

(No Model.)

J. S. BAKER, Dec'd.

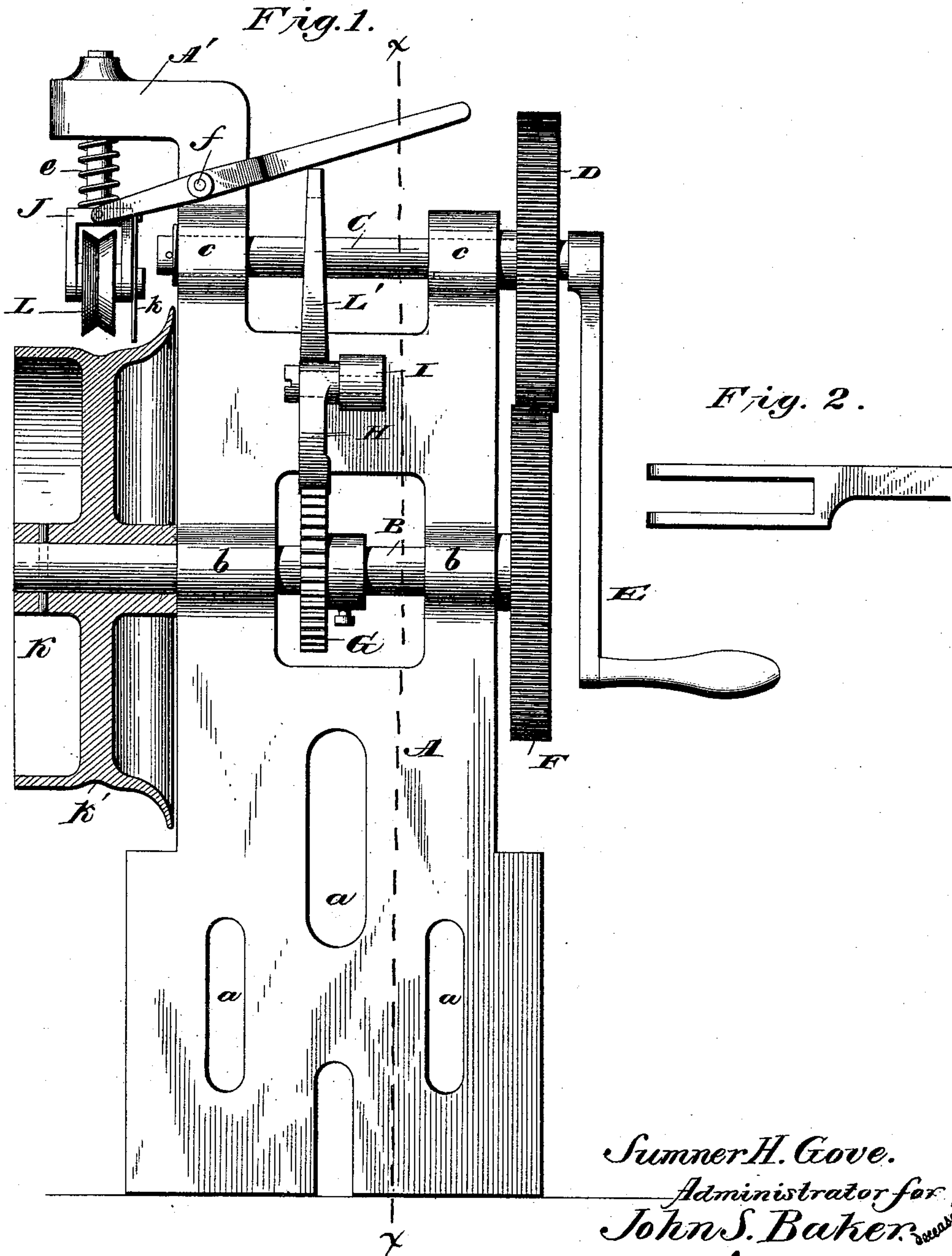
2 Sheets—Sheet 1.

S. H. GOVE, Administrator.

WINDLASS.

No. 415,036.

Patented Nov. 12, 1889.



Sumner H. Gove.
Administrator for
John S. Baker.

Witnesses

G. S. Elliott.
W. Johnson

Inventor

By his Attorneys

[Signature]

(No Model.)

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2 Sheets—Sheet 2.

