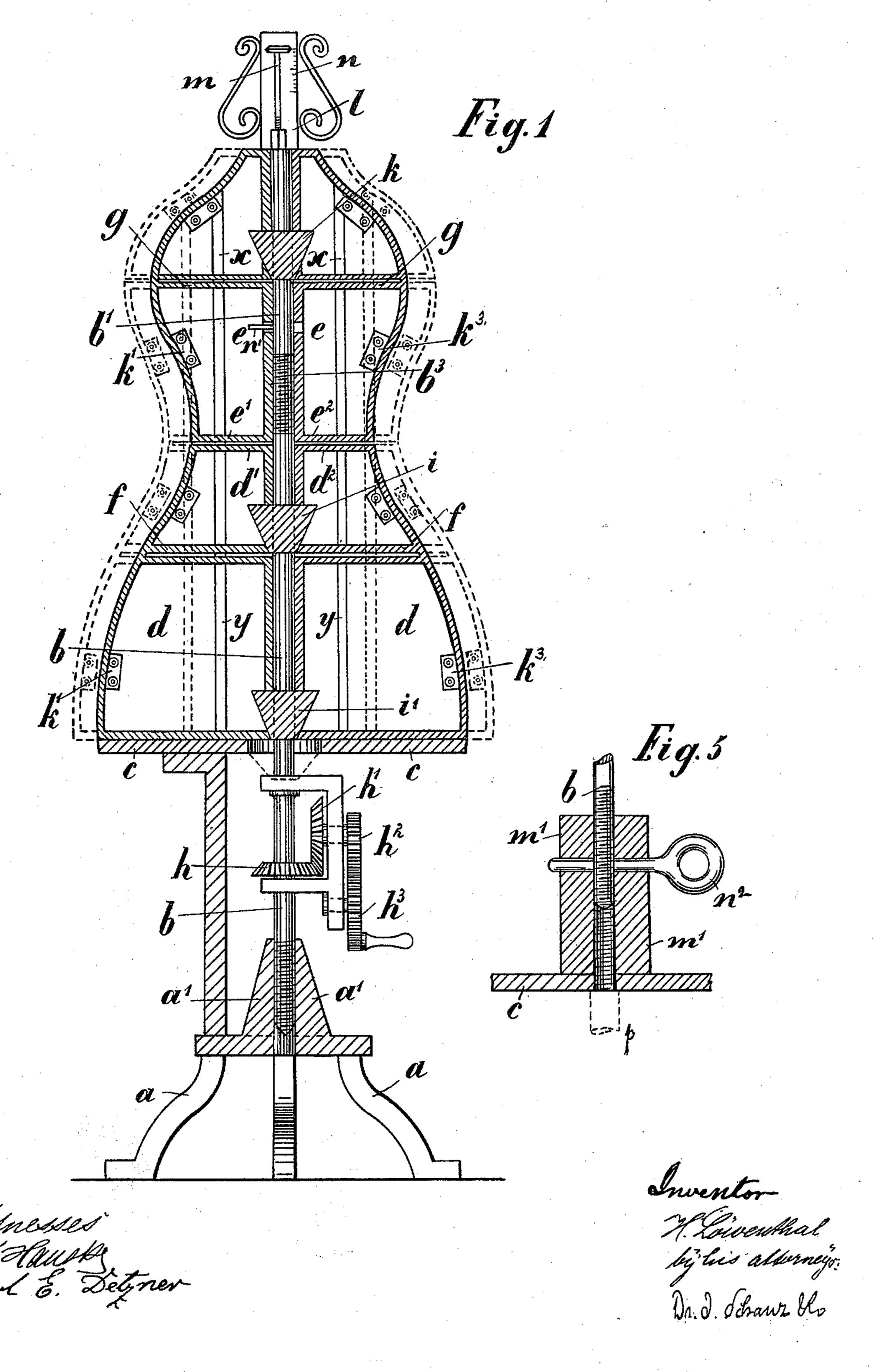
# H. LÖWENTHAL. ADJUSTABLE CLOTHES BUST.

No. 584,788.

