(No Model.)

M. MERICHENSKI.

APPARATUS FOR RAISING AND LOWERING GASOLIERS AND CHANDELIERS.

No. 273,576. Patented Mar. 6, 1883.

Fig. 2.

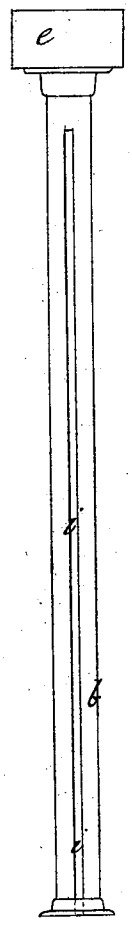


Fig. 1.

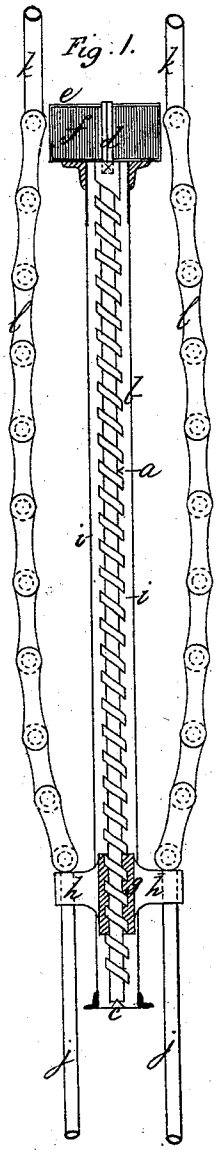
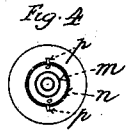


Fig. 4.



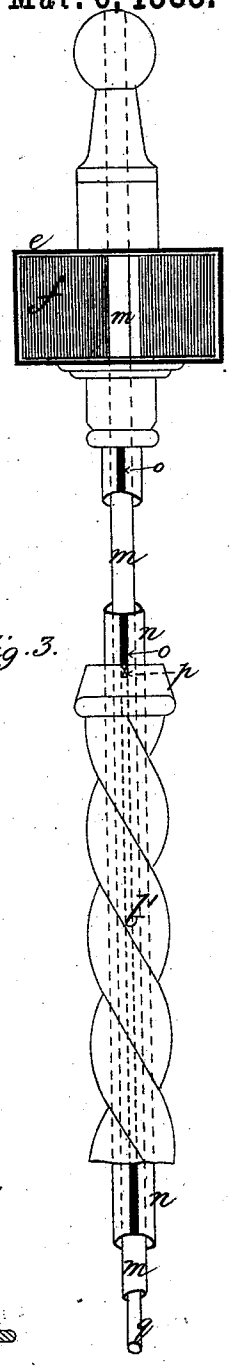


Fig. 3.

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UNITED STATES PATENT OFFICE.

MOSKA MERICHENSKI, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

APPARATUS FOR RAISING AND LOWERING GASOLIERS AND CHANDELIERS.

SPECIFICATION forming part of Letters Patent No. 273,576, dated March 6, 1883.

Application filed July 11, 1882. (No model.) Patented in England September 2, 1881, No. 3,828; in France March 25, 1882, No. 148,094; in Germany March 25, 1882; in Belgium March 27, 1882, No. 57,460, and in Austria March 31, 1882.

To all whom it may concern:

Be it known that I, MOSKA MERICHENSKI, a subject of the Emperor of Russia, residing at London, in the county of Middlesex, England, have invented a new or Improved Apparatus for Raising and Lowering Gasoliers and Chandeliers, also applicable to other purposes, (for which I have obtained a patent in Great Britain, No. 3,828, bearing date September 2, 1881,) of which the following is a specification.

My invention relates to a new or improved means of and apparatus for raising and lowering the sliding parts of gasoliers and chandeliers, also applicable to other appliances having a like action.

