

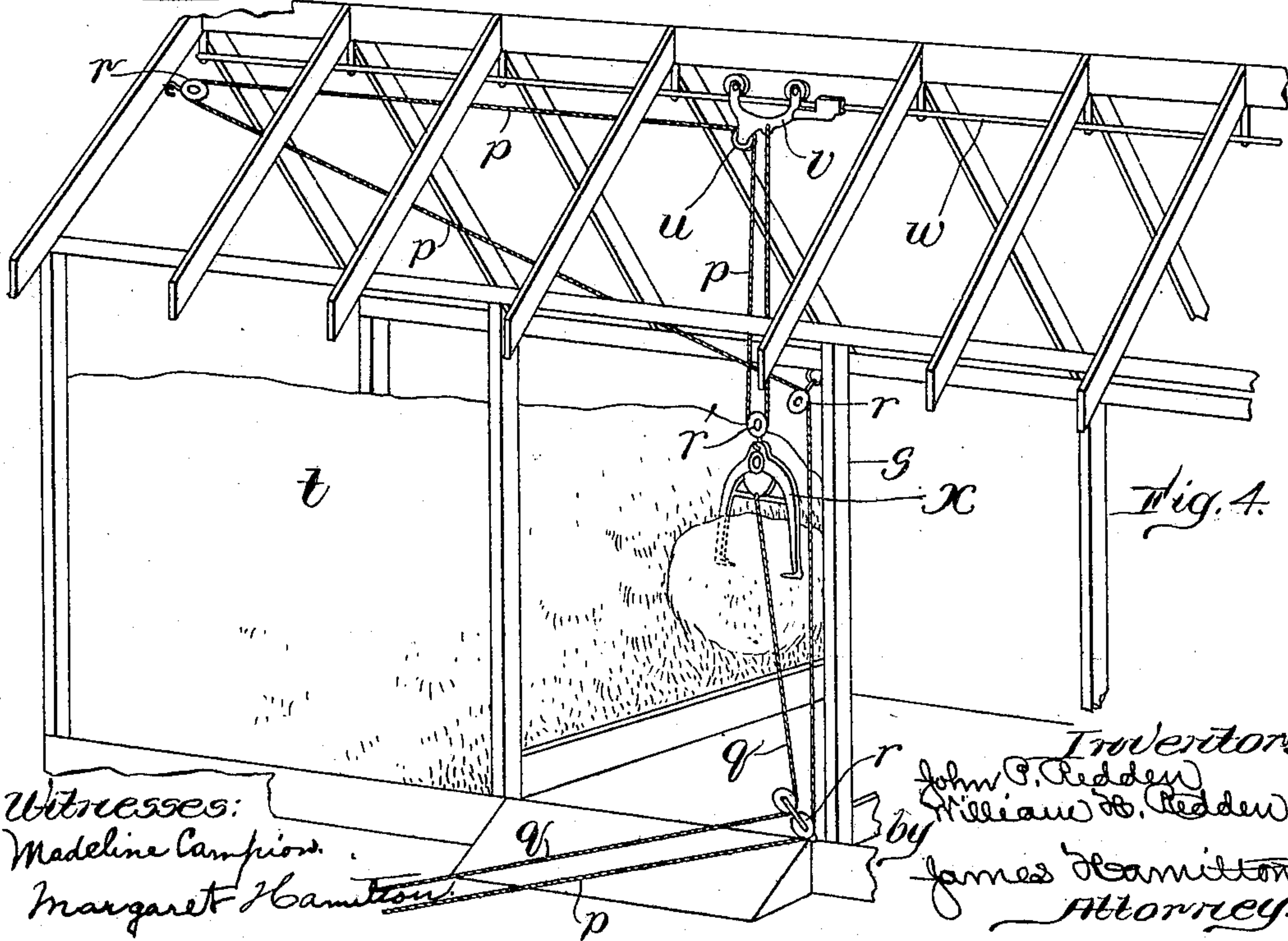
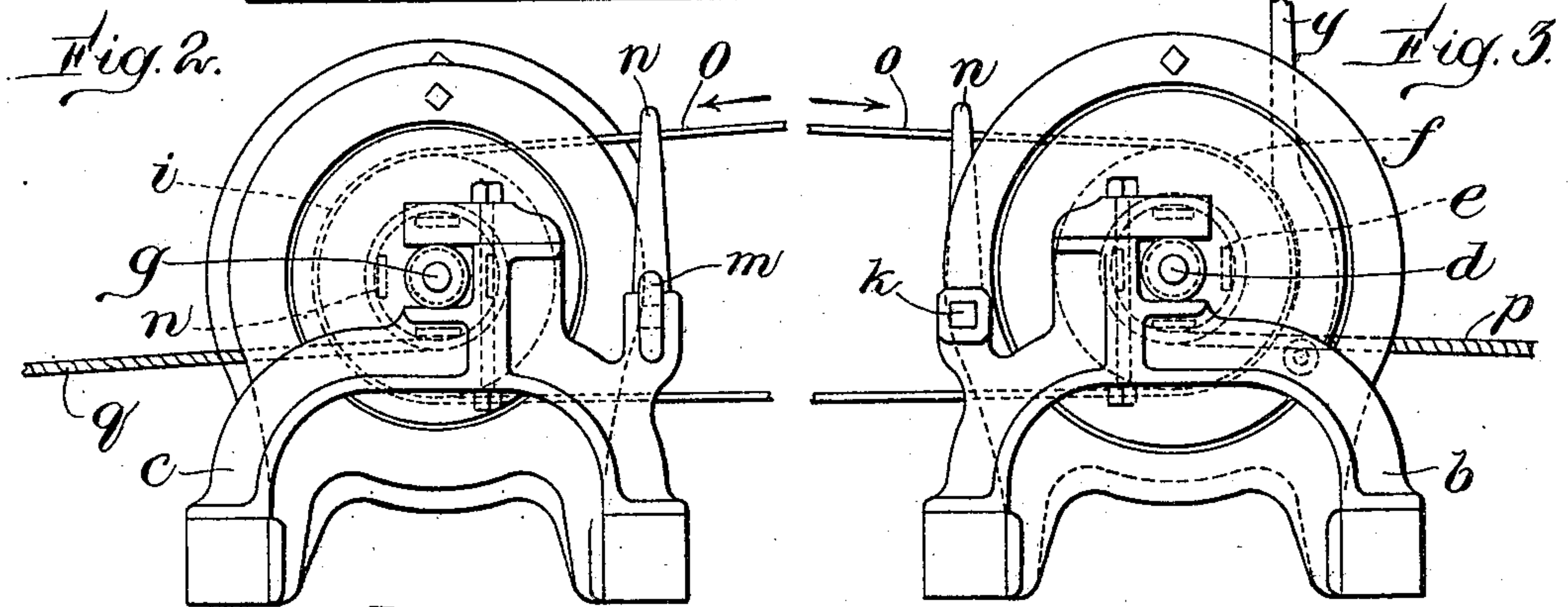
