Oct. 20, 1925. 1,557,700

C. A. JADERLUND

PAPER ROLL HOLDER

Filed Oct. 29, 1923

FIG. 1.

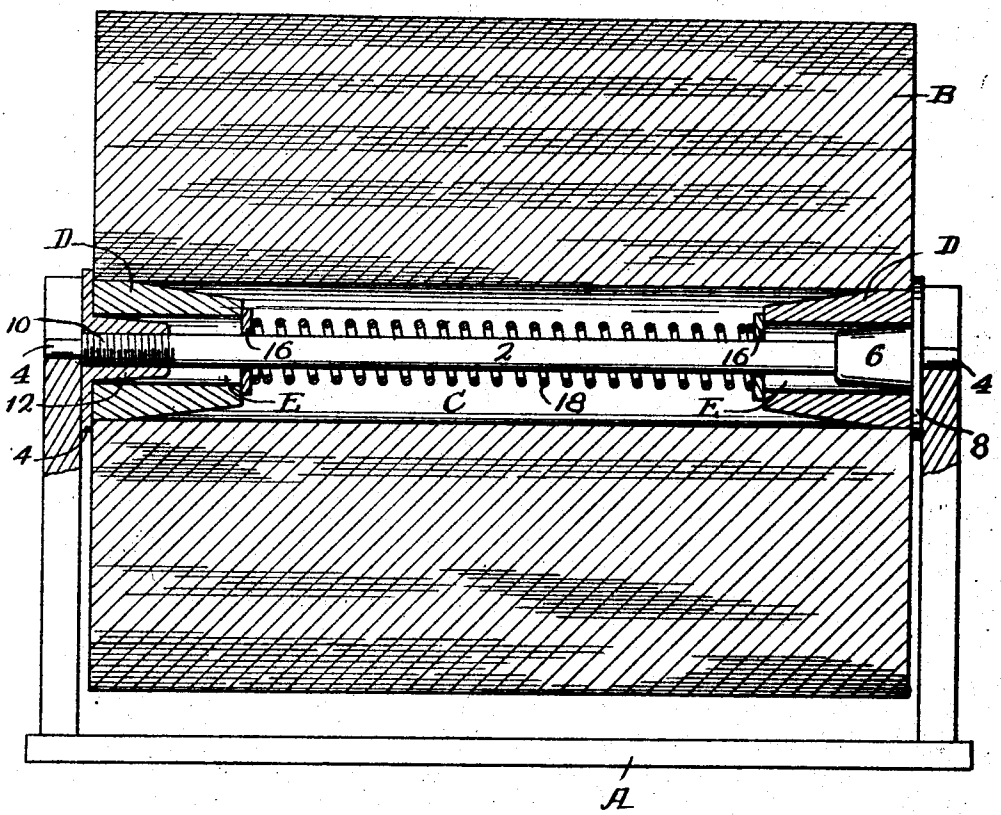
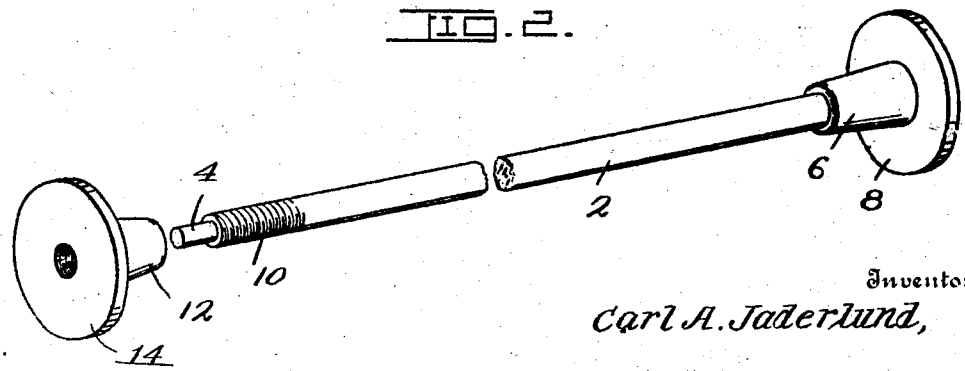


FIG. 2.



