

[54] **DRESSMAKING FORMS**

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[22] Filed: **Aug. 26, 1971**

[21] Appl. No.: **175,080**

**FOREIGN PATENTS OR APPLICATIONS**

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[30] **Foreign Application Priority Data**

Aug. 26, 1970 Great Britain.....41124/70  
 Sept. 2, 1970 Great Britain.....41932/70

[52] **U.S. Cl.**.....**223/68**

[51] **Int. Cl.**.....**A41h 5/00**

[58] **Field of Search**.....**223/66, 68**

[56] **References Cited**

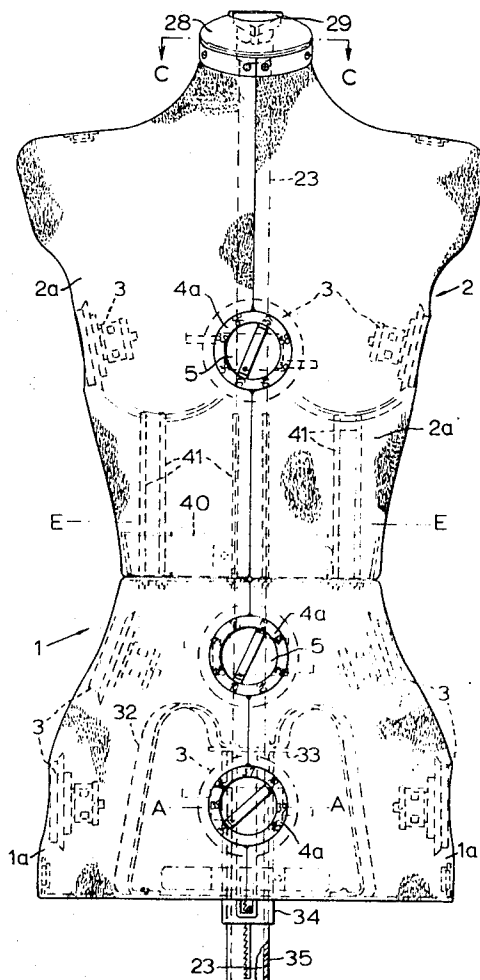
**UNITED STATES PATENTS**

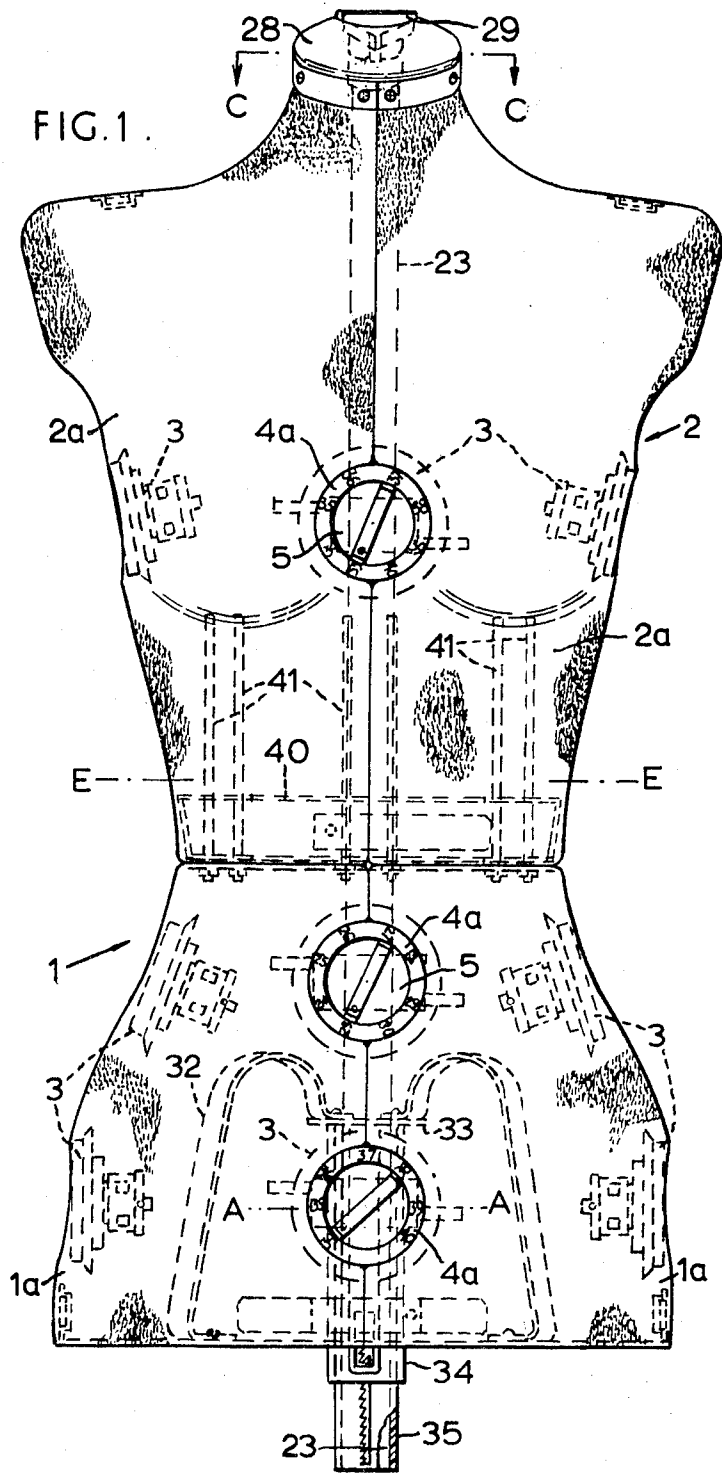
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[57] **ABSTRACT**

