(No Model.)

P. P. WEINHOLT.

COMBINED SKIRT LIFTER AND BUSTLE.

No. 436,748. Patented Sept. 16, 1890.

Fig. I.

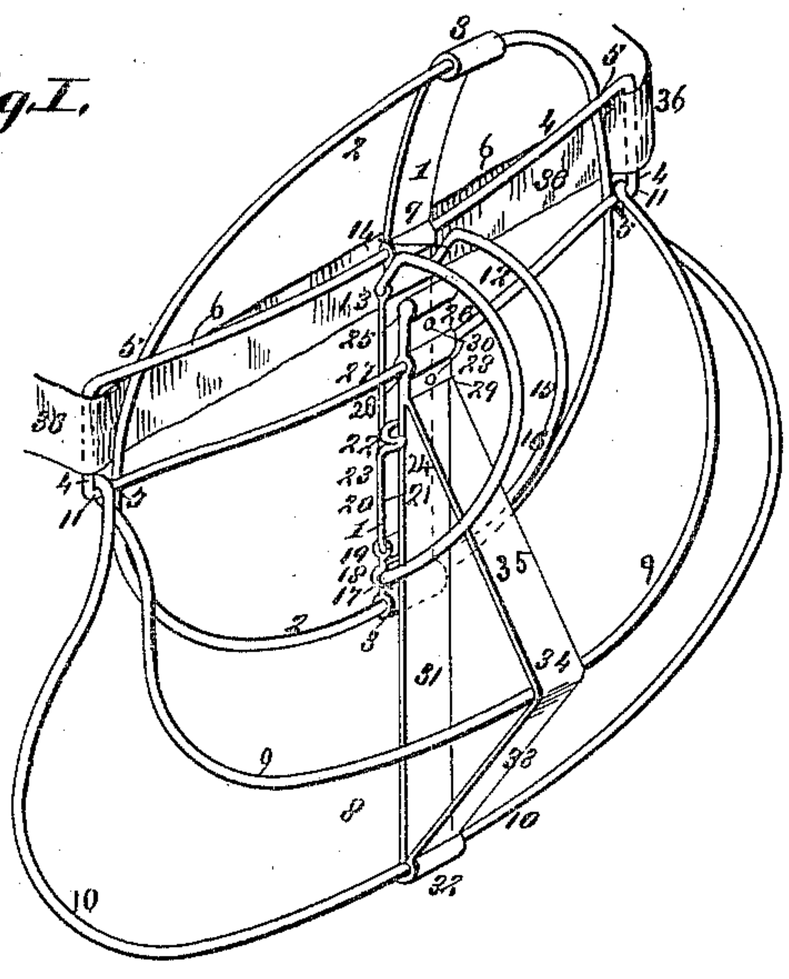


Fig. II.

