

(No Model.)

W. J. McGALL.
HAT BRIM IRONING MACHINE.

No. 483,746.

Patented Oct. 4, 1892.

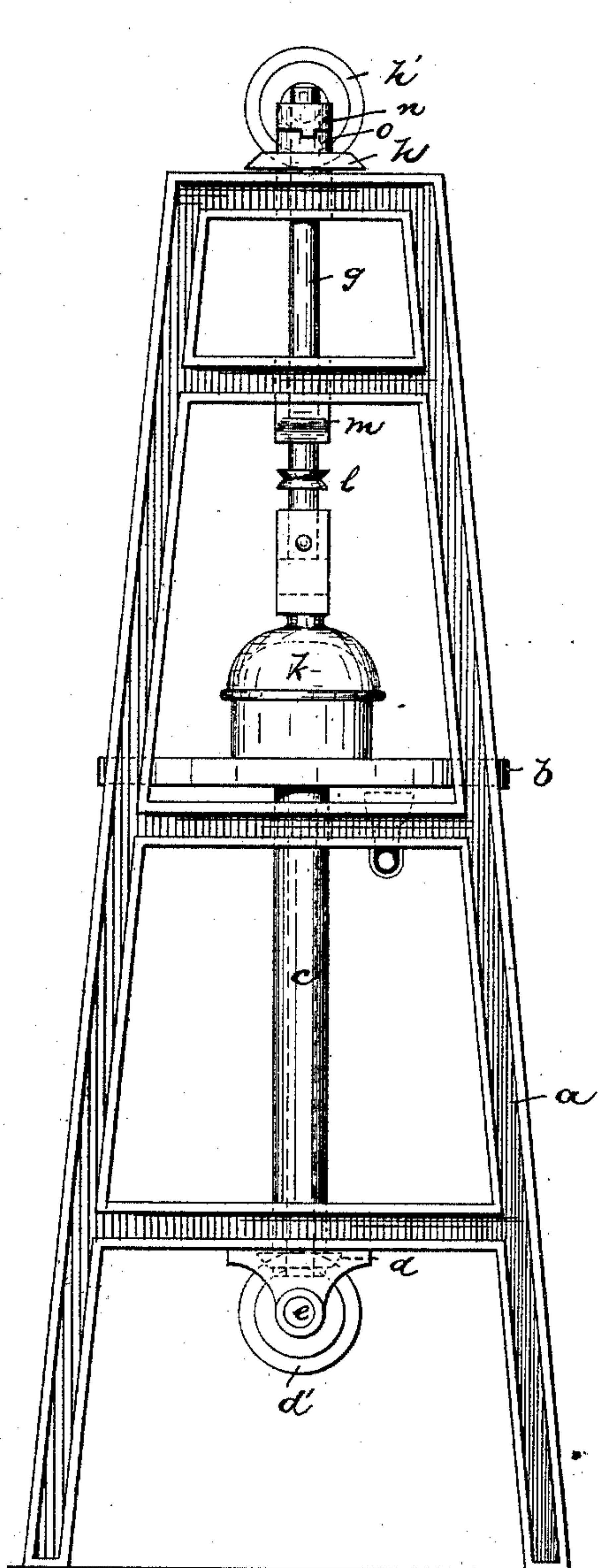


Fig. 1.

