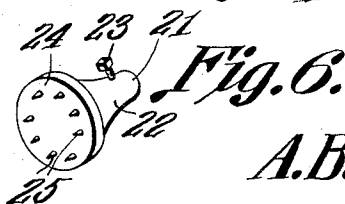
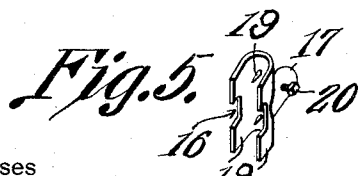
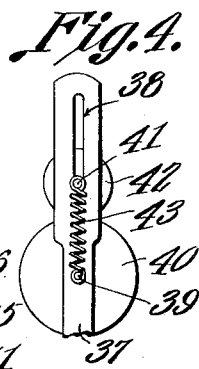
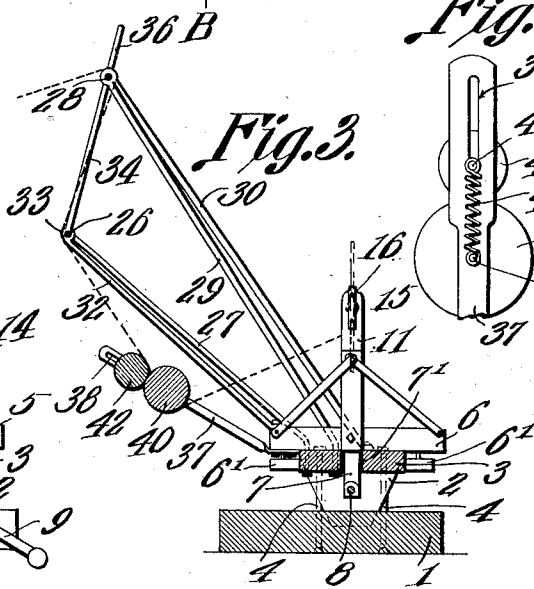
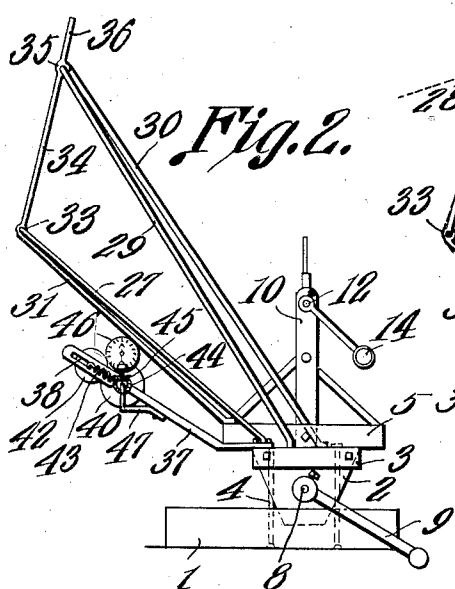
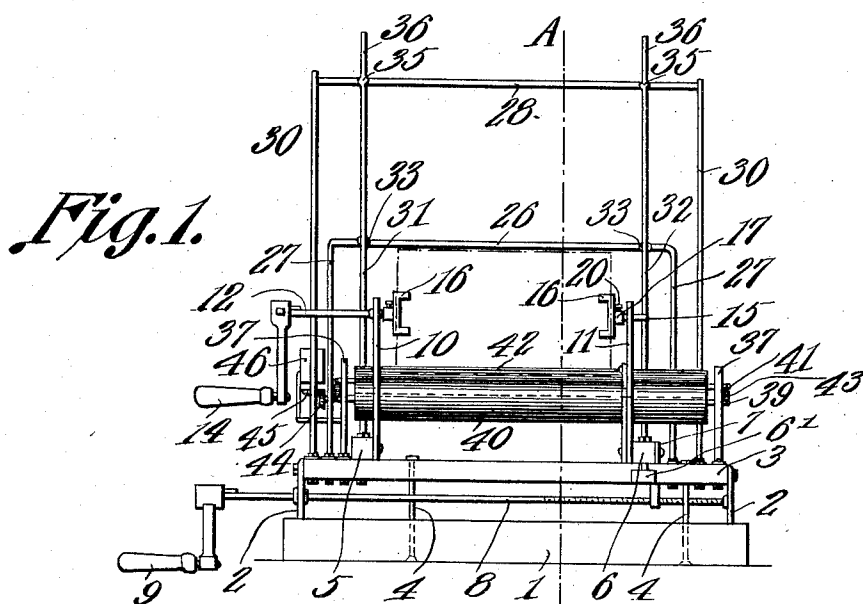


APPLICATION FILED JUNE 15, 1911.

