

(No Model.)

W. A. E. HENRICI.
IRONING MACHINE.

No. 428,605.

Patented May 27, 1890.

Fig. 1.

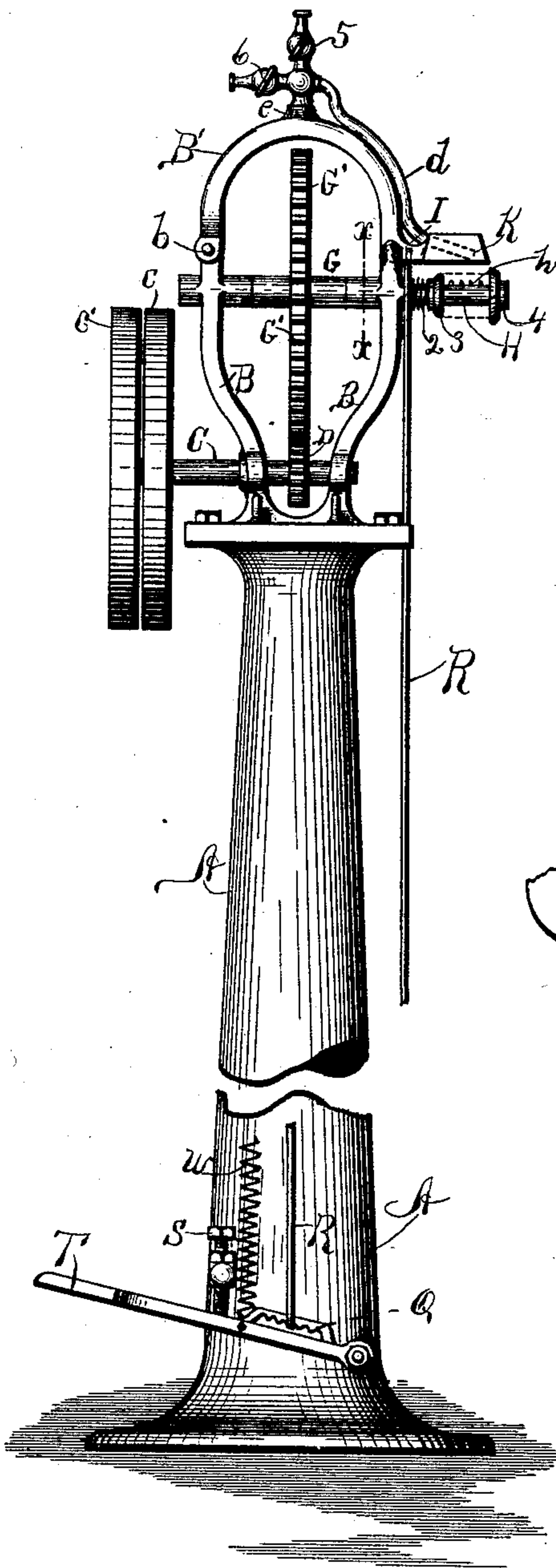


Fig. 2.

