

F. B. GRANGER.  
DRESS FORM.  
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1,271,889.

Patented July 9, 1918.  
2 SHEETS—SHEET 1.

Fig. 2.

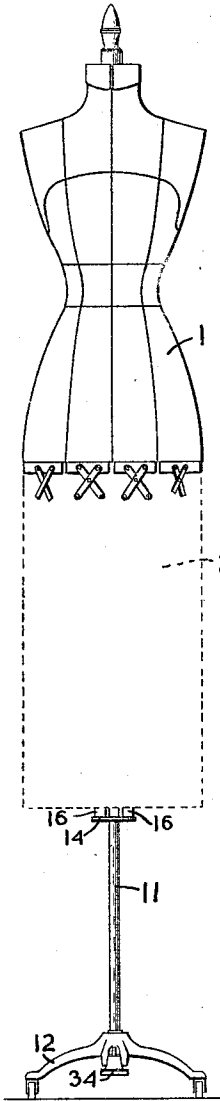


Fig. 1.

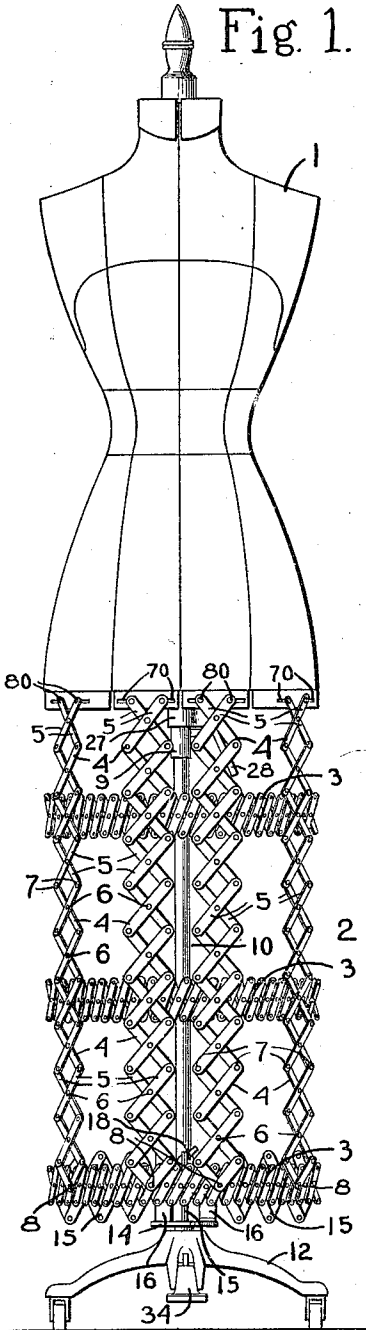


Fig. 3.

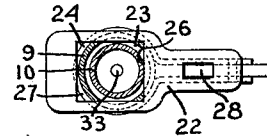
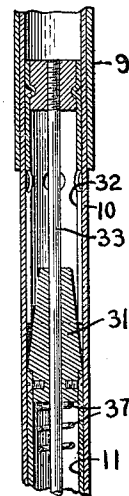


Fig. 4.

