(No Model.) 2 Sheets—Sheet 1.

C. L. BRALEY & J. C. STEWART.

IRONING MACHINE.

No. 491,634. Patented Feb. 14, 1893.

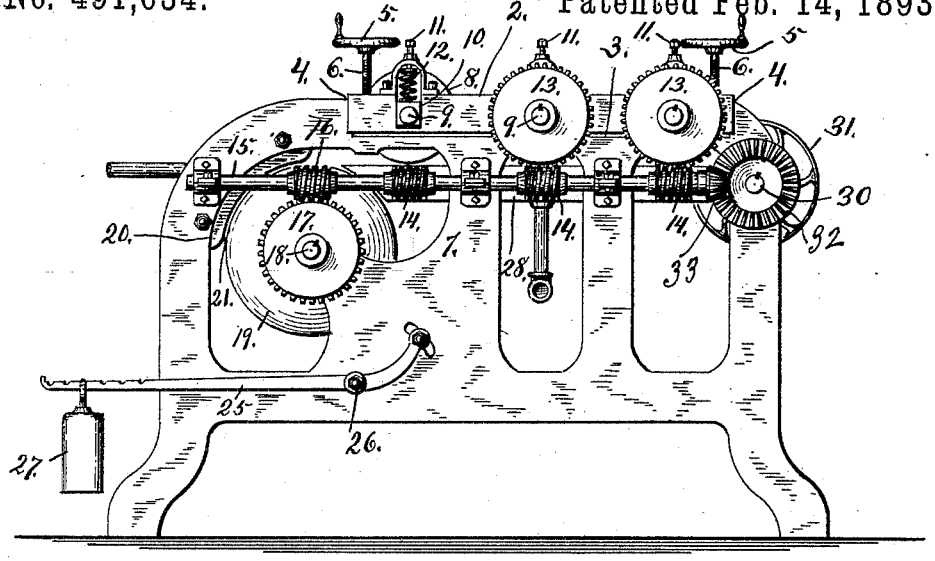

FIG 1.

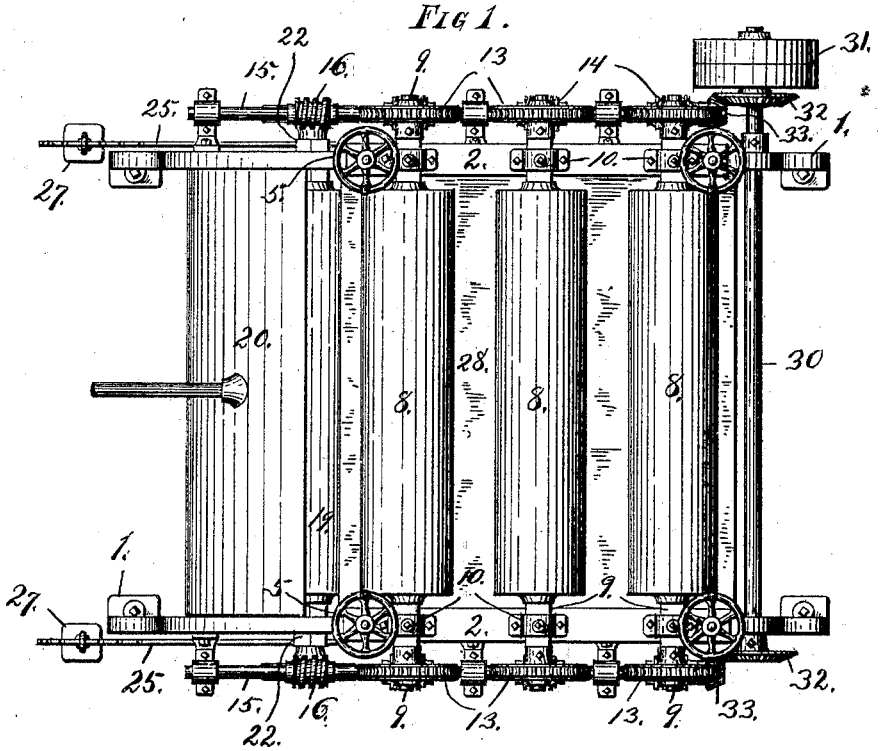

FIG 2.

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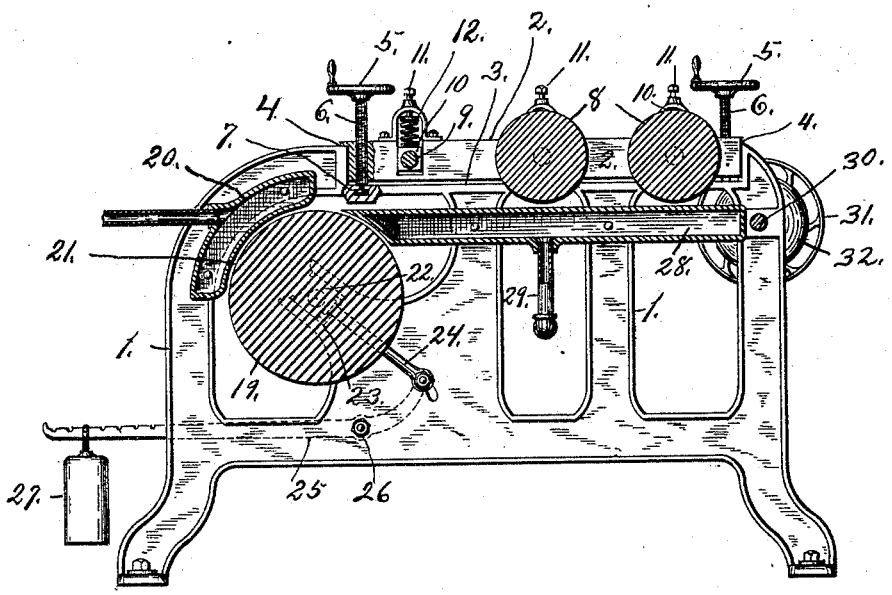

FIG 3.