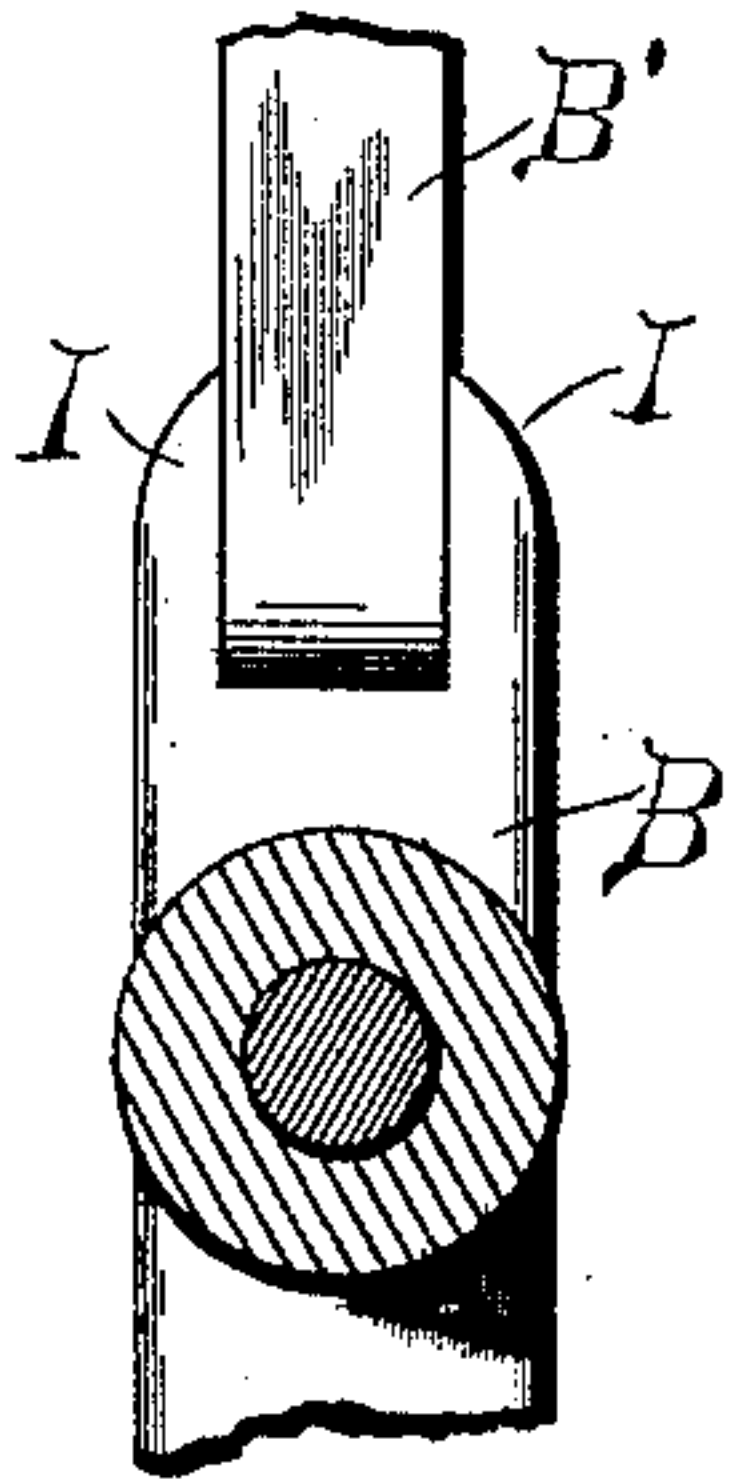


Fig. 3.

