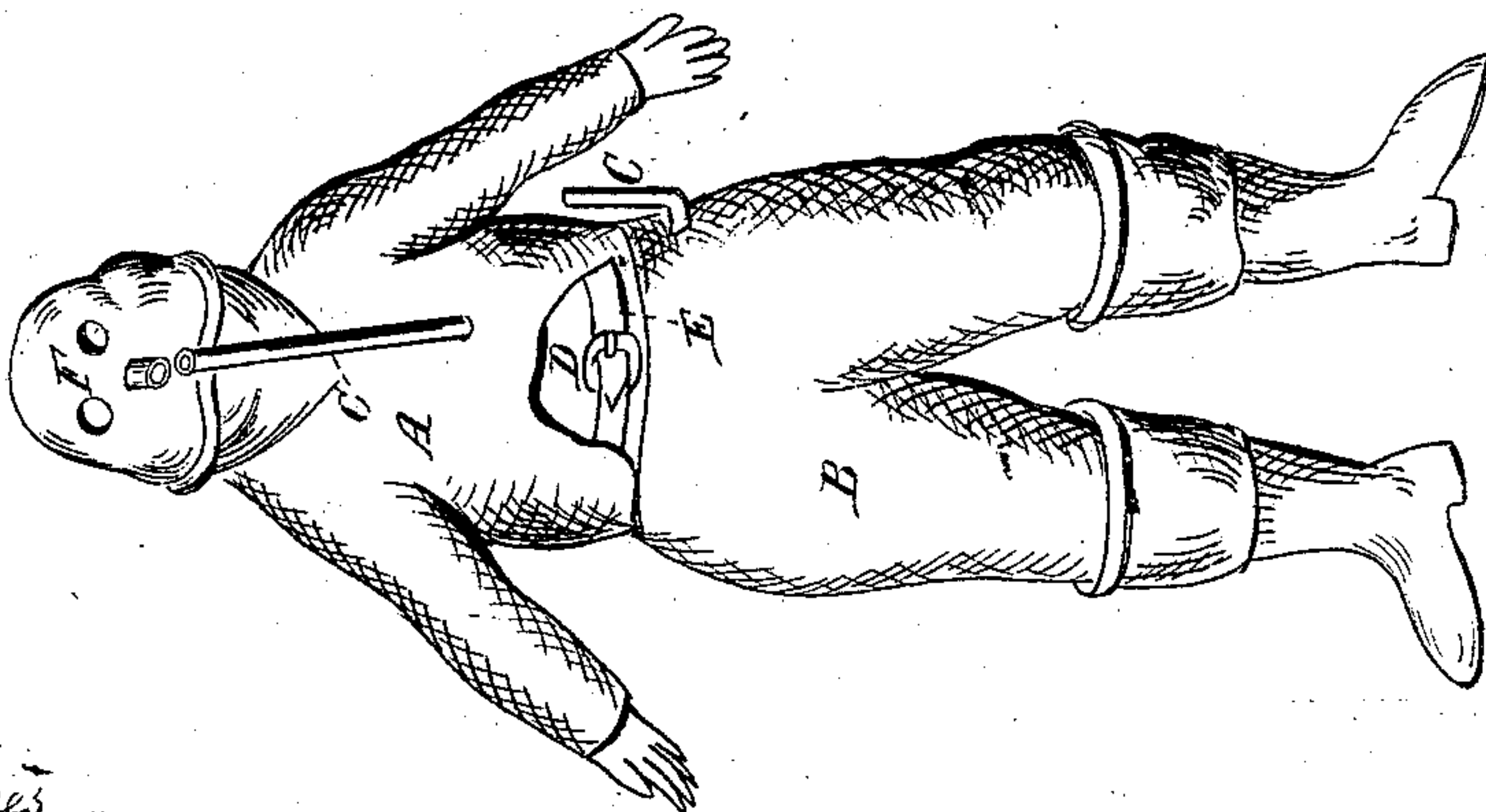
