

W. E. C. POWELL.
ADJUSTABLE TUBE.
APPLICATION FILED JULY 8, 1911.

1,066,319.

Patented July 1, 1913.
2 SHEETS—SHEET 1.

Fig. 1.

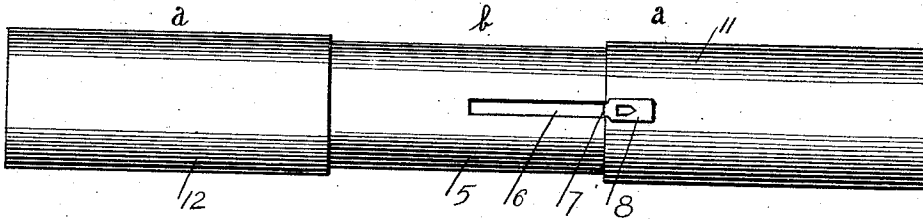


Fig. 2.

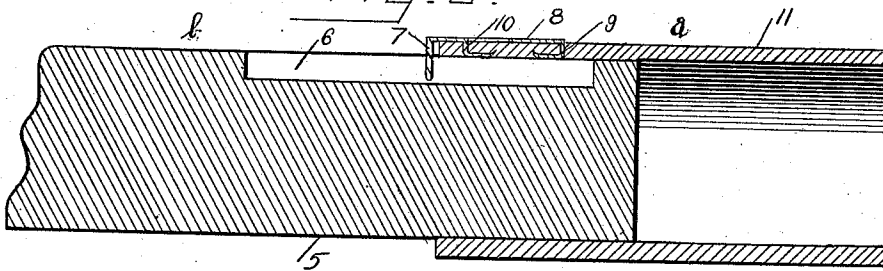


Fig. 3.

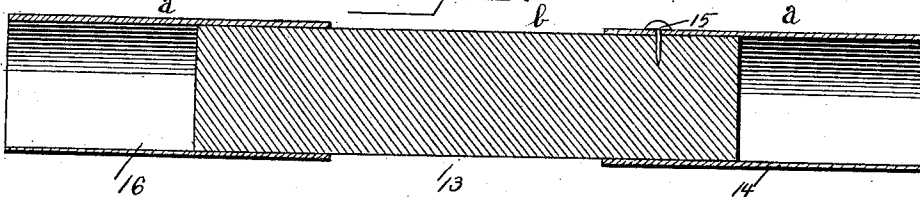
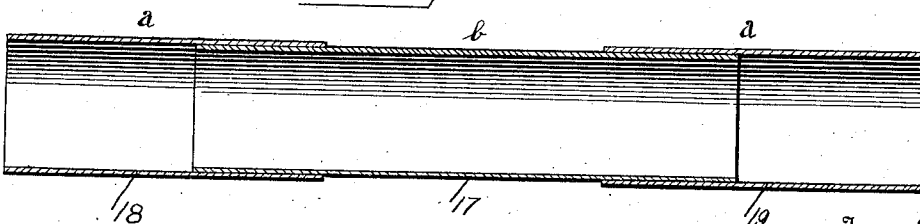


Fig. 4.



Witnesses

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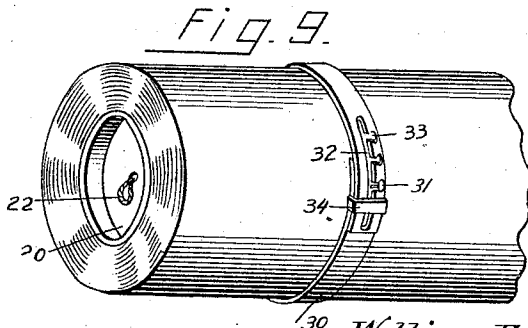
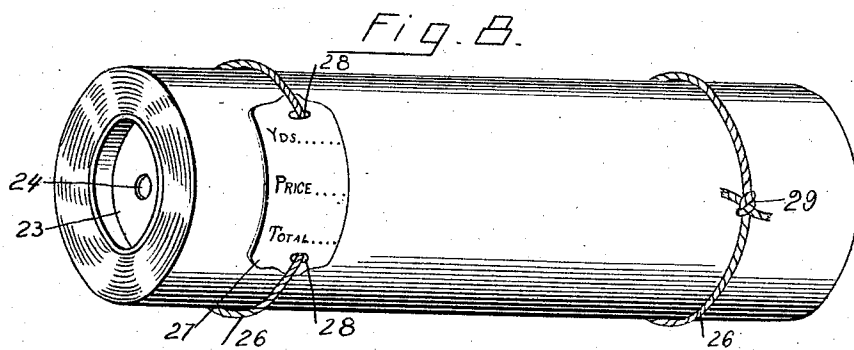
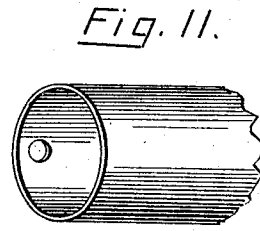
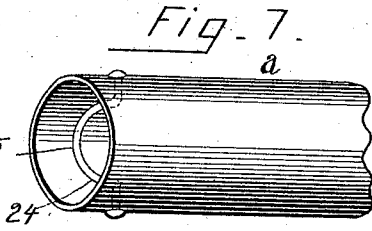
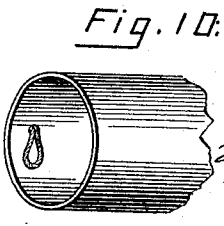
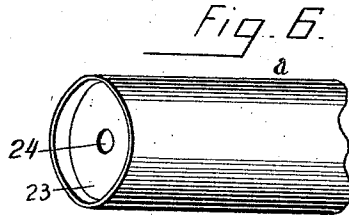
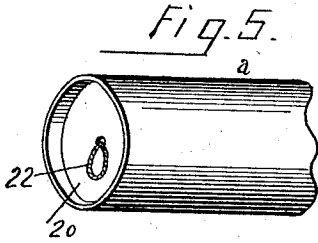
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ADJUSTABLE TUBE.

