No. 720,231. PATENTED FEB. 10, 1903.

C. DARGIE.

ADJUSTABLE FIGURE OR SHOW STAND.

APPLICATION FILED AUG. 18, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

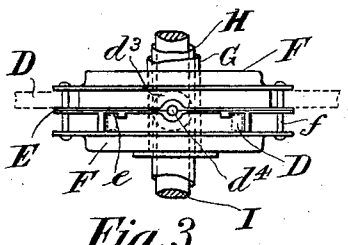
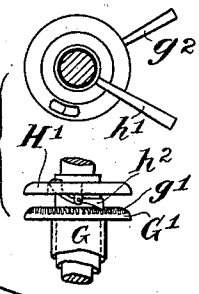


Fig. 3.



Figs. 7.

Fig. 8.

Fig. 9.

Fig 10.

Witnesses: Fig. 1.
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L. G. Boaz

Inventor:
Charles Dargie
By Richardson
his Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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ADJUSTABLE FIGURE OR SHOW STAND.

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NO MODEL. 2 SHEETS—SHEET 2.

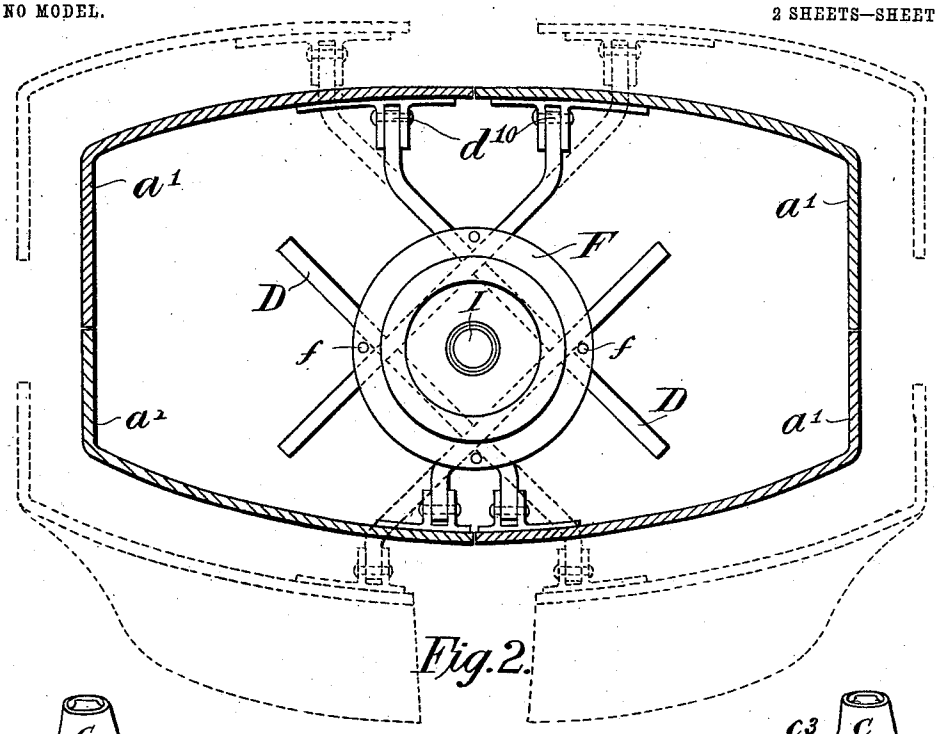


Fig.2.

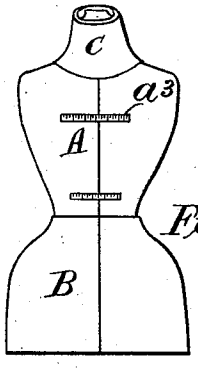


Fig.11.

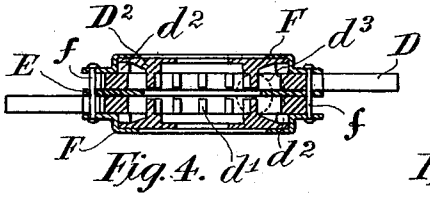


Fig.4.