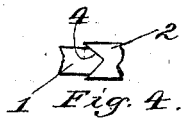

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES L. BRALEY AND JOHN C. STEWART, OF BUFFALO, NEW YORK.

IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 491,634, dated February 14, 1893.

Application filed April 7, 1892. Serial No. 428,110. (No model.)

To all whom it may concern:

Be it known that we, CHARLES L. BRALEY and JOHN C. STEWART, residing at Buffalo, New York, have jointly invented certain new and useful Improvements in Ironing-Machines; and we do hereby declare that the following description of our said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in steam ironing-machines and more particularly to that class of ironing machines in which the linen or material fed through them is ironed and polished upon both sides.

Its object is to produce a steam ironing machine which will expel the moisture and polish the material on both sides in a more rapid and efficient manner.

It consists essentially in the novel and peculiar combination of parts and details of construction as hereinafter first fully set forth and then pointed out in the claim.

In the drawings already referred to which serve to illustrate our invention more fully, Figure 1, is a side elevation of our improved steam ironing mangle. Fig. 2, is a top plan view of the same and Fig. 3, is a central longitudinal section, the rear roller being removed and part of one of the bearing frames being in section. Fig. 4 is a detail plan view, on a larger scale, of the meeting ends of the supporting and bearing frames.

In referring to the drawings it will be seen that the frame of the machine consists of the side plates 1. 1. between which the steam ironing beds or jackets and rollers are arranged. At the upper end of the side plates 1. 1. are arranged the adjustable bearing frames 2. 2. which rest in horizontal longitudinal recesses 3. in the side plates 1. and are notched at their ends as at 4. so as to engage the beveled end walls of the recesses 3 prevent lateral displacement and at the same time permit the frames to be adjusted vertically. These frames 2. are adjusted at will by the hand-wheels 5. which are mounted upon the screw-threaded bolts 6. said bolts being threaded through the frames 2. and having their ends seated into the side-plates 1. as seen in Fig. 3. at 7. Within these frames 2. are mounted the rollers 8. their journals 9. resting in spring-pressed bearings 10, which bearings may be adjusted by the bolts 11, which tension the spiral-springs 12. against the bearings as seen in Figs. 1. and 3.

Upon the journals 9. and at the outside of the side-plates 1. 1. are rigidly mounted the worm-gears 13. which intermesh with the worms 14, mounted upon the shafts 15, by means of which the rollers 8, are operated. Near the ends of the shafts 15, are mounted the worms 16, which communicate motion to the worm gears 17, mounted upon the ends of the shaft 18. Upon this shaft 18, is rigidly mounted the large roller 19, just in rear of and concentric with which and secured to the side-plates 1, is the steam ironing and polishing jacket 20, the inner face 21, of which is made to conform with the periphery of the roller as seen in Fig. 3. The shaft 18, of the roller 19, is mounted in boxes 22, which travel in inclined recesses 23. in the side-plates 1. Rigidly secured to the boxes 22. are the rods 24, which are loosely connected at their lower ends to the pivoted levers 25, pivoted as at 26, and having depending weights 27. at their outer ends as seen in the drawings.

Horizontally arranged between the side plates 1, and directly under the rollers 8, is the flat hollow ironing and drying bed 28, which is fed with steam through the steam pipe 29. This flat bed projects slightly over the roller 19 and its upper surface is in the same plane with the highest point of said roller.

In operation when it is desired to operate our improved machine, power is applied to the shaft 30, by means of the pulley 31, and transmitted to the horizontal shafts 15, by the bevel-gears 32, and pinions 33, from which the rollers are revolved by the worms 14 and 16, intermeshing with the worm-gears 13 and 17. The rollers 8, are then adjusted by the hand wheels 5, by means of which they may be raised or lowered simultaneously and adapted to receive the stock to be ironed. The linen or stock to be ironed is fed upon the jacket 28, at the right hand side and is carried over the drying and ironing jacket

28, by the padded rollers 8, from whence it is fed onto the roller 19, where it is ironed and polished by the steam jacket 20. The two steam drying and ironing jackets or beds being in such close proximity to each other and acting on both sides of the linen passing through it without turning the linen or carrying it by an apron enables us to give a much better finish to the linen and at the same time accomplishes the work in a much more rapid and expedient manner than in most mangles now in use.

Having thus described our invention, what we claim and desire to secure by Letters Patent is

The combination of the main frame, a horizontally disposed flat ironing bed secured therein, a presser roller arranged in rear and slightly under the ironing bed and having the highest point of its surface in the same plane with the surface of the bed, a curved ironing jacket arranged in rear of and concentric with the pressure roller, vertically adjustable frames mounted on the main frame above the horizontal ironing bed, and a series of vertically adjustable presser rollers mounted in said adjustable frames.

In testimony that we claim the foregoing as our invention we have hereto set our hands in the presence of two subscribing witnesses.

CHARLES L. BRALEY.
JOHN C. STEWART.

Attest:
OTTO E. HODDICK,
FERDINAND P. KERSTEN.