

E. G. Atwood

Hoop Skirt.

Patented Dec 18. 1860.

N^o 30907.

Fig. 1.

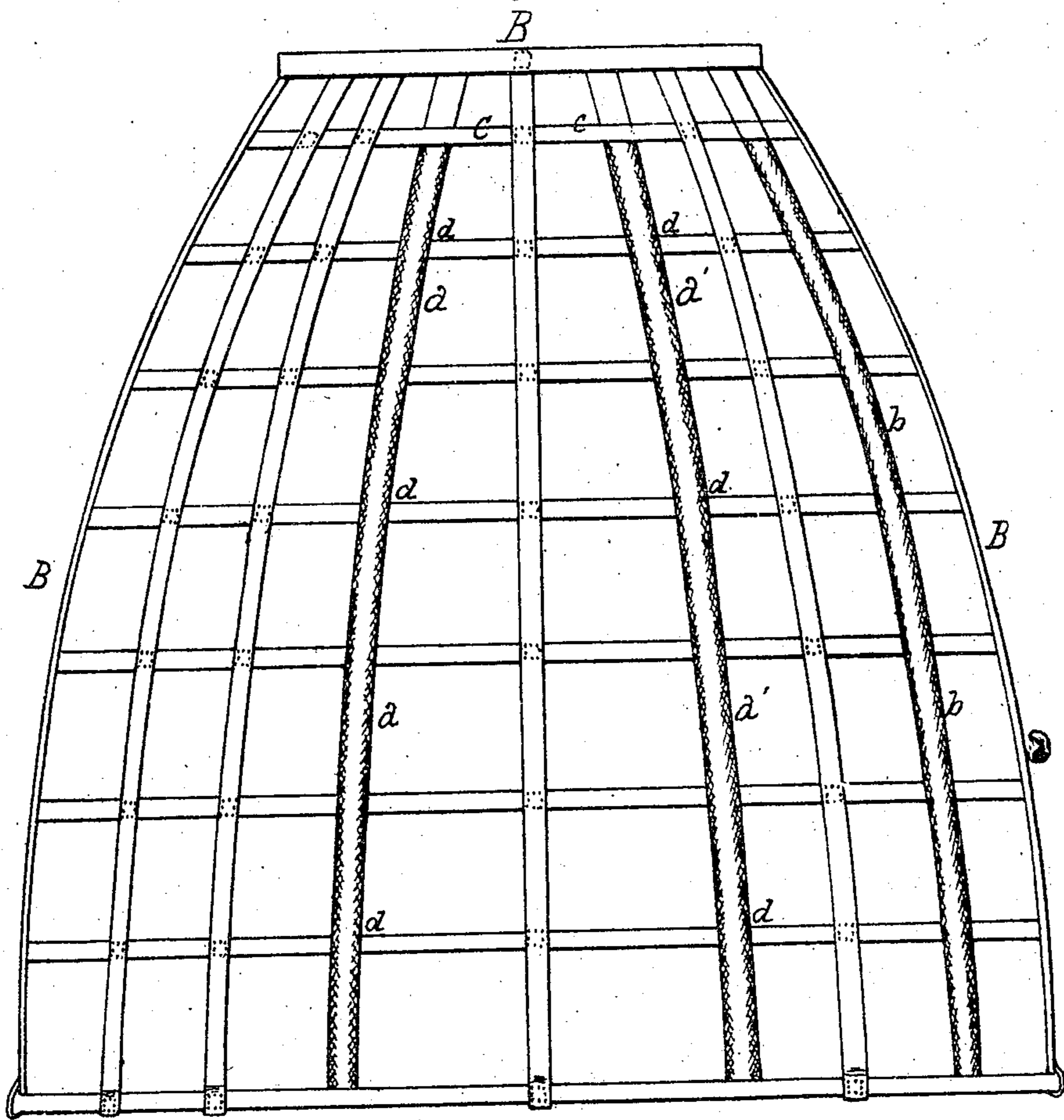


Fig. 2

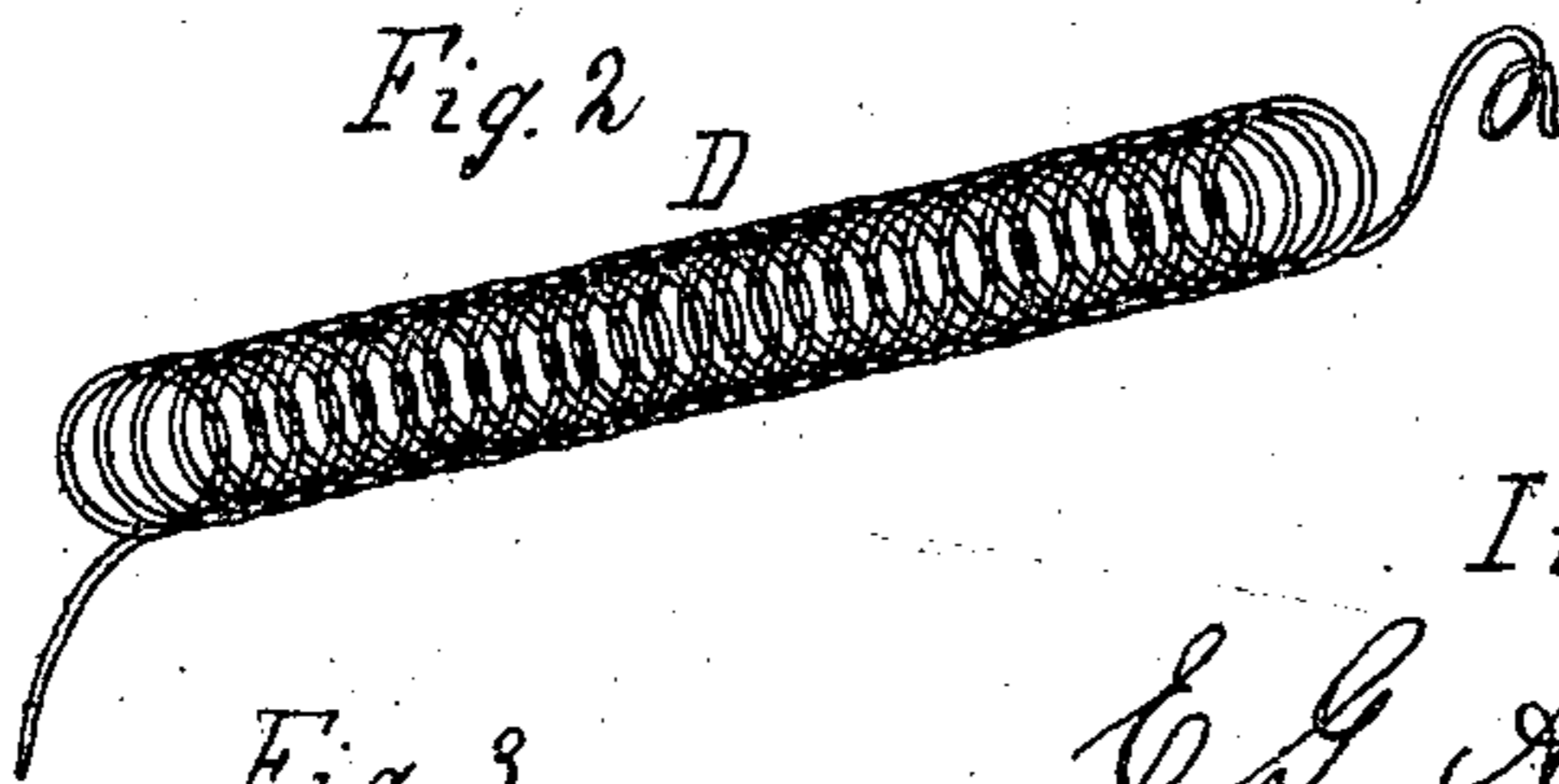
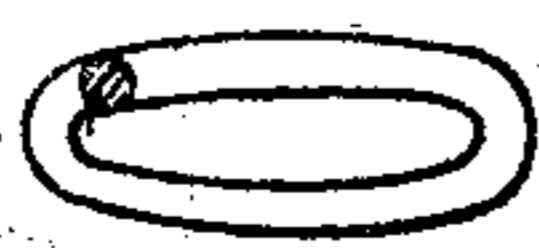


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

E. G. ATWOOD, OF DERBY, CONNECTICUT.

SKELETON SKIRT.