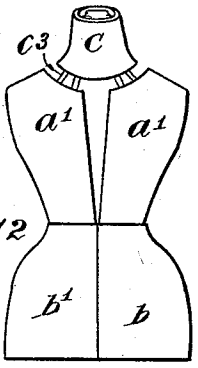


Fig.12

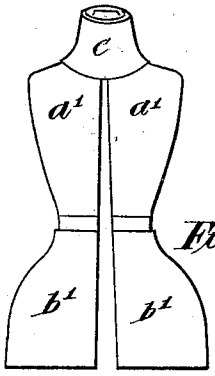


Fig.13.

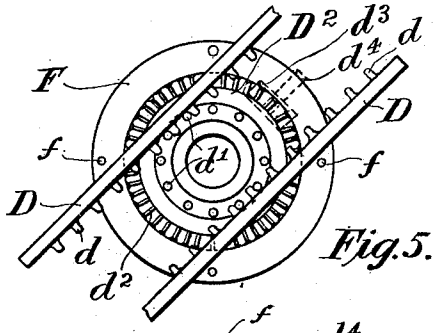


Fig.5.

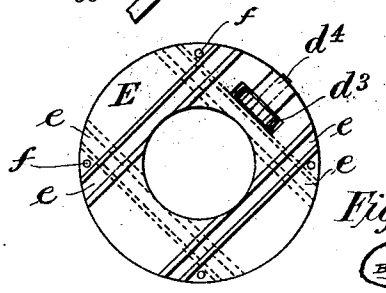


Fig.6

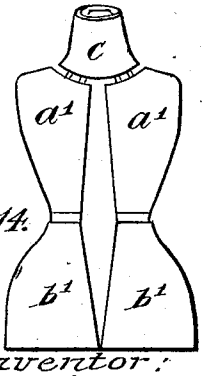


Fig.14.

Witnesses:
E.B. Bolton

Inventor:
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By Richards & Co
his Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES DARGIE, OF FITZROY, VICTORIA, AUSTRALIA.

ADJUSTABLE FIGURE OR SHOW-STAND.

SPECIFICATION forming part of Letters Patent No. 720,231, dated February 10, 1903.

Application filed August 18, 1902. Serial No. 120,077. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DARGIE, a subject of the King of Great Britain and Ireland, and a resident of Fitzroy, Victoria, Australia, have invented certain new and useful Improvements in Show-Stands for Dressmakers and the Like, of which the following is a specification.

This invention consists of an adjustable figure or show-stand for dressmakers, tailors, and others which is furnished with novel mechanical means for adjusting the size of the model at the chest, waist, and hips and for adjusting the height of the body, while the neck portion is so assembled that it automatically takes its proper position or slope with respect to the bust-piece as the latter is extended. The shell of the figure is formed of stiff cardboard, papier-mâché, leather, thin sheet metal, or other pliable material, in three main parts—viz., the neck-piece, the bust, and the lower part of body or hip portion—the bust and hip portions being each divided vertically into four sections, while the lower part of the bust-sections fit within or telescope at the waist with the upper part of the hip-sections. Each of said sections is carried by rack-bars controlled by gears, which, together with the rack-bars, are supported by circular gear-cases secured upon tubes which are carried telescopically on a vertical post which is adjustably supported in a stand or tripod piece. By the model being adjustable as to the chest, waist, hips, and height of body it may be set to represent, as nearly as possible, the body of the person whose dress is being made, so that the dress may be fitted thereon, or the figure can be adjusted to neatly fit the dress which is to be shown or exhibited.