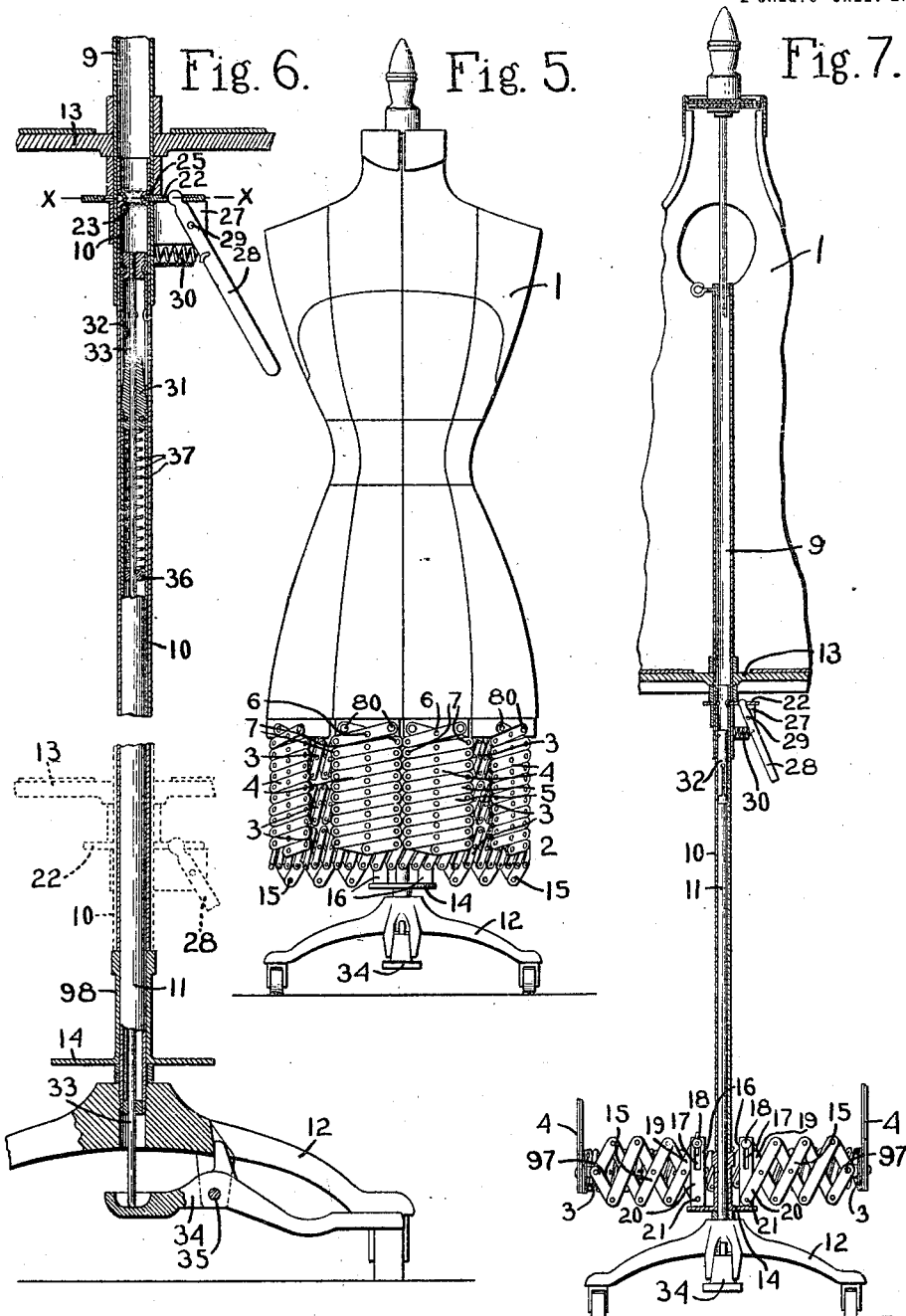


Witnesses.  
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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

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## DRESS-FORM.

1,271,889.

Specification of Letters Patent.

Patented July 9, 1918.

Application filed February 13, 1915. Serial No. 8,082.

### *To all whom it may concern:*

Be it known that I, FRANK B. GRANGER, a citizen of the United States, residing at New York, county of New York, State of New York, have invented an Improvement in Dress-Forms, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to dress forms of that type having a folding or collapsible skirt portion, and one of the objects of the invention is to provide a novel dress form in which the skirt portion is so constructed that it will automatically fold up or collapse as the dress form is lowered on its supporting standard and will be automatically extended as the dress form is raised. Other objects of the invention are to provide a dress form having an improved skirt portion which can be readily adjusted to different sizes, lengths and contours, and to provide a dress form with improved means for holding the form at any desired elevation from the floor, and otherwise to improve dress forms, all as will be more fully hereinafter described and then pointed out in the appended claims.

In order to give an understanding of my invention I have illustrated in the drawings a selected embodiment thereof which will now be described.

Figure 1 is a front view of a dress form embodying my invention;

Fig. 2 is a similar view showing the dress form sustained in an elevated position on the supporting standard;

Fig. 3 is an enlarged sectional view on substantially the line  $x-x$ , Fig. 6;

Fig. 4 is an enlarged vertical sectional view through the clutch which holds the dress form in its elevated position;

Fig. 5 is a front view of the dress form in lowered position on the pedestal and with the skirt portion folded or collapsed;

Fig. 6 is a vertical section through the lower portion of the pedestal;

Fig. 7 is a vertical central sectional frag-

mentary view showing the form in intermediate position with the skirt extended.

