

No. 864,788.

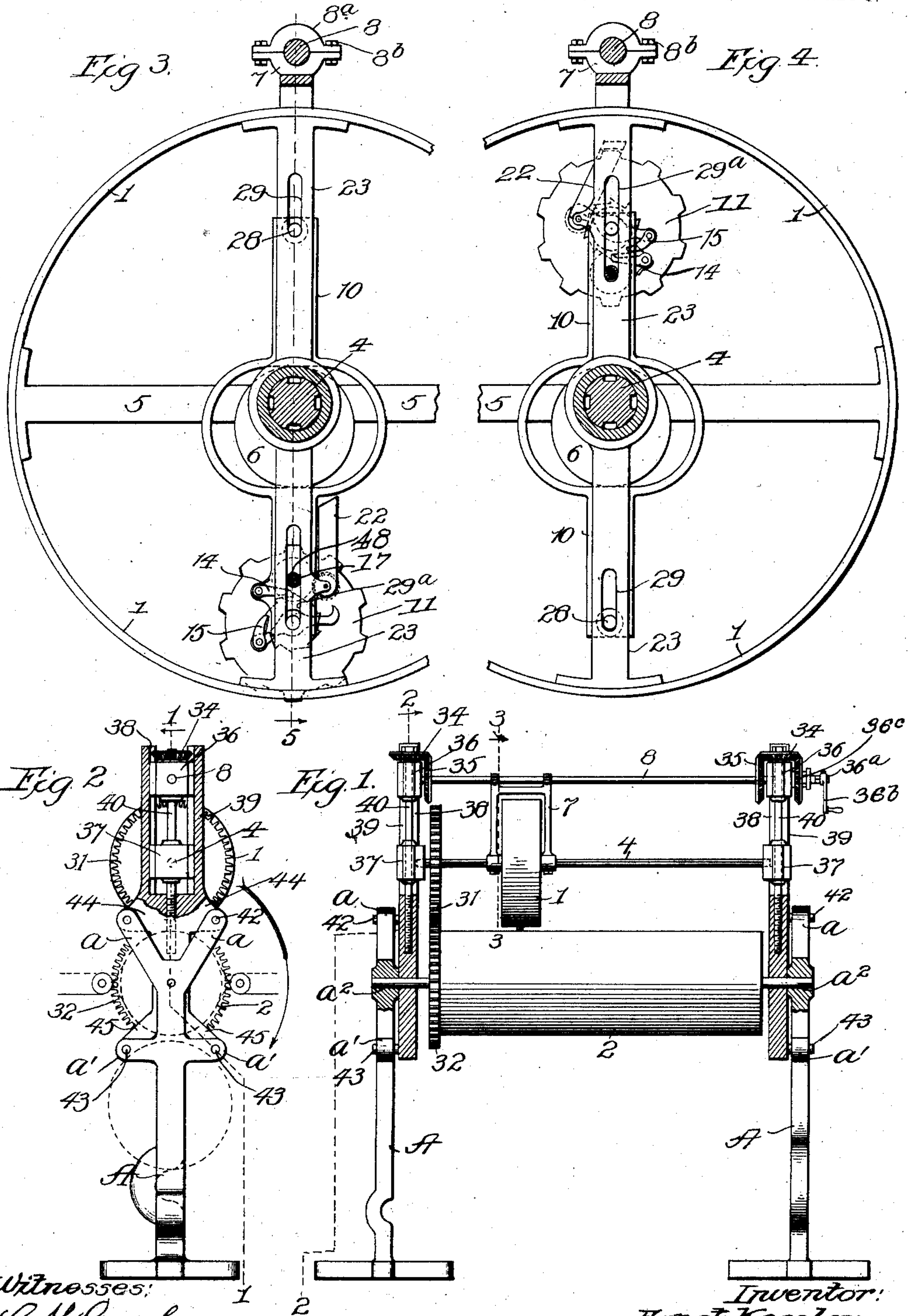
PATENTED SEPT. 3, 1907.

E. KESSLER.

APPARATUS FOR MARKING MEASUREMENTS ON FABRIC, PIECE GOODS,
AND THE LIKE.

APPLICATION FILED JAN. 7, 1906.

2 SHEETS—SHEET 1.



Witnesses:
C. M. Crawford
C. Heymann.

Inventor:
Ernst Kessler,
By B. Singer
Atty.

