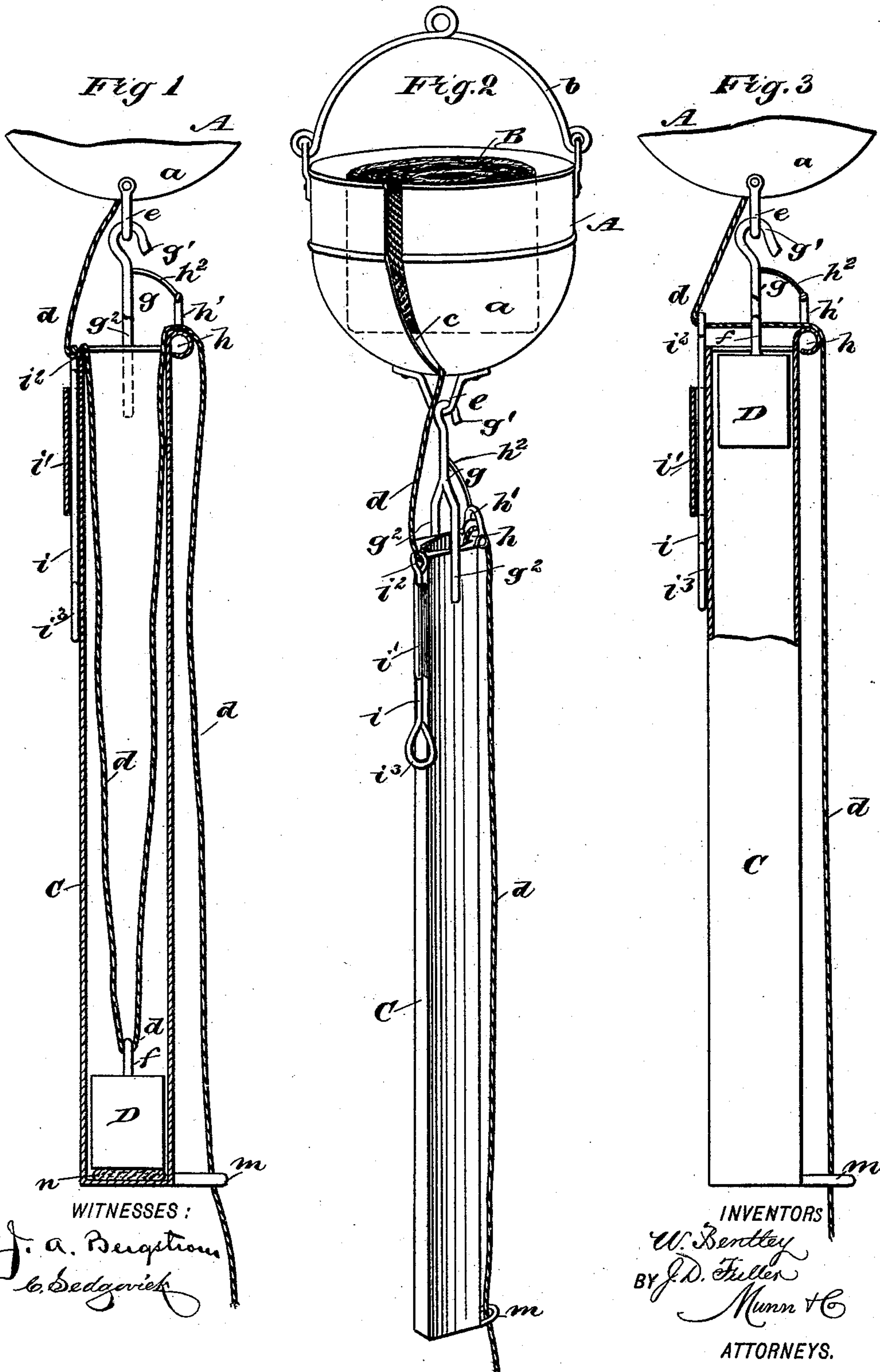


(No Model.)

W. BENTLEY & J. D. FULLER.
TWINE HOLDER CUP AND TAKE-UP.

No. 494,287.

Patented Mar. 28, 1893.



UNITED STATES PATENT OFFICE.

WILLIAM BENTLEY AND JAMES DIXON FULLER, OF LETHBRIDGE, CANADA.

TWINE-HOLDER CUP AND TAKE-UP.

SPECIFICATION forming part of Letters Patent No. 494,287, dated March 28, 1893.

Application filed May 19, 1892. Serial No. 433,533. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM BENTLEY and JAMES DIXON FULLER, both of Lethbridge, North-West Territory, Canada, have invented a new and useful Twine-Holder Cup and Take-Up, of which the following is a full, clear, and exact description.

The object of this invention is to provide a suspensible holder cup for a twine ball, which will be adapted to deliver the twine strand freely; a further object being to furnish a take up for the trailing end of an unwrapped twine strand, that is of novel construction, cheap and easy to make, and that is reliable in use, embodying a tension device that restrains the too free delivery of the twine.

