

V. A. PHOEBUS.

MACHINE OR DEVICE TO BE USED IN MEASURING AND CUTTING SKIRTS.

APPLICATION FILED MAR. 27, 1907.

2 SHEETS—SHEET 2.

Fig. 2.

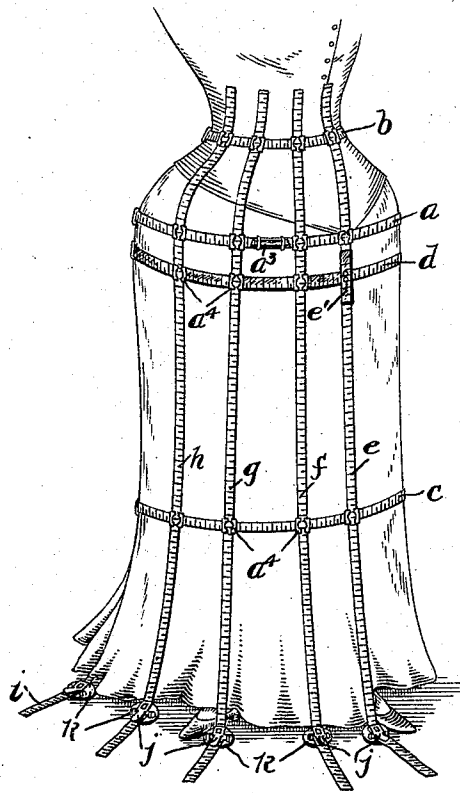


Fig. 3.

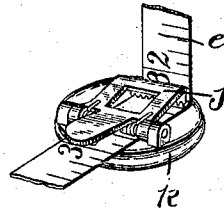


Fig. 4.

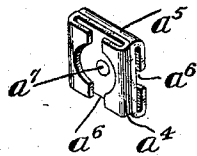


Fig. 6.

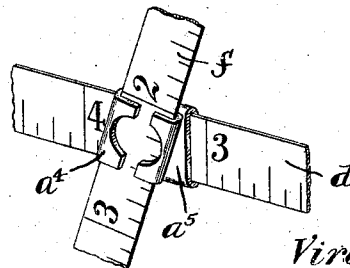
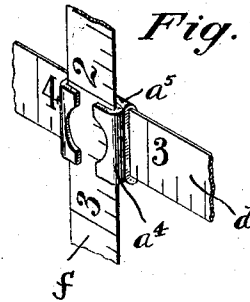


Fig. 5.



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UNITED STATES PATENT OFFICE.

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MACHINE OR DEVICE TO BE USED IN MEASURING AND CUTTING SKIRTS.

No. 873,266.

Specification of Letters Patent.

Patented Dec. 10, 1907.

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To all whom it may concern:

Be it known that I, VIRGINIA A. PHOEBUS, a citizen of the United States, and a resident of the borough of Manhattan, in the city, county, and State of New York, have invented a new and useful Improvement in a Machine or Device to Be Used in Measuring and Cutting Skirts, of which the following is a specification.

This invention relates to an apparatus whereby measurements may be taken conveniently for skirts and like garments, and my invention consists in a system of steel and textile tapes provided with scales which, when suitably arranged about the figure, afford means for registering all the desirable measurements to enable the skirtmaker to mark and cut the material correctly, or to produce a skirt pattern.

In the drawing accompanying my application, Figure 1, is a plan view of my apparatus showing the steel and textile tapes as spread flat. Fig. 2 is a partial view of a human figure with the various tapes adjusted thereon. Fig. 3 is a perspective view of a weight having a spring clip to hold the lower end of the tape in position. Fig. 4 is a perspective view of a double pivotal slide or clasp. Fig. 5 is a similar view thereof showing it containing crossed tapes. Fig. 6 is a corresponding view showing the pivotal action of said double slide or clasp, and Fig. 7 illustrates the opposite ends of a metal tape in enlarged form showing the stud at one end and the holes at the opposite end to engage with said stud.

In said Fig. 2 the letter *a* indicates a metal band which is intended to be fastened about the figure over the fullest part of the hips, said band being provided with a stud *a'* at one end and a series of holes, *a''* at the opposite end adapted to fit over said stud to fasten the band when drawn sufficiently tautly about the figure.