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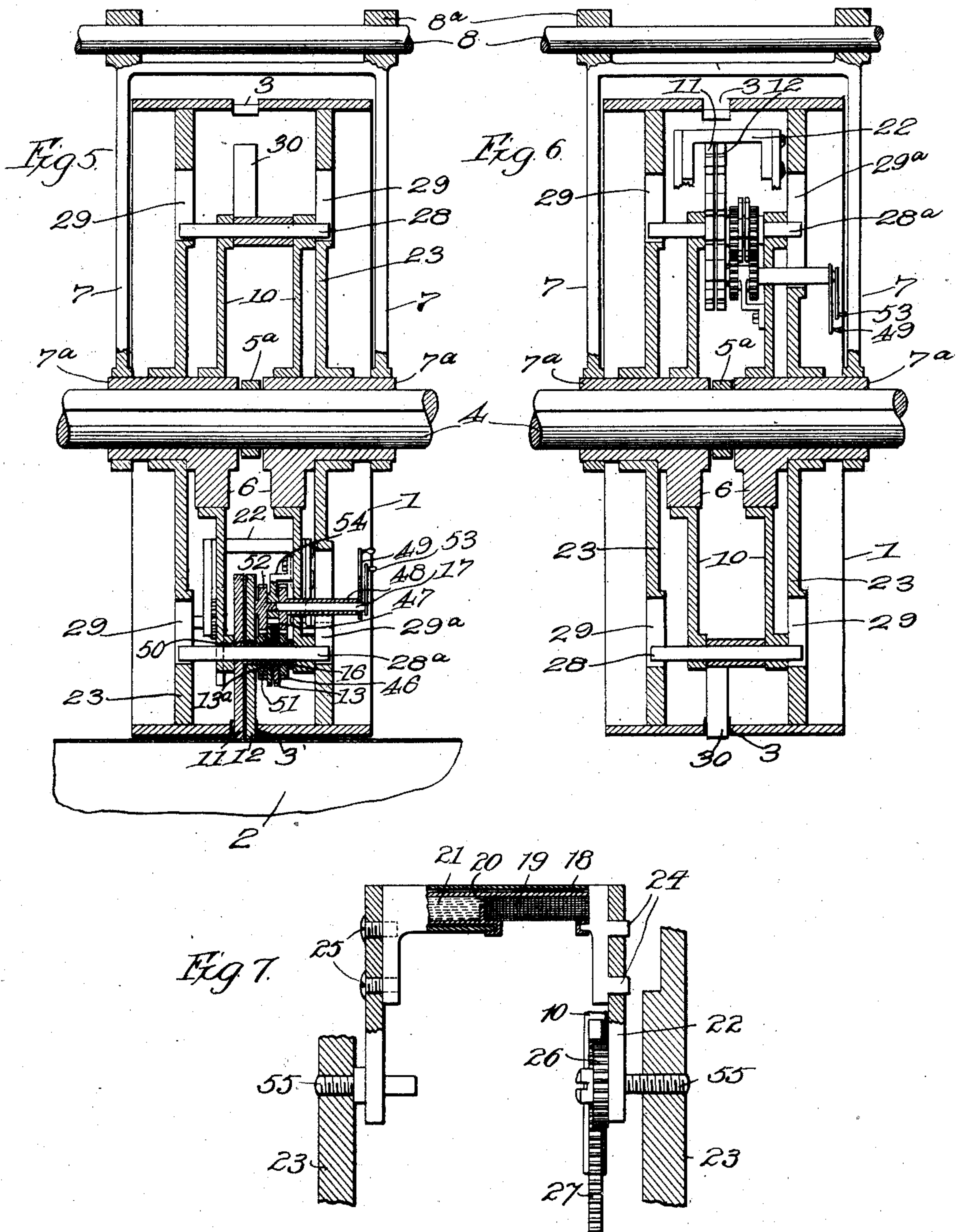
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By D. Singer Atty.

UNITED STATES PATENT OFFICE.

ERNST KESSLER, OF STUTTGART, GERMANY, ASSIGNOR OF ONE-HALF TO THE FIRM OF LOWENSTEIN & CIE., OF FRANKFORT-ON-THE-MAIN, GERMANY.

APPARATUS FOR MARKING MEASUREMENTS ON FABRIC, PIECE GOODS, AND THE LIKE.

No. 864,788.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed January 7, 1905. Serial No. 240,050.

