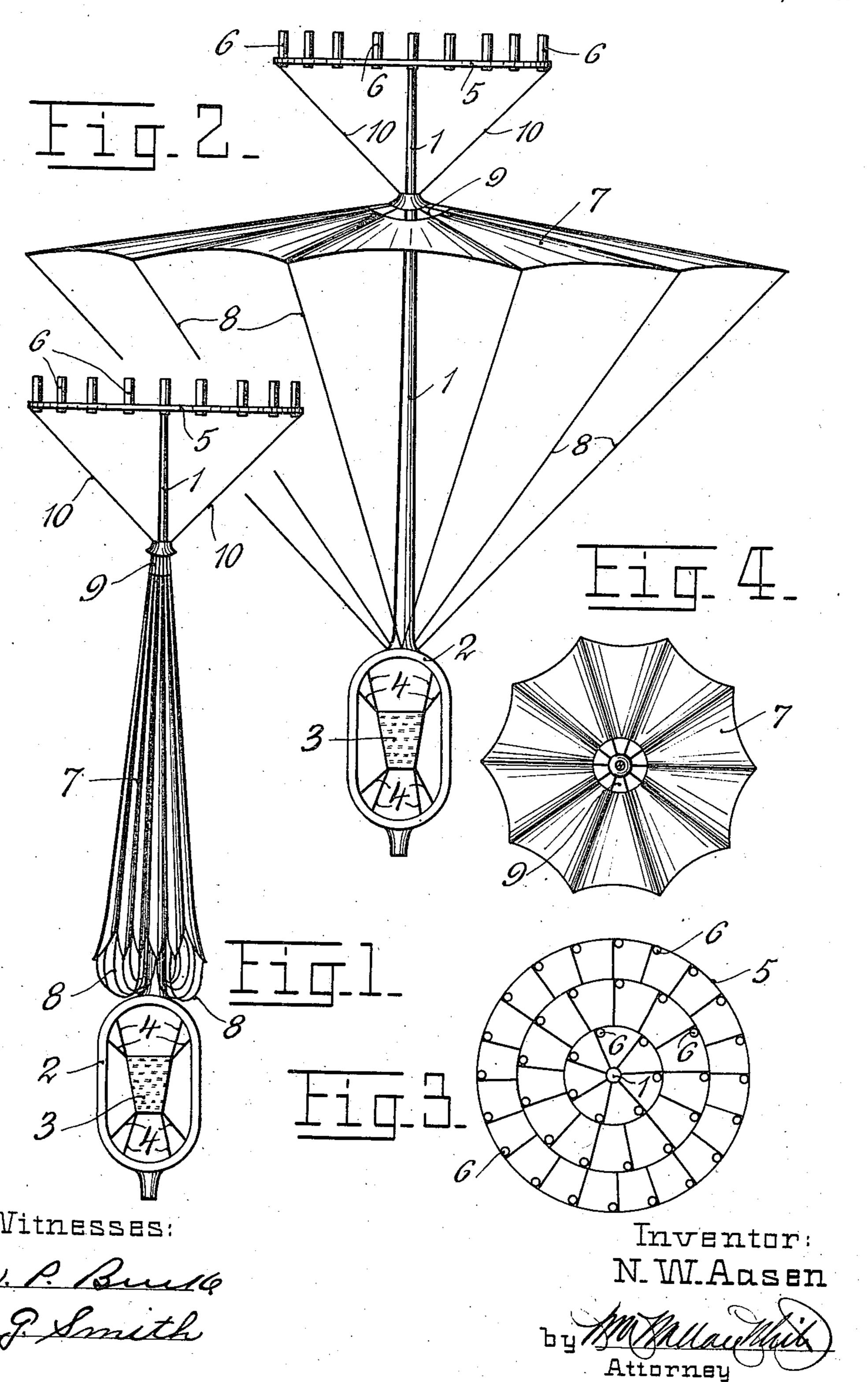
## N. W. AASEN. ROCKET PARACHUTE. APPLICATION FILED JUNE 4, 1908.

907,112.

Patented Dec. 22, 1908.



## UNITED STATES PATENT OFFICE.

NIELS WALTERSEN AASEN, OF DRÖBAK, NORWAY.

## ROCKET-PARACHUTE.

No. 907,112.

