No. 679,502. Patented July 30, 1901.

G. GRAHAM.

LIFE PRESERVER.

(Application filed Nov. 20, 1900.)

(No Model.)

Fig. 1.

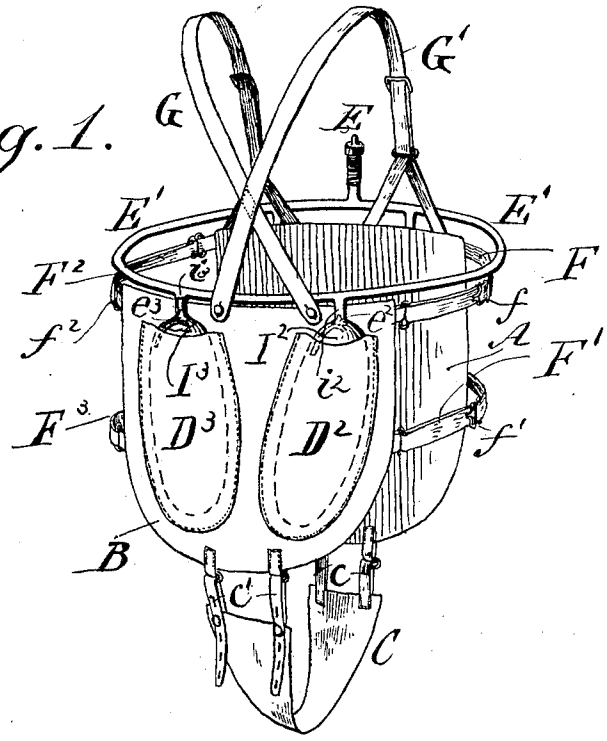
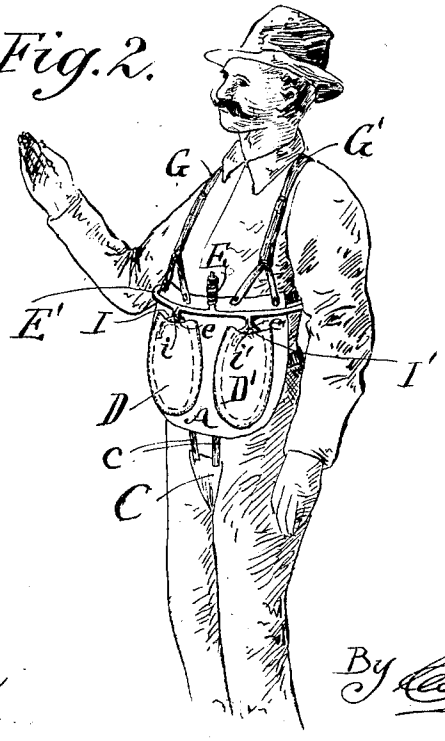


Fig. 2.



WITNESSES

Belle Paterson

Sophie Harnisch

INVENTOR

George Graham

By Cook, Reemer & Co

ATTY'S

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

UNITED STATES PATENT OFFICE.

GEORGE GRAHAM, OF PORT ARTHUR, TEXAS.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 679,502, dated July 30, 1901.

Application filed November 20, 1900. Serial No. 37,098. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GRAHAM, a citizen of the United States, and a resident of Port Arthur, county of Jefferson, and State of Texas, have invented certain new and useful Improvements in Life-Preservers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to improvements in life-preservers.

The nature and object of the invention will be fully understood from the following general description and the accompanying drawings and will be subsequently pointed out in the claims.

Figure 1 is a back view of my newly-invented life-preserver. Fig. 2 is a figure of a man with my life-preserver on it with the various parts in proper position.

