April 26, 1955

J. W. HETRICK

2,707,034

TELEVISION MAST STABILIZER

Filed June 30, 1954

2 Sheets-Sheet 1

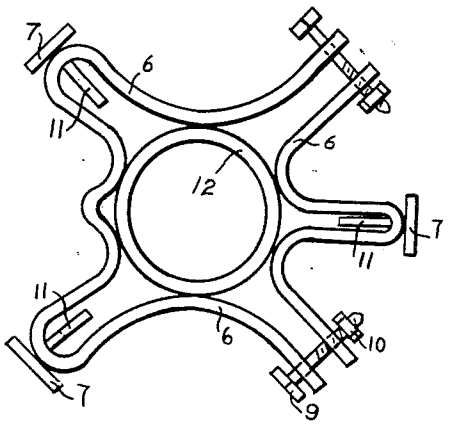


Fig-2

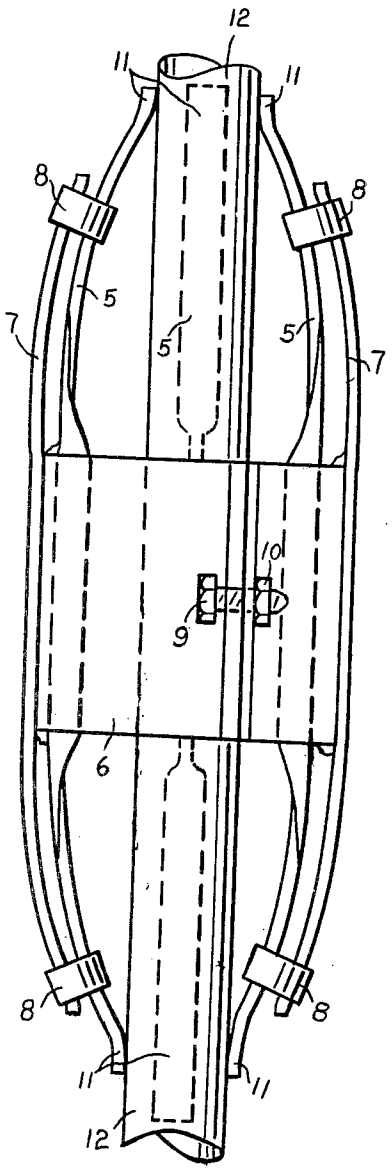


Fig-1

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2 Sheets-Sheet 2

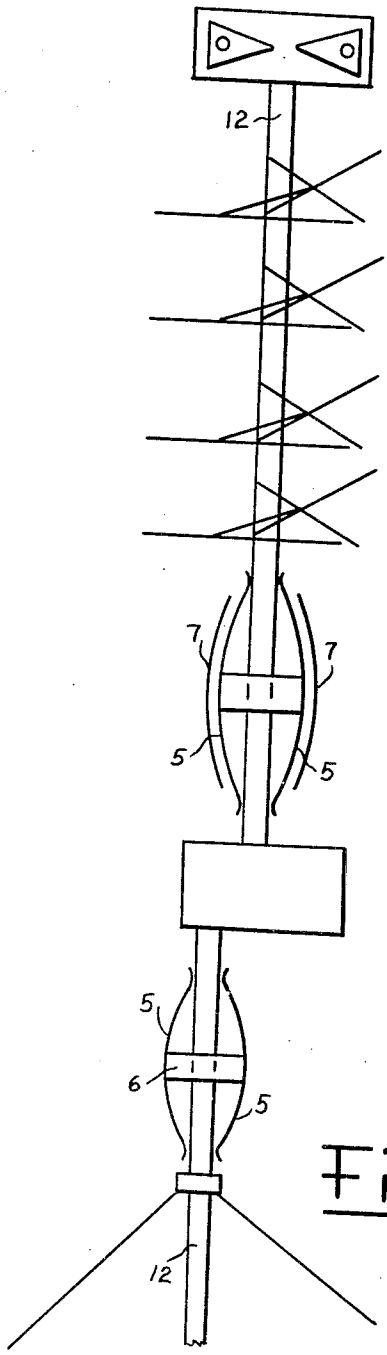


Fig-3

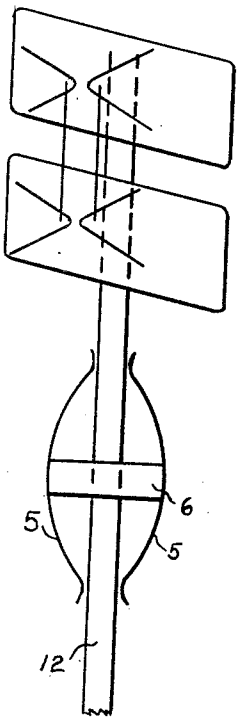


Fig-4

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2,707,034

Patented Apr. 26, 1955

2,707,034

TELEVISION MAST STABILIZER

John W. Hetrick, Newport, Pa.

Application June 30, 1954, Serial No. 440,493

2 Claims. (Cl. 189—31.4)

The invention relates to antenna masts of the type used to receive television signals or the like.

An object of the present invention is to provide a stabilizer for antennas which is designed to prevent swaying and vibration.

Another object is to provide an antenna stabilizer which may be mounted as a separate accessory without involving modification or re-design of the antenna.

A further object is to provide an antenna stabilizer for television reception which prevents "picture breathing" caused by antenna sway or undue motion.

Other objects and advantages will become more readily apparent from the following description and drawing.

In the drawings forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views:

Fig. 1 is an elevation of the present device in position on an antenna mast.

Fig. 2 is a plan view of the same.

Fig. 3 is a generalized elevation of two forms of the present invention positioned on a VHF-UHF typical installation.

Fig. 4 is a generalized elevation of the present device positioned on a light VHF antenna installation.

Referring now to the drawings by distinguishing reference numerals, it will be observed that the invention comprises an arched, resilient, spring-leaf assembly comprising a main spring 5 of substantially rectangular configuration which is twisted through its mid-point for added strength. A wide, cylindrical, split-type clamp 6 as shown in Fig. 1 circles the main spring 5. A helper or auxiliary spring leaf 7 is welded at its mid-point to the split-type clamp 6. The ends of the auxiliary spring leaf 7 are retained in position adjacent the main spring 5 by means of spring shackles 8. The split-type clamp

