(No Model.)

H. A. KEYES.

TWINE HOLDER.

No. 455,439. Patented July 7, 1891.

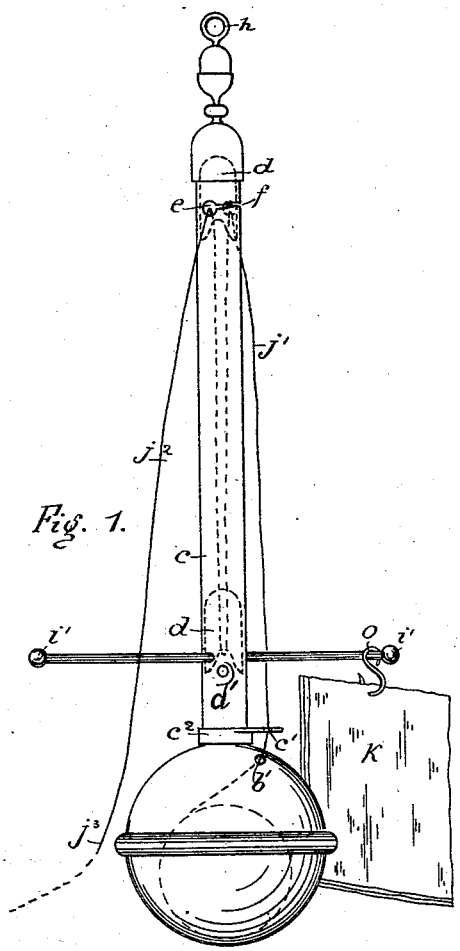

Fig. 1.

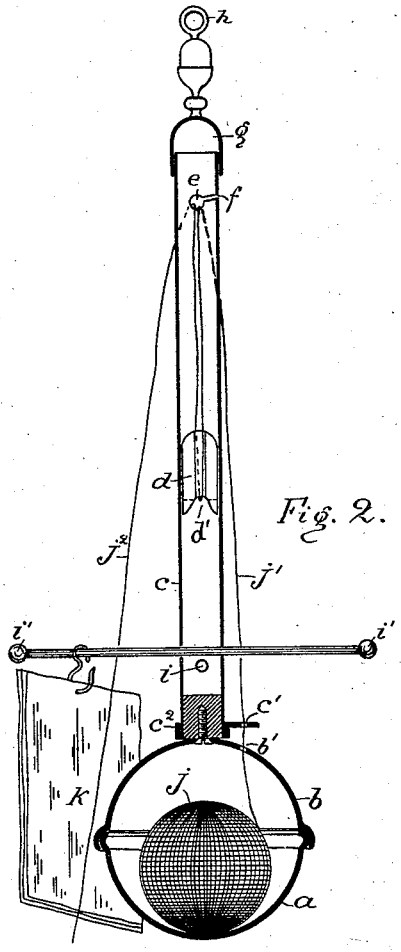

Fig. 2.

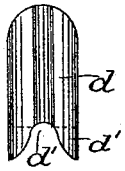

Fig. 4.

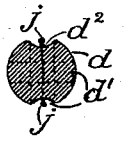

Fig. 3.

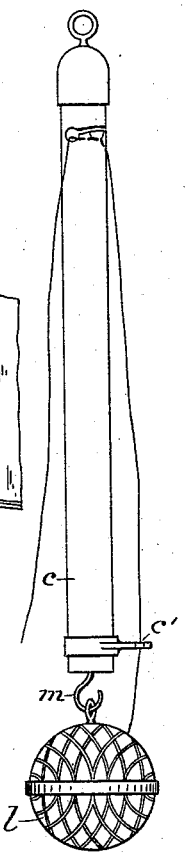

Fig. 6.

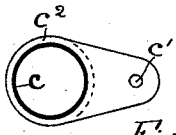

Fig. 5.

Witnesses
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HERBERT A. KEYES, OF LA GRANGE, ILLINOIS.

TWINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 455,439, dated July 7, 1891.

