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ADJUSTABLE DRESS STAND

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Fig. 1.

Fig. 2.

Fig. 3.

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To whom it may concern:

Be it known that I, HENRI ZILBERSTEIN, a subject of the Kingdom of Romania, and resident of 205 Rue Saint-Honore, Paris, France, have invented an Adjustable Dress Stand, of which the following is a full, clear, and exact description.

The present invention has for its object to provide an extensible bust or dress stand which is constructed in such a manner as to enable the shape of a person to be clothed to be exactly reproduced.

This bust, which is constructed in such a manner that it may be mounted upon the standard of any ordinary dress stand, is characterized essentially by the combination:

(a) Of an extensible base including a plate fitting upon the standard of an ordinary dress stand to support the said bust, this plate carrying arms, arranged in such a manner that they can be displaced radially in the said plate and fixed in this latter in any desired position;

(b) Of a body constituted by an air chamber made of rubber, having the form of a bust of a dress stand, but of reduced dimensions and provided, at its centre, with a tube of rubber enabling the body to be mounted upon the standard of the dress stand, this air chamber resting upon the extensible base and being provided with a valve enabling it to be inflated;

(c) Of an extensible cover or carcass in the interior of which is enclosed the air chamber, and constituted by vertical and horizontal coiled springs, the first fixed at their lower part upon the movable arms of the extensible base and at their upper part upon the wooden collar of the bust, the second upon the vertical springs and those at the upper part upon the pieces of wood forming the shoulders of the bust.

The extensible bust thus constructed is covered, when it is employed, by a mould made of woven material correctly fitted upon the bust of the person to be clothed, the interior air chamber being subsequently inflated until the fabric forming the mould is perfectly stretched. The bust forming the subject of the present invention is an exactly faithful reproduction of the bust of the person to be clothed.

In its most simple form of construction the carcass comprises:

(a) Series of vertical coil springs forming the front, rear and side parts of the bust, the said springs being attached, at their lower end, to the movable arms of the extensible base and, at their upper end to a member forming the neck for the springs placed in front and rear middle parts and to discs forming the arm-holes for the side springs;

(b) Transverse springs arranged throughout the height of the bust and attached to the vertical springs, those arranged on the shoulders being attached to the member forming the neck and to the discs forming the armholes.

According to a second form of construction, the flexible and extensible carcass is constituted by coil springs, of elliptic section, vertically arranged and connected together by vertical resilient bonds passing successively through the coils of two adjacent springs; the springs forming the front and rear middle parts of the carcass, as well as those forming the side parts of the said carcass are attached, at their lower end, to the extensible base of the bust, these springs being, on the other hand, attached at their upper part: the first, at diametrically opposed points of a ring secured in a neck member of the bust, the others on rings secured in members which, forming the shoulders of this bust, are connected to the neck member so as to be capable of being moved towards or from the latter according to the desired shoulder width; the other springs which complete the carcass are placed astride within shoulder members and are attached at both ends, to the extensible base of the bust.

The arms, radially arranged within the base plate and sliding in the latter or in guides secured under the said plate, are adjusted to any desired and predetermined position by a belt which adjusted on the person to be clothed, is placed on a member which forms the head of these spring arms and serves as a securing means for the vertical springs of the carcass.

The upper part of the bust is also extensible and comprises:

(c) A member forming the neck and constituted by a hollow cylindrical part provided, at its base, with the ring on which are secured, by their upper end, the vertical springs forming the front and rear middle parts of the carcass; this neck member carry-
ing two side extensions within which are secured arms adapted to support certain of the vertical springs forming the carcass; this neck member fits on the upper end of a vertical tube which, secured in the center of the extensible base, serves as a guide for the said neck member which may be adjusted in position on the said tube according to the desired height of the bust by the engagement in one of the recesses formed at the upper part of the guide tube of a clamping screw carried by the neck member.

(6) Two shoulder members arranged so as to be capable of longitudinally sliding on the extensions of the neck member and to be brought to the desired shoulder width, these two members being also each provided with an inner arm serving as a support for certain of the springs of the carcass and a ring on which are secured the ends of the springs forming the sides of the said carcass.

In order that the invention may be clearly understood, the extensible bust forming the subject matter of the said invention will be hereinafter described with reference to the accompanying drawing, in which:

Fig. 1 is a front elevation of a first form of construction of a complete apparatus.

Fig. 2 is a front elevation of the inner rubber body.

