

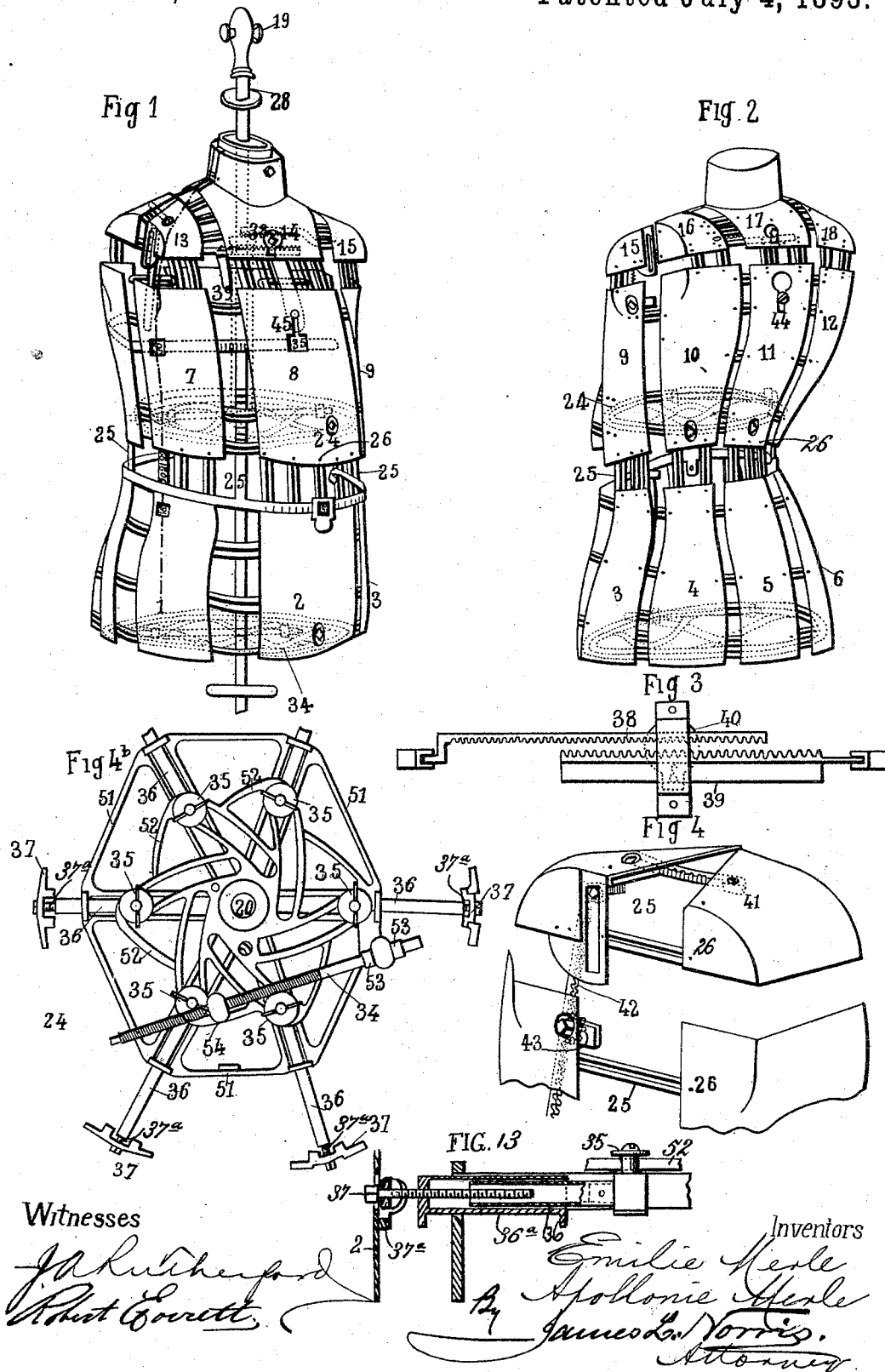
(No Model.)