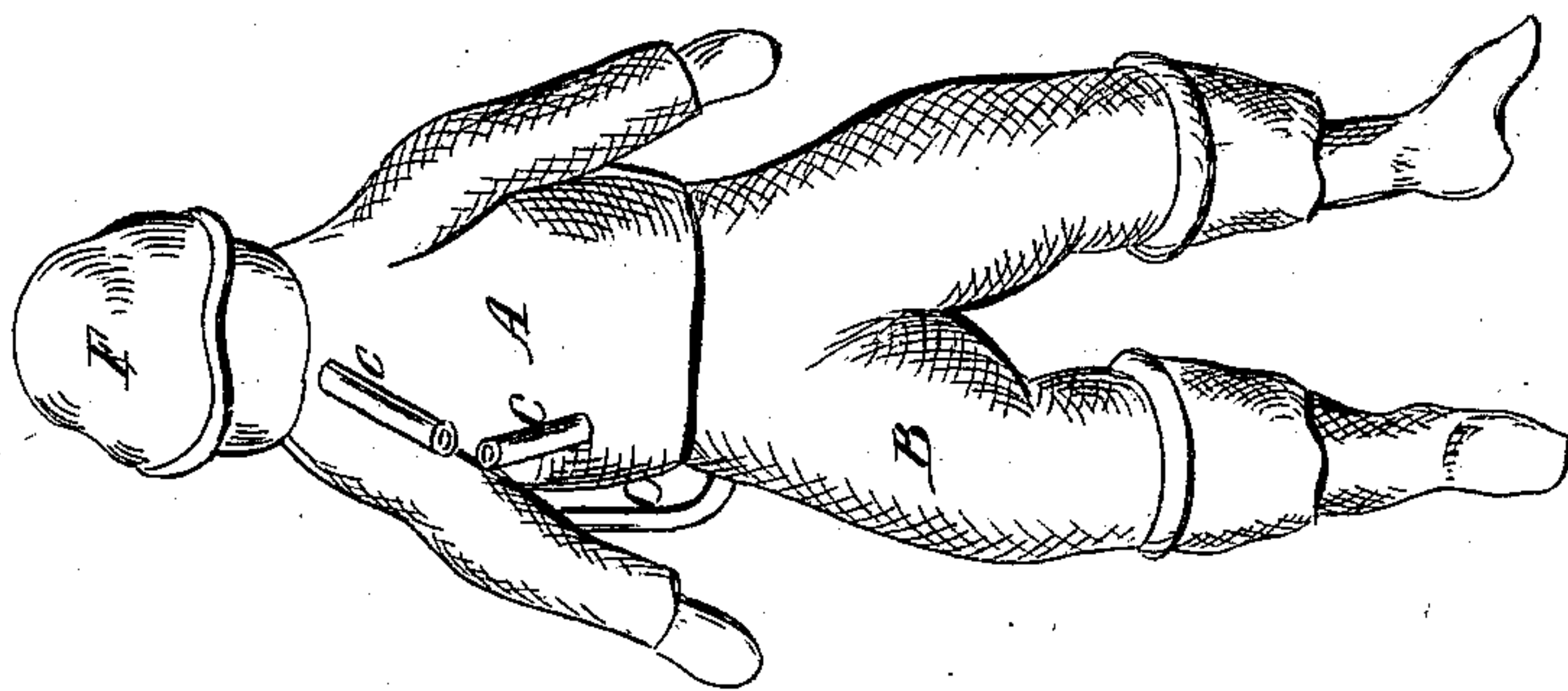
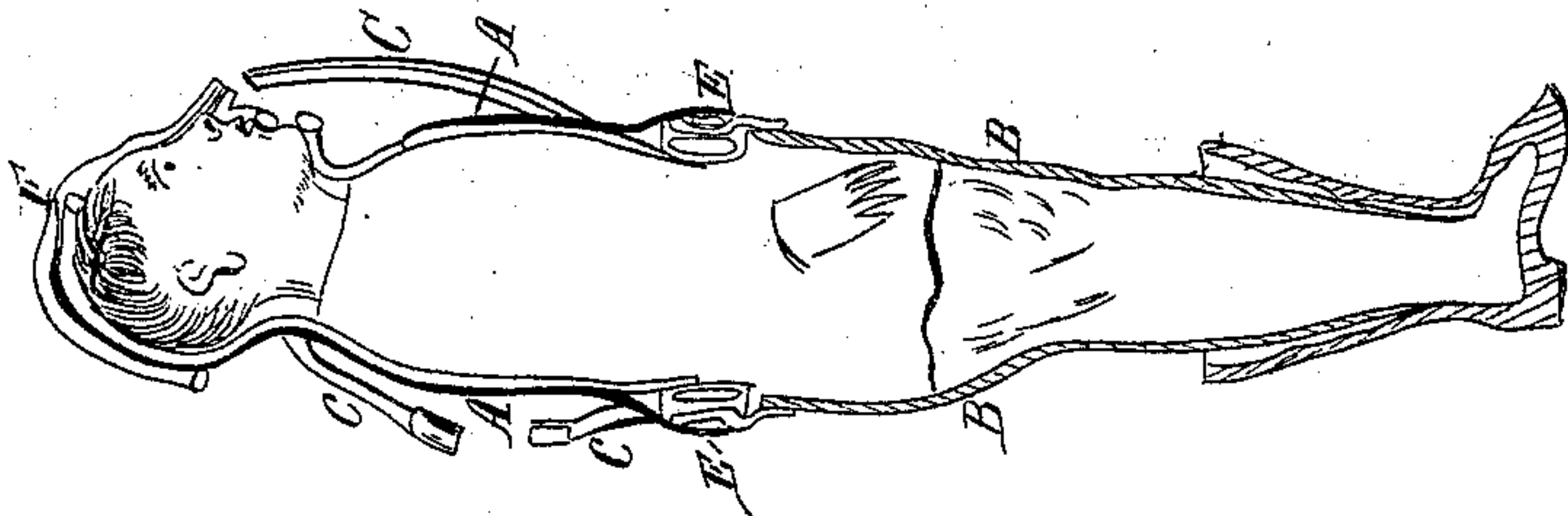
