Nov. 3, 1936. F. G. FISHER, JR 2,059,634

KITE PARACHUTE

Original Filed Dec. 30, 1935 2 Sheets-Sheet 1

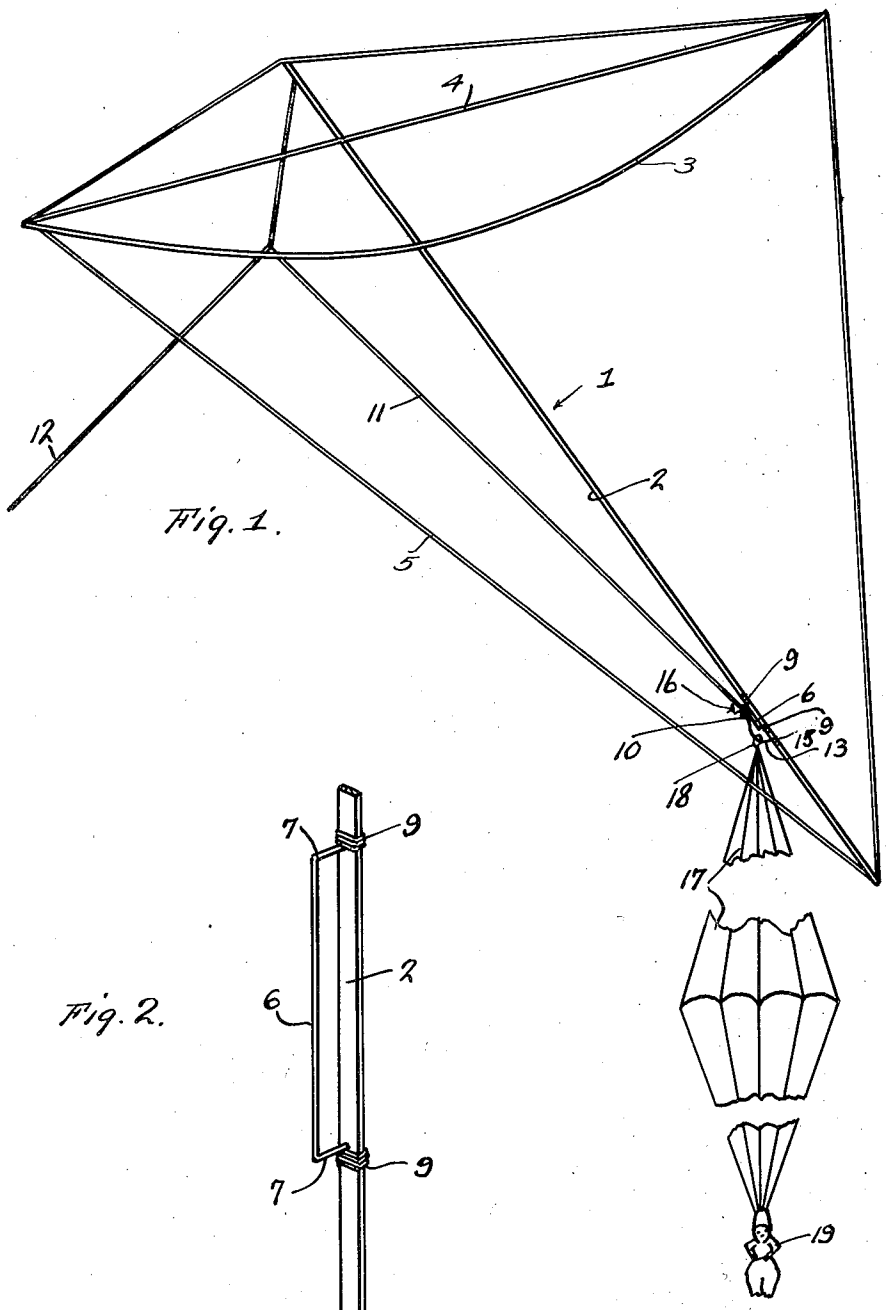

Fig. 1.

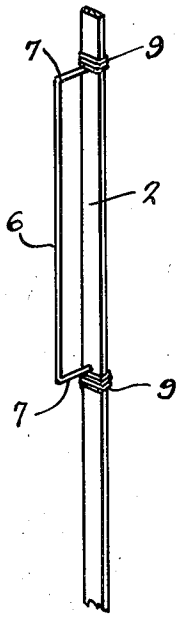

Fig. 2.

