June 24, 1924. 1,499,266

H. VIEREGG

PARACHUTE

Original Filed Sept. 11, 1923

Fig. 1.

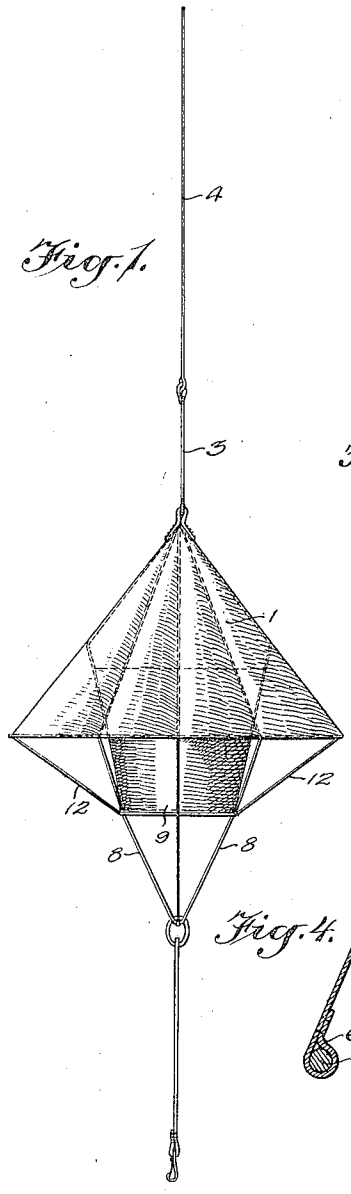

Fig. 2.

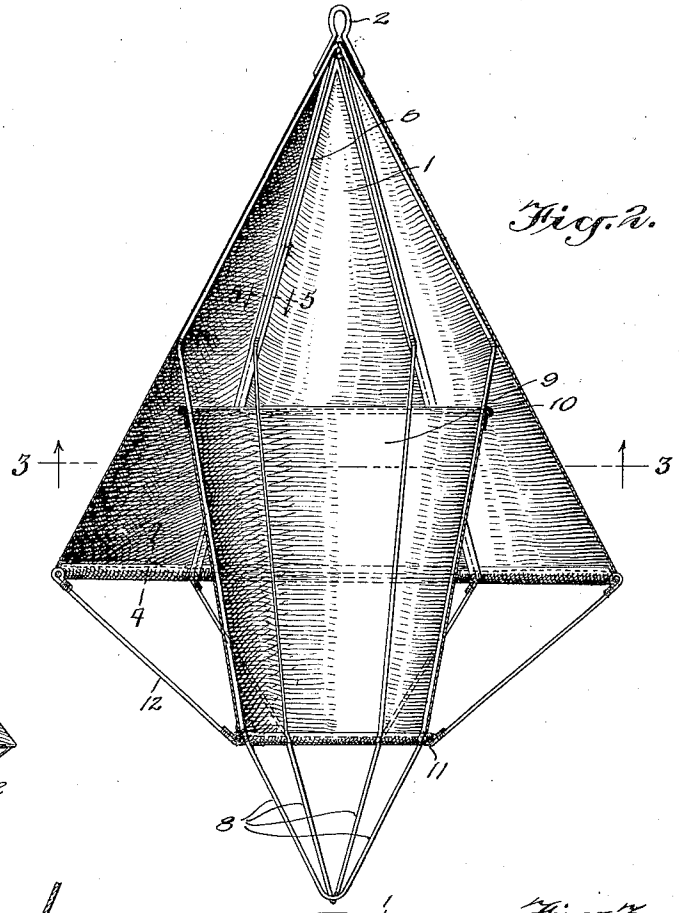

Fig. 4.

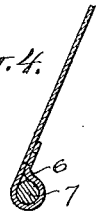

Fig. 3.

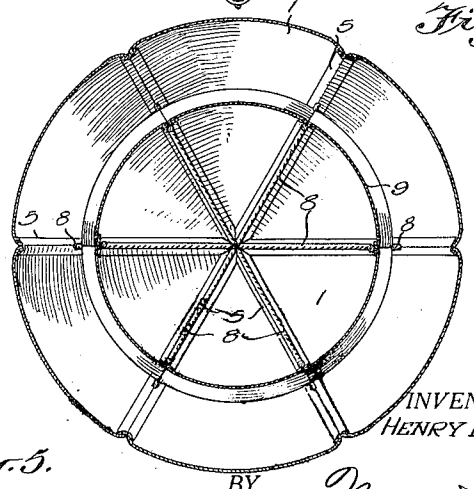

Fig. 5.