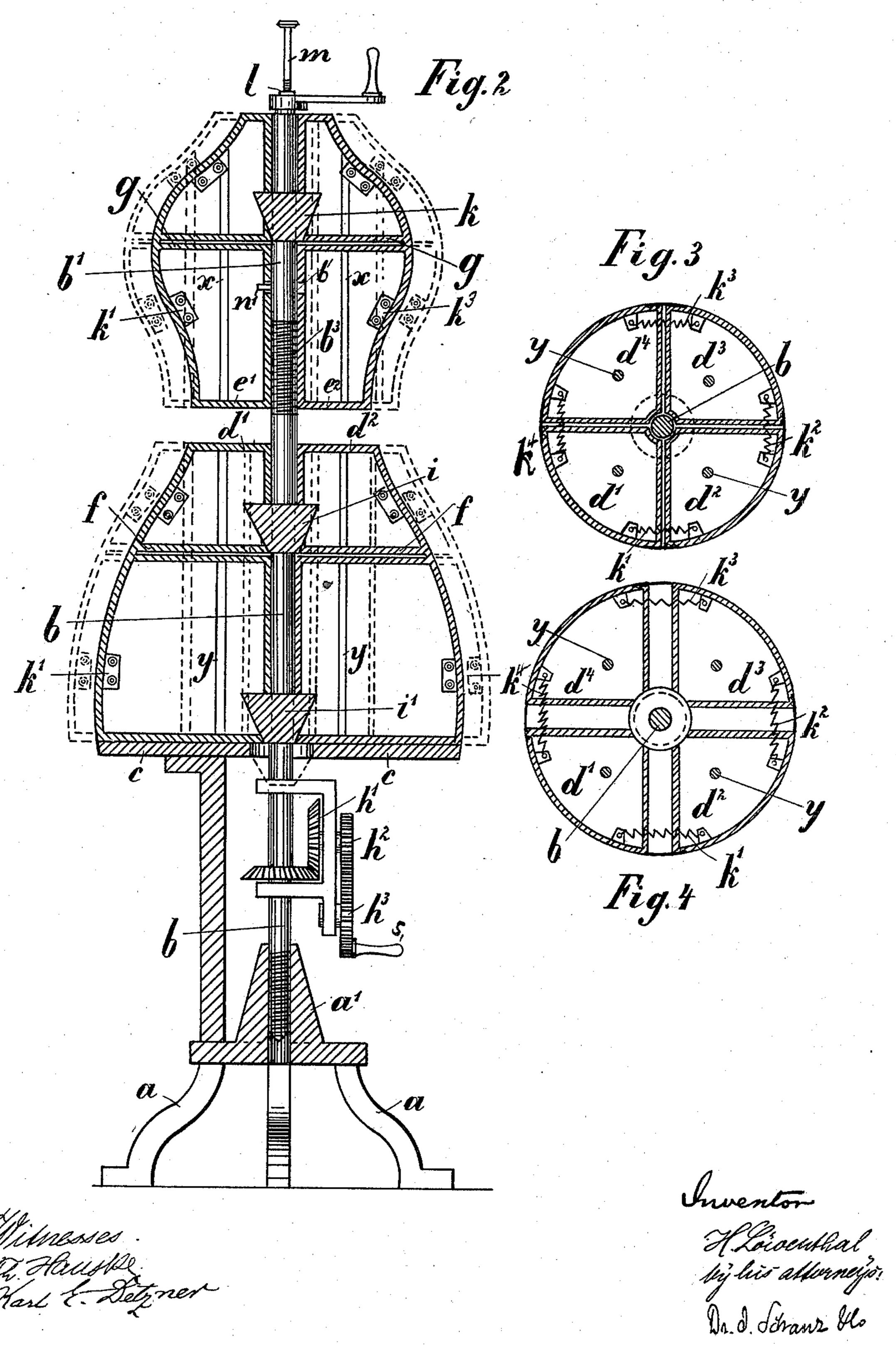
Patented June 22, 1897.



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## United States Patent Office.

HEINRICH LÖWENTHAL, OF BERLIN, GERMANY.

### ADJUSTABLE CLOTHES-BUST.

SPECIFICATION forming part of Letters Patent No. 584,788, dated June 22, 1897.

Application filed October 26, 1895. Serial No. 567,019. (No model.)

To all whom it may concern:

Be it known that I, Heinrich Löwenthal, physician, of 2<sup>b</sup> Chausseestrasse, Berlin, Kingdom of Prussia, German Empire, have invented new and useful Improvements in Adjustable Busts for Displaying Clothes, of which the following is a specification.

The clothes-bust according to this invention mainly consists of the bust-body proper, 10 of a vertical supporting-bar in two parts, which can be screwed up and down in a pedestal, and of a base attached to the supporting-bar, upon which the bust rests, which consists of an upper and a lower half. For the 15 purpose of adjustment of the bust-half in horizontal direction each half is divided into four parts or quadrants, which are attached to each other by means of spiral springs fastened at each end. Each of these quadrants 20 has a piece of the fourth part of a circle cut out at the center, so that four cuts lying around the supporting-bar form together a round hole. Upon the supporting-bar, which | can be screwed up and down by means of a 25 special crank-handle and cogged-wheel mech-

special crank-handle and cogged-wheel mechanism, there are fixed immediately above the circular holes above mentioned conical blocks, which when the supporting-bar is screwed downward enter the holes, thereby driving the quadrants of the busts asunder

in a uniform manner. For the purpose of adjustment in vertical direction the upper portion of the supporting-bar is arranged so as to be capable of being turned like a screw in a tapped tube at the upper end of the lower

a tapped tube at the upper end of the lower part of the supporting-bar, so that when the upper portion of the supporting-bar is screwed upward the upper bust can move upward independent from the lower one. This screw-

40 ing up is done by means of an ordinary crank-handle which is attached to a square bolt in the top end of the supporting-bar and is turned. In order to see the correct width in the waist, in horizontally adjusting the two busts a scale is fixed at the upper bust, upon

busts a scale is fixed at the upper bust, upon which a hand moves downward as the whole supporting-bar is screwed down.

