

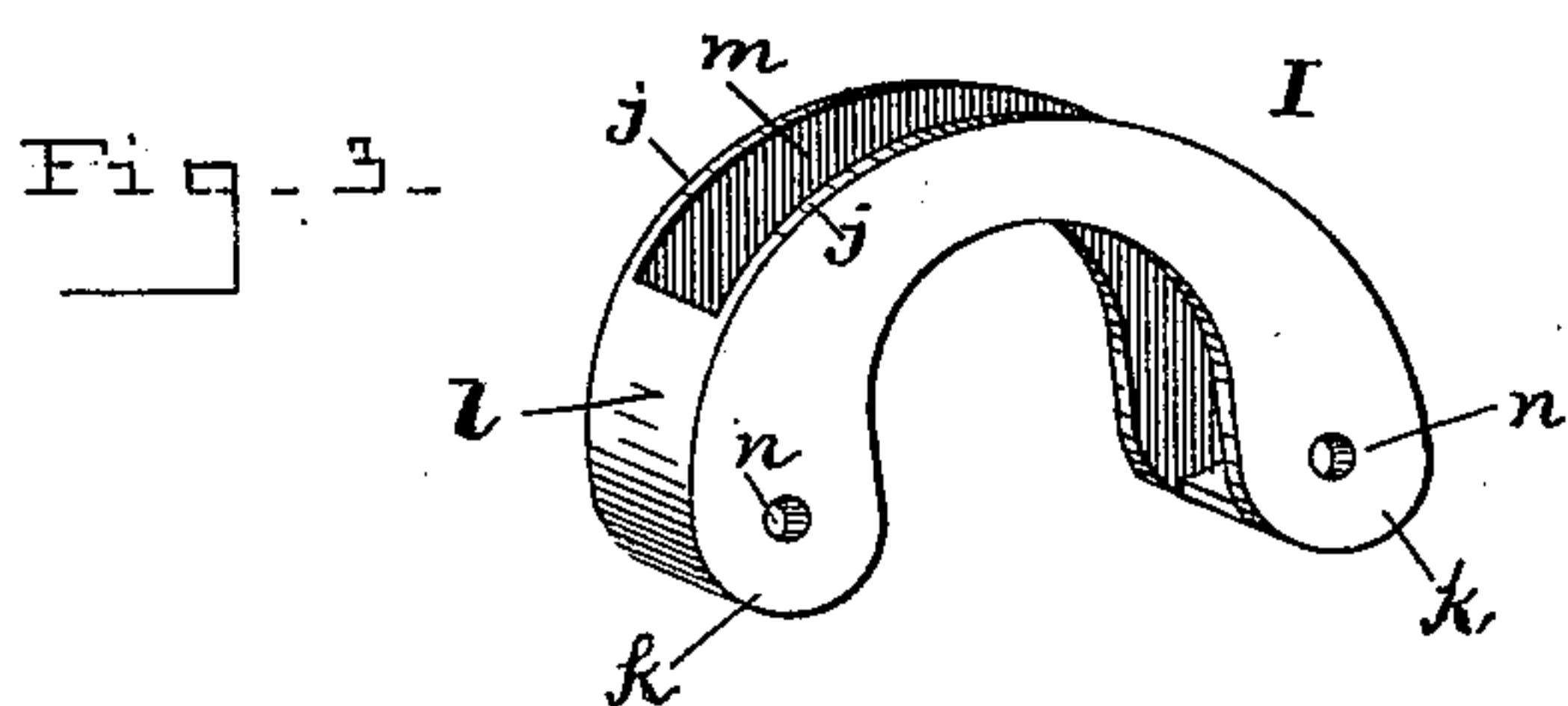
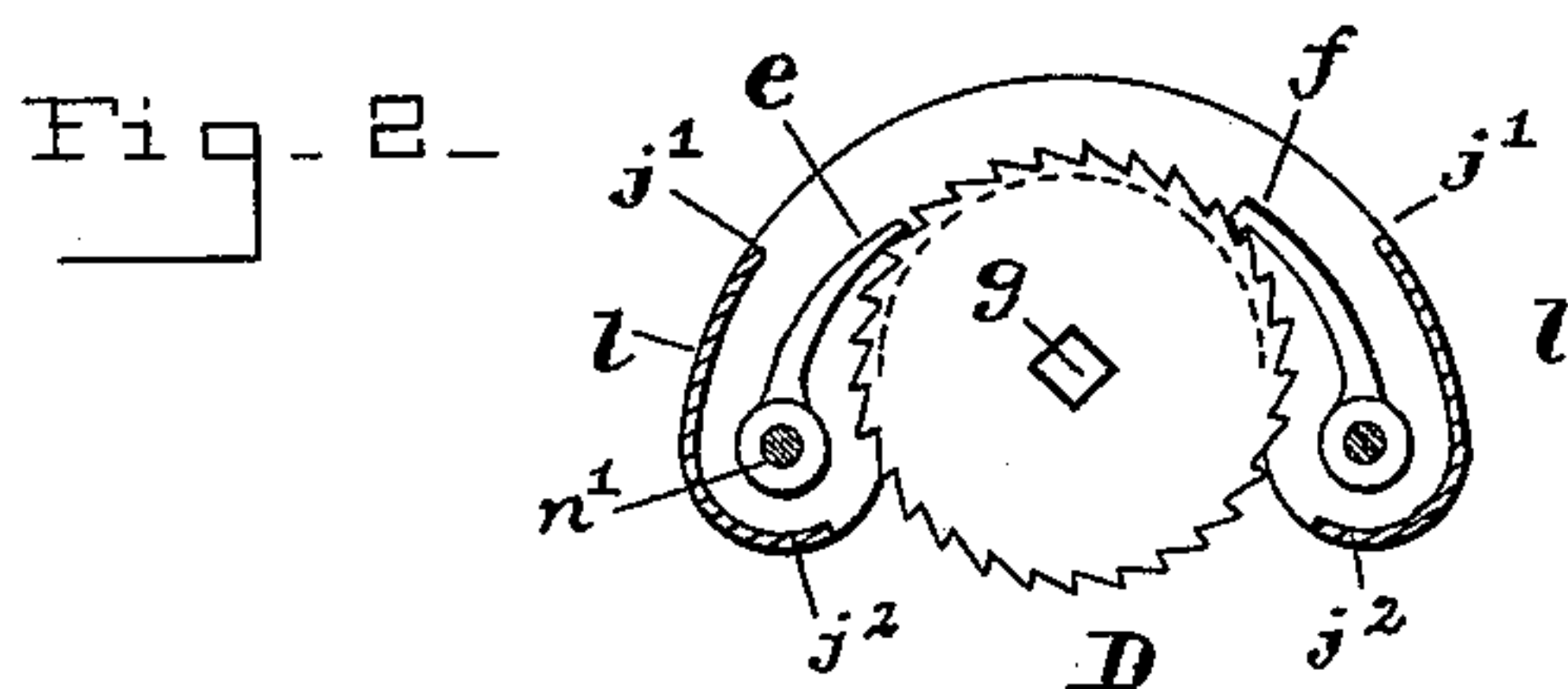
