

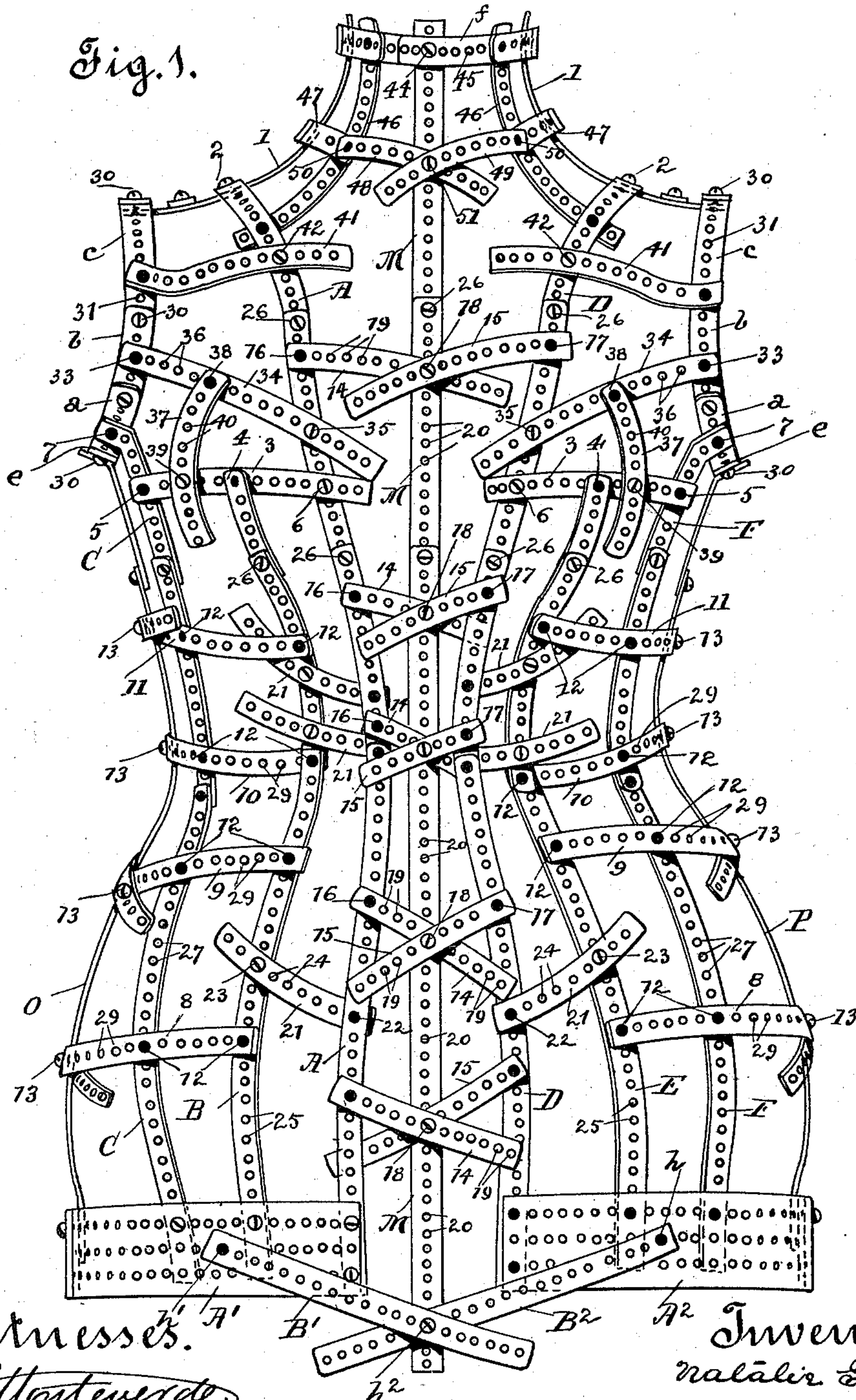
(No Model.)

3 Sheets—Sheet 1.

N. SCHELL.  
BUST FORM.

No. 582,101.

Patented May 4, 1897.



Witnesses.