My improved dress form comprises a body portion, a folding skirt portion connected thereto and a sectional supporting standard comprising a plurality of telescoping or nesting sections, the body and skirt being connected to the sections of the standard in such a way that when certain sections of the standard are extended the form will be raised and the skirt portion will be automatically extended or unfolded, while when the sections of the standard are telescoped together the skirt will be automatically folded. The body portion of the dress form is designated generally by 1 and the skirt portion by 2. The body portion may be made of any suitable material and have any suitable construction. That herein shown is of the familiar type that presents a shell-like formation divided both vertically and horizontally into a plurality of sections that are adjustable relative to each other. The skirt portion 2 is constructed to present a plurality of expansible and contractible hoop-like members 3 which are connected by expansible and contractible vertically-extending connecting members 4, said members being connected at their upper ends to the body portion 1 of the form and at their lower ends to the lower hoop-like member 3. The extensible and contractible nature of these members 4 permits the skirt portion to be folded or collapsed by bringing the hoop-like members 3 together against the lower end of the body portion 1. The hoop-like members 3 may have any suitable construction, but will preferably be so constructed that they can be expanded or contracted or changed in contour so as to allow the size and cross-sectional shape of the skirt to be varied as desired. Similarly the vertically-extending members 4 may have any suitable construction which will permit them to be extended or contracted. In the illustrated embodiment of my invention both the hoop-like members 3 and the vertically-extending members 4 are made from pivotally-connected links which are arranged in pairs to

present a lazy-tongs structure which can be extended or contracted by a swinging movement of the links of each pair. For instance, in the construction of the vertical suspending members 4 the links of each pair are indicated by 5 each pair being pivotally connected together at 6 and being pivotally connected at 7 to the links of the next adjacent pair. The hoop-like members 3 are similarly constructed of pairs of links pivotally connected together. The lower end of each suspending member 4 is connected at 8 to the lower hoop-like member 3. The upper links 5 of each member 4 are connected to the form body 1 in a manner to permit the links of the pair to open and close as the members 4 are extended or collapsed. One convenient way of accomplishing this is to provide the form 1 with pairs of slots 70 in which operate pins 80 secured to the upper ends of the links 5. This allows the necessary opening and closing movement of the links 5 while at the same time holding each lazy-tongs structure in proper vertical position. This particular manner of connecting the lazy-tongs suspenders to the body 1 is not essential however as any suitable construction permitting the suspenders to expand or contract may be employed.

The dress form is supported on a suitable supporting standard which is made in a plurality of sections that can telescope or nest within each other. The body 1 is secured to one section while the skirt 2 has such a connection with and relative to another section that the act of extending or collapsing the sections of the standard will result in automatically extending or collapsing the skirt portion.

In the illustrated embodiment of my invention the supporting stand comprises three sections which not only provides for the automatic folding or extending of the skirt portion, but also provides for supporting the entire dress form at different elevations from the floor, but the number of sections may be varied without departing from the invention. The supporting standard herein illustrated comprises the upper section 9 to which the body 1 of the form is secured, the intermediate section 10 which telescopes within the section 9 and which has a connection with the skirt portion 2 of the form, and the lower section 11 which is shown as telescoping within the intermediate section 10 and which is secured to and rises from the base or pedestral 12. All the sections are herein shown as tubular in shape. The upper section 9 is secured to the body 1 of the form in any suitable way, and as herein shown, said section 9 has secured thereto a member 13 to which the various sections of the body portion are adjustably secured, all as is usually found in dress forms of

this nature. The connection between the skirt portion 2 of the form and the intermediate section 10 is herein provided for by a collar 98 which is loosely mounted on the lower section 11 between the lower end of the intermediate section 10 and the pedestral 12, and to which the lower end of the skirt portion is connected. While any suitable construction may be provided for this connection, I have herein shown the collar 98 as provided with a laterally-extending flange 14 to which are connected a plurality of radially-arranged lazy-tongs members 15 that are connected at their outer ends to the lower hoop member 3. These lazy-tongs members 15 constitute connections which are readily adjustable as to their length, thus providing an elastic construction which permits the lower hoop member 3 to be adjusted to any desired size. As shown in Fig. 7, the flange 14 has arms 16 rising therefrom, the upper ends of which are slotted, as shown at 17, and the upper ends of the end links 19 of each lazy-tongs structure 15 are provided with clamping bolts 18 which operate in said slots, the lower ends of the end links 20 being pivoted at 21 to the vertical arms 16. This provides a connection between each lazy-tongs member 15 and the section 10 that permits each member 15 to be extended or contracted, and the clamping bolts 18 provide means for positively locking each member 15 in its adjusted position. The outer ends of the lazy-tongs members are connected to the lower hoop-like members 3, as shown as 97. Any desired number of these members 15 may be used, but for ordinary purposes four are sufficient to hold the skirt in its adjusted shape.

Since the body 1 is secured to the upper section 9 while, the lower end of the skirt is secured to the collar 98 which is confined between the lower end of the intermediate section 10 and the pedestal 12, it will be obvious that when the two sections are telescoped together, the skirt will be automatically folded, as shown in Fig. 5, while when the sections are extended the skirt will be automatically extended or unfolded, as shown in Fig. 1.

