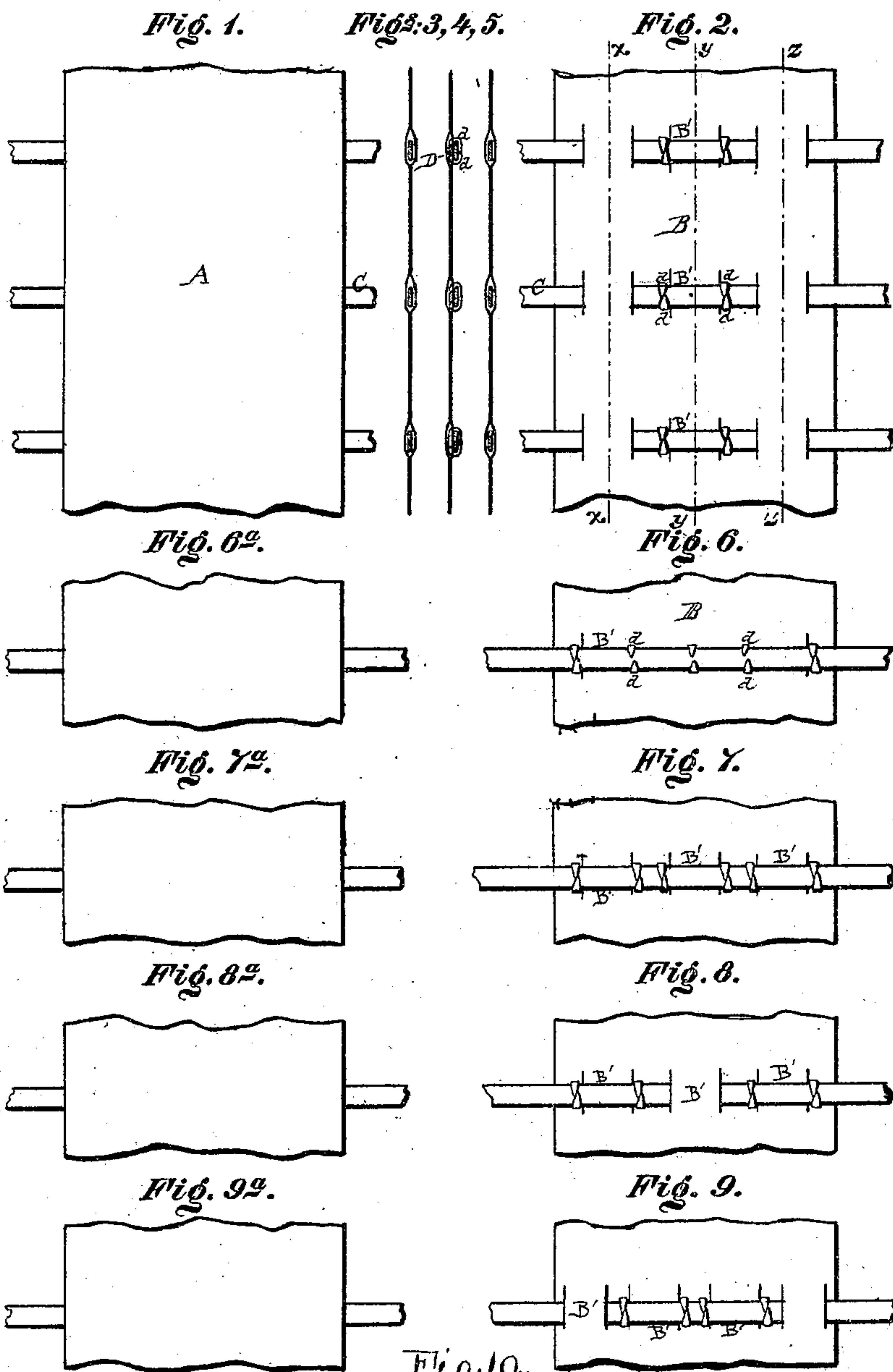


*K. M. Rae,*  
*Hoop Skirt.*

*No. 95,625.*

*Patented Oct. 5, 1869.*



*Witnesses.*  
*W. C. Dey*  
*L. L. Loring*

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# United States Patent Office.

