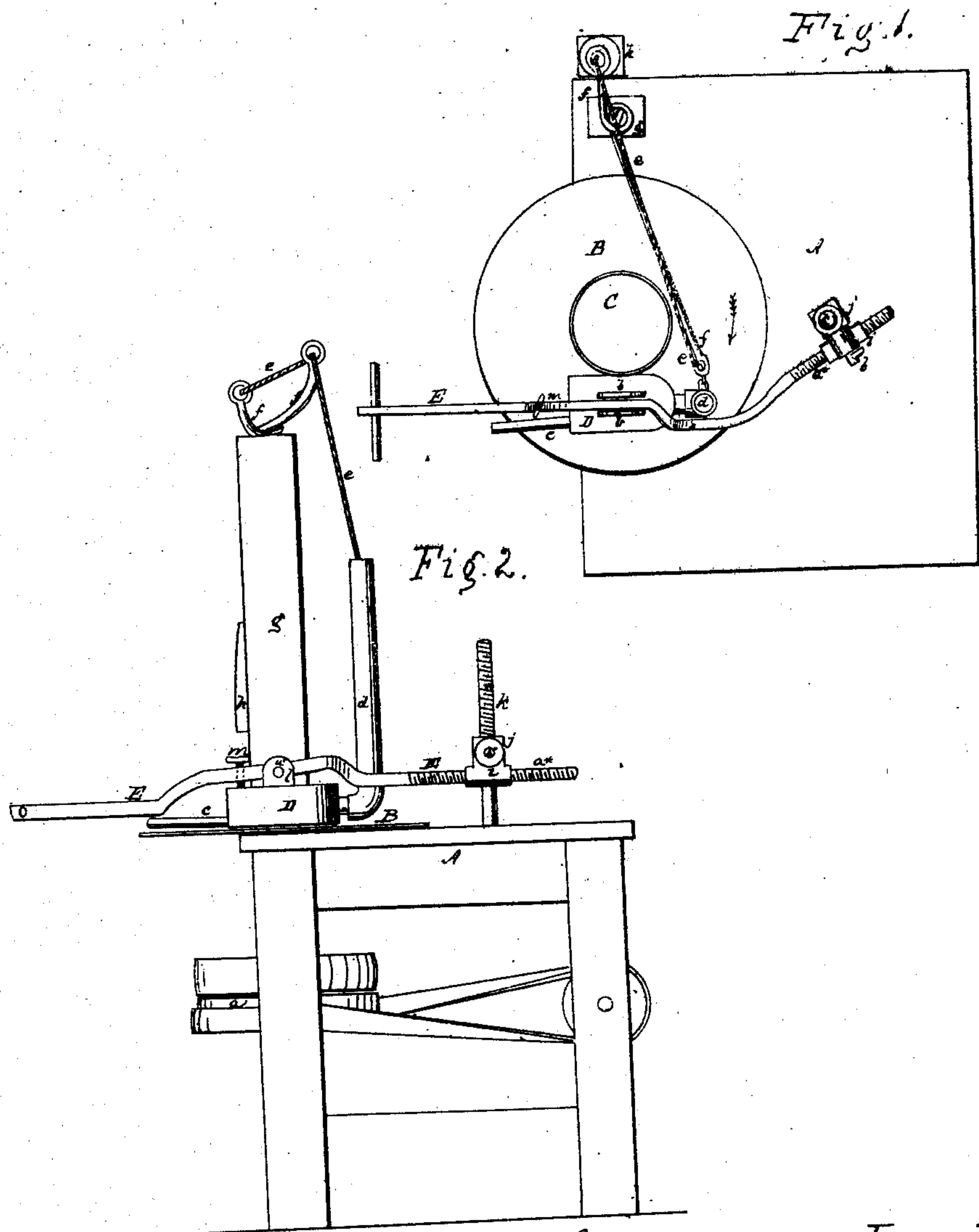


J. T. Waring.
Ironing Hats.

N^o 69950

Patented Oct. 15, 1867.



Witnesses
J. W. Coombs
G. W. Reed

Inventor
J. T. Waring
Per Brown, Coombs & Co.
Attys

UNITED STATES PATENT OFFICE.

JOHN T. WARING, OF YONKERS, NEW YORK.

IMPROVEMENT IN MACHINES FOR IRONING HATS.

Specification forming part of Letters Patent No. 69,950, dated October 15, 1867.

To all whom it may concern:

Be it known that I, JOHN T. WARING, of Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Machines for Ironing Hats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a plan view of a hat-ironing machine constructed according to my invention. Fig. 2 is a side elevation of the same.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to that class of hat-ironing machines in which a single iron, heated by gas or other suitable means, is employed to smooth both the brim and crown of the hat; and the invention consists in the combination, with such iron, of an operating-lever made adjustable vertically and longitudinally in such manner that the iron may be readily adjusted to smooth hats of different sizes, or having crowns of different heights.

