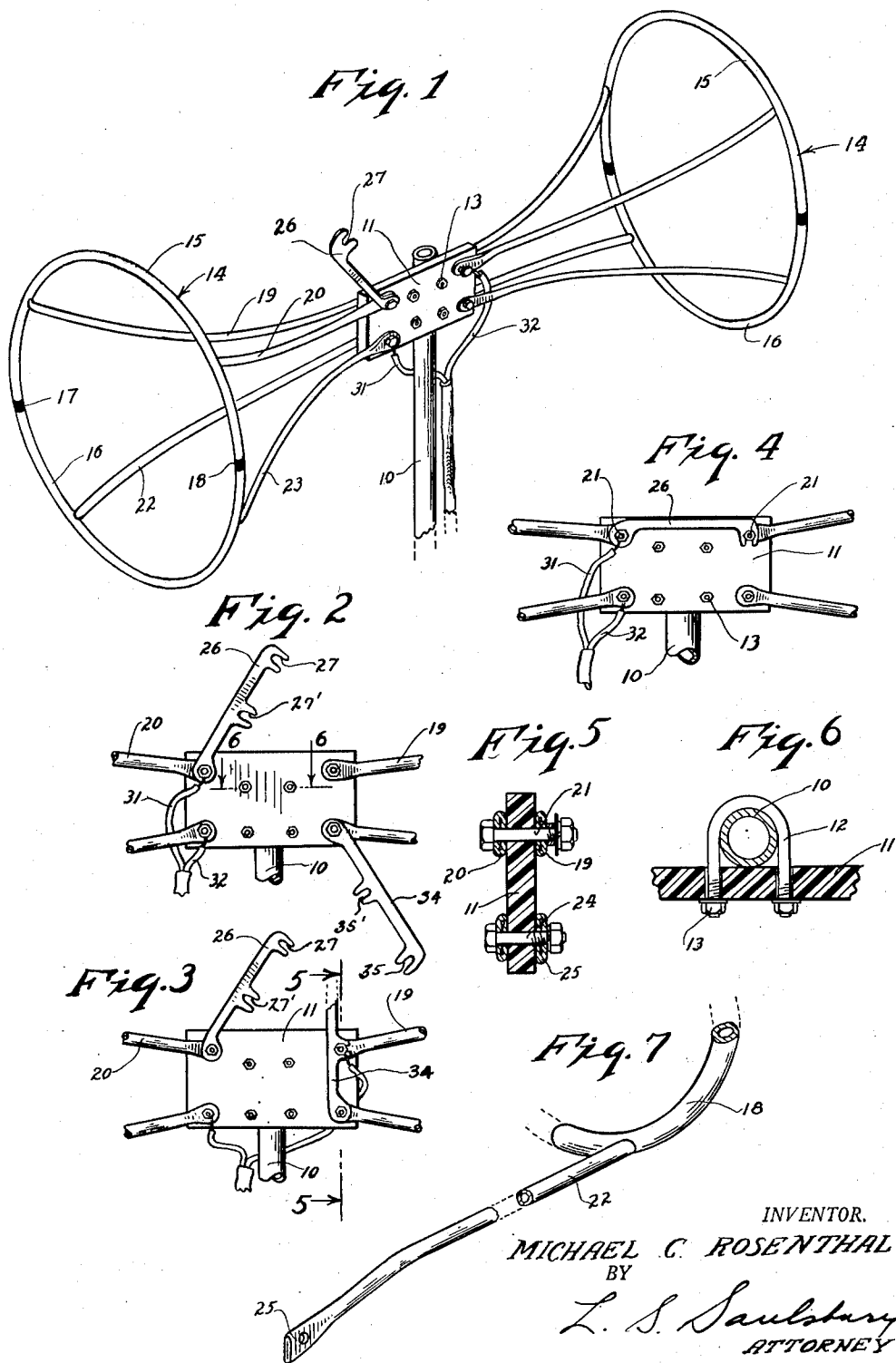


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TELEVISION ANTENNA CONSTRUCTION

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TELEVISION ANTENNA CONSTRUCTION

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This invention relates to a television antenna construction.

It is an object of the present invention to provide a television antenna construction wherein the antenna parts can be wired upon the antenna by simple connecting of the lead-in wires to the different portions of the antenna parts and wherein by a simple switch lever the hook-up for the different antenna parts can be changed.

It is another object of the present invention to provide a television antenna construction wherein the end rings provide, with the various connecting members for supporting the rings, a substantially cone-shape structure and wherein the rings are of a diameter substantially equal to the length of the members connecting the rings with the center structure of the antenna construction and wherein the rings are formed of semicircular parts insulatingly connected together to provide a complete ring.

Other objects of the present invention are to provide a television antenna construction which is simple, inexpensive to manufacture, has a minimum number of parts, easy to assemble, easy to connect and disconnect for the different arrangements of the antenna parts in the antenna system, compact, has a single center block, and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of the antenna construction embodying the features of the present invention.

Fig. 2 is an enlarged elevational view of the antenna with the lead-in wires connected to the parts on but one side of the construction.

Fig. 3 is a fragmentary elevational view of the center structure with the lead wires connected respectively to the opposite sides of the antenna.

Fig. 4 is an elevational view with the switch arm lowered to bridge the antenna parts on the opposite sides of the structure.

Fig. 5 is a sectional view taken on line 5—5 of Fig. 3.

Fig. 6 is an enlarged sectional view taken generally on line 6—6 of Fig. 2.

Fig. 7 is a fragmentary perspective view of a portion of the antenna parts showing the hollow piping which is used to provide the semicircular member and the longitudinally extending supporting members.

