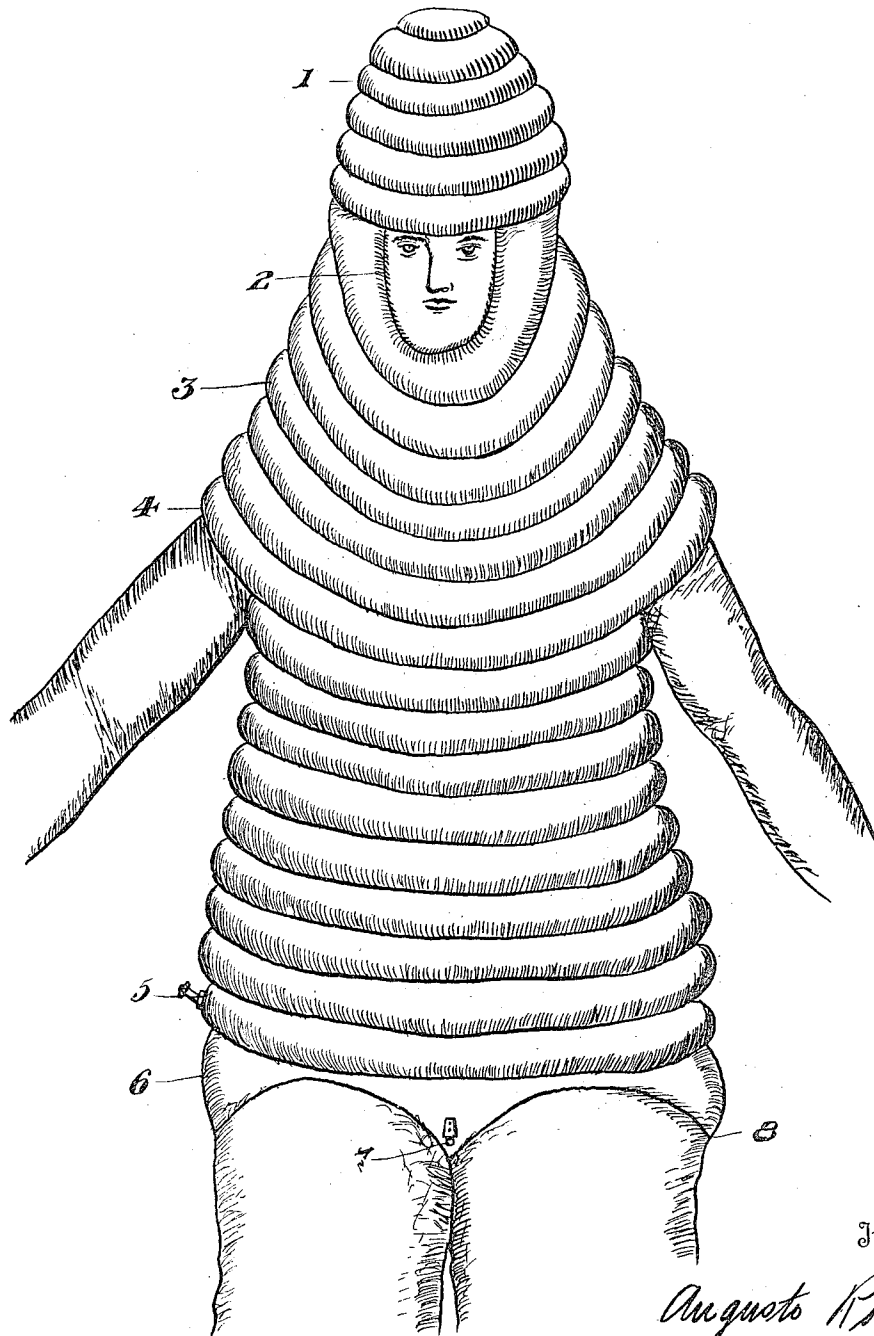


A. RODAL.
SAFETY SUIT FOR AVIATORS.
APPLICATION FILED JUNE 8, 1917.

Patented Feb. 19, 1918.

1,256,594.



By

Inventor

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AUGUSTO RODAL, OF HABANA, CUBA.

SAFETY-SUIT FOR AVIATORS.

1,256,594.

Specification of Letters Patent. Patented Feb. 19, 1918.

