L. CEEDER.

PARACHUTE.

APPLICATION FILED MAY 7, 1915.

1,171,837.

Patented Feb. 15, 1916.

2 SHEETS—SHEET 1.

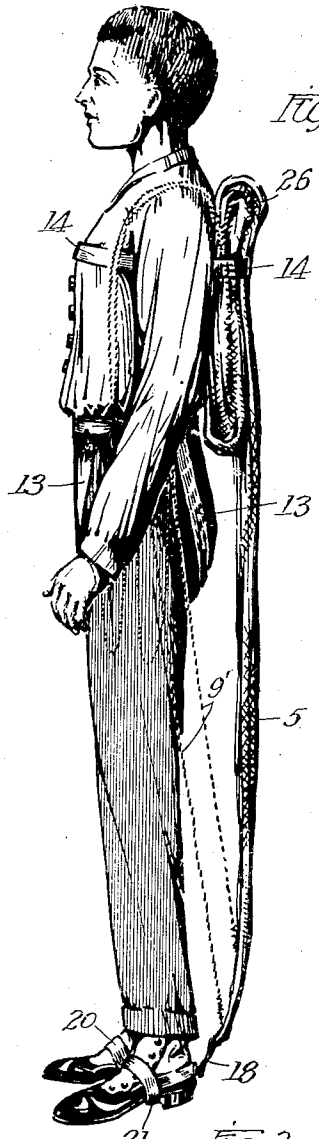


Fig. 1.

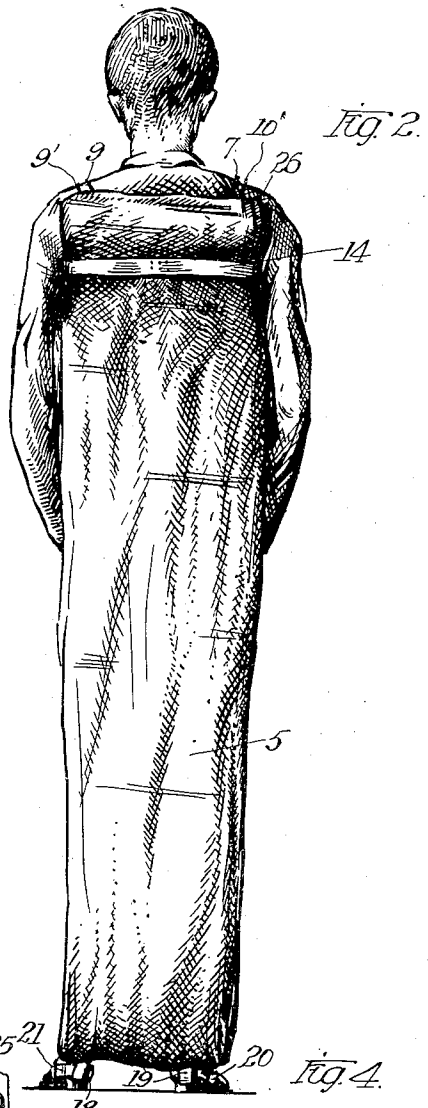


Fig. 2.

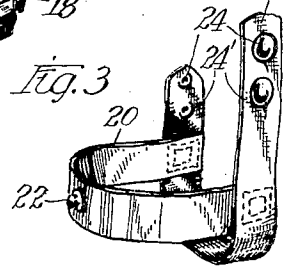


Fig. 3.

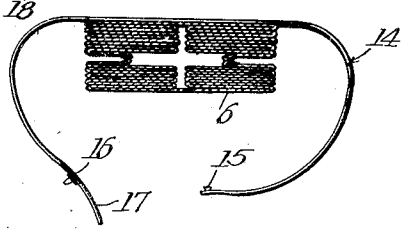


Fig. 4.