To all whom it may concern:

Be it known that I, ERNST KESSLER, a subject of the German Emperor, residing at Stuttgart, Germany, have invented certain new and useful Improvements in Apparatus for Marking Measurements on Fabric, Piece Goods, and the Like, of which the following is a specification.

This invention relates to machines for taking the measurement of cloth and indicating the same thereon.

10 The invention consists in the provision of a cloth roller of sufficient length to accommodate varying widths of cloth and a cooperating measuring drum operating in unison with the roller and preferably of the same diameter together with means for fixing the drum
15 in operative positions in diametrically opposite points with respect to the roller. In a machine of this character it is possible to not only indicate the measurement upon the cloth in any desired position with respect to
20 its width but it is also possible upon the more delicate and costly fabrics to shift the drum to either side of the roller so that the measurement is printed upon the reverse side of the fabric.

According to my invention there is provided means for adjusting the drum toward and away from the roller
25 to accommodate goods of different thickness and the drum is provided with, and preferably contains, the printing and inking mechanism by means of which the measurement is indicated upon the fabric, the entire drum mechanism being carried by the drum frame.

30 The invention will be more fully described in connection with the accompanying drawings and will be more particularly pointed out and ascertained in and by the appended claims.

In the drawings: Figure 1 is sectional view of the improved measuring drum embodying the main features of my invention taken on line 1—1 of Fig. 2. Fig. 2 is a sectional view of the same taken on line 2—2 of Fig. 1. Fig. 3 is a sectional view on line 3—3 of Fig. 1, showing the drum in the position for marking yards. Fig. 4 is a
40 view similar to Fig. 3 showing the drum in the position for marking half or fractions of yards. Fig. 5 is a sectional view on line 5—5 of Fig. 3 showing the parts in the position illustrated in Fig. 3. Fig. 6 is a sectional view similar to Fig. 5 showing the parts in the position
45 illustrated in Fig. 4. Fig. 7 is a sectional view of the improved inking mechanism.

Like characters of reference designate similar parts throughout the different figures of the drawing.

As shown, the machine is mounted upon standards A
50 provided with extensions $a a'$. A cloth roller 2 provided with shafts is mounted in said standards at a^2 . Said roller is provided on one end with a gear 32. A measuring drum 1 cooperates with said roller 2 and is displaceable longitudinally thereof and toward and
55 away from the periphery thereof to mark the fabric

passing through and between the drum and roller in any desired lateral position, and to accommodate for different thickness of the fabric, said drum being rotatively mounted in a manner to be fixed at diametrically opposite points with respect to the roller 2. The devices carrying the drum 1 comprise arms 39 rotatively mounted upon the shaft of the roller 2 and provided with extensions 44 and 45 apertured to receive bolts or studs 42 and 43 in the extensions $a a'$. The apertures of the said extensions are radially disposed an equal distance from the shaft of the roller 2 in order to permit the arms 39 to be swung into a position opposite to that shown in Figs. 1 and 2 in full lines and into the position indicated in Fig. 2 by dotted lines. Said arms 39 carry drum and adjusting shafts 4 and 8 in bearings 36 and 37
60 slidably mounted in ways 38 formed on said arms. Said bearings are mounted in fixed relation with respect to each other upon adjusting rods 40, the lower ends thereof having threaded engagement with the arms 39. Each of said rods 40 carry beveled gears 34 and on the outer
65 ends of shaft 8 are beveled gears 35 adapted to be operated by the crank 36^b. As shown the axis of the shaft 8 intersects the axis of the rods 40 therefore in order to operate the shaft 8 from the crank 36^b a stud shaft 36^a is mounted on one of the bearings 36 and carries a bevel
70 pinion 36^c adapted to mesh with one of the bevel pinions 34 as clearly shown in Fig. 1. The drum shaft 4 carries a gear 31 adapted to mesh with gear 32 to effect operation of the drum and roller in unison. When it is desired to throw the drum out of operative relation
75 with the roller or when, by reason of different thicknesses of goods, it is desired to adjust the drum 1 with respect to the roller 2, the shaft 36^a is operated to rotate the threaded ends of the rods 40 and effect the necessary adjustment of shafts 4 and 8 through bearings 36
80 and 37.