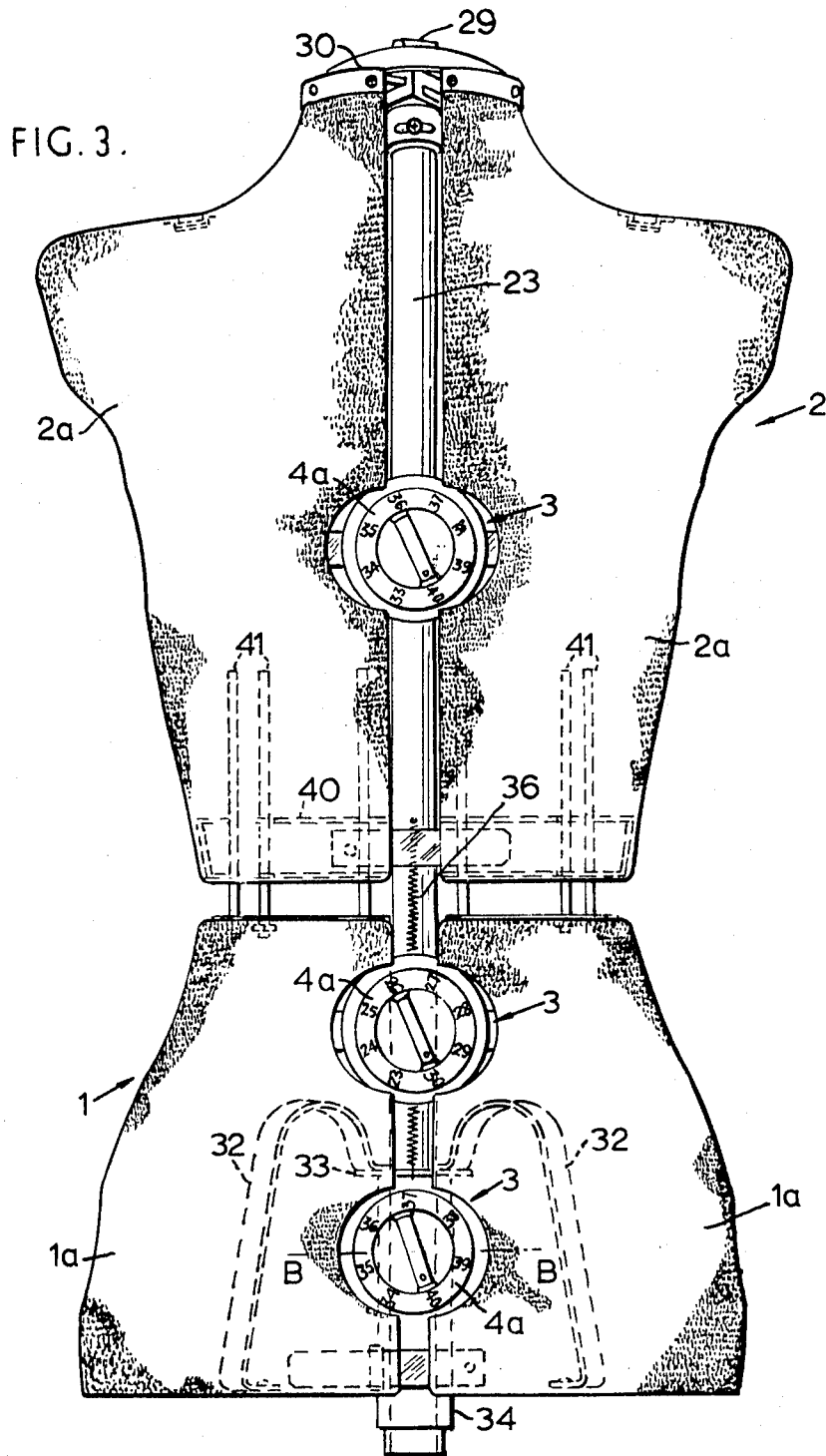
A dressmaking form comprising neck, bust, waist and hip portions, each of said portions consisting of a plurality of sections which are radially adjustable to increase or decrease the overall circumferential size of the portion by moving setting mechanism against appropriate dials, the waist and hip portions being relatively adjustable vertically to allow for different depths of waist sizes.

