

ing a part of the railway track, contact pieces, one in electrical communication with one of the insulated conductors and the other with the other of the insulated conductors, and a circuit closer insulated from surrounding objects, and connected with the movable rail to move with it into and out of engagement with the contact pieces to make a second electric connection between the insulated conductors, substantially as set forth. 3rd. In combination, a railway track, a swinging bridge from a support for the rails of a portion of the track, contact pieces having a normal tendency to rest in electrical contact, insulated conductors located along the track and connected, the one with one of the contact pieces and the other with the other contact piece, an insulating piece carried by the bridge and adapted to separate the contact pieces when the bridge is closed and permit them to close when the bridge is open, and partial electric circuit carried by a motor and including a battery and a signal, said partial circuit being in constant electrical contact with the insulated conductors, substantially as set forth.

No. 41,811. Muzzle. (*Muselière*.)

Nelson Gillespie and Chester Gillespie, both of Hoosick Falls, New York, U.S.A., 4th February, 1893; 6 years.

Claim.—1st. In an animal muzzle, the combination, with a support, and means for securing the support upon the animal's head, of a collapsible link guard pendent from the support and extending around and below the animal's mouth, and detachable link mechanism for closing the lower end of the guard, substantially as described. 2nd. The animal muzzle having the separate transverse flexible link diaphragm detachably supported by the muzzle guard, said transverse link diaphragm having an open mesh to permit an animal to eat slowly through the same, substantially as set forth.

No. 41,812. Car Coupler. (*Attelage de chars*.)

William R. Knight, William R. Ownby and Ambrose Pierce, all of Rector, Arkansas, U.S.A., 4th February, 1893; 6 years.

Claim.—In a car coupling, the combination of a draw head, a coupling pin, a rock shaft journaled in the bottom of the draw head and provided at one end with a crank handle having perforations in its horizontal arm, said rock shaft being arranged in rear of the coupling pin, a link lifting plate arranged on the bottom of the draw head, and provided in its upper face with grooves, and having a longitudinal coupling pin slot and secured at its rear end to the rock shaft, a rock shaft 10, provided with an arm 9, a link pivoted to the arm 9, and provided with an eye receiving the horizontal arm of the crank handle, keys arranged in the perforations of said crank handle and securing the link to the same, and a detachable crank handle secured to the other end of the rock shaft 3, substantially as described.

No. 41,813. Book Rest. (*Appui pour livres*.)

Benjamin Gunnarson and Bengt Gunnarson, both of West Haven, Connecticut, U.S.A., 4th February, 1893; 6 years.

Claim.—1st. In a book rest, the combination, with two side pieces adapted at their lower ends to be attached to a chair, of two arms pivoted at their upper ends to the said side pieces and adapted at their lower ends to be attached to a chair, and a book rest hinged at one end to the upper end of one of the said side pieces, and provided with means for attaching its opposite end to the other side piece, substantially as described. 2nd. In a book rest, the combination, with two side pieces adapted at their lower ends to be attached to a chair, of two arms pivoted at their upper ends to the said side pieces and adapted at their lower ends to be attached to a chair, and a book rack attached to the upper ends of said side pieces having a leaf hinged to its lower edge and folding against its rear face and forming a receptacle for papers when open, substantially as described. 3rd. In a book rest, the combination, with two side pieces adapted at their lower ends to be attached to a chair, of two arms pivoted at their upper ends to the said side pieces and adapted at their lower ends to be attached to a chair, a book rack hinged to one of the said side pieces, means for securing the opposite end of the book rack to the other side piece, a leaf hinged to the lower edge of the rack and folding against its rear face, a pencil case attached to the lower edge of the said rack, and a suspension loop attached to the upper edge thereof, substantially as described.

No. 41,814. Apparatus for Stopping Engines.

(*Appareil pour arrêter les machines à vapeur*.)

The Electro Automatic Appliance Company, assignee of Frederick Denison Taylor, all of Hartford, Connecticut, U.S.A., 4th February, 1893; 6 years.

Claim.—1st. In an apparatus for stopping an engine or other motor, in combination, a spring actuated shaft having a threaded portion, a clutch part secured to said shaft, an actuating spring having one end secured to the shaft, and the other to a fixed part of the frame, a reciprocating nut borne on the threaded portion of the shaft and held against rotation thereon, a spring actuated shipping lever extending across the shaft, and with its outer end engaging a tumbler, the tumbler with its outer end adapted to engage the armature of an electro magnet, the spring pawl having a shoulder located in the path of movement of the shipping lever, and the trip device with one end adapted to engage the spring pawl, and the other

