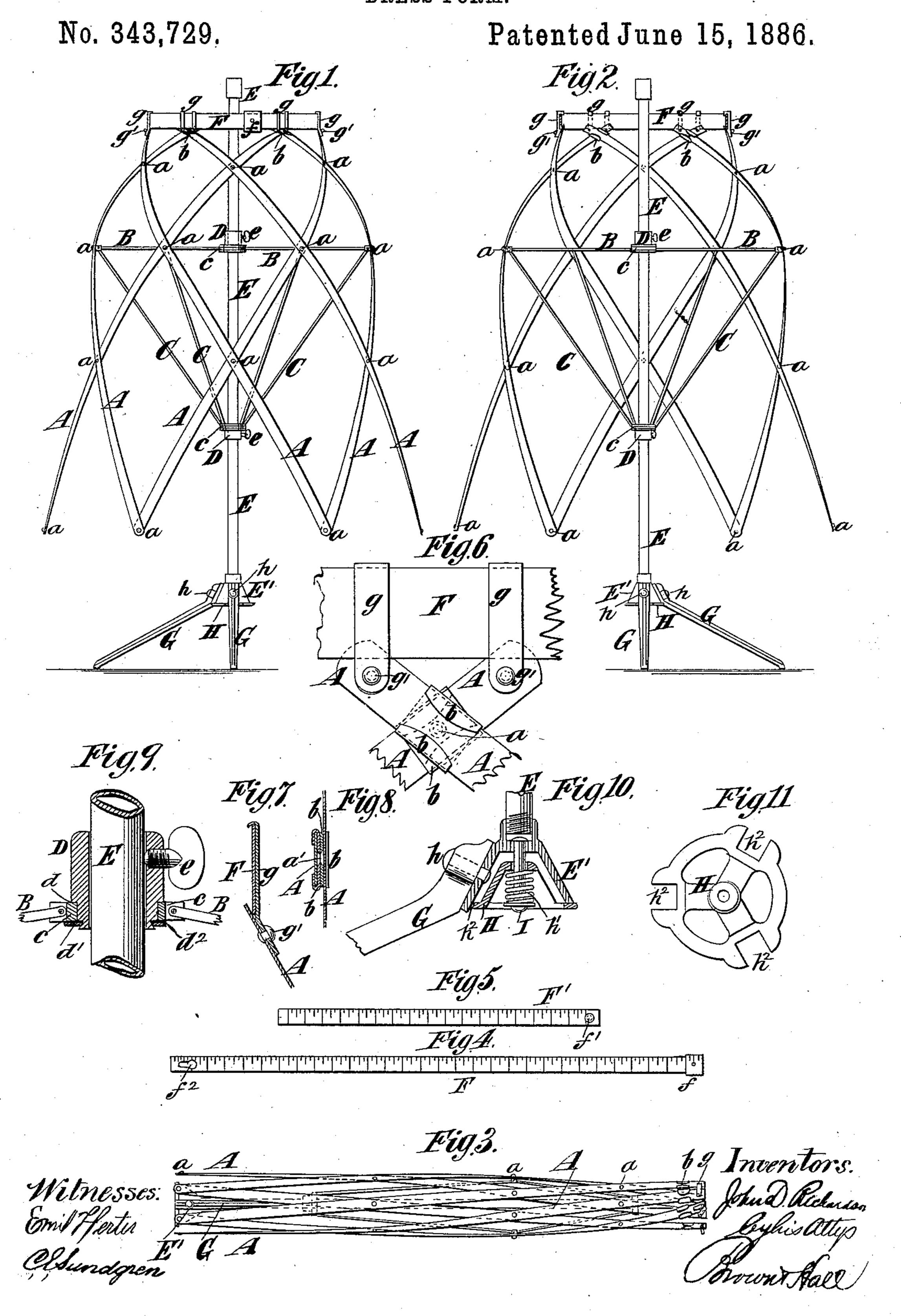
## J. D. RICHARDSON.

DRESS FORM.



## United States Patent Office

JOHN D. RICHARDSON, OF BROOKLYN, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HIMSELF AND FRANCIS L. MANCHESTER, OF SAME PLACE.

## DRESS-FORM:

SPECIFICATION forming part of Letters Patent No. 343,729, dated June 15, 1886.

Application filed November 25, 1885. Serial No. 183,927. (No model.)

To all whom it may concern:

Be it known that I, John D. Richardson, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new 5 and useful Improvement in Dress-Forms, of which the following is a specification.

My invention relates to dress-forms which severally consist of a skeleton metallic structure mounted on a central standard and capable of being expanded into a proper shape to drape a skirt or other garment upon it when desired for use, and of being collapsed and folded within very small compass when desired to pack it for transportation.