To these ends, our invention consists in the peculiar construction of parts, and their combination, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view in section, of parts of the twine take-up hung from a holder cup shown broken, a twine strand in slack condition extending from the holder cup and engaging the take up. Fig. 2 is a perspective view of the holder cup, a suspended twine take-up, and a twine ball within the cup, having one end portion unwrapped and engaged with the take-up; and Fig. 3 is a side view of the twine take-up partly in section, suspended from a holder cup shown broken, and a twine strand extended from the cup and engaged with the take-up, in taut condition.

The twine holding cup A, is preferably made cylindrical, and provided with a hemispherical bottom *a*, the cup being adapted for suspension by an attachment to its upper edge portion, of the bail handle *b*.

There is a slot *c*, cut in the side and bottom walls of the holder cup, as shown in Fig. 2, which will permit a strand *d*, from the twine ball B, that is placed in the cup, to be drawn downwardly through the slot without obstruction, so that twine may be unwound freely from the ball, and also do away with the threading of the twine cup, as is necessary in ordinary devices of this type.

Upon the bottom *a*, near its center, a loop *e*, is secured by its ends, for a loose engagement therewith of the hook *g'*, that is formed on the upper end of a hanger link *g*; the latter being forked to provide two parallel depending limbs *g*², which are secured oppositely upon the sides of an elongated guide box C.

The guide box mentioned, is preferably made of sheet metal, rectangular in cross section, with parallel sides, having a proper length for the travel therein of a loosely fitting weight D, that is furnished with a hanger loop or eye *f*.

On one side edge of the guide box C, at its top, a scroll *h*, is formed to permit a twine strand to slide freely over said edge, and above the scroll a keeper loop *h'*, is secured by its ends, through which the strand is to pass. There is a rod *h*² extended from the loop *h'* to the hanger link *g* near the hook *g'* which braces said link. On the opposite side of the guide box from that whereon the loop *h'*, is affixed, a tension bar *i*, is located, said bar being loosely held in place by its engagement with a vertical box *i'*, wherein it is adapted to slide freely. There is a ring eye *i*², formed on the upper end of the tension bar *i*, and a larger ring *i*³, produced on the lower end of said bar; or there may be a weight of proper heft substituted for the ring *i*³, that is designed to retain the bar in place, and also give it necessary weight. On the same side of the guide box with the scroll *h*, a leading eye *m*, is secured to project therefrom below; and within the guide box on its lower end wall, a cushion *n* of any suitable material is located, which will absorb the shock of the weight D, if the latter is allowed to fall suddenly.

In use, the holder cup A, is hung at a proper height above a counter, or other point where the twine is to be used, a strand *d*, from the ball B, being first inserted through the ring-eye *i*², of the tension bar *i*, then through the loop *f*, on the weight D, then through the keeper loop *h'*, over the scroll *h*, and down through the lower eye *m*, leaving a portion of the twine depending below the box C. In normal condition, the weight D, rests on the cushion *n*, but when draft strain is put upon the pendent end portion of the strand *d*, the weight will be lifted in the box till it reaches the top, which will then allow the tension bar *i*, to rise

slightly and feed the twine as needed, at the same time checking too free a delivery of the strand from the ball B. After a proper amount of twine has been severed from the unwound portion for use, the release of the trailing strand will permit the weight D to fall upon the cushion *n*, in the bottom of the box and take up the loose cord or twine, the tension bar sliding down a sufficient distance to lock the strand and prevent an accidental unwrapping of the same.

While it is preferred to use the holder cup A, in connection with the twine "take up" device, it is also available for service alone, the slot *c*, in that case being converged below sufficiently to restrict the too free delivery of the twine strand through it.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In a twine holder, the combination with the casing or box and the vertically movable weight therein, of a cord guide at one side of the casing or box through which guide the cord passes from the weight, and a vertically movable tension bar or piece at the opposite side of the box or casing from said cord guide and having an eye through which the cord passes to the weight; whereby when the free end of the cord is released the tension bar or piece will descend and engage the cord and

prevent the descending weight from unwinding the ball, substantially as set forth.

2. A twine holder, comprising a cup having a twine slot or opening, the guide box or casing C containing the weight and having a cord guide at one side of its upper edge, and a sliding tension bar at its opposite side provided with an eye at its upper end through which the cord passes from the cup to the weight; the said tension bar in its descent bending the cord across the upper edge of the guide box and preventing the descending weight from unwinding the ball, substantially as set forth.

3. A twine holder and take up, consisting in the slotted cup having a suspension bail, and a take up comprising the tubular casing C suspended from the bottom of the cup and provided with a vertically sliding weight having an eye *f*, the upper and lower guides *h'* *m* on the same side of the casing, and the vertically sliding bar *i* on the upper end of the casing opposite the guide *h'* and provided at its upper end with an eye *i'* to clamp the cord across the upper edge of the casing when the operator releases the cord, substantially as set forth.

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Witnesses:

JOHN MURRAY,
HELDEGE MIRON.