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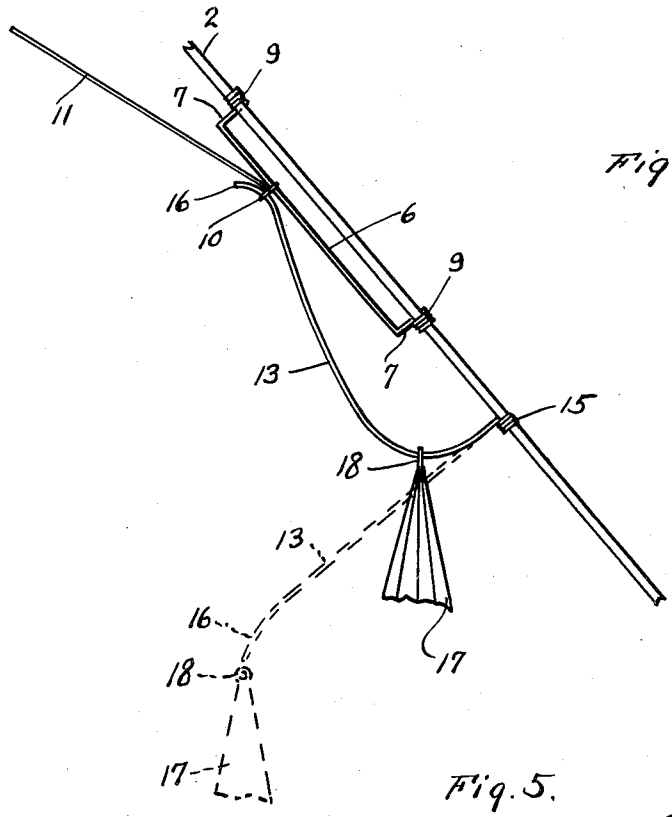


Fig. 3.

Fig. 4.

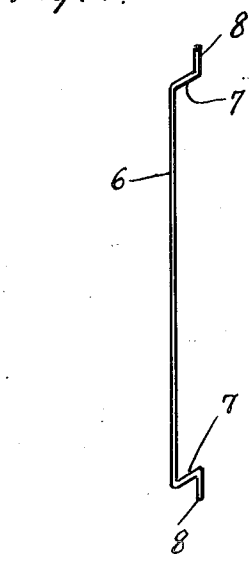
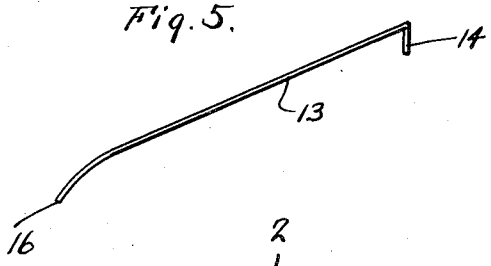


Fig. 5.



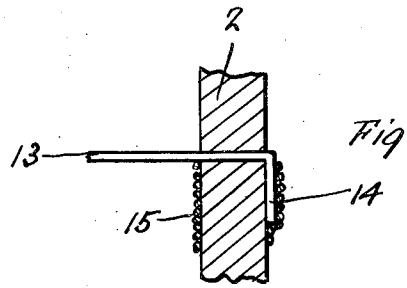


Fig. 6.

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2,059,634

KITE PARACHUTE

Frederick Gordon Fisher, Jr., Red Bank, N. J.

Application December 30, 1935, Serial No. 56,824
Renewed September 26, 1936

6 Claims. (Cl. 244—155)

The present invention relates to new and useful improvements in kite parachutes and has for its primary object to provide, in a manner as hereinafter set forth, novel means for releasably connecting the parachute directly to the frame of the kite.

Other objects of the invention are to provide a means for releasably connecting a parachute to a kite which will be comparatively simple in construction, strong, durable, reliable in operation, light in weight and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views and wherein:—

Figure 1 is a rear perspective view of the invention, the usual cover of the kite being omitted.

Figure 2 is a fragmentary view in perspective of an intermediate portion of the vertical spar of the kite frame, showing the rod constituting a part of the present invention mounted thereon.

Figure 3 is a view in side elevation of the releasable parachute connecting means.

Figure 4 is a detail view in perspective of the rod shown in Figure 2.

Figure 5 is a detail view in perspective of the resilient parachute supporting arm.

Figure 6 is a fragmentary view in longitudinal section through an intermediate portion of the vertical spar, showing the manner of mounting the resilient arm thereon.

Referring now to the drawings in detail, it will be seen that the reference numeral 1 designates generally the frame of a tail-less kite, said frame being of any suitable strong, light wood and including a vertical spar 2 on the upper portion of which a bowed cross member 3 is mounted. A string 4 secures the cross member 3 in bowed position in the usual manner. Extending around the frame 1 is a string 5. Of course, the usual cover (not shown) of suitable light, flexible material, such as paper or cloth, is mounted on the frame 1 and the string 5.