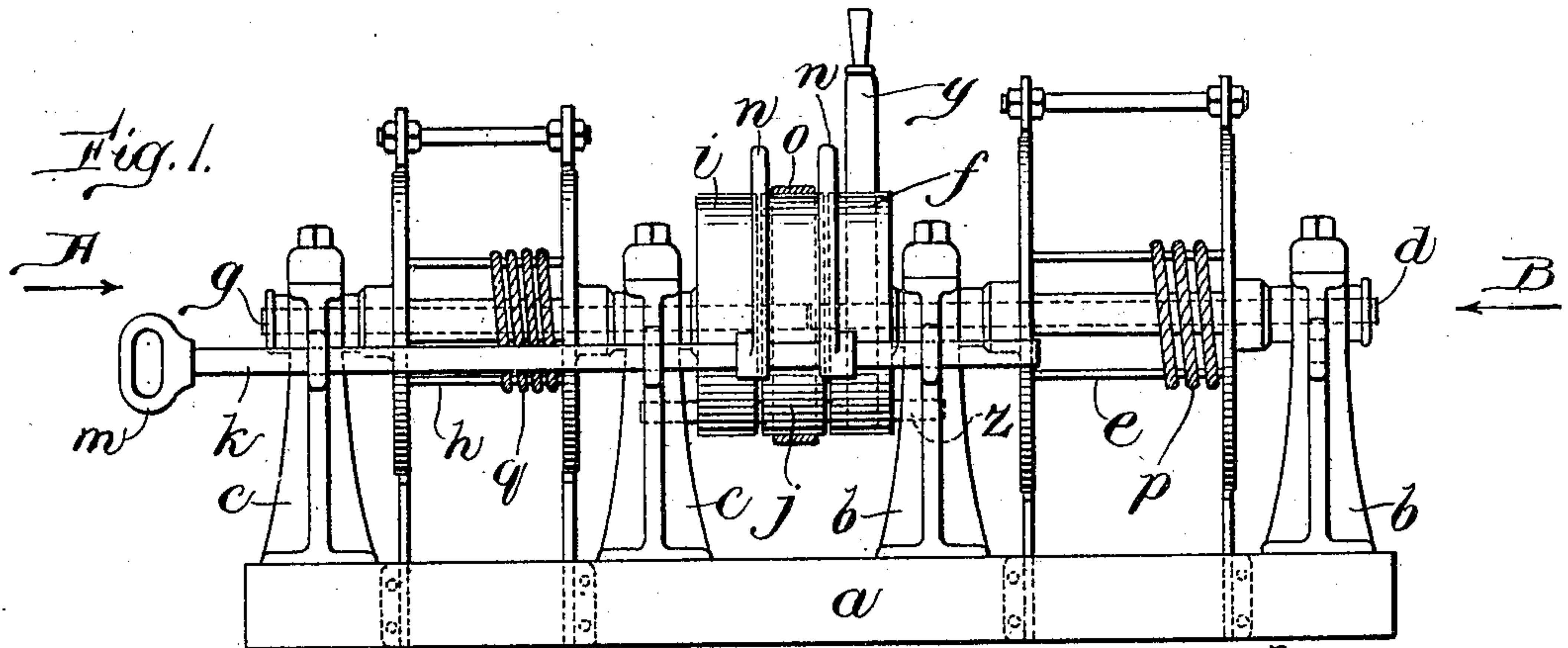
No. 887,228.

