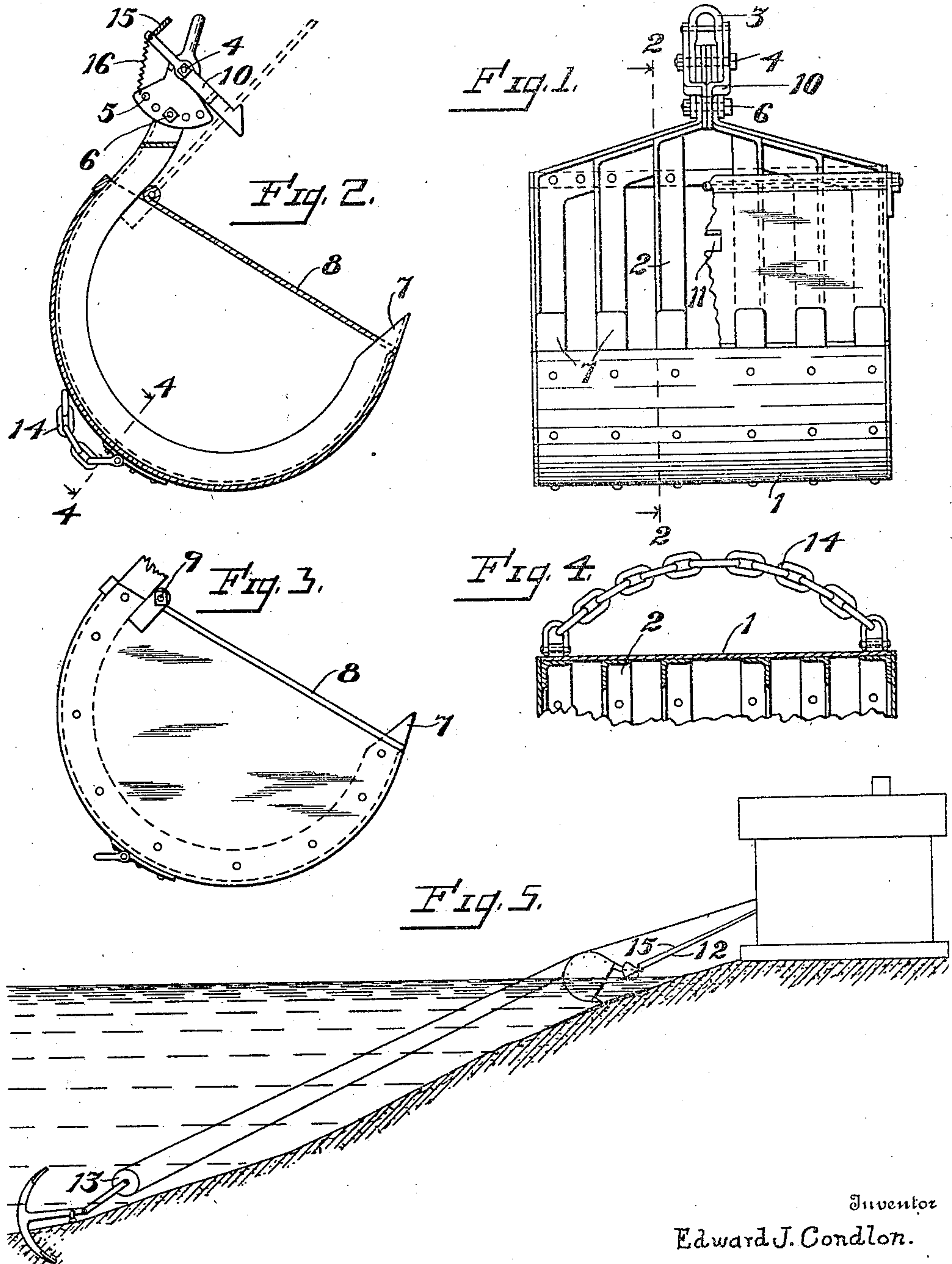


No. 819,636.

PATENTED MAY 1, 1906.

E. J. CONDLON.
SUBMARINE DRAG BUCKET.
APPLICATION FILED MAY 29, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD J. CONDLON, OF BALLARD, WASHINGTON.

SUBMARINE DRAG-BUCKET.

No. 819,886.

