No. 21,858. Snap Pulley for Hay Elevators and Carriers. *(Poulie pour Monte-Foin.)*

Edwin Harrington, Port Perry, Ont., 12th June, 1885 ; 5 years.

Claim.—1st. In a snap pulley, the pulley arms A and latch arm B, joined or formed together so as to form a bend or angle at their junction, substantially as shown and described. 2nd. A snap pulley having the pulley arms A and latch arm B, formed together relatively as shown, in combination with the latch C fulcrumed in the arm B, the hook D pivoted in the arm B, and bell-crank F also fulcrumed in the arm B, and spring *e*, substantially as shown and for the purpose set forth. 3rd. The combination, in a snap pulley composed partly of the pulley arms A and latch arm B, of the latch C pivoted in said latch arm, and having the notch *d*, the hook D, rope E having the loop *c*, bell-crank F fulcrumed in said arm B and latch line G, substantially as herein shown and described and for the purpose set forth.

No. 21,859. Chair. *(Fauteuil.)*

Frank H. Plummer, Leominster, Mass., U.S., 12th June, 1885 ; 5 years.

Claim.—1st. In a reclining chair, the combination of the side rails forming the seat frame, the crossed legs arranged in pairs transversely under the seat frame, and having their upper ends attached to the seat rails, and the central pivoting bar connecting the said legs, substantially as set forth. 2nd. In a reclining chair, the combination of the seat rails, the back frame, and leg-rest frame hinged, or pivoted, respectively at the rear and front ends of the same, and the crossed legs arranged in pairs transversely under the seat, having their upper ends attached to the front and rear ends of the seat rails and connected by the central pivoting bar, the rear legs being set in a rearwardly-inclined position so as to brace the chair, substantially as set forth. 3rd. The combination of the seat frame, the leg or supports, the back frame hinged at the rear end of the seat rails, the leg rest frame hinged at the front ends of the same, and the arm rests, the rear ends of which are pivoted to the sides of the back frame, and the lower edges of which at a distance from their front ends are connected pivotally with lever arms extending forwardly and upwardly from the sides of the leg rest frame, substantially as set forth. 4th. The combination of the seat frame, the legs or supports, the hinged back frame, the leg rest frame hinged at the front ends of the seat rails, sockets secured at the upper ends of the side rails of the leg rest frame and having forwardly and upwardly curved lever arms, and the arm rest having forwardly and downwardly extending scrolls or brackets connected pivotally with the said lever arms, while the rear ends of the said arm rests are pivoted to the side rails of the back frame, whereby the tops of the arm rests being approximately horizontal, the distance between the pivoting points A1 and Z is less that the distance between the points B1 and C1, substantially as set forth. 5th. The combination of the seat frame, the legs or supports, the hinged back frame, the leg rest frame hinged at the front ends of the seat rails and having sockets provided with forwardly and upwardly curved lever arms, the arm rests connecting the latter pivotally with the sides of the back frame, the extension frame arranged to slide on cleats upon the inner sides of the side rails of the leg rest frame proper, and cords connecting the lower corners of the said extension frame with the upper front ends of the arm rests, substantially as set forth. 6th. In a reclining chair, substantially as described, the leg rest frame consisting of side rails connected by cross-bars or braces, having cleats upon their inner sides and curved with flexible or textile material, in combination with the extension frame covered with flexible material arranged to slide upon the cleats and under the covering of the main frame, and having a foot rest hinged to its lower edge, and adapted to be retained at right angles to the frame by means of hasps and the operating cords, all arranged and operated substantially as set forth. 7th. In a reclining chair, the combination, with the back frame, of a head rest consisting of a bow, the ends of the legs of which are pivoted to the side rails of said back frame, and the upper portion of which is covered with flexible or textile material, and braces pivoted to the sides of the head rest frame and having curved and notched outer ends sliding in staples or keepers upon the side rails of the back frame, substantially as and for the purpose set forth. 8th. The combination of the seat frame, the legs or supports, the hinged back frame, the hinged leg rest frame having forwardly and upwardly extending lever arms, the arm rests connecting the latter pivotally with the back frame, perforated lugs pivoted to the sides of the arm rests, and curved rods pivoted at the rear ends of the seat rails, extending through said perforated lugs and provided with adjustable stop collars, substantially as and for the purpose set forth. 9th. The combination, with a reclining chair, constructed, substantially as described, and provided with lugs extending downwardly from the front ends of the seat rails, of a cross-bar having perforations to receive said lugs, and provided near its center with pivoted diagonally rearwardly extending bars extending under and beyond the seat rails in front of the hinged back frame, and suspending ropes or cords attached to the projecting ends of the transverse and diagonal bars, the dormer of which also serves to space the side rails of the seat and prevent any tendency in the latter to collapse, substantially as and for the purpose set forth.

No. 21,860. Chair. *(Fauteuil.)*

Frank H. Plummer, Leominster, Mass., U.S., 12th June, 1885; 5 years.