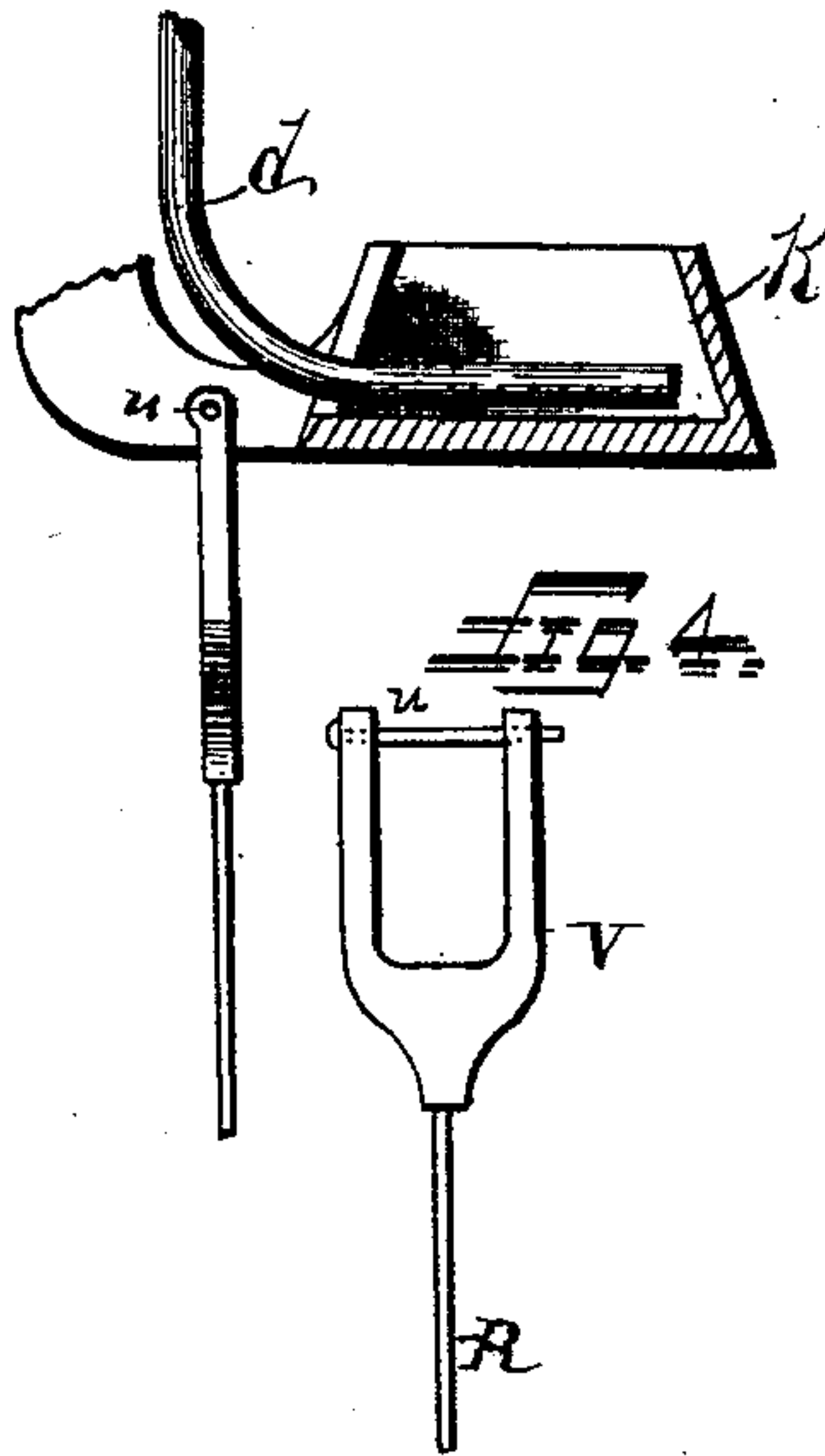
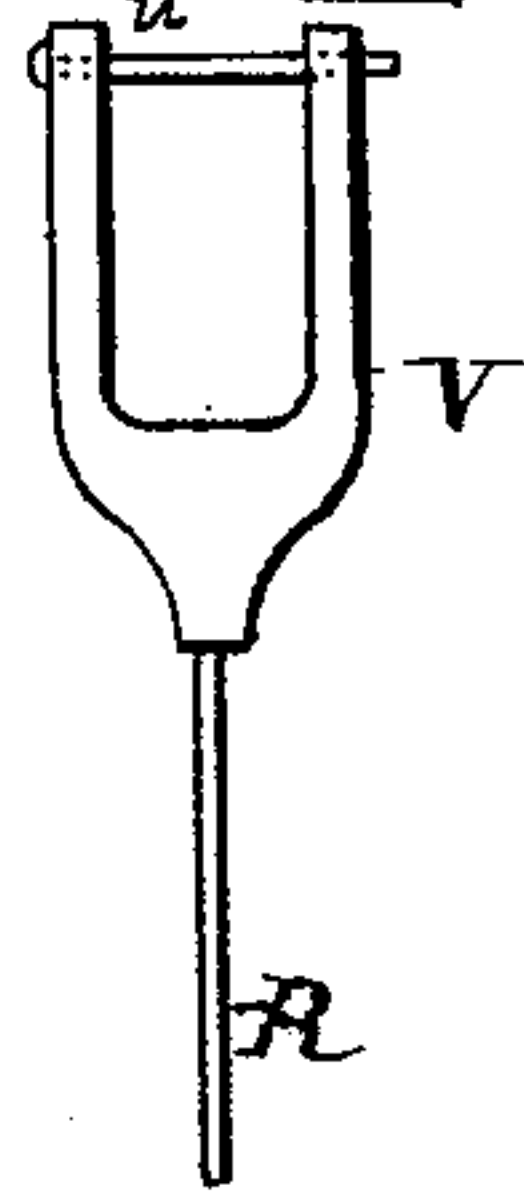