*W. H. Cobb*  
*W. H. Cobb*

Inventor.  
*Nathaniel Schell*  
by *Nathaniel Schell*  
*at*



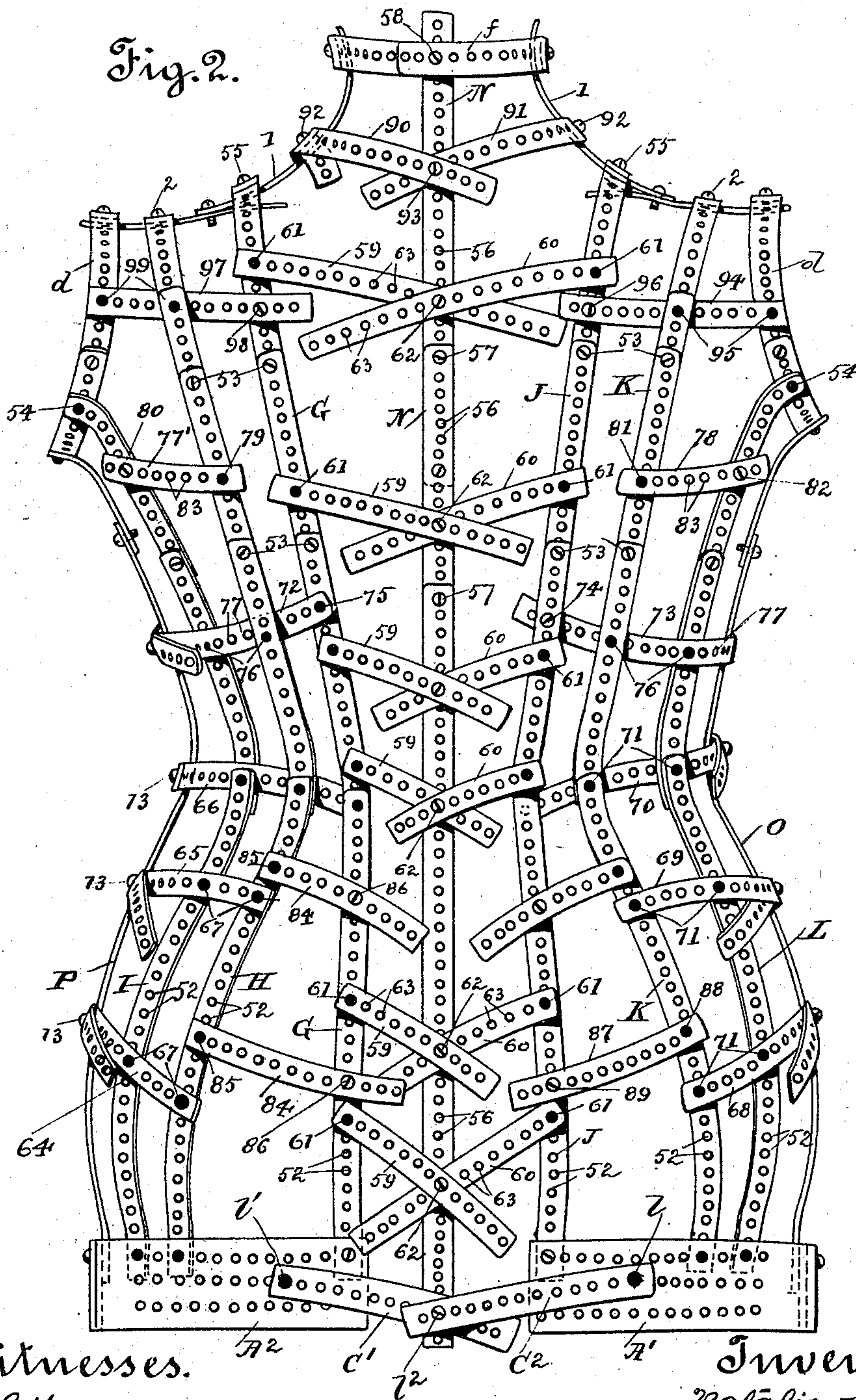
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BUST FORM.

No. 582,101.

Patented May 4, 1897.



Witnesses.

*J. H. Monteverde.*  
W. H. Cobb.

Inventor.

Natalie Schell

by *W. H. Cobb*  
att'y

(No Model.)