WITNESSES

George Taylor

Robert S. Hulsizer.

INVENTOR

HENRY VIEREGG

BY Munn & Co

ATTORNEYS

Patented June 24, 1924. 1,499,266

UNITED STATES PATENT OFFICE.

HENRY VIEREGG, OF GRAND ISLAND, NEBRASKA.

PARACHUTE.

Application filed September 11, 1923, Serial No. 662,103. Renewed May 13, 1924.

To all whom it may concern:

Be it known that I, HENRY VIEREGG, a citizen of the United States, and a resident of Grand Island, in the county of Hall and State of Nebraska, have invented a new and Improved Parachute, of which the following is a full, clear, and exact description.

This invention relates to a parachute, and has for an object the provision of means whereby the parachute will open much more quickly than any now in use so that parachute descents from low altitude can be achieved with safety.

Another object resides in the provision of means whereby in use the most efficient effect of the forces of the air in opening the parachute is effected.

A further object concerns the provision of means whereby the parachute is simple and efficient in construction and operation and is compact, so that it can be stored away in a small space.

The invention is illustrated in the drawings, of which—

Figure 1 is an elevation of the parachute;

Fig. 2 is a vertical section through the parachute;

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2;

Fig. 4 is a section taken on the line 4—4 of Fig. 2; and

Fig. 5 is a section taken on the line 5—5 of Fig. 2.

The form of the invention shown in the drawings is a preferred form, although it is understood that modifications in the construction and arrangement of the parts and in the character of the materials used may be adopted without departing from the spirit of the invention.

As shown in the drawings, the preferred form of the parachute includes a body portion 1 of any suitable fabric, preferably cone shaped, to the top of which is fastened a loop of material 2 whereby a short length of rope or cord 3 is connected, this cord preferably being of such strength that it will break when a load exceeding a definite amount is placed on the parachute. This connecting cord is connected to a rope or cable 4, which may be attached to any suitable portion of a balloon or aeroplane. The body portion of the parachute is provided with strips of material, such as tape or braid 5, which extend from the bottom to the top at regular intervals around the inner surface thereof. The lower edge of the body portion 1 of the parachute is folded over on itself, as seen at 6 in Fig. 4, to form a passage through which a heavy rope or cable 7 is fastened to make the lower edge more rigid. The sustaining cords from which the body of a person descending, or a load of any kind, is connected are represented by the numeral 8. These cords are joined together at their bottoms either directly to a belt connected to the person or to another rope or connection fastened to the body of the load. These cords extend upwardly and are connected in any suitable manner to the various strips 5 at a point midway between the top and the bottom of the body portion, so that the direct weight of the load in this parachute is supported not from the bottom edge of the parachute but from a point midway its length. These ropes then extend upwardly along the body portion to the top of the parachute. As a matter of fact, these load-supporting ropes may be continuous strands extending from the bottom up to the mid point of the parachute on one side, thence to the top and then down the other side and extending back to the other point in one piece. Supported between the bottom of the load-supporting connections 8 and their point of connection to the parachute body portion 1 there is fastened and supported from these connections an inner funnel or collar 9 in the form of a frustro-conical shell of suitable fabric which has its upper and lower edges provided with reinforcing rings such as 10 and 11 which may be heavier ropes or cables passed through folds in these edges. It will also be noted that auxiliary connections such as 12 are established at intervals between the lower edge of the inner guiding or directing shell 9 and the lower edge of the body portion 1 of the parachute.

It has been found by repeated experiments with full-sized working models of this parachute, carrying loads of varying size, that it opens almost immediately when released, so that with considerably heavy loads, dropped from only one or two hundred feet, it has been found that these loads can be safely lowered to the ground; because, whereas it takes the ordinary parachute a drop of four or five hundred feet before it opens, this one will open in a drop of a few feet after it has started or been disconnected from its carrier.

What I claim is:—

A parachute which includes a body portion having a lower edge, load-supporting connections connected at intervals to the body portion at points inside the lower edge and between said edge and the center of the body portion, an inner directing shell supported on said connections and disposed substantially centrally beneath the center of the body portion, the lower edge of said shell being disposed beneath the lower edge of the body portion, and auxiliary connections connecting at intervals the lower edge of the shell with the lower edge of the body portion.

HENRY VIEREGG.