

No. 788,914.

PATENTED MAY 2, 1905.

G. H. KING.
MEASURING DEVICE.
APPLICATION FILED SEPT. 15, 1904.

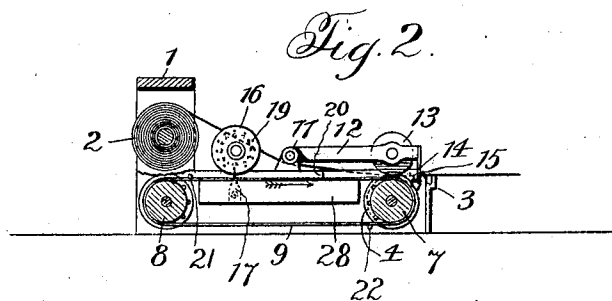
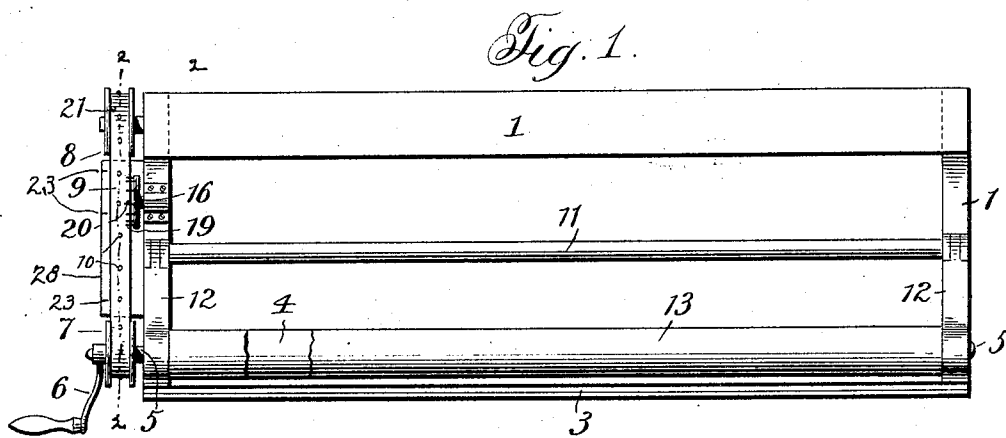
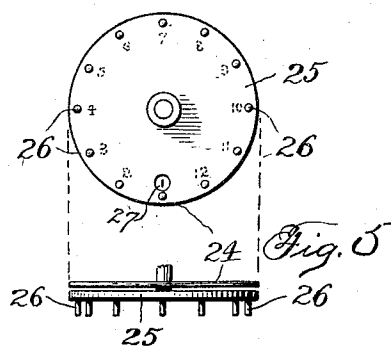
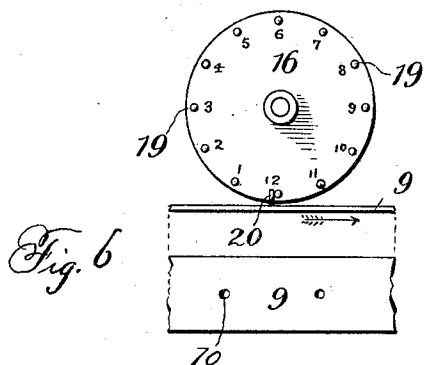


Fig. 3.

Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE H. KING, OF GUTHRIE, OKLAHOMA TERRITORY, ASSIGNOR OF ONE-HALF TO WILLIAM P. EAGER, OF GUTHRIE, OKLAHOMA TERRITORY.

MEASURING DEVICE.

SPECIFICATION forming part of Letters Patent No. 788,914, dated May 2, 1905.

Application filed September 15, 1904. Serial No. 224,581.

To all whom it may concern:

Be it known that I, GEORGE H. KING, a resident of Guthrie, in the county of Logan and Territory of Oklahoma, have invented certain new and useful Improvements in Measuring Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved measuring device, and more particularly to improvements of this character designed for use in connection with rolls of oil-cloth and the like, the object of the invention being to provide a measuring device of simple inexpensive construction in which an endless belt of proper length constitutes the unit of measurement and provide means operated by the belt for recording the lengths thereof as it moves with the cloth and provide improved means for designating fractions of the length of the belt.

With these and other objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view illustrating my improvements. Fig. 2 is a view in section on the line 2 2, Fig. 1. Fig. 3 is an enlarged view of the dial, and Fig. 4 is a view of a modified form of register. Fig. 5 is an edge view of the same. Fig. 6 is a detail face view of a portion of the belt 9.