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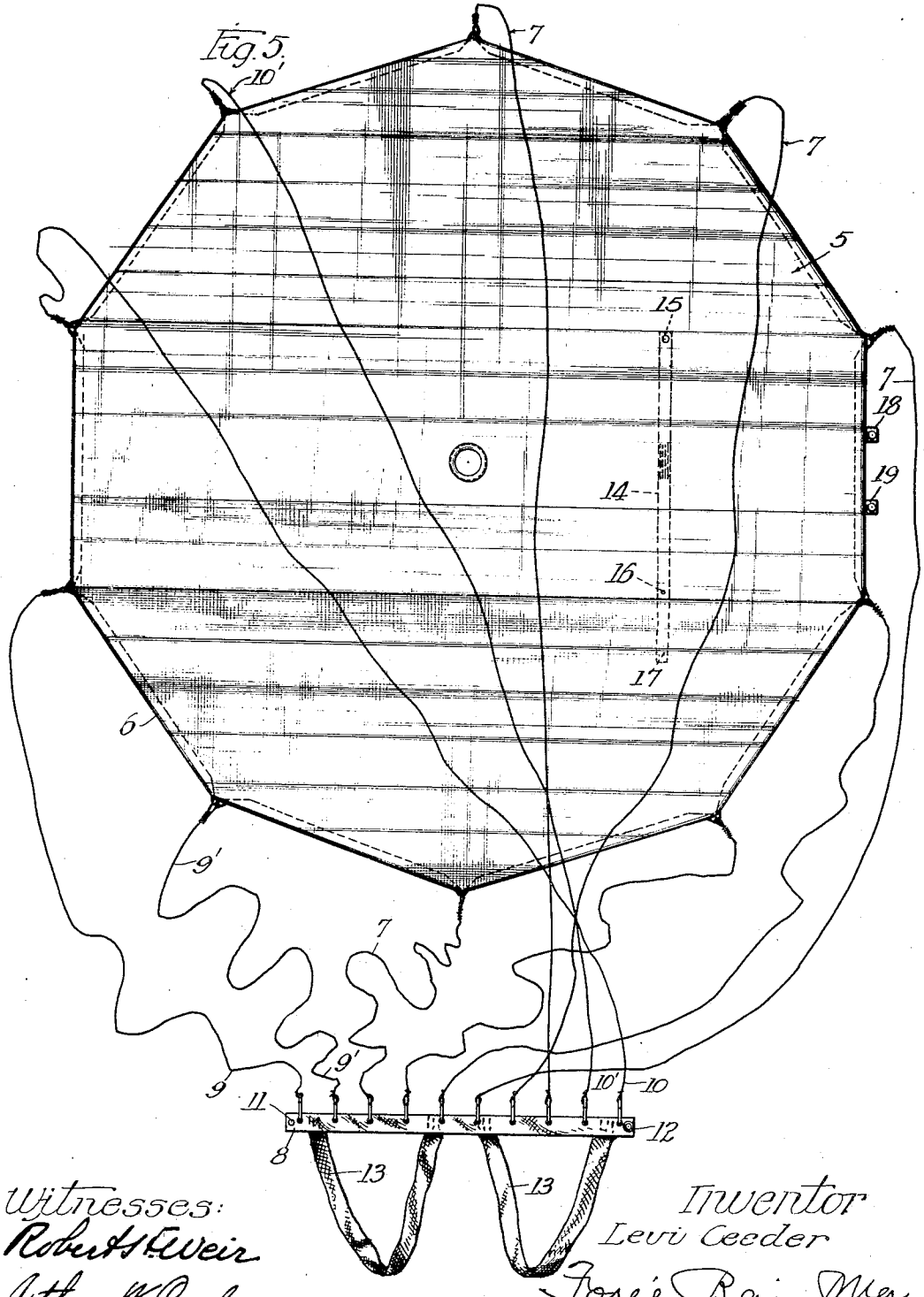
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2 SHEETS—SHEET 2.

Fig. 5.



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UNITED STATES PATENT OFFICE.

LEVI CEEDER, OF CHICAGO, ILLINOIS.

PARACHUTE.

1,171,837. Specification of Letters Patent. Patented Feb. 15, 1916.

Application filed May 7, 1915. Serial No. 26,511.

To all whom it may concern:

Be it known that I, LEVI CEEDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Parachutes, of which the following is a specification.

My invention relates to improvements in parachutes.

One of the objects of my invention is to provide a parachute adapted to be permanently worn by the user, while in danger of falling from a great height, and so arranged that it will automatically unfold and spread out above the head of the wearer by operation of the air draft created by the falling body, after certain of the parts of the device are released.

Another object of my invention is to arrange the parts of the parachute and to attach them to the wearer in such manner as not to interfere with his free movement or with his usual occupation. Aeronauts, aviators and other persons who are carried by aerial crafts, such as balloons, aeroplanes, and the like, are subject to possibility of falling from great heights to the earth and unless provided with some means of protection, they are doomed to destruction. It is to protect such persons and to provide means whereby their lives may be saved that my invention is directed.

Other and further objects of my invention will become readily apparent to persons skilled in the art from a consideration of the following description when taken in conjunction with the drawings wherein:—

Figure 1 is a side elevation of a man showing the parachute folded and detachably secured to and in place on the wearer. Fig. 2 is a rear elevation. Fig. 3 is a strap for detachably securing one edge of the parachute to the wearer's feet. Fig. 4 is a transverse sectional view showing the manner of folding the sheet as it appears in Fig. 1. Fig. 5 is a plan view of the device.