Fig. 4.



WITNESSES:

Edw. J. Johnson
Chas. L. Cooke

William A. E. Henrici INVENTOR

BY *J. H. Sibbs*

his ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM A. E. HENRICI, OF SYRACUSE, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO EDWIN E. SIBLEY, OF CHELSEA, MASSACHUSETTS.

IRONING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 428,605, dated May 27, 1890.

Application filed February 1, 1889. Serial No. 298,359. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. E. HENRICI, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Ironing-Machines, of which the following, taking in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improvements in ironing-machines designed particularly for ironing the neckbands and sleevebands of shirts; and it consists in certain peculiarities of detail, construction, and arrangement thereof, all as hereinafter more fully described, and particularly pointed out in the claims.

In the annexed drawings, Figure 1 represents an elevation of my improved machine, with the post or supporting-column broken at the lower end, and turned one-quarter around to better illustrate the same in details, hereinafter pointed out. Fig. 2 is a broken section of Fig. 1, taken on line $x x$; and Fig. 3 illustrates a sectional elevation of the ironing-block and its heating-pipe. Fig. 4 is a view of the detachable yoke connected to the rod R to raise and lower the iron.

This class of machines is used to iron the neck and wrist bands of shirts, and it is desirable that the parts thereof shall be at all times accessible, as well as compact and durable, with as few parts as possible liable to get out of order in using. To this end I have produced the machine represented by the annexed drawings, in which A is the post or supporting-column.

B is a U-shaped bracket at the upper end thereof, firmly secured thereto, and which carries the driving mechanism, together with the cloth-wound cushion, hereinafter described. Journaled in the bracket B is the driving-shaft C, upon which run the tight and loose pulleys $c c'$, over which passes the driving-belt. (Not shown.) Upon the shaft C is a pinion D, which meshes with the gear G' upon the shaft G, which latter is held in boxes in the upper ends of the arms of the bracket B. One end of the shaft G extends some distance beyond the bracket B, and is provided with coil-spring 2 and collars 3 4, collar 3 being movable and collar 4 being fixed to the

shaft, which collars hold between them a cushioned or padded roll consisting of a piece of rubber or several thicknesses of cloth wound around the shaft at H, the cloth being preferable for many reasons. Pins h , projecting from the shaft at H, are provided, which pins may be secured directly to the shaft or to a sleeve fitted thereon, as may be desired. These pins h are provided to assist in holding the cloth or rubber roll in place.

Above the bracket B is the curved arm B', pivoted thereto at b , and said arm B' terminates at its free end in a hollow ironing-block K, which latter may or may not be integral with the arm B' at the rear thereof, as may be desired. Secured to the arm B' is the pipe d , which is secured to said arm B' by a pin or screw passing up through said arm into the standard e , through which the pipe d passes. At the standard e the pipe d is provided with stop-cocks 5 6, the one 5 being connected to a gas-supply pipe and the one 6 connecting with an air-supply pipe, which latter is smaller than the interior diameter of the pipe d and projects into the same for a short distance past the standard e , the better to insure a perfect unification of the gas and air, which, when thoroughly commingled, passes through the pipe d and escapes through perforations therein within the walls of the iron K, where it is ignited and heats the said iron. The pipes leading to the stop-cocks 5 6 are of the ordinary flexible tubing, so as not to interfere with raising and lowering the free end of the arm B'. The arm B' is hinged to one branch of the bracket B at b , and is held against lateral movement at its free end by the bifurcated extensions I I of the other branch of the bracket B, between which extensions the arm B' passes in its movement up and down.