PATENTED MAY 12, 1908.

W. H. & J. P. REDDEN.

HOISTING DEVICE.

APPLICATION FILED FEB. 26, 1908.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. REDDEN AND JOHN P. REDDEN, OF NORWICH, NEW YORK.

HOISTING DEVICE.

No. 887,228.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed February 26, 1908. Serial No. 417,896.

To all whom it may concern:

Be it known that we, WILLIAM H. REDDEN and JOHN P. REDDEN, citizens of the United States, residing at Norwich, in the county of Chenango and State of New York, have invented certain new and useful Improvements in Hoisting Devices, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to improvements in devices for hoisting and particularly to devices for operating a hay-fork.

An object of our invention is to provide a hoisting device of the character described which will be simple in construction, cheap in manufacture and most efficient in operation.

In the drawings illustrating the principle of our invention and the best mode now known to us of applying that principle, Figure 1 is a rear elevation of our new hoisting device; Fig. 2 is a side elevation looking in the direction of the arrow A in Fig. 1; Fig. 3 is a side elevation looking in the direction of the arrow B in Fig. 1; and Fig. 4 is a perspective detail showing the arrangement of the ropes in the building in which the hay is stored.

The device is mounted upon a bed-plate *a* which supports four pillow-blocks *b, b, c, c*. In the upper ends of the pillow-blocks *b, b* is journaled a shaft *d* upon which are mounted fast a drum *e* and a pulley *f*. In the upper end of the pillow-blocks *c, c* is journaled a shaft *g* upon which are mounted fast a drum *h* and a pulley *i*. The shafts *d, g* are in line, end to end; and the fast pulleys *f, i* are mounted upon the inner or opposed ends of the shafts *d, g*, respectively. The inner opposed ends of the shafts *d, g* combine to support the loose pulley *j* mounted between the fast pulleys *f, i*. Slidably mounted upon the pillow-blocks *c, c* and the inner pillow-block *b* is a belt-shifting slide *k* provided with a handle *m*; and near the inner end of the belt-shifting slide *k* are mounted two shifting-posts *n*, between which near the top passes the upper side of the driving belt *o*.

It will be obvious that when the belt-shifter *k* is in the position shown in Fig. 1,

the machine will be thrown out of operation, since the belt *o* is then driving the loose pulley *j*. When the belt-shifter is pushed to the right in Fig. 1, the belt *o* will be shifted to the fast pulley *f* and will drive the drum *e*, thereby winding up the rope *p* upon the drum *e*. When the belt-shifter is pulled to the left from the position shown in Fig. 1, the belt *o* is shifted to the fast pulley *i*, thereby driving the latter and rotating the drum *h*. Rotation of the drum *h* winds up the rope *q*, when the drum is driven by the belt *o*.

Referring to Fig. 4, it will be seen that the rope *p* passes over pulleys mounted in the blocks *r* secured to the frame *s* of the building in which the hay *t* is stored. From the topmost of the three blocks *r* the rope *p* passes over a pulley *u* carried by a trolley *v* mounted upon the trolley-rail *w*. The rope *p* then passes around the pulley in the block *r'* and its end is made fast to the trolley *v*. The block *r'* carries the hay-fork *x* to which is fastened one end of the rope *q*. It will be obvious that when the rope *p* is wound up on the drum *e*, the rope *q* will be paid out automatically from the drum *h*; and when the rope *q* is wound up to pull down the hay-fork *x*, the rope *p* will be automatically paid out from the drum *e*.

The hand-operated friction-brake *y* is fulcrumed upon the stationary shaft *z* and is arranged to be pressed against the fast pulley *f* to hold the latter against rotation, when the load is elevated and the belt has been shifted to the loose pulley *j*. (Fig. 1).

We claim:

1. The combination of a pair of shafts in line with each other; a pair of drums, one on each of said shafts; hoisting devices connected with said drums; a pair of fast pulleys, one on each of said shafts at the opposed inner ends thereof; a loose pulley mounted between said fast pulleys; a driving belt; and a belt-shifter for shifting said belt from one of said pulleys to another thereof.

2. The combination of a pair of shafts in line with each other; a pair of drums, one on each of said shafts; hoisting devices connected with said drums; a pair of fast pulleys, one on each of said shafts at the op-

posed inner ends thereof; a loose pulley mounted between said fast pulleys; a driving belt; a belt-shifter for shifting said belt from one of said pulleys to another thereof
5 and a brake for holding one of said fast pulleys while the belt is driving the loose pulley.

In testimony whereof we have hereunto set our hands at said Norwich this twentieth

day of February, A. D. 1908, in the presence of the two undersigned witnesses.

WILLIAM H. REDDEN.
JOHN P. REDDEN.

Witnesses:

HENRY D. SPALDING,
IRA H. HYDE.