

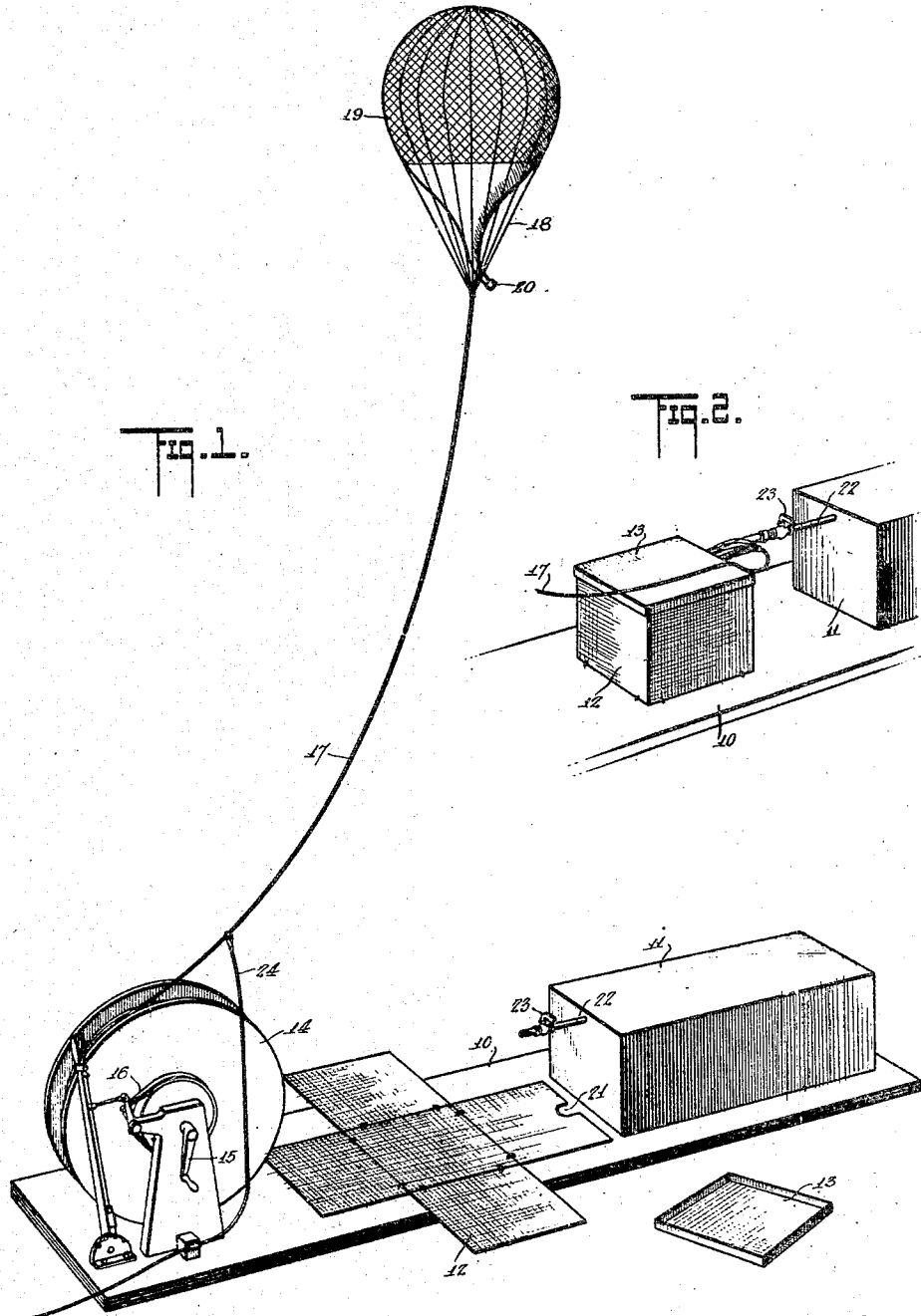
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ANTENNA DEVICE

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WITNESSES

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ANTENNA DEVICE.

