

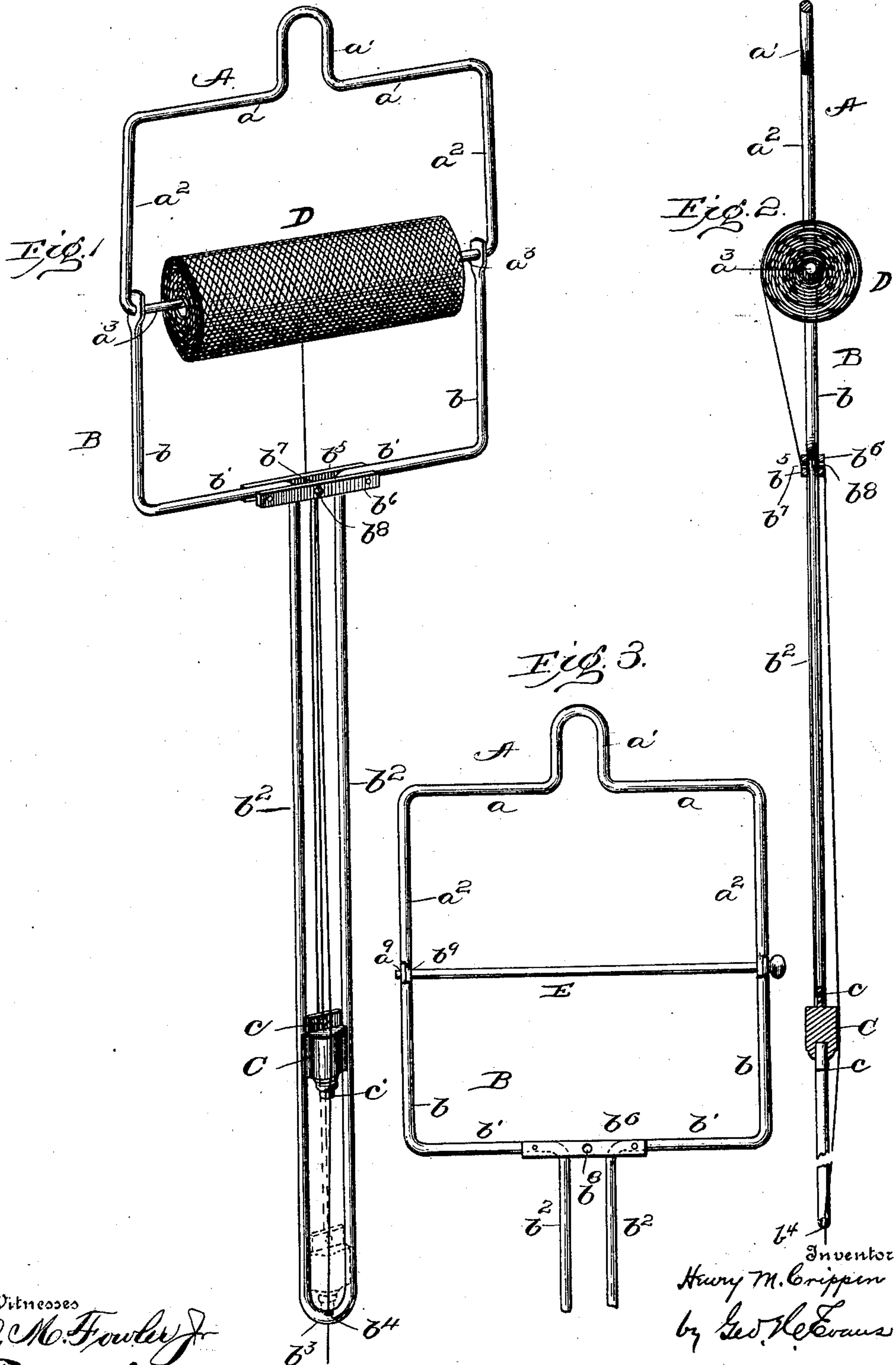
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Patented Apr. 2, 1901.

H. M. CRIPPEN.
TWINE HOLDER.

(Application filed May 28, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY M. CRIPPEN, OF ATHENS, OHIO.

TWINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 671,413, dated April 2, 1901.

Application filed May 28, 1900. Serial No. 18,264. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. CRIPPEN, a citizen of the United States, residing at Athens, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Twine-Holders, of which the following is a specification.

My invention relates to that class of twine-holders which have a take-up in the form of a vertically-sliding weight.

