C. A. UFFORD.

DRESS FORM.

APPLICATION FILED JUNE 28, 1912. RENEWED OCT. 26, 1917.

1,267,937.

Patented May 28, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

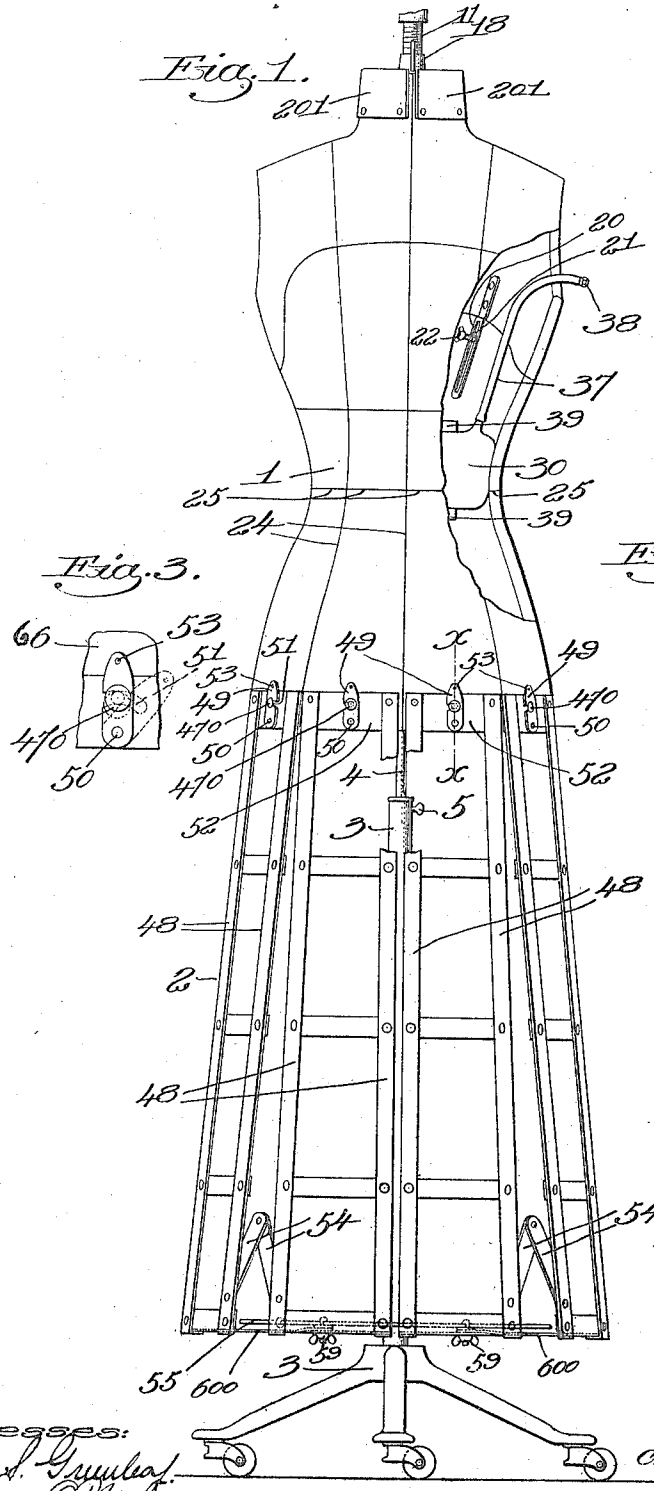
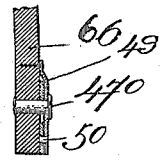


Fig. 3.

Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 4.

