(No Model.)

E. R. COGSWELL.

LIFE PRESERVER.

No. 281,178. Patented July 10, 1883.

Fig 1

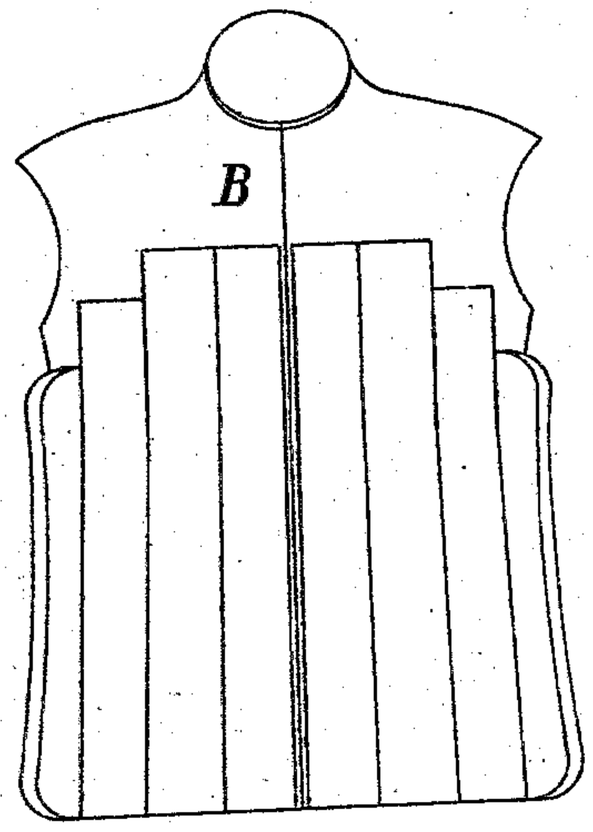


Fig 2

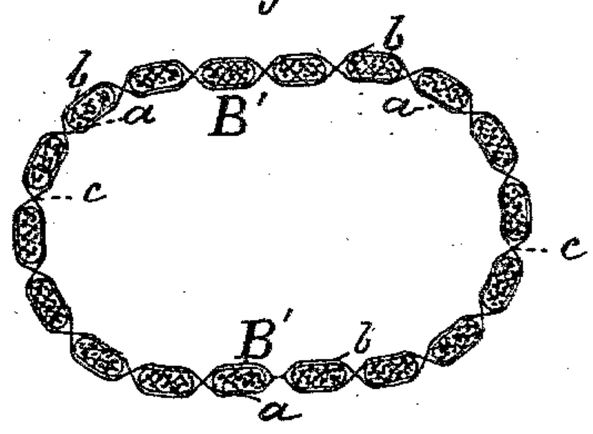


Fig 3

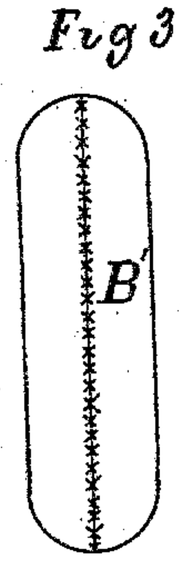


Fig 4

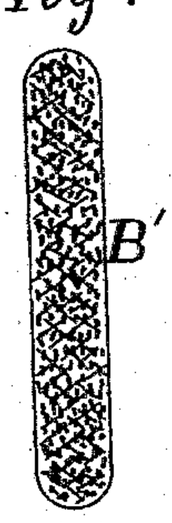
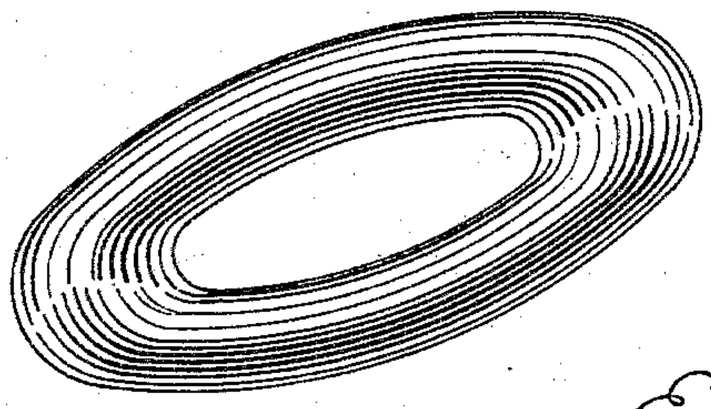


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ELIZA R. COGSWELL, OF NEW YORK, N. Y.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 281,178, dated July 10, 1883.