**2 Claims, 13 Drawing Figures**









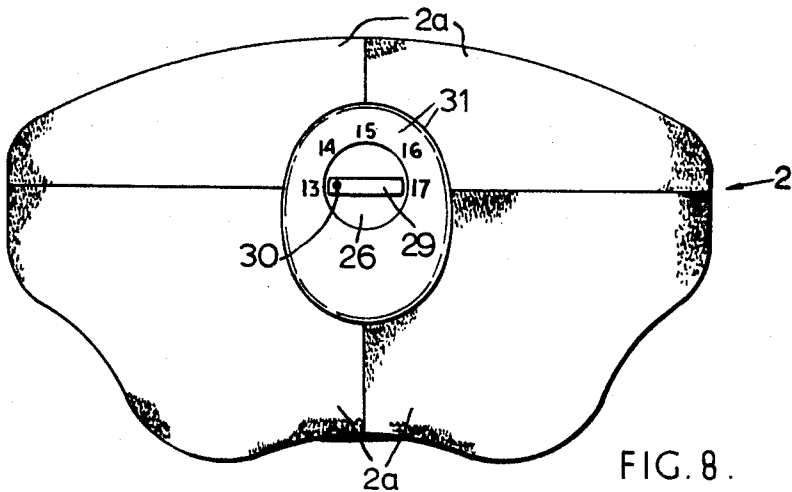


FIG. 8.

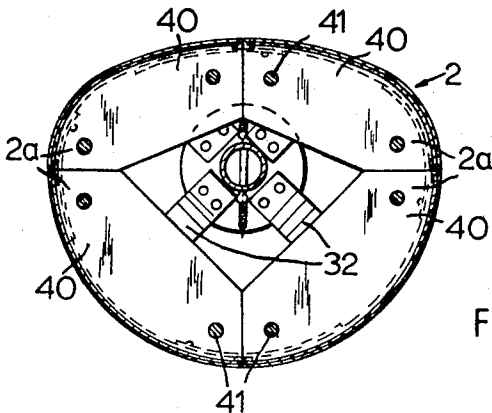


FIG. 11

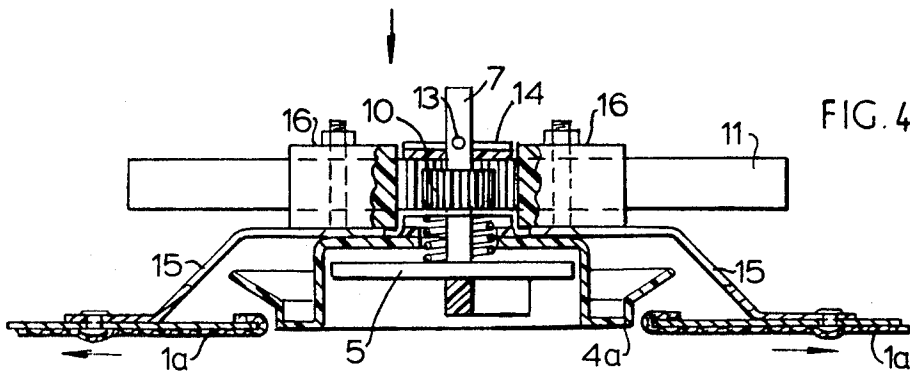


FIG. 4.