Dress-forms have been heretofore made in which a circular series of vertical ribs or strips are connected by stretchers with collars fitted to a central standard, and by sliding the collars on the standard the stretchers could be brought more or less nearly to a horizontal position to expand the form.

The object of my invention is to provide a form which will have all the advantages of those heretofore used, and which may be made and sold at a less cost, and will be lighter and occupy less room when packed.

The body portion of my improved dressform consists, essentially, of a circular structure composed of elastic or flexible strips 30 crossing each other obliquely and pivoted together, upon the well-known lazy-tongs principle, so that it may be readily expanded or contracted. This body portion is supported by means of stretchers, which are connected 35 with the elastic strips at their outer ends, and at their inner ends are attached to bands or collars fitted to slide upon the central standard. By sliding one of the collars upon the standard, so that one set of stretchers are 40 brought more or less nearly to a horizontal position, the form is expanded into shape for use, and by sliding the collars on the central standard, so that the stretchers are brought nearly into parallelism therewith, the form is 45 contracted about the standard, so that it may be packed in a very small compass for transportation. The elastic and obliquely-arranged strips are pivoted together at their points of

intersection, and at the top of the form I employ a circular band, which may be adjusted 50 to correspond to the size of the waist to be fitted, and which is connected by pivoted hooks to the upper ends of the obliquely-arranged elastic strips. At the top points of intersection the elastic strips, instead of being 55 simply pivoted together, are preferably provided with slides which are adjustable upon the strips, and which are themselves pivoted together, and by this construction the obliquely-arranged and pivoted strips are en- 60 abled to assume more readily the position required to connect the waistband to them. The waistband or top band, which when not in use may be laid out straight in order to pack closely with the other parts of the form, may 65 have an extensible section, which may be readily connected with it when it is desired to fit a large waist, and which may be disconnected from it when it is desired to pack the band with the form and into the same length 70 required for the form.

In the accompanying drawings, Figure 1 represents an elevation of my improved dressform expanded for use. Fig. 2 is a vertical section thereof in an expanded position. Fig. 75 3 represents the form folded and in condition for packing in close compass. Figs. 4 and 5 represent two portions of the elastic band which are employed for the waistband of the form. Fig. 6 is an elevation upon a larger 80 scale of the upper portions of two oblique elastic strips and a portion of the band with which they are connected. Fig. 7 is a vertical section of the waistband and the upper portion of one of the obliquely-arranged strips, 85 also showing a hook whereby the two are connected. Fig. 8 is a sectional view, upon the same scale as Figs. 6 and 7, of the pivot and adjustable connection which is employed between the intersecting oblique strips at their 90 upper ends. Fig. 9 represents a portion of the center standard and a vertical section of one of the collars with which the stretchers are connected upon the same large scale. Fig. 10 represents a sectional elevation of a 95 portion of the tripod on which the center

standard is supported, and Fig. 11 is a plan of the locking plate employed in the tripod, and hereinafter described.

Similar letters of reference designate corre-

5 sponding parts in all the figures.

The main portion of the dress-form consists of a circular structure composed of obliquelyarranged strips A, which may be of springsteel, and which are connected, on the well-10 known lazy tongs principle, so that they form a circular structure capable of being expanded to a large size, as shown in Figs. 1 and 2, or capable of being collapsed in a very small compass, as shown in Fig. 3. The lower ends 15 of these strips are pivoted together at a, and they are pivoted together in the same manner

at their points of intersection a'.

In order to connect the obliquely-arranged strips at their uppermost points of intersec-20 tion. I have represented clasps b, the edges of which are turned over, so as to receive the strips between them and slide freely on the strips, as shown in Figs. 6 and 8, and such clasps are pivoted together at a'. This con-25 nection permits of the oblique strips A, at their uppermost points of intersection, swinging freely on their pivot a', and at the same time permits of their lengthwise movement through the clasps b, to make them properly 30 self-adjusting. The circular body portion of the form, which is composed of the strips A. is supported by stretchers BC, which are made like simple umbrella-stretchers, as best shown in Figs. 1 and 2. These stretchers are con-35 nected to the strips A at those points of intersection which are in one horizontal plane, and extend inward and are attached to collars D. which are fitted to slide upon the center standard, E, which latter may be made of a round 40 rod or a piece of tubing. The stretchers B C at their inner ends are connected with a notchring, c, as shown in Fig. 9, and this notchring can turn freely on the collar D. As represented in Fig. 9, the collar at its end portion 45 is shouldered, as at d, and a washer, d', is secured on the opposite side of the notch ring cby riveting over the end of the collar.