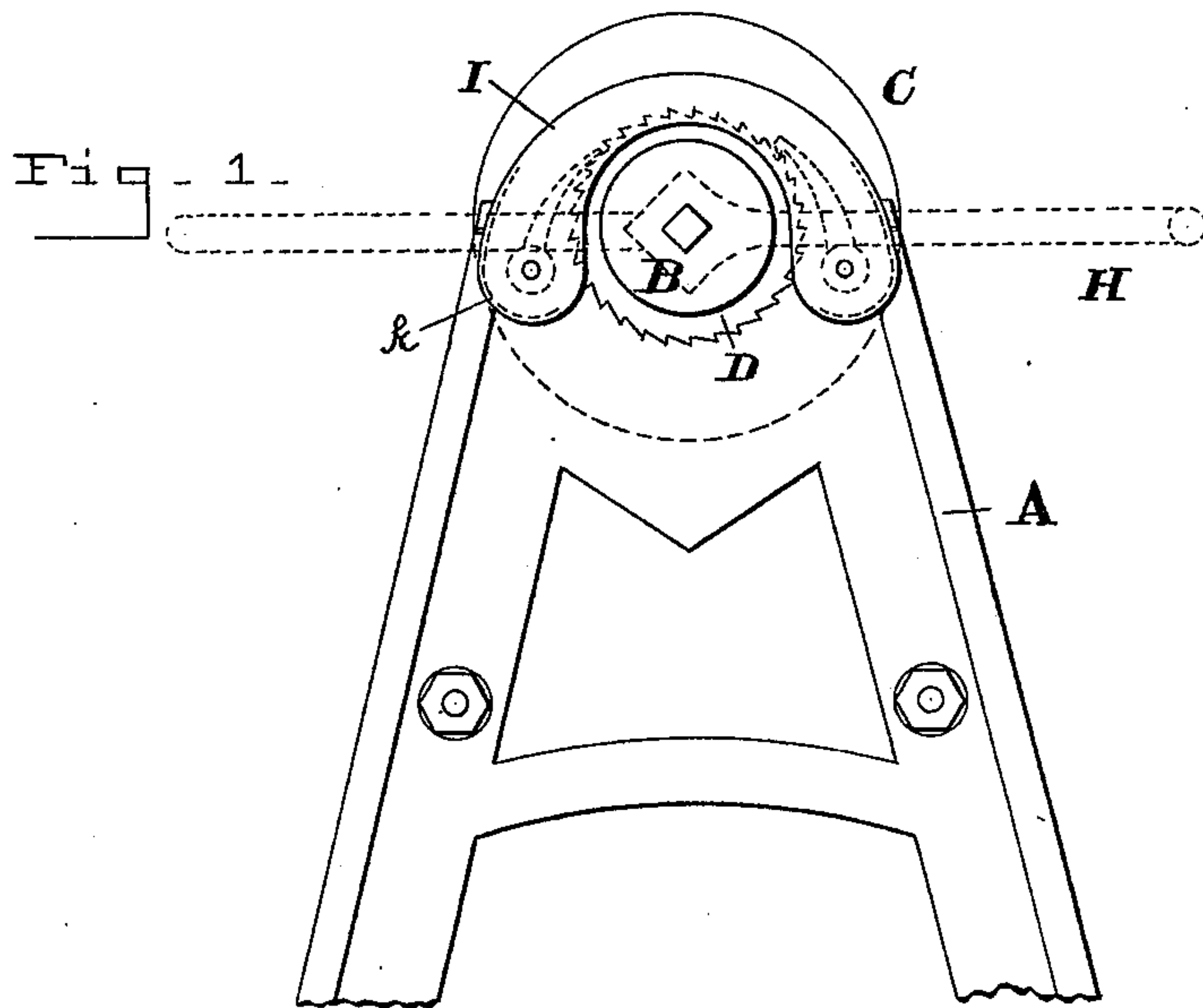
No. 636,645.