K. McRAE, OF NEW YORK, N. Y.

Letters Patent No. 95,625, dated October 5, 1869.

## IMPROVEMENT IN HOOP-SKIRTS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, K. McRAE, of the city and county of New York, in the State of New York, have invented certain new and useful Improvements in Skeleton Skirts; and I do hereby declare that the following is a full and exact description thereof.

My invention relates to the junctions of the tapes with the hoops. The tapes are woven with pockets, adapted to receive the hoops, in the manner shown in the patent issued to James Draper and S. H. Doughty, dated October 4, 1859. The hoops, unlike the Draper-Doughty arrangement, are not contained in all the pockets. They are fastened to some by clasps peculiarly arranged, so that the body of the clasp is enclosed within the pockets, and the prongs are made efficient in tightly holding the hoop against the tape on the inner face of the skirt.

My invention, by embracing the body of the clasp within the woven material, so that it is covered on both faces by the soft fabric, avoids the injurious effect on other articles of dress, and particularly avoids the offensive appearance to the eye due to the exhibition of large metallic surfaces. I find that the hoops are held very efficiently, and that the skirts are much liked.

I will proceed to describe what I consider the best means of carrying out my invention.

The accompanying drawings form a part of this specification.

Figure 1 is a view from the outside of the skirt, showing a portion of the tape, with the adjacent parts of the hoops;

Figure 2 represents a view from the interior of the skirt, showing the same portion of the tape, with the visible portion of the hoops and clasps adjacent;

Figure 3 is a vertical section on the line *x x*, fig. 2;

Figure 4 is a vertical section on the line *y y* in fig. 2; and

Figure 5 is a vertical section on the line *z z* in fig. 2.

(These figures represent what I consider the best form of my invention. All the junctions of the hoops to the tapes, throughout the entire skirt, may be formed similarly to those here represented.)

Figure 6 represents a single long clasp, applied within a single or ordinary pocket, that is to say, a pocket woven in the ordinary manner, in a single breadth.

Figure 7 represents three short clasps fitted within a pocket, divided into three separate pockets, or more properly, sections of pockets.

Figure 8 represents two short clasps, fitted within two sections of such pocket, while a third section receives and aids to support the hoop.

Figure 9 represents two short clasps, fitted within

two sections of a pocket, while two other sections receive and aid to support the hoop.

Figures 6<sup>a</sup>, 7<sup>a</sup>, 8<sup>a</sup>, and 9<sup>a</sup>, represent the exterior views of the tapes for all these modifications.

Figure 10 represents what I term the needle, for inserting the clasps in the difficult position required.

Similar letters of reference indicate corresponding parts in all the figures.

A and B are the two sides of the tape. The part which is presented on the exterior face of the skirt is always continuous, and is wider than the pocket or pockets. This side is indicated by A.

The side B, which is presented on the inner side of the skirt, may be a continuous breadth, as shown in fig. 6, or it may be divided into two, three, four, or other breadths, each distinct from the other, as indicated in figs. 2, 7, 8, and 9. My invention applies, with some success, to skirts made with any number of such divisions in the pockets, but I prefer three, as indicated in fig. 2.

C is the hoop. It is of flat tempered steel, covered with braid, starched and finished in the most approved manner, so as to afford an efficient covering for the hoop, and one which will not be readily soiled, and yet sufficiently soft to allow the clasps to become embedded in the covering, and to hold the hoops very strongly against an endwise or sliding movement.

D *d d*, fig. 4, is the clasp, the body being represented by D, and the arms which embrace the hoop by *d d*.

