

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN HOOP-SKIRTS.

Specification forming part of Letters Patent No. 41,148, dated January 5, 1864.

To all whom it may concern:

Be it known that I, T. S. GILBERT, of Derby, county of New Haven, in the State of Connecticut, have invented a new and useful Method of Forming Hoop-Skirts; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates more particularly to that kind of hoop-skirts which are capable of being adjusted or distended and contracted to different circumferences to suit the will of the wearer, and has for its object the production of a hoop-skirt which shall be simple and economic in its formation or construction, and at the same time more durable, stronger, less liable to a derangement or separation of the ends of its hoops, and otherwise more desirable than any heretofore made.

Previous to my invention various methods have been suggested and adopted of uniting the two ends of each annular wire to form the hoop, the most common of which, and that generally employed now, is that in which the ends of the wire are connected together by what is known as the "extension-clasp." It has also been customary to form a skirt by securing the opposite ends of all the hoop-wires in two vertical tapes or strips of material and then sew, or lace, or otherwise permanently or temporarily unite the adjacent edges of said two tapes or strips together. And in Letters Patent lately granted to Mann and McDonald still another method is shown and described—that of forming a hoop-skirt by securing the opposite ends of the hoop wires or springs in two vertical tapes, then overlapping the thus secured ends, so that one of said tapes runs underneath all the hoops and the other on top of all of them, and securing the outside tape by spring-clasps at intervals to the hoops over which it lies.

But each and all of these known methods of connecting the ends of the wires to form a hoop-skirt embody some defects or objectionable features which cannot be found in my improved skirt. In a skirt in which the ends of the hoop-wires are connected together by extension-clasps there exists a very great liability to a separation of the ends from the metallic clasps, and this mode of connecting the ends of the hoops, whether the skirt be

made adjustable or not, has been found to render the skirt weakest where the hoops' ends are joined, so that the skirt would give away at that point, and that very soon if the wearer had to subject them to any great strain, such as the results from holding children, &c. Various objections to a skirt laced together in front are well known to those familiar with the art; and in that method shown in Mann and McDonald's patent the ends of the hoops spring outward and make the front of the skirt very uneven; and even if the number of clasps or catches should be increased, so that there would be one to each hoop, which would greatly increase the expense of the skirt, the skirt, though rendered somewhat smoother in front, would require the manipulation of each and every one of these little clasps in adjusting it to different circumferences. The great objections to or defects in all practical methods of forming hoop-skirts heretofore suggested is the liability of the ends of the hoops to protrude tangentially from the circle of the skirt, so as to fret or catch against the garment worn over the hoops, and the tendency of the united or connected ends to spring apart and become deranged or separated entirely.

All these objections or defects are effectually overcome in a simple and economic manner by my invention, which consists in overlapping the opposite ends of the hoop wires or springs and attaching them to vertical tapes in such a manner that one set of hoops' ends shall pass over or outside of and hold down the tape to which the other set of hoops' ends are secured, as will be more fully explained hereinafter.

To enable those skilled in the art to make and use my invention, I will proceed to describe fully the construction and operation of my improved hoop-skirt.

In the accompanying drawings, forming part of this application, Figure 1 is a front elevation of one of my improved skirts. Fig. 2 is a front elevation of another skirt, showing a modification of my invention.

In Fig. 1, A is the waistband; B, the vertical tapes; *e*, the bustle-hoops; *f'* *f*², &c., the annular or continuous hoops; *g*, the bottom hoop, and D the bustle-tabs, all of which parts are constructed and put together in about the usual manner, well known to those skilled in the art.

