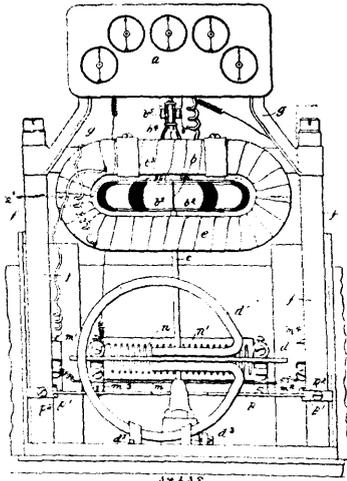


register with the passage ways leading to the bulbs as the wheel is rotated, said exhaust compartment provided with a series of openings with which each passage way is adapted to successively register, and a controlling device by which their size may be varied. 13th. A wheel comprising a rim provided with a series of hollows or indentations, a series of hollow flexible bulbs fitting into said hollows or indentations and connected with the rim of the wheel, passage-ways in communication with said bulbs and leading to the hollow hub of the wheel, an axle upon which said wheel is mounted provided with the exhaust and admission compartments separate from each other, the admission compartment adapted to be connected with a source of fluid supply, and the exhaust compartment adapted to be connected with the external air, said admission compartment provided with an opening adapted to successively register with the passage-ways leading to the bulbs as the wheel is rotated, said exhaust compartment provided with a series of openings with which each passage-way is adapted to successively register, a movable plate associated with said exhaust openings and adapted to be moved so as to vary their size, and a controlling device for said plate by which its position may be varied. 14th. A motor device consisting of a wheel having a series of radially movable parts associated with its periphery, said parts adapted to be moved so as to be radially extended by means of a fluid under pressure, a source of fluid supply with which said movable devices are successively operatively connected, a series of exhaust openings adapted to be placed in communication with said movable parts, and a controlling device for said exhaust openings by which their size may be varied and a gradual but incomplete exhaust may be obtained, substantially as described.

**No. 54,238. Electric Meter. (Electromètre.)**



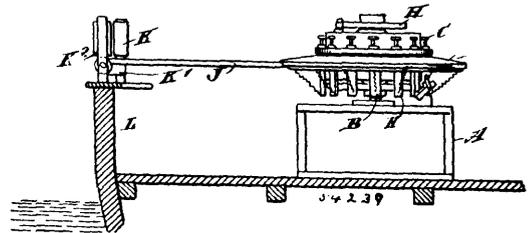
The Diamond Electric Company, assignee of Gustave A. Scheffer, all of Peoria, Illinois, U.S.A., 2nd December, 1896; 6 years. (Filed 18th May, 1896.)

*Claim.*—1st. In an electric meter, the combination with field coils connected with the circuit to be measured, of an armature adapted to be actuated thereby which is connected with said circuit and with the field coils to receive current passing through said coils sufficient to supply a torque thereto adapted to overcome the initial friction of the rotating parts, substantially as described. 2nd. In a direct-current electric meter, the combination with an armature and an adjusted resistance, of field coils connected in a branch across the mains of the measured circuit in series with said armature and resistance as multiple branches, and a second resistance cut into one of the mains of the said measured circuit between the points at which the armature and adjusted resistance are connected, substantially as described. 3rd. The combination in an electric meter with the field coils *c* connected in a branch across the mains of the circuit to receive measurement of the armature *b*, and resistance *o* connected as multiple branches in series with the field coils, said resistance being adjusted to divert to the armature a sufficient amount of the current flowing through the fields to supply a torque adapted to overcome the initial friction of the meter parts, and a light resistance *n* cut into one of the mains of the measured circuits between the points at which the armature and the adjusted resistance are connected, substantially as described. 4th. In an electric meter, the combination with the armature, of commutator segments formed of German silver alloy electrically connected with the armature coils, and brushes engaging therewith faced with platinum, substantially as described. 5th. In an electric meter, the combination with the armature *b*, of commutator segments *b'* constructed of German silver alloy, and brushes *b''* provided with bearing faces of platinum, substantially as described. 6th. In an electric meter, the combination with a sectional armature core constructed of wood or other light material, of an aluminium disc or plate to which the said sections are secured, substantially as described. 7th. In an electric meter, the combination with the wooden armature core constructed in sections *b'*, of the aluminium disc *b''* to which the said sections of