This clothes-bust is represented in the annexed drawings, in which—

Figure 1 is a vertical section through the whole bust with the bust-support. It shows at the same time in dotted lines the position

of the upper and lower quadrants and respectively the shape of the whole bust after the conical blocks (represented in full lines) 55 of the supporting-bar have entered into the quadrant-openings. Fig. 2 is a vertical section after the widening or extending of the busts has taken place and after the upper portion of the supporting-bar has been 60 screwed out of the tube of the lower portion. Fig. 3 is a cross-section through the upper portion of the lower bust-half according to Fig. 1. Fig. 4 is a similar cross-section after the extension of the bust, dotted position, 65 Fig. 1. Fig. 5 is a variation in the arrangement for widening the clothes-bust.

a is a pedestal of any kind extending upward into a solid top a', being vertically bored through and provided with a thread for re- 70 ceiving the lower portion of the supportingspindle. With this pedestal is connected in some suitable manner the base-plate c, directly supporting the lower bust-half d. Each of the hollow bust-halves d and e is provided 75 with bottoms below and covers on top and divided by a vertical cross-cut in four portions. Out of the four upper quadrants d' $d^2 d^3 d^4$  a fourth part of a circle has been cut out, as mentioned above, so that the support-80 ing-bars may pass through. Besides these there are intermediate parts f and g, respectively, of the same shape, at a certain distance from the covers and bottoms of each bust, which intermediate parts are connected 85 with the upper and lower bottoms and covers by means of props or connecting-bars x and y.

Into the circular openings formed by the parts cut out of the quadrants of f and g enter the lower parts of cones k i i', which are 90 closed at top and bottom and surround the supporting-spindle. Now if the arrangement of wheels hh'h2h3, attached to the extension of the lower pedestal, is put in motion by means of a crank-handle the supporting- 95 spindle turns round itself and goes downward into the pedestal. The cones k i i', together with the supporting-spindle portions b and b', move downward into the circular cuts of the horizontal intermediate walls of 100 the quadrants and uniformly drive the latter apart. The quadrants are held together by means of the springs k'  $k^2$   $k^3$   $k^4$ , attached at their outer edges, Figs. 3 and 4. The latter expand upon the extension and are held apart through the cones being driven in. Upon the cones receding upward the springs in tension automatically draw the quadrants

5 together again.

For the purpose of raising the upper bust, whether it is extended or not, there is provided a square bolt l, attached to the upper end of the supporting-spindle, and upon the 10 same being turned by means of an ordinary crank-handle the upper screwed portion of the supporting-spindle is raised out of the tapped tube  $b^3$  at the upper part of the lower portion of the supporting-spindle by means 15 of a pin or ring n', secured to the spindle portion b'. For the purpose of fixing the width of the waist upon the two busts being extended a spike with a hand m is inserted in a hole in the square bolt mentioned, and there is ar-20 ranged in any suitable manner a scale n on the upper bust. The two busts are fixed, the upper e resting on the lower d and the lower d resting upon the base-plate c. Now if by screwing down the supporting-spindle the 25 two busts are expanded and the waist therefore becomes wider, then the hand m goes downward along the scale and shows the width of the waist at any given moment.

o position shown in dotted lines in Fig. 1 and in the position illustrated in Fig. 2, the crank s must be turned back as long as the bust has gained its first shape and form. Then the board, with the scale n and the spindle m, must be removed and a crank must be put upon the square iron l. When the bust has been drawn asunder, as represented, it can be yet widened at need by putting some blocks in the space between the upper and lower portion, and then removing the upper crank and turning the lower one s, that the spindle

b b' moves downward.

By the variation represented in Fig. 5 it is rendered possible to fix the bust on a table without the aid of a pedestal and dispense

with the cog-wheel mechanism, the supporting-spindle b, which is to be screwed into a solid block of wood m', which is fastened on the base c of the bust, being screwed downward by means of the crank attached to 50 square bolt l, at the same time driving the four quadrants of the bust asunder. In this manipulation the pin  $n^2$  must naturally be removed out of the position shown in Fig. 5 as for enabling the whole supporting-bar with 55 all cones kii' of turning, while this pin must remain in this position when the upper portion of the bust shall be screwed upward alone by means of the cone k. If it is desired to put such bust on the floor in order to try 60 on clothes, a prop p, Fig. 5, is screwed into block m' from below.

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

In an adjustable clothes-bust the combination of the bust being horizontally divided into an upper and a lower half and also being divided into four quadrants held together by means of springs and resting upon a base of 7° a suitable pedestal, with a vertical supporting-spindle consisting of two portions being able of being screwed up and downward by means of a wheelwork at the lower portion and a handle at the top and provided with 75 three cones in certain distances apart one above the other and engaging with circular openings formed by the parts cut out of the quadrants and with a pin or ring at the upper portion and with a scale on the upper bust 80 and a pointer on the supporting-spindle; as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing

witnesses.

#### HEINRICH LÖWENTHAL.

Witnesses:

A. STRAUVEN, MASCHIRNS.