No. 789,428. PATENTED MAY 9, 1905.

T. J. HRUBY & T. J. JIRIK.

LIFE PRESERVER.

APPLICATION FILED SEPT. 6, 1904.

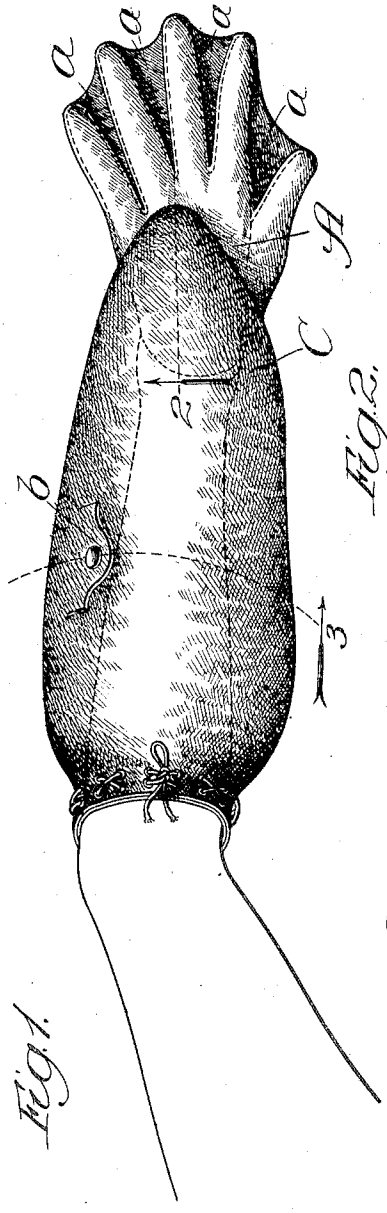


Fig. 1.

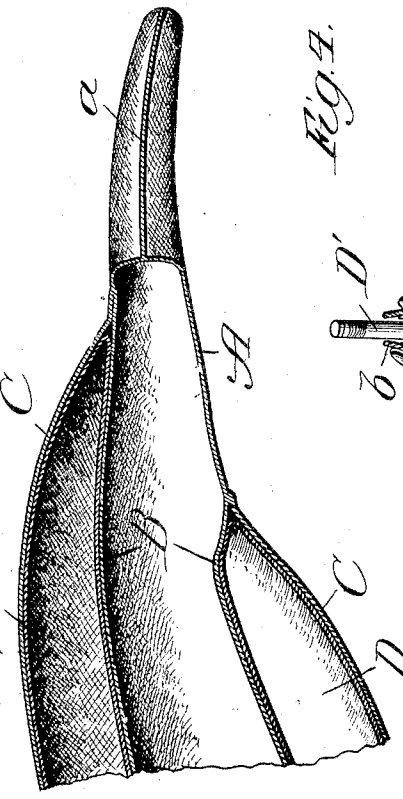


Fig. 2.

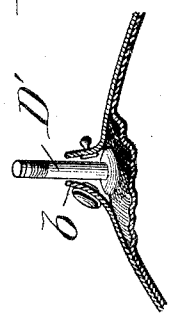


Fig. 4.

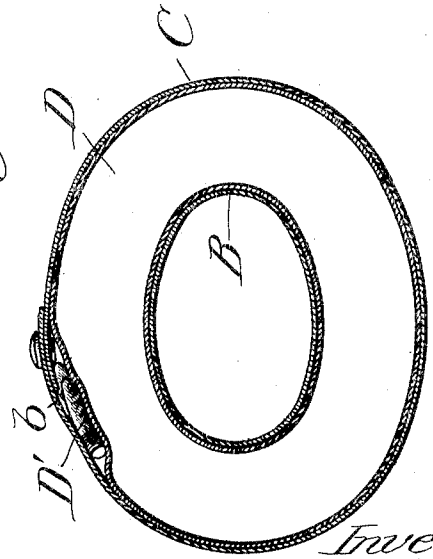


Fig. 3.

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No. 789,428. Patented May 9, 1905.

UNITED STATES PATENT OFFICE.

THOMAS J. HRUBY AND THOMAS J. JIRIK, OF CHICAGO, ILLINOIS.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 789,428, dated May 9, 1905.

Application filed September 6, 1904. Serial No. 223,404.

To all whom it may concern:

Be it known that we, THOMAS J. HRUBY and THOMAS J. JIRIK, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Life-Preservers, of which the following is a specification.

Our object is to provide a buoyant appliance of novel and improved construction adapted to be worn on the forearm and operate as a means whereby the wearer may so sustain himself in the water as to keep his head above the surface without material effort.

It is also our object to provide the appliance of a construction which will tend rather to aid than encumber a swimmer.