In all the views the same reference characters are employed to indicate similar parts.

The sheet 5 is made of a suitable fabric, such as silk or the like and for a man of average weight it may be about 24 feet in diameter, as it appears in Fig. 5. In the specific illustration the sheet is shown as a decagon or ten sided figure. The sheet may, however, be round in circumference or of any other suitable shape. The peripheral edge of the sheet is preferably reinforced, as by a stitched-in cord 6, and at suitable intervals around the periphery of the sheet are attached cords 7, the other ends of which cords are secured to a belt 8. Attached to opposite ends of the belt 8 are cords 9—9′ and 10—10′ which pass over the shoulder of the wearer, as shown in Fig. 1, so that when the sheet straightens out, in the action of going into operative position, the arms of the wearer will not interfere with the proper placement of these cords. The waist belt 8 is provided with hook members 11 and 12 to hold the belt 8 around the waist of the wearer and it is also provided at each end with a leg strap 13 to prevent the belt 8 from slipping up on the waist of the wearer and to help support the man in the parachute. In preparing the parachute for use the sheet 6 is longitudinally folded to contract its opposite diameter as shown by the creases in Fig. 5 and in the manner shown in Fig. 4 the folded part is about as wide as a man's back, which is transversely folded, see Fig. 1. The back of the sheet, when thus folded is detachably secured to the wearer's back by a belt 14 which is provided on one of its ends with a glove fastening friction engaging clasp member 15 and near the other end with a coöperating clasp member 16. The belt 14 passes around the chest of the wearer and around the folded portion of the parachute. The tab 17 is always accessible so that the wearer may separate the clasp members 15 and 16 by a sharp pull on the tab 17 when occasion requires. On the lower half of the sheet, are tabs 18 and 19 adapted for temporary attachment to heel straps 20 and 21, each of which is provided with a similar clasp member 22 for coöperation with the similar members on the tabs 18 and 19. Each of the heel straps 20, 21 is provided with similar frictionally engaging glove clasps 24, which may easily and quickly be separated by a pull on the free end of the strap.

After the sheet has been folded longitudinally, as shown by the creases in Fig. 5, and as shown in cross section in Fig. 4, it is transversely folded, as shown at 26 in Fig. 1, the cords are then tucked under the folded portion so as to be out of the way

and the strap 14 is placed around the folded part and around the chest of the wearer with the tab 17 free for quick and convenient access. The heel clips 18 and 19, which are attached to the bottom portion of the sheet are connected to the clips 22—22, respectively, on the heel straps 20 and 21. The device is now ready for use. In the event that the wearer should jump or fall from a high elevation, feet down, the air passing under the portion of the sheet between the feet of the wearer and the folded part 26, will distend this portion and cause disengagement of the tabs 18 and 19 from the heel straps, while the wearer at or about the same time will seize the tab 17, of the belt 14, and separate the clasp members 15 and 16 thereby causing the folded part 26 to unfold and spread out, as shown in Fig. 5 with the cords connecting the belt 8 with said sheet in proper positions to properly support the wearer and to prevent his rapid descent, as usual in the operation of parachutes. In the event that the tabs 18 and 19 do not become automatically disengaged, the wearer can readily seize the tab 25 of the heel straps 20 and 21 and separate the clasps 24 or 24′ thereby quickly liberating this portion of the sheet.

While I have herein shown a single embodiment of my invention for the purpose of clear disclosure it is manifest that various changes may be made in the form, configuration and location of the parts within the scope of the appended claims.

Having described my invention, what I claim is:

1. A parachute arranged when folded to be secured to the wearer and comprising a sheet, a waist encircling belt for the wearer, cords connecting said sheet and belt at corresponding intervals around their respective edges, a detachable chest encircling belt arranged to hold the major portion of the sheet when folded against the shoulders of the wearer, and means for detachably securing a portion of the periphery of the sheet when folded to the wearer's feet.

2. A parachute arranged when folded to be secured to the wearer and comprising a flat sheet folded when not in use on parallel lines into a generally rectangular pack, a waist encircling belt for the wearer, cords connecting said sheet and belt at corresponding intervals around their respective edges, the major portion of said rectangular pack being doubled over to lie against the shoulders of the wearer, a detachable belt encircling the doubled over portion of the pack and the chest of the wearer, and means for detachably securing the free end of the pack to the wearer's feet.

In testimony whereof I hereunto set my hand in the presence of two subscribing witnesses.

LEVI CEEDER.

In the presence of—
FORÉE BAIN,
STANLEY W. COOK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."