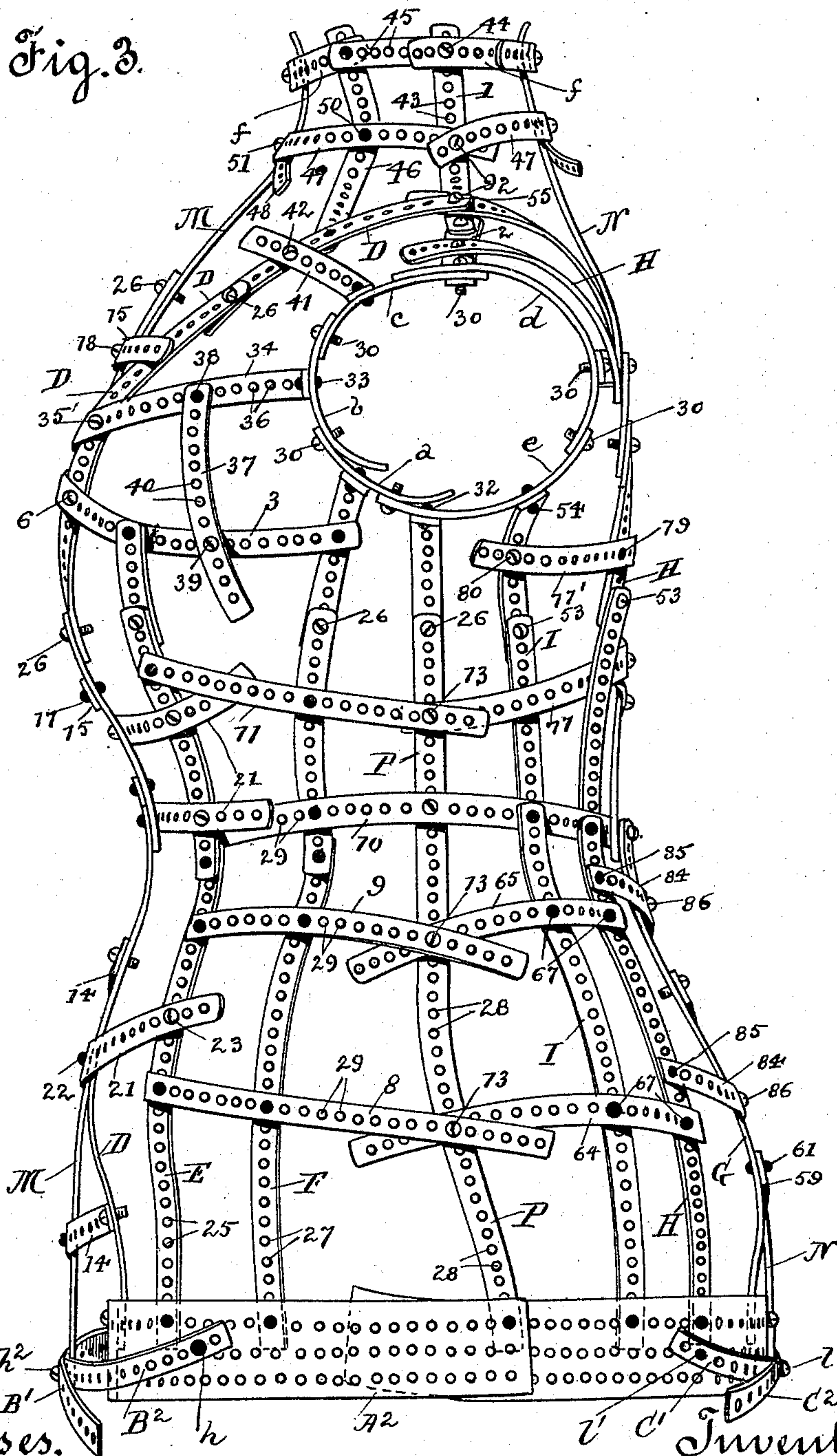
3 Sheets—Sheet 3.

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Fig. 3.



Witnesses.

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W. H. Cobb

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# UNITED STATES PATENT OFFICE.

NATALIE SCHELL, OF SAN FRANCISCO, CALIFORNIA.

## BUST-FORM.

SPECIFICATION forming part of Letters Patent No. 582,101, dated May 4, 1897.

Application filed November 22, 1894. Serial No. 529,577. (No model.)

*To all whom it may concern:*

Be it known that I, NATALIE SCHELL, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Bust-Forms; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The present invention relates to certain new and useful improvements upon the bust-form secured to me on the 19th day of September, 1893, by Letters Patent of the United States No. 505,133; and it consists in the arrangement of parts and details of construction, as will be hereinafter more fully set forth and pointed out in the specification.

