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APPARATUS FOR TAKING TAILORS' MEASUREMENTS.
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SHEETS—SHEET 5.

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To all whom it may concern:

Be it known that I, FRAUNZ GOERIGK, a subject of the Emperor of Germany, residing at Lychenerstrasse 130, Berlin, Germany, have invented certain new and useful Improvements in Apparatus for Taking Tailors' Measurements, of which the following is a specification.

This invention relates to an improved apparatus for taking tailors' measurements for the making of clothes, such as gentlemen's suits and ladies' dresses or costumes, in an exact, simple and expeditious manner, requiring very little practice.

By the use of this apparatus, the measurements taken are correctly maintained, and the clothes fit correctly, without the necessity for fitting on.

The improved apparatus consists of a belt or such like, provided with divisions, buttons and button holes and a collar fitted in a similar way, which can be connected to the belt at the sides, back and breast by means of suitable connecting bands of the necessary length, said bands being ruled and marked in any convenient manner.

In the apparatus, to the part which is applied to the finding of the width of the arm hole a locking piece is adjustable connected for the securing of the measuring band which, when firmly locked in place indicates the back width, the back measuring band as shown in Fig. 2 running across the back at right angles to the middle measuring band, which latter connects the collar with the belt.

The band which connects the collar with breast or bust measuring band, is also arranged movably. The part of the apparatus used in finding the width of the arm hole is held by means of a measuring band, which is fixed to the collar, in the direction of the right shoulder seam while another measuring band is arranged movably round a horizontal bolt and reaching from the arm hole piece to the belt, being firmly connected at a suitable angle to the arm hole piece.

When the apparatus is correctly fixed on the body, the back measuring band is in a horizontal plane, and must cut, at right angles, the vertical plane through the middle of the back, while the belt also runs in a horizontal plane and the ends of the four measuring pieces which are fixed to and extend from it downwards also lie in a horizontal plane.

The apparatus is made in such a way that, the parts, on the correct position of which so much depends, have at one end a special end piece, movably connected to the band piece and having two right angle slits. This applies to the measuring piece which is connected to the collar and shows the direction of the shoulder seam and also applies to the measuring pieces which run down from the belt, in front and behind. The measuring pieces are all provided with buttons and hooks respectively and after the fixing of these stated parts of the apparatus, the two slits on the end pieces are fixed in position at the belt thereby giving the direction of the shoulder seam.

In the use of this apparatus for the measurement of gentlemen's suits, besides the setting of the back measuring pieces, the belt is also placed horizontally the belt being the lowest measurement to be taken. In the making of ladies' costumes it is necessary to take the hip widths and half body circumferences, and to do this the lower four measuring bands, must be fixed to the belt and the buttons which are fixed at the bottom ends of the measuring bands should lie in a horizontal plane. The ends of the single measuring pieces can be lengthened or shortened as desired by means of the adjusting appliances on the bands, which are made in such a way that they can be fixed simply and quickly, by means of a button and button hole arrangement to the collar or belt.

By the use of this apparatus, uncertain measurements are prevented and good fitting of both gentlemen's suits and ladies' costumes is secured.

In order that my invention may be properly understood and readily carried into effect I have hereunto appended five explanatory sheets of drawings whereon,

Figures 1 and 2 show the apparatus applied to the body as when measuring. Fig. 3, shows the glass tube arrangement used in horizontally fixing the measuring pieces. Fig. 4, shows the collar in front and side view. Fig. 5 shows, in front and side view, the arm hole measuring band, and the band which runs from it to the belt. Fig. 6, shows in front and side view the shoulder measuring bands on the left side of the body, with the manner of fixing the same, and also the downward connecting band to the belt. Fig. 7, shows in front and side views, the method of fixing the downward running bands, to the belt. Fig. 8 shows a front and side view of the belt. Fig. 9 shows in front and side view,
the method of fixing the measuring band pieces, to the belt, on the right side of the body. Fig. 10 shows the end piece 10 in front and side views. Fig. 11 shows the end piece 51 in front and side views. Fig. 12 shows the end piece 52 in front and side views.

In applying the apparatus to the body, the belt 1 which may be made of flexible steel ribbon is first fixed in place the two buttons 2 placed near one end of the belt being arranged so as to come exactly into the back seam. To fix the different measuring bands of the apparatus, above and below the belt, the latter is provided with two rows of buttons 2, and two rows of holes 3, the holes 3, being formed in such a way as to allow the buttons 2, to pass through the holes 3. The belt is also provided with a divided scale, etched or otherwise formed on it, which indicates the waist measurement.

