No. 710,275. Patented Sept. 30, 1902.

C. HUNT.

LIFE PRESERVER.

(Application filed Nov. 15, 1901.)

(No Model.) 2 Sheets—Sheet 1.

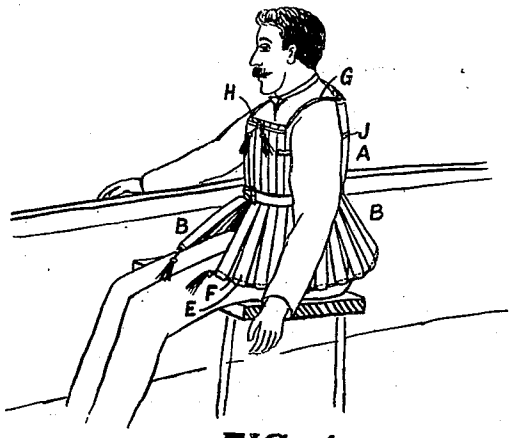


FIG. 4.



FIG. I.

Witnesses
Geo. H. Evans
Grace P. Brereton

Inventor
Charles Hunt
By
Shuntwant & Greeley
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

No. 710,275. Patented Sept. 30, 1902.

C. HUNT.

LIFE PRESERVER.

(Application filed Nov. 15, 1901.)

(No Model.) 2 Sheets—Sheet 2.

FIG. 2.

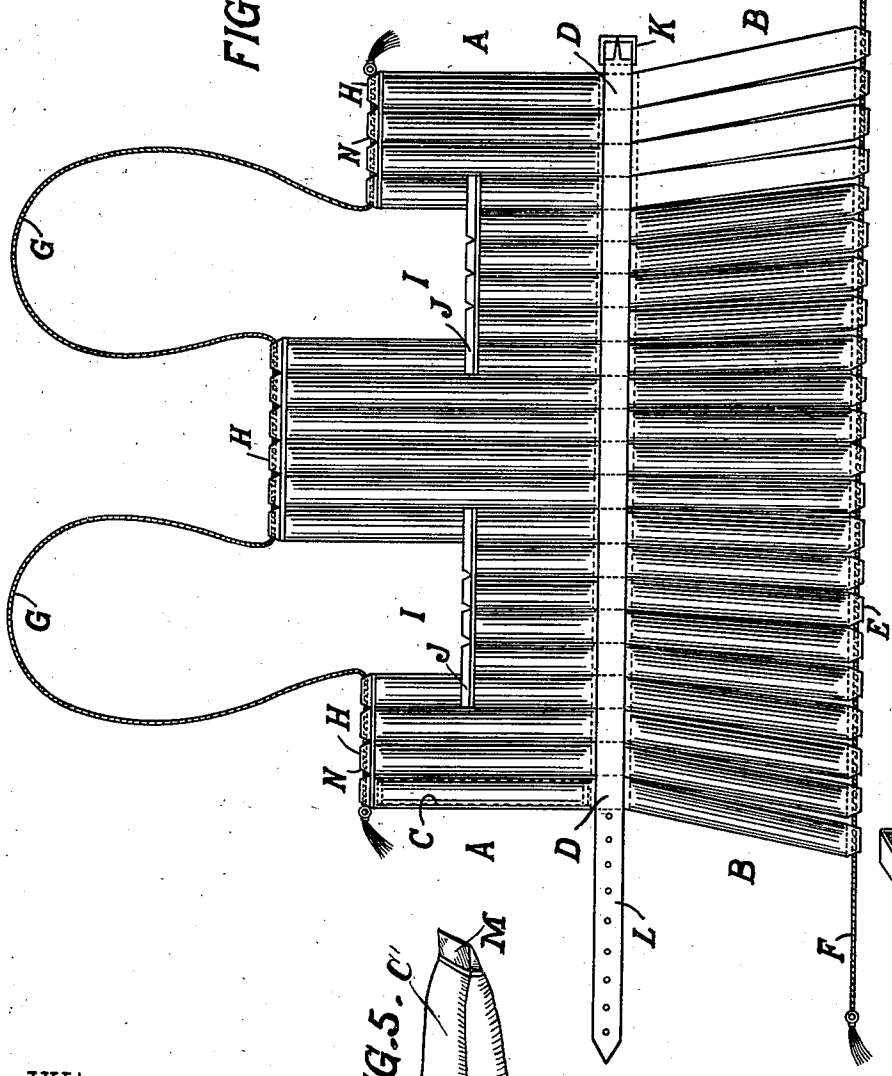


FIG. 3.

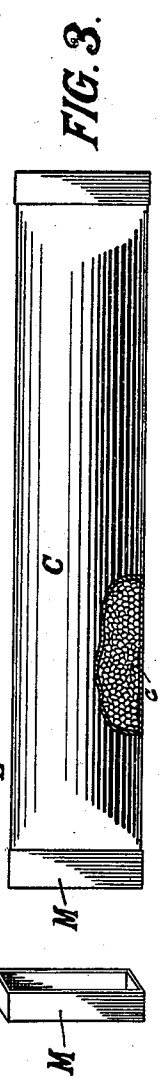
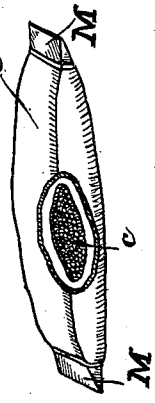


FIG. 5.



Witnesses

Geo. H. Evans

Grace P. Brereton.