E. & A. MERLE.
BUST FORM.

2 Sheets—Sheet 1.

No. 500,926.

Patented July 4, 1893.



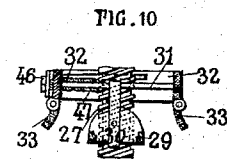
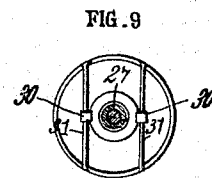
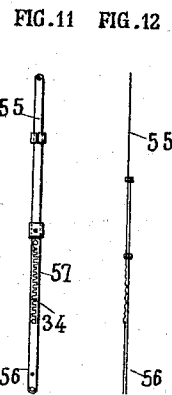
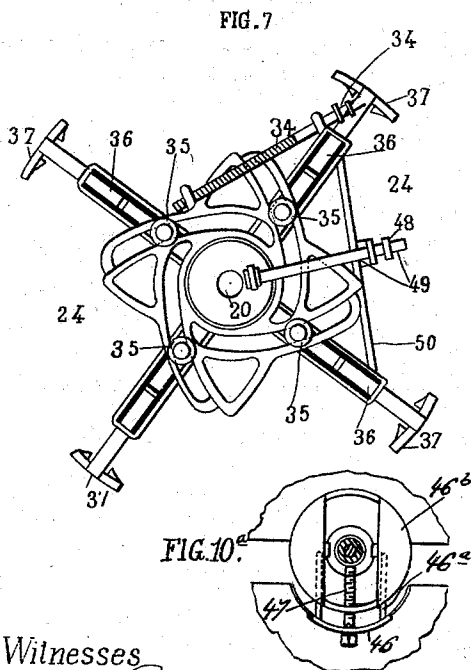
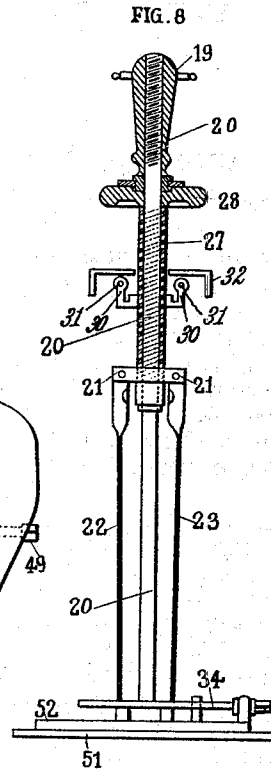
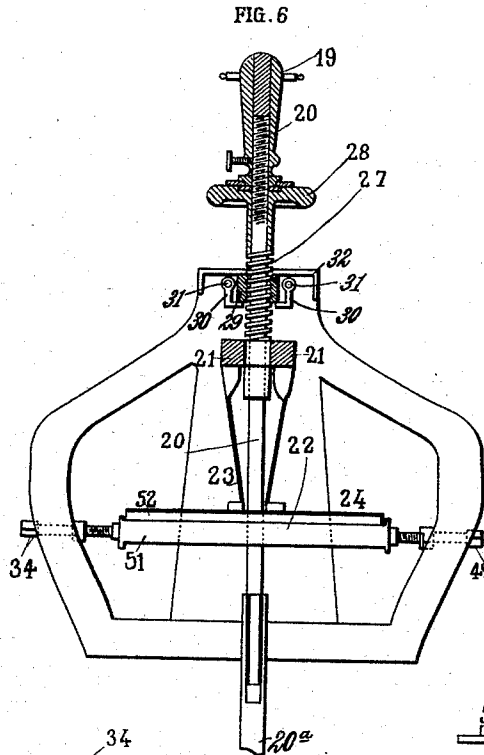
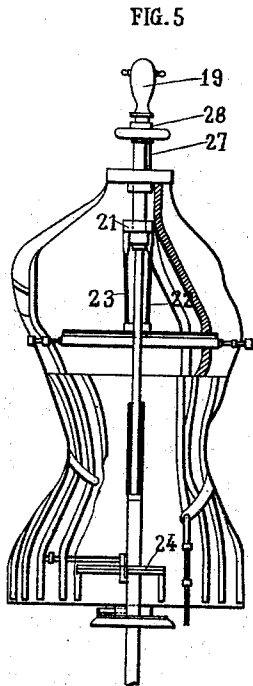
(No Model.)