The drum 1 is longitudinally movable with respect to the roller 2 in the following manner. A drum frame 7 is mounted at its upper end upon the adjusting shaft 8, said drum being provided with caps 8^a and adapted
85 to be clamped tightly on the shaft 8 by bolts 8^b. When it is desired to fix the drum 1 in any position longitudinally with respect to the roller 2, the ends of the bolts 8^b are loosened and the drum and its frame 7 are moved to the desired position whereupon the caps are secured
90 in place and the frame and drum anchored in operative proximity to the roller 2 until further adjustment is effected. The drum 1 is non-rotatively and slidably mounted on the shaft 4 by spokes 5 having a centrally disposed collar or hub 5^a engaging said shaft and keyed
95 thereto, said frame 7 carrying rigidly mounted sleeves 7^a which slide upon and permit rotation of the shaft 4. Said sleeves are provided near their central portions with eccentrics 6. Arms 23 rigidly secured at their outer ends to the drum 1 are concentrically mounted
100 110

at their inner ends upon the sleeves 7^a, said arms being provided with slots 29 and 29^a the latter being of greater length than the others. Arms 10, provided with centrally disposed eccentric straps surrounding said eccentrics 6, carry at their opposite ends printing mechanisms adapted to be alternately thrust through apertures 3 in the drum to engage the fabric. The eccentrics 6 being stationary and the arms 10 revolving with the drum 1, serve to thrust the printing mechanisms into printing positions when the same are adjacent the roller 2. In order to effect rotation of the arms 10 with the drum, the same are connected through the medium of rods 28, 28^a which engage the slotted portions 29 29^a of the arms 23, said slotted portions permitting endwise movement of the rods 28, 28^a and arms 10. One of the printing mechanisms consists of a single type bar 30 non-rotatively mounted on the rods 28 and adapted to indicate half yard measurements. The printing mechanism upon the other ends of the arms 10 serves to indicate the number of yards of fabric measured and preferably consists of two number wheels 11 and 12, the wheel 11 carrying the units and wheel 12 the tens. Obviously, the number of wheels may be increased where goods are of relative long lengths. As shown, the wheel 11 is provided with a sleeve 16, Fig. 5, which carries a ratchet wheel 13 and a return wheel 46, said return wheel being geared to wheel 47 mounted on sleeve 48 carrying crank 49. Said wheel 12 is provided with a sleeve 50 carrying a return wheel 51 meshing with wheel 52 mounted on shaft 17 and carrying a crank 53. Said shaft 17 is mounted in a bearing 54 which is secured to one of the arms 10 as clearly seen in Fig. 5. It will be obvious that by turning the cranks 49 and 53 the return wheels 46 and 50 will operate to restore the wheels 11 and 12 to a zero position. Said sleeves 16 and 50 carry ratchet wheels 13 13^a by means of which the wheels 11 and 12 are given a step by step movement, said ratchet wheels being engaged by pawls 14 and 15 which, by means of the stroke of the arms 10 with respect to the arms 23, operate the wheels 11 and 12 in an obvious manner. The construction of the printing mechanism does not specifically constitute a feature of the invention and is merely included broadly in the claims. The printing mechanism is supplied with ink in the following manner. A frame 22 is pivotally mounted on pins 55 to arms 23 as shown in Fig. 7. Said frame 22 carries an ink pad and receptacle including frame 18 secured to the frame 22 at one end by means of lugs 24 seated in apertures in said frame 22 and at its other end by screws 25. Said frame 18 carries an ink receptacle 21 adapted to communicate through a passage 20 with an ink pad 19. A gear wheel 26 is rigidly secured to the frame 22 and is adapted to mesh with the rack 27 mounted on one of the arms 10. When the numbering wheels 11 and 12 are retracted, or, in other words, when they occupy the position of the type bar 30, the retracting movement of the rack bar 27 on arm 10 operating through wheel 26 will cause the frame 22 to swing outwardly from the position shown in dotted lines in Fig. 3 and between the bars 23 in a manner to bring the pad 19 between the outer periphery of the wheels 11 and 12 and the inner face of the drum 1, the pad 19 wiping the surface of the wheels 11 and 12 and supplying the same with ink.

