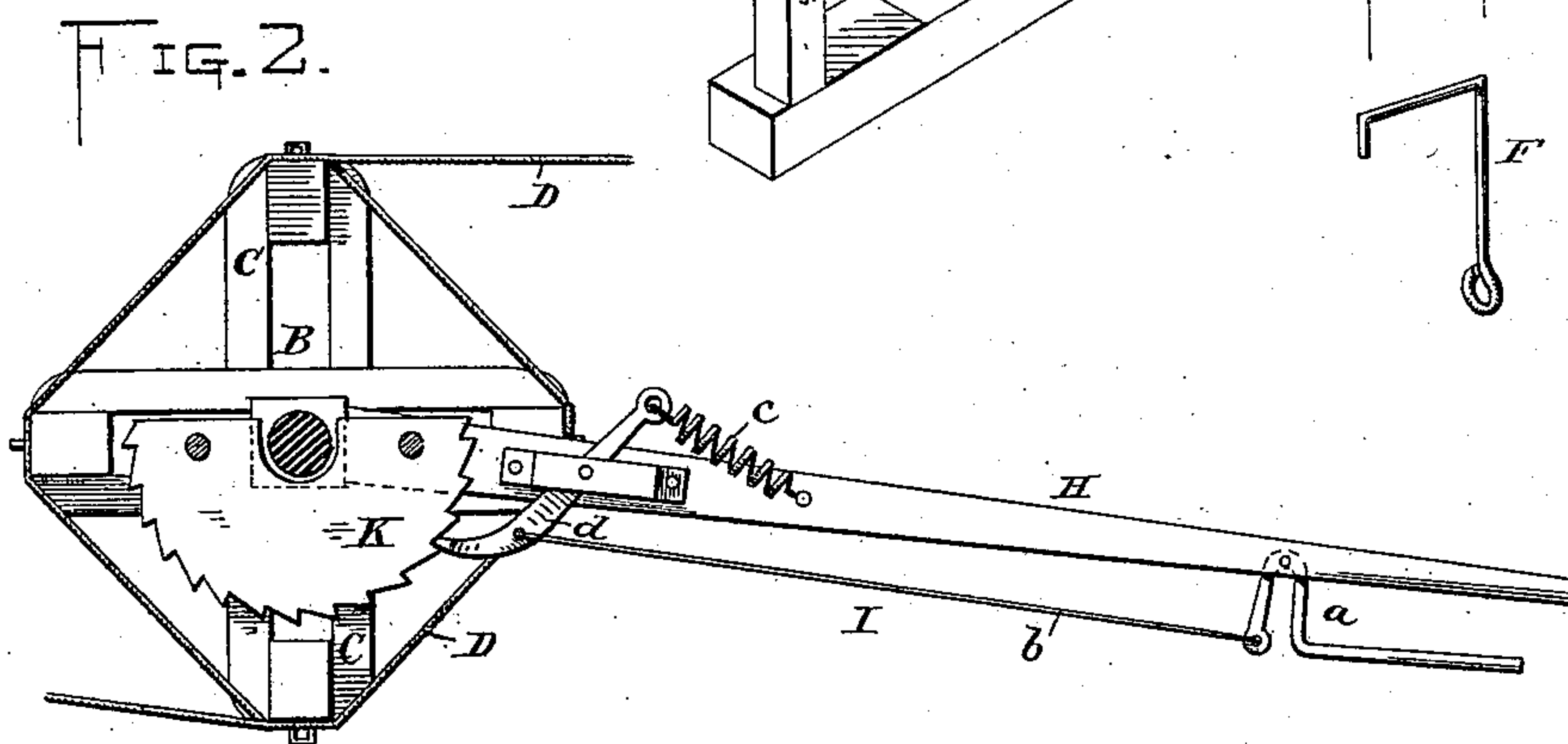