Inventor

Charles Hunt

By Sturtevant & Peeler

Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES HUNT, OF BELFAST, IRELAND.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 710,275, dated September 30, 1902.

Application filed November 15, 1901. Serial No. 82,354. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HUNT, M. D., oculist, a citizen of the United States of America, residing in Belfast, in the county of Antrim, Ireland, (whose full postal address is Corn Market, Belfast, aforesaid,) have invented certain new and useful Improvements in Life-Preservers, of which the following is a specification.

This invention has for its object a device to enable a person to float in water in case of accident or other event. It is in the nature of a belt or jacket which can be put on the wearer and adjusted in position quickly. It excels the ordinary cork belt in many ways, especially in that it keeps the wearer from the chest upward above the surface of the water.

In the accompanying drawings, Figure 1 is a view of the life-preserver in use. Fig. 2 is a view of the life-preserver separated from the wearer; Fig. 3, an enlarged detail view of one of the covered cork-packed tubes stripped of its outer canvas covering and with one of the caps M removed. Fig. 4 is a view showing the life-preserver with the lower portion released in order to enable the person to sit more easily. Fig. 5 is a view similar to Fig. 3 with the outer canvas covering in place.

In place of the usual jacket lined with pieces or layers of cork I form my jacket or belt with two rows A B of flexible tubes or elongated compartments. These are composed of an inner flexible tube, preferably made of rubber or other similar material, and, as shown at C, are packed with granulated cork *c* and are closed at the ends and hermetically sealed, so as to be perfectly air-tight. An outer covering or sheath C, of canvas or other suitable strong material, is placed around the tubes C. The outer coverings or envelops of canvas with which the tubes in the lower row B are entirely covered are fastened at one end to the waist-belt D, which is preferably of canvas also, leaving the entire length of these covered tubes of the lower row B, except where they are attached to the waist-belt, separate from each other. Furthermore, the waist-belt D, acting as a hinge, allows these covered tubes B to separate when the wearer sits upon the seat of a life-boat, for example. Through loops E at their lower ends is passed a cord F, knotted at the ends to prevent it from slipping through the loops, the ends of the said cord being tied together when the life-preserver is to be used in the water, so as to prevent the lower tubes from rising beyond the horizontal or to bind them as closely as required to the body of the wearer. The other row A of tubes, which are also covered with canvas, are fastened at the lower ends to the waist-belt D, while their upper ends are sewed together at N, and a shoulder-cord G passes through loops H in the ends to keep them firmly secured around the body. It will be noticed that some of the covered tubes in the upper row A are made shorter than others, so as to form armholes I, through which the wearer's arms are passed. These are looped by the bands J to the adjacent longer tubes, so as to keep them in position. The waist-belt D is provided with a buckle K and strap L at the ends, so that it can be fastened around the wearer's waist, and the cord G passes over the shoulders and is fastened around the chest just below the neck.

The cork *c*, with which the tubes are packed, is ordinary cork of good quality, which is first granulated, then washed in hot water, then washed in alcohol, and placed in an oven to dry. When thoroughly dried, the cork is packed in the inner rubber tubes C, after which the ends of the inner tubes are hermetically sealed, then turned over, and fastened by solutioning a cap-like piece of canvas M over them, so as to make an air-tight joint. A tube packed in this way is very flexible, besides possessing great powers of buoyancy. This plan of packing the tubes with granulated cork is greatly superior to providing air-inflated compartments, as there is not the same risk of bursting. It is well known that the pressure of water increases with the depth, and consequently with a life-belt inflated with air under pressure there is always the danger of the belt bursting the farther it is submerged. By my invention, however, there is no such liability, and yet the granulated cork-packed tubes are highly resilient, far more so than solid cork, and they allow themselves to yield to the shape and movements of the body in the water and also expand and do not lose buoyancy.

The mode of action is as follows: The jacket is placed around the body, with the arms protruding through the armholes H, the waist-belt fastened by the buckle K and strap L, and the cord G fastened below the neck. When a person clothed in the jacket is immersed in water, the buoyancy of the granulated cork in the sealed tubes of the jacket tends to maintain the body in a natural vertical position, as if the person were standing on land, with about one-third of the body, or thereabout, from the chest upward above the surface of the water.

I declare that what I claim is—

1. In a life-preserver, the combination of a plurality of rubber tubes packed with granulated cork, means for hermetically closing said tubes, a canvas sheath for each rubber tube, a waist-belt above and below which said sheathed tubes are attached in rows, loops upon the lower extremities of the lower row of said canvas-sheathed tubes, a cord passing through said loops and adapted to be tied together at its ends to bind the said tubes around the wearer, loops on the upper extremities of the front and back members of said upper sheathed tubes, and a cord adapted to pass through said loops and over the shoulders of the wearer, whereby said tubes may be bound around the chest and sides of the wearer; substantially as described.

2. In a life-preserver, the combination of a plurality of rubber tubes packed with granulated cork, means for hermetically closing said tubes, a separate canvas sheath for each rubber tube, a waist-belt to which said canvas-covered tubes are attached separately in two rows, one row above and one row below said belt, and releasable means for binding the ends of said tubes around the body of the wearer; substantially as described.

In witness whereof I have hereunto signed my name, this 1st day of October, 1901, in the presence of two subscribing witnesses.

CHARLES HUNT.

Witnesses:

JOHN LYTLE,

JAMES T. MCFADDEN.