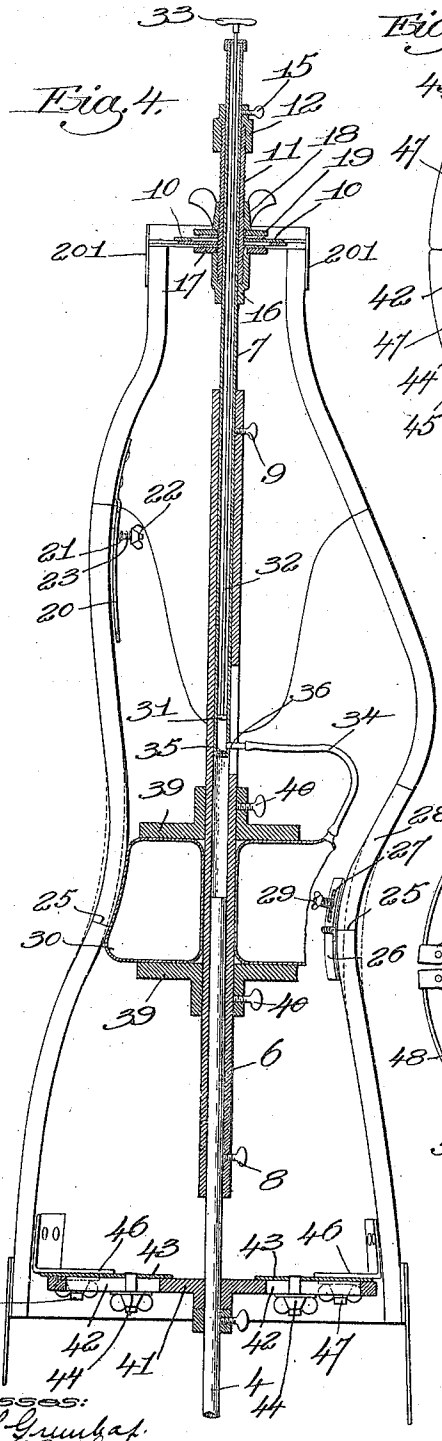


Fig. 5.

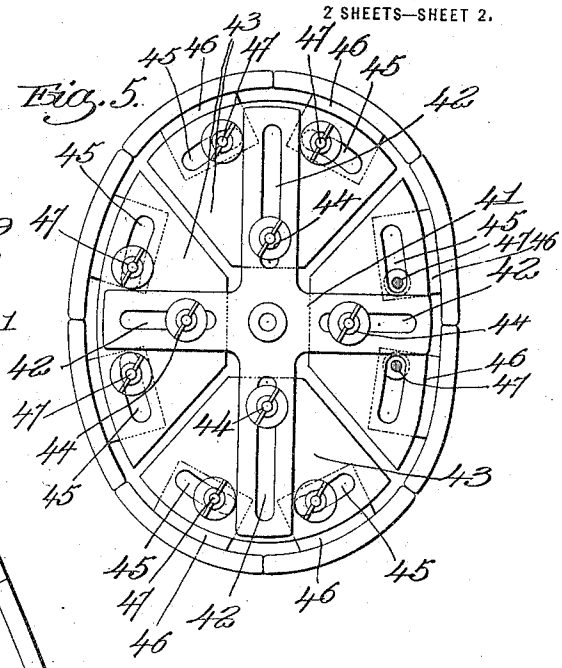


Fig. 6.

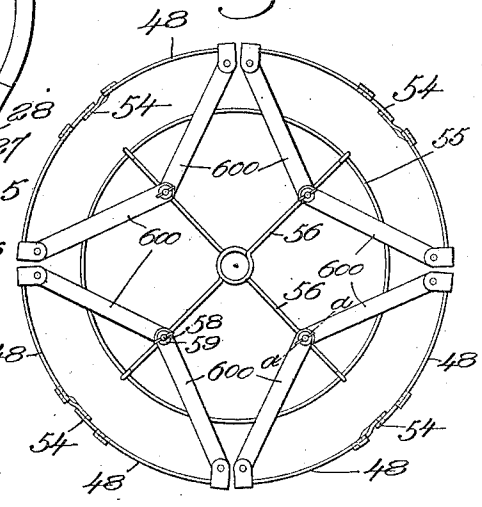
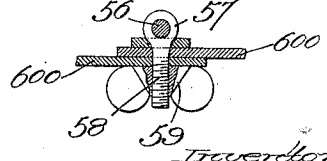


Fig. 7.



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UNITED STATES PATENT OFFICE.

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DRESS-FORM.