E. & A. MERLE.
BUST FORM.

2 Sheets—Sheet 2.

No. 500,926.

Patented July 4, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

EMILIE MERLE AND APOLLONIE MERLE, OF PARIS, FRANCE.

BUST-FORM.

SPECIFICATION forming part of Letters Patent No. 500,926, dated July 4, 1893.

Application filed January 20, 1892. Serial No. 413,678. (No model.) Patented in France May 9, 1890, No. 205,571.

To all whom it may concern:

Be it known that we, EMILIE MERLE and APOLLONIE MERLE, citizens of France, residing at Paris, in the Department of the Seine, France, have invented a new and useful Improvement in Busts for Tailors and Dressmakers, (for which we have obtained Letters Patent in France, dated May 9, 1890, No. 205,571,) of which the following is a specification.

This invention relates to the construction of an improved articulated dummy or dressstand for the use of tailors and dressmakers, the said dummy or stand being so contrived as to readily lend and adapt itself to all the forms of the body. With a single dummy constructed according to this invention it is possible to make up clothes for men or women of all sizes according as the dummy is constructed for the male or female form.

The invention consists in the novel construction, combination and arrangement of parts hereinafter described and claimed.

The various sections composing the structure are connected together by slides, in both directions, so as to permit of their being separated or being brought nearer to each other by screws or racks as will be hereinafter explained.

In order that the invention may be readily understood we will proceed to describe the same with reference to the annexed drawings which show several views of a man's dummy and also modifications, in detail, which are necessary in order to adapt it to a woman's dummy.

Figure 1 is a front view of a man's dummy expanded, and Fig. 2 is a back view of the same. Fig. 3 shows an arrangement of racks for effecting the displacement of two neighboring sections. Fig. 4 shows a detail of the mechanism for raising and broadening the shoulders. Fig. 4^b shows a plan of the means or arrangement for enlarging or expanding a portion of the dummy either at the waist, or at the bosom, or chest, or elsewhere. Fig. 5 shows the arrangement adapted to a woman's dummy and Fig. 6 shows the upper part thereof on a larger scale. Fig. 7 is a plan of the enlarging expanding means or arrangement when four vertical sections or pieces are

employed. Fig. 8 is a detail view showing the means for lengthening the dummy so as to increase the height and permitting the entire upper portion to be separated from the hips, or only the shoulders to be separated from the remaining portion of the dummy. Figs. 9, 10 and 10^a are detail views of the collar and collar expanding devices. Figs. 11 and 12 show the double blades controlled by a spring, which may be substituted for the rigid sections or pieces of the dummy in the vicinity of the waist. Fig. 13, is an enlarged detail, in section, of auxiliary means for operating the sections, severally, at will.

As shown by Fig. 1 the man's dummy or stand is by preference, composed of three horizontal series of sections, the hips, the chest, and the shoulders, arranged one above the other, and each series is divided into six vertical sections or pieces, three for the front and three for the back, but this division especially as regards the vertical sections or pieces, is quite arbitrary and may be modified as required for, as will be seen farther on, four vertical sections or pieces only are employed in the woman's dummy or stand.