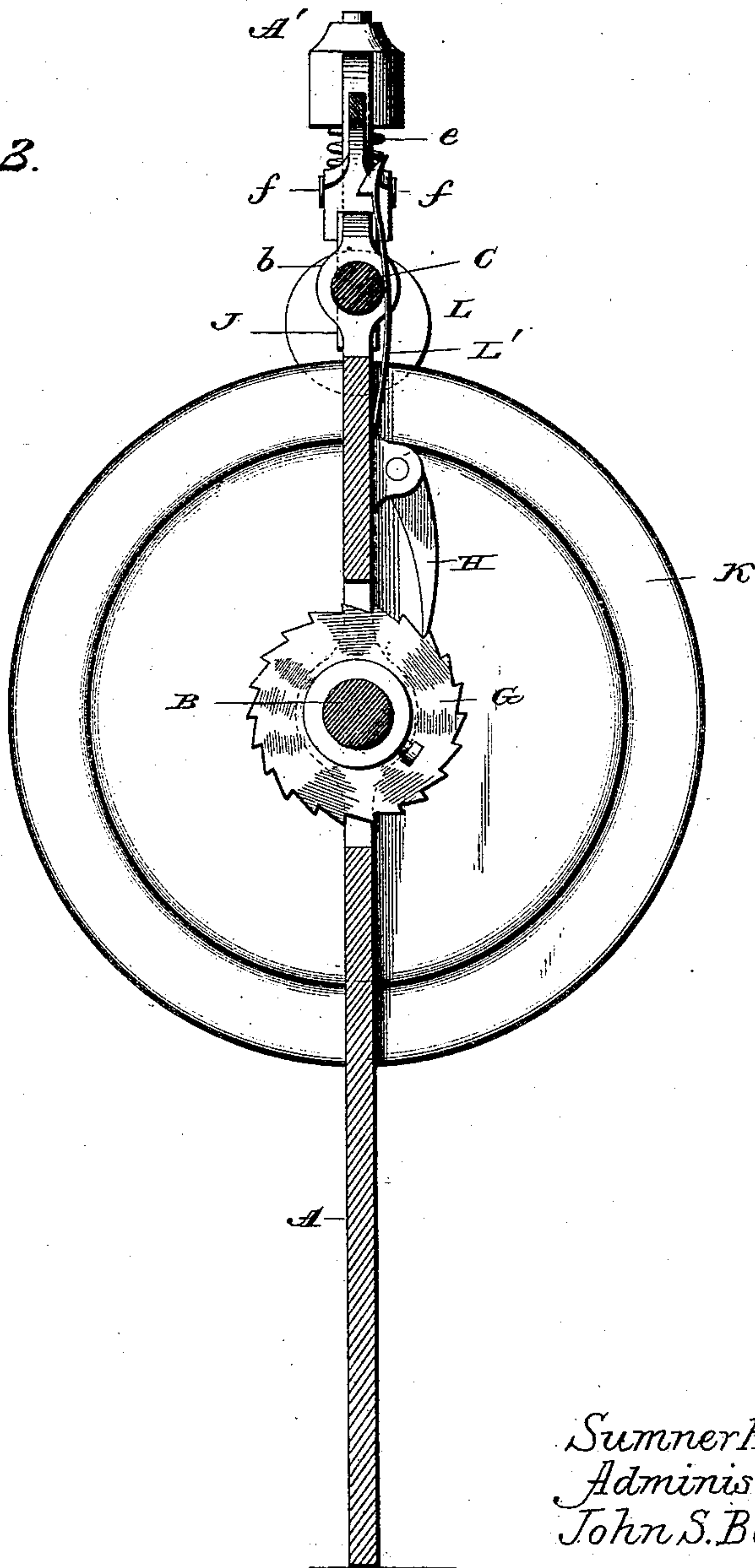
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Fig. 2.



Sumner H. Gove,
Administrator for
John S. Baker.

Witnesses

G. S. Elliott.
H. L. Beall.

Inventor

By his Attorneys

[Signature]

UNITED STATES PATENT OFFICE.

SUMNER H. GOVE, OF WESTERLY, RHODE ISLAND, ADMINISTRATOR OF
JOHN S. BAKER, DECEASED.

WINDLASS.

SPECIFICATION forming part of Letters Patent No. 415,036, dated November 12, 1889.

Application filed June 6, 1889. Serial No. 313,306. (No model.)

To all whom it may concern:

Be it known that I, SUMNER H. GOVE, a citizen of the United States, residing at Westerly, in the county of Washington and State of Rhode Island, administrator upon and for the estate of JOHN S. BAKER, late a citizen of the United States, and a resident of Groton, county of New London, and State of Connecticut, pray that Letters Patent may be granted to me as administrator for an Improvement in Windlasses and Attachments Therefor; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in windlasses and attachments therefor; and it consists in providing a windlass, above the drum thereof, with a grooved guide wheel or pulley for holding the rope upon the drum, said guide wheel or pulley being mounted to have movement to and from the drum, the frame of said guide-pulley being connected to a lever, by means of which the pulley can be held away from the drum when desired.