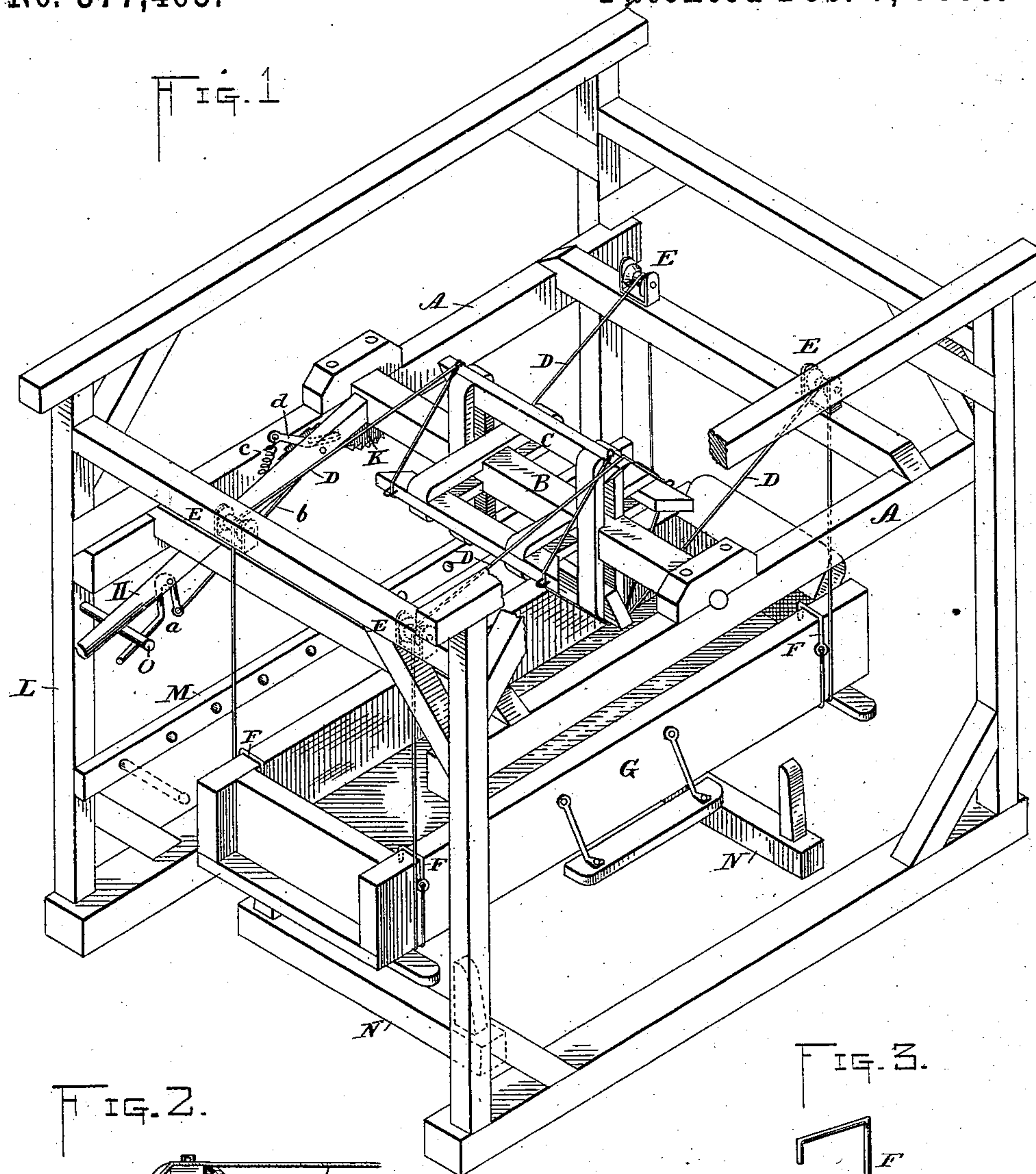