1,066,319.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed July 8, 1911. Serial No. 637,484.

To all whom it may concern:

Be it known that I, WILLIAM E. C. POWELL, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful Improvements in Adjustable Tubes, of which the following is a specification.

The invention has for its general objects the adaptation of remnant tubes to the various widths of cloth, whereby, to eliminate the present expensive practice of providing tubes of various lengths, and to facilitate the removal of these tubes from rolls of cloth which are to be sold without the tubes.

Other objects will appear and be better understood from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a front elevation of the preferred form of my device. Fig. 2 is a detail longitudinal sectional end view of the same. Fig. 3 is a detail longitudinal section of a modified form. Fig. 4 is a similar view of a further modification. Fig. 5 is a detail perspective of one end of the tube showing one form of finger-hold for withdrawing the tube from a roll of cloth. Fig. 6 is a view similar to Fig. 5 but showing a modified form of finger-hold. Fig. 7 is a view similar to Fig. 6 of a still further modified form of finger-hold. Fig. 8 is a perspective of a roll made up of cloth wound upon any of the forms of tubes shown in Figs. 1, 3, and 4 and the means for securing the cloth against unwinding. Fig. 9 is a view similar to Fig. 5 showing a modified form of means to prevent unwinding of the cloth. Figs. 10 and 11 are detail perspective end portions showing further modifications of finger-holds.

The tube *a* comprises a core *b*. This core may be of any suitable material such as pasteboard as illustrated in Figs. 1 and 4, in which figures it will be seen that the core *b* is in the form of a hollow cylinder, or as shown in Figs. 2 and 3 the core *b* may be a solid cylinder of wood or analogous material.

In Figs. 1 and 2 the core 5 has a longitudinal slot 6 which receives a combined stop and guide 7 preferably of metal and ar-

ranged in angular relation to a body 8 which has prongs 9 and 10 embedded in a section 11 slidably fitted on the core 5. The section 11 is preferably, though not necessarily, of pasteboard and fits nicely onto the core so as to be frictionally held in adjusted position. The combined stop and guide, by abutting the ends of the slot 6, limits the longitudinal movements in either direction, of the section 11 and by bearing on the sides of the slot prevents turning movement of the section 11 on the core 5. The section 12 slides on the end of the core 5 opposite to the end provided with the section 11 and like the last named section is of a size to nicely receive the core so as to be frictionally held in adjusted position thereon. With this construction it will be seen that when the tube forms part of a roll, such as illustrated in Figs. 8 and 9, it may be readily withdrawn therefrom in two sections. For instance, the section 11 and core 5 may be first drawn from the roll and through one end thereof, after which the section 12 may be withdrawn from the opposite end of the roll. It will be observed that the maximum pressure on the roll will be on the sections 11 and 12 since these are relatively larger in exterior diameters than the core 5 so that when the sections are positioned on the core as shown in Fig. 1, for instance, the middle portion of the roll will not press the exposed portion of the core 5, whereby, the section 11 and core may be readily withdrawn from the roll, at least such withdrawal will not remove the inner coil through one end of the roll, since one side portion of such coil bears on the section 12 and if the latter and section 11 be pulled simultaneously neither side of the inner coil will project beyond either end of the roll after the tube has been withdrawn therefrom.