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This invention relates to an antenna device. It has for its object the provision of an antenna of the vertical type which can be normally wound up out of the way and yet quickly released and elevated for use by means of an inflatable buoyant carrier such as a balloon.

A further object comprises the provision of a means whereby the carrier element can be always ready to elevate the antenna and yet when not in use can be stored away.

The invention is illustrated in the drawings, of which Figure 1 is a perspective view of the device showing the antenna in its elevated position.

Figure 2 is a partial perspective view showing the antenna and the carrier element stored away.

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 set forth in the appended claims.

In its general aspect the invention comprises a conductor element to act as an antenna which is preferably wound on a reel, the free end thereof being connected to a carrier element of the buoyant type, such as a balloon. This carrier element is normally enclosed in a receptacle out of the way, and the antenna wire is normally wound up on the reel. The carrier element is normally disposed in a box having collapsible sides, held together in their closed relation to house the carrier element, by means of a cover. The neck of the balloon is normally in connection with a reservoir containing buoyant fluid, so that after the box has collapsed to release the balloon, it can be quickly inflated.

In the preferred form of the invention shown in the drawings I show a base 10 in which is mounted a reservoir 11, a box 12, having a cover 13, a reel 14 having an operating handle 15 and a suitable brake mechanism 16.

On this reel is wound an antenna wire 17, the free end of which is connected by cords 18 to an inflatable carrier element or a balloon 9. This balloon has a neck 20 which is preferably provided with an automatic valve of the automobile type, although the construction of this valve is not shown. The

sides of the box 12 are preferably so hinged or pivoted to the base 10 that they will collapse and fall apart as soon as the cover 13 is removed. The side of the box adjacent the reservoir 11 is provided with a notch 21 through which the neck 20 of the balloon extends. This neck is normally connected to a pipe 22 leading from the reservoir, this pipe containing a valve 23.

Whenever it is desired to use the antenna, the cover is taken off the box, permitting the sides to collapse, after which the valve 23 is opened, permitting the buoyant fluid to flow into the carrier element to inflate it. The valve 23 is then closed and the balloon or carrier element can be released to carry the antenna away upward, the brake 16 being used to control the elevation of the wire. When the antenna element has been elevated sufficiently the brake is applied and any suitable conducting wire, such as 24, is clipped on to the antenna wire as shown and is led to a suitable radio set.

In this way an antenna of any desired length is always readily available for use, and when not in use can be stored away in a simple, compact manner. The carrier element is always ready to be inflated and can be very easily and quickly released.

What I claim is:

1. Apparatus for the purpose described, including an inflatable carrier element, an antenna wire connected to said carrier element, a container for the carrier element, inflating means for inflating said carrier element, said container constructed of relatively movable parts capable of being associated in container forming relationship, said parts being subjected to the pressure within the carrier element while being inflated causing the parts to be separated to release the carrier element.

2. Apparatus for the purpose described, including an inflatable carrier element, an antenna wire connected to said carrier element, a container for the carrier element, inflating means for inflating said carrier element, said container consisting of relatively movable parts capable of being associated in container forming relationship, one of said parts having an opening therein, said carrier element having a portion adapted to extend through said opening and to which said inflating means is connected for the inflating operation, and the parts of said container being separated under the action of

pressure within the carrier element while the carrier element is being inflated to release the carrier element.

3. Apparatus for the purpose described including an inflatable carrier element in the form of a bolster, an antenna wire connected at one end to said carrier element, a container for the carrier element, said container comprising hinged sides and a flanged cover adapted to hold said sides in container forming relationship, said cover being removable to allow said sides to move on their hinges respectively to be disposed in the same horizontal plane.

4. Apparatus for the purpose described including an inflatable carrier element in

the form of a bolster, an antenna wire connected at one end to said carrier element, a container for the carrier element, said container comprising hinged sides and a flanged cover adapted to hold said sides in container forming relationship, said cover being removable to allow said sides to move on their hinges respectively to be disposed in the same horizontal plane, one of said sides having an opening therein, inflating means, said carrier element having a portion adapted to extend through said opening and be connected to said inflating means for the inflation of the carrier element.

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