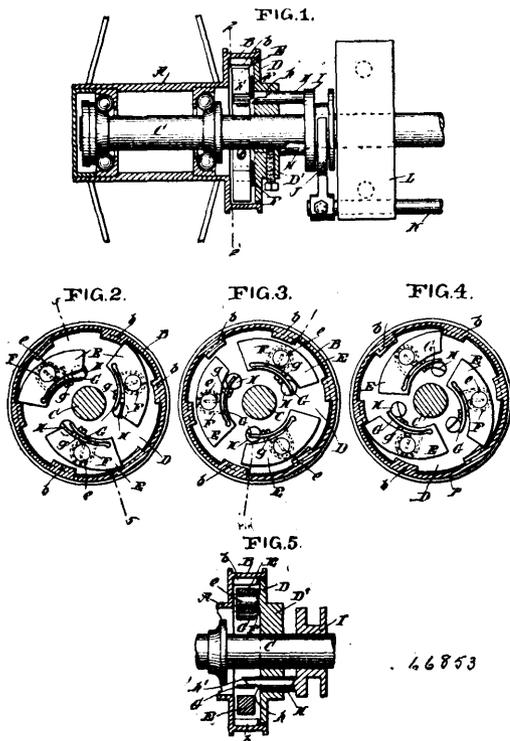


No. 66,853. Reversible Clutch Mechanism.
(*Mécanisme d'embrayage.*)

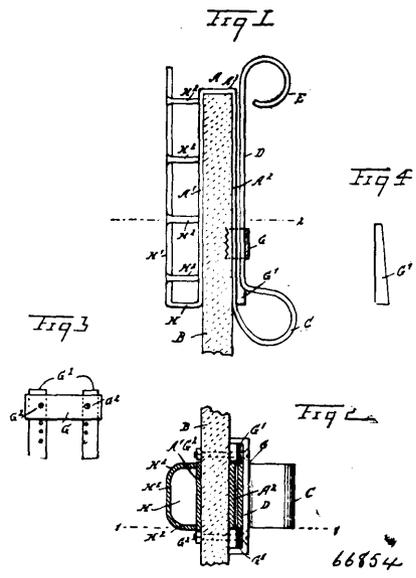


Franz Schneider, Lawrence, Essex County, Massachusetts, U.S.A.,
31st March, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. The combination with two relatively movable parts, of a pawl hung intermediate its ends on one of said parts, and movable to engage either end with the other of said parts, to transmit movement from one to the other, a spring serving normally to hold the pawl in one position, and means for throwing the pawl out of such position against the tension of the spring. 2nd. The combination of two relatively movable parts, a pawl hung at a point intermediate its ends, the pawl being mounted on one of said parts and capable of moving to engage either end with the other of said parts, a spring engaging the pawl to throw it to a certain position, a spring branch carried on the pawl, and a member movable to engage said spring branch of the pawl to throw the pawl against the tension of the first named spring. 3rd. A ratchet or clutch device, comprising two relatively rotatable members, one having projections or teeth thereon and the other having pawls pivoted thereon by their centres and adapted to engage either end with the teeth on the other member, springs tending to hold one end of said pawls engaged with said tooth, and independent means for positively engaging the pawl to overcome the action of said spring and to shift the opposite end of said pawl into engagement with said teeth, substantially as described. 4th. A ratchet device, comprising two relatively rotatable members, one having projections or teeth thereon and the other having pawls pivoted thereon by their centres and adapted to engage either end with the teeth on the other member, springs tending to hold one end of said pawls engaged with said teeth, and bars mounted to slide lengthwise of the axis of said clutch members and having inclines thereon adapted to engage said pawls to reverse their position and to engage their opposite ends with the teeth, substantially as described. 5th. A ratchet device, comprising a casing and a rotatable disc within the same, one being mounted on a driving member and the other upon a driven member, the casing having projections or teeth and the disc having pawls centrally pivoted thereon, and adapted to engage either end with the teeth on the casing, springs normally holding one end of said pawls in engagement with the teeth, independent means for shifting said pawls so as to clear both ends from the teeth or to engage the opposite ends with the teeth, and a spring of superior strength to the other spring interposed between said shifting means and the pawl, substantially as described. 6th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the casing having projections or teeth and the disc having segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth on the casing, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 7th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, adjusting screws adapted to regulate the position of the bar springs relatively to the pawls, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 8th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, a grooved collar slidably mounted axially of the clutch members and supporting the pawl shifting bars, a yoke entering the grooves in said collar, and means for shifting said yoke and collar, substantially as described.

shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, substantially as described. 7th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon the driven member, the casing having projections or teeth and the disc having segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth on the casing, and springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, adjusting screws adapted to regulate the position of the bar springs relatively to the pawls, and shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking position, substantially as described. 8th. A ratchet device, comprising a casing and a concentric disc within the same, one being mounted on a driving member and the other upon a driven member, the disc and casing having the one, projections or teeth, and the other segment-shaped pawl bars centrally pivoted thereon and adapted to engage either end with the teeth, springs normally holding one end of said pawls in engagement with the teeth, bar springs secured by one end to the inner sides of the pawl bars, shifting bars or rods mounted to slide parallel with the axis of the clutch members, said shifting bars having inclines adapted to engage the inner surfaces of the bar springs to move the pawls respectively into inoperative and into reversed locking positions, a grooved collar slidably mounted axially of the clutch members and supporting the pawl shifting bars, a yoke entering the grooves in said collar, and means for shifting said yoke and collar, substantially as described.

No. 66,854. Whip Socket and Rein Holder.
(*Double de fouet et porté-réncs.*)



George W. Hyde, St. Paul, Nebraska, U.S.A., 31st March, 1900;
6 years. (Filed 26th January, 1900.)

Claim.—1st. A combination whip socket and rein holder, comprising a frame, a rein holder, comprising a frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a whip socket having its inner side formed by the other side of the saddle frame, substantially as shown and described. 2nd. A combined whip socket and rein holder, comprising a saddle frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a clamp and guideways for the jaws and adapted to be secured to the support of the device, substantially as shown and described. 3rd. A combined whip socket and rein holder, comprising a saddle frame, a rein holder having jaws, one of which is formed by one side of the saddle frame, and a clamp and wedge shaped guideways for the jaws and adapted to be secured to the support of the device, the said clamp being made U-shaped to extend over the front face of the outer jaw, and the guideways being held adjustably on the clamp to engage the side edges of the jaws, substantially as shown and described. 4th. A combined whip socket and rein holder, comprising a frame, a rein holder having jaws, one which is formed by one side of the saddle frame, a whip socket having its inner side formed by the other side of the saddle frame, one side of the whip socket being provided with spaced integral bars bent over to meet the inner side of the socket, substantially as shown and described.