The invention will now be described, aided by a reference to the accompanying sheets of drawings, in which—

Figure 1 is a vertical central section of the model or stand; and Fig. 2, a sectional plan of it on line *a a*, Fig. 1, and also showing by dotted lines the bust-sections when extended; Fig. 3, a side view of the gear-case for the rack-bars; and Figs. 4, 5, and 6, details of same, showing the toothed operating-gear with the rack-bars in position. Fig. 7 is a plan and side view of the hand-gear for use when extending or closing the bust-sections. Fig. 8 is a detail section at *b b*, Fig. 1, while Figs. 9 to 14 are outline views illustrating various forms or extensions of the figure or model, Fig. 9 showing a side view with the sections closed together, while Fig. 10 shows the bust and hip sections extended parallel apart and with the neck-piece extended upward. Fig. 11 shows a front view with the sections closed together, also it shows that a scale or measure a^3 may be attached to the bust to indicate the width of opening between the sections. Fig. 12 shows the model closed together up to the waist and then gradually opened apart to the neck-piece, which is also extended. Fig. 13 shows the model slightly opened at top of bust-section and then gradually widening out to its lower part and with the body lengthened at the waist, and Fig. 14 shows the model opened wider at the waist than at the neck and with the bottom part of the hip-sections close together.

The bust portion A of the figure is made up in four sections a', the lower ends of which pass into or telescope with the upper part of the four sections b' of the hip portion B, while the neck-piece C is made in one piece, with its lower edge designed to fit neatly upon the upper edges of the bust-sections a' when they are closed together, the shell forming said neck, bust, and hip portions being made of papier-mâché or other material, as hereinbefore explained.

The neck-piece C is carried at its top end by a collar c', of wood or other material, affixed on a short tube c^2, which fits freely upon another longer tube, which carries the upper bust-extension gear-case, as will be hereinafter explained.

c^3 represents inclined flexible metal slide-straps secured one to each upper part of the bust-section a' and working in guide-pieces c^4, secured at the lower edge of the neck-piece, as shown in Fig. 1, and it is said inclined straps which cause the neck-piece to slide upward as the bust-sections are extended at the neck.

Each section a' of the bust-piece is supported by two sliding rack-bars D, one being secured to the inner surface of the shell at its upper part and the other to the inner surface of shell at its lower part by the joint-pieces d^{10},

as shown in Fig. 2. Again, each section b' of the hip portion is supported by one rack-bar D, carried in the lowermost gear-case in the same manner as described for the bust-sections, and, further, the meeting edges of the bust and hip sections are held together by a sliding clip b^2, as shown in Figs. 1 and 8.

The rack-bars D have teeth d, which gear with trundles or pins d', formed on small wheels D^2, the teeth of which, d^2, gear with a toothed pinion d^3, which is arranged between two of said wheels D^2, the pinion being carried on a spindle d^4, supported in bearings on a central carrier-flange E, which has on both its sides two guides or races e to receive the rack-bars D, the two guides on the top lying at right angles to the two on the under side, as shown in Fig. 6. The wheels D^2 are supported and rotate in annular recesses formed in the top and bottom circular casing-cheeks F, which are secured one on either side of the rack-bar carrier-plate E, the three pieces being secured together by rivets f. The parts marked E and F F practically form a casing or box in which to support the two small wheels D^2, toothed pinion d^3, and the four rack-bars D.

The gear-casing E F, carrying the four rack-bars D at the upper part of the bust-sections, has its lower wheel D^2 secured to a flange g, formed on lower end of a tube G, which passes upward through neck-piece tube c^2 and has secured on its top end, above the neck-piece, a flange-wheel G', having ratchet-teeth g' and a handle g^2. The gear-casing E F, carrying the four rack-bars D at lower part of the bust-sections, has its upper wheel D^2 secured to a flange h at lower end of a tube H, which passes upward through tube G to above its upper end, and it has secured on it thereat a flange-wheel H', furnished with a handle h' and with a pivoted catch h^2, which is designed to engage the ratchet or lock teeth g' on the flange-wheel G'. Said tube H is supported on a vertical post I, having a knob i on its upper end, while its lower end is threaded at i' to fit a nut i^2, secured upon the top end of a tubular pillar J, while i^3 is a collar fixed on post I and lying between the bottom of intermediate gear-casing E F and top of nut i^2. The box J fits upon a vertical post I', whose lower part is carried in the socket of a tripod or other suitable stand The lower end of box J sits on the top surface of the lowermost of the gear-cases E F, the rack-bars D of which carry the four hip-sections b'. The under side toothed wheel D^2 of this lower gear-case is secured to the upper flange k of a tube K, which is supported on post I', while the lower end of tube K is secured to a flange-wheel L, furnished with handle l and pivoted pawl-catch l', which is designed to engage the teeth on circular ratchet-piece L', secured to the post I'.

