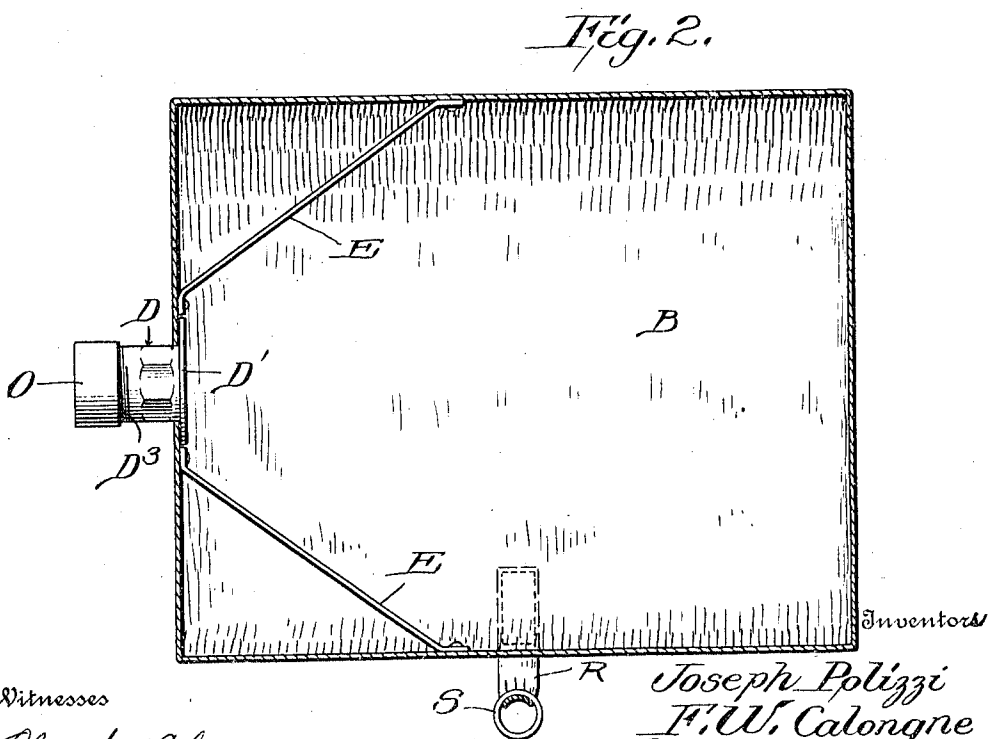
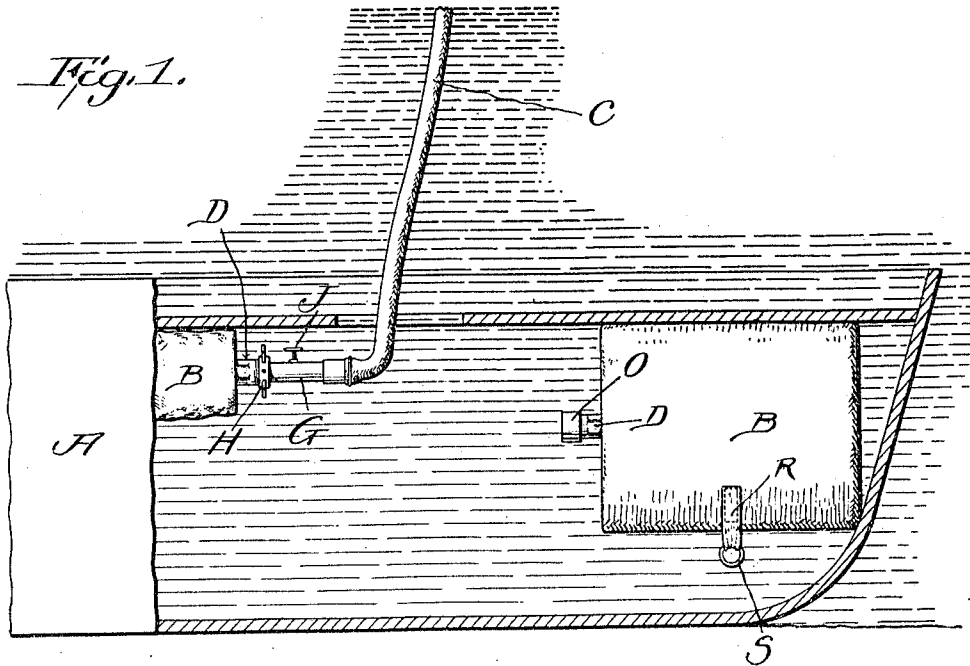