The telescoping feature of the sections 9 and 10 of the supporting standard permits the form to be readily raised from the position shown in Fig. 5 to that shown in Fig. 1 by merely lifting on the body portion 1 of the form, and during this operation the skirt will be automatically extended, as above described. By simply applying downward pressure to the body portion 1 of the form the two sections 9 and 10 can be nested, during which operation the skirt will be automatically folded into the position shown in Fig. 5. When the form is in this condition the member 13 at the lower

end of the form body will assume the position shown in dotted lines Fig. 6.

I have herein provided means for locking the section 9 extended or in the position shown in Figs. 1 and 7, and I will preferably employ for this purpose an automatically-operative lock so that when the operator raises the body of the form, the section 9 will become automatically locked in its raised position. The lock herein shown comprises a locking member 22 carried by the upper section 9 and adapted to engage in a groove 23 formed in the intermediate section 10. This locking member 22 is shown as a locking plate provided with an aperture 24 through which the sections of the standard extend, and the section 9 is provided with a slot 25 in one side thereof through which the locking edge 26 of the locking member enters to engage in the groove 23. The member 22 thus encircles the section 9 and operates through a slot therein to engage the groove of the intermediate section. This locking member 22 is sustained by a bracket 27 secured to the lower end of the upper section 9. Said locking member is disengaged from the groove by means of a lever 28 pivoted at 29 to the bracket 27 and at its upper end engaging said locking member 22. The lever is acted upon by a spring 30 herein shown as a push-spring which normally tends to move the locking member into its operative position. When the form body is raised from the position shown in Fig. 5 to that shown in Fig. 1, the locking member 22 will slide upwardly on the intermediate section 2 until the groove 23 comes into alignment with the slot 25, at which time the spring 30 will throw the locking member into its locking position and thus lock the two sections 9 and 10 together. If the form body is to be lowered the lever 28 will be manipulated to withdraw the locking member, after which the two sections 9 and 10 can be telescoped together.

The groove 23 extends entirely about the member 10 and this construction, together with the swivel collar 98, makes it possible to turn the form around without disconnecting the lock, for when the form is turned the upper section 9 of the supporting standard and the collar 98 will merely turn about the sections 10 and 11.

In addition to the above-described features, my improved supporting standard is so constructed as to permit the dress form as an entirety to be elevated different distances above the pedestal 12. This action is permitted by the telescopic connection between the intermediate section 10 and the lower section 11 which is secured to the pedestal 12. Since these two sections 10 and 11 are telescopic, it will be obvious that when the

form has been raised into the position shown in Fig. 1, it may be still further elevated with the skirt extended by lifting up the dress form and the sections 9 and 10, of the supporting standard relative to the section 11, as shown in Fig. 2. I have provided herein a lock or clutch device for locking the sections 10 and 11 together in any adjusted position of the section 10 thereby holding the dress form at the desired elevation. While any suitable lock for this purpose may be employed, I prefer to use one which can be released from a treadle secured to the pedestal 12, as this makes a more convenient device to operate.

In the illustrated construction, the lower section 11 is provided at its upper end with a cone-shaped head 31 which coöperates with an expansible clutch member 32 that is situated within the section 10 and is connected to a rod 33 that extends down through the head 31 and the lower section to a point below the pedestal 12, at which point it engages with a treadle 34 pivoted at 35 to the pedestal. The rod 33 has a collar 36 secured thereto and situated between the collar and the head 31 is a clutch-actuating spring 37 that tends normally to move the clutch member 32 toward the head 31. When the spring 37 is allowed to act it forces the lower open end of the expansible sleeve 32 onto the conical head 31, thus expanding the sleeve into frictional engagement with the interior of the tubular member 10. By this means the members 10 and 11 are securely clutched together and may be held in any desired position. To release the clutch it is simply necessary to depress the outer end of the treadle 34 with the foot thereby raising the inner end and lifting the rod 33 and clutch member 32. When the clutch member 32 is raised from the cone 31, the resiliency of said clutch member will cause it to contract sufficiently so that its frictional engagement with the inner wall of the intermediate section 10 will be relieved, thus permitting the intermediate section 10 to be readily raised or lowered. As soon as the pressure is removed from the treadle, the spring 37 will automatically draw the clutch member 32 down onto the cone 31, thus expanding it into frictional engagement with the inner wall of the section 10.

