

ADJUSTMENT FOR DRESS FORMS.

991,242.

Patented May 2, 1911.



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FIG. 3.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN RAE, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Adjustments for Dress-Forms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention is intended for application to a dress form comprising an exterior skeleton conforming approximately to the shape of a portion of the typical human figure and contrivances arranged within the skeleton and connected therewith by means of which the skeleton may be locally or as a whole contracted or expanded.

The object of the invention is to provide means for adjusting said contrivances vertically relatively both to the standard on which the dress-form is mounted and to each other.

A dress-form to which my invention is applicable is set forth in an application filed by me of even date herewith, Serial No. 506,647; but my invention is not limited in its application to any particular construction of exterior skeleton or to any particular internal contrivances to expand or contract the skeleton and therefore it is unnecessary to describe or illustrate such skeleton and contrivances except in a very general manner.

In the drawings: Figure 1 is a front elevation of a dress-form with my invention applied thereto. Fig. 2 is a front elevation of a preferred embodiment of my invention in detail; Fig. 3 is a side elevation of the same.

Referring first to Fig. 1: *a* represents an exterior skeleton, mainly of wire, suspended from a frame-work *b* supported at the top of a central post *c*. *d*, *e* and *f* represent sets of extenders arranged within the skeleton at elevations corresponding to the hip, waist and bust portions of the skeleton, said extenders being connected to the skeleton and respectively supported on plates or tables *g*, *h* and *i* mounted as hereinafter described on bearings *k*, *l* and *m* respectively, which bearings are sleeved on the post *c*, as hereinafter described. The post *c* projects upwardly from, and is vertically adjustable with relation to, the standard *n*. Each bearing *k*, *l*, or *m*, has trunnions *o* projecting

therefrom and extending into orifices in lugs *p* depending from the corresponding table *g*, *h* or *i*. The trunnions *o* engage the orifices in the lugs *p* with a sufficient degree of tightness to prevent the tables from accidentally turning on the trunnions but not so tightly as to prevent the operator from varying the angle of the table as desired, the upper table *i* being shown in Fig. 1 as adjusted at an angle to a horizontal plane. The means for adjusting the bearings *k*, *l* and *m* upon the post *c*, which forms the subject-matter of my invention, will now be described. In the detailed views, Figs. 2 and 3, two only of said bearings, *m* and *l*, are shown and only the mechanism for actuating the bearing *m* is illustrated. 10, 10, are pins or studs projecting in opposite directions from the bearing *m*. 11, 11, are plates arranged in vertical planes on opposite sides of the bearing. Each plate has a cam slot 12 through which the corresponding pin 10 extends. 13 is a cam slot in each plate 11 arranged diametrically opposite the cam slot 12. 14 is an extended sleeve or bushing loose on the post *c*. The upper end of the sleeve 14 extends between the plates 11, 11, and has secured thereto, by means of a set screw 15, a collar 16 having pins 17 projecting therefrom and engaging the cam slots 13. Connecting plates 11, 11, are cross-pins 18, 18, to which are secured cords 19, 19, carrying finger rings 20, 20. 21 is an equalizing bar pivoted centrally to one of the plates 11 and having slots 22, 23, through or into which the pins 10 and 17 respectively extend. It will be understood that if one or the other of the cross-pins 18 is pulled down, the pins 10 and 17 will be moved relatively toward or from each other, causing the bearing *m* and collar 16 to relatively approach toward or recede from each other. The equalizing bar 21 prevents any differential movement of the pins within the two slots. Without such bar, there would be a tendency for each plate to rotate on one of the pins 10 and 17 as axis.

As illustrated in Figs. 2 and 3, the bearing *m* is shown as adjusted to its highest point. If it be assumed that the collar 16 and sleeve 14 are held in fixed position on the post *c*, and that the right-hand cross-pin 18 is pulled down, it is clear that the pins 10 will move downwardly toward the pins 17 and at the same time the plates 11 and equalizing

bar 21 will also move downwardly a distance equal to one half the movement of the pins 10. The downward pull upon the cross-pin 18 may be continued until the pins 10 and 17 travel into the opposite ends of their respective slots. Thus the bearing *m* may be adjusted from its highest to its lowest position relatively to the collar 16 and sleeve 14. A downward pull upon the left-hand cross-pin of course causes the bearing *m* and the slotted plates and equalizing bar to move upwardly upon the post *c*.