1 represents a frame in which a roll of cloth 2 is adapted to be supported. Across the frame 1 at the forward edge is a cutter-guide 3, and behind the same is a roll 4, supported to turn freely in the frame, said roll having trunnions 5, mounted in bearings in the frame, and one of said trunnions projecting out beyond the frame and provided with a crank-arm 6 to turn the same. On said trunnion 5, carrying crank-arm 6, a toothed and flanged pulley 7 is secured, and an idle pulley 8 is mounted in the rear of said frame. On these pulleys 7 and 8 an endless belt 9, preferably of metal, is mounted to turn and has perforations 10 therein to receive the teeth of pulley 7 and prevent possibility of its slipping on the pulley.

On a cross-rod 11, in rear of roll 4, arms 12 are pivotally secured and carry at their free ends a roll 13, which latter is adapted to be swung down on top of the cloth fed from supply-roll 2 and hold it down against roll 4, compelling the cloth to be fed forward as the roll 4 is turned. Any suitable form of device may be employed to hold the roll 13 down on the cloth. I have shown a hook or dog 14 for this purpose, which engages a lug or pin 15 on the frame and holds the roll 13 against upward deflection.

The belt 9, above referred to, is exactly one yard in length, and as the belt is turned, with roll 4 feeding off the cloth, it will be seen that at each complete turning movement of the belt exactly one yard of cloth will be fed off. On frame beside the belt 9 is a rotary dial 16, containing a series of indicating-numerals on its face registering with a fixed pointer 17 on the frame, and at the edge of the dial a tooth or finger 19 is provided for each and every numeral thereon. These teeth or fingers 19 project over the edge of belt 9, and a button or lug 20 is secured on said belt and at each revolution of the belt engages a finger and turns the dial a distance of one numeral, thereby registering a yard of cloth as it is fed off and enabling the operator to readily measure the yards of cloth desired to be removed from the roll.

Beneath the belt 9 between the pulleys is a supporting-table 28, holding the belt against sagging.

To measure the fractions of a yard, I provide two lugs or buttons 21 and 22 on the belt 9 at the edge thereof opposite to lug or button 20 and mark on the lugs 21 and 22 or on the belt beside the same suitable words or characters to designate that one lug or button is for certain fractions of a yard and the other lug for the remaining fractions. These lugs 21 and 22 are adapted to register with suitably marked indicating-points on the projecting table, so that the operator can by watching the lugs 21 and 22 as they reach the proper

indicating-marks on the table know just when he has secured the proper length of cloth.

In the modification shown in Fig. 4 I illustrate a fixed dial 24, containing a series of numerals thereon, and mount a rotary plate 25 above the same. This plate 25 is provided at regular intervals with teeth or fingers 26, corresponding to the number of numerals on the dial and adapted to be struck and turned a distance of one tooth by the button or lug 20, as above explained. This plate 25 is provided with an opening 27, through which can be seen one of the numerals of the dial, and starting with zero when a yard of cloth has been measured off the plate will be moved so that the numeral "1" can be seen through the opening 27, and so on, the operator seeing through the opening 27 the number of yards measured off.

Various other changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I would have it understood that I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination with a frame, of a roll mounted in said frame, a pulley carried by said roll, a second pulley, a measuring-belt passing over said pulleys, a supply-roll above the second pulley, a presser-roll over the first-mentioned roll, a projection on the measuring-belt, and an indicator to be actuated by said projection.

2. In a device of the character described, the

combination with a frame, of two pulleys, a measuring-belt passing over said pulleys, a horizontal table between the pulleys, over which the belt passes, a projection on the belt, a register actuated by said projection, a feed-roll carrying one of said pulleys, a supply-roll above the other pulley and a presser-roll over the feed-roll.

3. In a device of the character described, the combination with a frame, of a table having graduations thereon indicating fractions of a yard, two pulleys, a measuring-belt having a length of one yard, passing about said pulleys and over the table, said belt having indicators to register with the graduations on the table, a projection on said belt, a register moved by said projection to indicate one yard on the register at each complete movement of the belt, a feed-roll carrying one of said pulleys, a presser-roll over said feed-roll, and a supply-roll.

4. In a device of the character described, the combination with a frame, of a graduated table, two pulleys, a measuring-belt having a length of one yard, passing about said pulleys and over the table, said belt having indicators to register with the graduated table, a projection on said belt, an indicator actuated by said projection to denote the measurements made by the belt, a feed-roll carrying one of said pulleys, a presser-roll over said feed-roll, and a supply-roll.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE H. KING.

Witnesses:

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