Mounted on a lower portion of the vertical spar 2 of the frame 1 and extending in spaced parallel relation thereto, is a rod 6 which includes right angularly extending portions 7 which pass through said spar 2 and which terminate in out turned end portions 8 secured to the spar 2 by strings 9 wrapped around the said spar. Slidable on the rod 6 is a ring 10 to which one end of the bridle 11 is connected. The other end of the bridle 11 is secured to the upper end portion of the vertical spar 2. The reference numeral 12 designates the flight string which is secured, as usual to the upper portion of the bridle 11.

Also mounted on the spar 2, below the rod 6, is a resilient arm 13. The resilient arm 13 passes through the spar 2 and terminates in a right angularly extending end portion 14 which is secured to the spar 2 by a string 15 wrapped around said spar. The resilient arm 13 terminates in a curved free end portion 16 which is engageable in the slidable ring 10.

The reference numeral 17 designates a parachute which is provided with a centrally located ring 18. The ring 18 is adapted to be slipped on the resilient arm 13. The parachute 17 further includes a figure 19 constituting a weight.

It is thought that the operation of the invention will be apparent from a consideration of the foregoing. To mount the parachute 17 on the kite, the ring 18 is slipped on the resilient arm 13 and said arm is flexed to the position shown in full lines in Figure 3 of the drawings to permit the retaining ring 10 to be slipped over the curved free end portion 16 thereof. Under ordinary conditions, the tension of the resilient arm 13 will be sufficient to create enough friction to secure the ring 10 against pull exerted thereon by the bridle 11, the curved end portion 16 of said resilient arm 13 also assisting in this function. However, when the kite is in flight and it is desired to release the parachute, the string 12 is jerked sufficiently hard to slip the ring 10 off the resilient arm 13 through the medium of the bridle 11. Thus released, the resilient arm 13 springs to the position shown in broken lines in Figure 3 of the drawings and the parachute drops therefrom. It may be well to here state that the resilient arm 13 and the portions 7 of the rod 6 pass through the usual kite cover.

It is believed that the many advantages of a kite parachute constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

1. In combination, a kite, a resilient arm mounted on the kite for releasably securing a parachute thereto, a ring slidably mounted on

the kite and engageable with the free end portion of the resilient arm for releasably securing said free end portion to the kite, and a bridle mounted on the kite and connected to the ring for disengaging said ring from the resilient arm.

2. In combination with a parachute including a ring, a kite, a rod mounted on said kite, a ring slidable on the rod, a resilient arm mounted on the kite and insertable through the parachute ring for releasably mounting said parachute on the kite, the second named ring being engageable over the free end portion of the resilient arm for releasably securing said free end portion to the kite, and means for disengaging said second named ring from the resilient arm.

3. In combination, a kite including a frame, a rod mounted on said frame, a member slidable on said rod, a resilient arm secured, at one end, to the frame below the rod, said resilient arm being engageable with a parachute for releasably connecting said parachute to the kite, said member being engageable over the free end portion of the resilient arm for releasably securing said free end portion to the kite, and a bridle secured, at one end, to the frame and at its other end to the member for disengaging said member from the resilient arm.

4. In a kite including a frame comprising a vertical spar and a cross member mounted thereon, a rod mounted on said spar in spaced parallel relation thereto, a resilient arm secured, at one end, to the spar below said rod, said resilient arm including a curved free end portion, said resilient arm being engageable with a parachute for releasably mounting said parachute on the kite, a ring slidably mounted on the rod and engageable over the curved free end portion of the resilient arm for releasably connecting said free end portion to the rod, and a bridle connected, at one end, to the spar and at its other end to the ring for disengaging said ring from the resilient arm.

5. In a kite comprising a frame, a rod mounted on said frame, said rod comprising angularly extending portions passing through the frame and terminating in out turned end portions, secured to said frame, a resilient arm mounted on the frame and engageable with the parachute for releasably mounting said parachute on the kite, a ring slidable on the rod and engageable over the free end portion of the resilient arm for releasably connecting said free end portion to said rod, and means for disengaging the ring from the resilient arm.

6. In a kite including a frame, a resilient arm mounted on the frame for releasably connecting a parachute thereto, said arm passing through the frame and including a right-angularly extending end portion secured to said frame, and means for releasably connecting the free end portion of the resilient arm to the frame.

FREDERICK GORDON FISHER, JR.