In all the modifications of the form, the body D is within the pocket of the tape, and the arms *d d* project out toward the inner face of the skirt, and embrace the hoop C, and tightly hold the part B' of the tape between the body of the clasp and the hoop.

This novel arrangement of the parts may be applied either in the form indicated in fig. 6, where the entire pocket is in one breadth, or in the form indicated in figs. 2, 7, 8, and 9, where the pocket is in three breadths, or in any form where the pockets are in two, four, or other number of breadths.

In cases where the pocket is in three breadths, as in figs. 2, 7, 8, 9, I prefer to employ only one clasp, the width being but little greater than that of one of the parts of the pocket, and to place this clasp within the middle breadth, as represented in fig. 2; but I can use a single clasp, extending the whole breadth of three pockets, or three clasps, one for each breadth of the pocket; or I can use two clasps, one in each of the exterior breadths of the pocket, omitting the middle one; or I can use one clasp in either of the pockets, as preferred.

The clasps are necessarily inserted while the prongs or arms are in an extended condition. They are, in this condition, difficult objects to insert in the limited



space offered by the pockets. In order to readily insert them, I employ a peculiar needle or trough, represented in figs. 10. This trough may be provided with a handle, and operated by the hand; or it may be fixed in the wall, or in any suitable part of the framing of a machine, in which latter case the machine may be made to move the spout, to insert it, with its contents, within the pocket of the tape; or the machine may be made to move the tape upon the spout, so as to bring the parts in the proper relation to each other, while the spout is itself immovably held in a horizontal, slightly inclined, or other convenient position.

It will be understood that the clasp is introduced into the spout, by hand or otherwise, before the spout is inserted in the pocket of the tape; that the spout is deep enough to receive the clasp, with its prongs, entire, and thus to prevent the prongs of the clasp from catching the fabric while being inserted.

After the clasps are thus introduced in their respective places, the spout is withdrawn, either by reversed motion, or by continuing its motion through the pocket, which latter may be preferable in some instances, when operated by hand, and the clasp is left in the proper position within the pocket, ready, on the hoop being presented in the proper relation between the arms of the clasp, to have the prongs forcibly bent down by the ordinary machines, or by other means.

A pressure of the finger upon the spout, immediately over the clasp, is sufficient to retain the clasp in position while the spout is being withdrawn. In order to insure this effect, as also for other obvious reasons, it is important that the spout be only a very little deeper than the length of the prongs.

Whenever the pocket is made in three, or any other number of divisions greater than one, and the clasp is applied within one, or any other number less

than the whole of such divisions, I introduce the hoop so that it shall pass within the other divisions of the pocket; that is to say, the hoop lies necessarily outside of those pockets where the clasp applies, but it lies within the other portions of the pocket.

This arrangement is shown in several modifications in figs. 2, 8, and 9. I prefer the entire construction and arrangement shown in fig. 2. It allows the hoop to be very efficiently sustained in the vertical direction by two sections of the pocket, while it is very efficiently fastened against slipping by the clasp applied within the middle section.

The weaving of the pockets in separate sections or divisions is effected by multiplying the divisions in which the work of weaving at this point is accomplished. It will offer no difficulty to weavers accustomed to the manufacture of pocketed tapes. Each section is woven separately, in the same manner as a single side of the pocket is ordinarily woven.

I am aware of the application of George H. Young, filed June 1, 1869, and therefore make no claim to whatever invention there is embraced in said application.

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

The combination of a skirt-tape, A B, formed with pockets, with the hoop C and clasp D *d*, as described, when the latter is inserted within the said pocket or pockets, between the hoop and the front side of the tape, thus concealing its body, while its prongs grasp the hoop at each end of the said pocket, substantially as before described.

In testimony whereof, I have hereunto set my name, in presence of two subscribing witnesses.

K. McRAE.

Witnesses:

C. C. LIVINGS,  
W. C. DEY.