The invention further consists in the combination of a weight and cord with the chimney pivoted to the iron, whereby the said chimney is effectually retained in an upright position while the iron is being manipulated during the ironing operation.

The invention further consists in a thumb or set screw so combined with the iron and the operating-lever thereof that the iron may be easily adjusted, and so that its smoothing-surface may be brought into the most advantageous position with reference to the surface of the hat-brim when ironing the same.

To enable others to understand the construction and operation of my invention, I will proceed to describe it with reference to the drawings.

The framing which supports the working parts of the machine is marked A in the drawings, and supports the circular table B, which rotates on a vertical shaft, and has secured centrally thereon a suitable hat-block, C, the said table receiving its motion by means of a band-wheel, *a*, attached to its shaft, as indicated in Fig. 2, or by any other appropriate means. The smoothing-iron is marked D, and

has formed upon its upper side two upwardly-projecting ears, *b*, which are pivoted by a transverse pin, *a'*, to the operating-lever E. The gas-pipe by which the internal burner which heats the iron D is supplied with gas is represented at *c*, and is situated at the rear or butt end of the said iron, and pivoted in any suitable manner to the front or opposite end of the iron is the chimney *d*, which serves to carry off the products of combustion from the internal burner just mentioned, and is retained in an upright position by a cord, *e*, which, passing upward and then laterally through the looped ends of a nearly horizontal brace, *f*, which is itself supported by a vertical post, *g*, is furnished with a weight, *h*, at its opposite end, which, drawing upon the upper end of the chimney, retains the same in a vertical position. The pivoted or threaded end *a** of the operating-lever E is screwed into a socket-piece, *i*, which is placed upon a cylindrical arm, *b'*, projecting laterally from a movable nut, *j*, which is screwed upon a fixed vertical screw-shaft, *k*. Inasmuch as the threaded or pivoted end of the lever E turns within the socket-piece *i*, the socket-piece turns upon the arm *b'* of the nut *j*, and the said nut turns upon the fixed screw-shaft *k*, it follows that a universal joint is formed, which not only permits the lever E to be turned around upon its longitudinal axis, but also permits the same to be swung upward or laterally, as circumstances may require, at the same time that the height of the pivoted end of the lever E may be adjusted at pleasure by simply turning the nut *j* upon the screw-shaft, and the smoothing-iron may be moved to a greater or less distance from the said screw-shaft by unscrewing the threaded end of the lever E, as the case may require, in or out of the socket-piece *i*. Passing vertically through the lever E, with its lower extremity resting upon the rear portion of the upper surface of the smoothing-iron, is a thumb or set screw, *m*, and by turning this thumb-screw *m* the rear end of the smoothing-iron may be pressed downward with reference to the said lever in such manner that the under or smoothing surface of the iron, when placed upon the brim of the hat, will be situated at a slight angle thereto, as required in the operation of smoothing or ironing the

brim, in order to prevent the forward edge of the iron from digging into or abrading the surface of the said brim, the aforesaid smoothing-surface of the iron being by these means brought, as it were, to act gradually upon the aforesaid brim.

In using the machine the hat is first placed with its crown upon the hat-block C and its brim resting upon the rotating table B. A rotary motion is communicated to the said table, and the smoothing-iron is heated, as hereinbefore explained; which being done, the under or smoothing surface of the iron D is pressed down upon the upper surface of the brim of the hat by means of the operating-lever E, and of course smooths or irons the same, whereupon the said operating-lever is turned upon its longitudinal axis, so that the smoothing-surface of the iron may be pressed against the sides of the crown, after which the said smoothing-surface is pressed in like manner upon the tip or upper surface of the crown, the turning of the operating-lever upon its longitudinal axis permitting the smoothing-surface of the iron to be brought in proper contact with and made to conform to the said tip, the chimney *d* being retained in an upright position, not-

withstanding the turning movements of the iron, by means of the weight *h* and cord *e*, as hereinbefore explained; and, furthermore, the lever E being made adjustable, as hereinbefore described, the iron may be readily adapted to ironing hats of any size desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The lever E, working in a universal joint, and made adjustable longitudinally and vertically by means substantially as herein described, in combination with the smoothing-iron D, substantially as and for the purpose specified.

2. The combination of the weight *h* and cord *e* with the chimney *d*, pivoted to the smoothing-iron, substantially as and for the purpose specified.

3. The screw *m*, in combination with the lever E and the smoothing-iron pivoted thereto, substantially as and for the purpose specified.

JOHN T. WARING.

Witnesses:

C. E. WARING,
JAMES CROSBY.