The two lengthenings of the height are obtained in the following manner, reference being had to Fig. 8, which indicates, to a larger scale, the means employed for effecting the vertical movements: The sections or pieces, 1, 2, 3, 4, 5, 6, of the lower portion (Figs. 1 and 2) do not receive any vertical movement upon the supporting column or upright, but the whole of the remaining sections can be raised when the screw handle 19 is turned. The rotation of said screw handle causes the screw-threaded rod 20, whose lower part slides in the supporting column or upright 20^a to rise and carry with it, through the intervention of the collar 21 and the rods 22 and 23, the rose-shaped piece 24, to which is attached the whole of the middle sections or pieces 7, 8, 9, 10, 11, 12, as will be hereinafter explained. The portions 7, 8, 9, &c., are thus separated from the portions 1, 2, 3, &c., and the bust is lengthened in the vicinity of the waist. The sliding of the sections is effected upon guides each of which is formed by a slotted spring blade or plate fixed to the lower parts and between each of which passes a small stud 26,

carried by the upper movable parts 9, 10, 11 as is shown more particularly in Fig. 1. The rod 20 in its ascent carries with it a tube or sleeve 27 which is screw threaded on its exterior and is mounted loosely on the said rod 20. This tube or sleeve terminates in a hand-wheel 28 the revolution of which allows of the lengthening of the bust, not in the region of the waist but in that of the chest. By allowing the screw handle 19 to remain fixed, and by turning the hand wheel 28, a nut 29 (Fig. 10) is caused to move along the screw threaded tube or sleeve 27, and thus through the intermediary of the claws 30 and rods 31, shift the collar 32 which is secured by the hinged claws 33 to the sections 14 and 17 of the bust (see Figs. 1 and 2) while the sections 7, 8, 9, &c., connected to the rod 20, receive no movement in a vertical direction. Thus, only the uppermost sections 13, 14, 15, &c., partake of a rising movement during this operation.

The widening or broadening of the dummy or stand either at the level of the hips, or at that of the waist (or of the bosom for women) is effected by means of multiple cams (Figs. 1 and 2) one of which is shown in plan in Fig. 4^b. This multiple cam consists of two plates capable of turning one upon the other; the lower one of which constitutes a frame 51 and is connected to the sections of the dummy or stand, and the upper one 52 which constitutes the rose or multiple cam proper is free to turn upon said frame. When the screw 34 which is supported by two abutments carried by the fixed frame 51 is turned, by means of a key, said screw causes a nut 54 carried by the multiple cam plate 52 to advance or retire, thereby causing the said multiple cam plate to turn about its center. This cam plate is formed with eccentric slots in which slide cross-heads 35 capable of approaching to or retiring from the center in accordance with the direction of rotation of the cam plate. These cross heads are connected by pins to connecting rods 36 which are riveted at 37 to the six sections or elements of the horizontal portion of the dummy or stand. Thus by the rotation of the multiple cams, one of which is attached to the sections 1, to 6, and the other of which is attached to the sections 7 to 12, the widening of the dummy or stand at the hips, the waist and the chest or bust is effected.

The sections 1, 2, 3, &c., and 7, 8, 9, &c., may be widened or expanded, and contracted, independently of each other, in the following manner: Each of the connecting rods 36 is tubular and is interiorly screw threaded. Extending through the parts 37 which connect these rods to the different sections are inwardly extending screws 37^a which engage the tubular screw threaded ends of the rods 36, the outer ends of which screws are formed with lugs for the engagement of an operating key. When a given screw is turned by the key in the proper direction, the corresponding screw 37^a enters the rod 36, carrying with it the section which it controls independently

of the other sections, and when the said key is turned in a reverse direction its section is moved outwardly independent of the others. When, during the widening or expanding operation, it is desired to leave one of the sections unaffected say, for instance a back section, as illustrated in the drawings, so that the back will protrude less than the stomach, the connecting rod 36, corresponding to such back-section, is permitted to slide freely in a tube 36^a, as shown in detail in Fig. 13, in which case the screw 37, has no engagement with said rod 36, but engages a screw threaded orifice in the tube 36^a. It will thus be seen that the connecting rod will slide in the tube 36^a without affecting the position of the corresponding section. Likewise, by allowing a certain amount of play in the articulations, more or less pronounced curves may be given to the various slots in which the crossheads 35 slide so as to cause some of the sections to project less than others by a single rotation of the cam plate. In addition to these movements of elongation and expansion this construction of dummy or stand enables local deformations to be obtained by means of racks and pinions as shown at Figs. 1 and 4. One of the racks 38 is fixed to one section and the other 39 to a neighboring section so that when a pinion 40 gearing with both these racks is caused to revolve by means of a key, the neighboring sections are separated from each other to any required extent. By reason of a slight amount of friction existing between the slides any position given to the racks can be maintained. In a similar manner, by means of the curved rack 41 (Fig. 4), the bust may be made broader at the shoulder, and by revolving the pinion 43 gearing with the rack 42, the shoulder may be raised.

