Claim.—1st. The combination of a car or cage, a motor carried thereby and moving the same, a friction brake acting on the shaft of said motor, a controller connected with the motor to determine the direction of rotation of the motor shaft, a lifter carried by said controller and connected with the brake, and a guide or stop bearing on said lifter and having a central notch, substantially as and for the purposes set forth. 2nd. The combination of a car or cage, a motor carried thereby and moving the same, and a controlling device for said motor consisting of a pinion mounted on the side of the car, intermediate gear connecting said pinion with the motor, and a segmental rack pivoted on the side of the car and meshing with said pinion. 3rd. The combination of a car or cage, a prime mover carried thereby, upright shafts also carried by said car or cage, and geared at one end with said prime mover, vertical racks, worms on said shafts geared with said racks, and a supplementary transverse shaft geared with the opposite end of said upright shafts, substantially as set forth.

No. 50,431. Telephone System. (*Système de téléphone.*)

Fig. 2.

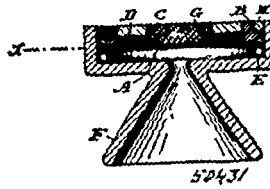
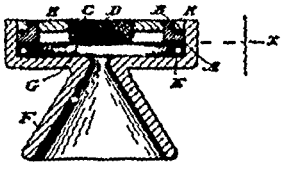


Fig. 4.



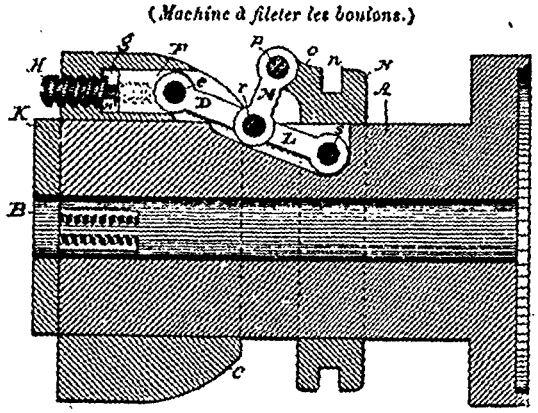
50431

Alfred Charles Brown, Lewisham, England, 2nd November, 1895; 6 years.

Claim.—1st. In a telephone receiver the arrangement and combination of a central or cylindrical casing or ring seating with ear piece and with two diaphragms both adapted to be simultaneously vibrated in opposite directions to or from each other, and polarized by magnets, substantially as above specified. 2nd. In a telephone receiver having two diaphragms clamped onto a cylindrical seating, the use for polarizing such diaphragms or cores, of a split steel tube such as S, encircling the coils as above described, or for the same purpose of bar magnets or of horse-shoe magnets, or of magnets arranged or adapted to operate substantially as above described and illustrated. 3rd. The combination in a telephone receiver, of a primary of an induction coil connected in circuit with the transmitter and local battery, with the coil or coils normally used for actuating the receiver, which is or are thereby caused to act also as the secondary of the induction coil, for the purpose of eliminating the resistances and impedances of the secondaries of the induction coils otherwise usually employed, and thereby increasing the amount of current energy available for actuating the receiver diaphragms at both ends of an ordinary telephone circuit, substantially as above set forth. 4th. A telephone receiver constructed to produce a loud buzzing sound by providing a contact screw located to make contact with its diaphragm or one of its diaphragms if it have more than one, said contact screw and diaphragm being joined in circuit with a battery and one of the coils of the receiver, as above described. 5th. The method, apparatus and electrical connections above described for calling attention at a subscriber's station from an exchange or central station by sending through the coils of the subscribers or out station telephone receivers the currents generated by an induction coil or the extra currents from an electro-magnet joined in circuit in either case with a current generator and rapid make and break, substantially as and for the purposes set forth. 6th. In a transmitter, an electrode in the form of the frustum of a cone in combination with an elastic packing forming a ring around said electrode, and a mass of hard carbon granules filling the triangular space between the cone, the packing ring and the diaphragm, and subjected by said ring to an elastic pressure exerting a constant tendency to cause the said granules to move up the incline of the cone towards and on to the diaphragm, and the said electrode carrying no granules on any other surfaces, substantially as set forth. 7th. In a telephone transmitter, a carbon electrode having one or more grooves or projections running in any longitudinal direction, rectilinear or curvilinear, over its surface, one of the walls of such grooves or projections being inclined to the face of the diaphragm (at an angle of approximately 45 degrees) and having parallel thereto and at a short distance therefrom a strip of cotton, wool or other springy packing following the direction of the length of such grooves or projections so as to form, together with the diaphragm and inclined face of the electrode, a triangular space having two rigid sides and one yielding side in which alone the hard carbon granules are confined, substantially as set forth. 8th. The herein described improvement in constructing telephone transmitters having a diaphragm resting upon an elastic seat, consisting in subjecting the diaphragm and said elastic seat together to the determinate measured pressure of a weight, spring or other device, and cementing, fixing or setting the diaphragm in position by a rigid clamping device without disturbing the said pressure. 9th. In a telephone transmitter, the combination, substantially as described, of a back ring or piece having a back electrode fastened to it, a diaphragm, an elastic seating for the edge of the same, and a frame or case in which said back piece is cemented to hold the said diaphragm in place between the frame and back piece and against the elastic seating with the measured pressure to which the said back piece is subjected at the time of cementing. 10th. In a telephone transmitter, the combination of a diaphragm, a back electrode conducting granules compressed between the diaphragm and back electrode, a frame or case, an elastic ring seating at the front of the diaphragm between the same and the case, and means for fastening the diaphragm and back electrode in the frame and at the same time holding the said diaphragm pressed from its rear against the said ring.