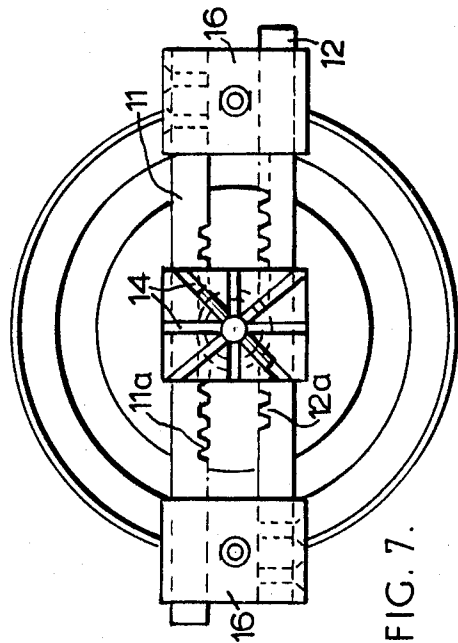


FIG. 7.

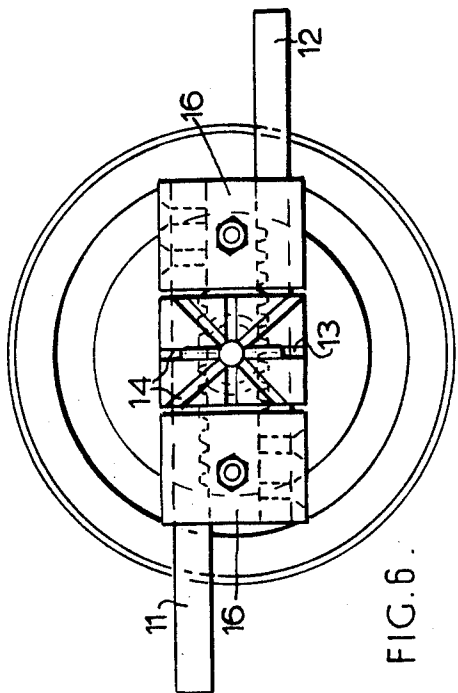


FIG. 6.

