

A.M. Bardwell.

Hoop Skirt.

N^o 54,998.

Patented May 22. 1866.

Fig. 1.

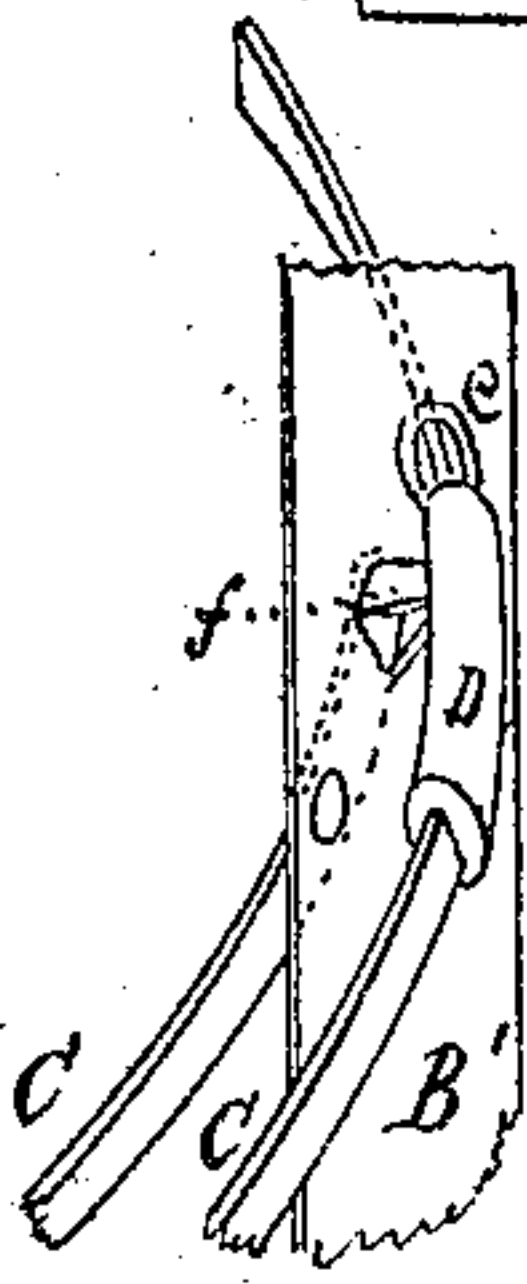
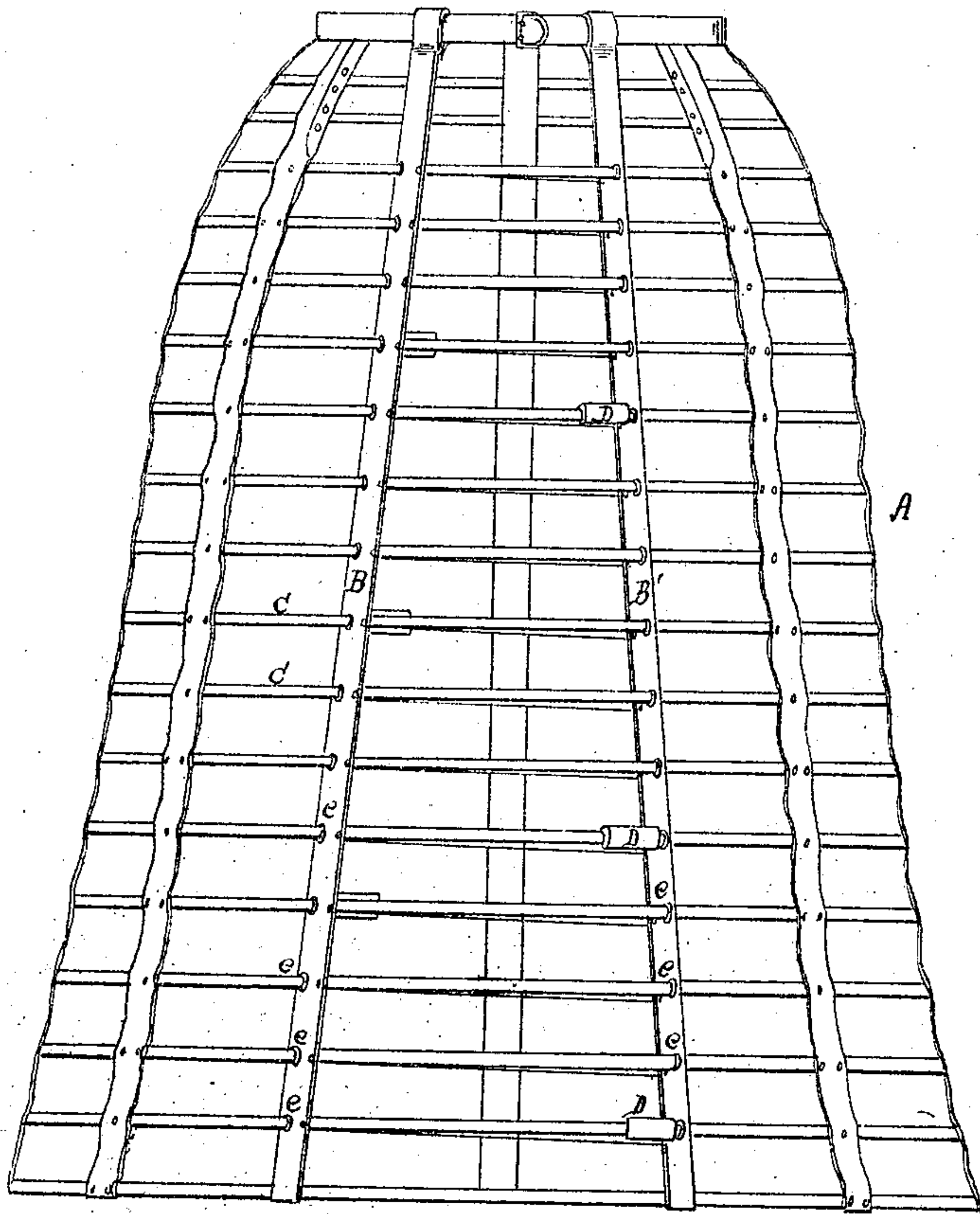