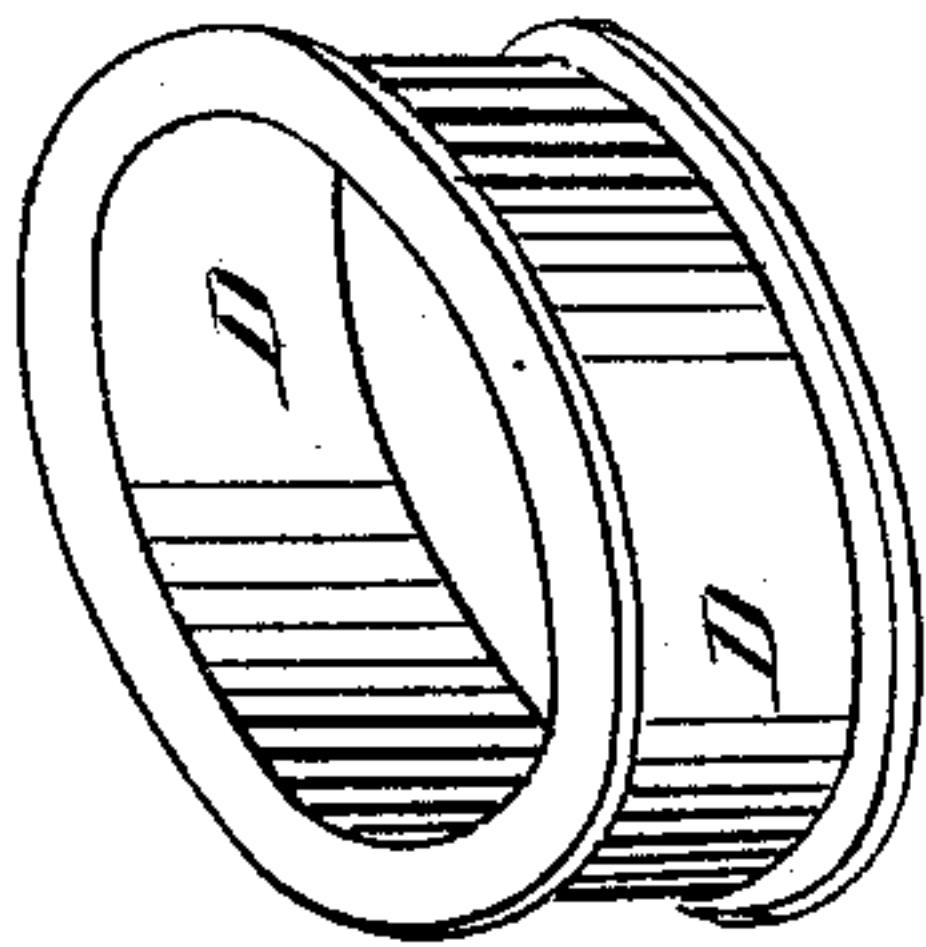


