Dec. 22, 1942. E. C. CRAIG ET AL 2,305,605

INSULATING PROTECTIVE AND BUOYANT SUIT

Filed Feb. 17, 1941

Fig. 1

Fig. 2

Fig. 3

Fig. 4
This invention relates to an insulating protective and buoyant suit and has for an object to provide a suit that is waterproof, windproof, soft and flexible and will stretch to fit the movements of the wearer.

A further object of this invention is to provide a suit that is an excellent insulator for protection against cold weather, is very light in weight and furnishes buoyancy for life-saving purposes should the wearer become immersed in the water.

A further object of this invention is to provide a suit that can be readily manufactured at minimum expense.

Another object of this invention is to provide a suit especially useful for aviators when flying in cold weather, or over the water, by divers for protection against cold and shock when diving in cold water and by occupants and operators of tanks for protection against vibration or shock.

With the foregoing and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter described and illustrated in the drawing, in which—

Figure 1 is an elevational partly broken-away view of the suit of this invention; Figure 2 is a sectional view on line 2—2 of Figure 1; and

Figures 3 and 4 are front and back views of the hood in closed position.

There is shown at 10 the suit of this invention being formed as a coverall fit over any other clothing of the wearer. The principal feature of this suit 70 is the interlining 11 made of expanded cellular rubber. As shown, this interlining 11 is made of a plurality of sections 12 cut to fit and joined together by strips 13 vulcanized thereto along the joints 14. As shown, there are four sections of expanded rubber 12 extending from the head and shoulders and about the trunk of the wearer which then continue downwardly past the crotch to form legs 20. At the trunk portion 15, the front sections 12 are each joined to the back sections which, in turn, are joined from the neck to the crotch. A central fastener 16 extends along the center front from the crotch to the neck and partially around an integrally formed high collar 17 capable of forming, with the fastener 19, a very close fitting hood 19 around the head and neck of the wearer. Below the crotch the inner edge of each front section is joined by a vulcanized strip to the inner edge of each back section while their outer edges are provided with separable fasteners 18 extending from about opposite the crotch to the ankles of the legs 20 formed thereby.

At the bottom of each leg 20 there is provided a strap 21 secured to the inner side of the bottom of the leg 20 and provided with a snap fastener 22 for passing under the arch of the foot of the wearer and holding the leg portion 20 in contact therewith. Sleeves 23 are made of similar strips of expanded rubber 24 fastened together along the joints by vulcanizing strips 25 and secured to the body armholes by means of vulcanizing strips 26. To complete the suit, the interlining 11 of expanded rubber sections 12 is provided on the inside with a covering 27 of suitable material such as light gaberline or flannel and the outer side is provided with an outer covering 28, such as gaberdine or whitecord. Below the ends of the sleeve 23 are provided knitted wrist bands 30 while wrist straps 31 are provided for tightening the ends when necessary.

Other modifications and changes in the proportions and arrangements of the parts may be made by those skilled in the art without departing from the nature of the invention, within the scope of what is hereinafter claimed.

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalties thereon or therefor.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

An insulating protective buoyant suit comprising an interlining of expanded cellular rubber, an inner cloth covering and an outer cloth covering, said interlining comprising a plurality of vertically extending sections, and vulcanizing strips extending along the joints to secure said sections together, said sections integrally extending downwardly from the trunk portion of the suit through the leg section, a separable fastener extending from the crotch upwardly to the neck portion, said sections extending upwardly from the neck portion to form a separable snug fitting hood, and separable fasteners extending from opposite the crotch section downwardly along the outer edge of said leg sections.