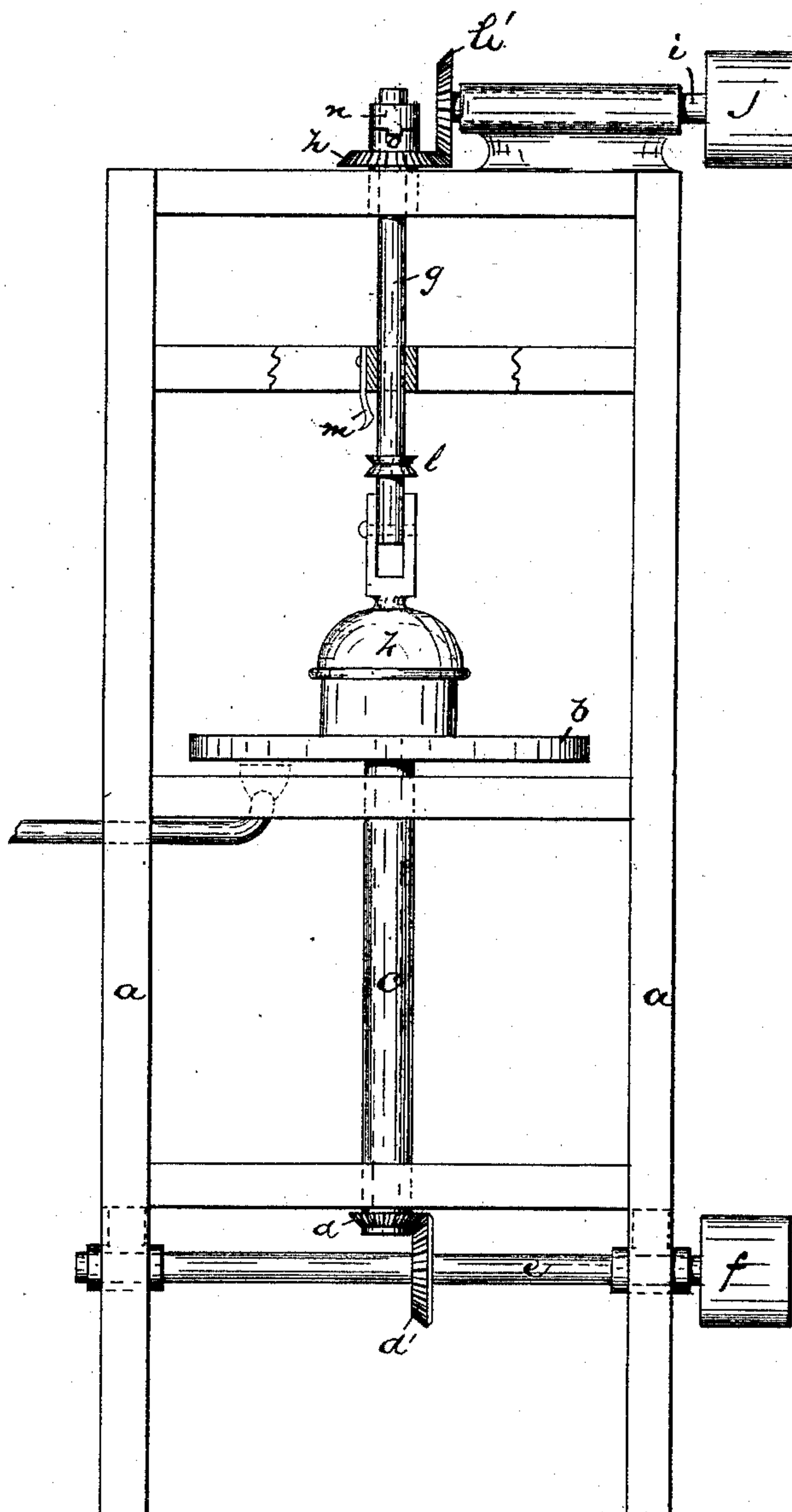


Fig. 2.

Witnesses:

Inventors

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UNITED STATES PATENT OFFICE.

WILLIAM J. MCGALL, OF WEST ORANGE, NEW JERSEY.

HAT-BRIM-IRONING MACHINE.

SPECIFICATION forming part of Letters Patent No. 483,746, dated October 4, 1892.

Application filed February 11, 1892. Serial No. 421,086. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MCGALL, a citizen of the United States, residing at West Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Hat-Brim-Ironing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to that class of hat-brim-ironing machines represented by the one described in a co-ordinate application filed September 23, 1891, in the United States Patent Office, Serial No. 406,540, in which a disk-like rotary iron suitably heated by gas or other means co-operated with a rotary block centrally disposed over said disk and revolving at a slower rate of speed and with a hand-iron, also heated, to iron out the hat-brim.

