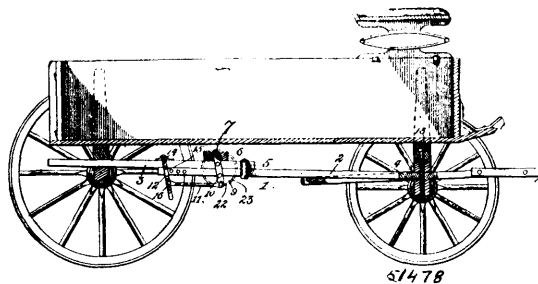
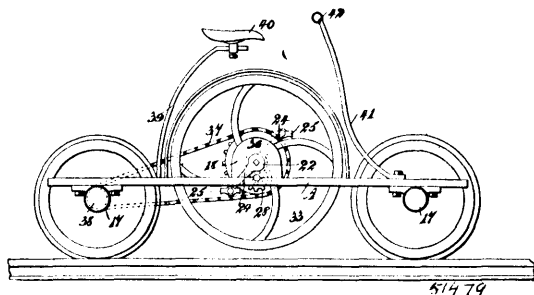


operate as a brake shoe and adapted to permit a free forward rotation of the brake-wheel, to permit the vehicle to be backed, and



means for throwing the brake-wheels into and out of engagement with the vehicle-wheel, substantially as described. 2nd. In an automatic brake, the combination of a brake-wheel provided with a rim and having an annular series of ratchet-teeth, and a fixed disc fitting within the rim and provided with a pivoted pawl engaging the ratchet-teeth and locking the brake-wheel against rearward rotation and permitting a free forward rotation to enable a vehicle to be backed, substantially as described. 3rd. In an automatic brake, the combination of a running gear having a reach composed of two sections arranged to slide on each other, a transverse rock-shaft carried by the rear section and located in advance of the hind wheel and provided at its ends with crank arms, brake-wheels journaled on the crank arms and arranged to engage the hind wheels, clutches connecting the brake-wheels with the rock-shaft, and connections between the rock-shaft and the reach sections, whereby when the rear reach section crowds forward the brake-wheels will be thrown against the vehicle wheels, substantially as described. 4th. In an automatic brake, the combination of a running gear provided with a reach composed of two sections slidingly connected, a transverse rock-shaft journaled in suitable bearings and carried by the rear section of the reach and provided with depending arms, wheel engaging devices located at the ends of the rock-shaft for engaging the hind wheels of the running gear, a lever frame pivoted to the rear reach section and provided with opposite sides depending therefrom, a pivot connecting the lever frame with the front reach section, and link bars connecting the sides of the lever frame with the depending arm of the rock-shaft, substantially as described. 5th. In an automatic brake, the combination of a running gear provided with a reach composed of two sections slidingly connected, a transverse bar mounted on the rear section of the reach, a rock-shaft journaled on the transverse bar and provided at its terminals with crank arms and having depending arms at opposite sides of the reach sections, brake-wheels journaled on the crank arms and connected with the rock-shaft by clutches, a rectangular lever frame pivoted to the upper reach section and depending therefrom, a pivot connecting the sides of the lever frame to the front reach section, link bars connecting the depending arms of the rock-shaft with the lever frame, a body mounted on the running gear and fixed to the rear bolster, and a roller mounted on the front bolster and supporting frame, substantially as described. 6th. In a brake, the combination of a brake-wheel provided at its periphery with flanges, and having in the space between the flanges recesses or serrations, and a band arranged on the brake-wheel in the space between the flanges and engaged by the said recesses or serrations, whereby the band is prevented from slipping, substantially as described.

