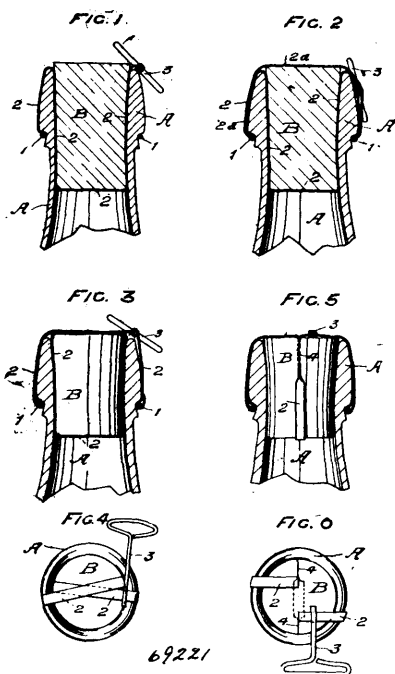


Claim.—1st. The combination of the draw head, an eccentrically mounted tumbler having a part projecting into the path of the coupling pin, and another part projecting into the path of the coupling link, with a slide mounted on said tumbler and having a nose projecting into the path of the pin, when the latter is raised and the tumbler is in its rear position. 2nd. The combination with the coupling link, of a longitudinally channelled draw head, a coupling pin moving vertically across the channel in the draw head and engaging in suitable bearings in the walls thereof, a tumbler mounted to swing in a vertical plane within the channel of the draw head and having a lug normally projecting into the path of the pin and above the path of the link, and a downwardly projecting portion normally lying in the path of the link and in a plane below that of the lug, and a slide in said tumbler in a plane above the lug thereon, said slide having a part projecting into the path of the pin when the tumbler is in position to withdraw said lug from out of the path of the pin.

No. 69,221. Cork Extractor. (Tire bouchon.)

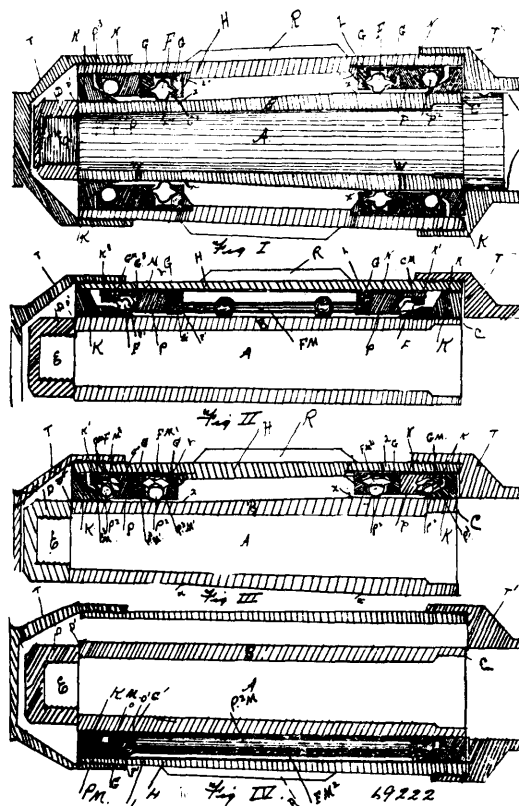


George A. Smith, Alberni, British Columbia, Canada, 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. In combination with the neck of an ordinary bottle and its cork, a wire securely fixed round the first reduction of the neck, a band of flat wire of flexible material attached thereto so that it can pass over the lip of the bottle, down under the cork and up the other side of the same, so that the cork rests in the loop thus formed, a key of suitable form attached to the free end of this band so that when the key is turned the band shall coil upon itself, substantially as and for the purposes specified. 2nd. In combination with the neck of an ordinary bottle and its cork, a wire drawn tight in a groove or reduction round the outside of the neck of the bottle, a strip of flexible material attached to such wire, passing up, over the lip of the bottle neck, down between cork and bottle to underside of cork, across and up the opposite side of cork, the continuation over the lip and down under and round neck wire, up and over cork and down to be secured near the point of commencement, and means whereby the loop under the cork may be wound up on itself after the severance of the strip across the cork, substantially as and for the purposes specified. 3rd. In combination with the neck of a bottle, a wire externally surrounding the same, a cork having slits cut in it from the top to half way down and of a depth about one third of the diameter of the cork, a loop of flat wire passing under the cork, a half twist on each side of such loop, and the upper edge portions of the loop being pressed in the slits, the bending over of the same and their attachment to the fastening wire, a key inserted in either strip external to the cork, substantially as and for the purposes specified. 4th. In combination with a bottle neck and a cork within the same, a wire in a groove round the neck of a bottle, a flexible strip attached to such wire and passing up over the top of the cork, down alongside the cork between cork and bottle across the underside of the cork and up the opposite side of the same, and being angled slightly, the continuation of the same strip over the cork and down to the neck wire on the opposite side, and a suitable key attached to the strip that after the severance of one of the

attachments shall enable the strip to be wound upon itself and shall shorten the loop which passes under the cork, substantially as and for the purposes described.

No. 69,222. Axle Box. (Boite à graisse.)



Albert Ennis Henderson, Woodbridge, Ontario, Canada, 5th November, 1900; 6 years. (Filed 16th October, 1900.)

Claim.—1st. The combination in a roller and ball bearing axle boxing, of an inner tapering sleeve fitting snugly upon the tapering arm of any ordinary axle, and firmly held against the shoulder on the inner end by a nut engaging the outer reduced threaded end of the arm, and an outer sleeve fitting into the wooden part of the hub, and having on its interior surface adjusting annular bearings for rollers, annular adjusting nuts to regulate these bearings, also cups, and retaining rings for balls, or adjustable roller bearings or roller bearings and retainers for balls where both are combined formed upon the outer surface of said annular adjusting nuts, said balls or rollers acting upon annular adjusting cone-shaped nuts screw threaded upon each end of the inner sleeve, which serve to keep the outer sleeve in its proper relation to the inner so that the rollers may engage the straight portion on the inner sleeve, as substantially set forth in drawings and specifications. 2nd. The combination in a roller and ball bearing axle boxing of a specially constructed bearing for the rollers, consisting of opposing annular rings provided with feathers fitting into oppositely disposed grooves in the outer sleeve, having on their opposing surfaces cone-shaped recesses to receive pointed ends of the rollers, said bearing rings being adjustable relative to each other by means of annular jam nuts, said bearing being adapted for working either horizontally or at an angle upon a direct parallel surface, and in the latter form may be substituted for the balls in the adjusting bearing thus practically eliminating friction by confining it to the bearing points of the rollers in their cone-shaped seats, as substantially set forth in drawings and specifications. 3rd. The combination in a roller and ball bearing axle boxing of balls or rollers in conjunction with, and acting upon the bearing rollers in modified form (which are held in their bearings on the outer sleeve), and engaging the outer surface of the inner sleeve, thus reducing the necessary rotary action of the balls or rollers as they do not engage the outer sleeve as in all other ball or roller bearings but act only upon the inner sleeve and the bearing rollers, which also prevents the friction of the balls or rollers upon each other, said balls or rollers being held in position in contact with bearing rollers by means of retainers attached to the annular bearing rings, of the adjusting nuts, attached to the outer sleeve, as substantially set forth in drawings and specifications. 4th. By using long bearing rollers, and long rollers in conjunction with them, the secondary or adjusting bearings may be dispensed with and the sleeves regulated upon each other by means