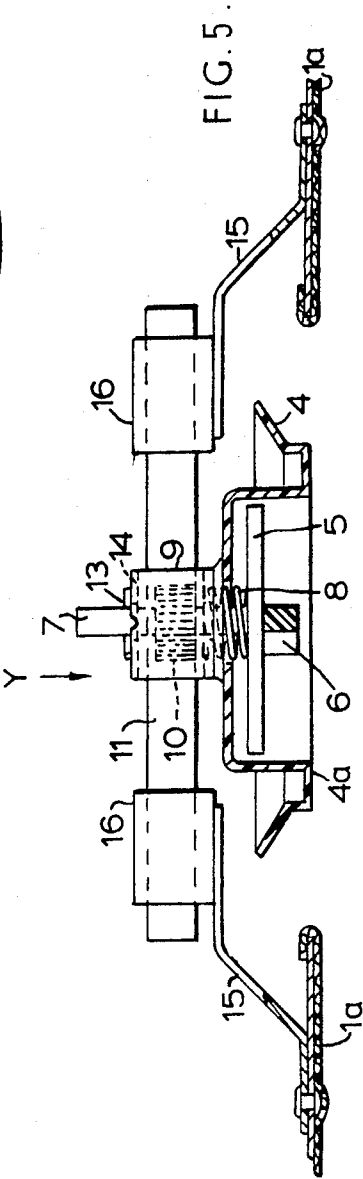
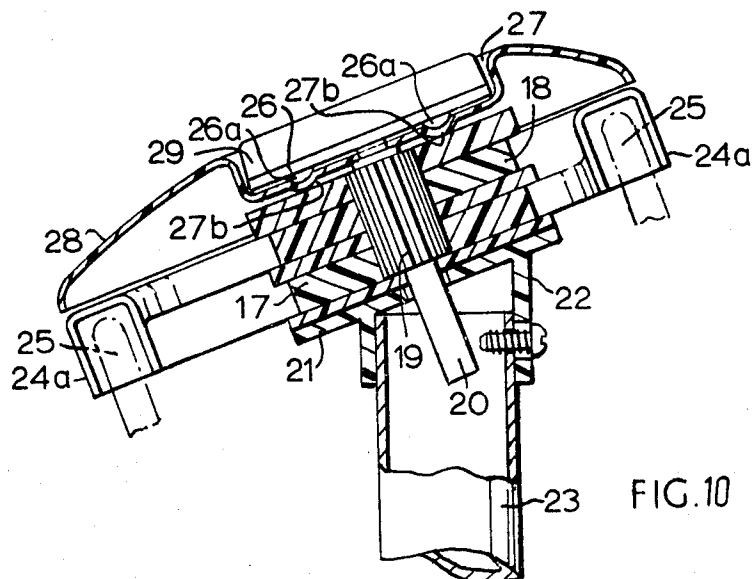
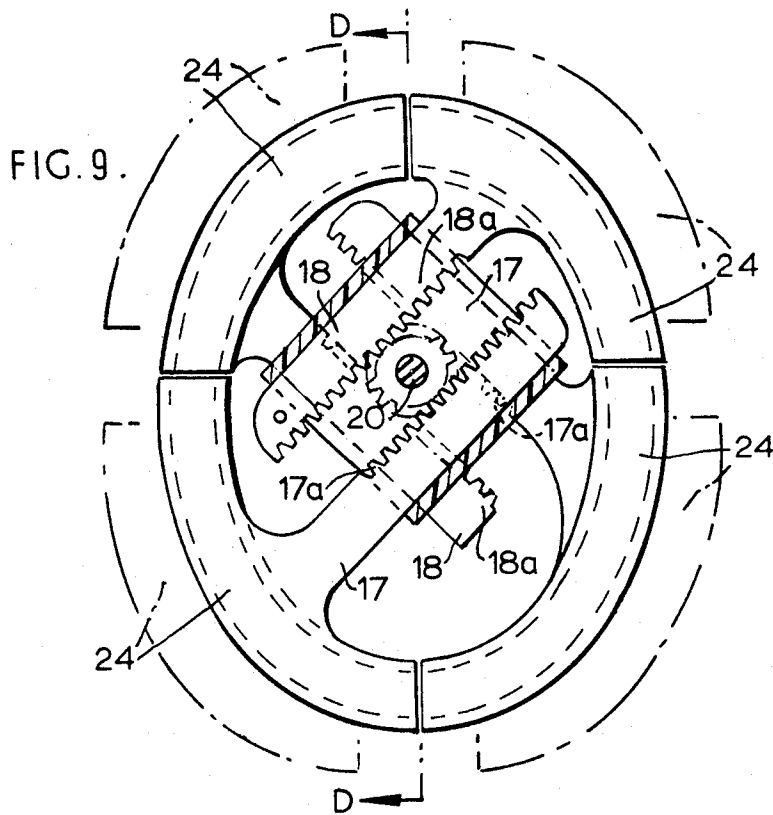


FIG. 5.