Fig. 2.

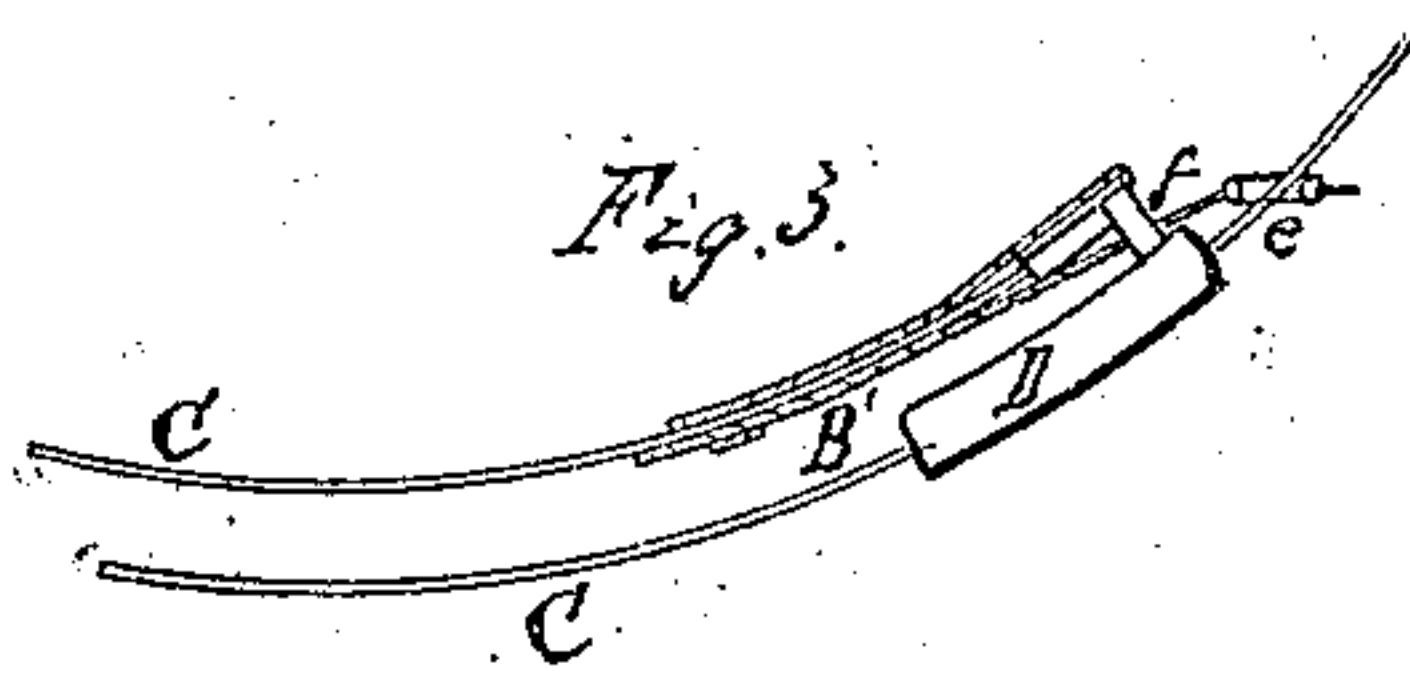


Fig. 3.

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UNITED STATES PATENT OFFICE.

ANNA M. BARDWELL, OF AMHERST, MASSACHUSETTS, ASSIGNOR TO C. D. CLAPP AND H. J. BARDWELL, OF SAME PLACE.

IMPROVEMENT IN HOOP-SKIRTS.