1,267,937. Specification of Letters Patent. Patented May 28, 1918.

Application filed June 28, 1912, Serial No. 706,344. Renewed October 26, 1917. Serial No. 198,737.

To all whom it may concern:

Be it known that I, CHARLES A. UFFORD, a citizen of the United States, residing at Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Dress-Forms, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings representing like parts.

This invention relates to adjustable dress forms and has for one of its objects to provide a dress form with novel means for expanding and contracting the waist line without changing the contour of the form at other portions and also to provide a novel means for adjusting the size of the form at the hips and for connecting the skirt section of the form to the bust portion thereof, all as will be more fully hereinafter described and then pointed out in the appended claims.

Referring to the drawings wherein I have shown a selected embodiment of my invention which is sufficient to show the principle thereof, Figure 1 is a front elevation of a dress form embodying the invention;

Fig. 2 is an enlarged section on the line *x*—*x*, Fig. 1;

Fig. 3 is a detail view of the means for fastening the skirt to the body portion of the form;

Fig. 4 is an enlarged vertical central section through the body portion of the form;

Fig. 5 is a bottom plan view of the body portion of the form;

Fig. 6 is a bottom plan view of the skirt portion of the form;

Fig. 7 is an enlarged section on the line *a*—*a*, Fig. 6.

The form herein shown comprises a body section designated generally by 1 and a skirt section designated generally by 2. The body section is divided into separate sections, as usual in dress forms of this character, and these sections can be adjusted relative to each other to give the form the required size, shape or contour. The form is supported by a stand 3 of usual construction which is provided with a central supporting member extending up through the form. In the present embodiment of my invention this central supporting member comprises a rod 4 which sets at its lower end into the upper end of the stand 3, as shown in Fig. 1, and is clamped therein by a clamping screw 5, a central tubular member 6 which telescopes over the upper end of the rod 4, and an upper member 7, the lower end of which is inserted into the tubular member 6 and which extends up through the end of the form, the members 4 and 7 being adjustably secured to the central tubular member 6 by the set-screws 8 and 9, respectively.

The body of the form is divided vertically in a plurality of places as shown by the division lines 24, and the various sections of the form are adjustably secured together by means of slotted members 20 that are secured to certain sections and clamping screws 21 that are secured to other sections and which pass through the slots of the members 20, each clamping screw having a clamping nut 22 thereon. This method of holding dress form sections in adjustable position relative to each other is well known and forms no part of the present invention.

In my present invention I propose to interpose springs 23 between the clamping nuts 22 and the slotted members 20, which springs make a yielding frictional connection which develops sufficient friction for holding the parts in adjusted position under ordinary circumstances, but which will give when sufficient pressure is applied so that the sections may be adjusted without the necessity of loosening the nuts 22.

The manner of adjusting the neck sections 201 herein shown is similar to that described and claimed in my co-pending application, Se. No. 641,737, filed August 1, 1911, and hence no further description thereof is necessary herein.

As stated above the form is divided vertically at several places, as shown at 24 in Fig. 1, and each of the divisions thus formed is jointed at the waist section so that the form can be expanded or contracted at the waist by bending the joints without the necessity of adjusting the form in any other part. I secure this jointed effect herein by dividing each section at the waist line, as shown at 25, and then by connecting the portions above and below the division line 25 by a hinge member 26. I will preferably use a hinge member such as shown in Fig. 4 which is rigidly secured to one portion of a section and is adjustably secured to the other portion thereof. As herein shown the upper end of the hinge member 26 is slotted