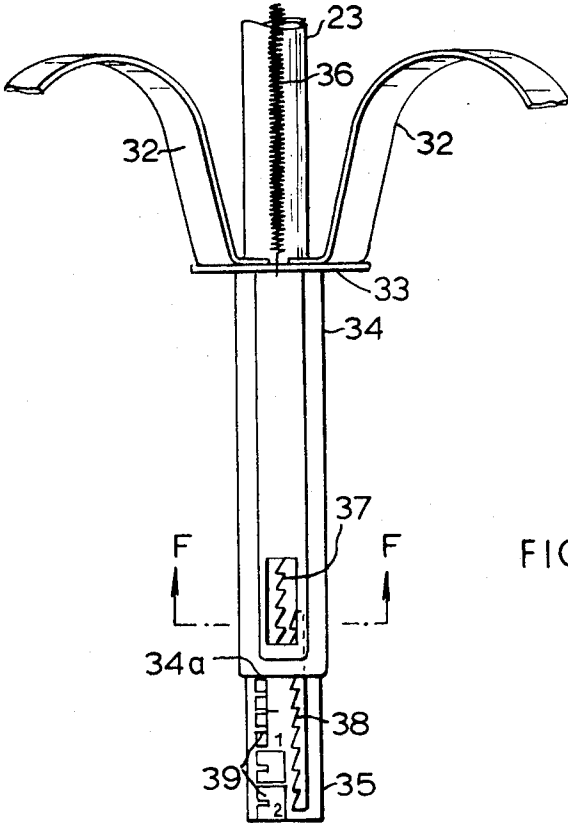


FIG. 12 .

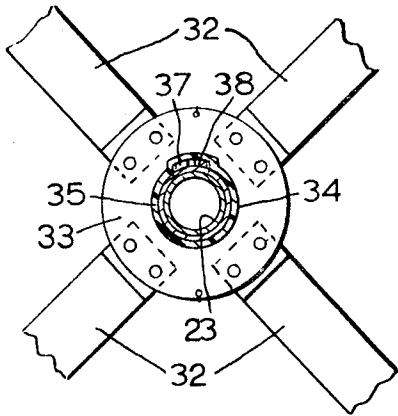


FIG. 13 .

**DRESSMAKING FORMS****CROSS-REFERENCES TO RELATED APPLICATIONS**

United Kingdom application Nos. 41124/70 dated Aug. 26, 1970; 41932/70 dated Sept. 2, 1970; 10434/71 dated April 21, 1971 and 29527/71 dated June 23, 1971.

**BACKGROUND OF THE INVENTION**

This invention concerns improvements in or relating to dressmaking forms and has for its object the provision of a form comprising adjustable body sections and neck portions which are capable of being adjusted accurately to suit required dimensions in a simple and expeditious manner.

**SUMMARY OF THE INVENTION**

Broadly, according to the present invention, there is provided a dressmaking form which comprises an assembly of radially adjustable body sections and wherein meeting or opposed edges of adjacent sections are interconnected by adjusting means for increasing or decreasing the overall circumferential size of a particular body part, for example hips, waist and bust, said adjusting means each comprising spaced apart toothed rack-like members having a toothed rotatable part or pinion interposed between them and to which members adjacent sections are connected, the arrangement being such that by turning said toothed rotatable part the rack-like parts are extended or contracted and the sections carried thereby adjusted to increase or decrease the overall circumferential size of the body-forming parts of the form.

Each of said adjusting means is operated by turning a size-indicating setting disc relatively to a dial.

Means is also provided which enables the waist and hip sections to be adjusted vertically relatively to the bust sections to allow for different depths of waist sizes.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a front elevation of the dressmaking form showing the sections thereof closed together or contracted;

FIG. 2 is a side elevation showing said sections extended;

FIG. 3 is a front view of FIG. 2 showing said sections extended;

FIG. 4 is a section taken on the line A—A of FIG. 1;

FIG. 5 is a view similar to FIG. 4, but taken on the line B—B of FIG. 3, showing the body sections extended;

FIG. 6 is a rear view of FIG. 4 looking in the direction of the arrow "X" showing the sections contracted;

FIG. 7 is a view similar to FIG. 6 but looking in the direction of the arrow Y of FIG. 5, showing the sections extended;

FIG. 8 is a plan view of FIG. 1;

FIG. 9 is a section drawn to a larger scale and taken on the line C—C of FIG. 1 showing the neck adjusting mechanism;

FIG. 10 is a section taken on the line D—D of FIG. 9;

FIG. 11 is a section taken on the line E—E of FIG. 1;

FIG. 12 is a front elevation drawn to an enlarged scale illustrating mechanism facilitating relative verti-

cal adjustments between the bust sections and the hip sections; and

FIG. 13 is a section taken on the line F—F of FIG. 12.

**DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Referring firstly to FIGS. 1 to 3, the dressmaking form comprises a lower portion 1 and an upper portion 2 which combine to constitute bust, waist and hip portions, and each of the portions 1 and 2 comprises four sections 1a and 2a respectively, which are interconnected at their meeting or opposed edges by setting or adjusting means indicated generally at 3 for increasing or decreasing the overall circumferential size of a particular body portion.

