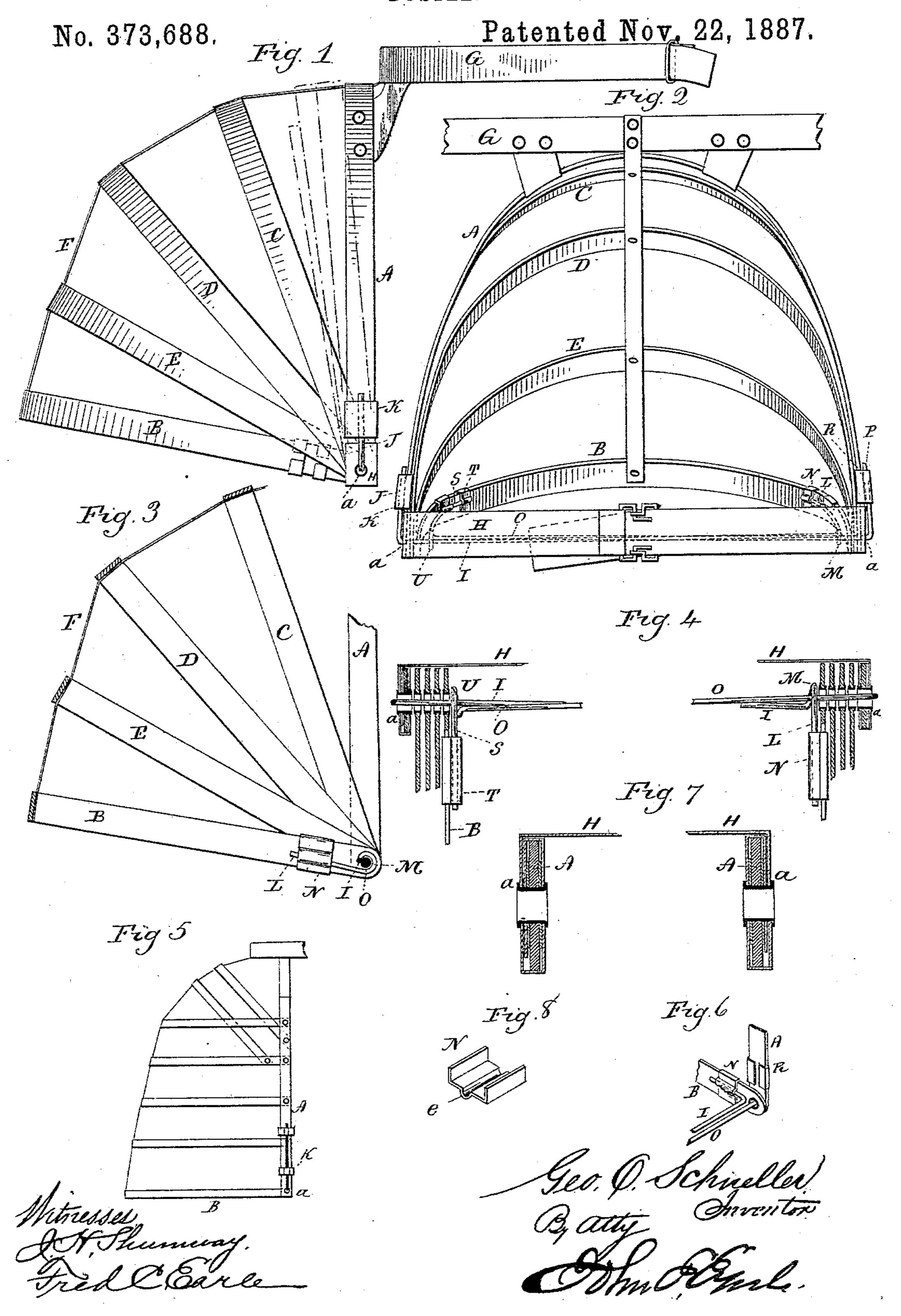
## G. O. SCHNELLER.

BUSTLE.



## United States Patent Office.

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## BUSTLE.

SPECIFICATION forming part of Letters Patent No. 373,688, dated November 22, 1887.

Application filed September 19, 1887. Serial No. 250,064. (No model.)

To all whom it may concern:

Be it known that I, GEORGE O. SCHNELLER, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new 5 Improvement in Bustles; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a bustle complete; Fig. 2, a front view of the same; Fig. 3, a vertical section cutting at right angles to the axis; Fig. 4, a horizontal section looking down upon the lower or principal bow and illustrating the connection of the springs with the principal bow and body bow or pieces, enlarged. Fig. 5 illustrates the application of the invention to a bustle of different arrangement of bows; Fig. 6, a modification in the attachment of the spring to the bows. Fig. 7 illustrates the attachment of the connecting-strap to the ends of the body-bow, enlarged; Fig. 8, a perspective view of the clip.