C. S. Merriman.

Diving Armor.

No. 93,544.

Patented Aug. 10. 1869



Witnesses  
H. S. Lathrop  
E. M. Swanwick

Inventor  
Clark S. Merriman  
by B. T. Jones  
his atty



# United States Patent Office.

CLARK S. MERRIMAN, OF AFTON, IOWA.

Letters Patent No. 93,544, dated August 10, 1869.

## IMPROVEMENT IN SUBMARINE CLOTHING.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, CLARK S. MERRIMAN, of the town of Afton, in the State of Iowa, have invented a new and improved Suit of Submarine Clothing, susceptible of being used, when occasion requires it, as a life-preserver; but, ordinarily, it is intended to be applied and worn by persons who are obliged, by their vocation, to work in the water.

In order to enable persons skilled in the art to make and use this, my invention, I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification.

This suit consists of a jacket and head-piece, so joined and connected together as to form the whole of the upper garment, and pantaloons and boots, also connected in like manner, and forming but one piece or article.

The inner linings of both are so made that spaces are left in each, to admit the introduction of air through tubes, and become inflated.

The tops of the pantaloons and the bottom portion of the jacket are constructed of elastic India rubber, so that when a metallic band is placed about the waist, having outwardly-projecting flanges formed upon its upper and lower edges, thereby making a groove in the same, the elastic rubber will fit in the said groove, and, by means of the belt, when buckled, will form a close and water-tight joint or joints where the jacket and pantaloons meet upon the belt or band.

The head-piece, attached to the jacket, envelopes the head and a portion of the face, and, where it comes in contact with the latter, is made of elastic rubber, so as to fit very closely, and prevent the water from running within the suit or dress.

The method of inflation is by means of tubes constructed in the usual manner, and applied, severally, to the front, back, and head of the jacket, as well as to the front or back portion of the pantaloons.

These tubes may be supplied with valves and stop-cocks, to retain the air when the dress becomes inflated; and they can be made of such a length as to be readily applied to the mouth of the person using them; or, when the dress is used for diving-purposes, the tubes can be sufficiently elongated as to receive the air from above the surface of the water.

A supplemental head-piece is also used, so as to entirely enclose the head and face, with spaces or holes left for the eyes, which holes are or may be filled with glass, to enable the workman or diver using the same to see clearly under the water, without any liability to admit the water upon the inside of the hood or head-piece.

To the mouth formed in such head-piece may be attached a tube of sufficient length to admit air from

above the surface of the water, to admit of breathing freely.

In the drawings—

A A A represent the jacket.

B B, the pantaloons, and boots attached.

C C C C, the tubes used for inflating the same.

D is the metallic flanged girdle or belt.

E, the strap or belt that holds firmly the jacket and pantaloons upon the metallic girdle or belt.

F is the supplemental head-piece, showing the spaces or openings for the eyes, nose, and mouth, and the attachment of the tube to the latter.

The operation of adjustment of the dress is as follows:

The pantaloons, with boots, are first put on, and the elastic rubber then adjusted to the flanged girdle or belt. The jacket, with its head-piece, is then put on, and the elastic rubber at its bottom placed over that of the pantaloons, and within the flanges aforesaid. Then the belt is buckled over both, and the operation is complete, unless it is desired that the person wearing the same be entirely submerged in the water. In that event, the supplemental head-piece is adjusted as hereinbefore described.

I do hereby disclaim as my invention the construction and arrangement of the devices shown and claimed by John Bethel, as described in his English patent, dated January 31, 1835, No. 6,757; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The construction and arrangement of a submarine suit of clothing, with spaces intervening between the inner and outer linings thereof, and tubes connected with such spaces, so that the suit of clothing, or the several parts thereof, may be inflated in the manner and for the purpose herein described.

2. The construction and arrangement of the jacket and pantaloons of a submarine suit of clothing, so that the lower portion of the jacket and the upper portion or waist-band of the pantaloons shall have firmly attached to them elastic pieces of India rubber, when the same is combined with a metallic band, with outwardly-projecting flanges thereupon, surrounding the waist of the wearer, into which band the elastic rubber is fitted and adjusted, and secured therein by a belt or strap, in the manner and for the purpose herein described.

3. The supplemental head-piece F, in combination with a suit of submarine clothing, when the same is constructed and arranged in the manner and for the purpose herein described.

C. S. MERRIMAN.

Witnesses:

JAS. HOPCROFT,  
J. A. RIORDAN.