Application filed December 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELIZA R. COGSWELL, of the city, county, and State of New York, have invented an Improvement in Life-Preserving Apparatus, of which the following is a specification.

This invention relates to that class of "life-preservers," so termed, which owe their buoyancy to a filling of cork; and the said invention is applicable not only to "cork jackets," so called, but to floats and other varieties of what are generally known as "life-preservers."

The object of my invention is to provide a life-preserver at a minimum cost which shall have all the advantage and permanent buoyancy due to the use of solid cork or cork blocks, together with the quality of being relatively soft and flexible; and to this end it consists in a jacket or other buoyant float made of a fibrous or woven fabric provided with pockets which are filled with waterproofed granulated cork or like woody matter.

Figure 1 is a side view and partial sectional view of a cork jacket embracing the several features of my said invention. Fig. 2 is a horizontal sectional view of such jacket, taken in the line *x x* of Fig. 1. Figs. 3 and 4 are respectively a side view and longitudinal sectional view of certain parts embraced in my said invention; and Fig. 5 is a perspective view of another form of life-preservers, which includes in its construction certain features of my said invention.

To provide the cork filling for life-preservers made according to my said invention, I take cork in a fragmentary condition—that commonly termed "waste cork"—and reduce it to what is usually termed a "granular" condition, the material being reduced by any suitable means to any required or desired degree of comminution. I provide a caldron or other suitable vessel containing paraffine in a molten condition, or, in lieu thereof, paraffine dissolved in any suitable menstruum or solvent. I then immerse the cork in the paraffine or paraffine solution, as the case may be, for a sufficient length of time to coat the surface of the cork with the paraffine, so that when the cork is removed the fragments or pieces, or granules thereof, as the case may be, are each severally coated with the paraffine. The cork as thus prepared has air and moisture practically excluded from contact therewith, from which it follows that the cork itself cannot be deteriorated by air or moisture, or by both, and is prevented from absorbing water or becoming "water-logged" thereby.

In the construction of that form or variety of life-preservers commonly termed a "cork jacket," I provide the jacket B itself of any suitable material, or of any ordinary or suitable shape or configuration, and provide therein pockets, which, when desired, may be similar to those in which ordinary granular cork has been used. These pockets are represented at *b* in Figs. 1 and 2, and may be formed by parallel rows of stitches, which connect the inner and outer fabrics, *a' b'*, by parallel seams, as shown at *c* in Fig. 2. I then provide sacks or pouches B' of such size and configuration that when distended they will pass readily into the pockets *b* of the jacket. These pouches I make of any suitable material or fabric, itself thoroughly impregnated or treated or coated with paraffine, so as to form a water-proof pouch. These pouches I fill with the cork, coated, as hereinbefore explained, with paraffine, and then seal the pouches as closely as may be to exclude external air. I then insert the pouches into the pockets *b* of the jacket, and then, by sewing or otherwise, close the pockets to retain the pouches therein with sufficient security.

It is to be understood that any suitable light woody material having a buoyancy which will enable it to serve the purposes of cork may be used as the equivalent of cork in my said invention. It is also to be understood that any material which, applied as a covering to the granules or pieces of cork, will serve to exclude water or moisture from the interior thereof may be employed as the equivalent of paraffine—as, for example, solutions of india-rubber, resins, or gums of appropriate character.

I am aware that it has been proposed to treat solid blocks of cork to make them water-proof or water-repellent. I am also aware that granulated cork has been used in pockets of life-preservers. The one is comparatively expensive and the other is unreliable. These I do not claim as my invention; but

What I do claim, and desire to secure by Letters Patent, is—

1. The life-preserver herein described, consisting of a jacket or float of fibrous material, provided with a series of cells or closed pockets containing waterproofed granulated cork or other like granulated woody matter, substantially as and for the purposes set forth.

2. The combination, in a life-preserver, of a jacket or float provided with cells or pockets and sacks or pouches filled with waterproofed granulated cork or like granulated woody matter, as hereinbefore set forth.

ELIZA R. COGSWELL.

Witnesses:
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