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UNITED STATES PATENT OFFICE.

CARL A. JADERLUND, OF KANSAS CITY, KANSAS.

PAPER-ROLL HOLDER.

Application filed October 29, 1923. Serial No. 671,467.

To all whom it may concern:

Be it known that I, CARL A. JADERLUND, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Paper-Roll Holders, of which the following is a specification.

My invention relates to paper-roll holders, and one object is to provide new and useful means for securing from end play the conical bushings used in centering the roll upon the axial shaft.

A further object is the provision of means for preventing axial play of the roll on the conical bushings, in order that the accurate centering of the roll may be maintained and mutilation of its edges avoided when the roll is rotated.

In order that the invention may be fully understood, reference will now be had to the accompanying drawing, in which:

Fig. 1 is a vertical central section through a paper roll mounted upon the mechanism constituting the present invention.

Fig. 2 is a detail perspective view of a shaft and a nut employed in carrying out the invention.

Referring now in detail to the various parts, A designates a stand of any suitable form and B designates a paper roll having the usual axial opening C to receive a pair of tapered bushings D.

2 designates a shaft adapted to extend freely through the axial openings C and E of the paper roll B and bushings D, respectively. Said shaft 2 is provided at its ends with reduced spindles 4 adapted to be removably mounted in the stand A. The shaft 2 is provided adjacent to one of the spindles 4 with a tapered portion 6 having a peripheral flange 8 at its outer end. The shaft 2 is provided adjacent to its opposite spindle 4 with threads 10 for engagement by an internally threaded element or nut 12 having a peripheral flange 14, corresponding to the flange 8.

16 designates a pair of members freely fitting upon the shaft 2 and adapted to be forced in opposite directions by a coil spring 18 freely mounted upon the shaft.

In practice the paper roll B is usually shipped from the factory with the bushings D. Preparatory to mounting the paper roll on the stand A, the shaft 2 is placed through the axial opening E of the bushing D at the right, Fig. 1 to bring the tapered portion 6 within said bushing. The members 16 and the spring 18 are then placed upon the shaft 2, after which the same is passed through the opening E in the bushing at the left. The element 12 is then screwed upon the threaded portion 10 of the shaft 2 until the flanges 8 and 14 engage the ends of the paper roll B and the outer ends of the bushings D. As the threaded element 12 is screwed upon the spindle 4 it forces the adjacent bushing D into the axial opening C of the paper roll B, causing compression of the spring 18 which holds the members 16 firmly against the inner ends of the bushings D. The spindles 4 are then mounted in the stand A. When the paper roll B is mounted as above described it is prevented from moving longitudinally by the flanges 8 and 14. The bushings D are held from longitudinal movement in either direction by the flanges 8 and 14 and the members 16, and thus accurately center the paper roll B, so that it may be rotated easily when unwinding the paper and its edges may be protected from becoming mutilated from contact with the adjacent sides of the stand A.

From the foregoing description it will be understood that I have provided a paper roll holder possessing the advantages above pointed out, and while I have shown and described the preferred construction, combination and arrangement of parts, I reserve the right to make such changes as properly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. In a paper roll holder, the combination with end bushings, of a shaft extending freely through said bushings and provided adjacent to one end with an enlarged tapered portion for centering the associate bushings thereon, a tapered element removably mounted upon the shaft adjacent to its opposite end for centering the other bushing thereon, two members loosely mounted upon the shaft, and spring means interposed between said elements to hold the same against the inner ends of the bushings.

2. In a paper roll holder, the combination with end bushings, of a shaft extending freely through said bushings and provided

adjacent to one end with an enlarged tapered portion for centering the associate bushing thereon, a tapered element removably mounted upon the shaft adjacent its opposite end for centering the other bushing thereon, peripheral flanges on the enlarged parts of the tapered portion of the shaft and the tapered element for engaging the outer ends of the bushings, two members loosely mounted upon the shaft, and a coil spring for forcing said members against the inner ends of the bushing.

In testimony whereof, I affix my signature.

CARL A. JADERLUND.