6 is tightened by means of bolt 9 and nut 10. The ends 11 of the main spring leaf 5 press against the antenna mast 12 as shown in Fig. 1. In Fig. 2 the clamp 6 is shown in two sections for easy assembly.

In use, three units are needed to form one assembly with the main leaf springs 5 being positioned within the clamp 6. The clamp 6 is tightened by means of bolt 9 and nut 10 after the three main leaf springs 5 have been positioned against the antenna mast 12. In instances wherein extra stabilization is needed auxiliary leaf springs 7 which are welded to the clamp 6 are positioned adjacent the main leaf springs 5 by means of spring shackles 8. These auxiliary leaf springs 7 are not needed with light weight installations. It is apparent that the present assembly positioned at a critical point along the extent of the mast 12 effectively prevents sway due to wind action without the use of guy wires or the like. One effective position for installation of the present device is between the rotator and antenna array.

Minor changes in shape, size, relative proportions and materials may be resorted to in practice without departing from the spirit of the invention of the scope of the invention as hereinafter claimed.

I claim:

1. In an antenna stabilizer of the type described, the combination of a plurality of leaf springs, the ends of said leaf springs being twisted and bent inwardly, a split clamp adapted to retain said leaf springs with the ends frictionally contacting an antenna mast, said split clamp being provided with auxiliary leaf springs welded thereto, the extremities of said auxiliary leaf springs being secured to the ends of said leaf springs by means of shackles.

2. In an antenna stabilizer of the type described, the combination of a plurality of main leaf springs, said main leaf spring ends having a rectangular configuration and being twisted through its central section, a split clamp adapted to retain the ends of said main leaf springs frictionally in contact with an antenna mast, said split clamp provided with auxiliary leaf springs attached thereto, the extremities of said auxiliary leaf springs being connected with said leaf spring ends by means of shackles.

References Cited in the file of this patent

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