the armature are fastened, substantially as described. 8th. In an electric meter, the combination with a vertical shaft whereon the rotating parts are mounted, of a laterally-extending bar or strip adapted to be adjustably secured at such a height as to support the weight of the shaft and mounting, substantially as described. 9th. In an electric meter, the combination with the shaft *c* whereon the armature *b* and disc *d* are mounted, of the bar *p* provided with collars *p'*, encircling the uprights *f*, the said bar being adapted to be raised and lift the said shaft from its lower bearing or jewel and be secured in position by the screws *p''* provided in the said collars, substantially as described. 10th. In an electric meter, the combination with a disc mounted upon a driving shaft of the registering train, of permanent damping magnets between the poles of which said disc rotates, and guides or ways extending in planes parallel to a diameter of the disc wherein the said magnets are laterally adjustable in the plane of rotation of the said disc and adapted thereby to include portions of the disc partially or entirely in the fields of the damping magnets, substantially as described. 11th. In a damping device of an electric meter, the combination with an aluminium disc mounted upon and rotating with the driving shaft of the registering train, of permanent magnets between the poles of which the said disc is adapted to rotate, and ways or guides extending in planes parallel to a diameter of the disc wherein the said magnets are mounted, permitting a lateral adjustment of the magnets to include portions of the disc partially or entirely in their magnetic fields and vary the damping effect of the device, substantially as described. 12th. In an electric meter, the combination with the aluminium disc *d* mounted upon the vertical shaft *c*, of permanent damping magnets *d'*, between the poles of which the said disc is adapted to rotate, ways or guides *d''* wherein the said magnets are laterally adjustable in the plane of rotation of the said disc to secure the regulation of the damping effect of the device, and means for securing the said magnets in their adjusted positions, substantially as described.

**No. 54,239. Net-lifting Apparatus.**

(Appareil pour haler les filets.)



John W. Atwood, Malden, Massachusetts, U.S.A., 2nd December, 1896; 6 years. (Filed 24th October, 1896.)

*Claim.*—1st. An apparatus of the class described, provided with a revoluble drum, clamps arranged on the periphery thereof, each clamp comprising an elastic block, a guideway for the same, an adjustable plate engaging the top of the block, a movable block directly opposite the said elastic block, a lever pivoted on the drum and adapted to actuate with said movable block, a link for connecting said lever with said movable block, a stationary cam capable of moving the lever, and a spring pressing the lever, substantially as described. 2nd. An apparatus of the class described, provided with a revoluble drum, clamps arranged on the periphery thereof, each clamp comprising an elastic block, a guideway for the same, an adjustable plate engaging the top of the block, a movable block directly opposite the said elastic block, a lever pivoted on the drum and adapted to actuate the said movable block, the adjacent ends of the said movable block and lever being bevelled, a cam capable of turning the lever, and a spring pressing the lever, substantially as described. 3rd. The combination with the frame, of a vertical shaft revolubly mounted thereon, a drum fixed to the shaft, a series of stationary blocks carried by the drum, a movable block for each stationary block and carried by the drum, and capable of sliding toward and from the respective stationary blocks, levers fulcrumed on the drum, links respectively connecting the levers and the movable blocks, a table outrunning from the drum and moving therewith, retractile springs respectively connected to the levers and to the table, and a cam fixed to the frame and capable of being engaged by the levers, the cam being engaged to move the levers against the tendencies of the springs, substantially as described. 4th. The combination with a frame, of a vertical shaft revolubly mounted therein, a drum carried by the shaft, stationary blocks carried on the drum, movable blocks respectively sliding towards and from the stationary blocks, levers fulcrumed to the drum, links respectively connecting the lever and movable block, springs pressing the levers, and a cam for moving the levers against the tensions of the spring, substantially as described.

**No. 54,240. Loom. (Métier.)**

Elmer Gates, Chevy Chase, Maryland, U.S.A., 2nd December, 1896; 6 years. (Filed 12th November, 1896.)

*Claim.*—1st. In a loom, in combination, a pair of solenoids, an electric circuit, means for throwing said solenoids alternately into