It will be noticed that metal band *a* in Fig. 2 is provided with a spirit level as *a'''* which furnishes indication as to the true horizontal position of said band. This function is highly essential, as from said band *a* both vertical and circumferential measurements may be correctly obtained. A flexible tape as *e* crosses band *a*. The tape and band are connected by means of one of the double pivotal slides indicated in Fig. 4, a description of which is now proper:

Said slides consist of two pieces of flat metal as *a⁴* and *a⁵*, they being placed back to back and having their ends folded over upon their respective outer surfaces to afford the flat slide ways *a⁶*. Said slide ways are pivotally connected, as by a pivot *a⁷*, whereby each may turn independently, according to the particular angles assumed by the tapes and bands entered therein in a fixed position.

Where the metal band *a* and flexible tape *e* intersect, they being passed through their respective slide ways, are held in a fixed position by the said slide-ways. At this pivotal point the band *a* which is provided with scales of inches and sub-divisions thereof, said scales extend in opposite directions therefrom, the pivotal point representing zero. Also the tape *e* is secured to the pivot *a⁷* at a zero point, scales of inches and fractions thereof extending from said zero point in both directions. A flexible tape as *b* is provided with a scale and at this zero point is connected to the pivot of the double slide way that is located slidably upon the tape *e* above metal band *a*. This flexible tape serves as the waist band and is provided with a buckle to enable it to be fastened about the figure. Also a tape *c* that is provided with a scale is connected to the double slide way at this zero point, and is intended to be buckled around the figure just above the knees either loosely or closely accordingly as the skirt to be made requires. The slide way upon this tape receives the tape *e*. A metal measure band as *d*, having studs *d'* and holes *d''* is placed in position about the figure below the band *a*, a metal square *e'*, at intersection of the tape *e* and metal measure *d*, directing the line which this metal measure must take. Double slide ways, as indicated in Fig. 4, are placed at different points along the tapes and bands *b c a d*, and receive perpendicular tapes *f g h i* at *c*. At the points of intersection between the band *a* and the tapes, *f g h i* the latter are riveted to said double slideways, such riveting being at the zero points of the oppositely extending scales upon each of said tapes. Said tapes *f g h i*, also intersect each of the bands and tapes *a d b c*, and at their points of intersection are provided with double slide ways to permit adjustment. Evidently since the tapes *e f g h i*, are each riveted to the slide ways at points of intersection with the band *a* they are, when being fitted to the figure,

inserted through their respective slide ways upon tape *b* above said band *a* and through their respective slide ways on band *d* and tape *c* below said band *a*. At their lower ends these tapes are passed through a spring catch *j* that is mounted upon a weight *k*, that resting upon the floor, holds said tapes as drawn out at length. The tapes *e* form the front gore, tape *g* passes over the front of the fullest part of the hip, tape *h* over the back of the fullest part of the hip, and tape *i* forms the middle of the back.

Tape *e* is contracted or expanded by the operator, so as to follow the style of the season and good judgment, this tape regulating the fullness of the skirt. Should the figure to be measured be of abnormal size, it may be advisable to take one or more additional perpendicular measurements, in which case the measures already taken may be recorded and the tapes *f g h* readjusted for such further measurements. When the figure being measured is fairly symmetrical; measurements taken at one side may be deemed sufficient, but where one side of the figure is materially larger than the other, both sides must be measured. In doing this, the device must be unstrapped, and the perpendicular tapes, *f g h i*, transferred to the other side of the tape *e* on metal measure *a*. After registering the measurements at the points of intersection, the device can be removed. The metal measure *a* should then be removed from the slide ways and a tape line bearing a corresponding measure inserted in its place, the same measurements reading at the

several points of intersection. The device is then to be laid flat on paper for the purpose of making a pattern, or on the fabric to be marked and cut. The square at intersection of *d* and *e* will afford the requisite shaping of the hip line *a* on the tape line that is substituted for the metal measure *a*, such tape line yielding to the desired curvature as made necessary by the measurements. The slide ways on tape *b* are allowed to adjust themselves until the device lies flat, and the tapes *e f g h i* assume straight lines from said tape *b*, to the bottom of the skirt. In order to take out fullness of belt line *b*, darts are formed from the belt line in the usual manner.

I claim:—

An improved measuring apparatus for skirts comprising a number of metal measuring bands adapted to fasten horizontally about the hips of the human figure, a flexible measuring band adapted to fasten about the waist, a flexible band adapted to fasten about the figure just above the knees and a series of perpendicular measuring tapes intersecting said horizontal bands and tapes to afford vertical measurements, together with double slide ways to receive said horizontal bands and tapes and said vertical tapes at their points of intersection, and weights having means of attachment for the lower ends of said vertical tapes.

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In the presence of:

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