No. 783,871. PATENTED FEB. 28, 1905.

E. LAWSON.

TENSION DEVICE.

APPLICATION FILED NOV. 19, 1904.

2 SHEETS—SHEET 1.

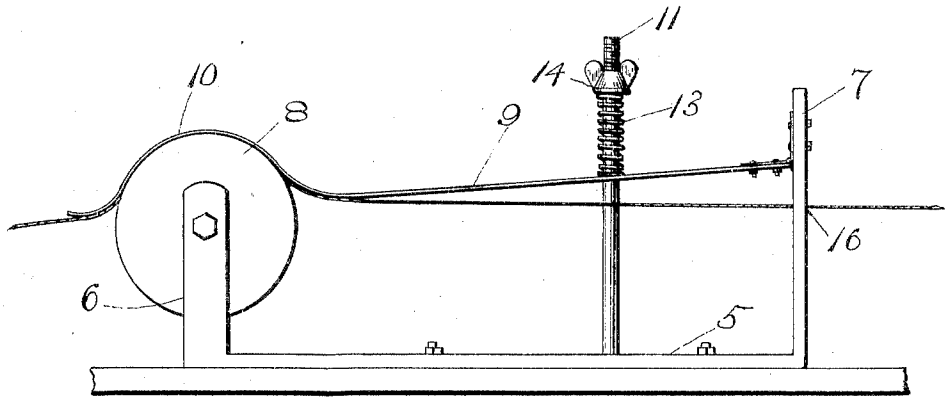


Fig. 1.

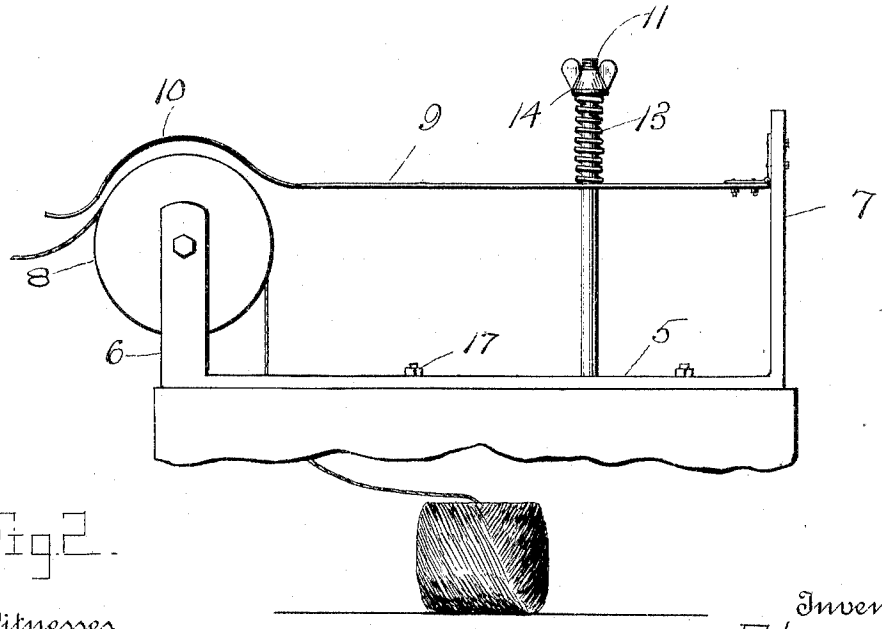


Fig. 2.

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2 SHEETS—SHEET 2.