In the form illustrated in Fig. 3 the solid core 13 has a tubular section 14, preferably of pasteboard, suitably secured thereto such as by a nail or tack 15 driven through the said section 14 and into the core, the section 16 being slidably fitted on that end of the core 13 opposite to the end provided with the section 14, the section 16 nicely fitting on to the core 13 so as to be frictionally held when adjusted thereon. What has been said

of the merits of the structure illustrated in Fig. 1, may also be taken to apply to that shown in Fig. 3 and also in Fig. 4, wherein it will be seen that the hollow cylindrical
 5 core 17 is preferably, though not necessarily, of pasteboard and has slidingly fitted on either end thereof, telescoping sections 18 and 19 which are frictionally held in adjusted positions on the core 17.

10 In reference to the foregoing structures, it may be further stated that the length of the tube may be varied to suit the different widths of cloth which will be found very advantageous either when cloth is to be
 15 wound on the tube for the purposes of display, or when a quantity of cloth is wound on the tube and the whole to be sent to the customer. Heretofore it has been necessary to provide tubes of different lengths to conform to the standard widths of cloth and the
 20 expense of providing these various tubes and moreover the time wasted in selecting a tube of proper length commercially detracted from these devices to no small extent.

25 In Fig. 5 I have shown a form of finger-hold to be connected to either or both of the extensions illustrated in Figs. 1, 3, and 4, this finger-hold being herein shown to comprise a disk 20 suitably secured to the inner
 30 surface of the section and having a centrally disposed flexible loop 22 to receive one of the digits of the operator in the operation of withdrawing the tube as previously described. The modified form of finger-hold
 35 shown in Fig. 6 comprises a disk 23 having a central opening 24, for one finger of the operator when withdrawing the tube. In the modified form of finger-hold shown in
 40 Fig. 7, a cross bar 24 extends transversely of the section and has a bowed middle portion 25 around which the operator curves his finger when withdrawing the tube as previously described. In Figs. 10 and 11 I
 45 have shown still further modified forms of finger-holds. The loop in Fig. 10 which corresponds to the loop 22 in Fig. 5, being secured in a lateral opening in one end portion of the tube while in Fig. 11 a lateral
 50 opening of a size sufficient to receive a finger, is formed in the wall of the tube and adjacent to one end thereof.

In Fig. 8 I have shown a convenient means for securing a remnant or other roll
 55 of cloth, this securing means being preferably adapted when the roll is made up, for shipping to the customer or it may be used when the roll is made up for display purposes. A flexible element such as a cord 26;
 60 is directed over the inner face of a tag 27 which is herein shown as having marked panels thereon for the number of yards in the roll, the price per yard and the total or price of the roll. The cord is directed

through openings 28 adjacent to the opposite ends of the tag. If desired, a pair of these devices may be employed and arranged adjacent to the opposite ends of the roll and secured by extending the flexible element
 65 26 around the roll and tying the ends thereof as shown at 29, in which event it will be seen that when a remnant is thus made up and purchased as it stands the purchaser,
 70 upon delivery of the same will see that the remnant has been delivered just as it appeared when purchased. It will be further observed that with this construction the tag is securely held and will not become
 75 readily detached when the roll to which it is secured, forms one of a quantity of other rolls arranged promiscuously on a bargain counter.

In Fig. 9 I have shown another means for securing a roll against unwinding, this means comprising a resilient band 30 having
 85 a headed stud 31 adjacent to one end thereof which is received by a longitudinal slot 32 formed adjacent to the opposite end of the band, one side of the said slot having a series of key-hole slots 33 which receive the
 90 shank of the stud 31 after the band has been contracted around one end portion of the roll and the ends thereof moved laterally and relatively to each other. A collar 34 slides on the end portion of the band
 95 which carries the stud 31 and embraces the extending end portion of the slotted end of the band when the ends thereof are interlocked as previously described.

Although I have shown and described a
 100 preferred and several modified forms of my device it is to be understood that I am not to be limited to the specific description herein given nor to the particular arrangement
 105 of the parts as illustrated, since various changes will be made, in the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim as new is:

110 1. A remnant tube comprising a core having a longitudinally extending slot formed therein adjacent to one end thereof, a tubular extension slidably mounted upon one end of the core and removable therefrom, a
 115 second tubular extension slidably fitted upon the opposite end of the core, and a combined stop and guide carried by said last-named extension and disposed within the slot in said core whereby the sliding movement of said extension is limited and the
 120 extension guided in its path of movement.

2. A remnant tube comprising a core having a longitudinally extending slot formed therein adjacent to one end thereof, a tubular
 125 extension disposed upon one end of the core, a second tubular extension slidably disposed upon the opposite end of the core, and

combined stop and guide carried by said
last-named extension and disposed within
said slot to guide the respective extension
in its path of movement and limit the slid-
5 ing movement thereof and provided with an
angular body portion having prongs em-
bedded in the respective extension.

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

WILLIAM E. C. POWELL.

Witnesses:

THOMAS G. GRADY, Jr.,
F. REGESTER MEGINNISS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."