J. POLIZZI & F. W. CALONGNE.
 DEVICE FOR RAISING SUNKEN BODIES.
 APPLICATION FILED FEB. 2, 1911.

1,019,724.

Patented Mar. 5, 1912.

2 SHEETS—SHEET 1.



Witnesses

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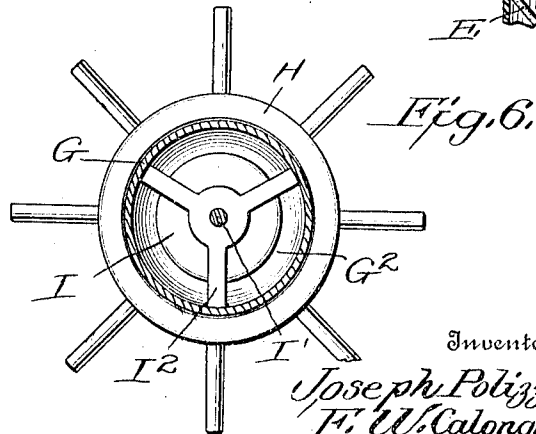
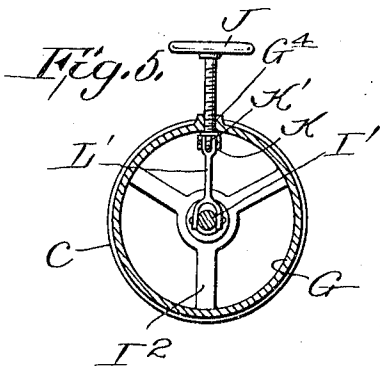
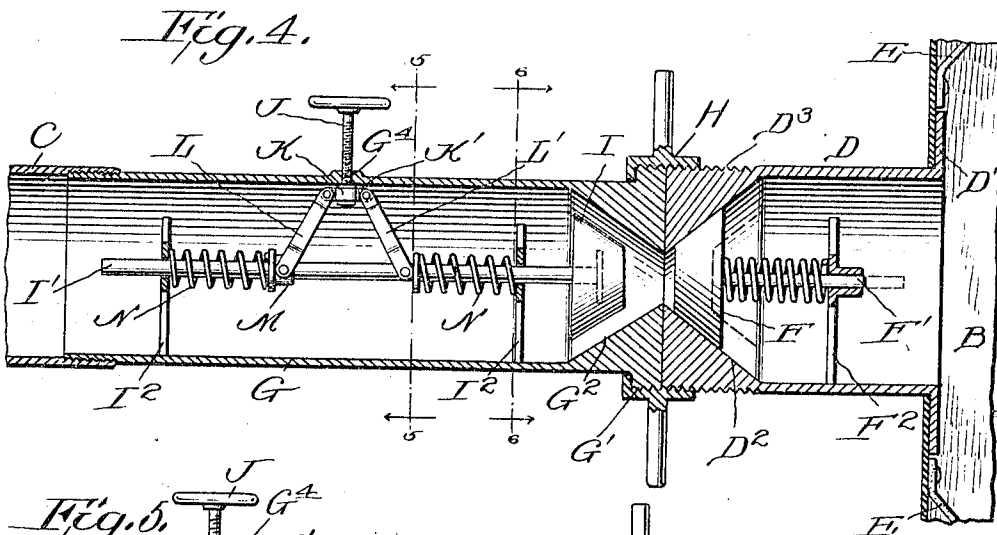
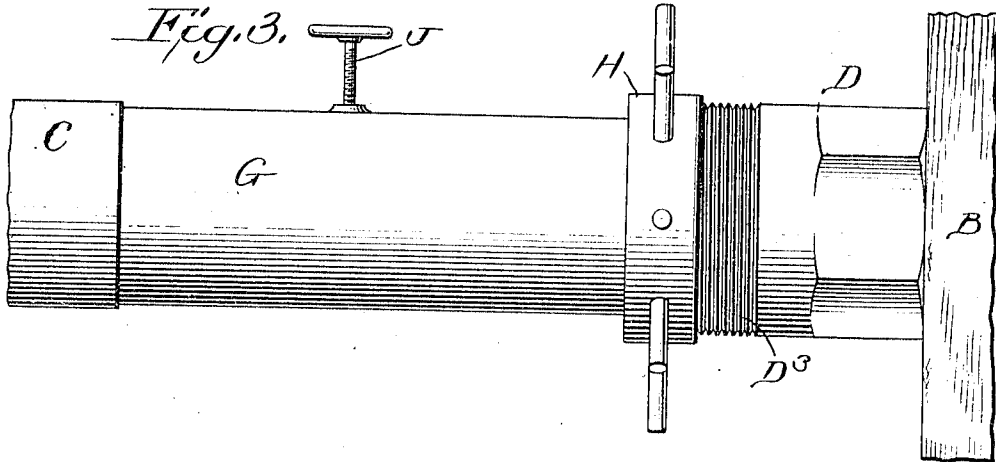
Chas E Brock
 Attorney