No. 51,479. Mechanism for Propelling Railway Velocipedes and Hand Cars. (*Mécanisme pour mettre en mouvement les vélocipèdes de chemin de fer et chars à bras.*)

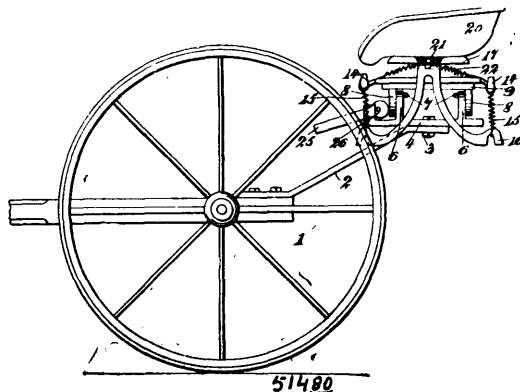


James Joseph Thompson, Jacksonville, Florida, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. In a mechanism for propelling velocipedes, hand cars and like vehicles, a driving shaft, cranks attached to the said driving shaft, ball bearings journaling the cranks a fly wheel mounted to turn on the crank shaft, ball bearings interposed between the crank shaft and hub of the fly wheel, said bearings being disposed

within the said hub in a manner to support its centre and ends, and a driving connection between the said crank shaft and an axle of the car, as and for the purpose specified. 2nd. In a mechanism for propelling velocipedes, hand cars and similar vehicles, a driving shaft, a frame through which the said shaft passes, cranks secured to the ends of the shaft, ball bearings in the said frame, journaling the hubs of the said cranks, a fly wheel mounted upon the crank shaft, ball bearings carried by the said shaft and engaging with the hub of the fly wheel, a gear connection, substantially as described, between the drive shaft and the fly wheel, and a driving connection between the said crank shaft and an axle of the car, as and for the purpose set forth. 3rd. In a vehicle, the combination with a frame, and driving mechanism, substantially as described, of a journal box comprising a straight upper portion adapted to be secured to the frame, and a cylindrical body portion having an interior chamber and an opening outward from said chamber and through which the wheel axle passes roller bearing surrounding the axle in the chamber, a track wheel having rigid connection with the axle, and a cap having an exteriorly threaded hollow shank engaging in a tapped opening leading into the chamber, the said hollow shank receiving the end of the axle, as and for the purpose specified. 4th. In a mechanism for propelling velocipede and hand cars and like vehicles, a frame, a driving shaft passed through the frame, having its ends squared, cranks secured to the squared ends of the said shaft, ball bearings located within the said frame and engaging with the periphery of the hubs of the cranks, caps entered into the frame securing the ball bearings in position, a fly wheel loosely mounted upon the crank shaft, being seated on ball bearings carried by the crank shaft, a gear connection between the crank shaft and the hub of the fly wheel, and a driving connection between the said crank shaft and an axle of the car as and for the purpose specified.

No. 51,480. Tilting Spring Seat. (*Siège à bascule.*)



Charles F. Davy, Starkville, New York, U.S.A., 26th February, 1896; 6 years. (Filed 3rd February, 1896.)

Claim.—1st. The combination of an upper spring frame section, a lower spring frame section, springs secured at their upper ends to the lower section and at their lower ends to the upper section and serving as supports for the upper section, and side springs extending diagonally from the central portion of one section to the ends of the other section, substantially as set forth. 2nd. The combination of an upper spring frame section having depending arms, a lower spring frame section having arms, springs secured at their upper ends to the lower section and at their lower ends to the upper section, and serving as supports for the same, and side springs extending diagonally from the central portion of one section to the ends of the other section, substantially as set forth. 3rd. The combination of a lower spring frame section having oppositely diverging arms at opposite ends, an upper spring frame section also having oppositely diverging arms at opposite ends, said sections being arranged at right angles to each other, and the arms of the upper section being arranged to depend below the arms of the lower section, springs uniting said arms of the respective sections, and side springs each connected at one end at or near the centre of one section, and having its opposite end extending diagonally to one arm of the other section, substantially as set forth. 4th. The combination of a lower tilting frame section, an upper tilting frame section, said sections being pivoted together and arranged to tilt laterally, and means for locking said sections together, substantially as set forth. 5th. The combination of a lower tilting frame section, an upper tilting frame section, the said sections being pivoted together and adapted to tilt laterally, a bracket on one section, and a locking device on the other section to engage said bracket and hold the sections locked together, substantially as set forth. 6th. The combination of a lower tilting frame section having upwardly extending lugs, an upper tilting frame section having depending lugs pivoted to the lugs of the lower section, and a locking device on one section to engage one lug on the other section to lock the sections together, substantially as set forth.