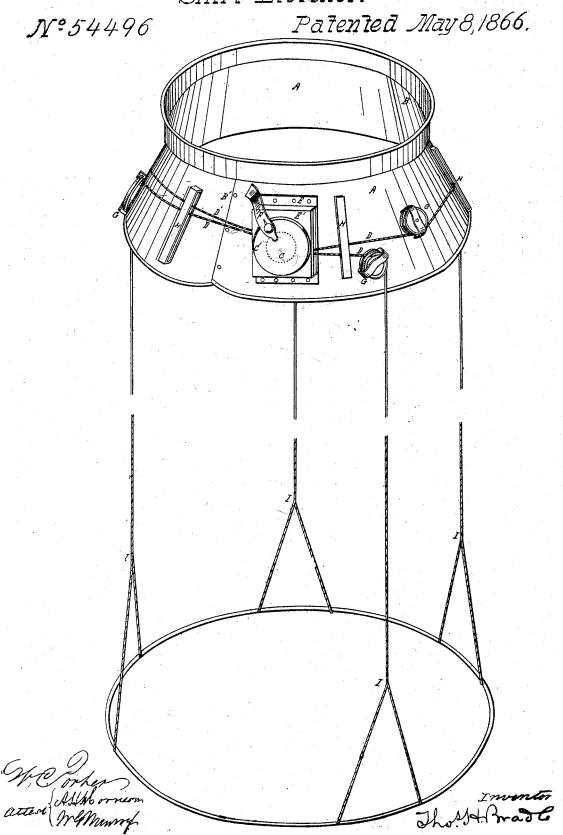
T H Bradley. Skirt Elevator.



UNITED STATES PATENT OFFICE.

THOMAS H. BRADLEY, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN LADIES' SKIRT-LIFTERS.

Specification forming part of Letters Patent No. 54,496, dated May 8, 1866.

To all whom it may concern:

Be it known that I, Thomas H. Bradley, of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and useful Machine for Raising and Lowering the Skirts of Ladies' Dresses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

I construct a belt, A, which is to be worn immediately below the waist, of linen, cotton, or other material, using something like whalebone, pasteboard, wire, or spring-steel for stiffening, and in order to secure a fit for different individuals I divide it into two parts, B B', with facilities for lacing them together at the back and for buttoning or hooking them in front.

Using either metal, wood, or gutta-percha, I construct a main wheel, C, with a deep groove, in which I fasten a cord, D, doubled, the two ends projecting one way—say three feet long—and the double end projecting the other way—say three inches. I make a hole through the wheel in its center and construct an axle to pass through it, with a crank or circle, C', attached to one end and a revolving knob upon the front of the crank or circle near the outside edge.

Of any of the materials above mentioned for the wheel I construct a case for it, the back piece, E, flat and (to afford a means of fastening it to the belt) longer than the front E', which is made with a top and bottom, in order to fasten it to the back piece, and at the same time to shield the wheel and support the outer end of the axle. I make holes in the center of the front and back of the case, pass the axle through the case and wheel from front to back, and, by means of a wire pin or otherwise, fasten the wheel to the axle and the back end of the axle, allowing the axle room to revolve and rest upon the front E' and back piece, E, of the case.

I construct a raised circle a little larger than the circumference of the wheel on the inner side of the front and back parts of the case, so as not to allow a small cord, passing through the open ends of the case, to become displaced from the groove of the wheel. I at

tach this case, when perfected as above described, and a loop or strap, F, for the knob of the crank or circle, to the front of the left half of the belt A, so that when it is placed upon a lady the crank or circle C' will come directly under or near the slit usually made in the skirt of ladies' dresses.

Taking any of the materials above named for the wheel, I construct six small pulleys, G G G, the other three not shown, with cases made round or in the same manner as is above described for the main wheel, and as many guides H as may be necessary to govern the cord and keep it in place.

The guides H are made of two narrow pieces of the same length—say one, two, or three inches—which are placed parallel with each other and fastened together in such a way as to admit a cord to pass loosely between the two pieces.

I fasten the guides and cases for the pulleys in positions to correspond upon each half of the belt A, the guides H H H crosswise of the belt, one pulley-case, G, near the middle of the half of the belt and parallel with the guides, one near the back, and one lower than the others, near the front end of the belt, with the tops of the cases inclined to the rear. I place the guides H H H one near the main wheel on the left part of the belt, one near the front end on the right part of the belt, and one on each part, between the back and middle pulleys.

Providing myself with a cord, D', doubled similar to the one, D, which belongs to the left side of the belt, and is attached to the main wheel, I attach a small hook to the doubled end and pass it through the guide H on the front part of the right half of the belt. I then pass one of the ends of the cord into the groove and over the pulley next to the guide, leaving the end I hang down, and then pass the other end into the groove and under the middle pulley, through the guide next to it, and into the groove and over the back pulley, leaving the end I hang down.

Taking the cord D, attached to the main wheel, I draw the doubled end to the right of the wheel C, and after passing the two ends through the guide H on the left of the main wheel, proceed to arrange them to correspond with those on the right half of the belt. Af-

ter making each cord of the same length from the belt to the end, I attach a spring-hook or a button to each of the ends I hanging down.

With the skirt of a dress folded into four equal parts and laid flat, I proceed to fasten the ends of four or more pieces of cord or tape of equal length to each seam or elsewhere about one foot above the bottom of the skirt.

Placing the belt or machine upon the person, I hook or button it at B', and the two doubled ends of the cord in front, lace the belt to fit, place and fasten the skirt on the person, hook or button the four cord ends into the loops formed by doubling together the middle part of each of the four or more pieces of cord or tape attached to the skirt, and proceed to

raise or lower the skirt at pleasure by simply using the right hand (to seize the knob between the fingers) to turn the crank or circle, and thereby wind or unwind the cords.

What I claim as my invention, and desire

to secure by Letters Patent, is-

A machine to be worn as a belt for raising and lowering the skirts of ladies' dresses with cord and tape, by means of a wheel having a case, axle, and crank, with pulleys and guides attached.

THOS. H. BRADLEY.

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Witnesses:
W. C. PORTER,
A. H. MORRISON.