The objects of my invention are cheapness and simplicity of construction; a take-up device which not only takes up the slack in the cord or twine beyond the holder proper, but which will also clamp the free end of the cord at the point where it makes its final passage from the holder; also, to provide the take-up with a soft or yielding buffer at its lower end to not only render its descent noiseless, but to engage the free end of the cord and clamp it without cutting or injuring it; also, to provide a holder proper which may be suspended vertically or secured horizontally to a suitable support and yet allow the take-up frame to hang down freely; also, to provide the take-up frame with two upper apertures or openings with which an aperture at the upper end of the weight may be alined, so as to permit the cord or twine to be threaded simultaneously through all three openings. These objects I accomplish by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of my improved twine-holder with a spool of cord in place, the take-up weight being raised slightly in full lines and in dotted lines shown as it would appear in its lowermost position, where it clamps the free end of the cord at its lower outlet-aperture. Fig. 2 is a central vertical longitudinal section. Fig. 3 is a fragmentary view of a modification to be hereinafter described.

A represents the holder proper, formed of a length of wire having a top bar a , bowed upwardly or outwardly at its middle to form an attaching or suspending means a' , and depending side arms $a^2 a^2$, terminating at their lower ends in inwardly-extending pintles or trunnions $a^3 a^3$, which receive and support a

ball, cone, or spool of twine. These side arms $a^2 a^2$ may be sprung apart sufficiently to allow the cord or twine to be passed between the pintles or trunnions, which will then be moved inwardly into engagement with the spool or ball and support it, so that it may revolve freely in unwinding.

B is the take-up, preferably formed of a single length of wire having side arms $b b$, apertured at their upper ends for the passage of the pintles or trunnions $a^3 a^3$, which form the take-up supports. These arms $b b$ are bent inwardly at their lower ends, as at $b' b'$, and thence downwardly for quite a length to form the guide-bars $b^2 b^2$, which are integrally connected at their lower ends by a cross-bar b^3 , having a central vertical cord-aperture b^4 . The upper ends of the guide-bars $b^2 b^2$ are connected by parallel cross-pieces $b^5 b^5$, which are provided with horizontally-alined cord-apertures $b^7 b^8$, respectively.

C designates the take-up weight, having its vertical sides grooved to fit between and slide upon the guide-bars b^2 . The upper end of the weight has a transverse eye c , adapted to pass between and register with the eyes or apertures $b^7 b^8$, and the lower end of the weight has a central buffer c' , of rubber or other suitable material, in vertical alinement with the lower aperture or eye b^4 .

The operation is as follows: A ball, spool, or cone D of cord is placed upon the pintles or trunnions $a^3 a^3$, as before described, and the weight C is raised till its eye c registers with the eyes $b^7 b^8$, when the free end of the cord is passed therethrough and drawn down and finally passed through the lower aperture b^4 , from which it depends within reach of the operator. A quick or sudden pull on the depending end of the cord will cause the weight C to rise and allow the cord to be freely drawn out, and the weight will take up all slack in the cord between itself and the ball, spool, or cone. As soon as the operator releases the cord the weight will fall and its buffer c' will engage the cord where it passes through the final eye a^4 and there clamp it and prevent it from being pulled up through the said eye a^4 .

It is obvious that the meeting ends of the holder A and take-up frame B might be pro-

vided with registering eyes a^9 b^9 , through which a cord-supporting pin or axis E could be passed, as in Fig. 3.

Having described my invention, what I
5 claim is—

1. The combination with the cord-holding device, of a take-up comprising a depending frame formed of a single wire bent upon itself to form two parallel guide-arms provided with
10 upper and lower cord-apertures; the lower aperture extending vertically through the bend at the lower end of said frame, and a sliding weight between said guide-arms having a cord-eye in its upper end and on its lower end
15 provided with a central depending buffer in line with said lower cord-aperture to clamp the outgoing end of the cord thereat; substantially as described.

2. A take-up frame having parallel guide-
20 arms having an outlet-eye between their lower connected ends for the free end of the cord, horizontally-alined cord eyes or apertures between their upper connected ends through which the cord passes first, a weight sliding
25 between said guide-arms and having an eye or opening adapted to register with said two upper frame-eyes for the simultaneous pas-

sage of the cord through all three eyes; the lower end of the weight being adapted in its lowest position to clamp the free end of the
30 cord to the lower cross-bar of the take-up frame; substantially as described.

3. The combination with the cord-holder formed of a bowed wire having inturned lower ends upon which a ball or spool of cord may
35 beswung, of a take-up frame having eyes at its upper ends through which said inturned cord-supporting ends pass, and provided therebelow with parallel weight-guiding arms, horizontally-alined apertures or eyes between the
40 upper ends of said guiding-arms and a vertically-disposed eye between the lower ends of said arms, and a weight sliding between said arms having a cord-eye in its upper end and a buffer on its lower end to clamp the cord at
45 the lower eye when the weight drops; substantially as described.

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

HENRY M. CRIPPEN.

Witnesses:

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