Referring now to the figures, 10 represents a supporting post to which there is secured a block

of central structure 11 by means of U-bolts 12 having nuts 13 thereon. This block 11 extends to the opposite sides of the post 10. A cage is connected to each side of the block 11. Each cage comprises a circular part 14 formed of two arcuate sections 15 and 16 insulated from one another at 17 and 18. The section 15 has longitudinally extending members 19 and 20 which are connected respectively to the opposite sides of the block by bolt means 21. Longitudinally extending members 22 and 23 extend from the arcuate section 16 to the block 11 and are connected respectively upon the opposite sides thereof by bolt means 24. The arcuate sections and the members, which extend longitudinally to support the arcuate sections, are hollow or tubular, as shown clearly in Fig. 7. The ends of the longitudinal members are flattened, as indicated at 25, Fig. 7, so as to fit flush upon the face of the block 11. It will be apparent that each cage is of the same construction. While the numerals have been applied to the cage at the left side of Fig. 1, it will be understood that they equally apply to the cage at the right side of Fig. 1.

Pivoted upon one of the bolts 21 is a bridging arm 26 having a notch 27 therein to receive the bolt at the opposite end of the block 11 whereby to connect together the two top sections of the cages. This arm 29 will thus put into circuit relation the top sections of the two cages. This arm is shown connected in Fig. 4.

The lead-in wires can be hooked up to the different arcuate sections in any number of different ways. As shown in Figs. 1 and 3, cables 31 and 32 are connected respectively to lower section 18 of one cage and upper section 15 of the other cage. As shown in Fig. 2, both cables are connected to the one cage and the switch arm 26 is lifted. Cable 31 in this instance will be connected to the upper section 15 of the one cage and cable 32 will be connected to the lower section 16 of the same cage.

With the switch arm 26 bridging the bolt means 21, as shown in Fig. 4, cable 31 will be connected to the upper sections of the two cages while cable 32 will be connected to the lower section of the left hand cage.

These different wiring connections can be made at the time the television set is installed and to give the best reception of the set for the particular locality.

The rings are of a diameter equal to the length of the longitudinally extending members.

It should be apparent that there has been pro-

vided a simple television antenna construction whereby the different connections can be effected easily and the antenna made readily adapted to the particular set and locality.

In Figs. 2 and 3, there is shown a slightly modified form of the invention wherein two switch arms are employed and wherein each switch arm has two notches so that the switch arm can be positioned horizontally to extend between the structures upon the opposite side of the block 11 or can be extended vertically to extend between the member supporting the ring on the one side of the central structure 11, in the manner shown particularly in Fig. 3. There is accordingly provided on the arm 26 a second notch 27'. A second switch arm 34 is provided at the right side of the structure and it also has spaced notches 35 and 35'. When the switch arm 34 is extended vertically, its notches will be connected between the bolts at one side of the structure, Fig. 3. The arm 34 can also be extended across the bottom of the structure the same as the arm 26 is extended across the top of the structure whereby the connection can be made between the lower halves or arcuate sections 16 of the respective circular parts 14 of the cages.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

I claim:

1. An antenna construction comprising a post, an insulating block secured to the upper end of the post and extending respectively to the opposite sides thereof, a cage connected to the opposite sides of the block, and each cage comprising a circular ring and longitudinally extending members connected between the ring and the block, bolt means extending through the block to secure the longitudinal members thereto, the said ring comprising two arcuate sections, and two of said longitudinal members connected to each section, the longitudinal members of the sections being vertically spaced upon the block, the arcuate sections of the ring being insulated from each other.

2. An antenna construction comprising a post, an insulating block secured to the upper end of the post and extending respectively to the opposite sides thereof, a cage connected to the opposite sides of the block, and each cage comprising a circular ring section with a plurality of arc sections insulated from each other and longitudinally extending members connected between the ring and the block, bolt means extending through the block to secure the longitudinal members thereto, and a bridging arm adapted to extend between the bolt means at the opposite

ends of the block whereby to place the sections of the cages on the opposite sides of the block in circuit relation.

3. An antenna construction comprising a post, an insulating block secured to the upper end of the post and extending respectively to the opposite sides thereof, a cage connected to the opposite sides of the block, and each cage comprising a circular ring and longitudinally extending members connected between the ring and the block, bolt means extending through the block to secure the longitudinal members thereto, and a bridging arm adapted to extend between the bolt means at the opposite ends of the block whereby to place the cages on the opposite sides of the block in circuit relation, and each of the cages having their rings formed of arcuate sections insulated from one another, two longitudinal members extending from each of said sections, the longitudinal members of one section being vertically spaced from the longitudinal members of the other section.

4. An antenna construction comprising a post, an insulating block secured to the upper end of the post and extending to the opposite sides thereof, a cage connected to each end of the insulating block, said cage comprising a circular part having arcuate sections insulated from one another, two longitudinal members extending from each arcuate section and bolt means connecting the longitudinal sections to the insulating block, the bolt means for the respective cages being spaced longitudinally of the block a greater distance than the spacing of the bolt means vertically of one another for one of the cages, a bridging switch arm connected to one of the bolt means and having notches at spaced locations therealong whereby the switch arm can be connected to either a bolt means at the opposite side of the insulating block or to the other bolt means on the same side of the block.

5. An antenna construction as defined in claim 4, and a second switch arm connected to another bolt means and having notches thereon at spaced locations therealong and similarly adapted to be either connected to bolt means at the opposite side of the block or to the other bolt means on the same side of the block by extending the switch arm either horizontally or vertically.

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