

(No Model.)

D. BRODERICK.

DEVICE FOR LIFTING, MOVING, AND CARRYING HEAVY BODIES.

No. 578,479.

Patented Mar. 9, 1897.

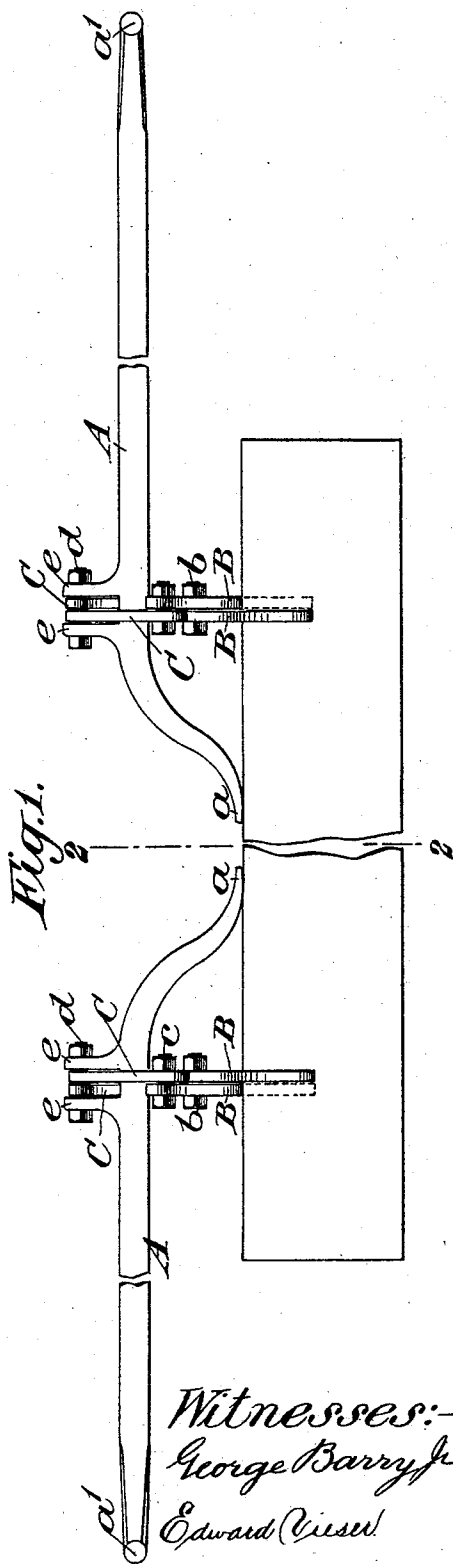


Fig. 3.

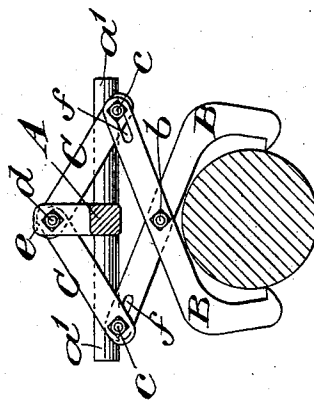
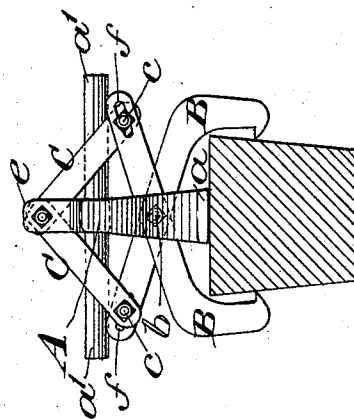


Fig. 2.



Witnesses:-
George Barry Jr.
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UNITED STATES PATENT OFFICE.

DANIEL BRODERICK, OF LAUREL HILL, NEW YORK.

DEVICE FOR LIFTING, MOVING, AND CARRYING HEAVY BODIES.

SPECIFICATION forming part of Letters Patent No. 578,479, dated March 9, 1897.

Application filed November 17, 1896. Serial No. 612,473. (No model.)

To all whom it may concern:

Be it known that I, DANIEL BRODERICK, of Laurel Hill, in the county of Queens and State of New York, have invented a new and useful Improvement in Devices for Lifting, Moving, and Carrying Heavy Bodies, of which the following is a specification.

My invention consists in a device which may be used single for the lifting of some bodies or for the moving of either end, or one end after the other, of a longer body—such as a beam, girder, or heavy bar—or which may be duplicated to be applied at both ends of a long body for carrying it from place to place.

I will first describe the invention in detail with reference to the accompanying drawings and afterward point out its novelty in claims.

Figure 1 is a side view illustrating the use in duplicate of a device embodying my invention for lifting a body of considerable length. Fig. 2 represents a transverse section in the line 2 2 of Fig. 1. Fig. 3 is a view corresponding with Fig. 2, illustrating the application of my invention to the lifting of a round body.

Similar letters of reference designate corresponding parts in all the figures.

Each of the duplicate devices shown in Fig. 1 consists of a lever A, having a pair of grappling hooks or tongs B B connected with it by two toggle-links C C. The lever A has its shorter arm bent downward to form a foot *a*, and is represented as having its longer arm furnished at its end with a cross-handle *a'*. Such handle may, however, only be necessary when the lever is to be manipulated by two persons. The grappling-hooks are pivoted together by a pivot *b* and thus constitute tongs such as are in common use for many purposes, ice-tongs, for example. The stocks of the said hooks or tongs are connected by a pivot *c* with the lower ends of the two toggle-links C, the upper ends of which are both connected to the lever A by a common pivot *d*, arranged parallel with the pivots *b* and *c* and with the length of the lever, the said connec-

tion by the pivot *d* being preferably made with an upward extension *e*, provided on the lever for the purpose.

Slots *f* are represented as provided in the stocks of the grappling-hooks for the pivots *c* to work in, but these slots are immaterial.

In the use of a pair of these devices, as illustrated in Fig. 1, the foot *a* of each lever A is placed upon the top of a body to be lifted and carried, and the grappling-hooks are placed over the sides of the said body, as shown in Figs. 2 and 3. The lifting is performed by taking hold of and raising the handles *a'*, which draws the grappling-hooks together on the sides of the body, which may then be carried by one or more persons from one place to another by the persons holding the handles. In like manner only one of the said devices may be used for lifting and carrying a short body or for moving a longer body by first taking hold of and moving one end and afterward taking hold of and moving the other.

What I claim as my invention is—

1. A lifting and carrying device comprising a hand-lever, a pair of grappling hooks or tongs, and a pair of toggle-links each link connected by a separate pivot with one of the stocks of said hooks or tongs and both links being connected with the lever by a single pivot arranged parallel with the length of the lever, all in combination substantially as herein set forth.

2. A lifting and carrying device comprising a hand-lever having a downwardly-projecting foot, a pair of grappling hooks or tongs, and a pair of toggle-links, each link connected by a separate pivot with one of the stocks of the said hooks or tongs and both links being connected by a single pivot with an upward projection on the said lever, all in combination substantially as herein set forth.

DANIEL BRODERICK.

Witnesses:

GEORGE BARRY, Jr.,
FREDK. HAYNES.