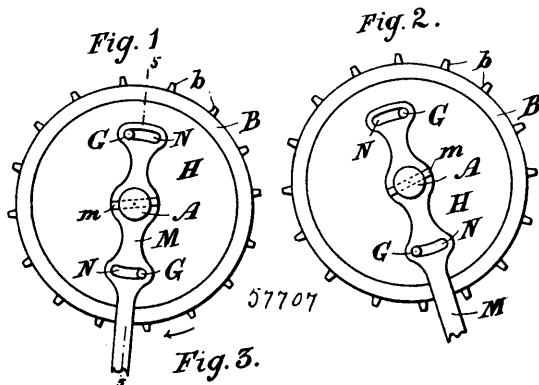


clamp united to the seat spring embracing the tie-plate, a cross head connected to the seat spring on the inner side of the rear forks, a seat frame connected to the rear of the seat spring, a seat, the rear of the seat being connected to the seat frame, the horn of the seat connected to the seat spring, and hand-grip connected to the saddle post, substantially as specified. 5th. In a bicycle, the combination of the rear forks, a tie-plate uniting the rear forks above the driving wheel, a seat spring, a clamp united to the seat spring embracing the tie-plate, a cross head connected to the seat spring on the inner side of the rear forks, a seat frame connected to the rear of the seat spring, a seat, the rear of the seat being connected to the seat frame, the horn of the seat connected to the seat spring, hand-grips connected to the saddle post, and foot rests connected to the rear forks below the supplemental seats, substantially as specified. 6th. In a bicycle, the combination of the rear forks, a tie-plate uniting the rear forks above the driving wheel, a seat spring, a clamp united to the seat spring embracing the tie-plate, a cross head connected to the seat spring on the inner side of the rear forks, a seat frame connected to the rear of the seat spring, a seat, the rear of the seat being connected to the seat frame, the horn of the seat connected to the seat spring, a T-coupling connected to the horizontal part of the seat post, having hollow screw-threaded branches, and hand-grips having shanks fitted into the hollow screw-threaded branches of the T-coupling, substantially as described. 7th. In a bicycle, the combination of the rear forks, a tie-plate uniting the rear forks above the driving wheel, a seat spring, a clamp united to the seat spring embracing the tie-plate, a cross-head connected to the seat spring on the inner side of the rear forks, a seat frame connected to the rear of the seat spring, a seat, the rear of the seat being connected to the seat frame, the horn of the seat connected to the seat spring, a T-coupling connected to the horizontal part of the seat post, having hollow screw-threaded branches, hand-grips having shanks fitted into the hollow screw-threaded branches of the T-coupling, and foot-rests connected to the rear forks below the supplemental seat, substantially as specified.

No. 57,707. Foot Rest and Stop Motion.

(Appui-pieds et arrêt.)



Robert Curtis Warner, Osnabruck Centre, Ontario, Canada, 7th October, 1897; 6 years. (Filed 24th September, 1897.)

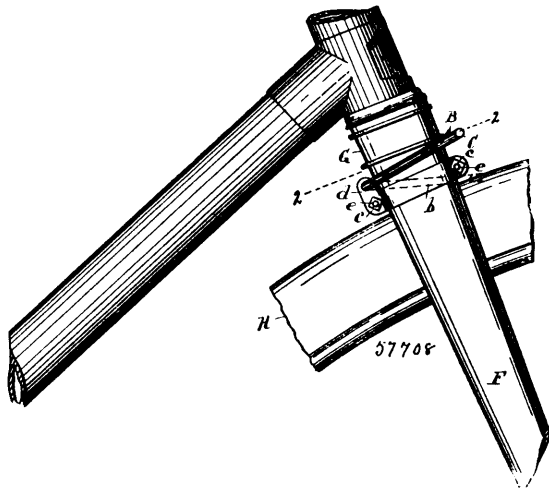
Claim.—1st. A foot rest and stop motion for bicycles, consisting of a sprocket rim having internal ratchet teeth, a disc on which the said rim revolves, sliding pawls in the said disc adapted to engage the said ratchet teeth, the axle on which the said disc is journaled having pockets to receive the butts of the said sliding pawls, the said pockets having one side inclined, a crank secured on the said axle, pins secured in the said disc, slots in the said crank adapted to be engaged by the said pins, whereby a limited movement is given to the axle in relation to the said disc, causing the pawls to be put into or out of engagement with the said ratchet teeth, substantially as set forth. 2nd. In a foot rest and stop motion for bicycles, the combination with the sprocket rim B, internal ratchet teeth C and recessed portions c, c, of the discs E, H journaled on the axle A, sliding pawls I sliding in grooves in the disc E, pockets P formed in the said axle A, and having each one side inclined, the said pockets being adapted to receive the butts of the said pawls, substantially as set forth. 3rd. In a foot rest and stop motion for bicycles, the combination with discs carrying sliding pawls adapted to engage internal ratchet teeth on a sprocket rim revolving on said disc, of a crank having a limited motion relative to the said disc, the said crank being rigidly secured to the axle, pockets in the said axle to receive the butts of the said sliding pawls, the pockets being so constructed that the change in the relative position of the axle and discs either forces the pawls into engagement with the said ratchet teeth or retracts them, substantially as set forth.