Patented Feb. 6, 1912.



J. R. Dornier
S. A. Wilcox

by *C. Knowlton*
Attorneys

UNITED STATES PATENT OFFICE.

ANTHONY B. GRIEP, OF AURORA, MISSOURI.

RIBBON-HOLDER.

1,016,489.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed June 15, 1911. Serial No. 633,299.

To all whom it may concern:

Be it known that I, ANTHONY B. GRIEP, a citizen of the United States, residing at Aurora, in the county of Laurence and State of Missouri, have invented a new and useful Ribbon-Holder, of which the following is a specification.

The object of the present invention is to provide an apparatus adapted to wind, readily and effectively, upon a suitable core or the like, any fabric, from a ribbon one-eighth of an inch wide, to dry-goods fifty-two inches wide or more, and in connection with the latter, to smooth and stretch the same in the act of rolling.

A further object of the invention is to provide a means whereby the material may be measured, while it is being wound up.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 is an end elevation of the dry-goods winder constituting the subject matter of the present invention; Fig. 2 is a side elevation thereof; Fig. 3 is a transverse section upon the line A—B of Fig. 1; Fig. 4 is an end elevation of the yieldably co-acting rollers through which the goods pass, together with the supporting mechanism whereby these rollers are carried; and Figs. 5 and 6 are perspectives, showing different forms of elements which are adapted to be secured to the winding shafts, thereby to support cores of different formations.

In carrying out the invention there is provided a base 1, to which are secured brackets 2, carrying a guide plate 3, the guide plate 3 being secured to the base 1, by means of bolts 4 or the like. The base 1 and the guide plate 3 constitute what, for convenience, will be referred to hereinafter as the supporting portion of the structure.

Disposed transversely of the guide plate 3, are bars 5 and 6, spaced apart. The bar 5 is secured to the guide plate 3, while the bar 6 is slidable thereon, the latter bar being referred to hereinafter as the cross piece. This cross piece 6 carries rollers 6', adapted to

register against the edges of the guide plate 3, thereby to direct the sliding movement of the cross piece, longitudinally of the guide plate 3. The cross piece 6 carries a depending bracket 7, extended through a longitudinal slot 7' in the guide plate 3, the lower end of the bracket 7 being adapted to engage with a worm shaft 8, journaled for rotation in the brackets 2. The worm shaft 8 carries, adjacent one end, a crank 9, whereby the worm shaft may be rotated.

Fixed to and rising from the bar 5, is a standard 10. Fixed to and rising from the cross piece 6, is another standard 11, the standard 11 being a two-part, longitudinally extensible structure. Journaled for rotation in the standard 10, is a winding shaft 12, having a suitable operating crank 14. Carried by the standard 11, is another shaft 15. The adjacent ends of the shafts 12 and 15, are adapted to receive core-holding elements, seen most clearly in Figs. 5 and 6. One of these core-holders, denoted by the numeral 16, is adapted to receive a flat board, the same being the form of core upon which dry-goods is commonly wound. This core-holder 16 includes a neck 17, and spaced spring arms, adapted to engage the sides of the board. The core-holder 16 is provided, between the spring arms 18, with outstanding spurs 19, adapted to engage the end of the board. In the neck 17 there is a set screw 20, whereby the core-holder 16 may be assembled with the shaft upon which it is mounted. The other core-holder, seen in Fig. 6, is adapted to receive a spool, this core-holder being denoted by the numeral 21. The core holder 21 comprises a tubular neck 22, into which is threaded a set screw 23, for an obvious purpose. The core-holder 21 terminates in a head 24, having outstanding spurs 25, adapted to engage the ends of the spool.