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To all whom it may concern:

Be it known that I, AUGUSTO RODAL, a citizen of the Republic of Cuba, residing at Calle Marina 12, Habana, Cuba, have invented certain new and useful Improvements in Safety-Suits for Aviators, of which the following is a specification.

This invention relates to aviator's safety suits, particularly to such suits which are intended to protect the aviator against the fatal results of a fall and to preserve his life.

With this end in view, a suitable hose or the like, containing compressed air, is guided in serpentine convolutions around the body and the head of an aviator.

In the accompanying drawing, a suit according to the present invention is shown in front view in place upon an aviator's body and head.

The suit rests upon the shoulders as shown at 3 and is spaced a material distance from the top of the head, the suit being open at the bottom or lower end so that the aviator can easily slip into it similar to the manner in which a sleeveless knitted sweater or similar garment is put on. Below the part 3 the suit extends downwardly to a point below the hips, as shown.

There are no openings in the garment except those at the bottom, those for the arms, and the one for the face of the wearer.

This simple device is made of a light elastic fabric, flexible and durable, indicated at 6, and which extends from the head part 1 on top to a point beyond the hip of the wearer, constituting thereby a sleeveless and trouserless garment, similar to sweaters as frequently worn for athletic purposes. Over said fabric a rubber tube is wound forming a casing which is light and flexible and offers a great resistance consisting of convolutions of two inches in diameter over the entire length extending in the form of a spiral as described and having the shape and form as illustrated in the figure in the accompanying drawing.

By means of an air pump which is attached to the valve nipple 5 provided at a convenient place, compressed air is pumped into the convolutions of the suit of such a force as to make the suit capable of resisting and taking up the force of all shocks and crushing forces to which an aviator may be subjected when the flying machine stops and

falls to the ground. Thus an aviator can only sustain minor injuries as, for instance, breaking an arm or leg which nowadays can easily be healed, while his life is preserved.

In the upper inner part of the suit a material space is left or provided for between the fibrous fabric and the rubber tube. This structure comprising a fabric and rubber tubing spaced therefrom forms the head piece of the garment completely surrounding the upper portion of the head and greatly increasing the power of resistance of the protecting structure. In order to safeguard the life of an aviator and to safeguard him against being killed, the device is provided at its upper front part with an opening of the size of the face of an aviator bordered by rounded borders 2 of the inflatable rubber tube, and two laterally arranged borders 4 are provided for the arms. Similar borders, although of a larger size and width, are provided at the hips 6 as indicated at 8, and a means of attachment is suitably arranged as indicated at 7 allowing the fastening of the suit with great facility. The suit has a weight which does not in the least inconvenience the wearer and its flexibility permits it to be folded at will and conveniently stored or hidden when it is not in use. It is very easily handled for the same reason. It is quickly prepared for a flight and it permits of a perfectly free movement of the aviator's arms and legs. The free movement of the head is not impeded and the same may therefore be moved normally and at will while it is adequately protected against the force of the air developed through the velocity of the flight of the machine by the fabric which is attached to the coils of rubber tubing and which surrounds the face of the aviator, the pressure of which is light but uninterrupted. As experienced in practical use, the described device protects an aviator also against death by drowning if he should fall into the sea, as the compressed air within the convolutions or coils will keep the aviator afloat and will prevent him from sinking.

It will be understood that the device is subject to many modifications, for instance, the diameter of the rubber tube may be changed and reduced and correspondingly also, the dimensions of the suit.

This suit may also be advantageously used by automobilists or sailors, in short, by all

persons who are in danger from shocks and contusions or similar accidental consequences of their activities.

Having thus described my invention, what
5 I claim is:

1. A sleeveless and trouserless sweater-like garment, comprising a trunk portion and a head portion, both of these portions being
10 surrounded by inflatable tubing arranged in coils surrounding the trunk and head of the wearer, but free of engagement with the arms and legs of the wearer.

2. A sleeveless and trouserless sweater-like garment, comprising a trunk portion and a head portion, both of these portions being
15 surrounded by inflatable tubing arranged in coils surrounding the trunk and head of the wearer, but free of engagement with the arms and legs of the wearer, said coils being placed in close juxtaposition to each
20 other and extending substantially in transverse direction around the body of wearer.

AUGUSTO RODAL.