Aug. 23, 1927. M. E. FRASER ET AL 1,639,727

AERIAL

Filed Feb. 23 1926

Fig. 1.

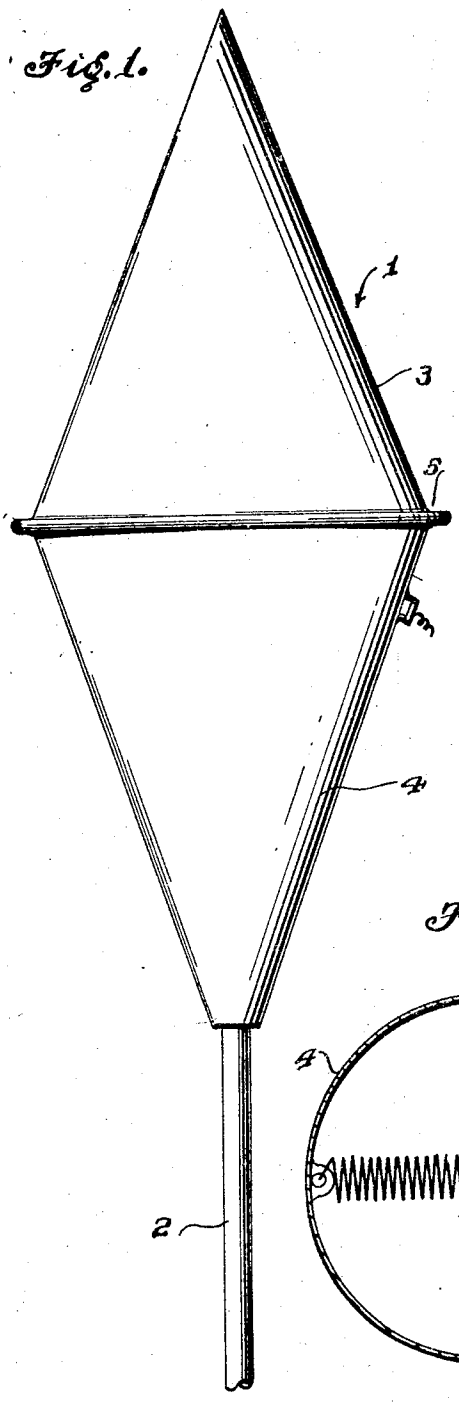


Fig. 2.

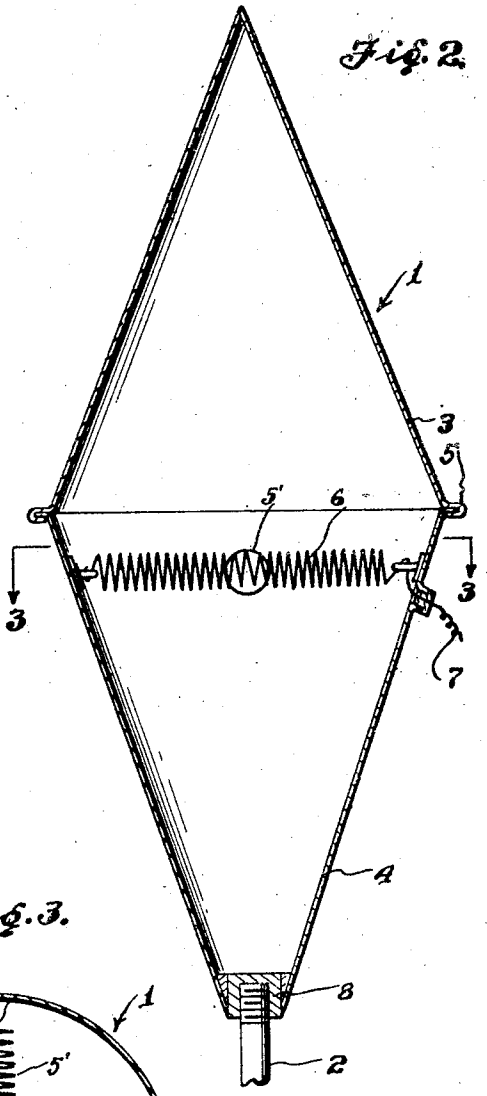


Fig. 3.

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UNITED STATES PATENT OFFICE.

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AERIAL.

Application filed February 23, 1926. Serial No. 90,179.

This invention relates to radio aerials.

The principal object of the invention is to provide a device of this character in the form of a spear head with a wire coil in the interior and means for attaching the structure to a support.

For a more detailed understanding of the invention attention is called to the drawings in which a preferred embodiment is shown illustrated.

Fig. 1 is an elevation of the aerial.

Fig. 2 is a longitudinal section thereof.

Fig. 3 is a section on line 3—3 of Fig. 2.

Referring now to the drawings in detail in which like reference characters denote like parts throughout the specification, numeral 1 represents the body of the aerial and 2 a rod for supporting the body. The body is formed of two cone shaped sections 3 and 4 of relatively thin material and joined at the center 5, the whole forming a spear-like structure.

Within the section 4 are two coils of wire 5′ and 6 at right angles to each other and joined in the center. Attached to the coil 6 is a conductor 7 which leads to the radio instrument (not shown). At the lower end of the section 4 is a threaded bushing 8 into which fits the pipe or rod 2.

It will thus be seen that this device is self contained and simple in construction and has relatively few parts in its make up. It can be installed in a small amount of space and will not disfigure its surroundings as is usual with the usual aerial. The body portion is preferably made of 20 ounce sheet copper.

Having thus described our invention, what we desire to secure by United States Letters Patent is:

1. In a device of the class described, a spear shaped structure formed of two cone shaped sections and permanently joined in the middle base to base, wire coils at right angles to each other attached to lugs within the lower section, one of the coils having a conductor leading to the exterior of the structure, a support and means for attaching the said structure to the said support.

2. In an aerial of the class described in combination, a spear-shaped structure formed of two cone shaped sections and joined in the center base to base, the lower cone having an outward turned rim on its base co-operating with a bent over rim on the base of the upper section, a pair of wire coils attached to lugs at right angles to each other and joined in the center, one of the coils having a conductor leading to the exterior of the structure, a bushing at the end of the lower section and a support threadedly engaging said bushing.

In testimony whereof we affix our signatures.

MALCOLM ERNEST FRASER.
LOUIS SCHULTZ.