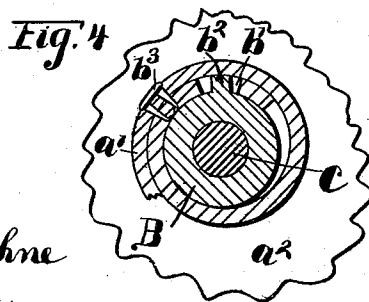
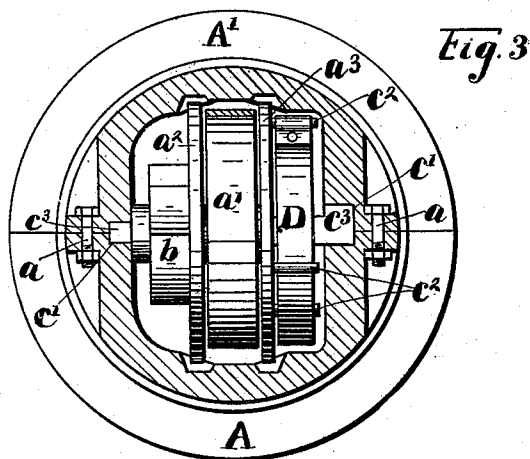
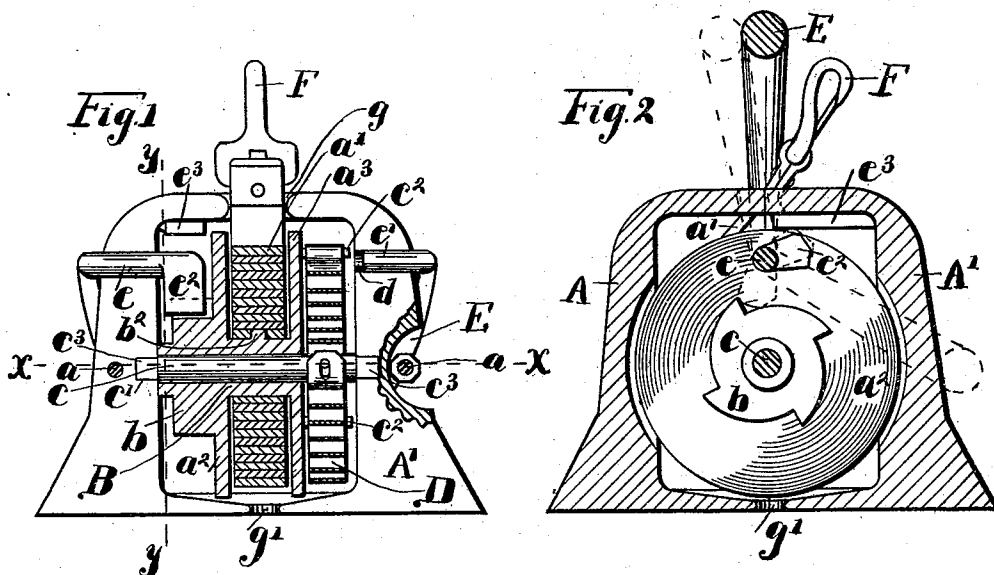


(No Model.)

E. E. ALBIN.
HITCHING DEVICE.

No. 486,842.

Patented Nov. 29, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

ELMER E. ALBIN, OF SPRINGFIELD, OHIO.

HITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 486,842, dated November 29, 1892.

Application filed October 15, 1891. Serial No. 408,844. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. ALBIN, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Hitching Devices, of which the following is a specification.

My invention relates to improvements in hitching-weights having a strap or similar connection adapted to be automatically drawn into the weight when not in use.

The object of my invention is to provide a hitching device of simple construction the parts of which are so arranged as to be readily adjusted, and at the same time secure that ease of operation necessary or desirable to secure efficient results.

My invention consists in the constructions and combinations of parts hereinafter described, and pointed out in the claim.

In the accompanying drawings, which form a part of this application, Figure 1 is a transverse sectional view of a hitching device embodying my invention, the line on which the section is taken being identical with the parting-line of the respective halves of the casing, which is formed in two parts. Fig. 2 is a sectional view of the same, taken on line *y y* of Fig. 1. Fig. 3 is a sectional view of my device with the casing removed down to line *x x* of Fig. 1. Fig. 4 is a detail view of the preferred manner of attaching the strap to the reel.

Like parts are indicated by similar letters of reference in the several views.