Fig. 3 is a plan view of the extensible base of the extensible bust.

Fig. 4 is a front elevation of another form of my invention, with parts in section.

Fig. 5 is an underside view of the bust shown in Fig. 4.

Fig. 6 is a front elevation of the upper part of this bust comprising the neck and the shoulders.

Fig. 7 is a corresponding plan view.

Fig. 8 is a vertical longitudinal section made according to line B—B of Fig. 7.

Fig. 9 is a cross vertical section made according to line C—C of Fig. 8.

Figs. 10 and 11 illustrate in plan view and vertical section a modification of the extensible base of the bust.

As diagrammatically illustrated in Figs. 1 to 3 of the accompanying drawing, the improved bust has a base comprising a plate of wood having the shape of the base of an ordinary dress stand and constituting the support of the improved bust.

This base is extensible and is provided for this purpose, with arms sliding radially within the plate and provided at their free ends with curved telescopic tubes, as shown in Fig. 3.

A hole pierced in the plate enables this latter to be mounted upon the standard of the dress stand upon which it is held by the ordinary shoulder and screw.

The interior body of the bust represented in detail in Figure 2 has the approximate form of a bust of a dress stand, but of reduced dimensions. It forms an air chamber of rubber which is provided with an in-flating valve 30 and has a central tube 31 made of rubber by means of which the rubber body 30 is guided upon the standard of the dress stand and rests by its base upon the plate 4.

Upon this body 30 are assembled vertical springs 1 and transverse springs 1s of rectangular section forming the outer extensible cover of the bust.

The upper ends of the springs 1 are fixed to the wood neck member 20 of the dress stand and their lower ends to the curved parts 7s of the tubular arms 7, the springs 1s, arranged between the springs 1, are secured to these latter, the springs 1s of the upper part of the extensible cover being attached to the members 27 forming the shoulders and to the member 20.

The bust thus constructed and mounted on a standard of an ordinary dress stand as indicated above, is covered with a mould made of woven material executed on the bust of the person to be clothed; the inner body 30 is then inflated for obtaining, by the suitable distortion of the latter and of the resilient carcass formed by the springs 1—1s, the filling up of the mould of woven material covering the bust.

In the form of construction illustrated in Figs. 4 to 9, the distortable and resilient carcass is constituted by vertical coil springs 1 of elliptic section, as shown in Fig. 5, connected together by resilient bonds or cables 2 vertically arranged and successively, engaging in the coils of two adjacent springs, as clearly shown in Fig. 5.

This carcass, excessively flexible and distortable, is connected at its base to a plate 4 which, perforated with a central opening 5 for engagement on the standard 6 of an ordinary dress stand, is provided with radial arms 7s the number of which corresponds to that of the springs 1s forming the carcass.

In the form of construction shown in Figs. 4 to 9, these arms 7s are mounted so as to be capable of sliding in tubes 8 secured on the bottom of the plate 4 and enclosing springs 9 which tend to push the said arms 7s outwardly in the guide tubes 8 in which they are held in any desired position by clamping screws.

Each of these arms 7s which forms a spring piston, is provided, externally of the plate 4 to which, with a head formed by a metal plate 11 suitably cut out and shaped for forming, at the upper part, a hook 12 serving as a point of attachment for each spring 7s and, at the lower part, a groove 13 in which is placed a ribbon or belt which, previously placed on the body of a person to be clothed, allows to bring and hold the
various spring arms 7" in the desired position of development.

The base formed of plate 4" and of the arms 7" is therefore extensible and is provided, at its center, with a metal tube 15, through which freely passes the standard 6 of the dress stand and which has, at its upper part an enlargement 16 in which are formed a number of superposed recesses 17 in any one of which can be inserted a screw 18 carried by a nut 19 rigid with the neck member 20" of the dress stand, for permitting to adjust at will the height of the bust: This neck member is constituted by a hollow cylindrical metallic body having two diametrically opposed extensions 21 and provided at its base with a ring 22 which secured by soldering or otherwise to the neck member, is perforated with holes adapted to permit, as shown in Fig. 4, the engagement of the upper end of a number of springs 1' forming respectively the front and rear central parts of the carcass of the bust.