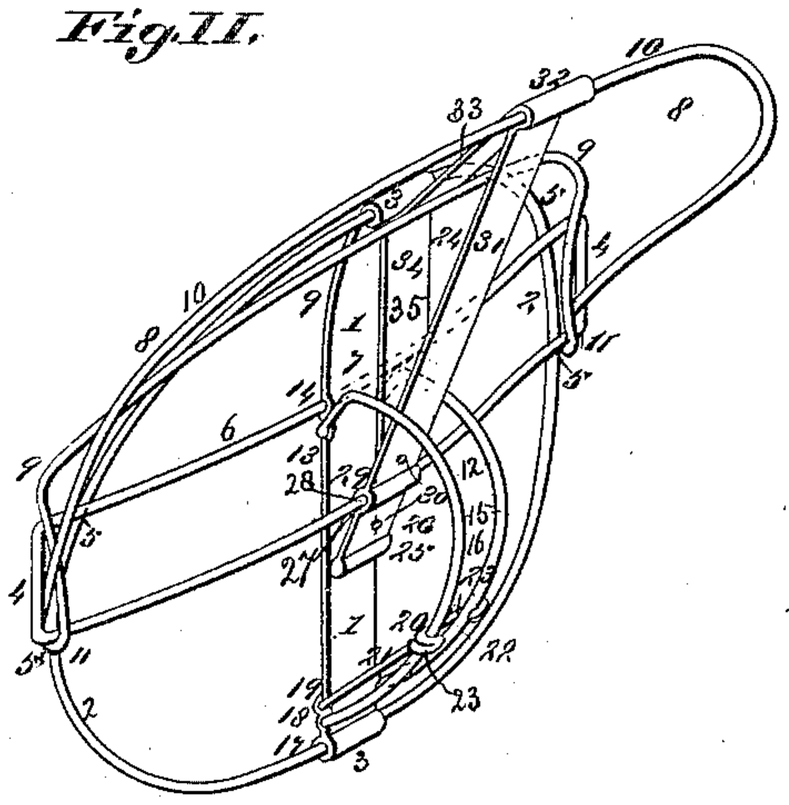
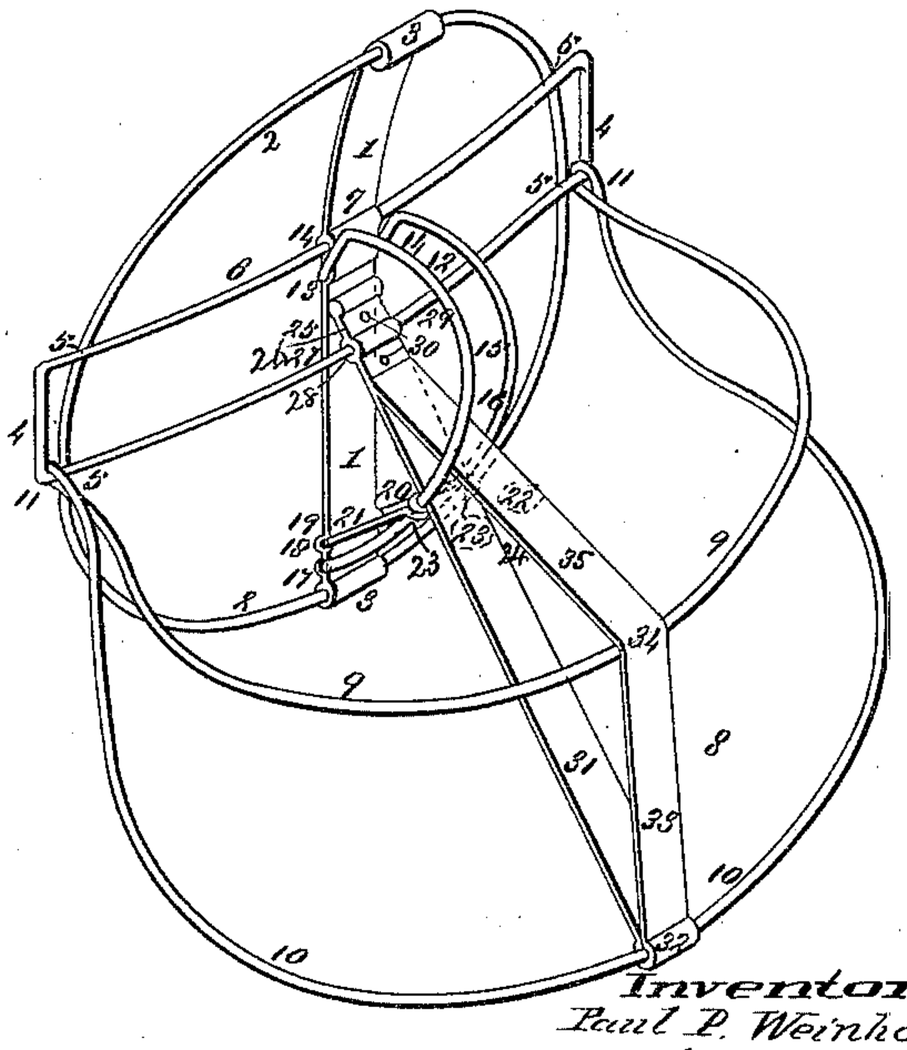


Fig. III.



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COMBINED SKIRT-LIFTER AND BUSTLE.

SPECIFICATION forming part of Letters Patent No. 436,748, dated September 16, 1890.

Application filed May 10, 1890. Serial No. 351,302. (No model.)

To all whom it may concern:

Be it known that I, PAUL P. WEINHOLT, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Combined Spring Skirt-Lifter and Bustle, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a combined skirt-lifter and bustle that has a spring adjustment by which it is made transformable from its collapsed position into a medium skirt-lifter or bustle, and from that position into a higher lift, in which it is adapted for use in passing over muddy crossings or wet grass, &c.; and the invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a perspective view of the combination frame in its collapsed condition, and shows a detail of the strap that is secured around the waist of the wearer to attach the frame in its operative position. Fig. II is a perspective view of said combination frame, sprung up into its extreme elevated position; and Fig. III is a like view with the frame in its medium position, in which it provides a medium skirt-lift or bustle.