(No Model.)

M. S. RAGSDALE.
HOISTING APPARATUS.

No. 377,465.

Patented Feb. 7, 1888.



Witnesses.

Re A Dimmock
Mr. W. D. DUNNELL.

Inventor.
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UNITED STATES PATENT OFFICE.

MARTIN S. RAGSDALE, OF FREELANDVILLE, INDIANA, ASSIGNOR OF ONE-HALF TO F. T. PHILLIPS, OF OLNEY, ILLINOIS.

HOISTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 377,465, dated February 7, 1888.

Application filed March 17, 1887. Serial No. 231,294. (No model.)

To all whom it may concern:

Be it known that I, MARTIN S. RAGSDALE, a citizen of the United States of America, residing at Freelandville, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Hoisting Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an apparatus for hoisting. It is intended to be used for hoisting and suspending wagon-beds in sheds, or to unload them into cribs; to suspend live animals for any purpose—as to shoe those that are unruly or to operate on those that are injured—and to hang slaughtered animals for convenience in cleaning and cutting. It is especially designed to furnish farmers with a cheap and easily-operated hoisting-machine.

The whole apparatus is shown in Figure 1 of the drawings, a pawl-and-ratchet device in Fig. 2, and a hook in Fig. 3, the same letters referring to the same parts in the several figures.

The apparatus consists of a windlass, B, whose bearings rest in and rotate on the frame-work, A, and which is fitted with a reel, C. To this reel are fastened, and about it are wound, four ropes, D, for hoisting. These may be of wire, hemp, or other material, and so arranged as to ascend and descend together. From the reel the ropes pass over four rollers or pulleys, E, which are supported on the frame-work, and from these pass down to the load. To the free ends of these ropes are attached hooks F, with which to take hold of the wagon-bed G or other load.

To the windlass, near one of its bearings, is attached a lever-bar, H, by means of which the windlass is to be rotated. Connected to and operated with the lever-bar is an attachment, I, consisting of a handle with an elbow-curve, *a*, connecting-rod *b*, spring *c*, and pawl *d*, the latter fitting into a semicircular ratchet-plate, K.

This attachment in its several parts and operation is shown in Fig. 2. The plate is fastened against the frame-work which supports the apparatus, and the handle, spring, and pawl are so pivoted on the lever-bar that by engaging or disengaging the pawl the windlass may be held or released, as desired. This

handle and its appurtenances, including the ratchet-plate, are of metal, while the windlass and lever-bar are of wood.

In the upright piece of the frame-work L and along the side piece, M, the latter of which is placed for the purpose, are arranged a series of holes adapted to receive a movable pin, O, to engage the lever-bar and hold the load at any desired elevation.

In Fig. 1 N represents the standards of a wagon, from which the bed is hoisted.

From this description of parts, their connections and uses, it will be seen that any movement of the lever-bar rotates the windlass and hoists or lowers the load. It will also be seen that the pawl-and-ratchet device and the adjustable pin are each adapted to hold the windlass in any desired position, and each supplements the other. If the pin is not in reach, the pawl and ratchet will hold until it is recovered and placed; and if the ratchet device should become deranged the pin will hold.

I am aware that the windlass, bar, ropes, pawl and ratchet, and hook are common devices, and I do not claim the invention of any of them; neither do I claim a combination of them in a machine in which a pawl and ratchet is used to rotate the windlass, or in which the windlass is rotated by a crank with pulley and cords.

What I claim as my invention, and desire to secure by Letters Patent, is—

A hoisting-machine comprising a windlass, with a lever-bar by which to rotate it, ropes wound around the windlass and descending to the load, pulleys supported on the frame-work, over which the ropes pass, hooks attached to the ends of the ropes, an attachment pivoted on the lever-bar, consisting of a curved handle, rod, spring, and pawl, a ratchet-plate fastened to the frame-work, the pawl, and a pin adapted to fit into holes arranged along the frame-work, all combined, arranged, and operated substantially as set forth.

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

MARTIN S. RAGSDALE.

Witnesses:

J. B. MORFORD,
WM. RITTERSKAMP.