In the said drawings, A A' represent the weight proper, made in two parts hollowed and joined to form a casing. The casing is parted on a line passing through the centers of all the operating parts, thereby cheapening construction and facilitating repairs. The respective halves A A' of said casing are secured together by suitable bolts or rivets *a*. Located within the casing is a reel B, having one end of a strap *a'* secured thereto. This reel is provided with flanges *a² a³*, formed integral therewith, adapted to guide said strap *a'* when coiled upon said reel. Formed with and projecting from the face of the flange *a²* of the reel B is a ratchet-wheel *b*, for the purpose hereinafter described. The reel B is

loosely mounted on a stationary shaft *c*, provided with square or oblong ends *c³*, which rest in correspondingly-shaped depressions *c'* in the adjoining faces of the respective halves of the casing A A'. A coil-spring D, having one end secured to said shaft, is coiled about the said shaft. The remaining end of said spring is looped over one of a series of pins *c²*, which project laterally from and at substantially-equidistant points about the circumference of the flange *a³* of the reel B. These pins *c²* are also adapted to prevent the spring D from expanding beyond the periphery of the flange *a³* of the reel B. Pivotally mounted above the shaft *c* is a bail E, having inwardly-bent trunnions *e e'*, resting in oppositely-located depressions *d*, formed in the adjoining faces of the respective halves of the casing A A'. Formed on the end of the trunnion *e* is a detent projection *e²*, adapted to act upon the ratchet-wheel *b* as a detaining-pawl when the bail is in the position shown in Fig. 1 and dotted in Fig. 2, and thus prevents the strap *a'* from being wound up when the bail E is in a position for transporting the weight, as shown in Fig. 2. The detent *e²* of the bail E is oscillated out of engagement with the ratchet *b*, which permits the tension of the spring D, caused by the strap *a'* being unwound, to coil said strap *a'* around the reel B, the flanges *a² a³* of said reel and the hole *g*, through which said strap *a* passes, guiding said strap and preventing it from twisting or kinking in coiling.

To prevent the bail E from dropping by the action of gravity to the position opposite that shown in Fig. 3 and thus compel the operator to raise the bail E and place it in the position shown in Fig. 1, in order that its detent *e²* may engage with the ratchet *b*, I provide a lug *e³*, projecting from the part A' of the casing and adapted to engage the detent *e²* for retaining said bail E within the limits as defined by the positions of the bail E. (Shown in dotted lines in Fig. 2.)

The preferred manner of attaching the strap *a'* to the reel B will now be referred to, reference being had to Figs. 1, 4, and 5. In the end of the strap *a'* is formed a hole *b'*, adapted to receive a pin *b²*, cast with said reel B. Said strap *a'* is then wound once around said reel, and a two-pronged riveting-tank *b³* is then

driven through two layers of said strap and clinched against the reel, as shown more clearly in Fig. 4.

5 The end c^3 of the shaft c nearest the spring D , I make, preferably, oblong, while the opposite end is formed square in order that the reel B may be threaded over said square end c^3 . The object is that in construction and
10 when the casing is open for repairs said oblong end c^3 prevents the tension of the spring D from forcing the operative parts out of the part A' .

15 The interior surface of the wall which forms the bottom of the casing $A A'$ slopes inwardly and downwardly to a central point, where a hole g' is formed through said casing to permit dust, moisture, and other foreign substances to readily pass therethrough.

20 The bail E , being pivoted in the casing, forms a yielding handle, which is not apt to be broken in rough usage and which permits the weighted casing to oscillate on its bail-bearings when subject to sudden movement. The arrangement of the bail and pawl or detent
25 provides a convenient construction for releasing the reel to permit the spring to wind up the strap when the bail is raised for lifting the weight into a vehicle or otherwise.

Having now described my invention, I claim—

In a hitching device, the combination of a reel having integral flanges and a strap adapted to coil thereon, a ratchet-wheel on said reel, a bail pivoted in the casing on journals, one of which extends into said casing and is provided with a detent projection formed integral therewith and adapted to engage said ratchet by the weight of said bail when released, a projecting lug on the casing forming a stop to keep said detent from reversing, a rigidly-secured shaft for said reel, the ends of which are fitted into holding-recesses in said casing, a coil-spring attached at one end to said shaft and at the remaining end to one of a series of pins arranged at different points about the circumference of the reel, and a two-part casing to form an open or split bearing for the shaft and bail, substantially as specified.

In testimony whereof I have hereunto set my hand this 25th day of September, A. D. 1891.

ELMER E. ALBIN.

Witnesses:

CHASE STEWART,
PAUL A. STALEY.