

UNITED STATES PATENT OFFICE.

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TWINE-HOLDER.

No. 804,044.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARCUS RICKETTS, a citizen of the United States, residing at Nevada, in the county of Tipton and State of Indiana, have invented certain new and useful Improvements in Twine-Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in twine-holders from which the twine is drawn out at intervals, and particularly refers to the means for taking up or retracting the free end of the cord or twine when released, as fully described in the specification, and pointed out in the claim.

The object of this invention is to provide a frictional tension means whereby the free end of the binding twine or cord is more effectually prevented from overrunning when drawn from its holder, also to provide new means whereby the twine may be applied to the holder more readily and conveniently than heretofore. I attain these objects by means of the twine-holder illustrated in the accompanying drawings, in which similar numerals of reference designate like parts throughout the several views.

Figure 1 is a side elevational view of my invention of a binding twine or cord holder. Fig. 2 is a horizontal section of the same, taken through the line A B. (See Fig. 1.) Fig. 3 is a front elevational view of the same, taken through the line C D. (See Fig. 1.) Fig. 4 is an enlarged broken perspective view of the guiding-tube of the take-up weight, and Fig. 5 is a detail perspective broken view of the top portion of said guiding-tube and take-up weight.

A ball of binding-twine is contained in the cylindrical case 2, and said case is provided with a bottom removable cover 3, which cover is removably secured to the bottom end of the cylindrical case 2 by the spring-catches 4, so that said bottom cover 3 may be readily removed when it is necessary to place a ball of twine within the case 2 and return said cover 3 to close the bottom end of the latter.

A vertically-extending guiding-tube 5 of elliptical cross-section is secured to the side of the case 2, and said tube has its bottom end 6 closed and its top end 7 open. Situated on the diametrically-opposing sides of the longer or major axis of the guiding-tube 5 are the slots 8, which extend vertically and downwardly from the open end 7 of said

guiding-tube 5 and terminate in the twine-guiding eyes 9.

A gravity or take-up weight 10 is constructed of an oval form to loosely fit and slide vertically in the guiding-tube 5 and is so formed to prevent its turning in its guiding-tube, and consequently twisting the binding-cord, which would result in rendering the apparatus inoperative, and said take-up weight is provided at its bottom end with a buffer or cushion 11, whereby when the said weight 10 is permitted to descend or rapidly fall to the bottom of its guiding-tube 5 the sound will be deadened. On the top end of the said take-up weight 10 is the eye 12, through which the loose or free end of the binding-twine is passed, so that when the said end of the binding-twine is pulled taut the weight 10 ascends in its tube 5 and when more tension is applied to the binding-twine the latter is drawn out of the receptacle or twine-case 2.

A horizontally-extending tension-bar 13 is secured to the tube near the top end thereof and in position thereon, so that its top side will be on a level with the eyes 9, through which latter the slack end of the twine is passed.

A vertically-extending bar 14 of any suitable cross-section extends from the top of the twine receptacle or case to a level with the top of the tube 5 and is secured at its bottom end to the top end of the twine receptacle or case 2 in a position diametrically opposite said tube 5. A cross-bar 15 extends from the top end of the vertically-extending bar 14 to the top side portion of the tube 5.

An eye 16 is formed central on or connected to the cross-bar 15, and a suspension-hook 17 is connected thereto, whereby the entire apparatus is suspended overhead, as is usually the custom in stores.

The manner of practicing my invention I will now proceed to describe: The loose end of the twine of the ball is passed through the opening 2^a of the receptacle or ball case 2. The ball is then placed within the ball-case or receptacle 2, and the bottom lid 3 is applied to the bottom open end of said ball case or receptacle 2 to close the same and is secured thereon by its spring-fastening 4, as previously described. The twine 1 is then drawn through the opening 2^a the required extent and wrapped once around the friction or tension bar 13, as shown particularly in Figs. 1, 11c

2, 3, and 4. The end of the twine is then passed through the eye 12 of the weight 10, and the operator applies the weight to the top 7 of the vertical guiding-tube 5, (see Fig. 5,) so that the twine 1 will fall directly over the slots 8. The weight then descends, the tube 5 dragging the loose end of the twine 1 with it, as shown particularly in Fig. 3. Now this last particular feature, whereby the weight is threaded by the twine 1 and is thus readily applied, as described, to its guiding-tube, forms the main feature of this invention, for by such an arrangement the twine is quickly and readily threaded through the weight and the weight applied to the tube, a matter of importance in establishments where the binding-twine is rapidly used up and the twine-holding receptacle must necessarily be very frequently supplied with twine throughout the day. Another important feature is the means of applying the tension to the twine. This is readily understood by reference particularly to Figs. 1 to 4, inclusive, the operator using the loose end of the twine 1 when it is necessary to bind a parcel, pulls the twine 1 taut, which results in the weight 10 being drawn up the tube 5 till its eye 12 comes to a level with the eyes 9 of the tube 5, and thus a more direct tension is applied to the twine 1 between the eye 12 of the weight 10 and the tension-bar 13, around which the twine extends one turn; but a greater tension or pull must be applied to the loose or slack end of the twine 1 to withdraw more twine from the receptacle 2, and this additional tension is the amount required to counteract the tension applied to the twine by the gravity of the take-up weight 10, so that when the operator lets go or releases the end of the twine 1 the weight

10 will descend in its tube 5 and take up said loose end of the twine 1 without withdrawing a further supply from its receptacle 2. This method of applying the tension to the twine is more positive and reliable.

Having thus fully described this my invention, what I claim as new and useful, and desire to cover by Letters Patent of the United States therefor, is—

In a twine-holder, the combination with a ball-receptacle provided at its top closed end with a twine-outlet aperture, a removable ball-receptacle bottom cover, of a vertically-extending guide-tube of oval bore situated at one side of said receptacle having its bottom end closed and its top end open and provided with opposing vertically-extending cord or twine receiving slots extending from the open end of the tube, which slots terminate in twine-guiding eyes, a take-up gravity-weight adapted to slide longitudinally in said vertically-extending tube, a tension-bar situated at or near the top open end of said tube parallel with the line of the bottom of the twine-receiving slots, a vertically-extending bar situated on the top of said ball-receptacle diametrically opposite said guide-tube, and extending vertically to a level with the upper open end of the said tube, a cross-bar connecting the top ends of said bar and said tube and means connected to said cross-bar whereby the ball-holder is suspended.

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

MARCUS RICKETTS.

Witnesses:

S. C. MILLS,
D. L. DUKE.