Patented Nov. 7, 1899.

**R. H. DOUGHERTY.**  
**HOUSING FOR RATCHET WHEELS.**

(Application filed Nov. 10, 1897.)

(No Model.)



WITNESSES -

*Charles B. Mann Jr.*  
*Chapin A. Ferguson.*

INVENTOR -

*R. H. Dougherty*

*By Chas B. Mann.*

ATTORNEY -

# UNITED STATES PATENT OFFICE.

RICHARD H. DOUGHERTY, OF BALTIMORE, MARYLAND.

## HOUSING FOR RATCHET-WHEELS.

SPECIFICATION forming part of Letters Patent No. 636,645, dated November 7, 1899.

Application filed November 10, 1897. Serial No. 657,999. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD H. DOUGHERTY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have  
5 invented certain new and useful Improvements in Housings for Ratchet-Wheels, of which the following is a specification.

This invention relates to an improved housing for ratchet-wheels of windlasses such as  
10 are used for oyster-dredges; and it consists of the parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an end elevation of a windlass. Fig. 2 is a vertical section of the improved housing inclosing the ratchet-wheel and pawls. Fig. 3  
15 is a perspective view of the improved housing.

The letter A designates the frame, and B the shaft on which the winding drum or spool C is fixed. A ratchet-wheel D is on the shaft,  
20 and two pawls *e f* engage the ratchet and prevent reverse movement. One or both ends of the shaft has a square end *g* to receive a crank-arm H, (indicated by broken lines.)

It is desirable to provide a housing for inclosing the ratchet-wheel and the pawls and  
25 of such construction that access may be immediately had to said parts at any time, and which will exclude the clothing of the operator from accidentally catching in said parts and prevent the pawls from turning backward and wholly disengaging from the ratchet and throwing the crank back, which sometimes results in serious injury to the operator. I have accordingly provided the housing I  
35 shown in the drawings. This housing consists of two parallel arch-shaped side walls *j*, having rounded ends *k*. These walls are spaced apart and are connected together at the rounded ends by curved end walls *l*, which  
40 unite said two side walls. These end walls *l* extend upward for a distance and have an upper edge *j'*, and the lower portion of each of the two end walls curves inward, as at *j<sup>2</sup>*, toward each other. An open top *m* is thus

left between the upper edges *j'* of the two end walls and the arched part of said side walls *j*. Each end of the housing has a hole *n* to receive a bolt *n'*, which serves to secure the housing to the frame A, and each bolt also serves as a pivot for one of the pawls. The  
50 side walls project higher than the ratchet-wheel, and the uppermost edge *j'* of each end wall prevents the pawl adjacent it from turning backward and entirely disengaging from the ratchet-wheel, and the lower curved part  
55 *j<sup>2</sup>* takes under the pivoted end of the pawl and prevents anything from passing upward and thereby disengaging the pawl.

By using this housing device there will be no liability of the crank being thrown backward and injuring the operator.

Having thus described my invention, what I claim is—

1. A housing for ratchet-wheels having in combination two parallel arched side walls  
65 spaced apart and connected at their ends by end walls the lower ends of which latter curve and take under the ends of the side walls and the upper parts of which extend upward, each having an upper edge, *j'*, leaving a top opening between said upper edges and said side walls, as set forth.

2. In a windlass the combination of a ratchet-wheel; a housing inclosing said ratchet-wheel and having two parallel arched  
75 side walls connected together at the ends by end walls, an open top being left between the end walls and said side walls; a pawl within the housing at each side of the ratchet-wheel; and two bolts—one securing each end of the  
80 housing and also serving as a pivot for one of the pawls, substantially as described.

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

RICHARD H. DOUGHERTY.

Witnesses:

CHAPIN A. FERGUSON,  
CHAS. B. MANN.