This invention relates to an improvement in that class of bustles which consist of several semicircular bows hinged by their ends to body-pieces, and so that they may turn upon 30 their hinged ends to permit the bustle to collapse or expand, as the case may be. In this class of bustle a spring of some character is necessary in order to distend the bustle and yieldingly hold it in its distended position, 35 and so that as the wearer sits, as upon a chair, the several bows will be turned upward and toward the body under the pressure of the body toward the back of the chair, but so that when the wearer rises the spring will cause 40 the several bows to assume their distended or normal position.

Various constructions of springs have been applied.

The object of my invention is the application of a torsion-spring at the hinge-point of the lower or principal bow, and which will work freely to cause the distention or permit the collapse of the bustle, and at the same time will permit the spread of the bows, so as to contract the projecting extent of the intermediate bows.

I first illustrate the invention as applied to

that class of bustles in which all the bows composing the bustle are hinged together at a common center.

A represents the body-bow, the sides of which are substantially vertical, and form what may be called "body-pieces;" and B, the lower or principal bow; C, D, and E, intermediate bows, all hinged together at their respective 60 ends upon a common pivot or center, a. The several bows are connected by one or more flexible tapes, F, in the usual manner, and the body-bow A is also provided with the usual waistband, G, by which it may be secured to 65 the person. Across the body-bow and near its ends an adjustable strap, H, is arranged, by which the width of the bustle may be contracted or expanded. Each end of the respective bows is provided with an eyelet, 70 which forms the pivot-hole, alike in all the bows.

The spring is made from wire, and in two parts. The one part, I, runs through the pivot-holes in the bows at one end, and is then 75 turned upward to form an arm, J, which is clipped to one side of the body-bow, as at K, so that the part I of the spring is permanently secured to the part K, and so as to avoid possible rotation. The other end of the part I is 80 turned horizontally outward to form an arm, L; but at the bend or angle of the arm L an eye, M, is formed in a plane parallel with the arm L. The arm L extends along the inner side of the lower bow, B, (see Figs. 3 and 4,) 85 and is clipped to the bow B, as at N, so as to firmly secure that arm to the bow B. The other part, O, of the spring is like the part I, but runs through the pivot-holes at the opposite end of the bows, as seen in Figs. 2 and 90 4, and is turned up to form an arm, P, extending onto the other side of the body-bow A, and is there secured by a clip, R. The part O also extends through the eye M of the part I, as shown. The other end of the part 95 O, like the part I, is turned horizontally to form an arm, S, which is clipped to the lower bow, B, as at T, and at the bend of this arm an eye, U, is formed, like the eye M of the part L, and this eye U surrounds the part I, 100 as indicated in Figs. 2 and 4. It will thus be seen that one end of each spring is firmly secured to the body-bow, and the other end of the same spring is secured to the lower bow,

B; hence if the two bows A B be forced together it will impart a torsion or twist to the respective parts I O of the spring, the reaction of which will cause the two extreme bows to separate when free. The result of this is that as the wearer sits the lower bow strikes the back of the chair and forces that bow with the others upward and toward the body-bow into the collapsed position, as seen in Fig. 1.

This imparts a torsion strain to the parts of the spring, and so that when the wearer rises from the seat the reaction of the spring will force the bows to their distended or normal position.

As one part of the spring is secured to one end of the body-bow and the other part of the spring to the other end of the body-bow, and as each part is provided with an eye surrounding the other part as a guide or support, it follows that the ends of the body-bows may separate by lengthening the strap H or contracted by shortening the strap; hence the width of the bustle may be readily adjusted and without affecting the respective springs.

In some classes of bustles, as indicated in Fig. 5, the bows are hinged to uprights or body-pieces, which take the place of the bodybow A of Figs. 1 and 2. The lower bow, B, is hinged to the body-piece at the lower end 30 in the same manner and the springs are there applied in the same manner as between the body-bow A and the lower bow, B, of the first illustration. The intermediate bows, however, are pivoted at different points on the 35 body-piece and the several bows connected to the lower bow. As the spring in this arrangement acts precisely the same between the lower bow, B, and the body-piece A, as before, it follows that the same collapsing is permis-40 sible to impart torsion to the parts of the spring, and the reaction will throw the lower bow back to its normal position, and because of connection with the bows above will bring all the bows to their respective normal posi-45 tions; but in the arrangement which I have first described the parts of the spring form the respective pivots upon which the several bows turn, and for this reason I prefer this

The eyes M U, which embrace the two parts of the spring, may be omitted; but in such case a clip should be applied directly at the end of the spring, and, as indicated in Fig. 6, these clips will hold the parts in their proper relative position to each other; but yet I prefer to form the eyes M U for this purpose.

construction; but I do not wish to be under-

50 stood as limiting the invention to any particu-

lar arrangement of intermediate bows.