By means of arranging two rows of buttons instead of one row, which arrangement is stipulated on account of the end pieces 51, 52 of the respective measuring bands; these measuring bands can be fixed above or below another, whereby the bottom rows guard the figured portion, which is etched into the belt, between the rows of buttons and holes, from injury.

When the belt 1 is secured in place, the collar 4 is then fitted in position, in such a way that, the buttons 5, which are placed close to one end, lie exactly into the back seam and in the same line as the corresponding buttons on the belt. The collar 4 is also provided with a divided scale, and has, in the same way as the belt, two rows of holes 6, these holes being a little larger than the diameter of the buttons 5 of which there is only one row. The figures on the bottom of the collar, indicate the measurement of the collar half width. The scales, which are etched into the collar near buttons 5 (see Fig. 4) gives the half collar width, and the scales, which are etched into the collar between the two buttons near the one end of the collar and the bottom row gives the third of the half collar widths. The different heights of the dividing lines mentioned are an advantage in giving distinctness. A slide 8 is fitted to the collar 4 and has two buttons 7 on it, which are used for fixing the shoulder measuring bands 9 in place. After the collar is fixed, the sliding edge, which is nearer to the two buttons on the collar end, must be always brought into exact conformity with this line of the partition, which gives the third of the half collar width. When this is done, the measuring band 9 is attached to the collar 4 by means of a fixing piece 10, having two right angle slits, into which the buttons 7 of the slide 8 are inserted and held. The measuring band piece 9 and the other measuring band pieces, are each provided with a scale of measurement. Each band piece is preferably made up of two parts, to enable its length to be adjusted, the one part 11 which may be secured to the measuring band 9 having at its free end a locking appliance 12, by means of which it is secured to the other part 14, which is movable and slides under the part 11. On the part 14 is fitted a flat guiding cover 13, which is provided with a button for easier handling. By means of a corresponding movement of the movable handle on the locking appliance 12, the movable part 14 of the measuring band can be left free for the purpose either of lengthening or shortening the whole measuring band and after the measuring band is placed into position, it can be secured against further moving by means of the locking appliance 12. The movable part 14 may be left free, and, after adjustment, can be readily fixed by means of the locking appliance 12. When the measuring band piece 9 has been secured to the collar 4, the connecting measuring pieces 15 and 16, placed on the back and front of the body, respectively, are then attached to the collar and belt. This requires to be carefully done, as the measuring band must lie exactly in the vertical plane, through the vertical center of the body, and their ends must come exactly to the halving line of the collar and belt.

The arm hole measuring apparatus preferably consists of two parts 17 and 18, the part 17 being rigid and the part 18 movable. The part 18 can be moved on the bar 19, which forms an extension of and is rigid with part 17 and can be fixed thereto by means of a set pin 20. The measuring band 21, which is used for obtaining the arm hole width passes round the curved interior surface of the flat quadrant guiding cover 23 of the part 17, and goes from there to the locking appliance 24 of the part 18, through which it passes after being correctly placed in position.

On the rigid part 17 of the arm hole measuring apparatus the measuring bands 25 and 27 are movably attached, by means of the horizontal bolt, the band piece 25 connecting with the back width measuring band 26, and the band piece 27, connecting with the measuring band 28 which measures the width of the breast. The band piece 29 is connected to the part 17, at a suitable angle by means of the connecting piece 30, the connection between them being made in such a way, that the piece 29 can be readily removed or placed in position. The band piece 29 is kept pressed against the body by the flat spring 31. A button 32 placed on the locking appliance 24 of the part 18, serves to hold the end of an ordinary measuring tape, which, in this case, is used for obtaining the outer length of the sleeves of gentlemen's garments.
measuring band 28, is used to obtain the breast width and is movably connected to the part 33 by means of a horizontal pin. The part 33 is placed under the left arm pit and is connected to the band piece 26, and to the band piece 34, which latter serves as a support for the part 33, which is movably connected thereto at 35 and kept pressed close to the body by the flat spring 36. Two glass tubes 38 which form no part of the present invention are used and connected together by means of a rubber tube or cord 37. These tubes are each filled with a suitable liquid and provided with a scale. They are for the purpose of insuring the correct placing of the parts of the apparatus used for measuring the width of the arm hole and for insuring that the measuring band 26 lies horizontal. On the line of the measuring band 20 a number of buttons, 39, 40, 41, 42, and 43 are provided for carrying the glass tubes 38 the arrangement being such, that when the liquid in the two tubes reaches the same height, the two buttons to which they are attached are horizontal.