The invention further includes a lower rack, the same consisting of a rod 26, disposed transversely of the base 1, to the rear of the base. The ends 27 of the rod 26 are carried forwardly and are engaged with the plate 3.

The invention further includes an upper rack, this upper rack consisting of rod or bar 28, extended transversely of the base 1, above the base and to the rear of the same. The ends of the rod 28 are carried forwardly, as shown at 29, and are united with the plate 3. The rod 28 is upheld by means

of rearwardly extended braces 30, the forward ends of which are united with the plate 3.

The invention further includes braces 31 and 32. The brace 31, at its lower, forward end, is secured to the fixed cross bar 5, while the brace 32 at its lower, forward end, is secured to the movable cross piece 6. In their intermediate portions, the braces 31 and 32 are provided with heads 33, adapted to engage with the rod 26. The braces 31 and 32, above the heads 33, are carried upwardly and forwardly, as shown at 34. The portions 34 of the braces, carry heads 35, engaging the rod 28, both braces being extended above the rod 28, to form guide fingers 36. It will be understood that the brace 32, being connected with the slidable cross bar 6, is, in its turn, slidable upon the bars 26 and 28.

The invention further includes a pair of rearwardly extended brackets 37, carried by the base 1, and located well below the rack member 26. In these brackets 37 there are longitudinally extended slots 38, adapted to receive the ends of a shaft 39, carrying a roller 40. These slots 38 are likewise adapted to receive the end of a shaft 41, carrying a roller 42, coöperating with the roller 40. The ends of the shafts 39 and 41 are connected by retractile springs 43, so that the rollers 40 and 42 will be held in yieldably co-acting relation.

Secured to one end of the shaft 39, is a beveled pinion 44, adapted to mesh into a beveled pinion 45, secured to the operating shaft of a measuring device 46, the latter being carried by a bracket 47 which, in its turn, is supported by one of the brackets 37. In practical operation, the core is engaged with the core-holders 16, presupposing that this form of core-holder is employed. The cloth which is to be wound, is passed over the rod 28, thence over the rod 26, thence between the rollers 40 and 42, the cloth being then secured to the core which is maintained in place by the holders 16. It will be seen that the rods 28 and 26, together with the yieldably co-acting rollers 42 and 40, serve to stretch the cloth, when the same is wound upon the core, the rollers 42 and 40, also co-acting to smooth out the material, while it is being wound up. Obviously, the winding up of the material is effected by manipulating the crank 14.

As the cloth passes between the rollers 40 and 42, the intermeshing pinions 44 and 45

will actuate the measuring device 46, thereby indicating, at any point in the operation of the structure, the amount of cloth which is already wound upon the core. At this point it may be stated profitably, that the measuring device may be of any common and well known type, and therefore a specific description of the same is not necessary.

It has been pointed out hereinbefore, that the device is adapted to reel up material varying greatly in widths. It will be understood, referring particularly to Fig. 1, that when the crank 9 is rotated, rotation will be imparted to the worm shaft 8, the same engaging the bracket 9 which is secured to the cross bar 6, and causing a reciprocation of the cross bar, together with the parts which are carried thereby, on the base 1. This adjustment of the cross bar 6 upon the base 1, or, more properly, upon the guide plate 3, obviously enables the device to be employed for winding in materials, the widths of which differ greatly.

Obviously, the fingers 36 prevent lateral movement of the material while it is being rolled up.

Having thus described the invention, what is claimed is:—

A dry-goods winder comprising a support; vertically spaced racks carried by the support; braces connected adjacent their upper ends with both racks, the extremities of the braces upstanding above the uppermost rack to provide guide fingers, one of the braces being connected with the support; a cross piece slidable upon the support, and with which the other brace is connected; devices rotatably carried by the support and by the cross piece, to engage the core upon which the material is to be wound; means for advancing and retracting the cross piece, to accommodate goods of different widths; yieldably co-acting rollers carried by the support, and disposed below the lowermost rack; a measuring device operatively connected with one of said rollers, the racks and the rollers being adapted to engage the material prior to the winding of the same upon the core.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ANTHONY B. GRIEP.

Witnesses:

DOLEN W. HILL,
L. C. MARSHALL.