The clips by which the ends of the two wires 60 are secured to the respective bows should be as near the angle as conveniently may be, in order to make the connection between the springs and the bows firm, and so that there will be no yield to the wire to any extent be65 tween the clip and the angle, thereby confining the elasticity entirely to the twist or tor-

sion of the wires themselves between the two

angles.

In this class of bustles the adjusting-strap H, which connects the two ends of the body- 70 bow, is usually secured to the ends of the bodybow or body-pieces at a point above the pivot, and simply laps onto the outside of the bodybow and is there secured by an eyelet. The lower end of the body-bow therefore bears di- 75 rectly against the body of the wearer, and, being hard and unyielding, is frequently a discomfort to the wearer, because the tendency of the skirts upon the bustle is to throw the lower ends of the body-bows hard against the 80 body of the wearer. Again, the wear upon the pivot in the body bow is much greater than upon the other bows, because of its greater exposure, the body-bow always being the outside bow, and the tendency of the strap secured 85 above the pivot and drawing over the edge of the bow tends to twist the body-bow, and thus increase the strain or wear upon the pivot. To overcome these difficulties I apply the adjusting strap to the extreme ends of the 90 body bow, as indicated in Fig. 2. In thus applying the strap, the ends of the strap are wound around the body-bows, as seen in Fig. 7, first applying the end to the outside; thence around the front edge; thence returning on the 95 inside of the bow around the outside edge; thence returning again to the front edge, thus producing several thicknesses of the strap around the bow at the end, and preferably so that the lower edge of the strap will extend 100 below the ends of the bows, as indicated in Fig. 2, and then the pivot-eyelet is introduced through the thicknesses of the strap and through the body-pieces, as seen in Fig. 7, securing the several thicknesses of the strap to 105 the body-piece by the pivot-eyelet itself. The straps from the two sides are connected by a buckle, as shown, or may be a strap without a buckle if no adjustment is required. By this construction the ends of the bows are in- 110 closed by several thicknesses of the strap, and the strain is brought directly in line of the pivot, which, to a very great extent, avoids the twisting strain upon the body-bow before referred to, and the several thicknesses of the 115 strap form a cushion upon the end of the bow to bear against the body of the wearer and soften the pressure, which, without such protection, would necessarily exist. This strapconnection is applicable to the various classes 120 of bustles in which the ends of the body bows or pieces are connected by a strap of this character.

The clips N, by which the arms are secured to the base, are formed from sheet metal, as 125 seen in Fig. 8, the piece of metal being of sufficient length to embrace the bow. At its center a longitudinal recess, e, is formed, corresponding to the shape of the wire, and so that when laid upon the bow, as seen in Fig. 3, the longitudinal recess e will locate the arm, while the flaps at each side are closed down upon the re-

verse side of the bow. This longitudinal recess securely locates and holds the arm in its proper relation to the bow.

I claim—

1. A bustle consisting of body-pieces provided with a band, by which the bustle may be secured to the body, a principal bow pivoted at each end to the said body-pieces, a wire spring made in two parts, IO, said parts ex-10 tending, respectively, through the pivots between the body-pieces and the principal bow, one end of each part made fast to the bodypiece on one side and at the opposite side turned horizontally outward and made fast to 15 the principal bow, substantially as described.

2. A bustle consisting of body-pieces provided with a band, by which the bustle may be secured to the body, a principal bow pivoted at each end to said body-pieces, a wire spring 20 made in two parts, I O, said parts extending, respectively, through the pivots between the body-pieces and the principal bow, one end of each part made fast to the body-piece on one side and at the opposite side turned horizon-25 tally outward and made fast to the principal bow, each part constructed with an eye, through

which the other part passes, substantially as described.

3. A bustle consisting of a body-bow provided with a band, by which the bustle is se- 30 cured to the person, a second or lower bow pivoted by its ends to corresponding ends of the body-bow, with intermediate bows pivoted to said body-bow, and so that the bustle is adapted to be collapsed, a strap connecting the two 35 sides of the body-bow, the ends of the strap wound about the ends of the body-bow at the pivot, the pivot-eyelet introduced through the bow and through the windings of the strap around the bow, substantially as described.

4. The herein-described clip adapted to secure springs to bustle-bows, consisting of a plate having a longitudinal central groove therein corresponding to the shape of the wire of the spring and provided with a flap at each 45 side adapted to close upon the reverse side of

the bow, substantially as described.

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Witnesses:

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