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UNITED STATES PATENT OFFICE.

JOSEPH POLIZZI AND FRANCIS WARREN CALONGNE, OF NEW ORLEANS, LOUISIANA.

DEVICE FOR RAISING SUNKEN BODIES.

1,019,724.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed February 2, 1911. Serial No. 606,195.

To all whom it may concern:

Be it known that we, JOSEPH POLIZZI and FRANCIS WARREN CALONGNE, citizens of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Devices for Raising Sunken Bodies, of which the following is a specification.

10 This invention relates to certain new and useful improvements in a device for raising sunken bodies such as vessels and the like, the object being to provide means for forcing the water out of the sunken body and
15 replacing the same with air or gas which is contained within suitable inflatable bags, whereby the buoyancy of the vessel will be restored in such a manner that the vessel can be towed to the desired place.

20 Another object of our invention is to provide novel means for inflating the flexible bags, whereby the bags will be held in an inflated position without any danger of the air or gas escaping.

25 A still further object of our invention is to provide an inflated bag which is so constructed that the same will assume the shape of the cavity in which it is placed when inflated, whereby the water within said cavity
30 will be displaced.

Another object of our invention is to provide a novel valve for the end of the air or gas pipe used to inflate the bags, whereby the same can be cut off after the bag has been
35 inflated in order to prevent the escape of air or gas.

A still further object of our invention is to provide an inflatable bag which is formed of cloth and rubber having reinforcing
40 straps of duck extending from the inlet end to the middle of the same, whereby all danger of the neck containing the check valve from being blown out by the pressure of air or gas within the bag is prevented.

45 With these objects in view, the invention consists in the novel features of construction, combination and arrangements, of parts hereinafter fully described and pointed out in the claims.

50 In the drawing forming a part of this specification:—Figure 1 is a sectional view showing a sunken vessel with a pair of the inflatable bags arranged therein. Fig. 2 is a longitudinal vertical section through the
55 bag detached. Fig. 3 is a side elevation of the supply nozzle and bag neck showing

the manner of connecting the same. Fig. 4 is a longitudinal vertical section of the same. Fig. 5 is a section taken on line 5—5 of Fig. 4. Fig. 6 is a section taken on line 6—6 of
60 Fig. 4.

