

1,053,323.

Patented Feb. 18, 1913.

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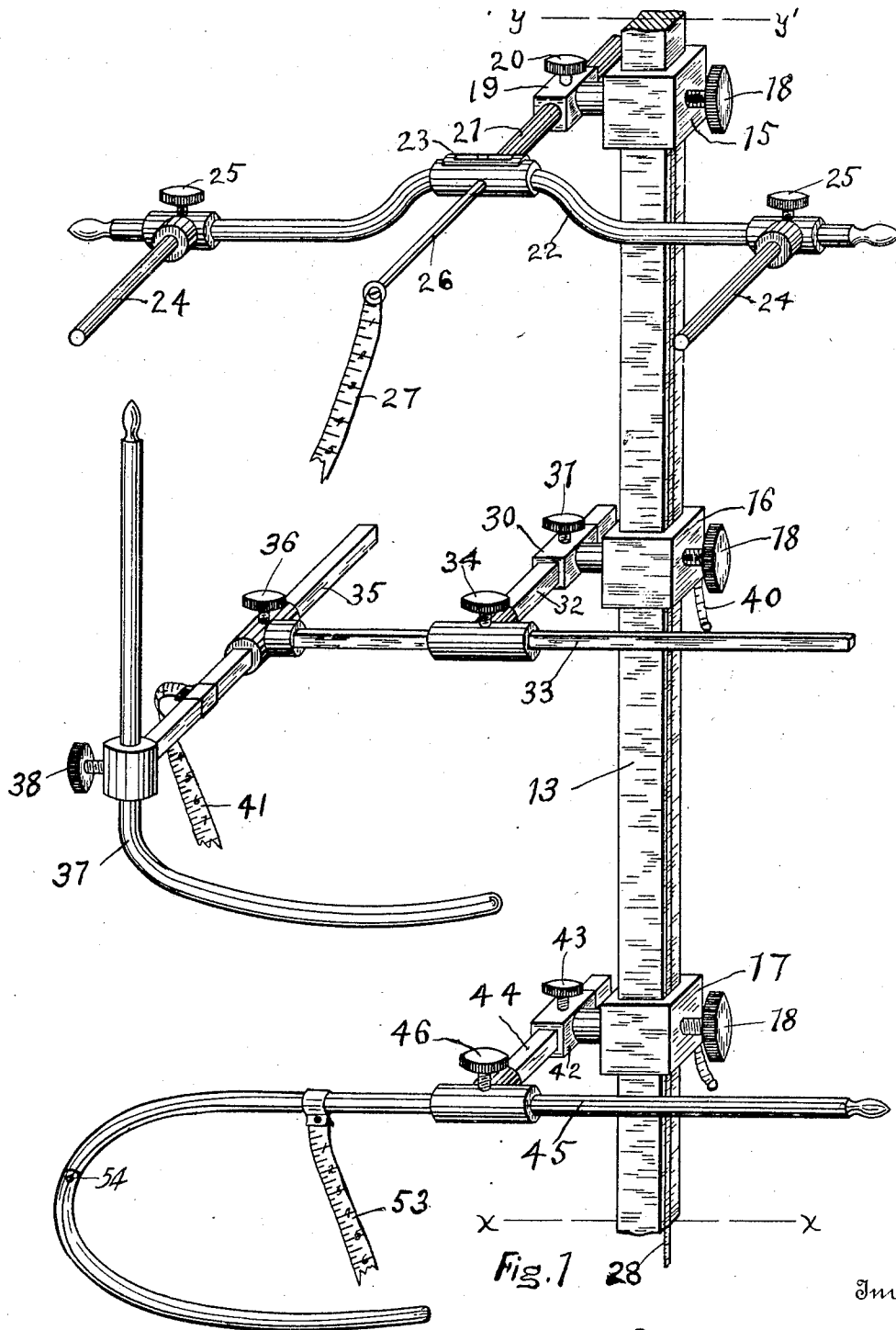


