

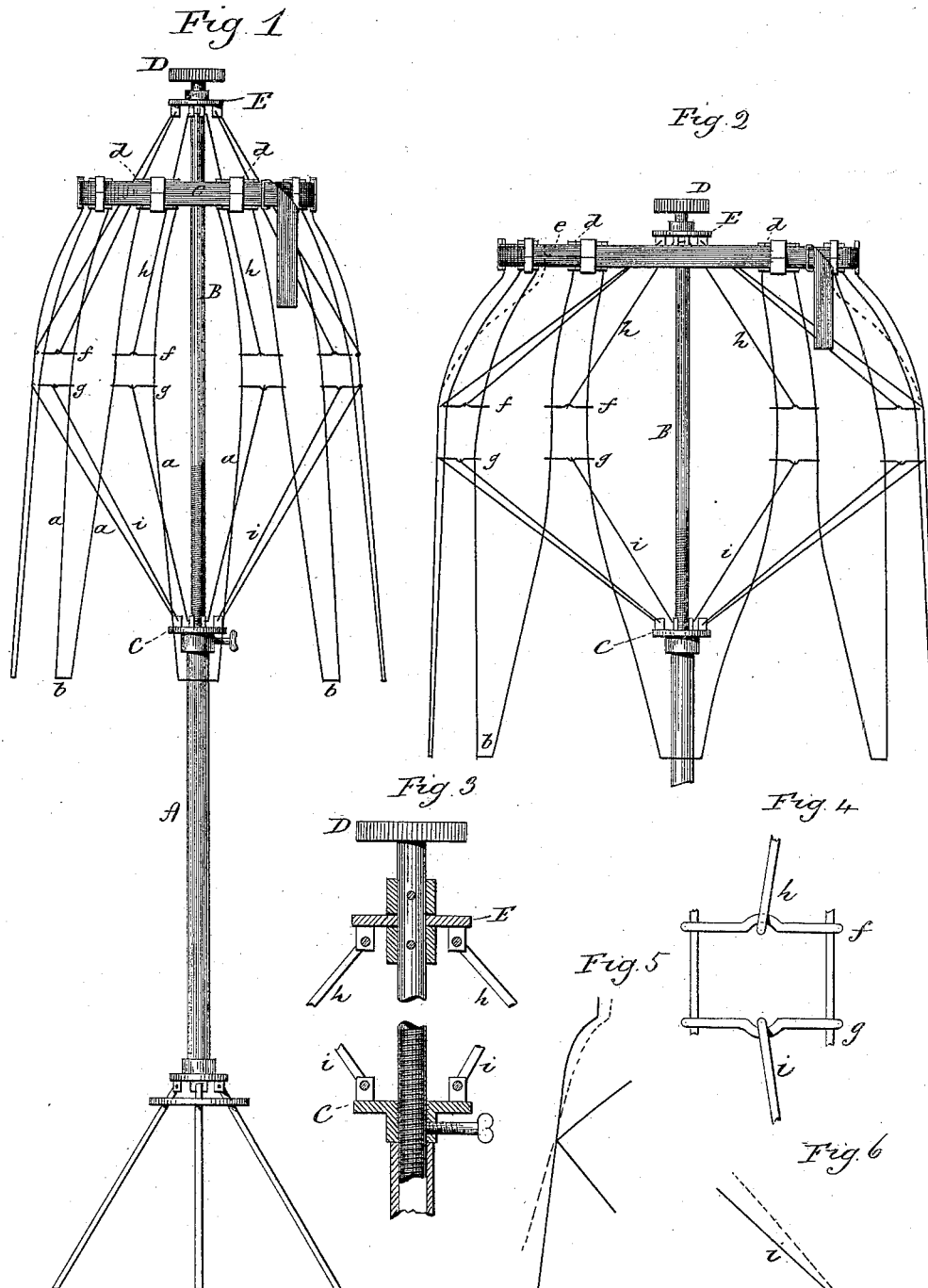
(No Model.)

W. H. KNAPP.

DRESS FORM.

No. 383,470.

Patented May 29, 1888.



Witnesses,
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UNITED STATES PATENT OFFICE.

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DRESS-FORM.

SPECIFICATION forming part of Letters Patent No. 383,470, dated May 29, 1888.

Application filed November 21, 1887. Serial No. 255,699. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KNAPP, of Brooklyn, in the county of Kings and State of New York, have invented new Improvements in Garment-Stands; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the stand complete; Fig. 2, same side view in a more expanded condition; Fig. 3, a vertical central section of a portion of the spindle, collars, and braces, enlarged; Fig. 4, the connection of the braces with the ribs, enlarged; Fig. 5, an illustrative diagram; Fig. 6, a top view of the collar and a pair of braces, illustrating their elastic operation.

This invention relates to an improvement in that class of stands which are designed to receive the skirt of a lady's dress, and which stands usually consist of a series of vertical ribs surrounding a central upright spindle, the said ribs being made adjustable to adapt them to different sizes of skirts.

The object of my invention is to construct a stand which will conform more nearly to the shape of the body of a person than in the usual full-length ribs, and so that the adjustment may be made upon the hip portion and leave the skirts free to hang as they naturally would upon the wearer.

A represents the tubular central standard, which is supported upon suitable legs or base to maintain it in its upright position.

B represents a spindle, which is supported in the tubular standard A and extends upward therefrom, but adjustable vertically therein in the usual manner for this class of spindles.

C represents a nut, through which the screw-spindle B works. This nut may rest on the upper end of the tubular standard A, and so as to retain the spindle B at its proper elevation. The spindle is provided at its upper end with a suitable head, D, by which it may be rotated.

