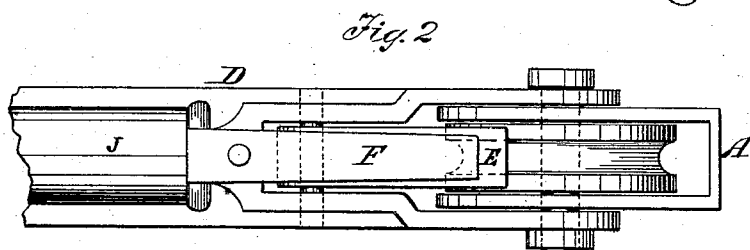
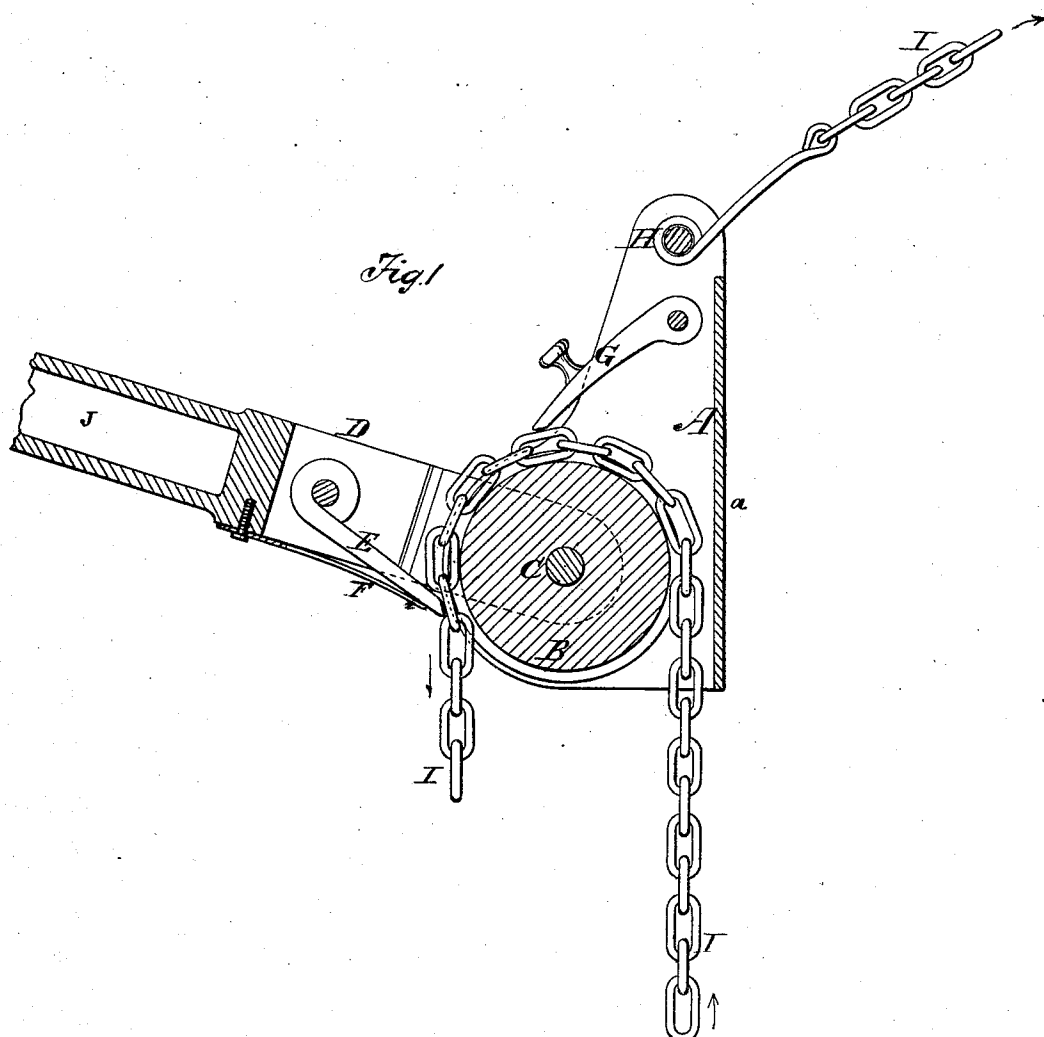


J. N. & G. J. ACKERMAN.
Chain-Grip and Tightener.

No. 159,057.

Patented Jan. 26, 1875.



WITNESSES:

A Remembrance of
A. F. Terry

INVENTOR:

J. N. Ackerman
G. J. Ackerman
BY *Immune*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN N. ACKERMAN AND GEORGE J. ACKERMAN, OF HACKENSACK, N. J.

IMPROVEMENT IN CHAIN GRIPES AND TIGHTENERS.

Specification forming part of Letters Patent No. **159,057**, dated January 26, 1875; application filed December 19, 1874.

To all whom it may concern:

Be it known that we, JOHN N. ACKERMAN and GEORGE J. ACKERMAN, of Hackensack, Bergen county, New Jersey, have invented a new and Improved Combined Chain Gripe and Tightener, of which the following is a specification:

The object of this invention is to provide means whereby a chain may be drawn tightly around a load of lumber, or up or around other objects, and held firmly in such position, the construction and operation of which will be understood from the following description, reference being had to the accompanying drawing forming a part of this specification.

Figure 1 represents a sectional elevation, showing my invention as applied; and Fig. 2 is a plan of the same, bottom side up.

Similar letters of reference indicate corresponding parts.

In the case here presented the letter A represents a cast-iron frame, having a sheave, B, pivoted at C. D is a lever, whose end is yoked so as to receive the aforesaid frame A, and is pivoted thereto by the same bolt which passes through the sheave. E is a pawl pivoted on the yoke of the lever, and F is a spring to keep it held in position. G is a pawl pivoted in the upper end of frame A, and H is a fixed pin, on which the chain is coupled.

To operate this device I place the flat side *a* of the frame A against the load and throw the chain I over the load, and then, bringing it around under the load, I pass the chain up over the sheave, and then down through the yoke of the lever; then, by pulling the said lever downward, it will cause the pawl E to gripe the chain and draw it through, and the

pawl G, resting on the sheave above the chain, will gripe and hold it while the lever D is being raised in position for a fresh gripe, and so repeated till the chain shall have been drawn tightly around the load, at which time the pawl G will hold the chain secure.

The lever has a socket, J, in which a bar may be placed when necessary to apply additional power.

After having drawn the chain as tight as required, the lever is moved flush with the load, so as to be out of the way in traveling.

It is not absolutely necessary to have the spring F to hold the pawl E bearing against the chain, as the pawl would naturally gripe the chain when the lever is raised in an upright position, and would hold its grip until the sheave had made nearly one-half of a revolution.

The apparatus is also applicable for raising heavy weights; also for raising anchors, and for various other purposes.

When it is used for hoisting purposes and the like, the frame A will be mounted on any suitable support, and secured or not, as required, or it will be suspended by the pin H.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The frame A, having chain I on pivot H, and the pawl G, combined with pulley B and spring-pawled lever D on the same pivot C, as and for the purpose specified.

JOHN N. ACKERMAN.

GEORGE J. ACKERMAN.

Witnesses:

DAVID TERHUNE,
A. G. BASEL.