The advantage of the above construction which permits the dress form as an entirety to be raised up on the lower section 11 of the standard is that it provides for bringing the bottom of the skirt at a level sufficiently above the floor to permit of the seamstress working thereon easily.

When the dress form is thus raised more or less on the lower section 11 it is possible to lengthen the skirt portion 2 by merely drawing downwardly on the collar 98, and

by this means the skirt portion of the form can be given any desired length within the limits of expansion of the suspenders 4.

In dress forms as now manufactured it is the common practice to have the skirt portion of fixed length. My invention, however, provides a construction by which the skirt can be lengthened beyond the position shown in Fig. 1 by simply raising the intermediate section 10 on the lower section 11 to an extent equal to that to which the skirt is to be lengthened and then moving the collar 98 downwardly against the pedestal 12. The device, therefore, is one in which the skirt can easily be lengthened or shortened from its normal or average length.

Another advantage of the construction herein shown is that the skirt portion can be given different sizes at different parts thereof. The various hoop-like members 3 are independent from each other and can each be independently expanded or contracted. The suspenders 4 are also more or less flexible which permits any one of the the hoop-like members 3 being expanded or contracted more than the others. This provides a construction by which the bottom of the skirt portion can be made larger or smaller than the top, and it is thus possible to adapt the skirt portion to any style or size of skirt.

While I have illustrated herein a selected embodiment of my invention I do not wish to be limited to the constructional details shown.

I claim:

1. In a device of the class described, the combination of two telescoping members, a dress form body comprising a body portion and a skirt portion including hoop members and lengthwise extensible and contractible suspender members connected thereto and having their upper ends secured to said body portion, means for supporting the body portion by the upper of said two telescoping members at elevated or lowered positions, a connection between the lower ends of said suspender members and the lower of said two telescoping members, whereby the skirt portion of the form will be automatically elongated or shortened as said body portion is raised or lowered.

2. In a device of the class described, the combination with a supporting standard comprising two telescopic sections, the lower one of which is provided with an annular groove, of a dress form body comprising a body portion and a folding nontelescopic skirt portion connected thereto, means for securing the body portion to the upper section of said standard, a connection between the skirt portion and the other section of said standard whereby the skirt portion of the form will be automatically extended or folded when the sections are extended or

telescoped together, and a spring-actuated locking member carried by the upper section and adapted to engage said groove in the lower section for holding the sections extended.

3. In a device of the class described, the combination with a supporting standard comprising three telescoping sections adapted to nest together, of a dress form comprising a body portion and a folding skirt portion connected thereto, means for securing the body portion to the upper section of the standard, and a connection between the skirt portion and the intermediate section of the standard whereby the skirt will be folded or extended as the upper and intermediate sections are telescoped together or extended and the entire dress form raised or lowered as the intermediate and lower sections are extended or telescoped together.

4. In a device of the class described, the combination with a supporting standard comprising three telescoping sections adapted to nest together, of a dress form comprising a body portion and a folding skirt portion connected thereto, means for securing the body portion to the upper section of the standard, a connection between the skirt portion and the intermediate section of the standard whereby the skirt will be folded or extended as the upper and intermediate sections are telescoped together or extended, and means to sustain the intermediate section at different elevations relative to the lower section to vary the elevation of the bottom of the skirt portion.

5. In a device of the class described, the combination with a dress form, of a supporting standard therefor comprising two telescoping sections, the outer one of which has a slot and the inner one of which has a groove therein, a laterally-moving locking member carried by the outer telescoping section and adapted to engage the groove of the inner section through said slot and positively prevent telescopic action.

6. In a device of the class described, the combination with a dress form, of a supporting standard therefor comprising two telescoping sections, the outer one of which has a slot and the inner one of which has a groove therein, a laterally-moving locking member carried by the outer telescoping section and adapted to engage the groove of the inner section through said slot and constitute the sole support for the upper section, and a spring acting on the locking member and urging it into locking position.

7. In a device of the class described, the combination with a supporting standard comprising three telescoping sections adapted to nest together, of a dress form comprising a body portion and a lengthwise extensible and contractible skirt portion con-

nected thereto, means for securing the body  
portion to the upper section of the standard,  
means for automatically extending the skirt  
portion when the two upper sections of the  
5 standard are extended, the extended length  
of said two upper sections being substan-  
tially equal to the normal length of the skirt  
portion when extended, and means to sustain  
the central portion of the standard at differ-  
10 ent elevations relative to the lower portion,

said skirt being extensible when the central  
section is thus elevated.

In testimony whereof, I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

FRANK B. GRANGER.

Witnesses:

FRANK GARCIA,  
J. F. DUNN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."