In my aforesaid Patent No. 505,133 the bust-form I constructed for individual use or purpose—that is to say, the bust-form therein described was designed for the bust of the person ordering the same—and while the same is made adjustable it is only for the purpose of allowing for slight variation which may take place from time to time in the bust measurement of the owner.

My present invention has for its object the construction of a bust-form which may readily be changed or adjusted to correspond with the bust measurement of a number of persons, thus making it adapted for use in dress-making establishments generally. In fact, the present invention is designed for the use of dressmakers solely and not for individual use, as my aforesaid Letters Patent No. 505,133. Consequently it is necessary that considerable adjustment of the several parts be permitted in order that the bust may be adapted to correspond to various differences which exist between a number of persons. For instance, it is not sufficient that the form be permitted lateral adjustment or vertical adjustment, for such adjustment would only suffice for a number of persons having approximately the same bust measurement; but in order that the form may be of use generally it is necessary that not only vertical and lateral adjustment be provided, but that the several parts or pieces composing the form be allowed or

permitted adjustment independent of each other. By permitting the form to be adjusted at any desired point I can readily adjust the parts so as to reproduce in the form any malformation which may exist in the human form, thus making the fitting-form to be an exact reproduction as to measurement of the form of the person whom the dressmaker may desire to fit.

In order to more fully comprehend my invention, reference must be had to the accompanying sheets of drawings, wherein—

Figure 1 is a front view in elevation of the completed form. Fig. 2 is a back view in elevation, and Fig. 3 is a side view in elevation.

My improved form is composed of a series of metallic stays, bands, and connecting-strips, which stays, bands, and connecting-strips are composed of metal having such ductility as to permit of being bent so as to conform to the contour of the human body, but of sufficient rigidity to maintain in place after the form has been built out or completed. Consequently there is no danger of the form collapsing during the operation of fitting a dress thereon. Consequently after the form is once made up it will maintain its proper shape until the several parts are changed by the operator.

The form is built in four sections, each section being capable of independent adjustment. The two front sections are composed of the vertical stays A B C and D E F, Fig. 1. Stay A and D of each section runs the entire length of the form, and the upper end of each stay is connected to one of the shoulder-braces 1 by means of the screw 2. Vertical stays B E of each section are connected at their upper end to the bust-band 3 by rivets 4, the outer end of which bust-bands is rigidly secured to the vertical stays C F by rivets 5, while the inner end of said bands is movably secured to the vertical stays A D by screws 6. Upper end of vertical stays C F, I rigidly secure to one of the bands, say *a*, which constitute the arm-size, by rivets 7.

The vertical stays B C and E F are rigidly connected by means of the hip-bands 8 9, waistbands 10, and bust-bands 11 3, each band, excepting band 3, being rigidly secured to said stays by means of rivet 12, the band



3 being connected by rivets 4 and 5. The hip-bands 8 9, waistbands 10, and bust-band 11 project at their outer end beyond the vertical stays C F and are movably connected at their  
 5 ends to the side stays O P by screws 13. Vertical stays A D of each front section are connected to the central or middle stay M by means of the connecting-strips 14 and 15, one end of strip 14 being rigidly secured to stay  
 10 A by rivet 16, while strip 15 is connected rigidly to vertical stay D by rivet 17, both strips being movably secured to the central or middle stay by screw 18. These screws pass through one of the perforations 19 of the  
 15 connecting-strip and perforations 20 of the central or middle stay. Consequently by changing the screw 18 from one perforation to another the stay A or D may be moved toward or away from the central stay M. I further  
 20 connect the vertical stays A and D with the vertical stays B and E, respectively, by the strips 21, one end of said strips being rigidly secured to stays A and D by rivets 22, while the free portion of said strips I connect to the  
 25 stays B and E by screws 23, which pass through the perforations 24 of said strips and perforations 25 of the stays. Consequently by changing the position of said strips—that is, swinging the same up or down—the stays  
 30 B and E may be readily moved toward or from the stays A and D.

The vertical stays and side stays and central stays are made of a number of pieces or in sections, each piece or section being movably secured to the next by screws 26, which  
 35 pass through the perforations 20, 25, 27, and 28. Consequently said stay may be readily shortened or lengthened in order to increase or decrease the length of the form.