In the drawing, A indicates a sunken vessel, B the inflatable bag, and C the supply pipe used for inflating the bags when arranged in position within the vessel, and is
65 generally carried by a vessel having a suitable pump or generator for forcing gas or air into the bags, whereby the water within the sunken vessel will be forced out as the bags are expanded by being inflated. When
70 a number of these bags have been inflated within the vessel they will assume the shape of the hull so as to completely fill the cavity and force the water therefrom, whereby said sunken vessel will rise to the surface.

The bag B is formed of a suitable air tight material which is preferably formed of cloth and rubber, and is provided with a neck D having a retaining flange D' which is arranged within the bag, and said bag is provided with strengthening straps E which
80 extend from the end of the bag to the sides of the same in such a manner that the neck will be prevented from being blown out by the pressure of the air or gas within the
85 same. The neck D is provided with a valve seat D² in which is seated a spring actuated check valve F which is provided with a stem F' working through a spider F² in such a manner that air will be allowed to pass
90 into the bag through the neck but is prevented from escaping.

Arranged on the lower end of the supply pipe C is a nozzle G which is provided with an externally threaded shoulder G', and
95 carries a threaded locking ring H which is adapted to engage the threads D³ of the neck D and securely locking the nozzle G to the neck in such a manner that an air tight joint will be formed. The nozzle G is provided with a valve seat G² in which is seated
100 a conical valve I carried by a valve stem I', which is mounted in suitable spiders I² arranged within the nozzle as clearly shown, said valve serving the purpose of closing the
105 end of the nozzle after the bag to which it has been attached has been inflated, and by this means the loss of any air or gas is prevented.

For operating the valve I, we provide a
110 screw J which is mounted in a threaded bore G⁴ formed in the nozzle G. The lower end

of the screw J carries a collar K which is provided with oppositely disposed ears K', to which are connected arms L L', the arm L' being secured to the valve stem I' and the arm L is connected to a collar M which is slidably mounted upon the valve stem in such a manner that it is free to move. Suitable coiled springs N surround the valve stem I between the spiders I² and the ends of the arms L L' in such a manner that the valve will be held in an open position without any danger of it closing, and it will be seen that by operating the screw J the arms L L' will be spread apart so as to force the valve I tightly into the seat G². By this arrangement air passing into the neck of a valve through the nozzle can be cut off before the nozzle is detached from the neck.

From the foregoing description it will be seen that we have provided means for raising sunken bodies, consisting of a number of inflatable bags each being provided with a neck having a check valve. After each bag has been inflated a suitable cap O is placed upon the neck so as to completely close the end so that it will be impossible for any air to escape by the check valve being accidentally moved.

In order to attach the bags to the bottom of the vessel if desired we attach strips R to the bags which carry rings S, which can be attached to suitable hooks which can be screwed or driven into the bottom of the ves-

sel. This will be especially useful in case of small boats not decked over.

What we claim is:—

1. The combination with an inflatable bag having a valve controlled inlet, of a supply pipe having a nozzle adapted to cooperate with said inlet, said nozzle being provided with an interior seat, a valve adapted to cooperate with said seat, a valve stem, springs encircling said stem, and adapted to hold said valve away from its seat, pivoted arms, a collar slidable upon said stem, one of said arms being pivotally connected to the stem and the other to the collar, and a screw pivotally connected to said arms and adapted to spread them apart for the purpose of forcing said valve to its seat against the pressure of said springs.

2. A nozzle for inflating bags comprising a body having a valve seat at one end and means for connecting the same to a bag, a spring actuated valve mounted in said nozzle, a screw working in a bore formed in said nozzle, a collar carried by said screw, and arms connected to said collar, one of said arms being connected to the valve stem and the other to a collar slidably mounted thereon.

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Witnesses:

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