located in the path of movement of the nut, all substantially as described. 2nd. In an apparatus for stopping an engine or other motor, in combination, a spring actuated shaft having a threaded portion, a clutch device having one part secured to said shaft and the other part mounted in operative relation thereto, the shipping lever extending across the shaft between an elastic buffer and a reciprocating nut, the reciprocating nut borne on the threaded portion of the shaft and held against rotation thereon, and an electro magnet having its armature adapted to engage the tumbler of the releasing and resetting mechanism, all substantially as described. 3rd. In an apparatus for stopping a steam engine or other motor, in combination, a spring actuated shaft having a threaded portion, a clutch part secured to said shaft, the actuating spring connected to the shaft and to a fixed portion of the frame, the sprocket wheel secured to the outer end of the shaft, a reciprocating nut borne on the threaded portion of the shaft and held against rotation thereon, a shipping lever extending across the shaft and having its outer end engaging a cam slot in a tumbler, a buffer located back of the shipping lever, the tumbler having a cam slot in engagement with a projection on the shipping lever, and an arm engaging a catch on the armature of an electro magnet, the armature having a catch device, the clutch part mounted in operative relation to the shipping lever, the trip device with means for holding the clutch parts disengaged, and the reciprocating nut having a flange adapted to operate the trip device in its reciprocating movement along the shaft, all substantially as described. 4th. In an apparatus for stopping a steam engine or other motor, in combination, the spring actuated shaft having a threaded portion, the clutch part secured to one end of the shaft, a sprocket wheel secured to the outer end of the shaft, an actuating spring secured to the shaft and to a fixed part of the frame, and mechanism, substantially as described, for releasing the clutch and automatically resetting the releasing mechanism, all substantially as described. 5th. In combination, in an apparatus for stopping a steam engine or other motor, a spring actuated shaft having a threaded portion, the shaft actuating spring, the clutch parts secured to the shaft and to the frame respectively, and the releasing and resetting mechanism comprising a flanged nut borne on the threaded portion of the shaft, and held against rotation thereon, all substantially as described. 6th. In combination, in an apparatus for stopping a steam engine or other motor, a spring actuated shaft having a threaded portion, the shaft actuating spring, the clutch parts secured to the shaft and to the frame respectively, the releasing and resetting mechanism, comprising a flanged nut borne on the threaded portion of the shaft and held against rotation thereon, the flange of the nut having a series of locking notches, all substantially as described. 7th. In combination, in an apparatus for stopping a steam engine or other motor, a spring actuated shaft, the clutch parts secured to the shaft and to the frame respectively, the releasing and resetting mechanism, comprising with the other elements a tumbler and a swinging shipping lever in operative engagement with each other, all substantially as described. 8th. In combination, in an apparatus for stopping a steam engine or like motor, a spring actuated shaft having a threaded portion, the clutch parts secured to the shaft and to the frame respectively, the releasing mechanism, substantially as described, and the resetting mechanism comprising a reciprocating nut borne on the threaded portion of the shaft, and held against rotation thereon, all substantially as described.

No. 41,815. Cash Register and Indicator.

(*Régistre et indicateur*.)

Hugo Cook, Dayton, Ohio, U.S.A., 4th February, 1893; 6 years.

Claim.—1st. In a registering machine, the combination of a main actuator, a driving mechanism therefor, capable of connection therewith and disconnection therefrom, a series of keys whose relative positions determine the different points at which the actuator shall be disconnected from the driving mechanism, an indicator wheel geared to the actuator and moving therewith, a type wheel or carrier moving in unison with the indicator wheel, and a printer co-operating with the type wheel. 2nd. In a registering machine, the combination of an oscillatory shaft, a gear toothed segment mounted on said shaft, a latch for connecting the segment with and disconnecting it from the shaft, a series of keys co-operating with the latch and whose relative positions determine the different points at which the segment shall be disconnected from the shaft, an indicator wheel geared to the segment, a type wheel moving in unison with the indicator wheel, and a printer co-operating with the type wheel. 3rd. In a registering machine, the combination of a revoluble shaft and a handle for operating the same, an oscillatory shaft a crank and pitman connection between the two shafts, a series of gear toothed segments loosely mounted upon the oscillatory shaft, latches for connecting the segments with and disconnecting them from the oscillatory shaft, a series of banks of keys, one bank for each segment, and co-operating with the latch thereof to disconnect the segment from the oscillatory shaft at different points, according to the key which is operated, a series of indicator wheels, one for each bank of keys and its associated segment and geared to the latter, and a registering mechanism actuated by the segments to register the values indicated. 4th. In a registering machine, the combination of a revoluble shaft, and a handle for operating the same, an oscillatory shaft, a crank and pitman connection between the two shafts, a series of gear toothed segments loosely mounted upon the oscillatory shaft, latches for connecting the segments with and dis-