No. 57,708. Bicycle Brake. (Frein de bicycless.)

Thomas Walsh, Detroit, Michigan, U.S.A., 7th October, 1897; 6 years. (Filed 24th September, 1897.)

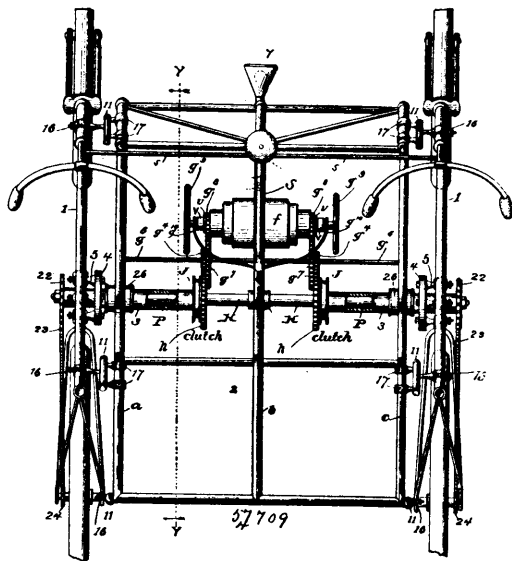
Claim.—1st. In a bicycle brake, the combination with the fork, of a rock-shaft mounted thereon, a brake-spoon on said shaft stand-

ing between the sides of said fork, and a crank extending from said shaft to operate said brake-spoon. 2nd. In a bicycle brake, the



combination with the fork-sides, of the vertically-adjustable clamps mounted on said sides, the rock-shaft journaled in said clamps, the brake-spoon on said shaft projecting between said fork-sides, and a crank upon said shaft for actuating said brake-spoon. 3rd. In a bicycle brake, the combination with the fork-sides, the supporting clamps adapted to embrace said sides, the rock-shaft carrying a brake-spoon which projects between said fork-sides, said shaft being journaled in brackets carried by said clamps, one of said clamps being movable longitudinally upon said shaft, and the crank upon said shaft for operating said brake. 4th. In a bicycle brake, the combination with the fork-sides, the supporting clamps adapted to embrace said fork-sides, the transverse rock-shaft journaled in said clamps and carrying a brake-spoon which projects between said fork-sides, a crank upon said shaft for actuating said brake-spoon, and a coiled spring upon said shaft engaging said brake-spoon to normally retain it in a raised position against the crown of the fork. 5th. In a bicycle brake, the combination with the fork-sides, the supporting clamps mounted on said sides and capable of vertical adjustment, the rock-shaft journaled in said clamps, the brake-spoon carried by said shaft, the crank upon said shaft for actuating said spoon, and a spring for retaining said spoon in a raised position.

No. 57,709. Velocipede. (Vélocipède.)



Hermann Gottfried Neumann, Bessemer, Alabama, U.S.A., 7th October, 1897; 6 years. (Filed 7th September, 1897.)

Claim.—1st. In a velocipede, the combination with two bicycles of ordinary construction, and the frame of another bicycle, means for connecting the parts together, an engine frame supported by the bicycle frames, the driving shaft connected with the driving shafts of the two bicycles, and connections between the engines and the driving shafts for imparting the movement of the engine to the driv-