In order to oppose a slight resistance to the turning of the form on the standard E while 5c in use, I may place between the collar d' and the notch-ring c of the upper stretchers, C, a friction-ring,  $d^2$ , of leather, rubber, or other

suitable material, as shown in Fig. 9.

The cellars D are adjustably secured in dif-55 ferent positions on the standard E by setscrews e, as best shown in Fig. 9. When it is desired to have the form turn freely upon the center standard, E, or, rather, upon the collars D, it is only necessary to loosen the set-screw 60 on the upper collar, and the form will then be supported by the notch-ring c of the lower collar, which turns upon said collar, while the upper collar and notch-ring both turn together freely on the standard. When it is desired, how-65 ever, to oppose a yielding resistance to the turning of the dress-form, the upper collar, D, may

be fastened to the center standard by its setscrew e, and both the upper and lower notchrings, c, will then turn on their collars, the packing-ring  $d^2$  of the upper collar opposing a 70 frictional resistance to the turning of the up-

per ring, c, and the dress-form.

In order to complete the upper end of the form, I employ a waistband or strip, F, which may be of steel, and has at one end a clip or 75 slide, f, into which the opposite end may be inserted when it is bent into a circular form. This band F is shown in its straight condition in Fig. 4, and as bent into circular form in Figs. 1 and 2. A band which was only the 80 length of the dress form when collapsed, and which could be packed without waste of room, might not be sufficient to span the largest waists, and I therefore provide an extensible band portion, F', (shown in Fig. 5,) which 85 may be connected with the main band F by means of a button or stud, f', in the form, fitting a key-hole slot,  $f^2$ , in the latter, so as to form a band long enough to span the largest waist. I prefer to divide the band F 90 into inches and fractions thereof, or other units of length, as shown in Figs. 4 and 5, so that the band may be employed as a measure.

When it is desired to adjust the form for use, and after the body has been expanded, as 95 shown in Fig. 1, the band F is bent into circular form and is placed outside the extreme upper ends of the obliquely-arranged strips A, and is then held or confined thereon by hooks g, which are pivoted at g' to the upper ends of 100 the strips A, and are adapted to be swung over to embrace the top edge of the band F, as shown best in Figs. 6 and 7. These hooks g may be readily sprung away from the band when it is desired to remove it and as readily 105 engaged therewith when it is desired to place

the band in position.

I have shown the standard E as provided with a three-legged tripod, which I do not claim as included in my present invention, but 110 which I have shown in order to illustrate a complete structure. This tripod consists, essentially, of a conical base portion, E', screwed fast or otherwise secured upon the lower end of the standard E, and three legs, G, which are 115 pivoted at h to the conical base portion or center E'. These legs, when thus pivoted, may be swung up into positions parallel with the standard E, or swung downward into positions divergent therefrom.

In order to hold the legs locked in either of the two positions, I have shown a locking-plate, H, which is free to slide on a pin or rod, I, forming an extension of the standard E, and which is pressed upward constantly by the spring h', 125 as shown in Fig. 10. As best shown in Fig. 11, this plate has notches  $h^2$ , which are coincident with the legs G and hold them in either of their two positions. When the legs are to be adjusted from one position to another, it is 130 only necessary to press downward on the plate H, in order to free its notches  $h^2$  from the leg,

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and the leg may then be turned on its pivot h until the notch  $h^2$  again springs into engagement with it to hold it in its new position.

What I claim as my invention, and desire to

5 secure by Letters Patent, is—

1. A dress form consisting of a circular body portion composed of obliquely-arranged elastic ribs or strips pivoted together at their points of intersection, stretchers connected at their outer ends with the strips, and at their inner ends secured to bands or collars, a central standard on which said bands or collars are adjustable, and a circular band portion connected with the upper ends of the oblique-ly-arranged strips, substantially as and for the purpose herein described.

2. The combination, with the obliquely-arranged strips pivoted together at their points of intersection, and a circular band portion at the top of the form, of hooks pivoted to the upper ends of the obliquely-arranged strips and adapted to engage the upper edge of the band portion, substantially as and for the pur-

pose herein described.

3. The combination, with the obliquely-ar- 25 ranged strips pivoted together at their points of intersection, and adjustable lengthwise at their upper ends in slides b, which are pivoted together, of a circular band portion connected with the upper ends of the obliquely-arranged 30 strips, substantially as and for the purpose herein described.

4. The combination, with the obliquely-arranged strips A, pivoted together at their points of intersection, and connected at their 35 upper ends by slides b, which are pivoted together, of a circular band, F, and the pivoted hooks g, whereby the upper ends of the obliquely-arranged strips are connected with said band, substantially as and for the purpose 40 herein described.

## JOHN D. RICHARDSON.

Witnesses:

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FREDK. HAYNES, HENRY McBride.