Below the head a collar, E, is arranged loose on the spindle, but held against vertical movement, as represented in Fig. 3. Around the

upright several ribs are arranged, these ribs being each of U shape and made from wire. The two legs *a a* of each rib are connected at the bottom, as at *b*, which forms the U shape of the rib. One leg of one rib is secured to a loop, *d*, at its upper end, and the adjacent leg of the next rib is secured to the same loop, and so on around the stand, the adjacent legs of each two ribs being secured to a loop at the upper end, independent of the other legs.

The loops are constructed to receive a flexible strap, *e*, which passes through them, and by which the upper end of the ribs may be contracted or expanded. This peculiar construction of ribs, loops, and flexible bands is included in an application for Letters Patent of the United States, Serial No. 250,654, filed September 26, 1887, and patented November 29, 1887, No. 373,989. One leg of each rib is connected to the adjacent leg of the next rib by a bar, *f*, this bar being at a point below the loop or connected ends above, and immediately below this bar *f* the same legs are connected by a like bar, *g*.

To the collar E a series of braces, *h*, are hung by one end. The braces extend therefrom diagonally downward, and are connected by their outer ends to the respective bars *f*. To the collar C a similar series of braces, *i*, are hung by their inner end. The braces, extending diagonally upward, are hung by their outer ends to the respective bars *g*, and as represented.

Hitherto it has been common to hinge the two series of braces at the same point on the ribs, the result of which arrangement has been that as the braces approach each other they force that one point outward, but without other control upon the ribs than simply expansion, and as the collars are separated and the braces approach a vertical position the ribs are drawn together; but the braces in that case have no control over the ribs other than simply contraction.

By connecting the two series of braces to the ribs at points one above the other, each series of braces controls the ribs at its own point of connection, and that connection being at two points, one above the other, those two points will always stand in substantially the same plane; consequently that same rocking movement which exists under the connection of the

two series at one point is impossible with the connection of the two series at different points. To illustrate, if the two series of braces be connected to the ribs at the same point, any contraction of the upper ends of the ribs would cause the ribs to turn upon the brace-connection as a hinge and the lower ends of the braces to be correspondingly thrown outward, as indicated in broken lines, Fig. 5; but by making the connection at two points, as seen in Figs. 1 and 2, the ribs are held by the two braces, so that the contraction of the band at the upper end will only produce curvature from the braces upward, with very little effect upon the ribs below, as indicated in broken lines, Fig. 2. By this arrangement the stand is expansible and contractible at the hips and at the waist, each point independent of the other, and so that one may be contracted or expanded under the drawing up or letting out of the strap *e*, without changing the form of the stand below the braces, the brace-connection being at the hip-line of the garment. This construction avoids the long ribs which have heretofore been necessary, and also the series of braces at the lower portion of the stand, so that the ribs may only be of a length corresponding to the body portion of the person, leaving the skirt free below, substantially as it would be upon the wearer.

To provide a spring the tendency of which shall be to readily bring the ribs into their contracting position and yieldingly resist the expansion, and so that the ribs may be held firmly, the braces *i i* are made in pairs, each pair being formed in a single piece, as represented in Fig. 6, the connection between the two legs being at the respective collars. As the ribs are thrown outward, the circumference necessarily expands. The result of this is that the braces will be correspondingly spread, as indicated in broken lines, Fig. 6. The braces will offer a yielding resistance to this expansion, and being made from elastic wire, this resistance will produce a reaction as the ribs are contracted, so that the ends of the springs will correspondingly approach each other.

The legs of the ribs form a spring opposed to the braces, and so that between the elasticity of the ribs and the elasticity of the braces the ribs and braces maintain their proper relation to each other at whatever position in their expansion or contraction they may stand—that is to say, the normal condition of the braces and the legs of the ribs being in the closed po-

sition, as the stand is expanded the legs of each rib spread, as do the braces connected thereto, the ribs, like the braces, resist such spreading, and that resistance maintains the same relative position between braces and ribs and serves to forcibly contract the stand.

The adjustment is made in the usual manner for this class of stands by revolving the spindle B to separate the collars or cause them to approach each other, as the case may be.

I claim—

1. A garment-stand consisting of a central upright and a vertically-adjustable spindle, B, combined with a screw-threaded collar, C, on said spindle, a collar, E, above, loose on said spindle, but fixed against vertical movement, a series of substantially vertical ribs surrounding said spindle, a series of braces hung by their upper ends to the collar E and extending diagonally downward, hung by their outer ends to the ribs at a point below the upper ends of the ribs, a second series of braces hung by their inner ends to the collar C, extending diagonally upward, their outer ends hung to the ribs immediately below the connection of the upper braces with the ribs, the said ribs contractible from the point of connection with the braces upward, and a flexible band connecting said upper ends of the braces, substantially as described.

2. In a garment-stand consisting of a vertical central adjustable spindle, B, a series of ribs, each rib made from wire and of U shape, the upper end of one leg of each rib connected by a loop to the upper end of the adjacent leg of the next rib, a flexible band through said loops on the upper ends of the ribs, a collar, C, on the adjusting-spindle below, and a similar collar, E, above, a series of braces hung to the collar E and extending diagonally downward, their outer ends hung between the connected legs of adjacent ribs at a point below the upper ends, and a second series of ribs hung to the collar C below and extending diagonally upward, their outer ends hung between the connected legs at a point below the connection of the upper braces, the said braces constructed in pairs, each pair composed of a single piece of elastic wire bent so as to form a connection between the two braces of a pair at their inner ends, substantially as described.

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Witnesses:

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