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ANTENNA

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Fig. 1,

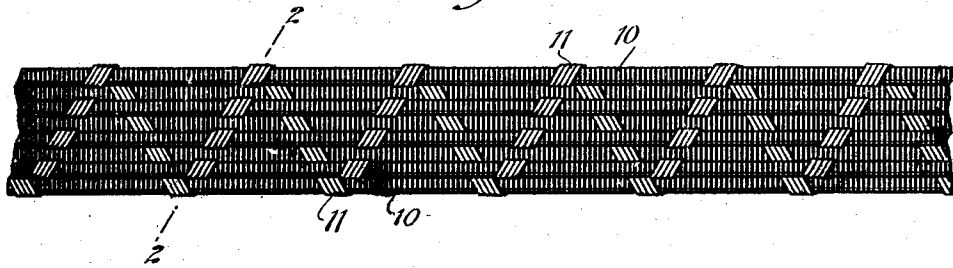
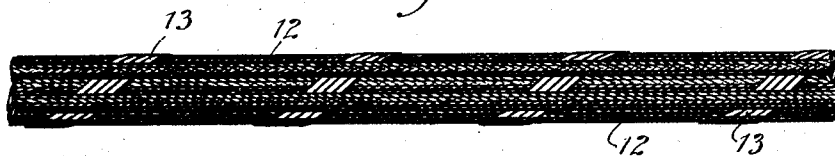


Fig. 2,



Fig. 3.



WITNESSES

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ANTENNA.

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This invention relates to a new and improved form of radio antenna. An object of the invention is to provide a fabric in which an antenna element is woven so that the antenna can be efficiently supported and incorporated with the material, which can be used incidentally in an ornamental manner in connection with the interior of a house.

Another object concerns the provision of means whereby a considerable length of antenna can be properly installed on a short length of a given support.

A further object concerns the provision of a suitable support for an antenna which can be incorporated with the decorations of a house, be out of the way, not particularly expensive, and harmonize with the furnishings.

The invention is illustrated in the drawings, of which—

Figure 1 is a plan view of a strip of braid in which an antenna is incorporated;

Fig. 2 is a section therethrough; and

Fig. 3 is a plan view of a portion of a rope or cord into which the antenna is woven or twisted.

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 idea comprises, broadly, the provision of a zigzag antenna.

More specifically, the invention includes the idea of suitably incorporating a zigzag antenna on a desired base.

More specifically, the invention comprises weaving a braid or tape with a zigzag antenna element woven therein.

Still more specifically, the invention includes the idea of weaving or twisting into a rope or cord an antenna element, preferably in a spiral fashion, so that a great length of antenna element can be incorporated in a given length of cord or rope.

In the preferred form of the invention, as

shown in Fig. 1, I provide a braid 10 into which, preferably during the process of manufacture, a conductive antenna element 11 is woven in a zigzag fashion. By thus manufacturing the braid or other fabric, a considerable length of antenna element can be woven into a given length of braid or into a given length of sheet material.

As shown in Fig. 3, a rope or cord 12 is suitably woven, braided or twisted, and into this is incorporated a spiral conductor element 13 which acts as an antenna.

The particular manner in which the antenna element is incorporated in the fabric is not essentially important.

It is to be clearly understood that the fabric or sheet of material into which the antenna wire is woven may itself be made of insulated metallic wires, each of which can serve as an element in the antenna. In other words, the braid, tape, sheet of material or cord, can be made of insulated antenna wires entirely. This sort of construction will contain a considerable number of zigzag antenna, which will have a considerably greater capacity than a fabric containing only one or two wires supported therein. It will also be suitable for both outside and inside antenna. In other words, the support or mounting for any particular antenna wire may be a plurality of other antenna wires with which it is incorporated.

What I claim is:—

1. An antenna which comprises a flat sheet of fabric comprising a plurality of braids or strands laid parallel to each other and of insulating material and a conductor woven progressively forward in a zigzag manner across the sheet alternately between the strands of the sheet.

2. An antenna comprising a narrow sheet or tape of insulating material, and a flexible conductor interwoven in said sheet extending alternately across the sheet longitudinally thereof, and lying flat whereby to increase the capacity of said conductor in collecting radiant energy.

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