At the lower end of the column A is a treadle T, pivotally secured to said base and provided with a spring W, secured above said treadle to raise the same and its connections when not in operation, while a set-screw S is held by the base in position, so as to act as a stop to limit the rise of said treadle.

Secured to the treadle T is an adjusting-piece Q, provided with serrations or notches, and held by these is a rod R, running thence

to the arm B', to which it is connected by means of the yoke V, so that the arm B' will be controlled in its vertical movements by the treadle and rod when the latter is attached to
5 said arm.

Around the sleeve or shaft H, I wind several thicknesses of cloth, so as to form a pad or cushion, (shown in dotted lines in the drawings,) so that the pins on the shaft may
10 be seen, the purpose of which will be presently explained.

Power being applied and the iron K having been heated to the required temperature, the operation of my invention is as follows: A
15 neck or sleeve band is introduced between the said cushion and the iron K. The treadle T is depressed sufficiently to bring the iron with some pressure on the neckband, when the friction of said cushion will cause the
20 same to be quickly passed through under the iron K, by which it is smoothed and polished, after which pressure may be removed from the treadle, at which the spring W causes the parts to resume their normal position, being
25 stopped at the proper point by the stop S, abutting against the treadle T. After continued use the cloth-roll will become somewhat reduced in diameter. Owing to this fact and that different degrees of pressure by
30 the iron K on the goods in passage through between the same and said roll are desired, it is desirable to provide the piece Q, which furnishes a quick and safe means of adjusting the pressure of the iron K to accommo-
35 date itself to these contingencies as they arise, and the bifurcated ends I I of the bracket B serve to guide the arm B', so as to return the iron K to its proper position vertically above the axis of the roll and serve to
40 prevent any lateral movement of said arm B' while in use.

When cloth is wound around the shaft at H to produce the cushion before referred to, it is frequently desirable to raise the iron K
45 and arm B' out of its normal position, so as to leave a clear space above the part H of the shaft in which to wind the cloth thereon and for

other purposes—such as minor repairs, &c.—by removing the pin *u* and disengaging the and for this reason I so pivot the arm B' that
50 yoke *v* therefrom said arm may be thrown back away from the other parts of the machine, thus leaving clear space above the shaft at H to permit the cloth-roll being wound thereon.

As more or less oil is needed in the shaft-bearing in running, I provide the coil-spring 2, intended to hold the collar 3 clear from contact with the box of the shaft G, so that
60 said collar cannot be pushed in contact with the box, and hence cannot conduct oil to the roll of cloth wound on the shaft between the collars 3 4. Said spring also serves to hold the collar 3 against the said roll and retain
65 it in its proper position.

Having described my invention, what I claim as new is—

1. In an ironing-machine, the combination, with the pedestal and the U-shaped bracket mounted thereon and bearing between its
70 branches the driving-gear on shafts journaled in the same, of the curved arm pivoted at one end to one branch of the bracket reaching over the gears, guided at the other end in the other branch of the bracket, and
75 outside of its guided part carrying the ironing-block over the rotating cushion on the main shaft, substantially as described.

2. In an ironing-machine, the main shaft provided with pins for securing the padding-
80 cloth wound thereon and a fixed collar on its outer end, combined with the collar pressed against the wound cloth by a spring, substantially as described.

In testimony whereof I have hereunto
85 signed my name, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 11th day of January, 1889.

WILLIAM A. E. HENRICI.

Witnesses:

FREDERICK H. GIBBS,
GEO. J. CHAMPLIN.