as at 27, and this upper end is adjustably secured to the dress form section 28 above the division line 25 by a clamping screw 29. A similar construction is provided for each of the sections of the form formed by the vertical division lines 24, and with this device it is, therefore, possible to lengthen or shorten the waist by separating the sections at the line 25. This hinge connection 26 also provides for expanding or contracting the size of the form at the waist line, and one feature of my invention relates to a novel pneumatic means for securing this end. As herein shown I employ an inflatable chamber 30 which surrounds the central supporting member at the waist line and is capable of being inflated, and I also employ means for preventing expansion of said inflatable chamber in a vertical direction whereby when it is inflated expansion must take place laterally. For inflating the chamber 30, I have provided means operable from the exterior of the form, and in the present embodiment this means is in the nature of a pump which is confined within the central supporting member. It will be noted that the member 7 is hollow and the interior thereof constitutes a pump cylinder in which operates a pump piston 31 connected to a stem 32 that extends up through the upper end of the member 7 and is provided with a handle 33 at its upper end. The interior of the member 7 below the piston 31 is connected to the inflatable chamber 30 by a pipe 34. 35 designates a check valve controlling an inlet to the chamber and another check valve (not shown) will be employed in the connection 36. With this construction the operating of the pump piston 31 will inflate the chamber 30, as will be evident. This inflatable chamber 31 also has connected thereto another discharge pipe 37 which is shown as leading out through the arm scye and is provided with a cap 38 by which it may be closed.

The tubular member 6 is shown as having two flanges 39 sustained thereby, one on each side of the inflatable chamber 30, said flanges operating to prevent the expansion of said chamber vertically when it is inflated. These collars are adjustable on the member 6 and may be held in adjusted position by set-screws 40.

If it is desired to expand the waist line into the dotted line position, Fig. 4, it is simply necessary to operate the pump and thus inflate the chamber 30. If, on the other hand, it is desired to reduce the waist line measurement, the cap 38 can be removed to allow the chamber 30 to become more or less deflated.

For adjusting the sections at the hip I have provided the following mechanism:

The rod 4 carries a four-armed member 41, the arms of which are slotted, as at 42. Each of the slotted arms carries a plate 43 preferably of sheet metal, said plate being adjustable longitudinally of the slot 42 and held in adjusted position by the clamping screws 44. Each plate 43 is provided with the two slots 45 which extend substantially parallel to the outer edge of the plate, or substantially parallel to the sides of the form. Each of the form sections has a projection 46 extending inwardly therefrom and carrying an adjusting screw 47 which plays in one of the slots 45. The form herein shown is divided vertically in eight places to constitute eight sections at the hip, and two hip sections are adjustably secured to each of the plates 43. The slots 45 are somewhat wider than the diameter of the clamping screws 47, and these slots therefore allow of a slight radial adjustment of each hip section as well as an adjustment of the hip sections toward and from each other. The adjustment toward and from each other is necessary for expanding the size of the form at the hips and the radial adjustment due to the difference between the width of the slot 5 and the diameter of the clamping bolt 47 permits sufficient movement to allow the hip sections to be brought into line with each other. The slots 42 are also necessary for providing for an expanding or contracting movement of the hip.

The skirt portion 2 is also divided into sections corresponding in number to the hip sections, and these several sections are detachably secured to the hip sections. As herein shown each hip section 66 is provided with a headed stud 470 and each skirt section 48 is provided in its upper end with an opening to receive the head of the stud 470 and is also provided with a swinging keeper 49 pivoted at 50 and having a notch 51 that is adapted to pass over the shank of the stud 470 behind the head thereof thereby to lock the skirt section to the form. Each keeper 49 extends above the top bar 52 of the skirt section so as to overlap the hip section 66, and this extending part is provided with an aperture 53 into which a nail or pin may be driven, said pin entering the hip sections 42 and locking the keeper in place, as shown in Fig. 2. It will be understood, of course, that the hip section 66 is made of papier mâché or some other easily-penetrable material. The means provided for holding the lower ends of the skirt sections in their adjusted position relative to each other is shown best in Fig. 6. The central standard 3 sustains a frame 55 provided with a plurality of radially-extending members 56. On each member 56 is slidably mounted a runner 57 having a screw-threaded shank 58 which carries a clamping nut 59. Each of the skirt sections 48 has pivotally connected thereto one end of a link 600, said links being arranged in pairs, and

the other ends of the links of each pair having an aperture through which the shank 58 passes. These pairs of links 600 are arranged as shown in Fig. 6, and by sliding the runners 57 radially on the bars 56, the dress form can be expanded or contracted. When the desired size is secured, this may be maintained by tightening up the clamping nuts 59. It will be noted that each pair of links 600 is connected to the corresponding skirt sections adjacent the opposite edges thereof and the adjacent edges of each pair of skirt sections are connected by the hinge links 54.