40 The screws 13, which connect the projecting end of the hip-bands 8 and 9, waistbands 10, and bust-bands 11 with the side stays, pass through perforations 29 of said bands and perforations 28 of the side stays. As the  
 45 screws 13 are changed from one perforation of said bands to another the vertical stays B C and E F are moved toward or from the side stays. It is through the medium of these bands and the connecting-strips 14 and 15  
 50 that the front sections of the bust-form are adjusted laterally.

The arm size or pit of the form is composed of the sections or segments *a b c d e*, each segment being adjustably connected by  
 55 screws 30, which pass through the perforations 31 of said segments.

To the sections or segments *e* I secure the upper end of side stays O P by screws 32. To one of the sections, say *b*, is secured by  
 60 rivets 33 the bust-bands 34, which bands project forward and are connected to vertical stays A and D by screws 35, which screws pass through perforations 36 of said bands and those of the stays. By thus uniting the  
 65 bust-bands 34 to the vertical stays the same may be adjusted vertically and laterally, so

as to increase or decrease the bust measurement at this point. The bands 34 are connected to the central bust-band 3 by means of the curved connecting-straps 37, the upper end of which straps I secure to the bust-bands 34 by rivets 38, and the free end portion to bust-bands 3 by screws 39. These screws pass through perforations 40 of the straps 37 and perforations of the bust-bands  
 75 3. By movably securing the curved straps 37 to the bust-bands 3 they may be moved back and forth as the position of the bands 34 is changed.

From the arm-size sections *c* project the  
 80 straps 41, which straps act as a support for the arm-size. These straps are adjustably connected to the vertical stays A D by screws 42, as shown. The upper end of the vertical stays A and D, I secure to the shoulder straps or  
 85 braces 1 by screws 2, as before stated. The lower end of these shoulder straps or braces I secure to one of the sections, say *d*, composing the arm-size, by means of one of the screws 30, said screw, which secures said ends  
 90 of the straps, passing through one of the perforations 43 of said straps.

The collar of the form is composed of a series of sections *f*, each united together by screws 44, which pass through the perforations 45 of said sections. This collar, when the sections are united, is supported by means of the front stay M, back stay N, shoulder straps or braces 1, and the yoke-straps  
 95 46. The yoke-straps 46 I connect at their upper end to the collar and at their lower end to the vertical stays A and D, Fig. 1, and to the shoulder straps or braces 1 by cross-straps 47, said yoke-straps being also secured to the central stay M by the straps 48 and 49,  
 100 one end of each strap being fastened to the yoke-straps by rivets 50, the opposite end portion of the straps 48 and 49 being connected to the central stay M by screw 51, which screw passes through one of the perforations of the said straps and central stay  
 105 M. Consequently said straps by releasing the screw may be swung up and down, as required.

The back sections of the form are composed of the vertical stays G H I and J K L. These stays are provided with a series of perforations 52, and each stay is composed of a series of sections, Fig. 2, adjustably secured together by screws 53, same as the stays composing the front sections. Vertical stays I and L are secured at their upper end by rivets 54 to sections *e* of the arm-size, while stays G H and J K have their upper end fastened to shoulder-straps 1 by screws 2 and 55,  
 120 the upper end of the back central stay N, which is also provided with a series of perforations 56 and composed of a series of sections united by screws 57, is connected to one of the collar-plates *f* by screw 58. The vertical stays G and J are adjustably connected to the back and central stay N by screws 62.  
 125



These connecting-straps are provided with perforations 63, through one of which the screw 62 passes. By adjusting the position of the connecting-straps 59 and 60 the stays 5 G and J may be moved toward or from the central back stay.

The straps H I are connected together by the bands 64, 65, and 66, which bands are secured to the stays by rivets 67, the free or projecting end of said bands being secured to the side stay P by the screws 13, while the stays K and L are connected by the bands 68, 69, and 70, said bands being fastened thereto by rivets 71, the free or projecting end of the bands being connected to side stay O by the screws 13. Connection is further made between the side stay O, vertical stays I, H, and G, and side stay P, and vertical stays L, K, and J by means of the bands 72 and 73, which bands are secured at one end to the stays G and J, respectively, by screws 74 and 75, and the opposite end to the side stays O and P by screws 13, said bands being united to the stays H I and K L by rivets 76. Each of the bands described has the perforations 77 cut therein. Consequently wherever a union is made by a screw passing through one of the perforations the same may be readily adjusted at such point by changing the connecting-screw from one perforation to another. The stays H I and K L are also connected by the straps 77' and 78, one end of strap 77' being secured to stay H by rivet 79 and the opposite end to stay I by screw 80, while one end of strap 78 is secured to stay K by rivet 81 and the opposite end to stay L by screw 82. These straps being provided with perforations 83, it is obvious that by changing the screws the straps may be given adjustment.

