th April, 1897; 6 years. (Filed 23rd March, 1897.)

**Claim.**—1st. In a non-refillable bottle, a valve seat within the neck passage, a gravity actuated valve revolvably mounted on the valve seat, and adapted to maintain its gravity position during the turning of the bottle when inverted, substantially as specified. 2nd. In a non-refillable bottle a valve seat within the neck passage, a gravity actuated valve revolvably mounted on the valve-seat in combination with a gravity actuated follower located within the neck passage and adapted to engage the valve when the bottle is inverted, to maintain the valve in its gravity position during the turning of the bottle, substantially as specified. 3rd. In a non-refillable bottle the combination of a valve-seat within the neck passage, and a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the valve seat, and a weight to normally hold the plate against the valve-seat, and to maintain the valve in its gravity position during the turning of the bottle, substantially as specified. 4th. In a non-refillable bottle, a valve seat within the neck passage, a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the valve-seat, and a weight depending from the plate in combination with a gravity actuated follower to engage the weight, substantially as specified. 5th. In a non-refillable bottle, a valve-seat within the neck passage, a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the valve-seat, a weight depending from the plate in combination with a gravity actuated follower to engage the weight, to hold the weight under the valve-seat when the bottle is in its upright position, and to maintain the valve in its gravity position when the bottle is inverted, substantially as specified. 6th. In a non-refillable bottle, a valve-seat within the neck passage, a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the valve-seat, a weight depending from the plate in combination with a movable follower to engage the weight, consisting of a shank, a skeleton frame at the upper end of the shank embracing the valve weight, and a weight attached to the opposite end of the shank, to follow the centre of gravity during the turn of the bottle, substantially as specified. 7th. In a non-refillable bottle, a stopper consisting of a plug having a central bore, a circumferential groove at the upper end of the plug opening from the bore to the groove, a cap for the plug, peripheral channels in the cap communicating with the groove, and a gravity actuated valve within the bore, substantially as specified. 8th. In a non-refillable bottle, a stopper consisting of a plug having a central bore, a circumferential groove formed at the upper end of the plug, openings from the bore to the groove, a cap for the plug, peripheral channels in the cap communicating with the groove, a valve-seat within the bore, and a gravity actuated valve revolvably mounted on the valve-seat, substantially as specified. 9th. In a non-refillable bottle, a stopper consisting of plug having a central bore, a gravity actuated valve revolvably mounted on the valve-seat, a weight depending from the valve engaging the under side of the valve-seat when the bottle is in an upright position, a gravity actuated follower within the bore below the valve, consisting of a shank, a skeleton frame at the upper end of the shank to engage the valve weight, and a gravity weight at the lower end of the shank to follow the turning of the bottle when inverted, substantially as specified. 10th. In a non-refillable bottle a stopper consisting of a plug, having a central bore, a circumferential groove in the top of the plug, openings from the bore to the groove, a cap for the plug, peripheral channels in the cap communicating with the groove, a valve-seat within the bore, a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the valve-seat, and a weight depending from the plate to hold it against the valve-seat, a gravity actuated follower longitudinally movable within the bore, consisting of a shank, a skeleton frame at one end of the shank to engage the valve weight, and a gravity weight at the opposite end of the shank to follow the centre of gravity during the turning of the bottle when inverted, substantially as specified. 11th. In a non-refillable bottle, a stopper consisting of a plug having a central bore, a circumferential groove in the top of the plug, openings from the bore to the groove, a cap for the plug, peripheral channels in the cap communicating with the groove, a valve-seat within the bore, a gravity actuated valve revolvably mounted on the valve-seat, consisting of a plate to close the passage through the