Fig. 1

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Witnesses

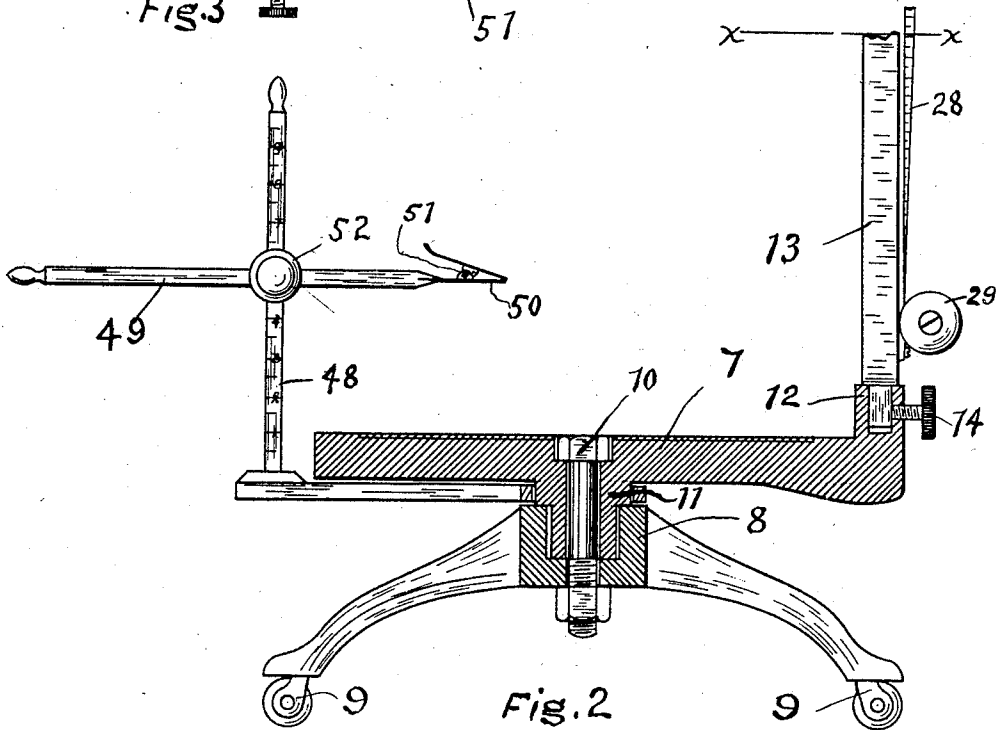
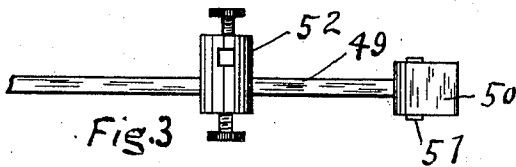
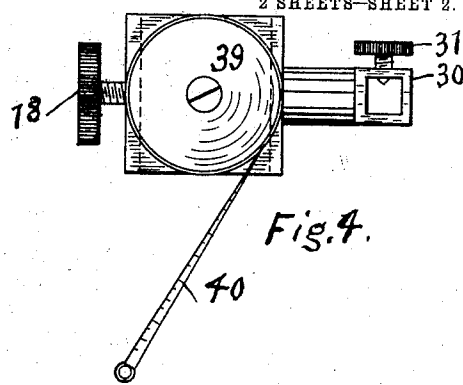
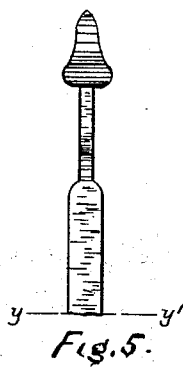
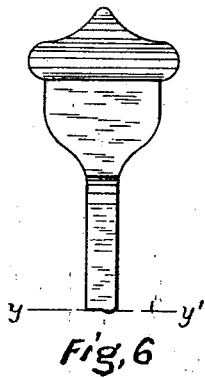
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MEASURING DEVICE.
APPLICATION FILED DEC. 14, 1911.

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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

JOSEPH SKRELL, OF SEATTLE, WASHINGTON.

MEASURING DEVICE.

1,053,323.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Application filed December 14, 1911. Serial No. 665,621.

To all whom it may concern:

Be it known that I, JOSEPH SKRELL, citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented a certain new and useful Improvement in Measuring Devices, of which the following is a specification.

My invention relates to improvements in devices for measuring the physical proportions of a person whereby may be known the required dimensions of the several parts of cloth which may be combined to form a garment for such person, and the object of my improvement is to provide an apparatus which shall be adapted to measure quickly the several physical proportions of a person standing in an upright position and which shall be simple in plan of construction, easily manipulated and accurate in its operations. I attain such object by devices illustrated in the accompanying drawings wherein—

Figure 1 is a view in perspective elevation showing several essential parts of my invention and their normal relation to each other. Fig. 2 is a view showing other parts of same, some in side elevation and others in vertical-section. Fig. 3 is a plan-view of a detail of same. Fig. 4 is a rear view in elevation of a detail of same while Figs. 5 and 6 show respectively, by a view in side and front elevations, a fanciful ornamental top of an upright portion of my invention.

Similar reference numbers indicate like parts throughout the several views.