On the extensions 21 of the neck member are mounted, so as to be capable of frictionally sliding, metallic members 23 forming the shoulders of the bust which can thus be moved towards or from each other according to the breadth across the shoulders of the person to be clothed, the said members being guided in their longitudinal displacement by grooves 24 of one of the members in which are fitted the edges of the other, as shown in Fig. 9 and by a claw 25 of each shoulder extending in a slot 26 of the extensions 21 (Figs. 4, 7 and 8).

In each of the shoulder members 23 is also secured, by soldering or otherwise, a ring 27' in the bases of which are attached, by their upper end, the springs 1' forming the side parts of the carcass.

The rings 27' are, moreover, each provided with an arm 28 which is so arranged as to be capable of sliding on a similar arm 29 carried by the ring 22 and forms, with the latter, a support of adjustable length on which are placed astride the springs 1' completing the carcass and which attached or soldered at their ends on the end of the arm 7" of the plate 4", thus pass, in the middle of their length, within the shoulder members 23 and slide on the arms 28 and 29 as illustrated in Figs. 4 and 9.

The air chamber 30 placed within the carcass described is provided, at its center, with a tube 31 through which freely passes the tube 15 secured on the plate 4".

The bust above described is used in the following manner:

By means of cloth or other suitable fabric a mould is taken of the person to be clothed and the extensible bust is clothed with this mould as indicated at 32 in Fig. 4; the said mould may, for instance, be attached on a number of studs such as 33 shown in plan view in Fig. 10 and carried by spring pistons 7" of the plate 4"

The measurement of the hips is then taken by means of the belt 14 and the latter is placed in the groove 13 of the head of each of the spring pistons 7" of the plate 4"; these latter are subsequently secured in position by suitable tightening of the screws 10.

The position of the neck member is adjusted by means of the screw 18 according to the height to be given to the bust.

After having subsequently adjusted the shoulders to the desired width, all that remains to be done, in order to obtain a bust rigorously similar to that of the person to be clothed, is to inflate the air chamber by means of a pump the connecting piece of which is screwed on the valve 36 of the said chamber, the inflation being stopped as soon as the mould is perfectly stretched throughout its surface.

The constructional arrangements are, of course, given by way of example only; the forms, materials and dimensions of the various constituent parts may be modified without departing thereby from the scope of the invention.

The spring pistons 7" of the plate 4" might, for instance, as shown in Figs. 10 and 11, be guided in recesses or housings formed in the plate itself, certain of these pistons terminating by curved rods 34 fitted in tubular parts 35 integral with the other pistons and on which are soldered the lower ends of the springs 1 or 1' of the carcass.

Claims:

1. An adjustable dress stand comprising: a plate forming the base of the bust,—adjustable arms radially mounted in the plate,—means for securing these arms in position,—an air chamber having the shape of the bust of a dress stand of reduced dimensions resting on the plate,—an inflating valve on the said chamber,—a member forming the neck and members forming the shoulders of the bust,—an extensible carcass covering the air chamber and formed by springs connected together as well as to the arms of the plate and to the neck and shoulder members of the bust,—means for obtaining, by the inflation of the air chamber, a bust exactly reproducing that of a given person.

2. An adjustable dress stand comprising: a plate forming the base of the bust,—arms radially movable in the plate,—springs pushing these arms outwardly,—screws locking these arms in any desired position,—a tube secured in the center of the plate,—an air chamber having the shape of the bust of a dress stand of reduced dimensions resting on the plate,—an inflating valve on the said chamber,—a member forming the
neck of the bust and sliding on the central tube of the plate,—a screw securing the neck member on the said tube in any desired position,—side extensions integral with the neck member,—a ring secured at the base of the neck member, laterally extending arms secured to the said ring,—shoulder members adapted to slide and to be adjusted in position on said arms,—a ring secured to each of the shoulder members and an arm secured to each of said shoulder member rings and sliding on the corresponding arm of the ring secured to the neck member,—an extensible carcass covering the air chamber and formed by vertical springs of elliptic section,—vertical resilient bonds connecting together springs which, attached to the movable arms of the plate are secured: some of them either on the ring integral with the neck member or on the ring integral with the shoulder members, the others passing at the middle of their length on the extensions integral with each of the rings,—a cover of non extensible fabric moulded on the bust of a given person, placed in position on the extensible carcass and adapted to limit the distortion of the said carcass, upon inflation of the air chamber, and to form the outer cover of a bust exactly similar to that of a given person.

The foregoing specification of my "An adjustable dress stand," signed by me this 26th day of January, 1923.

HENRI ZILBERSTEIN.