In carrying out our invention, broadly stated, we provide a sleeve to fit more or less closely around the forearm of the wearer and forming a sack or receptacle for a float which is preferably in the form of an inflatable bag of air-holding material. As we prefer to construct the appliance we form a glove, of canvas or other material, to fit more or less closely the hand of the wearer, having a sleeve extension reaching nearly to his elbow and fitting more or less closely around his wrist and forearm. Fastened around or adjacent to the hand portion of the glove is an outer sleeve, of canvas or the like, of greater diameter than the glove extension and extending to the end of the latter to form therewith an annular receptacle or sack. In the said receptacle we place another receptacle or bag of material impervious to air and having means whereby it may be inflated and maintained in that condition to fill out its containing-receptacle.

The preferred construction will be described more in detail in connection with the accompanying drawings, in which—

Figure 1 is a broken perspective view showing our improved life-preserver in position on the hand and arm of the wearer; Fig. 2, an enlarged and broken longitudinal section at the glove portion; Fig. 3, a cross-section taken on line 3 in Fig. 1, and Fig. 4 a broken sectional detail view showing a valved mouthpiece through which the inner receptacle may be inflated.

A is a fingered glove, provided between the fingers with webs *a*, as indicated.

B is a sleeve extension of the glove, adapted to fit more or less closely around the forearm and reaching, preferably, nearly to the elbow of the wearer. Fastened around the glove, preferably in such manner as not to interfere with the movement of the fingers, is an outer sleeve or casing C, also reaching nearly to the elbow and adapted to be laced or otherwise fastened at that end to the adjacent end of the inner sleeve.

D is a sack or bag, of thin rubber, oiled silk, or other flexible sheet material, which may be passed into the receptacle formed by the inner and outer sleeves described. The bag D may be annular, as shown, to completely surround the forearm, or it may be formed to only partly surround the forearm. Preferably nearly midway between the wrist and elbow the bag D is provided with a short inflating-tube D′, having a suitable valved mouthpiece. In the location of the inflating-tube is an opening through the outer casing, closed, preferably, by a suitable flap *b*, which may be opened to give access to the tube and mouthpiece and buttoned down to cover the same.

In operation the inner bag D in a collapsed condition is passed into the outer sack and the latter is laced, as indicated. The appliance is then drawn over the hand and forearm, as shown, after which the wearer may inflate the inner bag, causing it to fill out the outer sack and form a buoyant sleeve around the forearm. The pressure of the air in the bag D will tend to press the inner sleeve closely around the wrist and forearm and hold the appliance in place with sufficient firmness.

In practice the wearer would adjust an appliance on each of his hands and forearms, and they need be of no greater size in cross-section than is necessary to afford buoyancy which will permit the wearer to maintain his head above water. The webs *a* will aid a swimmer in propelling himself through the water, while the device itself will offer no material obstruction to movement of the hands and arms.

On disinflating the bag D the appliance may

be readily removed from the hand and arm. The position of the tube D′ on the forearm puts it within easy reach of the mouth of the wearer.

While we prefer to construct our improved appliance in the manner shown and described, it may be variously modified in the matter of details without departing from the spirit of our invention as defined by the claims.

What we claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a life-preserver comprising a double-walled sleeve adapted to fit around the forearm of the user and composed of flexible waterproof and air-proof material, said walls forming between them a closed inflatable air-chamber, and means provided on said sleeve for inflating it.

2. As a new article of manufacture, a life-preserver comprising in combination an inner sleeve fitting around the forearm, an outer sleeve connected to and forming with the inner sleeve an annular receptacle extending approximately from the hand to the elbow, and an inflatable bag, of flexible waterproof material impervious to air, filling out said receptacle, substantially as set forth.

3. As a new article of manufacture, a life-preserver comprising in combination a glove having a sleeve extension fitting around the forearm and forming an annular receptacle extending approximately to the elbow and an inflated bag of flexible waterproof material impervious to air filling out said receptacle, substantially as set forth.

4. As a new article of manufacture, a life-preserver comprising in combination a fingered glove provided with webs between the fingers, and having a sleeve extension forming an annular sack to fit around the forearm, a bag of flexible waterproof material impervious to air in said sack, lacing means for the end of the sack and means upon the bag whereby the same may be inflated and disinflated without removal from the sack.

5. As a new article of manufacture, a life-preserver comprising in combination a glove, a sleeve extension upon the glove reaching approximately to the elbow, an outer annular flexible covering fastened to the glove and extending to the end of the said sleeve extension to form therewith an annular receptacle about the forearm, means for closing the end of said receptacle, an air-holding bag of flexible waterproof material, provided with a valved inflating and disinflating tube, in said receptacle and filling out the same when inflated, and an opening and closing flap in the side of the receptacle giving access to said tube, substantially as and for the purpose set forth.

THOMAS J. HRUBY.
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In presence of—
WALTER N. WINBERG,
F. M. WIRTZ.