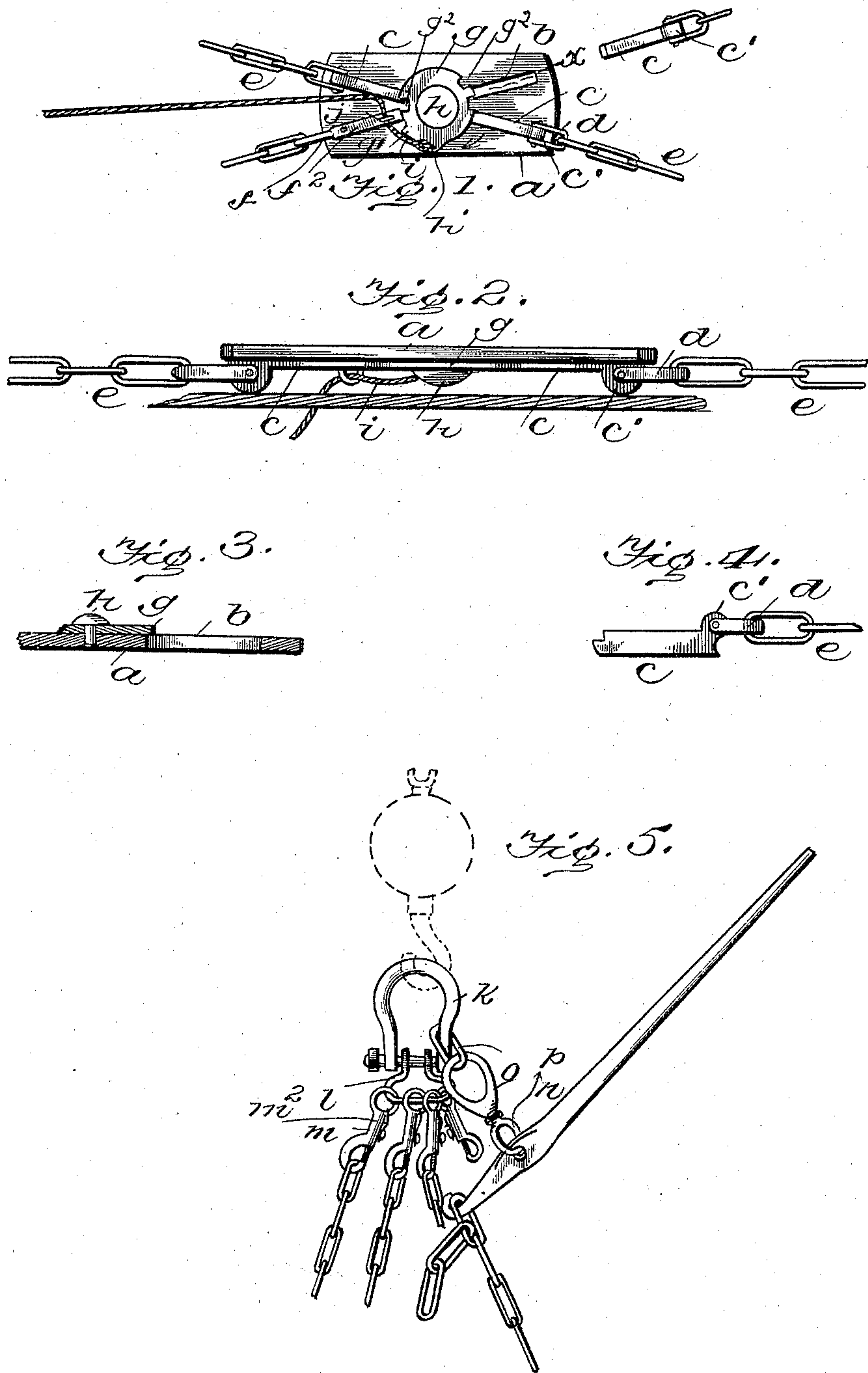


(No Model.)

H. C. DOMEYER.
LOADING OR UNLOADING APPARATUS.

No. 582,117.

Patented May 4, 1897.



Witnesses
John D. Dume
L. David

Inventor
Henry C. Domeyer
By *J. J. Geisler*
Attorney

UNITED STATES PATENT OFFICE.

HENRY C. DOMEYER, OF SAUVIE'S ISLAND, OREGON.

LOADING OR UNLOADING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 582,117, dated May 4, 1897.

Application filed January 15, 1897. Serial No. 619,380. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. DOMEYER, a citizen of the United States, residing at Sauvie's Island, in the county of Columbia, State of Oregon, have invented a new and useful Loading or Unloading Apparatus, of which the following is a specification, reference being had to the accompanying drawings as forming a part hereof.

The object of my invention is to contrive some device to facilitate the loading and unloading of merchandise on and from a dray or wagon into the warehouse or elsewhere, more especially bulky substances, such as hay, grain, wood, and the like, and such contrivance I have obtained in the device which I am about to describe and which is illustrated in the accompanying drawings.