Specification of Letters Patent.

Patented May 1, 1906.

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To all whom it may concern:

Be it known that I, EDWARD J. CONDLON, a citizen of the United States, residing at Ballard, in the county of King and State of Washington, have invented certain new and useful Improvements in Submarine Drag-Buckets, of which the following is a specification.

My invention relates to improvements in submarine drag buckets or scoops; and the primary object thereof is to improve and simplify such devices.

A further object is to so construct the improvement that by altering the line of draft teeth provided at the forward edge of the bucket will be caused to assume a greater downwardly-inclined relation, and thereby vary the degree of penetration of said teeth into the water-bed.

With the above and other objects in view the invention consists of the parts, arrangement, and combination of parts hereinafter described, and succinctly pointed out in the appended claims.

In the accompanying drawings, in which like numerals of reference indicate like parts throughout the several views, Figure 1 is a view in front elevation of the present invention, a portion of the cover of the bucket being broken away. Fig. 2 is a section taken on line 2 2 of Fig. 1. Fig. 3 is a side view with parts removed. Fig. 4 is a section taken on line 4 4 of Fig. 2, and Fig. 5 is a diagrammatical view illustrating the invention in use.

In carrying out my invention I provide a bucket or scoop of approximately semicircular cross-sectional contour, the same having its body and end walls formed of sheet metal, and said body, which is indicated by reference-numeral 1, has arranged on its interior angle-bars 2, to which it is secured, as by rivets or the like. (See Fig. 1.) These angle-bars project beyond the forward edge of the bucket and are pointed to form teeth which will penetrate and loosen the earth, as will be more fully set forth in the following, and at their rear portions said bars are bent inwardly to a point approximately central of the length of the bucket and then upwardly, and to these last-named portions a clevis 3 is pivoted by bolt 4. This clevis is formed with a number of perforations 5, through which bolt 6 is adapted to project in order to vary the line of draft, and thereby cause the teeth 7 to penetrate the earth to different depths.

Reference-numeral 8 indicates the cover, the same being pivoted on a bolt 9 and having its forward edge cut out so as to fit about the teeth 7 when in lowered position. To hold the cover elevated, and thereby allow the earth or other materials loosened by teeth 7 to enter the bucket, I provide a catch 10, which is pivoted on bolt 4 and has its hooked end adapted to pass through opening 11 in the cover and catch on the inner face thereof, as illustrated by dotted lines in Fig. 2.

In operation a cable 12 or the like is connected to the clevis 3, which cable can be operated in any desired manner, and another line is preferably passed over a pulley, as 13, secured to an anchor embedded in the bed of the stream or other water and connected to a flexible connection 14, secured to the bottom of the bucket. By this construction the bucket is held firmly to its work.

The catch 10 is connected by a cable 15, so that the cover can be released when the bucket is filled.

A spring, as 16, prevents accidental displacement of the catch and serves to return the same to its normal position after each release thereof.

While I have herein shown a construction which is simple and efficient in operation, I reserve the right to make such alterations and changes in the details of construction as fall within the scope of the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. A drag-bucket having teeth projecting beyond its forward edge, an adjustable clevis connected to the bucket at the rear portion thereof, and means for holding said clevis as adjusted.

2. A drag-bucket comprising a body portion approximately semicircular in cross-section, reinforcing-bars secured to the inner face thereof and having their forward ends projecting beyond the adjacent edge of the bucket, and means to which the draft-line is connected, said means being arranged at a point opposite the teeth.

3. A drag-bucket comprising a body portion, a cover for closing said body portion, and means for holding said cover in opened position.

4. A drag-bucket comprising a body portion, a cover hinged thereto, said cover having its free edge formed with cut-out por-

tions, and teeth projecting through the cut-out portions of said cover when the same is closed.

5 5. A drag-bucket comprising a body portion, a cover hinged at the rear edge thereof, a means for holding said cover elevated, and a cable connected to said means, for the purpose specified.

to 6. A drag-bucket comprising a body portion having teeth at its forward edge, and a cover hinged to the rear portion of said body portion.

7. A drag-bucket comprising a body portion approximately semicircular in cross-section, and reinforcing-bars secured to the inner face thereof and extending longitudinally thereof. 15

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

EDWARD J. CONDLON.

Witnesses:

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