When it is desired that the bust should incline backward, the screw 44 at the back (Fig. 2) is tightened up, thereby preventing the section 11 from sliding vertically. Then by giving a rising movement, by actuating the hand wheel 28, (the front section only being able to move) the bust is inclined backward. If, on the other hand, it is desired to cause the bust to incline forward, the screw 44 is loosened and the chest screw 45 is tightened up. To cause the back to advance or retire a screw 43 (Fig. 7) may be employed. This screw which abuts against the central rod is revolved by means of a key, and causes a nut 49 to travel to or fro, which latter, through the intervention of the connecting rod 50, causes the whole of the rose or multiple cam plate and consequently the sections of the bust which are attached to it, to advance or retire.

The piece 46 (Fig. 10) which carries bars 46^a capable of sliding in the collar 46^b in either direction by the operation of the screw 47, enables one of the diameters of the neck to be altered so that circular collars of various diameters can be attached thereto.

In Figs. 1 and 2, graduated bands are shown

situated on the inside of the sections, by means of which the elongation of the dummy can be measured and stopped at the required place.

5 Figs. 5 and 6 are intended to represent a bust for a woman to which the arrangements just before mentioned are also applicable.

The only modification which might further-
more be applied to the man's dummy is ob-
tained by the substitution, in the region of
10 the waist, of the double flexible spring blades 55 and 56 (Figs. 11 and 12) which, by the ac-
tion of the spring 57, always tend to lie one
over the other. The width and curvature at
15 the waist are given by means of a tape (Fig. 5) which can be more or less drawn down-
ward either in front or at back, and thus be
more or less tightened.

We claim—

20 1. In a dummy or dress-stand for tailors or dress-makers, the combination with a plu-
rality or series of sections, of a cam-plate pro-
vided with slots diverging from its center,
rods attached to said sections, cross-heads car-
ried by said rods and engaging the diverging
25 slots of the cam-plate, means connected with
said cam-plate for operating the same to move
the sections composing a series laterally rela-
tively to each other, and means connected
30 with each section composing a series for si-
multaneously vertically adjusting all these sec-
tions in a series relatively to the other series
of sections, substantially as described.

35 2. In a dummy or dress stand for tailors or dress-makers, the combination with a series
of movable sections and a frame, as 51, of a
series of rods connected with said frame, and

screws carried by said sections and engaging
said rods, whereby said sections may be in-
dependently adjusted relatively to each other, 40
substantially as described.

3. In a dummy or dress stand for tailors or
dress makers, the combination with a series
of movable sections and a frame, as 51, of a
series of rods connected with said frame, 45
screws carried by said sections and engaging
said rods, whereby said sections may be in-
dependently adjusted relatively to each other,
and means for simultaneously adjusting said
sections relatively to each other substantially 50
as described.

4. In a dummy or dress-stand for tailors or
dress-makers, the combination with a series
of movable sections and a frame, as 51, of a
cam-plate provided with slots diverging from 55
its center, rods connected with the frame 51,
and provided with cross-heads engaging the
diverging slots of the cam-plate, screws car-
ried by the movable sections and engaging
said rods, whereby said sections may be in- 60
dependently adjusted relatively to each other,
and means connected with said cam-plate for
operating the same, to move the sections si-
multaneously relatively to each other, sub-
stantially as described. 65

In testimony whereof we have signed this
specification in the presence of two subscrib-
ing witnesses.

EMILIE MERLE.
APOLLONIE MERLE.

Witnesses:

J. O. JOUY,
V. FOURS.