In taking the measurement of the inner sleeve length, the end of an ordinary measuring tape is hooked on to the button 43, and the measurement taken in the usual way. The measuring band 28 is prevented from sliding upwards on the band 16 by the set screw 44 which is placed on the flat sliding cover 45 which slides on the band 16.

In taking measurements for gentlemen's garments, the measurements are completed at the belt and the apparatus is removed after the measurements have been noted. In taking measurements for ladies' costumes, the four measuring bands 46, 47, 48, and 49 have to be fitted to the belt 1. These four measuring bands which form a continuation of the measuring bands 15, 16, 29, and 34 are provided with hooks 50 by means of which they can be fastened to the dress. The two back and front measuring bands 46 and 47 can be readily set right, and attached to the belt 1, by means of the fixing pieces 51 and 52 which are provided with two right angle slits and are movably connected to the bands 46 and 47. The measuring bands 48 and 49 are fitted with a locking or fixing appliance by means of which the ends of the bands can be readily fixed to buttons or to the holes in the belt 1. Buttons 53 are provided on the lower end of the bands 46, 47, 48, and 49, and these buttons must all lie in a horizontal plane, which position can be ascertained by the use of the glass tube arrangement already described. The measuring band 46 is provided with three buttons 54, and the measuring bands 47, 48, and 49 have each three hooks 55 placed at the same distance apart as the buttons 54 the hooks on the measuring band 47 pointing upwards and the hooks on the measuring bands 48 and 49 pointing downwards. When the measuring bands 46, 47, 48 and 49 have been placed in position the various lengths can be noted and the half body circumferences below the belt can be measured with an ordinary tape. The end of the tape is fixed to one of the buttons 54 on the band 46, then round the body, being kept from sliding up or down by the hooks 55 on the bands 47, 48, and 49. The hooks 50 are attached to rubber bands 56 which are fixed to the measuring bands 46, 47, 48, and 49.

In the measuring of gentlemen's suits the glass tube arrangement requires to be used twice. First, for the horizontal placing of the measuring band 26, and of the arm hole measuring arrangement. Second, for the horizontal setting of the belt.

In the measuring of ladies' costumes, the glass tube arrangement is also used twice. First, in the horizontal setting of the measuring band 26, and of the detail for measuring the arm hole width. Second, for the horizontal setting of the buttons 53, at the lower ends of the measuring bands 46, 47, 48, 49, and 49.

All the measuring band pieces, also the collar and belt are made of thin sheet steel or like material and are provided with suitable divisions or markings to allow of easy reading of the measurements.

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

1. An apparatus for taking tailors' measurements comprising, in combination, upper adjustable measuring bands lying in a vertical plane, a waist belt movably connected thereto, an adjustable arm hole measuring device, lower adjustable bands connected to the said belt and horizontally arranged adjustable measuring bands connected to the arm hole measuring devices and the vertical bands.

2. An apparatus of the kind described having, in combination, an arm hole measuring device, a quadrant thereon, a sliding measuring band secured to the quadrant, an arm or projection extending from the quadrant, a second quadrant secured to the arm or projection, connecting pieces secured to the projection, buttons for connecting and supporting the measuring bands on the arm or projection and a spring 31 which constantly presses one of the bands against the body and is secured on the bar 19 of the fixed part 17.

3. An apparatus of the kind described having, in combination, a measuring band (9) which measures the shoulder seam, a belt, means suitably connecting the measuring band with the belt, measuring bands (46) and (47) extending downwards from the
belt, and end pieces (51), (52) upon the bands adapted for engaging with the belt, said end pieces having two right angle slits.

4. An apparatus of the kind described having, in combination, measuring bands (46, 47, 48, and 49) each having at its lower end a button (53) the buttons lying in a horizontal plane, the measuring band (46) being provided with three buttons (54) while the other measuring bands (47, 48, and 49) have hooks (55) which point upwards on the band (47) and downwards on the bands (48 and 49).

In testimony whereof I affix my signature in presence of two witnesses.

FRANZ GOERIGK.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPP.