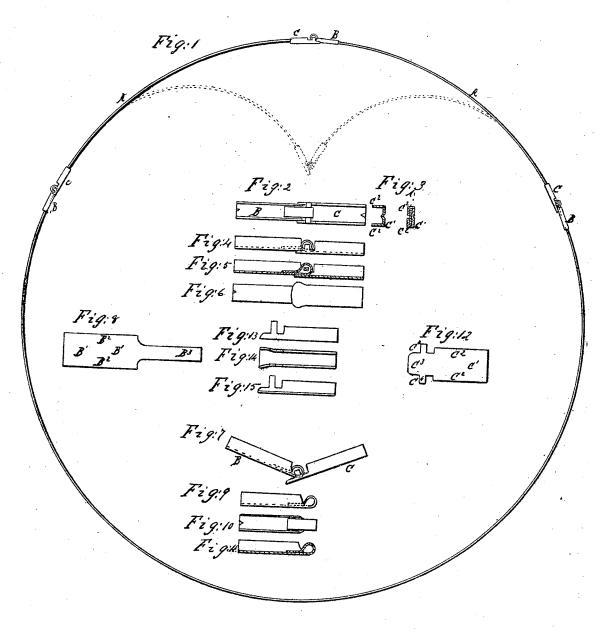
## S.J. Sherman.

Hoop Skirt.

Nº53691

Patented Apr. 3, 1866.



Witnesses John Noble D. W. Stetson

Inventor LI Shirman

## UNITED STATES PATENT OFFICE.

S. J. SHERMAN, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN SKELETON-SKIRTS.

Specification forming part of Letters Patent No. 53,691, dated April 3, 1866.

To\_all whom it may concern:

Be it known that I, SYLVESTER J. SHER-MAN, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Skirts for Ladies' Wear; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of an entire hoop provided with three hinges according to my invention. Fig. 2 is an exterior view of one of the hinges on a larger scale. Fig. 3 is a cross-section thereof. Fig. 4 is a top view of the same hinge. Fig. 5 is a longitudinal section thereof. Fig. 6 is a view of the same hinge from the inside of the hoop.

In each of the above figures the joint or hinge is represented as straight, except that in Fig. 1 red outlines are employed to indicate the position of one of the hinges, and also of the adjacent portions of the hoop when the hinge

is pressed inward by any force.

Fig. 7 is a top view of the hinge when partially bent or turned inward. Fig. 8 represents a plate of brass or other suitable material cut by dies or otherwise in a proper shape to form one of the parts of the hinge. Fig. 9 represents a top view of the same after the sides have been raised and the tongue bent over. Fig. 10 is another view of the same. Fig. 11 is a longitudinal section thereof. Fig. 12 represents a plate of brass or other suitable material cut by dies or otherwise in a proper shape to form the opposite part of one of the hinges. Fig. 13 represents a top view of the same after the sides have been raised and the ears bent over. Fig. 14 is another view of the same. Fig. 15 is a longitudinal section of the same part.

Similar letters of reference indicate like

parts in all the figures.

The object of my invention is to provide for the bending inward of the hoop at the front and also at the sides of the skirt when required, and to avoid the evils incident to the use of

hinged hoops previously known.

I provide a hinge at three points—one in front and one at each of the sides of the hoop. I believe there is no especial advantage in producing hinges at the back of the skirt. The hinges at the sides allow the wearer to walk in close contact with a companion by the yield-

ing inward of the hoops at the side against which the companion touches; and the hinge at the front is particularly useful in allowing the dress to be gathered together by folding the hoops inward between the feet in a crowded place or in assuming a sitting posture. I so construct my hinges that they will yield readily inward, but not outward and not up or down.

I have in my patent dated August 15, 1865, described a hinge for hoop-skirts which will yield inwardly and not outwardly, but which will yield up and down. I find that that quality of yielding in a vertical direction is not of much use, and involves almost necessarily a risk of jamming and binding, so as to entangle and obstruct the action of the hoops.

To enable others skilled in the art to make and use skirts or hoops and hinges therefor according to my invention, I will proceed to describe such construction by the aid of the drawings and of the letters of reference marked

thereon.

A A are the several portions of the hoop, (seen edgewise in Fig. 1,) and which may be of thin tempered steel covered in the ordinary manner. B and C are the two portions, respectively, of the several hinges. The hinges may be all made alike, as represented.

The part B is cut by dies or otherwise into the form represented in Fig. 8, where B' is the back, and B<sup>2</sup> B<sup>2</sup> the sides, adapted to turn up, as shown in Fig. 13, and ultimately folded over, as shown in Fig. 3<sup>a</sup>. B<sup>3</sup> is the loop or tongue, an extension of B', and is ultimately folded over by machinery or otherwise into the form shown in Figs. 1, 4, 5, 7, 9, and 11.

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The part C is cut by dies or otherwise into the form represented in Fig. 12, where C' is the back, and C<sup>2</sup> C<sup>2</sup> the sides, adapted to be bent up by dies or otherwise, and ultimately to be folded over upon the hoop and clasped firmly thereon, as shown in Fig. 3<sup>a</sup>. C<sup>3</sup> is an extension of C'. C<sup>4</sup> C<sup>4</sup> are ears, which are bent upward by dies or otherwise, and are folded inward and confined within the loop B<sup>3</sup>, as represented in Figs. 1, 2, 4, 5, 7, and 14.

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The metal of which the parts B and C are formed is sufficiently thick and strong to enable the loops B³ and the extension C³ and the ears C⁴ to endure all the strain which is thrown on them in all ordinary exigencies. The extension C³ on the part C applies under or with-

in the part B, as indicated in Figs. 1, 4, 5, 6, and 7, so as to offer no obstruction to the folding or bending of the hinge inwardly toward the person, but to forbid its bending outwardly, while the ears C4, standing in the loop B3, as also the reception of the loop B3 and the parts B' B<sup>2</sup>, within the part C and between the parts C' C<sup>2</sup>, protect the joint against any possibility of working in the vertical direction. The hinge therefore cannot bend upward or downward, but maintains a rigidly plain or nearly plain condition, while it can bend inward freely but not outward.

I do not confine my invention to the precise forms and proportions of the parts herein indicated. Various modifications will suggest themselves to any good mechanic; but the general construction here represented is much superior to any other known to me, because it may be made very cheaply and applied together rapidly by suitable machinery, and will endure as long as the other portions of the skirt.

Having now fully described my invention,

what I claim as new in hoop-skirts, and desire to secure by Letters Patent, is as follows:

1. The within-described hinge-joint on the ends of the hoops, the same being rigid in the vertical direction and adapted to yield inwardly, but prevented from yielding outwardly by extending the one part past the axis of the joint, so as to bear against the other part, substantially in the manner and for the purposes

herein set forth.

2. The three hinges arranged at the sides and front of the skirt-hoop, and capable of yielding inwardly, but not outwardly, so as to allow the skirt to be compressed inwardly at any of those points without protruding outward at either point beyond the general circuit of the hoop, substantially in the manner and for the purposes specified.

S. J. SHERMAN.

Witnesses: JOHN NOBLE. D. W. STETSON.