In order to extend or enlarge the figure or model at the bust, pawl h^2 is released from the teeth of the flange-wheel G'. Then by rotating the latter in the proper direction motion is imparted through medium of tube G g to the lower wheel D^2 in the uppermost gear-case E F, and by aid of the pins or trundles on said wheel the two lower rack-bars D gearing therewith are carried outward in opposite directions. At the same time the said lower toothed wheel D^2 rotates the pinion d^3, which communicates motion from the lower to the upper toothed wheel and so causes it to revolve and carry the two upper rack-bars D, and hence the four sections a' of the bust move together, and, vice versa, the reverse motion given to the flange-wheel G' will bring the upper part of the bust-sections together. To enlarge the figure at the waist, the flange-wheel H' has to be rotated, while to enlarge it at the hip the flange-wheel L must be turned in the proper direction, when the rack-bars by being operated by gears identical to that already described for the bust-section will carry the waist or the hip sections apart. To extend or lengthen the figure at the waist, the central post I is rotated by its knob i, so as to cause, by aid of the screwed portion i', the lower part of the bust-sections to slide upward from within the waist part of the hip-sections, as shown in Figs. 13 and 14.

I claim—

1. In an adjustable figure for the purpose specified the combination of the neck-piece C, bust A, composed of four sections a' and the hip portion B composed of four sections b' all assembled and operated substantially as described.

2. In an adjustable figure for the purpose specified a neck-piece C carried on a sliding tube c^2 and having guides c^4, combined with the bust-sections a' furnished with sliding straps c^3, the lower edge of neck-piece fitting the upper edges of the bust-sections substantially as described.

3. In an adjustable figure for the purpose specified the combination of the bust-sections a' with the upper part of the hip-sections b' with which they telescope, and clips b^2 whereby the said parts or sections a' and b' are held together at their edges substantially as described.

4. In an adjustable figure for the purpose specified a gear-case consisting of the combination of the cheeks F, supporting wheels as D^2, central piece as E supporting pinion d^3 and the four racks as D all assembled and arranged substantially as described and shown.

5. In an adjustable figure for the purpose specified the combination of a neck-piece C the bust and hip portions A, B, the rack-bars D, connected with the bust and hip sections, a central support and gear-cases assembled on said support for operating the racks, substantially as described.

6. In an adjustable figure for the purpose described the combination of the upper and lower bust gear-cases, and their contained

gears and racks, with the inner and outer tubes carrying said gear-cases, the post within said tubes, the wheels carried at the upper ends of said tubes and the catch-pawl carried by one wheel engaging ratchet-teeth on the other, substantially as described.

7. In an adjustable figure for the purpose described, a central post, a tube encircling the same, having a pawl-and-ratchet connection therewith, a hip portion gear-case carried by said tube, and coöperating gears and racks carried by said gear-case, substantially as described.

8. In an adjustable figure of the class described, the combination with the tubular post J and a hip portion encircling said post, of a post I in line with and having a threaded connection with said post J and carrying the bust portion, substantially as described.

9. An adjustable figure for the purpose specified consisting of the combination of the neck-piece, and bust and hip sections, the gear-cases, the rack-bars supported by the latter and carrying the bust and hip sections, and the central tubes and adjustable central post all substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CHARLES DARGIE.

Witnesses:
BEDLINGTON BODYCOMB,
W. J. I. THOMPSON.