The object of the present improvements is to provide other means for accomplishing the advantageous results referred to in the said co-ordinate application and to secure other advantages and results, some of which will be referred to in connection with the description of the working parts.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in both of the views, Figure 1 is a side view, and Fig. 2 is a front view, of a machine embodying my improvements.

In said drawings, *a* indicates a suitable frame providing bearings for the working parts.

b is a rotary ironing-disk adapted to be heated in any ordinary manner. The said disk is carried by a shaft *c*, to which power is imparted by gearing *d*, *d'*, *e*, and *f* or other appropriate means. Above said ironing-disk is arranged another shaft *g*, to which rotary motion is transmitted through gearing *h*, *h'*, *i*, and *j* in any suitable manner, the said gearing serving to revolve said shaft at a rate of speed slower than that of the ironing-disk shaft. The shaft *g* has a vertical movement

in its bearings, or a movement toward and from the ironing-disk, and carries a block-grasping clamp or hand *k*, adapted to engage the hat-block or the hat arranged on said hat-block and cause the same to revolve therewith. At the upper end of said shaft is a suitable clutch, one section *n* of which is on the shaft and the other *o* on the gear-wheel *h*. By simply raising the shaft out of engagement with the gear-wheel its rotary movement is stopped, and by a reverse movement the rotation of the shaft is begun. The shaft is provided with a suitable catch *l* to co-operate with another catch *m* on the frame of the machine, by which the said shaft and its clamp or hand are held in their elevated positions or away from a position to engage the hat-block. Said clamp or hand consists of an elastic and concavous device adapted to fit over the body of the hat and the hat-block, as indicated in the figures of the drawings. It is preferably of india-rubber, though it may be of any other spring material, and is coupled to the rotary shaft *g*, so as to revolve therewith and impart rotary motion to the hat and hat-block stationed at the center of the rotary disk.

The hat-block is independent of the ironing-disk and rotary clamp and simply rests on said disk, being free to move independent of said disk under the power of said clamp. Any suitable means may be employed to operate the vertically-movable shaft from and to engagement with the catch, either mechanical means or the hand of the operator.

In operating the device, motion being given to the disk and cog-wheel *h'* and the elastic clamp being in its elevated position free of the hat and hat-block, the hat is placed on said hat-block and the two are disposed centrally upon the ironing-disk, the brim of the hat being laid out horizontally upon the latter. The clamp is then lowered and snugly caught upon the hat body and block by frictional contact, and the clutch parts are at the same time brought into operative engagement, so that rotary motion is imparted to the vertical shaft, the hat and hat-block clamp, and said hat and hat-block, and thus the rim is caused to revolve on the ironing-disk, but at a speed less than that of said disk.

By employing an ordinary heated hand-iron on the top of the brim the latter is ironed out smooth and without wrinkles.

Having thus described the invention, what
5 I claim as new is—

1. The combination, with a rotary ironing-disk, of a hat-block and a rotary concave clamp arranged above said disk and adapted to grasp the hat-body upon the said hat-block
10 and cause the same to revolve upon the ironing-disk, substantially as set forth.

2. The combination, with a rotary ironing-disk, of a rotary shaft arranged above the center of said disk, a clamp to engage the
15 hat-block and secured to said shaft to revolve therewith and movable to and from the said disk, and a hat-block adapted to receive the

body of the hat and admit of the brim of said hat lying on said disk, substantially as set forth. 20

3. In a hat-brim-ironing machine, the combination, with a rotary ironing-disk, of an elastic hat-body clamp disposed above the center of the said ironing-disk and revoluble at a rate of speed slower than that of said disk, 25 but in the same direction, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of February, 1892.

WILLIAM J. MCGALL.

Witnesses:

CHARLES H. PELL,
OSCAR A. MICHEL.