On the accompanying drawings, Figure 1 is a vertical section illustrating my invention as applied to gasoliers and chandeliers, according to which arrangement I make use of a screw or worm, *a*, placed centrally within the fixed portion or case *b* of the gasolier or chandelier, its bottom end being mounted on a pivot, *c*, at the bottom of the case *b*, and its upper end formed with a square recess, into which is inserted a square pivot or bar, *d*, which passes up into a box, *e*, where it is attached to a spiral or coiled spring, *f*, (similar to that of a watch or clock.) This box *e*, with its appendages, as described, is secured to the ceiling of the room or building in any suitable manner. On the central screw or worm, *a*, is fitted a nut, *g*, with opposite arms *h h*, which pass through corresponding slots, *i*, Fig. 2, in the case *b*, and carry at their ends the sliding pipes *j* (shown broken away) of the gasolier, or the carrying-tubes of the chandelier, (as the case may be.) On pulling down or lowering the sliding pipes, *j*, (or carrying-tubes,) the nut *g*, traveling along the screw or worm *a*, causes it to revolve and wind up the spiral spring *f* at the top, and on raising the sliding pipes *j* the reaction of the spring *f* causes the screw or worm *a* to revolve in the opposite direction, so as to raise the nut *g*, thereby reducing the pressure required to raise the sliding pipes *j* by the hand to a minimum, or not exceeding that necessary when weights are used, which in this case are entirely dispensed with.

For conveying the gas from the main pipe to the sliding pipes *j*, in the case of gasoliers, the gas passes through a pipe, (or pipes,) *k*, by the side of the spring-box *e*, or near thereto, and thence through flat hollow links *l*, swiveled together at the sides, as shown, so as to form connecting ducts or chains, which communicate with the upper ends of the sliding pipes *j*, and which, when the latter are raised, as above described, spread out or accommodate themselves to the movement.

Fig. 3 is a sectional elevation, showing a modified form of my invention, in which the worm or screw *a'*, in lieu of extending the entire length of the central tube, (or bar,) *m*, as in Fig. 1, is formed only for a short distance thereon at its lower (or upper) end. This spiral portion *a'* of the central tube, (or bar,) *m*, works in a corresponding worm or thread formed on the entire length of the interior of the case or elongated nut *b'*. The central tube, (or bar,) *m*, is inclosed by a second tube, *n*, constituting the sliding pipe of the gasolier, (or carrying-tube of the chandelier, as the case may be,) and formed with longitudinal slots *o*, Fig. 4, taken into by tongues or pieces *p* (in combination or not with friction-rollers) on the case or elongated nut *b'*, for preventing the tube *n* (or sliding pipe) from turning. In this arrangement the arms *h h* (shown in Fig 1) may be dispensed with, if desired. On pulling down the case or elongated nut *b'* of the gasolier the worm or screw on its internal surface causes the spiral portion *a'*, with the inner central tube, (or bar,) *m*, to rotate, and in so doing the latter winds up the spiral or coiled spring *f* at the top. On raising the case or elongated nut *b'*, the reaction of the spring *f* causes the central tube, *m*, and its spiral portion *a'* to revolve in the opposite direction, and so easing the weight of the gasolier or chandelier in a similar manner to that described in Fig. 1; or, if desired, the case or elongated nut *b'* may be fixed to the ceiling, and the tube or sliding pipe *n* pulled up and down. The gas is conveyed to the burners of the gasoliers through a third tube, *q*, passing through the central tube, *m*, and through a stuffing-box at its lower end to prevent the escape of gas.

My invention may be applied to any other purposes where a raising and lowering action is required, such as for electric lamps or chandeliers, shutters, and others. Among its ad-

vantages are—that the water hitherto used in hydraulic chandeliers is dispensed with, and, no weight being required, danger is avoided.

I claim as my invention—

1. The combination, with a central tube and a spring, of a worm or screw arranged within the tube, and a nut provided with opposite arms, and adapted to slide in slots of said tube to revolve said worm or screw, substantially as set forth.

2. The combination, with a case or box containing a coiled spring, of a tube, *b*, a worm, *a*, a bar, *d*, a nut provided with opposite arms, and adapted to slide in longitudinal grooves of said tube to operate the spring, and sliding pipes and chain connections, substantially as set forth.

3. In a device for raising and lowering gasoliers, &c., the combination, with a casing or box adapted to be secured to a ceiling, and containing a coil-spring, of a worm and a nut or equivalent device connected with sliding gas-pipes, and adapted to move on said worm, thus revolving the latter and operating the spring, as set forth.

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