Referring to the drawings, 1 represents the center back-strap plate of the frame, which remains stationary in a vertical position, and which is preferably made of steel plate, but may be of any other suitable material, and 2 is the approximately circular stationary wire, which is rigidly secured to said back-plate 1, respectively at top and bottom, by the loops 3 at the ends of said plate, which loops bend around and rigidly hold said circle wire at their points of contact.

4 represents an elongated rectangular wire frame, which spans from side to side of the circle frame 2, to which it is secured, by soldering or otherwise, at 5, and the upper stretch 6 of which may be secured to the back-strap plate, where it crosses, by a solder or other joint 7. The ends of said rectangular frame preferably project beyond said circle frame sufficiently for the outer hinged attachment of the double-loop portion of the elevator-frame 8, which is preferably made of steel wire, but may be of any other suitable material. The said double loop is preferably made of a single wire, and is constituted of a minor loop 9 and major loop 10, the wire at the connection between said loops turning around the wire of the lower stretch of the rectangular frame 4 at or near its outer corners, outside the circle frame, making a hinge-connection 11 of said double-loop part of the elevator-frame 8.

12 represents a double-bow-guide frame, which is preferably made of a single piece of steel wire, but may be of any other suitable material. The top center of said double-bow frame is rigidly secured to the front of the back-strap plate 1 by a strap-bracket or other suitable attachment joint 13. The wire at both sides of said attachment diverges at an angle 14, inclining upward and forward to hold the integral parallel bow-wires 15 at a sufficient elevation to provide the upper end of the guideway 16 between said parallel bow-wires. From the forward points of the angles 14 the parallel bow-wires extend round in the arc of a circle until they reach to a little above the foot-loop 3 of the back-strap plate, where the lower toe ends 17 are inturned toward each other, and are secured to the back-strap steel plate by the extension of the upturned end of the lower loop 3, which extension also curves around and makes a hinge-seat 18 for the pivotal end 19 of the bifurcated wire hook 20, whose parallel arms 21 extend from said pivot end to the T-head 22 that carries the inturned hooks 23, which hooks, when operative, as shown in Figs. II and III, embrace the parallel bow-wires 15 to limit the drop of the elevator-frame by means hereinafter explained, when it is held in its medium position.

24 represents a double angularly-bent metal strap-plate which is preferably made of steel and is formed with a circular foot terminal 25, from which for a short distance both layers of said strap-plate run in close contact at 26 until they reach the lower stretch 27 of the rectangular frame 4, (previously described,) at which point both layers diverge, each passing around opposite sides of said wire 27 of

said rectangular frame, forming a journal-bearing 28. The two layers preferably again run in close contact for a short distance at 29, and each side of said journal-bearing the double layers of strap steel plate are preferably secured together by the rivets 30, which pass through and are riveted to said double layers of the plate. The lower portion of said strap-plate from the last-mentioned point of double-layer contact runs preferably in a straight course 31 to the extreme center of the major loop 10 of the elevator-frame, around which it passes and is rigidly secured by a clamp embrace 32 of the same. From this point said strap-plate diverges at an angle, so as to take a straight course 33 to the extreme center of the minor loop 9 of the elevator-frame, around which it angles at 34, and converges in a straight course 35, until it reaches the before-mentioned junction double-layer contact of said strap-plate at 29. In passing to said double-layer junction, as well as in passing from the same, the two portions 31 and 35 of the said angularly-turned strap-plate 24 pass through between the parallel bow-guide wires 15, which, as the lifter is either elevating or depressing, guides the angular strap-plate 24 from lateral digression in its movement.

36 represents a detail of the attachment strap by which the combination device is secured to the waist of the wearer.