Each setting mechanism (see FIGS. 4 to 7) comprises a dish size-indicating dial 4 in which is rotatable a setting disc 5 having extending forwardly therefrom a radial bar 6 which can be gripped by a user of the appliance for turning the disc 5 and setting the bar 6 against the required size indication on a marginal portion 4a of the dial, as shown in FIGS. 1, 2 and 3. This disc 5 is fixedly secured to the forward end of a spindle 7 which is slidable axially against the influence of a compression spring 8 which is interposed between the rear face of the disc 5 and the front wall of a relatively immovable part of a housing 9, said spindle being turnable and fitted with a small pinion wheel 10 which engages with and between toothed portions 11a and 12a of a pair of spaced apart rack-like parallel bars 11 and 12 to which the relatively adjustable sections 1a or 2a of the dress form are secured.

The rear end of said spindle 7 has fixedly secured thereto a locking bar 13 which can be engaged in radial grooves or recesses 14 in the rear face of the housing 9. The said radial grooves 14 each comprises a pair of aligned grooves located respectively one at either side of a central hole in the rear face of the housing 9 through which the spindle 7 passes.

In operation the setting bar 6 is pressed down and the disc 5 together with the spindle 7 is moved rearwardly slightly against the influence of the compression spring 8 to disengage the locking bar 13 from the radial grooves 14, whereupon the bar 6 together with said disc 5 can be turned and the bar 6 moved to bring an indicating mark 6a thereon against a different reading on said dial 4a, the locking bar 13, when the bar 6 is released, moving back and engaging in a registering groove 14. During turning of the bar 6 and disc 5 the pinion wheel 10 is rotated and moves the toothed bars 11 and 12 in opposite directions to move the sections 1a and 2a towards or away from one another to extend or contract the form and so increase or decrease its circumferential size of the body forming parts 1 and 2.

It will be readily appreciated that the adjusting mechanism can be quickly and easily operated to set the sections 1a and 2a of the dress form to a required circumferential size as regards bust, waist and hip measurements, and when the setting mechanism is released it becomes locked and will prevent unintentional or accidental movement of the setting mechanism.

The bust sections 2a or hip or waist-forming sections 1a, as the case may be, may conveniently be connected to the bars 11 and 12 by means of brackets 15, each fitted at one end to a section and at its other end being clamped at 16 to an associated bar.

Referring next to the adjustable neck device shown in FIGS. 8, 9 and 10, the principle of operation involved here is generally similar to that already described, and this adjustable neck device comprises two assemblies similar to those already described which are arranged horizontally and positioned to cross one another at their centers substantially at right angles.

Each assembly comprises bars 17 and 18 (similar to the bars 11 and 12) formed on their opposed edges with teeth or serrations 17a and 18a, and between these is located a toothed pinion-like part 19 mounted on a rod 20, the bars 17, 18 and the pinion 19 being located in a housing 21 from which extends a socket 22 (FIG. 10) intended to be fitted to the upper end of a center tube 23 of the dressmaking form. In this adjustable neck device, however, the outer ends of the bars 17 and 18 are formed or fitted with arcuate segments 24 which, when the two assemblies are put together one above the other in substantially parallel horizontal planes, define an oval as shown in FIG. 9 simulating a neck portion.

The undersides of the segments 24 are channelled at 24a to receive the upper neck-defining edges 25 of the sections 2a of the bust, and these edges are secured to the segments 18 by pop rivetting.

The arrangement is such that the two assemblies forming the adjustable neck device are disposed almost horizontally, one closely beneath the other, with one end of an assembly fitted to a front part of the neck and the other end thereof secured to a rear part of the neck.

The said spindle 20 is formed or fitted with a setting disc 26 which is rotatable in a recess 27 in a cover plate 28, and the disc 26 and the base 27a of the recess are formed respectively with pip-like projections 26a and recesses 27b to enable five or any other suitable number of settings to be effected, the disc 26 making a click by click movement as it moves into different setting positions. The disc 26 is conveniently formed with a setting bar 29 having an indicating mark 30 which can be set against neck size readings 31 on the cover plate 28.

