(No Model.)

H. COLE.

DEVICE FOR HITCHING ANIMALS.

No. 422,381. Patented Mar. 4, 1890.

FIG. 1

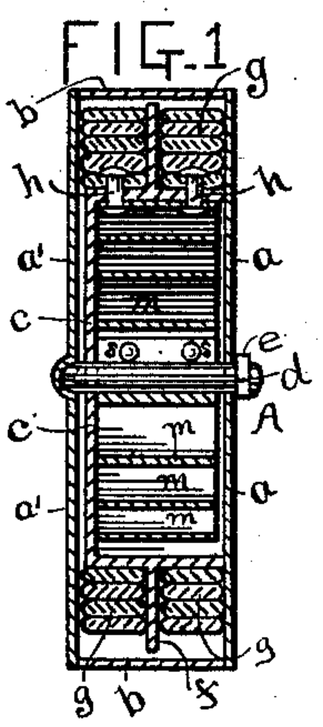


FIG. 2

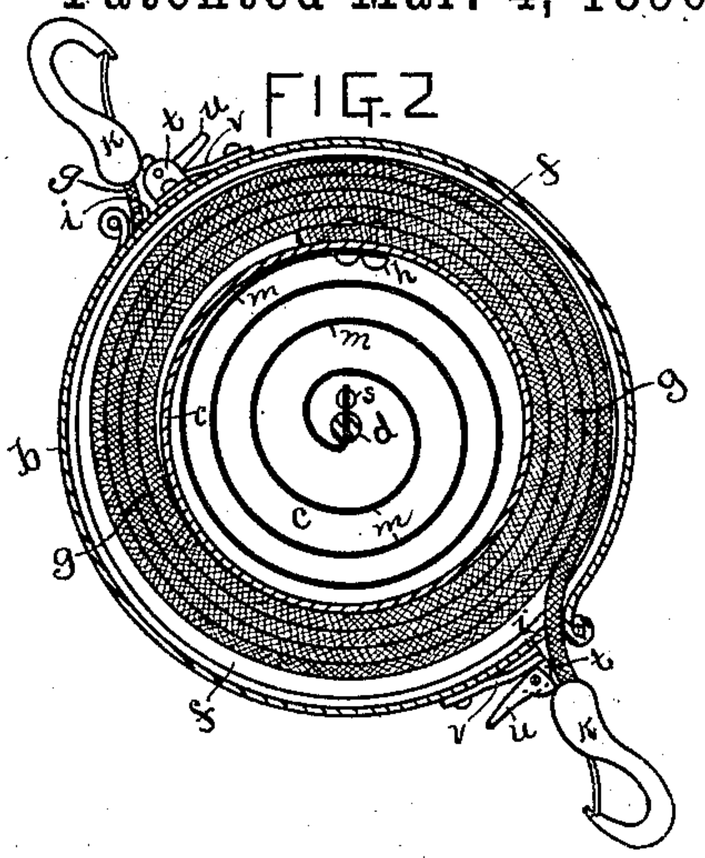
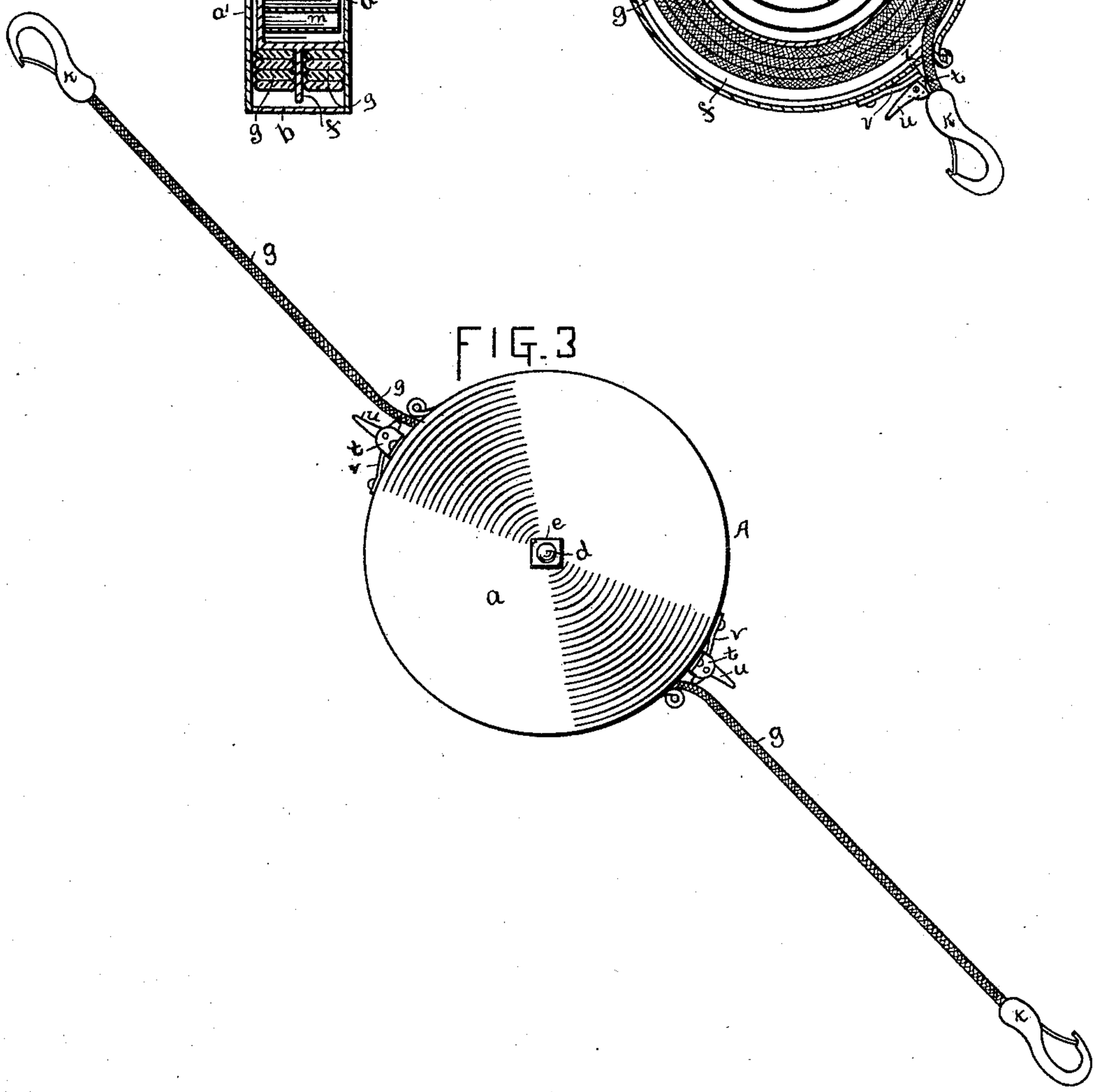


