

**No. 41,156. Disconnecter for Overhead Conductors.***(Désembrayeur pour les conducteurs suspendus.)*

Andrew Langstaff Johnston, Richmond, Virginia, U. S. A., 10th December, 1892; 6 years.

*Claim.*—1st. In an automatic disconnecter for overhead conductors or other wires, the combination of the body thereof provided with an insulated cap having jaws, of the switch bars mounted on the body of the disconnecter having heads at their upper ends, said heads being adapted to be thrown out of engagement when the wires are slackened as stated. 2nd. In an automatic disconnecter for overhead conductors or other wires, the combination, with the body having an insulated cap with the jaws on either side, of the switch bars pivotally mounted on the body, and provided at their upper ends with the hatchet shaped heads, which are automatically thrown out of engagement when the wires are slackened, as specified. 3rd. In an automatic disconnecter for overhead conductors or other wires, the combination, with the body thereof provided with an insulated cap having jaws, and lever switch bars mounted upon the body so as to be thrown into engagement with the jaws, of the hollow sections having springs secured thereto at one end, and the line wires connected to the other ends of the said springs, and knock bars also connected to the said springs, and adapted to be thrown into engagement with the lever switches when the wires are slackened, as described. 4th. In an automatic disconnecter for overhead and other electrical conductors, the combination of a hanger, substantially as described, provided with circuit breakers having interlocking devices arranged to hold the levers in closed adjustment, as set forth. 5th. The combination, in an automatic electrical disconnecter for overhead and other conductors, of a hanger or suitable support provided with a pair of pivoted levers having hatchet shaped heads, and jaws adapted to receive the heads of interlocking beads or projections, and recesses adapted to receive the beads and hold the heads in place, for the purposes described.

**No. 41,157. Rest for the Arms and Wrists.***(Appui-bras et poignet.)*

Rebecca Kirk, Stratford, Ontario, Canada, 10th December, 1892; 6 years.

*Claim.*—1st. An arm rest comprising a guide rail, a carriage mounted upon said guide rail consisting of a frame, wheels mounted in said frame and adapted to run upon said guide rail, and a top to said frame for the arm to rest upon, substantially as and for the purpose set forth. 2nd. In an arm rest, the combination of a guide rail, a carriage mounted upon said guide rail, said carriage comprising a frame work, two wheels mounted in said frame work and adapted to run upon said guide rail, a roller mounted in the top of said frame work to support and allow the movement of the arm, substantially as and for the purpose described. 3rd. In an arm rest, the combination of a guide rail, a carriage mounted upon said guide rail, said carriage comprising a frame work, two wheels mounted in said frame work and adapted to run upon said guide rail, a roller mounted in the top of said frame work to support and allow of the movement of the arm, and a stop located at either end of said roller to prevent the arm moving off said roller, substantially as and for the purpose set forth. 4th. In an arm rest, the combination of a guide rail, provided with two parallel grooves, a tongue between said grooves, a carriage comprising a frame work, grooved wheels mounted in said frame work, the flanges of which travel in the grooves of the guide rail, a top to said frame, a roller mounted in said top adapted to support the arm, and a pin located at either end of said roller to prevent the arm slipping off said roller, substantially as and for the purpose described.

**No. 41,158. Filtering Apparatus for Molten Glass.***(Appareil à filtrer le verre fondu.)*

Moritz Epstein, Berlin, German Empire, 10th December, 1892; 6 years.

*Claim.*—1st. An improved device for refining molten glass, consisting of a filtering tube *a*, divided into two compartments, the lower of which is fitted with clay or porcelain balls so that the glass after having passed the openings *f* must first pass through the clay or porcelain balls before it can pass through the orifice *g* into the upper compartment, substantially as described. 2nd. The improved subdivided smelting vessel *b*, with partition *p* and serpentine ways *c*, substantially as and for the purpose set forth.

**No. 41,159. Machinery for Compressing and Accumulating Air and Water.** *(Machine pour compresser et accumuler l'air et l'eau.)*

George Goodlet, East Brunswick, Victoria, Australia, 10th December, 1892; 6 years.