The bearing *l*, instead of being, like bearing *m*, sleeved directly on the post, is secured to the sleeve 14 by means of the set screw 24. This bearing is connected with cam actuating mechanism 25 similar to that described for actuating bearing *m*, and such cam-actuating mechanism is connected with a collar 26 similar to collar 16, which in turn is connected, by means of a sleeve 27, similar to sleeve 14, with the bearing *k*. This bearing is also connected with cam actuating mechanism 28 similar to that described for actuating bearing *m*, and such cam actuating mechanism is connected with a collar 29 similar to collars 16 and 26 except that collar 29 is sleeved directly on the shaft *c* and is fixedly secured thereto.

It will be understood, from the foregoing description, that if either cam actuating mechanism is operated, it will effect a vertical adjustment of only the bearing or bearings above it and not of any bearing below it. That is, if the cam actuating mechanism 28 is operated, it elevates or lowers not only the bearing *k*, but also, and to the same extent, the bearings *l* and *m*, the latter being held in fixed relation to each other and to the bearing *k* so long as the other cam-actuating mechanisms are not operated. If the cam-actuating mechanism 25 is operated, it elevates or lowers the bearings *l* and *m*, while bearing *k* remains in fixed position on the post; while if the cam plates 11 are operated, they elevate or lower bearing *m* only, while bearings *k* and *l* remain in fixed position on the post.

Each table *g*, *h* and *i*, or at least tables *g* and *h*, should be provided with orifices 30 to permit the actuating cords attached to the more elevated cam-actuating mechanisms to extend therethrough. These cords preferably extend to a point below the exterior wire skeleton, so as to allow the vertical adjusting devices to be operated from a point below the figure when the same is draped.

I do not herein claim broadly the means herein shown for vertically adjusting the hip-, waist- and bust-extendors, as the same is claimed in the hereinbefore mentioned application filed by me of even date herewith, but it is intended to claim herein only such features of novelty as are not disclosed in said application.

Having now fully described my invention, what I claim and desire to protect by Letters Patent is:—

1. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, and means, including a movable member and a pin and cam slot connection between the same and said bearing, for imparting a vertical movement to said bearing.

2. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a collar on said post, pins on the bearing and collar, and a turnable plate having cam slots engaging said pins respectively.

3. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a collar on said post, pins on the bearing and collar, a turnable plate having cam slots engaging said pins respectively and a slotted equalizing bar engaging said pins.

4. In a dress-form, the combination with a post, of a plate and a bearing movable on the post, said bearing adapted to support a form-extending device and said plate being movable relatively to the bearing, a pin on one of the last named elements and a cam slot in the other engaging the pin, whereby the movement of the plate actuates the bearing.

5. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a collar on said post, pins projecting in opposite directions from the post, pins projecting in opposite directions from the collar, a pair of plates on opposite sides of the post, each having diametrically opposite cam slots engaging contiguous pins, and means to turn the plate.

6. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a collar on said post, pins projecting in opposite directions from the post, pins projecting in opposite directions from the collar, a pair of plates on opposite sides of the post, each having diametrically opposite cam slots engaging contiguous pins, and an equalizing bar pivoted on one of said plates centrally thereof having slots engaging the two pins on the corresponding side of the shaft.

7. In a dress-form, the combination with a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a collar on said post, pins projecting in opposite directions from the post, pins projecting in opposite directions from the collar, a pair of plates on opposite sides of the post, each having diametrically op-

posite cam slots engaging contiguous pins, and cross-pins connecting opposite plates and arranged on opposite sides of the post.

8. In a dress-form, the combination with
5 a post and a plurality of bearings adapted to support form-extending devices and sleeved upon said post one above another, of positively operated devices, one supported on the post and the remainder on the several
10 bearings except the upper one, each of which is connected with, and adapted when operated to raise or lower, the bearing next above it, and means adapted to operate said devices depending therefrom and extending
15 below the lowermost of said devices.

9. In a dress-form, the combination with a post and a plurality of bearings adapted to support form-extending devices and sleeved upon said post one above another, of means,
20 supported on each bearing except the upper one, including a slotted plate and pin con-

nection with the bearing next above it for adjusting the latter vertically with relation to the bearing or bearings below it.

10. In a dress-form, the combination with 25 a bearing adapted to support a form-extending device, of a post on which said bearing is movable, a sleeve beneath said bearing and movable on said post, a collar secured to said sleeve, a second bearing secured to said 30 sleeve beneath said collar, a pin on said collar, a pin on the first bearing, and a turnable plate having diametrically opposite cam slots therein engaging said pins.

In testimony of which invention, I have 35 hereunto set my hand, at Philadelphia, on this 6th day of July, 1909.

JOHN RAE.

Witnesses:

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