Specification of Letters Patent No. 30,907, dated December 18, 1860.

To all whom it may concern:

Be it known that I, E. G. Atwood, of Derby, in the county of New Haven and State of Connecticut, have invented certain
5 new and useful Improvements in Hoop-Skirts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 represents an elevation of a hoop skirt embracing my improvements as viewed from the rear and side. Fig. 2 represents on an enlarged scale a flattened spiral spring which is covered in Fig. 1. Fig. 3 represents
15 a cross section through the flattened spiral spring.

The object of my invention is the production of a light, flexible and symmetrical skirt, with the hoops so arranged and con-
20 nected with each other, as to give to it increased stiffness and elasticity in the direction of its length, and so that the hoops will not tend to rise and catch upon each other in sitting, or that when raised by the wind
25 or in passing through narrow passages will readily work themselves down, into their proper position.

To effect this object has been a desideratum among manufacturers of hoop skirts; and
30 many forms of construction have been devised for this purpose; but all of them are more or less objectionable, and have only been adopted in a limited degree. Among other constructions proposed is to form the
35 body of the skirt, with vertical elastic steel bands, extending from the waistband to the upper hoop, of a series, of two or more hoops used to form the bottom of the skirt. Al-
40 though this arrangement prevents the lower hoops from rising, it is objectionable from its giving too great stiffness to the skirt in the direction of its length; and also because the proper form and symmetry required, cannot be given to the skirt. Spiral hoops to
45 form the skirt, connected at different points by vertical tubular tapes, with a cord passing through them, have also been used, but these cords are not sufficiently elastic, to prevent the hoops from rising, or to work them
50 down when raised.

My invention consists, in the application to the ordinary hoop skirt (formed with a series of horizontal hoops) of vertical elastic ribs, made of flat spiral metallic, springs,

which extend from the waistband or upper 55 hoop, to the bottom of the skirt, and intersect, and are attached, by riveting or any other convenient mode to the intermediate hoops.

By reference to the accompanying draw- 60 ing my improvement will be fully understood.

The skirt (B) is constructed in the ordinary manner with a series of flat, steel hoops (e) connected with each other and with 65 the waistband, by means of tapes (—) or any other convenient mode in general use. At the rear of the skirt in the present instance, are three rows of flattened and covered spiral springs (a a' b) placed at con- 70 venient distances apart, and extending from the waistband or upper hoop (c) to the lower hoop of the skirt, and crossing all the intermediate hoops, at about right angles; and attached to the hoops, at the point of 75 intersection (d) by a clasp, sewing, or any other convenient mode.

The spring used to form the vertical elastic ribs to the skirt, represented in Figs. 2 and 3, is made like the ordinary metallic 80 spiral spring, and then flattened, in order to give increased stiffness and elasticity; and also that it may not project, so as to incommode the wearer of the skirt. The advantage of this spring in hoop skirts and 85 the arrangement proposed, is, that any form required, to adapt the skirt to the prevailing style, can be readily given to it; that the symmetry and grace of the skirt is not marred by the application of these springs; 90 that it can be gathered up and raised when required, without breaking or injuring the spring, which is not the case when the flat steel spring is used; while it has all the advantages of the flat steel spring, in that it 95 does not project so as to incommode the wearer in sitting down and also prevents in a great measure the skirt from swinging. This spring also allows the skirt to yield with freedom so that it can be easily raised 100 when necessary—it prevents the hoops from catching or entangling when raised, and causes them when released to regain their proper position, which is not the case when vertical cords are used in connection with 105 the hoops. I do not confine myself to applying these springs to the rear of the skirt alone nor limit myself to any number of

springs as these may be varied as circumstances require.

What I claim as new in hoop skirts and desire to secure by Letters Patent is—

- 5 The combination of a series of hoops to form the skirt, with a series of flattened spiral springs—extending from the waistband or upper hoop, to the bottom of the skirt, crossing the intermediate hoops and

attached to them, by any well known means 10 for the purpose set forth.

In testimony whereof I have subscribed my name.

E. G. ATWOOD.

Witnesses:

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M. V. B. RANCLIFFE.