The stay H is connected to stay G by the perforated straps 84, one end of the straps being connected to the stay H by rivets 85 and the opposite end to the stay G by screw 86, while the stay K is connected to stay J by perforated straps 87, one end of the straps being secured to the stay K by rivet 88 and the opposite end to stay J by screw 89, Fig. 2.

Connection is made between the shoulder-straps 1 and the central back stay N by the perforated straps 90 and 91, said strap being secured to the shoulder-straps by screws 92 and to said central stay by screw 93.

Connection is made between the arm-size and stays K J by perforated cross-strap 94, which strap is fastened to one of the plates composing the arm-size and to stay K by rivets 95, and secured to stay J by screw 96, while connection is made between stays G H and the opposite arm-size by cross-strap 97, said strap being secured to stay G by screw 98 and to stay H and one of the plates composing the arm-size by rivets 99.

Each of the vertical stays I secure at its lower end by rivets to the base-plates A' A<sup>2</sup>, which plates are adjustably connected in the

front and back by the perforated straps B' B<sup>2</sup> and C' C<sup>2</sup>, the straps B' B<sup>2</sup> being secured to the base-plates by rivets *h h'* and to the front central stay M by screw *h<sup>2</sup>*, while the straps C' C<sup>2</sup> are connected to the base-plate by rivets *l l'* and to back central stay N by screw *l<sup>2</sup>*.

The present bust-form may be readily adjusted to correspond to the actual bust measurement of the human figure, and inasmuch as all the parts are composed of metal there is no likelihood of the form collapsing after having been once adjusted.

Inasmuch as the bust-form is composed of a number of adjustable vertical stays and adjustable bands and straps made of metal of such ductility as will readily permit of bending so as to correspond to the natural curves of the human form it is obvious that the several parts may be so adjusted as to reproduce the bust measurement exactly of the person for whom the dressmaker desires to make a dress, and, each part being adjustable independent of the others, defect or malformation of the human figure or bust will be produced in the bust-form. Hence a deformed person may be as easily and accurately fitted as one having a perfect form. Each portion of the bust-form is adjusted in accordance with the actual measurement of the person whose form is to be reproduced.

In large dressmaking establishments my form will be found of the utmost importance not only in saving repeated calls by customers in order to have the dress tried on, (which is not only exceedingly tiresome and trying to the customer, but to the fitter as well,) but it enables the dressmaker, after having once secured the measurement of a customer, to make future dresses without the necessity of the customer visiting the establishment of the dressmaker.

The use of the device not only enables the dressmaker to obtain a perfect fit without having frequent calls from the customer, but its non-collapsible nature permits it to be used as a model upon which to drape goods, and thereby obtain the exact effect which will be produced by any contemplated pattern or style of dress.

My device is not a pattern which is laid upon the goods as a guide to cutting the same, but is a facsimile of the body of the customer made by adjusting the different sections to the measurements of the customer. A pattern may be cut out on the bust-form and then laid flat upon the goods to guide the cutting of the same.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture a rigid, non-collapsible bust-form upon which to trim, drape or design for dressmaking purposes said form being composed of a series of independent sections, each section comprising a series of vertical adjustable stays connected by a



series of adjustable cross bands or straps and  
each section being adjustably connected to its  
opposing section, whereby the entire form  
may have lateral and vertical adjustment and  
5 each section adjustment independent of all  
the other sections, the vertical stays and con-  
necting straps or bands being of pliable but  
non-collapsible metal having sufficient duc-  
tility to permit of being readily bent so as to

conform to the measurement of the human  
figure and of such rigidity as to resist collaps-  
ing after the form has been completed.

In testimony whereof I affix my signature  
in presence of two witnesses.

NATALIE SCHELL.

Witnesses:

N. A. ACKER,  
LEE D. CRAIG.