W. KROLL.

DRESS FORM STAND.

APPLICATION FILED MAR. 20, 1918.

1,272,678.

Patented July 16, 1918.

2 SHEETS—SHEET 1.

Fig. 1,

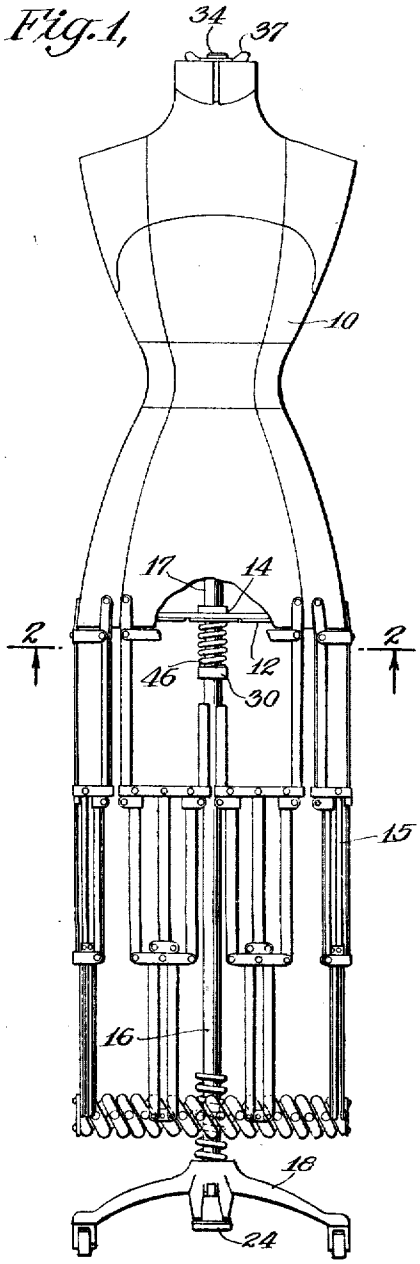


Fig. 3,

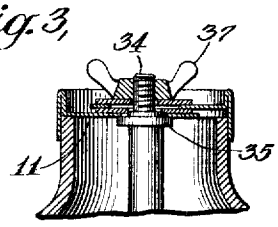
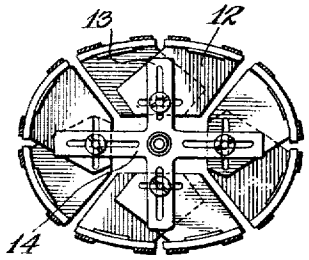


Fig. 2,



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2 SHEETS—SHEET 2.