Specification forming part of Letters Patent No. 54,998, dated May 22, 1866.

To all whom it may concern:

Be it known that I, ANNA M. BARDWELL, of Amherst, in the county of Hampshire and State of Massachusetts, have invented a new and useful Improvement in Hoop-Skirts; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation of a skirt made according to my invention. Fig. 2 is a detailed perspective view of the device by means of which the hoops and front tapes are connected. Fig. 3 is a view of the same parts seen in Fig. 2, the tape being shown in cross-section.

Similar letters of reference indicate corresponding parts.

The object of this invention is to produce a hoop-skirt which can be readily expanded or contracted by the wearer while it is being worn, and in which a bustle can be produced by the same devices which enable one to effect the expansion of the skirt.

A designates a hoop-skirt, whose vertical tapes are or may be of the number usually employed in those which are not expansible. The letters B B' designate the ordinary tapes placed in the front of the skirt to support the hoops at that part. C designates the hoops. Their ends are not coupled together, as in ordinary cases, but are left disconnected, to allow them to lap over each other. Their ends, however, are fastened to the said front tapes, B B', respectively, those ends of the hoops which extend toward the right being fastened to the tape B' and those which extend toward the left being fastened to the tape B. The hoops, consequently, are double between the front tapes, but yet are not directly connected to each other. Those ends of the hoops which are fastened to the left-hand tape B are each connected to the right-hand tape B', but by an adjustable and not a rigid connection, for they severally pass through eyelets *e*, made in the said tape for that purpose. Those ends of the hoops which are fastened to the right-hand tape B' in like manner pass through eyelets made for them in the left-hand tape B. It is evident from this construction that the front tapes, B B', can be brought toward each other by sliding their eye-

lets over the ends of the hoops, and that in this way the diameter of the hoops will be enlarged, and that they can be moved away from each other until they come in contact with the next adjacent tapes on either side.

In order to retain the hoops at whatever diameter they are brought to, it is necessary to provide a frictional or other fastening which will hold them stationary and prevent the movements of the skirt produced in wearing it and any unequal strain put upon any of the hoops and tapes from causing them to slip. I make such provision in the following manner: D designates a sliding tube made of some elastic material, such as rubber or gutta-percha, or compounds of either, or of elastic cloth, and which is placed on all the hoops, or on as many of them as will serve to keep the tapes at the desired distance apart. The size of the tube internally is to be such that it is placed upon one of the hoops C only by using force, so that when it is on the hoop it can only be moved to and fro by overcoming the friction produced by its elasticity. The place of the tube on the hoops is in this example (see Fig. 3) on the left-hand side of the right-hand tape B', but it will operate equally well on the other side. In this example I have shown three of the hoops provided with tubes along the tape B'. From that side of the tube which is next to the tape and from that end of it which is next the eyelet *e* proceeds a loop, which is run over and tacked to that end of the hoop that is fastened to the tape B'. This loop may be made of elastic material.

Observing Fig. 3, it will be understood that when one holds onto the inner part of the hoop C with one hand, and with the other hand moves the tube D toward the left or the right, that the lap of the ends of the hoop, and consequently its diameter, will be increased or diminished according as the tube is slid toward the right or left. The tape B' will partake of the motion given to the tube, because the tape is fastened to the same end of the wire to which the loop of the tube is fastened. Since the hoops compose a frame, being fastened to the side and back tapes at their places of intersection, it follows that they will in a considerable degree follow the movements of the hoop to which the force is applied, each being free to move to and fro through the eyelets *e* of the

tape; but in order to produce uniformity in the "hang" of the skirt, it is necessary to have several tubes, D, on the hoops.

Those parts of the hoops which pass through the eyelets of the front tape B are also provided with friction-tubes D, whose loops are fastened to those ends of the hoops which are tacked to said tape B. These tubes will occur behind the tapes B, because the parts of the hoops on which they are placed pass behind them after they are inserted through the eyelets *e*.

It will be observed that by this construction all the hoops are suspended from the tapes as completely as in skirts which are not extensible, and that separate and supplementary tapes to hold the ends of the hoops are dispensed with, whereby the strain brought against the skirt when worn is borne equally by all the wires, notwithstanding the ends of the hoops are not joined by rigid connections.

The tubes D are applied at the upper part as well as at the other parts of the skirt, where-

by a bustle can be formed in the skirt independently of its adjustment below.

This mode of connecting the ends of hoops to the tapes of skirts can be used with good results in making skirts which are not expandible, one advantage being their superior flexibility. In making such use of my invention the tubes may be secured on the hoops, so as not to be capable of being moved along them.

I claim as new and desire to secure by Letters Patent—

1. The combination of the hoops C and tapes B B', the ends of the hoops being arranged as described, in the manner and for the purpose herein specified.

2. In combination therewith, the tubular fastening D, with a loop at one end, made substantially as shown.

ANNA M. BARDWELL.

Witnesses:

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