F. B. VOEGELI.

LIFE SAVING SUIT.

APPLICATION FILED JUNE 10, 1913.

1,113,074. Patented Oct. 6, 1914.

Fig. 1.

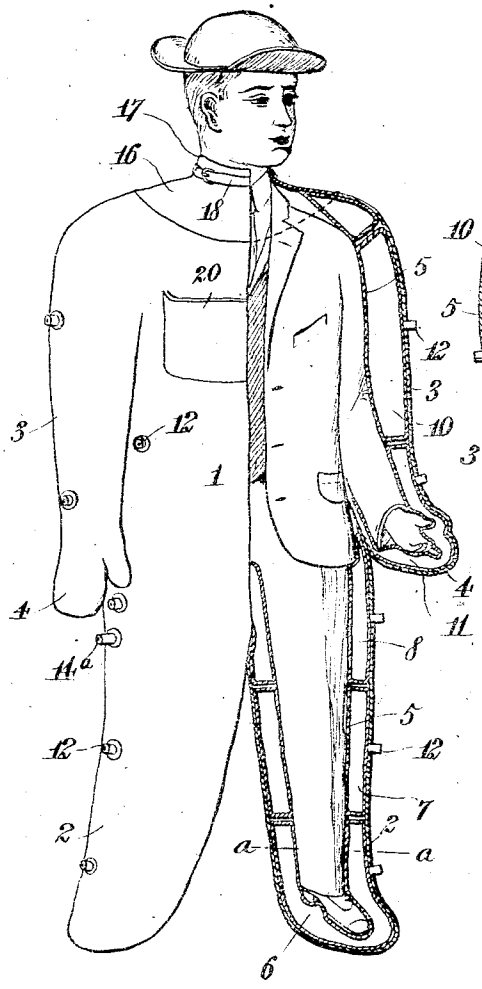


Fig. 2.

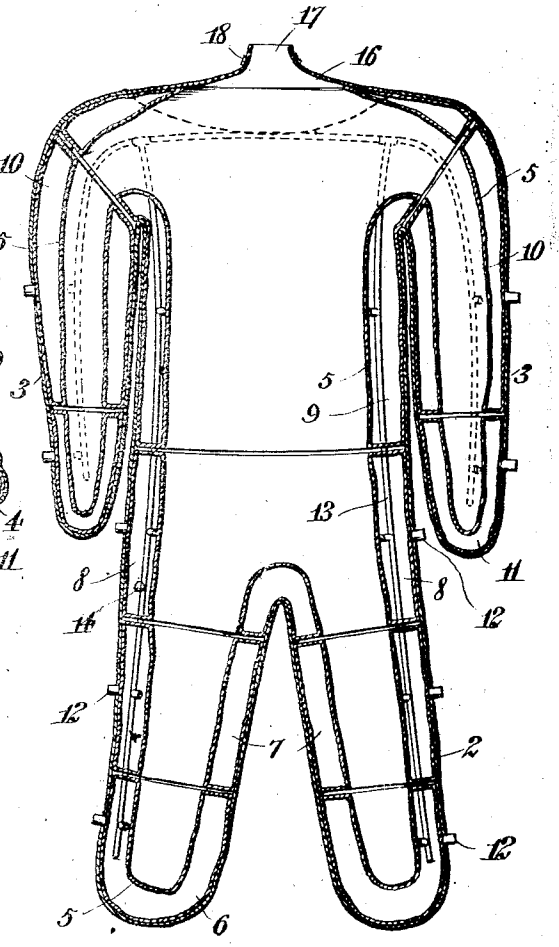
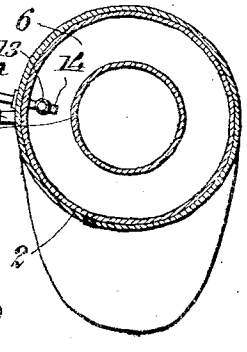


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK B. VOEGELI, OF MANSFIELD, MASSACHUSETTS.

LIFE-SAVING SUIT.

1,113,074. Specification of Letters Patent. Patented Oct. 6, 1914.

Application filed June 10, 1913. Serial No. 772,884.

To all whom it may concern:

Be it known that I, FREDERICK B. VOEGELI, a subject of the Emperor of Germany, residing at Mansfield, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Life-Saving Suits, of which the following is a specification.

This invention is an improved life saving suit for use by shipwrecked persons to prevent them from sinking and from being chilled by the water, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed, the object of the invention being to provide an improved life saving suit of this character which may be readily put on or taken off, which adapts itself to the size of the person who wears it and which embodies in its construction a plurality of double-walled compartments, which when inflated with air give the necessary buoyancy to prevent sinking and also act as non-conductors and prevent the person using the suit from being chilled by the water.

In the accompanying drawing:—Figure 1 is partly an elevation and partly a sectional view of a life saving suit constructed in accordance with my invention, showing the same in use. Fig. 2 is a vertical sectional central view of the same. Fig. 3 is a transverse sectional view of the same on the plane indicated by the line *a*—*a* of Fig. 1.

My improved life saving suit is here shown as comprising a body 1, legs 2 and sleeves 3, the sleeves being provided with glove portions 4. The suit is made of suitable flexible waterproof fabric and may, in practice, be made of rubber or other similar material covered with cloth. On the inner side of the suit are air chambers which are formed by linings 5 of suitable flexible but airtight fabric, which linings are secured at their edges to the outer fabric 1 as by means of stitching or by other suitable means and are separated from and independent of each other. A pair of these air chambers is arranged to fit around the feet as at 6, another pair is arranged to fit around the lower legs as at 7, another air chamber is arranged to fit around the upper legs and thighs as at 8, another air chamber is arranged to fit around the body or trunk as at 9 and each sleeve 3 contains an air chamber 10 for an arm and an air chamber 11 for a hand. Normally the air chambers are deflated and, hence, the suit is normally extremely flexible and may be readily put on. Each air chamber is provided with an externally arranged valve 12 adapting it to be filled with compressed air or deflated at will and in the suit is arranged an air tube 13 which has independent air valve connections 14 with all of the air chambers and also has an externally arranged valve 14ª which may be readily connected to a suitable air pump. When the air tube is used all of the air chambers may be inflated simultaneously or if preferred, by using the valves 12, the air chambers may be inflated or deflated independently of one another, by simply blowing into the valve or relieving the air by opening the valve. Hence, certain of the air chambers may be filled to a greater extent with compressed air than others, according to the necessities of the case and all portions of the suit may be inflated to any desired extent to secure buoyancy and stability.

The suit is provided with a flexible and elastic yoke 16 which is preferably made of pure rubber and the said yoke is provided with a rubber elastic collar or neck band 17 around the hole through which the neck of the wearer extends. A pair of bands 18 are arranged around the neck band and provided with buckles for tightening and adjusting the neck band to fit the neck of the wearer. On the front of the suit is a pocket 20 in which provisions may be placed.

I claim:—

The herein described life saving suit comprising a flexible body and a plurality of disconnected air chambers arranged in the body, the fabric of the air chambers forming a lining for the suit and said air cham-

bers when inflated affording buoyancy and also forming insulators, each of said air chambers having a valve adapting it to be inflated or deflated independently of the others and projecting outwardly through the fabric of the body and an air tube arranged in and connected to the several air chambers and providing a valve adapting it to be simultaneously inflated through the said tube.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK P. VOEGELI.

Witnesses:

JOHN F. BANNON.

WILLIAM H. BANNON.