Referring to the drawings a revoluble platform 7, preferably of cast-iron, as shown in vertical-section in Fig. 2, is mounted upon a three legged support 8, also preferably of cast-iron, whose central portion is shown in vertical-section and two legs of which are shown in elevation. The legs of support 8 are provided with casters 9 whereby the platform 7 with an apparatus mounted upon it may be moved easily from one position to another on the floor of a room. The platform 7 is secured to turn on support 8 by a pivot bolt 10 which extends through a hub 11 on the underside of said platform 7 and through the central portion of said support 8. The platform 7, at a point adjacent to its outer edge, is provided with an upwardly projecting socket 12 which is adapted to receive the lower end of an upright standard 13 whose lower end may be secured in such socket 12 by a binding screw 14.

In Fig. 2 the standard 13 is shown as broken off at a point indicated by broken line $x-x$ which point corresponds to the point in Fig. 1 also indicated by broken line $x-x$, in which Fig. 1 the standard 13 represents a continuation of the same standard 13 of Fig. 2. Thus when the standard 13 is fixed in its place in the socket 12 a person standing on platform 7 could be disposed near said standard 13. Slidably mounted on standard 13 are three rectangular sleeves 15, 16 and 17 adapted to be moved to different vertical positions on the standard 13 where they may be secured by a set-screw which projects through one of their sides and engages with the standard 13. Projecting from the side opposite the set-screw of the top sleeve 15 is a supporting piece 19 through which is a horizontal hole which with the aid of a set-screw 20 adapts it to receive and secure a metal tube 21 which may be inserted into said hole to assume any desired horizontal or circumferential position where such tube may be fastened by said set-screw 20 as shown in Fig. 1. On the front end of tube 21 is rigidly mounted, at right angles with it, a cross-arm 22, of metal rod, extending equi-distant on each side. On the top of said cross-arm 22 and near its central point is disposed a spirit level 23 whereby said cross-arm 22 may accurately be set in a horizontal position. Slidably and adjustably mounted on the cross-arm 22, on each portion extending from tube 21, is a projecting rod 24 which extends from cross-arm 22 at a right angle thereto. These two projecting rods 24, if desired, may have each a spirit level, not shown in the drawing, attached to it whereby it may be set accurately to a horizontal position and thereby secured by a set-screw 25. The two projecting rods 24 may be varied in distance from each other by moving them independently on the cross-arm 22 to any desired positions whereupon the set-screw 25 may be turned to fasten them in such position. Disposed within the tube 21 and projecting outwardly from the front end thereof, at the central point of the cross-arm 22, is a small rod 26, preferably of metal, which is adapted to be moved slidably to adjust it to project outwardly to any desired distance and on the projecting end of such rod 26 is attached the end of a tape line measure 27. To the inner surface of the side of the top sleeve 15 through which

the set-screw 18 extends there is attached the end of another tape line measure 28 which extends down along that side of the standard 13, where it is disposed within a slightly depressed curve, to terminate within a reel box 29 attached to the lower portion of standard 13 as shown in Fig. 2. Such reel box 29 may be adapted by means of a coil spring automatically to wind up said tape line measure 28 whenever the top sleeve 15 is moved downwardly. Thus a person may stand on platform 7 whereupon the top sleeve 15 may be raised or lowered as required to cause the projecting rods 24 to rest upon such person's shoulder and thereupon the height of such person's shoulders with relation to platform 7 may be ascertained by measurements indicated by tape line measure 28; and the small rod 26 disposed within tube 21 may be adjusted to touch the back of such person's neck whereupon the tape line measure 27 may be employed to make any measurements from the back of such person's neck to any desired point on such person.

Projecting from the side opposite the set-screw 18 of the middle sleeve 16 is a supporting piece 30 through which is a horizontal hole of square cross-section which with the aid of a set-screw 31 adapts it to receive and secure a metal rod 32 of square cross-section which may be inserted into said hole to assume any desired horizontal position where such square rod 32 may be fastened by said set-screw 31, as shown in Fig. 1. On the front end of such square rod 32 and at right angles thereto is slidably and adjustably mounted another and smaller rod 33 of square cross-section which may be secured in any horizontal position by set-screw 34. On the left-hand end of the small square rod 33, as shown in Fig. 1, is slidably and adjustably mounted another rod 35 of square cross-section which may be secured in any horizontal position by set-screw 36. On the front end of said rod 35 is adjustably and slidably mounted a round rod 37 one portion of which is disposed in a vertical position while another curved portion of it is disposed in a horizontal plane, the said vertical portion being adapted to be set at different vertical positions with relation to the rod 35 where it may be secured by set-screw 38, as illustrated by Fig. 1. This rod 37, when properly adjusted with relation to the form of a person standing on the platform 7, may serve to determine the height of the point of greatest circumference of the bust of such person. At a convenient point on rod 35 is attached the end of another tape line measure 41. On the back side of the middle sleeve 16 is disposed a tape line reel which is shown in rear elevation by Fig. 4 and which is indicated on Fig. 1 by the projecting end of a

tape line measure 40, the said tape line reel 39 being of a well known form of self-winding reels. The devices thus attached to the middle sleeve 16 are adapted for the purpose of taking the bust measure of a person when standing on platform 7. Thus the sleeve 16 may be raised or lowered to suit the height of the person being measured and the tape line measures 40 and 41 may be used in an obvious manner for required measurements.