Fig. 4,

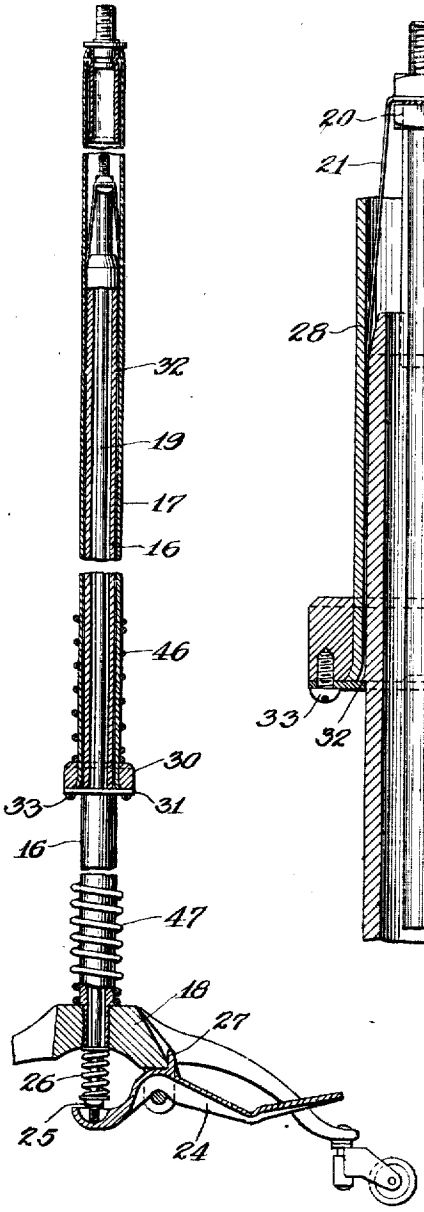


Fig. 5,

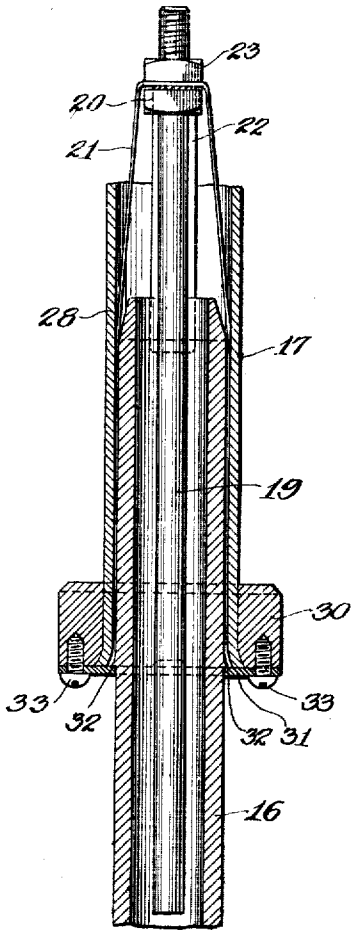


Fig. 6,

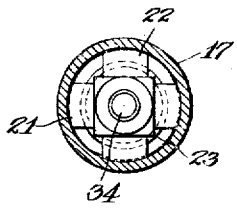


Fig. 7,

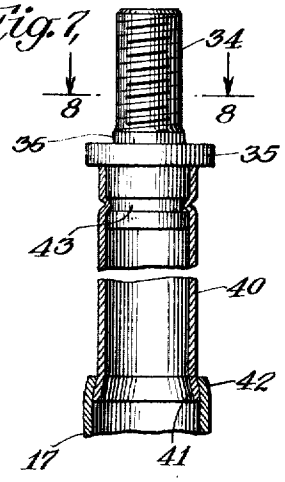
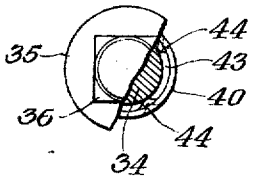


Fig. 8,



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UNITED STATES PATENT OFFICE.

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DRESS-FORM STAND.

1,272,678. Specification of Letters Patent. Patented July 16, 1918.

Application filed March 20, 1918. Serial No. 223,496.

To all whom it may concern:

Be it known that I, WALDEMAR KROLL, a subject of the King of Denmark, and resident of Weehawken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Dress-Form Stands, of which the following is a specification.

This invention is an improved stand particularly designed for use in supporting a dress-form in adjusted positions for display or dress fitting purposes. My improved stand is of that type in which the main standard is formed of telescoping members, one of which is secured to the base and one or more of which is secured to the dress-form or other device to be supported. My invention resides primarily in the construction of this standard and involves improved means for locking the telescoping sections in various adjusted positions, for permitting the free rotation of the dress-form, and for preventing the accidental or unintentional separation of the parts. The main object of my invention is to secure these results by mechanism simple and easy to assemble, efficient in operation, inexpensive to manufacture and durable to withstand rough or careless handling.

In the accompanying drawings, to which reference is to be had, I have shown an embodiment of my invention and have illustrated it in connection with a dress form. It will be evident that various minor changes in detail may be made within the scope of my invention and that the stand may be employed for other purposes than for supporting dress-forms. In these drawings,

Figure 1 is a front elevation of the dress-form, a portion being broken away and supported by my improved stand;

Figs. 2 and 3 illustrate the attachment of the dress-form to the stand, Fig. 2 being a transverse section on the line 2—2 of Fig. 1 looking in the direction of the arrow and Fig. 3 being an enlarged central vertical section of the upper end of the form;

Fig. 4 is a central longitudinal section of the stand;

Fig. 5 is an enlargement corresponding to a portion of Fig. 4;

Fig. 6 is a top plan view of the construction shown in Fig. 5;

Fig. 7 is an enlargement of the upper portion of Fig. 4; and

Fig. 8 is a transverse section on the line 8—8 of Fig. 7.

I have illustrated my improved construction in connection with a dress-form including a shell 10 of papier mâché or other suitable material, subdivided into a plurality of sections. These sections may be adjustably connected together by any means well known in the art so as to permit an expansion of any desired part of the form either horizontally to increase the size, or longitudinally to increase the length, or in both directions.

Each of the sections at the neck of the form has an inwardly extending slotted flange or plate 11, the several plates being superposed and connected to the upper end of the stand and shown in Fig. 3, and as particularly described hereinafter.

Each of the lower or hip sections of the form has an inwardly extending, slotted plate or flange 12, the adjacent plates or flanges being connected in pairs to the slotted arms 13 of a supporting member 14 slidable on the standard. Clamping bolts extend through the registering slots to permit the locking of the sections in adjusted positions. The hip sections carry a skirt form 15 which may be made up of separate sections connected to the separate hip sections and each vertical section of the skirt-form may be vertically collapsible to facilitate shipment or storage. These parts form no portion of my present invention.

For supporting these, or similar or analogous dress-form or other devices, I provide a stand which includes a plurality of telescoping tubes carried by a base. As shown, there are two tubes 16 and 17, the former being rigidly secured to a base 18 and extending within the other tube. The base 18 may be of any suitable construction, but preferably is somewhat in the form of a spider with a plurality of legs, each of which may have a caster to facilitate easy movement from place to place.

The outer tube 17 is mounted to slide vertically on the inner tube and the means for locking it in position constitutes an important feature of my invention. As shown, particularly in Fig. 5, the upper end of the

tube 16 has its outer surface beveled so as to converge downwardly toward the inner surface of the outer tube. Longitudinally movable within the inner tube is a rod 19 having a shoulder adjacent to its upper end preferably in the form of a nut 20 and having a pair of spring steel straps 21 and 22 supported thereon and perforated to receive the upper end of said rod. These extend at right angles to each other and have their extremities or free end portions bent down and frictionally engaging with the inner surface of the tube 19. The straps may be locked upon the shoulder by a suitable nut 23.

The lower end of the rod extends through the base 18 and engages with the inner end of a foot lever 24 pivoted to the base. Between a suitable stop 25 on the lower end of the rod and the under-side of the base is a spring 26 normally tending to move the rod downwardly and to swing the outer end of the foot lever 24 upwardly. The lever has a stop 27 for engaging with an adjacent portion of the base to limit this movement. The rod and the straps 21 and 22 are of such length that the free ends of the strap extend below the upper end of the tube 16 and terminate adjacent the beveled surface 28 at the upper end of the latter. The spring 26 normally pulls the rod downwardly so as to wedge the free ends of the spring metal straps between said conical surface 28 and the inner surface of the tube 17, but by depressing the outer free end of the foot lever 24, the rod may be raised and the ends of the metal straps brought out of contact with said conical surface. At this time, the tube 17 may be freely moved up and down, but when moved to the adjusted position the foot pressure on the lever 24 may be released and the spring 26 will immediately pull the rod 19 downwardly and force the ends of the straps into locking position. Further downward movement of the tube 17 is thus prevented and any tendency toward said downward movement will merely wedge the ends of the straps more firmly in position.

For locking the tube 17 against being accidentally raised so as not to come off the upper end of the tube 16, a stop is provided. In my improved construction, I form this stop by slightly expanding the lower end of the tube 17, as shown particularly in Fig. 5, and mount a collar 30 on the tube, the collar being slightly countersunk to receive the expanded end, to hold against removal from the lower end of said tube by said expanded end. Secured to the lower surface of the collar 30 is a washer 31, the aperture through which is smaller than the tube 17, and closely fits the tube 16.

At the desired point along the length of the inner tube 16 and preferably adjacent to but spaced from the upper end of the latter, small projections are formed on the outer surface of the tube. These may be formed quickly, effectively and inexpensively by forcing a portion of the metal lengthwise of the tube by a cold-chisel and hammer or any other equivalent means. These projections do not extend out sufficiently to interfere with the free sliding of the tube 17 on the inner tube 16, there being sufficient free play between the two, but they do extend out sufficiently far to prevent the upward movement of the washer 31 past them and as this washer is secured by screws 33 or any other suitable means to the collar 30, above the expanded end of the tube 17, it will be noted that the washer can not move endwise in respect to the tube 17 and, when it comes into engagement with the stops or projections 32, will thereby limit the upward movement of the outer tube.

For securing the upper end of the dress-form to the standard, there is provided a threaded member 34 shown particularly in Fig. 7. This has an annular collar 35 above which is a squared portion 36 to receive the slot of the lowermost collar flange 11. The width of the squared portion being substantially equal to the width of the flange prevents any relative rotation of the member 34, and the dress-form. This squared portion need be only as thick as the lowermost flange 11 although if desired it may extend through the superposed series of them. A nut 37 on the upper end of the member 34 holds the parts together and also may be loosened or tightened to permit the expansion and contraction of the neck portion of the dress-form.

The threaded member 34 is free to rotate in respect to the upper end of the tube 17 and has a limited longitudinal movement in respect thereto. The extent of this longitudinal movement is at least equal to the extent of longitudinal expansion of the dress-form itself from its contracted position shown in Fig. 1. As a simple means for effecting this connection and permitting of the relative movement, I provide a tube 40, the lower end 41 of which may be expanded and held beneath the contracted upper end 42 of the tube 17. This prevents the separation of the two tubes, but permits their relative rotation. The member 34 has its flange 35 resting upon the upper end of the tube 40 and is held against longitudinal movement in respect to said tube. It may be free to rotate in respect thereto if desired. As shown, the member has an annular groove 43 spaced a short distance from the flange 35 and disposed within the upper end of the tube 40. Portions of the latter may be punched in to form projections 44 entering the groove 43 to permanently connect the parts and prevent accidental separation.