Application filed March 14, 1891. Serial No. 385,060. (No model.)

To all whom it may concern:

Be it known that I, HERBERT A. KEYES, a citizen of the United States, residing at La Grange, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Twine-Holders, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows my improved twine-holder in perspective. Fig. 2 shows the same in vertical section through its vertical axis. Fig. 3 shows the weight in plan view, and Fig. 4 shows said weight in side elevation. Fig. 5 shows the tension device c^2 attached to the stem *c*. Fig. 6 shows a common twine-holder *l* attached to the stem *c* by means of a hook *m*.

Like letters refer to like parts.

The object of my invention is to produce a twine-holder for stores and like places in which the end of the string will be in such a position as to avoid all liability of its being entangled with objects near it and thus be drawn out and wasted, and yet be readily accessible; and to attain said ends I construct my said improved device in substantially the following manner, namely: I provide a tubular stem *c*, ranging in length from about two to three feet, more or less, as needs may demand, and of internal diameter sufficient to freely pass a double-length twine between it and a weight carried and sliding on said string within the tube. The upper end is suspended by a ring *h* or otherwise supported, and to the lower end of said tube is attached a twine-holder composed of the two parts *a b*, separable by a friction or other joint for the purpose of opening and closing to receive and hold the ball of twine *j*. The said stem and its appurtenances may, however, be provided with a hook *m*, upon which any device, as *l*, may be hung to hold the ball of twine, which will then operate perfectly with my new device. Said twine-holder *a b* is provided with a hole *b'*, through which the string is passed up and through a hole *c'* in a tension device c^2, attached to and turning horizontally on the stem *c*. The stem *c* has holes *e* near its upper end, which are connected by a cut or kerf *f*. The twine is passed through said kerf into the holes *e*, the part *j'* passing up to and the part j^2 down from said holes *e*. Upon said twine, so arranged, is placed a weight *d*, forming a short cylinder with flattened sides d^2, and of which the lower end has two notches *d'* at right angles to each other. Said weight is then dropped into the top of the stem onto said string, which will enter one of said set of notches *d'*. When the parts *j'* and j^2 are released, the weight *d* will sink to the bottom of the tube, or until it strikes one of the cross-bars *i*, and thus draw up both of said parts *j'* and j^2; but for the purpose of giving more motion to the outer or free end j^3 of the string the tension device c^2 is applied, having an ear provided with a hole *c'*, through which the upward-moving part *j'* of the twine is passed. Said tension device when moved around increases the distance between the holes *b'* and *c'*, and consequently the frictional resistance of the part *j'*, which may thus be made to hold its place fixedly while the weight *d* falls, and thus move the part j^2 only and give to it twice the motion it would have if both *j'* and j^2 moved together. The weight may also be mounted on the string by inverting the stem and passing the string into the holes *e e* laterally through the slot *f*, after which the string is released and the stem erected, when the weight will mount the string. Of course the space above the string or slot must be high enough to hold the entire weight beyond or above said slot, so as not to interfere with the string passing through the slot. The bars *i* may be attached to the stem *c* by any known means, as by boring holes through it for the rods to pass through. On the ends of said rods *i* are fixed suitable stops or balls *i'* to keep the hooks *o*, on which the bags *k* are hung, from slipping off.

What I claim is—

1. The combination, with a tubular stem having a twine-holder with a hole *b'* attached to its lower end and holes *e e* connected by a slot *f* near its upper end, of a notched weight in said stem adapted through said notches to ride on the string, substantially as specified.

2. The combination, with a tubular stem having a twine-holder with a hole *b'* attached to it at its lower end and holes *e e* connected

by a slot *f* near its upper end through which to pass a string, of a tension device adapted to turn on the axis of said stem and guide the string, substantially as specified.

3. The combination, with a tubular stem having a twine-holder attached to its lower end and holes *e e* connected by a slot *f* near its upper end, of a weight notched on its sides and at its lower end to pass the string and ride upon it, substantially as specified.

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Witnesses:
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