Projecting from the side opposite the set-screw 18 of the lowest sleeve 17 is a supporting piece 42 through which is a horizontal hole of square cross-section which with the aid of set-screw 43 adapts it to receive and secure a metal rod 44 of square cross-section which may be inserted into said hole to assume any desired horizontal position where such rod may be fastened by said set-screw 43. Slidably and adjustably mounted on the front end of said rod 44 is a round rod 45, whose straight portion, as shown in Fig. 1, is adapted to be slidably moved horizontally to a desired position and there secured by set-screw 46 while its curved end portion, at a point near the center of the curve, is flexibly jointed by a hinge pivot 54 whereby such curved portion of rod 45 may conform to the waist of a person when standing on platform 7. While I have shown only one flexible joint in the curved portion of rod 45 it is manifest that, if desired, any suitable number of such flexible joints may be embodied in such curved portion of said rod 45. A tape line measure 53 is attached at a convenient point on rod 45. Thus, a person standing on platform 7, having the devices which are supported by the sleeves 15, 16 and 17 adjusted to such person's form, as hereinbefore indicated, may be measured quickly and accurately to determine the dimensions to which the cloth parts of a garment for such person should be cut.

Referring to Fig. 2, upon the hub 11 of platform 7 and above the three legged support 8 is mounted, freely to swing about said hub 11, an arm 47, upon the outer end of which is fixed a vertical measuring scale 48. Upon such measuring scale 48 is slidably and adjustably mounted a rod 49, of suitable material, which may be set at a desired vertical position on the scale 48 and at any desired longitudinal position with respect to said scale 48. Upon the end of rod 49 which extends toward platform 7 is attached a spring clip 50 within which clip 50 may be secured a crayon or a piece of chalk 51 which chalk may be caused to mark a line around the skirt or other garment of a person standing upon the platform 7 by swinging the arm 47 around the platform 7, and such line may be marked at any desired height above the platform 7.

Fig. 3 is a plan-view of the rod 49, the spring clip 50, the crayon or chalk 51 and the clamp 52 which serves to associate the rod 49 with the scale 48.

5 What I claim is:

1. In a measuring device of the class described, the combination with a revoluble platform mounted upon a suitable support, of a removable vertical standard supported
10 in a vertical position upon said platform, a self-winding reel of tape-line measure mounted upon the lower portion of said standard, and a vertically movable gaging device mounted upon said standard and
15 adapted to be clamped at a desired position upon said standard, one end of said tape-line measure being attached to said gaging device whereby different distances between the said gaging device and said platform
20 may at all times be determined.

2. In a measuring device of the class described, the combination with a platform mounted upon a suitable support, of a vertical standard removably secured to said
25 support, said standard being provided with a measuring scale on one of its sides, a gaging-member mounted on said vertical standard and adapted to be clamped in a fixed position with respect to the division
30 marks of said measuring scale, and a movably adjustable arm associated by suitable means with said gaging-member, said arm comprising a straight portion and a curved
35 articulated another swingingly adjustable

curved portion, whereby said arm may partially surround the waist of a person to co-act with said gaging-member to determine the position of the waist line of such person with respect to the different dividing
40 marks of said measuring scale.

3. In a measuring device of the class described, the combination with a vertical standard removably mounted upon a suitable supporting platform and provided with
45 a measuring scale upon one of its vertical sides, of a gaging-member slidably mounted on said vertical standard and adapted to be clamped in a fixed position thereon with respect to the division marks of said
50 measuring scale, a rod-arm disposed horizontally and adjustably secured to said gaging-member, a yoke-like member attached at a point near the center of its length to an end of said rod-arm and an arm ad-
55 justably mounted on each end portion of said yoke-like member whereby such arms of said yoke-like member may be adjusted to engage with a person's shoulder thus to indicate the vertical position of such por-
60 tion of a person's body with respect to the division marks of said measuring scale.

In witness whereof, I, hereunto subscribe my name this twentieth day of November A. D., 1911.

JOSEPH SKRELL.

Witnesses:

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B. P. BURGESS.