No. 50,432. Bolt Threading Machine.

(*Machine à fileter les boulons.*)



50432

Michel D. Luehrs, Cleveland, Ohio, U.S.A., 2nd November, 1895; 6 years.

Claim.—1st. In a bolt-cutter head the combination with the barrel and the die-ring sliding thereon, of a toggle having an adjustable connection to the die-ring and a fixed pivotal connection to the barrel, a clutch-ring sliding on the barrel and a link pivoted at one end to the clutch-ring, and at the other to the centre joint of the toggle, substantially as described. 2nd. In a bolt-cutter head the combination with the barrel and the die-ring sliding thereon, of a toggle having one end pivoted directly to the barrel and the other end pivoted to a block sliding in a recess in the die-ring, an adjusting screw threaded into said block and having a bearing in the die-ring, a clutch-ring sliding on the barrel, and a link pivoted at one end to the clutch-ring and at the other to the centre joint of the toggle, substantially as described. 3rd. In a bolt-cutter head the combination with the barrel, the die-ring sliding thereon, and a toggle immovably pivoted to the barrel and movably pivoted to the die-ring, of a clutch-ring sliding on the barrel and connected by a link to the centre joint of the toggle and adapted to force the outer end of the connecting link forward of a line at right angles to the line joining the pivots of the toggle when fully extended, so as to lock the toggle in the extended position as described. 4th. In a bolt-cutter head the combination with the barrel and the die-ring sliding thereon, of the toggle having one end pivoted directly to the barrel and the other end pivoted to a block sliding in a recess in the die-ring, an adjusting screw threaded through the die-ring and into the sliding block by threads of different pitch, a clutch-ring sliding on the barrel, and a link pivoted at one end to the clutch-ring and at the other to the centre joint of the toggle, substantially as described.

No. 50,433. Bolt Cutter. (*Appareil à couper les boulons.*)

Michel D. Luehrs, Cleveland, Ohio, U.S.A., 2nd November, 1895; 6 years.

Claim.—1st. In a bolt-cutter head the combination with the barrel, the die-carrying arms pivoted at their rear ends therein and having radial movement on such pivots, and a clutch-ring sliding on the barrel outside of the die-carrying arms, of a toggle connecting the clutch-ring with each die-carrying arm at its forward end, substantially as described. 2nd. In a bolt-cutter head the combination with the barrel, the die-carrying arms pivoted at their rear ends therein and having radial movement on such pivots, and a clutch-ring sliding on the barrel outside of the die-carrying arms, of a toggle connecting the clutch-ring with the die-carrying arm in line radially with the die, substantially as described. 3rd. In a bolt-cutter head the combination of the barrel, die-carrying arms pivoted at their rear ends therein and having radial movement on their pivots, a clutch-ring sliding on the barrel outside of the die-carrying arms, and a toggle link pivoted at one end to the clutch-ring and at the other to the forward end of the die-carrying arm, substantially as described. 4th. In a bolt-cutter head the combination of a barrel, die-carrying arms pivoted at their rear ends therein and having