What I claim is:—

1. A machine of the class described comprising in combination a cloth roller, a measuring drum adapted to cooperate with said roller, means whereby the drum may be adjusted longitudinally of the roller, and means for adjusting the measuring drum in fixed positions to opposite points of the roller. 65 70
2. A machine of the class described comprising in combination a cloth roller, a measuring drum adapted to cooperate therewith, gears connecting said roller and drum to effect operation thereof in unison, means for displacing the drum with respect to the roller to admit goods of different thickness, and means for adjusting the measuring drum in fixed positions to opposite points of the roller. 75
3. A machine of the class described comprising in combination a cloth roller, a measuring drum adapted to cooperate therewith, gears connecting said roller and drum to effect operation thereof in unison, means for displacing the drum with respect to the roller to admit goods of different thickness, means whereby the drum may be adjusted longitudinally of the roller, and means for adjusting the measuring drum in fixed positions to opposite points of the roller. 80 85
4. A machine of the class described comprising supporting standards, a cloth roller journaled thereon, a drum frame pivoted on the shaft of said roller, a drum carried by said frame, and means for anchoring said frame in fixed positions to operate the drum on opposite points of said roller. 90
5. A machine of the class described comprising supporting standards, a cloth roller journaled thereon, a drum frame pivoted on the shaft of said roller, a drum carried by said frame, means for anchoring said frame in fixed positions to operate the drum on opposite points of said roller, and means for adjusting said drum toward and away from said roller to accommodate different thicknesses of cloth in either of the fixed positions of said drum. 95 100
6. A machine of the class described comprising supporting standards, a cloth roller provided with a shaft rotatively mounted thereon and having a gear, a drum frame, arms mounted on the shaft of said roller and adapted to be fixed in diametrically opposite positions with respect to said drum, a drum shaft provided with a gear meshing with the roller gear, a measuring drum mounted on said shaft, an adjusting frame for said drum connected with said adjusting drum shafts, and means for operating said adjusting shaft to displace the drum with respect to the roller. 105 110
7. A machine of the class described comprising supporting standards, a cloth roller provided with a shaft rotatively mounted thereon and having a gear, a drum frame, arms mounted on the shaft of said roller and adapted to be fixed in diametrically opposite positions with respect to said drum, a drum shaft provided with a gear meshing with the roller gear, a measuring drum mounted on said shaft, an adjusting frame for said drum connected with said adjusting drum shafts, means for operating said adjusting shaft to displace the drum with respect to the roller, bearings for said adjusting and drum shafts, adjusting rods extending through said bearings on which same are mounted in fixed relation, said rods having threaded engagement with said arms, and gears serving to operate said rods in unison to displace the drum with respect to the roller. 115 120 125
8. A machine of the class described comprising in combination a cloth roller, a drum shaft, an adjusting shaft, a drum frame slidably mounted on said adjusting shaft and displaceable longitudinally with respect to said roller, sleeves mounted on said drum shaft and carried by said frame, a measuring drum mounted on said sleeves, eccentrics for said sleeves, separate printing mechanisms at opposite points on said drum adapted to project through openings in the periphery of the drum, and means operated by said eccentrics to shift said printing mechanism into marking and non-marking positions. 130 135 140
9. A machine of the class described comprising in combination a cloth roller, a drum shaft, an adjusting shaft, a drum frame slidably mounted on said adjusting shaft

and displaceable longitudinally with respect to said roller, sleeves mounted on said drum shaft and carried by said frame, a measuring drum provided with spokes having bearing on said sleeves concentrically, said spokes being
5 provided with slots, eccentrics for said sleeves, arms mounted upon said eccentrics, printing mechanism carried by said arms, ratchet wheels for said printing mechanism, and pawls carried by said concentrically mounted arms causing rotation of the printing mechanism when the same
10 is shifted by said eccentrics.

10. A machine of the class described comprising a measuring drum, a shaft on which said drum is concentrically mounted, printing mechanism, means shifting said mechanism into and out of printing positions, and inking
15 mechanism operatively associated with said means to ink said printing mechanism when the same is shifted out of a printing position.

11. A machine of the class described comprising in com-

bination, a cloth roller, a measuring drum adapted to cooperate with said roller, and means for adjusting said
20 measuring drum in different fixed positions with respect to said roller.

12. A machine of the class described comprising in combination a cloth roller, a measuring drum adapted to cooperate with said roller, printing devices associated with
25 said drum and adapted to project and print through the periphery of said drum, and means for adjusting said drum to different fixed positions with respect to said roller.

In testimony, that I claim the foregoing as my inven- 30
tion, I have signed my name in presence of two subscribing witnesses.

ERNST KESSLER.

Witnesses:

SIEGFRIED FELS,
EMIL NEIDHART.