Specification of Letters Patent.

Patented Dec. 22, 1908.

Application filed June 4, 1908. Serial No. 436,720.

To all whom it may concern:

Be it known that I, NIELS WALTERSEN AASEN, sergeant, subject of Norway, residing at the city of Dröbak, Norway, have 5 invented new and useful Improvements in Rocket-Parachutes, of which the following is a specification.

My present invention has for its object to provide a parachute which by means of rocko ets can be brought to ascend in order to lift for instance a man aloft to a certain height, whereafter he by means of the parachute may descend safely.

The device may especially be used at per-15 formances of amusement or the like.

My invention is illustrated in the accom-

panying drawing, in which:—

Figure 1 shows one form of the device in position ready for ascension. Fig. 2 shows 20 the device soaring. Fig. 3 is a plan view of the rocket-crown, and Fig. 4 is a plan view of the parachute drawn to a smaller scale.

To the lower end of a bar —1— of bamboo or similar light material is fastened a frame 25 —2—, within which is suspended a basket —3— by means of elastic cords —4—. At the upper end the bar —1— carries a crown —5— stayed by backstays —10— and having attached to it a great number of rockets 30 —6— which when ignited cause the parachute to ascend. The parachute proper —7— is preferably made like an umbrella the ribs of which are pivoted to the bar --1-- at a suitable distance from the rocket-35 crown. The parachute —7— is preferably manufactured of asbestos-fabric or another fireproof material and the reversing is prevented by backstays —8— connecting by free ends of the ribs with a suitable point of the 40 bar —1— or the frame —2—. At the center the fabric of the parachute preferably is provided with an opening —9—. The basket -3-, which is protected from sparks by the frame —2—, may receive a man, but of 45 course it also may carry a weight by means of which the device is balanced.

It will be understood that the details of the device may be varied in many respects without departing from the spirit of my in-50 vention. So the rocket-crown for instance may be placed beneath the fabric of the parachute.

The device is used in the following manner:—The bar —1— with the rocket-crown 55 and with the parachute folded together (Fig. 1) is placed on the field and leaned !

against a fixed vertical bar (not shown). After the person who shall ascend has taken his seat within the basket all the rockets are simultaneously ignited preferably by means 60 of electricity. The device then ascends maintaining its vertical position, and when the rockets are exhausted the ascent stops and the parachute—the ribs of which suitably are directed somewhat outwards at 65 their lower ends—by the commencing fall is unfolded by the air and the whole device then slowly descends to the earth with a moderate speed.

In order to increase the sensation the 70 lower end of the bar —1— may carry a tail having a length of 50 to 100 meters and being provided with paper lanterns, Bengal

fires and the like.

Having now described my invention, what 75 I claim as new and desire to secure by Letters Patent is:-

1. In combination a parachute connected to a bar or frame, a plurality of rockets carried by said bar which when ignited lift the 80 device to a certain height and means for balancing the device.

2. In combination a parachute made like an umbrella the ribs of which are pivoted to a central vertical bar, backstays con- 85 necting the free ends of the ribs with a suitable point of the bar below the parachute, means arranged at the lower end of the bar in order to balance the device and a crown of rockets attached to the bar.

3. In combination a parachute made like an umbrella the ribs of which are pivoted to a central vertical bar, backstays connecting the free ends of the ribs with a suitable point of the bar below the parachute, means 95 arranged at the lower end of the bar in order to balance the device, and a crown of rockets attached to the bar, said crown consisting of a plurality of concentric rings and intermediate radial ribs at which the rockets are 100 attached.

4. In combination a parachute the fabric of which is provided with a central hole and made like an umbrella the ribs of which are pivoted to a central vertical bar, backstays 105 connecting the free ends of the ribs with a suitable point of the bar below the parachute, means arranged at the lower end of the bar in order to balance the device, and a plurality of concentric rings of rockets at- 110 tached to the bar.

5. In combination, a parachute, a vertical

bar arranged in the center of the parachute, a frame arranged at the lower end of the bar, a basket suspended within the frame by means of elastic cords and a plurality of 5 concentric rings of rockets attached to the bar.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

NIELS WALTERSEN AASEN.

Witnesses:

ALEX. LAHN, RICHARD STOKKE.