A and B designate two flaps or aprons of similar form, as illustrated. These may be made of any convenient and adaptable fabric; but I prefer to make them of stout canvas or cotton drilling. To each of these flaps are firmly sewed two pockets, which may be of the same material, four pockets in all, (designated, respectively, by D D′ D^2 D^3.) These flaps A and B are held together by straps or belts F F′ F^2 F^3, which are provided with adjusting-buckles f f' f^2 f^3. C designates a wide strap or loop of the same material as the said flaps and pockets. This strap is formed narrower in its middle part and wider at each end. It is attached at one end by the straps c to the lower edge of the flap A and by the other end connected to the flap B by the straps c'. These straps are made adjustable by means of buttons and button-holes, as illustrated. Any other approved and adaptable device, however, may serve the same purpose and adjust them equally as well. To the upper edges of the said flaps A and B are attached the suspenders G and G′. These are provided with the common adjusting buckles and loops and are of the common and well-known form.

In each of the pockets D, D′, D^2, and D^3 is placed an air-tight india-rubber bag, four bags in all, (designated, respectively, by I I′ I^2 I^3.) E′ designates an annular flexible air-tight tube, preferably of vulcanized india-rubber, of the form illustrated. To this tube the bags I, I′, I^2, and I^3 are connected by the short tubes i i' i^2 i^3, so that there is a free communication between said bags and said annular tube. In these short tubes i i' i^2 i^3, however, are placed the valves e e' e^2 e^3, by which the communication between the said annular tube and the said bags may be cut off at pleasure. At E the said annular tube E′ is provided with an inflation-valve. By blowing into this the said annular tube and the said bags may all be inflated with air. These valves may all be of any approved and adaptable form. It may in some cases, however, be found preferable to attach an inflation-valve to each separate bag, and so to dispense with the annular tube E; but I consider the form here shown as being generally more preferable.

All the various parts of the device are to be substantially as herein illustrated and described.

To use my invention, it is to be put on the human body as illustrated in Fig. 2, with the flap A and its accompanying pockets and bags in front of the abdomen and the flap B, with its accompanying pockets and bags, directly behind and held in place by the belts F, F′, F^2, and F^3, partly encircling the body, the suspenders G and G′ passing over the shoulders and the band C passing between the limbs, the annular tube E′ also encircling the waist, with the inflation-valve E placed directly in front. The valves e, e', e^2, and e^3 between the annular tube E′ and the air-bags I, I′, I^2, and I^3 are then opened, and lastly the operator, opening the inflation-valve E, blows into it with his mouth or with the air-pump used for inflating bicycle-tires or with any other adaptable and convenient device until the air-bags are inflated with air. Then the valves are all closed, so that no air can escape. The device will then be found to be a very convenient and effective life-preserver capable of floating the wearer in water for any desired length of time. It will also be found that if by means of any accident the annular tube E′ or any one of the air-bags should be punctured the valves between the

air-bags and the annular tube will prevent the air from escaping to such an extent as to materially hinder the operation of the device.

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

1. In a life-preserver, the combination with two flaps to fit the front and back of the human body, pockets on said flaps, and suspenders, side bands and bottom bands attached to said flaps for holding the same in proper position, of air-tight bags in said pockets, a flexible annular tube, short tubes connecting said annular tube with said bags and valves as specified adapted for the inflation of said tubes and bags, and for the closing of the same, all substantially as and for the purpose set forth.

2. In a life-preserver, the combination with two flaps of adaptable fabric, for engagement with the front and back of the human body, pockets on said flaps adjustable suspenders attached to the upper edges of said flaps, adjustable side bands attached to the sides of said flaps, and connecting them together, a bottom band, and adjustable straps connecting said bottom band and the lower edge of said flaps of air-tight bags in said pockets, an annular, flexible air-tight tube, short flexible air-tight tubes, connecting said air-tight bags and said annular tube, air-valves on said short tubes between said air-tight bags and said annular tube and an inflation-valve in said annular tube, and all such valves arranged so that said tubes and bags may be inflated with air and also closed to prevent the escape of air therefrom all substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 2d day of October, 1900.

GEORGE GRAHAM.

Witnesses:
EVERETT PEVOTO,
O. W. KIETH.