Claim.—1st. In a reclining chair, the combination of the seat frame, the back hinged or pivoted to the same, the hinged leg-rest having upwardly and forwardly extending curved lever arms and the arm rests, the rear ends of which are pivoted to the side rails of the back frame, and the front ends of which are provided with longitudinal sliding adjustable rods connected pivotally with the lever arms of the leg-rest, substantially as set forth. 2nd. In a reclining chair, the combination of the seat frame, the back hinged or pivoted to the same, the hinged leg-rest having upwardly and forwardly extending curved lever arms, the arm-rests pivoted to the side rails of the back frame and having forwardly and downwardly extending scrolls on their undersides, sleeves upon the inner sides of the said scrolls in an inclined position with relation to the tops of the arm-rests, rods sliding in the said sleeves secured and connected pivotally at their front ends to the lever arms of the leg-rest, and means for retaining the said rods in any position to which they may be adjusted substantially as set forth. 3rd. The combination of the seat rails having slots at their front ends, the back hinged at the rear ends of the said seat rails, the leg-rest frame sockets at the upper ends of the side rails of the latter, having laterally extending studs journalled in the slots of the seat rails and provided with upwardly and forwardly extending curved lever arms, and the arm-rests pivoted to the side rails of the back frame and provided with longitudinally sliding adjustable rods, the front ends of which have laterally extending studs journalled in the upper ends of the lever arms, substantially as set forth. 4th. The combination of the seat-frame, consisting of side rails connected by metallic straps, the seat resting upon the said straps, and having transverse cleats on its underside to prevent its displacement, the hinged back frame and leg-rest frame and the arm-rests forming pivotal connection for thesaid frame, substantially as set forth. 5th. The combination, with the chair body constructed substantially as described, and the seat rails of which are provided with downwardly extending stud bolts, of the rocker-frame, the top rails of which are provided with perforations to receive the said studs and bolts, and thumb nut fitting the said bolts for securing the chair body detachably upon the rocker frame, substantially as set forth. 6th. The combination, with the rocker frame, of the detachable chair body, consisting essentially of the seat frame, the hinged back and leg-rest frames, the arm-rests forming pivotal connections for the same, and curved rods pivoted at the rear end of the seat rails and extending through eye-bolts arranged transversely in the arm-rests, or having tightening-nuts, or equivalent tightening or clamping devices, whereby the arm-rests may be connected rigidly, with the said curved rods, so as to retain the back and the leg-rests in any position to which they may have been adjusted. 7th. The combination, with the rocker frame, of the chair body having hinged leg-rest and suitable catches or latches, for connecting the said leg-rest frame temporarily with the rocker frame, substantially as set forth. 8th. The combination, with the chair body, constructed substantially as herein described, and mounted detachably upon a rocker frame, the seat rails of the said chair body being provided with downwardly extending studs and bolts, of a pair of longitudinal bars having perforations to receive the said studs and bolts, cross-bars connecting the said longitudinal bars and having suspended ropes or cords connected to their projecting ends, and the thumb nuts fitted to the said bolts, substantially as set forth. 9th. A head rest for reclining chairs, consisting of a suitable cushion having a central transverse tube of cloth rubber, or other suitable material or combinations of materials, and cords passing in opposite directions through the said tube, and having their upper ends attached to the top of the chair back frame, and provided at their lower projecting ends with stops or tassels, substantially as set forth.

No. 21,861. Fire Alarm Telegraph System.

(Systéme de Télégraphe Avertisseur d' Incendie.)

Lewis H. McCullough, Richmond, Ind., U.S., 12th June, 1885; 5 years.

Claim.—1st. In combination with electric circuit conductors, one running from each pole of a generator back to the same pole, two or more circuit closers in multiple arc relation between the said conductors, and receiving apparatus at one or more stations for receiving the signal when any one of the circuit closers is operated, substantially as set forth. 2nd. In combination with a loop or loops connected at each end with one pole of a generator, a loop connected at each end to the opposite pole thereof, circuit-closers arranged in multiple are between loops which are connected to opposite poles, and apparatus at one or more stations for receiving the signal when any one of the circuit closers is operated, substantially as set forth. 3rd. In a signalling system, an open metallic circuit, two or moer circuit closers in the same, each connected in two directions with each pole of the generator, and receiving apparatus at one or more stations for receiving the signal when any one of the circuit closers is operated, substantially as set forth. 4th. In a signalling system, an open metallic circuit, two or more signal boxes in the same, each connected in two directions with each pole of the battery, and one or more gongs for receiving the box signals, substantially as set forth. 5th. In combination with electric circuit wires, one running from each pole of the battery back to the same pole, two or more boxes arranged in multiple are relation between the said wires, and one or more gongs or bells for receiving the box signals, substantially as set forth. 6th. In combination with a loop or loops connected at each end with one pole of a battery, a loop connected at each end to the opposite pole of the battery, signal boxes arranged in multiple arc relation between loops which are connected to opposite poles, and one or more gongs or bells for receiving the box signals, substantially as set forth.

No. 21,862. Non-Interfering Fire-Alarm Telegraph System. *(Systeme de Télégraphe Avertisseur d'Incendie de Sûreté.)*

Lawis H. McCullough, Richmond, Ind., U.S., 12th June, 1885; 5 years.

Claim.—1st. The combination, with two electric circuit conductors, one running from one pole of a generator back to the same pole, and the other running out from the opposite pole, of two or more circuit closers in multiple are relation between the said conductors, and receiving apparatus at one or more stations, for receiving the signal when any one of the circuit closers is operated, substantially as set forth. 2nd. The combination, with two electric circuit conductors, one running from one pole of a generator back to the same pole, and the other running out from the opposite pole, of two or more circuit closers in multiple arc relation between the said conductors, and apparatus at a central station actuated by the operation of any circuit closer, whereby every other circuit closer is cut out of the cir-