In operating the device, if it is desired for the time being to use it in its nearly collapsed condition, as shown in Fig. I, (the previous condition supposably being in its elevated position shown in Fig. II,) the bow-guide wires 15 are sufficiently pressed together to dislodge the bifurcated hook 20, when its parallel arms 21 are folded back, turning on their pivotal end 19 until they lie snugly against the strap-plate 1 at the same time that the minor and major loops 9 and 10 of the elevator-frame are swung down from the position shown in Fig. II to that shown in Fig. I. Now it will be seen that when in the elevated position shown in Fig. II, the circular foot-terminal 25 of the angularly-bent strap-plate (that governs the elevator-frame) rests as a lock-brace against the steel back-plate 1, and thus holds the loops 9 and 10 of the lifter in their elevated position, as thus and there shown. Then the bifurcated hook 20 having been detached from the parallel bow-wires 15, a slight downward pressure is administered on the elevator-loops, which causes the angularly-bent strap-plate 14, that governs said elevator, to turn on its journal-bearings 28 on the lower stretch 27 of the rectangular spring wire frame 4, and pressing said spring journal-wire 27 and said spring strap-plate 1 sufficiently divergent apart to allow the circle-foot 25 of the strap-plate 24 to pass its center bearing, when said elevator-frame is immediately sprung down into its approximately collapsed position, as shown in Fig. I, in which the said circle-foot 25 locks it in that position also. In this adjustment of the device it only slightly puffs the skirt to add to the elegance of its pendent curved lines.

When it is desired to use the device as a combined skirt-elevator and bustle, the elevator-frame is again lifted (the foot 25 sliding on the spring strap-plate 1 past its center bearing) and the bifurcated hook 20 is turned outward and made to embrace the parallel bow-wires 15, after which the elevator-frame is dropped into the medium position shown in Fig. III, when the governing strap-plate 24 rests on the T-head 22 of the bifurcated hook 20, in which position its circular foot again locks it, and, lastly, to spring it back again into its extreme elevated position, (shown in Fig. II,) the frame is again lifted until the circle-foot 25 of the strap-plate 24 passes its center bearing, when of its own accord the elevator springs up to its most elevated position as a skirt-lifter.

The custom of wearing dress-skirts with short trains, or a nearly approximate approach thereto, in the house enforces the necessity of a skirt-lifter, which, like the subject of the present application, can be adjustably depressed or elevated, and the latter to different degrees of elevation to accord with its use either indoor or out and in fine or wet weather.

I have shown and described two loops 9 and 10 to the elevator-frame, which is the number generally preferred, but I do not confine myself to that number, for the elevator may be constructed with a single loop, or it may have a multiple of any number of loops required.

I claim as my invention—

1. The combination of the center back-strap plate 1, the stationary approximately circular wire 2, secured to the ends of the plate, the elongated rectangular wire frame 4, having its ends projecting beyond the wire, secured to the latter and to the plate by its upper stretch, and the elevator-frame 8, having loops 9 10 and hinged to the wire frame and the double angularly-bent strap-plate 24, hinged to the lower stretch of the wire frame, having its inner end bearing on the strap back plate and supporting the elevator-frame, substantially as described.

2. In a combined skirt-lifter and bustle, the combination of the stationary approximate circle-wire 2, the vertical back spring strap-plate 1, the rectangular wire frame 4, the above-named parts being secured together, the elevator loop-frame pivotally connected to said rectangular frame, angularly-bent strap-plate 24, and the parallel bow-guide wires 15, secured to said strap-plate 1, which bow-wires guide said elevator loop-frame from lateral displacement, the said loop-frame being arranged to be sprung from the position of a bustle into that of a skirt-lifter and back again, vice versa, by the pressure of the hand of the wearer, substantially as and for the purpose set forth.

3. In a combined skirt-lifter and bustle, the

combination of the stationary approximate circle-wire, the vertical back spring strap-plate, the said vertical strap secured by loops 3 to said circle-wire, the rectangular wire frame 4, the said frame secured near its ends to the circle-wire and the upper stretch 6 of said frame secured to the vertical strap 1, the parallel bow-wires 15, secured to said strap 1, the double angularly-bent strap-plate 24, provided with the journal-bearing 28, in which the lower stretch journal-wire of said rectangular frame has its bearings, the projected foot-terminal 25 of the strap 24 at the inner end of said double strap, and the minor and major loops 9 and 10 of the adjustable self-locking elevator-frame, the said elevator-loops being inclosed within said double strap 24, and provided with the hinge-connection 11 to said angle-frame, substantially as and for the purpose set forth.

4. In a combined skirt-lifter and bustle, the combination of the stationary frame, the pivotally-adjustable and self-locking elevator-frame 8, the parallel bow-guide wires 15, that project from and are secured to said stationary frame, and the bifurcated hook 20, provided with parallel arms 21, which have journal-bearings 18, secured to said stationary frame, and at its outer end provided with the T-head 22 and hooks 23, which hooks are made to embrace when operative the parallel guide-wires 15, and the T-head arranged as a buffer-stay to the elevator-frame at its medium lift or drop, substantially as and for the purpose set forth.

PAUL P. WEINHOLT.

In presence of—
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