FIGS. 1, 2 and 3 and 11 to 13 illustrate how the hip forming sections 1a are interconnected in a vertically adjustable manner respectively with associated and adjacent bust forming parts 2a.

The said sections 1a are each connected (see FIGS. 11 to 13) by a centralizing strip 32 to an upper flanged end 33 of an outer sleeve 34 which is slidable over a tube 35 which is a tight push fit over the main center tube 23.

It will be appreciated that when the sleeve 34 is slid up and down on the fixed tube 35 the four sections 1a constituting the hip part are raised and lowered in unison towards or away from the sections 2a of the upper body part or bust 2, thereby varying the vertical dimension of the waist of the dress form which comprises the lower part of the upper body part 2 and the upper part of the hip part 1.

The said hip sections 1a are movable downwardly away from the bust part 1 against the influence of tension springs 36 (FIG. 12) which, when permitted, reassert themselves to return the hip parts 1a upwardly towards the bust parts 2a.

Locking means is provided for retaining the sections 1a of the hip part in a required set position as regards height. The said locking means conveniently comprises teeth 37 on the outer sleeve 34, or on a part supported thereby which can be moved, by turning the sleeve 34

about its axis slightly, into or out of engagement with complementary teeth 38 provided on the inner tube 35. The sleeve 34 is formed with an opening through which the interengaging teeth 37 and 38 are visible.

Assuming it is desired to increase the depth of the waist portion, the sleeve 34 is turned to disengage the teeth 37 from the teeth 38 (as shown in FIG. 12) whereupon the outer sleeve 34 can be slid downwardly to move the hip sections 1a against the influence of the springs 36 farther away from the bust sections 1a, and the sleeve 34, at an appropriate position, is turned about its axis slightly in the opposite direction to re-engage the teeth 37 with the teeth 38, thereby preventing unintentional or accidental displacement of the outer sleeve 34 by the springs 36.

The lower edge 34a of the outer sleeve 34 can move vertically against a scale 39 bearing graduations indicating the amount of linear adjustment of said hip sections 1a.

The lower end of each of the bust sections 2a is fitted with a guide member 40 (FIGS. 1, 2 and 3) formed with holes in which are slidably engaged pins 41 upstanding from the top of an associated section 1a of the hip part.

Each of said guides 40 is made of any suitable rigid or substantially rigid material, but it is preferably made as an injection moulding of a suitable synthetic plastics material and is U-shape in transverse cross-section, i.e. of channel section, the flanges thereof being located horizontally in spaced relation one above the other with the web abutted against the inside of the wall of said section with the mouth of the channel directed inwardly towards the center posts 23.

Each guide 40 is secured in a section 2a by eyelets, adhesive or in any other suitable manner.

In addition to serving as a guide for the pins 41 it will be appreciated that the guides 40 also serve as a stiffener for the bust part 2a which is conveniently made as a flexible vacuum formed section.

I claim:

1. A dressmaking form comprising in combination:
  - a. an assembly of radially adjustable body sections,
  - b. adjusting means interconnecting and bridging opposed meeting edges of said sections for increasing and decreasing the overall circumferential size of a particular body part, for example hips, waist or bust, said adjusting means comprising,
  - c. spaced apart parallel toothed racks to which respectively adjacent body sections are connected,
  - d. a pinion interposed between and meshing with said racks,
  - e. a rotatable size indicating and setting member adapted to turn said pinion to extend or contract said racks whereby the body sections carried thereby are adjusted to increase or decrease the overall size of the body-forming parts of the form,
  - f. a size indicating dial against which said setting member is turned, the latter being spring loaded and movable axially against said spring to a position in which it can be turned against said dial and returned automatically by said spring to lock it in a required set position, the form also including a radially adjustable neck portion comprising four sections operable simultaneously and each having a rack-like part extending from an arcuate neck forming segment, said rack-like parts comprising pairs of racks which intersect one above the other in different substantially horizontal planes and

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being in mesh with a common operating pinion actuated by a setting member rotatable in relation to a size-indicating dial.

2. A dressmaking form as claimed in claim 1, includ-

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ing means whereby the waist and hip sections can be adjusted vertically relatively to the bust sections to allow for different depths of waist sizes.

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