With the parts of the stand removed as shown in Fig. 4 and with the dress-form secured thereto, the collar portions of the dress-form will be secured to the member 34 while the supporting member 14 will encircle the tube 17 at a point somewhat above the collar 30. Between said collar and said supporting member, I provide a coil spring 46 as shown in Figs. 1 and 4.

With the dress-form reduced or contracted to the maximum, the supporting member 14 will rest upon the upper end of the spring 46 and the latter will not be under any material compression. At the same time the tube 40 will be telescoped within the tube 17 and the flange 35 will rest upon the upper end of said tube 17 as shown in Fig. 4. When it is desired to increase the length of the dress-form, the various fastening members connecting the sections may be loosened if they have a positive locking action and the user or operator may grasp the form by the hip or waist portion and press downwardly to extend the form. This will at the same time compress the spring at 46 as the lower part of the form moves downwardly, but the upper part of the form will be held against any downward movement. Thus, any desired amount of pressure may be brought to bear to extend or elongate the form. As soon as the pressure is released, the spring 46 will lift the entire form and the tube 40 will be raised in respect to the tube 17 by an amount substantially equal to the amount of lengthwise extension of the dress-form itself. As previously stated, the amount of compression of the spring 46 is substantially equal to the maximum telescoping movement of the tubes 40 and 17.

From the foregoing, it will be seen that my improved construction is formed of parts simple and easy to manufacture and assemble, and efficient in operation. By pressing on the foot pedal, the clamp may be released and the dress-form lifted to the desired elevation and will be automatically locked on the release of the foot-pressure. When it is desired to lower the form, it is merely necessary to apply pressure to the outer end of the foot pedal. To absorb the shock of the sudden dropping of the form, the tube 16 may have a cushioning spring 47 resting on the base, as shown particularly in Fig. 4. The parts cannot be accidentally pulled apart or the dress-form lifted too high, but the dress-form may be taken off the stand merely by removing the nut 37, or the tube 17 may be taken off by removing the screws 33.

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

1. A stand for dress-forms comprising a tubular standard, the exterior surface of the upper end thereof being beveled, a tubular member telescoping with said standard, a rod movable lengthwise through said standard, a pair of spring metal strips secured to said rod and extending transversely of the end thereof and having their terminal portions extending lengthwise of said member and terminating adjacent said beveled surface, and means for moving said rod and strips endwise to effect the locking or releasing of said member.

2. A stand for dress-forms comprising a tubular support beveled exteriorly at the upper end, a tube telescoping with said support, a rod movable lengthwise of said support, a U-shaped, flat metal strip having its intermediate portion secured at the upper end of said rod and having its terminal portions disposed adjacent to said beveled surface, and a dress-form supported at the upper and lower ends of said tube and rotatable in respect to the latter.

3. A stand for dress-forms comprising a tubular support beveled exteriorly at the upper end, a tube telescoping with said support, a rod movable lengthwise of said support, a U-shaped, flat metal strip having its intermediate portion secured at the upper end of said rod and having its terminal portions disposed adjacent to said beveled surface, and a dress-form supported at the upper and lower ends of said tube and rotatable in respect to the latter, the connections between said form and said tube also permitting of a limited relative longitudinal movement.

4. A dress-form stand comprising a tubular standard, a tube telescoping therewith, means for locking said tube against downward endwise movement, a sleeve slidably mounted within the upper end of said tube, a member rotatably mounted within said sleeve, and a dress-form secured to said member.

5. A dress-form stand comprising a tubular standard, a tube telescoping therewith, means for locking said tube against downward endwise movement, a sleeve slidably mounted within the upper end of said tube, a member rotatably mounted within said sleeve, and a dress-form having its upper end secured to said member and having its lower end rotatably and slidably mounted on the lower end of said tube.

6. A stand for dress-forms comprising a tubular member having a collar at its lower end, a member rotatably and slidably mounted within the upper end of said tube, a dress-form having its upper end rigidly secured to said member, and a coil spring resting on said collar and supporting the lower end of said dress form.

7. A stand for dress-forms comprising a tubular support having a projection adjacent to but spaced from its upper end, a tube slidable upon said standard and having

a collar at its lower end, an inwardly extending flange on said collar for engagement with said projection to limit the upward movement of said tube, a dress-form having its upper end secured to the upper end of said tube, and a coil spring resting on said collar for supporting the lower end of said dress-form.

8. A stand for dress-forms comprising a tubular support having a projection adjacent to but spaced from its upper end, a tube slidable upon said standard and having a collar at its lower end, and an inwardly extending flange on said collar for engagement with said projection to limit the upward movement of said tube.

Signed at Hoboken in the county of Hudson and State of New Jersey this 9th day of March A. D. 1918.

WALDEMAR KROLL.

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