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

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

1. In a dress form, the combination with a body portion divided horizontally across the waist and divided vertically in a plurality of places, of hinge members connecting the sections above and below the waist line division, a central supporting member extending up through the body portion, and pneumatic means sustained on said supporting member within the form at the waist line for expanding the latter.

2. In a dress form, the combination with a body portion divided vertically in a plurality of places, the separate sections being jointed at the waist line of a central supporting member extending up through the body portion, and an inflatable chamber sustained by said supporting member on the interior of the form at the waist line whereby the waist of the form may be expanded or contracted independently of other portions of the form.

3. In a dress form, the combination with a body portion divided vertically in a plurality of places, the separate sections being jointed, of a central supporting member extending up through the body portion, an inflatable chamber sustained by said supporting member within the form opposite the joints of the sections, and means to inflate said chamber thereby to expand said form.

4. In a dress form, the combination with a body portion divided into sections and expansible at the waist line, of a central supporting member, an inflatable chamber situated on the interior of the form at the waist line, and means for inflating said chamber sustained by said supporting member.

5. In a dress form, the combination with a body portion divided into sections and expansible at the waist line, of a hollow central supporting member, an inflatable chamber situated on the interior of the form at the waist line, and means within the supporting member for inflating said chamber.

6. In a dress form, the combination with a body portion divided into sections and expansible at the waist line, of a central supporting member, an inflatable chamber situated on the interior of the form at the waist line, said supporting member having a chamber constituting a pump cylinder connected to the inflatable chamber, and a pump piston in said piston chamber operable from the exterior of the form and by which the inflatable chamber may be inflated.

7. In a dress form, the combination with a body portion made in separable sections adjustable relative to each other to vary the waist line measure, of an inflatable chamber situated within said form at the waist line, means to inflate said chamber, and means separate from the sections to prevent the chamber from expanding vertically when it is inflated.

8. In a dress form, the combination with a body portion divided into sections and expansible at the waist line, of a central supporting member provided with two separated flanges situated within the body portion at the waist thereof, an inflatable chamber situated between said flanges, and means to inflate said chamber.

9. In a dress form, the combination with a body portion divided vertically at the hip in a plurality of places, of a central supporting member, a plurality of plates sustained thereby and adjustable in radial directions, each plate having slots extending substantially parallel to the sides of the form, projections extending laterally of the dress form sections and having clamping screws which enter said slots and are adjustable both longitudinally and laterally therein.

10. In a dress form, the combination with a body portion divided vertically at the hips in a plurality of places, of a central supporting member, a plurality of plates sustained thereby and adjustable in radial directions, and means for adjustably connecting the form sections to the plates to permit of an independent radial and lateral adjustment of each form section relative to the plate to which it is secured.

11. In a dress form, the combination with a skirt portion, made in separable sections arranged in pairs, of adjustable means connecting the sections of each pair, a link hinged to each section, the links of each pair of sections being pivotally connected together, a frame having radial arms, one for each pair of links, and means to adjustably connect each pair of links to an arm.

12. In a dress form, the combination with a skirt portion, made in separable sections arranged in pairs, of means adjustably connecting the adjacent edges of the sections of each pair, links hinged to said sections, the

links of each pair of sections being pivotally connected together, and a frame to which the pairs of links are adjustably secured.

13. In a dress form, the combination with a sectional skirt portion, of a link pivotally connected to each skirt section, a frame having radial arms, runners slidably mounted on said arms, and means for pivotally connecting the links to the runners and for clamping the runners in adjusted positions on the arms.

14. In a dress form, the combination with a body portion divided vertically at the hip in a plurality of places, of a central supporting member, a plurality of plates sustained thereby and adjustable in radial directions, each plate having slots extending substantially parallel to the sides of the form, projections extending laterally from the dress form sections and clamping screws carried by said projections and operating in said slots.

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

CHARLES A. UFFORD.

Witnesses:
LOUIS C. SMITH,
THOMAS J. DRUMMOND.

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