FIG. 3



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DEVICE FOR HITCHING ANIMALS.

SPECIFICATION forming part of Letters Patent No. 422,381, dated March 4, 1890.

Application filed February 6, 1888. Serial No. 263,147. (No model.)

To all whom it may concern:

Be it known that I, HARRISON COLE, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Hitching-Straps, of which the following is a specification.

My invention relates to hitching-straps, such as are used in securing horses to posts, curb-rings, &c.; and the objects of my invention are to provide a hitching-strap which when not in use will assume automatically a compact form within a suitable form of case; to so construct the same as to admit of its being at all times held taut between the head of the horse or other animal and the object to which the remaining end of the strap is attached; to provide means for locking the straps or strap when at any desired length, and to construct the strap and its connections in a simple and convenient form and of strong and durable material. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section of the strap-case and inclosed straps. Fig. 2 is a central vertical section taken at right angles with the view shown in Fig. 1, showing one of the straps in elevation. Fig. 3 is an outside view of the case, showing the straps partly drawn out and locked.

Similar letters refer to similar parts throughout the several views.

A represents a circular case, formed of metal or other suitable material, having a front and rear disk-shaped face *a a'*, said faces connected, as shown, by a circular side strip *b*, secured to or formed with the rear face *a'*.

c represents a metallic cup-shaped reel of smaller diameter than the case A, said reel being loosely pivoted within said case on a pin or bolt *d*, the latter having one end secured rigidly to a central point in the face *a'*, and extending through the case has its remaining end projecting through a central hole formed in the face *a*, said projecting end being screw-threaded and having a small nut *e* screwed thereon and adapted to bear against the outer side of said face *a*, as shown.

The reel *c* is provided with a central circular peripherical flange *f*, preferably made to extend to within close proximity to the inner surface of the case side strip *b*.

About the periphery of the reel *c*, on each side of the central flange *f*, is wound, one coil above another, a flattened cord or strap *g*. These straps are preferably formed of woven or braided wire, but may be of any other suitable material. The inner end of each of these straps *g* is secured by rivets *h* or otherwise to a point on the outer side of the reel *c*, while its outer end is made to extend through a slotted opening *i* in the side *b* of the case. These openings *i* are preferably located at opposite points in the case. Each of the outwardly-extending ends of the straps is secured in any suitable manner to a suitable form of metallic hook *k*, which may be the ordinary form of snap-hook shown.

Within the internal reel *c* is coiled a metallic spring-strip *m*, preferably corresponding in form and material with the ordinary clock-spring. This spring has its inner end or terminus of its inner coil secured to or held by the central pin *d*. This is preferably accomplished by having formed in said pin a slot through which is made to extend the said spring end, the latter being prevented from returning by means of the heads of the rivets *s*, passing therethrough. The remaining and outer end of the spring *m* is secured to a point on the inner side of the reel, preferably by the rivets *h*. The above-described internal parts may be arranged within the case and cup as described, and the face *a* adjusted to its position on the case and detachably held in this position by securing the nut on the screw-threaded outer end of the pin *d*.

The operation of the above-described portion of my device is as follows: One of the hooks *k* having been engaged with a bridle of a horse, the strap *g* may be unwound and pulled from the case by pulling upon the hook of the remaining strap, which may then be made to engage with the object to which it is desired to secure the horse. The unwinding of one or both of the straps, as will be seen, will operate to revolve the reel *c*, which in turn will cause the spring *m*, by reason of its connection with a stationary and moving part, to be more tightly coiled, thus increas-

ing its tension as the strap or straps are uncoiled. The hooks *k* having been connected with opposite points, as above described, it will be observed that the tension of the spring will operate to cause the case A to assume a central position between the extended portions of the straps, as shown in Fig. 3 of the drawings. It will readily be seen that the tension of the spring within the case will tend at all times to hold the straps taut between the horse's head and the object to which he is hitched and that the movement of the horse's head is limited only by the length of the straps.

In order that the straps may be locked at any desired length from the case, I may combine with my device the following locking mechanism: From the side strip *b* of the case are made to project, respectively, from points adjoining one edge of the slotted openings *i*, lugs *t t*, to each of which is pivoted the head of a short locking-arm *u*, said head having a slightly-enlarged portion extending at right angles with the arm, as shown. One of these arms is loosely pivoted at its angle to each of the lugs *t*. Beneath the head of each of the arms *u* is made to bear one end of a short metallic spring-strip *v*, the latter having its remaining end riveted or otherwise secured to the side strip *b* of the case. The straps *g* having been drawn out the desired distance from the case, they may be locked in this position by turning the arms *u* until their enlarged heads bear against the straps and bind the latter against the opposite side of the slots *i*, the springs *v* operating to hold the locking-arm in this position.

It will be seen that the above-described hitching-strap may be made to assume automatically a compact and convenient form, which will admit of its being carried in a pocket, if desired.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the case, the single spring-actuated reel mounted therein, said reel having a central peripheral flange separating two coils of the strap, which are wound on the reel and whose outer ends pass through openings in the case diametrically opposite each other, and suitable hooks at the outer ends of said strap for attaching to the bridle and hitching-post, as set forth.

2. The combination of the case, the reel therein, the strap secured upon said reel and passing through the case, the arm pivoted on the case and bearing on the strap, and the spring secured to the case and bearing on said arm, substantially as set forth.

HARRISON COLE.

In presence of—
C. C. SHEPHERD,
L. F. WILDERMUTH.