In the drawings, Figure 1 is an inverted plan of the lower part of my invention, to which the chains are attached and which I will designate as the "chain-lock." Fig. 2 is an enlarged front side view of the same parts shown in Fig. 1, showing my invention properly placed. Fig. 3 is a section through that part of Fig. 1 intersected by the dotted line *x*. Fig. 4 is a detail; and Fig. 5 shows the upper part of my invention, which I will designate as the "chain-coupler."

The letters designate the particular parts referred to.

Beginning with the description of the lower part of my invention—the chain-lock—*a* is a plate provided with three radiating slots *b*, in which to insert the three bolts *c*, which are of the construction illustrated in Fig. 4, such bolts being respectively provided with an eye *c'*, to which is attached a clevis *d*, and to the latter is affixed a chain *e*, of about twenty feet in length. To one corner of the plate is permanently attached an eye *f*, also provided with a length of chain the same as the eyes *c'*. As seen in Fig. 1, the eye *f* is formed on the rounding part of a strap *f*², which is riveted on the plate *a*.

The trigger movement comprises a trigger *g*, revolving on a bolt-pin *h*, which is riveted in the plate *a* and has an eye *h'*, to which is attached a rope *i*, running through an eye *j*. The trigger *g* when in the position shown in Fig. 1 secures the bolts *c* in place. When wishing to disengage the bolts *c*, the trigger

is revolved in the direction of the arrow until the shoulder *g'* strikes against the end of the strap *f*². The notches *g*² will then be brought over the ends of the bolts *c* and release the same, so that they may be pulled out. When again desiring to reattach the chains, the bolts *c* are reinserted in the slots *b* and the trigger *g* reset to lock them in place. The chain-locking device, when to be used, is set on the wagon, or wherever wanted, as shown in Fig. 2, the four eyes *c'* and *f* all being of the same height, so that the plate *a* will stand evenly and the locking mechanism will be clear, as is illustrated in said Fig. 2. The chain-lock having been properly set and the loading finished, the free chain ends are attached to the chain-coupler. (Seen in Fig. 5.) This consists of a bail *k*, clevis *l*, a series of snap-hooks *m*, and a lever *n*, attached to the bail *k* by means of the link *o* and swivel-link *p*.

To attach or couple the chains to the snap-hooks, the ends are in the first place drawn as tight as possible by the hand and connected with such snap-hooks, and then the chains are individually tightened by means of the lever *n* and reattached. If using a spring-bolt snap-hook, as shown in the drawings, a little wire hook *m*² may be provided to hold the bolt back until released again, so that both hands can be used when tightening the chains with the lever *n*.

When desiring to unload, the bail *k* may be attached to the blocks of a crane and the load lifted where wanted. Upon pulling on the rope *i* the trigger will be revolved, as already described, releasing the bolts and lower chain ends, which will fly out, the plate *a* and its locking mechanism coming out with the chain end to which it is permanently attached.

To conveniently hold the free chain ends and the chain-coupler on a wagon, some hooks or pins should be provided, over which the same can be hung. If desirable, the chain-lock and chain-coupler may be respectively modified to hold a greater number of chains or cables.

The rope *i* should be pulled in the direction in which the end of the chain extends, which is permanently attached to the plate *a*.

Now what I claim is—

1. In a loading and unloading apparatus in combination, a lock adapted to receive and

secure the ends of a series of chains, and comprising a trigger movement so constructed that by pulling on such trigger the chain ends secured by said lock will be released; a series
5 of chains, and bolts on said chains adapted to be inserted in said lock so as to be secured thereby, and means for coupling together the other or loose ends of said chain, substantially as set forth.

10 2. In a loading and unloading apparatus, in combination, a chain-lock comprising a plate *a* provided with a series of radial slots *b*, and a tumbler *g* having notches *g*² corresponding to said radial slots and connections for oper-
15 ating said tumbler as described; the bolts *c* adapted to be inserted and secured in said slots *b* and respectively provided with chain lengths, and means for coupling together the other or free ends of said chains, substantially
20 as set forth.

3. In a loading and unloading apparatus, in combination, a chain-lock comprising a plate *a* provided with a series of radial slots *b* and a tumbler *g* having notches *g*² corresponding to said radial slots and connections for oper- 25
ating said tumbler as described; the bolts *c* adapted to be inserted and secured in said slots *b* and respectively provided with chain lengths, means for coupling together the other or free ends of said chains, and a lever *n* at- 30
tached to the bail *k* for tightening the ends of such chains when coupling the same together, substantially as set forth.

In witness whereof I have hereunto set my signature in the presence of two witnesses.

HENRY C. DOMEYER.

Witnesses:

GEO. W. HAZEN,
T. J. GEISLER.