C C' are two auxiliary vertical tapes, to which the ends of the hoops f' f^2 f^3 , &c., and hoop g are secured. These tapes C and C', to which the ends of all the annular hoops are secured, are so arranged with the hoops that while they hold all the hoops' ends down in the line of the circle they are free to slide toward or from each other in the arc of a circle to increase or diminish the lap of the hoops' ends, and thus increase or diminish the circumference or size of the skirt. The hoop f' , it will be seen, has one end passed through a pocket or loop, i , in the upper end of tape C, and thence into a pocket, g' , in the upper end of tape C', where it is fastened. The other end of hoop f' is passed through a pocket, m , in tape C, and thence into a pocket, o , in tape C', where it is fastened. The hoop f^2 is thus arranged in the pockets m and o of the tapes C and C', respectively, to secure and hold in proper position the ends of said tapes. The second hoop, f^2 , has one end passed over or outside of tape C, and thence into a pocket, r , in C', where it is fastened, and its other end passed over or outside of tape C', and thence into a pocket, n , in tape C, where it is fastened; and in like manner the two ends of the rest of the hoops f^3 , &c., are arranged with and secured to the tapes C and C'. The bottom hoop, g , which is considerably larger than the others, is lapped, so as to have one end rest on top of or immediately outside of the other, and each end is passed through the pocket (in which it freely slides) of tape C and C', in which the other end is made fast.

It will be understood that as tape C has one set of the hoops' ends only fast to it, and the other tape, C', has all the opposite ends only fast to it, the tapes C and C' may be slid along under the hoops, nearer together or farther apart at pleasure, thus increasing or diminishing the lap of the hoops' ends, and consequently adjusting the size of the skirt to suit the will or convenience of the wearer; and it will also be understood that the natural tendency of the hoops to spring from their circular form or condition (in which they are retained by the interlacing of the tapes C C' with their ends) creates a sufficient pressure or friction between the hoops and the tapes C C', where they simply rest against each other, to retain the hoops in any condition in which they may be set or adjusted by the pulling nearer together or farther apart of the tapes.

It will be observed that by the formation or construction of a skirt, as just explained, the hoops' ends are all held securely down or in-

ward, and any liability to protrude against the garment worn over the hoops is effectually avoided, while the peculiar manner of overlapping and retaining the ends of the hoops at the same time renders the front portion of the skirt (where the ends of the hoops are) stronger than any other portion.

At Fig. 2 I have shown another mode of applying or carrying out my invention. In this modification, in lieu of two auxiliary tapes in front, as seen at C C', Fig. 1, I employ only one, C². To this tape C² one end of each hoop f' f^2 , &c., is fastened, while the opposite ends of said hoops pass over or outside of said tape C² and extend along to the tape B², to which they are fastened. The other portion of the hoop f' f^2 , &c., should be left to slide freely in the pockets of tape B², (which I have shown with pockets for the hoops to pass through, instead of passing the hoops on top or outside of said tape B²,) and, thus arranged, it will be seen that the adjustment of the skirt may be effected as well as by the mode shown at Fig. 1. Of course the hoops f' f^2 , &c., should be secured in the usual manner to all the other tapes, excepting B² and C².

It is obvious that my invention is subject to numerous modifications in the modes of applying or carrying it out, all of which I wish to be protected in. For instance, no auxiliary tapes need be used; but the hoops f' f^2 , &c., in lieu of having one set of their ends secured to tape C², may be extended to and secured in tape B', Fig. 2, in which case the other portion of said hoops should be arranged to slide in pockets in said tape B, in lieu of being fast therein, as shown at Fig. 2.

Having fully explained the construction and operation of my improved hoop-skirt, so that those skilled in the art can make and use my invention, what I claim as new, and desire to secure by Letters Patent, is—

Overlapping the opposite ends of the hoops and securing them to vertical tapes, or their equivalents, so arranged with the hoops as that the tendency of the hoops to assume a straight condition will lock the hoops' ends and their vertical tapes together sufficiently to retain them effectually in any position to which they may be adjusted, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal this 10th day of December, 1863.

THOMAS S. GILBERT. [L. s.]

In presence of—

CHAS. H. DE FOREST,
THOMAS B. DE FOREST.