The invention also consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view, partly in section; Fig. 2, a detail view of the lever employed for operating the guide-pulley-carrying frame to hold it out of contact with the drum of the windlass; and Fig. 3 is a detail sectional view taken on the line *x x*, Fig. 1.

A refers to a suitable frame or casting provided near its lower end with slots or openings *a*, through which bolts can be passed for securing the frame A rigidly to a suitable support or base. This frame or casting has formed therein or attached thereto bearings *b b* and *c c*, through which pass shafts B and C, and is also provided with a projecting arm A', forming a bearing for the upper end of the guide-pulley frame.

C represents the driving-shaft, and has rigidly

secured thereto at one side of the frame A a cog-wheel D, the end of the shaft adjacent to the cog-wheel being key-ended for the reception of the crank-handle E.

The shaft B has rigidly keyed thereon a cog-wheel F, which meshes with the cog-wheel D, and near the center of this shaft B is secured a ratchet-wheel G, with which a gravity-pawl H, pivoted to the boss I, engages to prevent the rotation of the shaft B in a reverse direction.

K refers to the drum around which the rope passes, said rope being turned or coiled two or more times upon the drum. The outer coil of the rope passes directly beneath the grooved roller L, which is loosely mounted in the lower end of the frame J, the lower part of this frame being bifurcated or provided with extended arms, to which the pulley is journaled. This frame J is also provided with an upwardly-projecting stem, which passes through an opening in the arm A' of the frame, and this stem is encircled between the arm A' and frame J by a spiral spring *e*, which has a tendency to throw the pulley downwardly and hold the same in contact with the rope to prevent the same slipping off the drum.

To the inner side of the frame J is secured a plate *k*, which extends downwardly below the edge of the pulley, sufficient space being allowed between the side of the pulley and this depending plate to permit the passage of the rope between the pulley and plate. The plate in practice may be curved to extend to the rear of the pulley.

The pulley L may be made up of two disks, and above the supporting-frame of the pulley is pivoted one end of a lever, which is bifurcated to lie on each side of the arm A', and is connected to said arm by a pin or bolt *f*, the handle of the lever engaging with the notched end of the spring-arm L' to hold the same when it is thrust downward to elevate the frame J, carrying the grooved pulley.

The drum or wheel K is provided on its inner side with a raised rim or flange, which slopes downwardly toward the center groove or recess *k'*, above which is located the pulley.

The first coil or tight part of the rope passes around the drum adjacent to the flange thereof, while the second coil passes between the

plate or guide *k* and the inner edge of the pulley *L*, the last coil passing beneath the pulley. By means of this device the rope is prevented from slipping off the drum and greater frictional contact between the rope and drum is produced, and should it be desired at any time to stop the rotation of the drum it can be readily done, as the pulley will hold the rope from slipping around the drum, and the ratchet-wheel and pawl prevent the drum rotating in a reverse direction.

When it is desired to place the rope upon the drum or slack the taut end thereof, the frame carrying the pulley and guide-blade can be elevated by the lever, and will be held in a raised position by the spring-arm carrying the catch *L'*.

Having thus described the invention, what is claimed as new, and sought to be protected by Letters Patent, is—

1. In combination with a drum or windlass, a spring-actuated frame carrying a grooved pulley and a guide-plate located to one side of said pulley, substantially as shown.

2. In combination with a drum or windlass, a spring-actuated frame carrying a pulley, a pivoted lever engaging with said frame, and a spring-catch for holding said lever, substantially as and for the purpose set forth.

3. The combination of a frame *A*, constructed substantially as shown and provided with an overhanging arm *A'*, a windlass or drum mounted upon a shaft *B*, said shaft also carrying a ratchet-wheel, with which a pawl pivoted to the frame engages, a frame *J*, carrying a pulley *L* and plate *k*, said frame being spring-actuated toward the periphery of the drum, and a bifurcated lever pivoted to the pulley-carrying frame and to the main frame *A* for elevating said pulley-frame, said lever being adapted to engage with a catch *L'*, substantially as shown, and for the purpose set forth.

4. The combination, with the grooved guide-pulley mounted in the vertically-movable spring-seated frame, of a drum or windlass having the central portion of its periphery grooved, as described, and a flange to one side of said groove, the intervening portion being slightly swelled or raised, substantially as set forth.

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

SUMNER H. GOVE,
Administrator of John S. Baker, deceased.

Witnesses:

M. CRANSHAW,
C. E. STEADMAN.