*Claim.*—1st. The combination of parts forming the machinery, substantially as described and shown, by means of which fluids may be compressed within an accumulator by aid of a power that need only be sufficient to overcome the coefficient of friction of the moving machinery and of the compressed fluids. 2nd. The combination of the accumulator *D*, displacing cylinder *A*, trunk piston *A'*, rod *A''*, compensating valve *F*, spring *F'*, rod *F''*, check valve *G*, and casing *G'*, with the compensating piston *B'*, in cylinder *B*, furnished

with a U-leather and with the compensating pipe *D'* that communicates the power stored in accumulators to below the compensating piston, substantially as herein described and shown. 3rd. The combination, with an accumulator or reservoir, within which is a displacing cylinder and compensating valve having below it an inlet check valve, of a pipe springing from near top of accumulator and leading to under the piston in compensating cylinder, the rod of which operates the aforesaid compensating and check valve, as and for the purposes described and substantially as shown. 4th. The combination, with a vertical displacing cylinder arranged within an accumulator, of a compensating cylinder, the piston of which works within a U-leather, the piston rods of both being in a vertical line with each other and with a pipe connecting the accumulator and compensating cylinder, substantially as described and shown. 5th. The combination of the compensating cylinder having inlet and outlet valves at its top end with a vacuum chamber, as and for purposes described. 6th. The combination of the check valve *G'*, furnished with friction clutch *H*, *H'*, with the compensating piston rod *F''*, and inlet valve box *G*, either with or without the supplementary valve *J'*, as described and shown.

**No. 41,160. Spring Motor.** *(Moteur à ressort.)*

The Universal Sewing Machine Motor Attachment Company, assignee of Eli Samuel Reed, all of Chattanooga, Tennessee, U.S.A., 10th December, 1892; 6 years.

*Claim.*—1st. In a spring motor, the combination, of a spring driven train of frictional gearing, which includes a drum having a frictional wheel connected thereto, and said drum containing the drive spring, of another frictional wheel having an internal part thereto, serving as a journal for the drum, together with a short shaft carrying a wheel, which is belted to the driven machine, said shaft being actuated by the aforesaid train of frictional gearing. 2nd. In a spring motor, the combination with a spring driven train of frictional gearing, that includes a drum having a frictional wheel connected thereto, and said drum containing the drive spring, of another friction wheel having an integral tube, on which the drum revolves as a journal, a shaft carrying a wheel belted to the driven machine and actuated by the aforesaid train of gearing and winding devices for rotating the friction wheel and its integral tube. 3rd. In a spring motor, the combination of the drum having a frictional wheel connected thereto, the spring within the drum, the friction wheel and its integral part on which the drum revolves, the shaft above the drum, the bevel wheel carried thereby, the multiplying gearing connecting the friction wheel, on the drum with the said shaft of the bevel gear and horizontal shaft carrying the bevel pinion acted on by the bevel wheel, and carrying also a pulley belted to the driven machine. 4th. In a spring motor, the combination of the drum, the spring driven train of gearing, including a friction wheel connected to the drum, a frictional disc or wheel having an integral tube on which the drum revolves and the friction dogs acting on said disc. 5th. In a spring motor, the combination with the spring driven train of frictional gearing which includes a friction wheel connected to the drum containing a drive spring, of a frictional disc having an integral part thereof serving as a journal for the drum, the dogs acting to clutch said disc and devices for rotating the same for the purpose of winding the spring. 6th. In a spring motor, the combination with a spring driven train of frictional gearing, including a frictional wheel connected to the drum which contains the drive spring, of a friction wheel or disc having an integral part serving as a journal for the drum, friction dogs acting in connection with the periphery of said friction wheel, a bevel gear mounted below the wheel and loosely connected thereto, so as to rotate therewith, and winding devices for actuating said bevel gear. 7th. In a spring motor, the combination with a spring driven train of frictional gearing, including a frictional wheel connected to the drum containing the drive spring, of a frictional wheel having an integral part thereof serving as a journal for the drum, the friction spring provided dogs, acting to clutch the periphery of said friction wheel, the horizontal shaft geared to the friction wheel, and the winding lever provided with clutching devices, whereby the said shaft is rotated for the purpose of winding the drive spring. 8th. In a spring motor, the combination, with the spring driven train of frictional gearing, of the drum containing the drive spring, a friction wheel or disc having an integral part on which said drum revolves, the dogs acting in connection with the periphery of said friction wheel, the bevel gear having a projection on its upper side engaging a recess in the said friction wheel, the horizontal shaft carrying a bevel gear engaging the aforesaid bevel gear, and the winding lever containing a disc which is connected to said shaft, together with one or more dogs operating in connection with said disc to cause the parts to act as a clutch. 9th. In a spring motor, the combination, with a spring driven train of frictional gearing, and a drum containing the drive spring, of the frictional wheel having an integral part on which the drum revolves, the dogs *P*, *P'*, having springs *p*, *p'*, and acting in connection with said friction wheel, the gear *O*, having a projection *o*, on the upper side thereof adapted to enter the recess *h*, in the friction wheel and the bottom shaft *a*, beneath the gear, the shaft *R* having a gear *R'* engaging the gear *O*, and the winding lever *Q* carrying the disc *Q'*, together with the dog *Q''*, substantially as described. 10th. In a spring motor, the combination of the drum containing a drive spring, the train of multiplying frictional gearing for