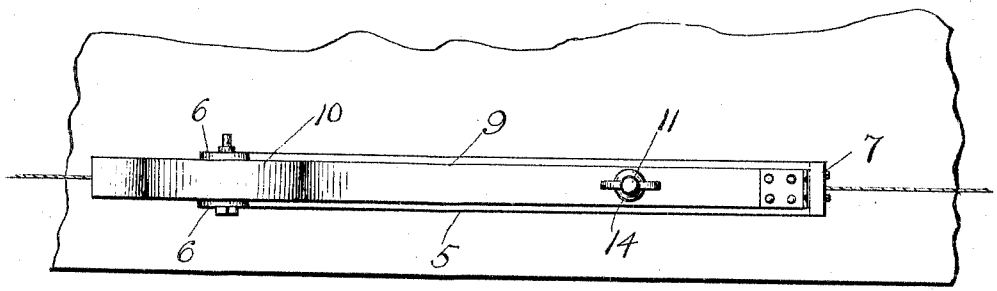


Fig. 3

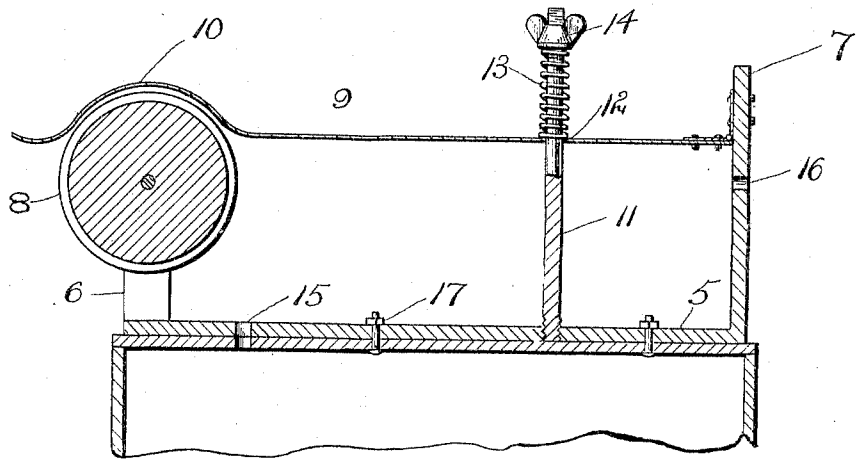


Fig. 4

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No. 783,871. Patented February 28, 1905.

UNITED STATES PATENT OFFICE.

EDWARD LAWSON, OF ELDORADO, WISCONSIN.

TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 783,871, dated February 28, 1905.

Application filed November 19, 1904. Serial No. 233,547.

To all whom it may concern:

Be it known that I, EDWARD LAWSON, a citizen of the United States, residing in Eldorado, (Rural Free Delivery No. 1,) in the county of Fond du Lac, State of Wisconsin, have invented certain new and useful Improvements in Tension 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.

This invention relates to tension devices, and more particularly to those especially adapted for use on harvesters, and has for its object to provide a tension device which will permit of the free passage of the twine therethrough, which will be so arranged that it may be quickly and easily adjusted, and which may be attached either to the binder-table or to the twine-box.

A further object is to provide a tension which will permit of the passage of knots therethrough and which will also permit the cord to turn therein to remove the torsional strain from the cord caused by the unwinding of the latter from the ball.

Other objects and advantages will be apparent from the following description, and it will be understood that modifications of the specific construction shown may be made and any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the device attached to the binder-table. Fig. 2 is a view similar to Fig. 1, showing the device attached to the twine-box. Fig. 3 is a top plan view of Fig. 1. Fig. 4 is a central longitudinal section of the device with the cord removed.

Referring now to the drawings, the present invention comprises a base-plate 5, having upwardly-extending transversely-spaced arms 6 at its forward end and having an upright 7 at its rearward end. Journaled between the arms 6 there is a peripherally-grooved wheel 8, and hinged at its rearward end to the upper end of the upright 7 there is a tension-arm 9, having a convolution 10 adjacent to its forward end, which is engaged over the wheel 8. A rod 11 is secured at its lower end to the base-plate 5 between the wheel 8 and the upright 7, this rod extending upwardly through a perforation 12 in the tension-arm 9. A helical spring 13 is engaged with the rod 11 above the tension-arm, and it is disposed with its lower end resting upon the latter, its upper end bearing against a head 14, which is adjustably mounted upon the upper end of the rod and by means of which the tension of the spring may be varied. Formed through the base-plate 5 just rearwardly of the wheel 8 there is a passage 15, a similar passage 16 being formed through the upright 7.

When the device is attached to the binder-table, as shown in Fig. 1, the cord as it comes from the cord-box is passed first through the opening 16 and then over the wheel 8 between this wheel and the convolution 10 of the tension-arm 9, the spring 13 holding the tension-arm against the cord, as it will be readily understood. When the device is attached to the cord-box, as shown in Fig. 2, the cord is passed first through the passage 15 and then over the wheel 8. Openings 17 are formed through the base-plate 5 for the reception of screws by which the device may be screwed in position.

What is claimed is—

1. A tension for binders comprising a base-plate, a peripherally-grooved wheel revolubly mounted upon the base-plate, an upright carried by the base-plate and having a passage therein, a tension-arm pivotally connected with the upright and having a curve in which the wheel is engaged, and means for holding the tension-arm yieldably in engagement with the periphery of the wheel, said base-plate having a passage formed therethrough adjacent to the wheel.

2. A tension device comprising a base-plate, spaced arms mounted upon the forward end of the base-plate, a wheel revolubly mounted between said arms, said base-plate having a passage therethrough just rearwardly of the wheel, an upright carried by the rearward

end of the base-plate, and having a passage therethrough, a tension-arm pivoted to the upright at its rearward end and lying with its forward portion in engagement with the wheel, a rod secured to the base-plate and slidably engaged in the tension-arm, a spring engaged with the rod above the tension-arm and resting thereagainst, and a head adjustably mounted upon the rod above the spring, and arranged for movement to vary the tension of the spring.

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

EDWARD LAWSON.

Witnesses:
W. R. LYLE,
J. E. CARTER.