A Family Man's

MOBILE ANTENNA

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IN THE AVERAGE amateur household it is not too uncommon to find that the XYL has nearly the last word in the appearance of the family automobile. Probably this is as it should be—for were it not so many of us would tie all types and styles of mobile antennas to the family chariot. Therefore, it became necessary to devise an antenna capable of serving a dual purpose; i.e., appearing pretty much like a regular car antenna and yet usable as an efficient mobile transmitting antenna.

Van R. Field, W2OQI, has proposed a mechanical design for either a 2-meter or 6-meter vertical "J" type antenna which has proven to be acceptable to all concerned. One of these dual purpose "J" antennas is shown in the accompanying illustration. Actually it comprises two vertical whip antennas which are spaced at the bottom by a metal shorting bar and at the top by a plastic feedline spacer.

First step in the construction of this type of mobile antenna is to replace the usual shorter whip antenna that came with the car with one of the extra long variety. A two-inch plastic space is then drilled out so that one of the enlarged holes will fit snugly over the new whip antenna and the other hole will fit snug over the old whip that was just removed from the car. Tighten down the screws that normally hold the feeder line so the spacer is sure to stay in its proper place. Next take a piece of thin wall brass tubing about 1 inch in diameter and drill out another set of holes spaced two inches apart. These holes should be large enough to allow the brass tubing, which is to be used as a shorting bar, to slip up and down the two whip antennas. Make a hacksaw cut through each of the holes as shown in the illustration and then drill two more holes at right angles for the nut and bolt which will be used to clamp the shorting bar into place.

We may now assemble the antenna by locating the shorting bar so that a minimum stub length of about 18 inches can be realized. Then clamp the shorting bar tight since the remainder of the tuning adjustments are made by varying the length of the whip antennas and the location of the feeder points.

Solder two midget battery clips on the end of a length of 300-ohm twin lead. Clip one wire of the lead-in to the antenna and the other to the matching stub. Run the free end under the car hood and through the dashboard or fire wall until you have a direct feedline to the mobile v-h-f rig. The length

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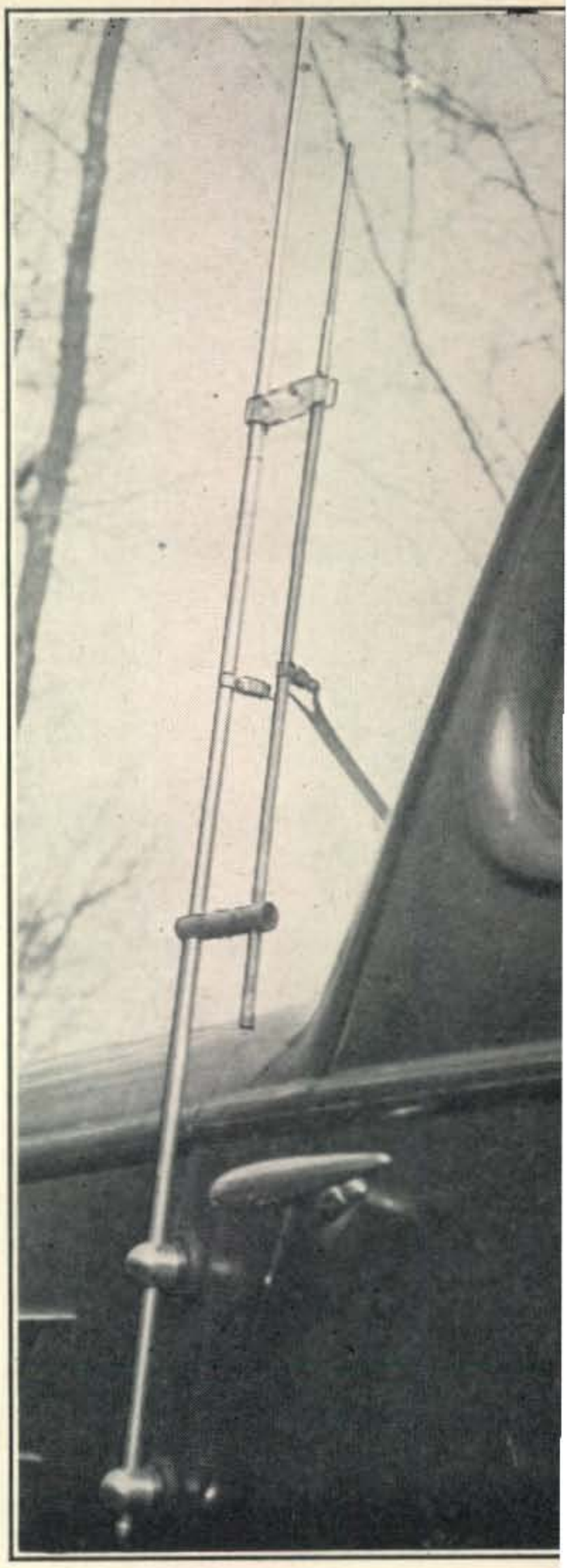
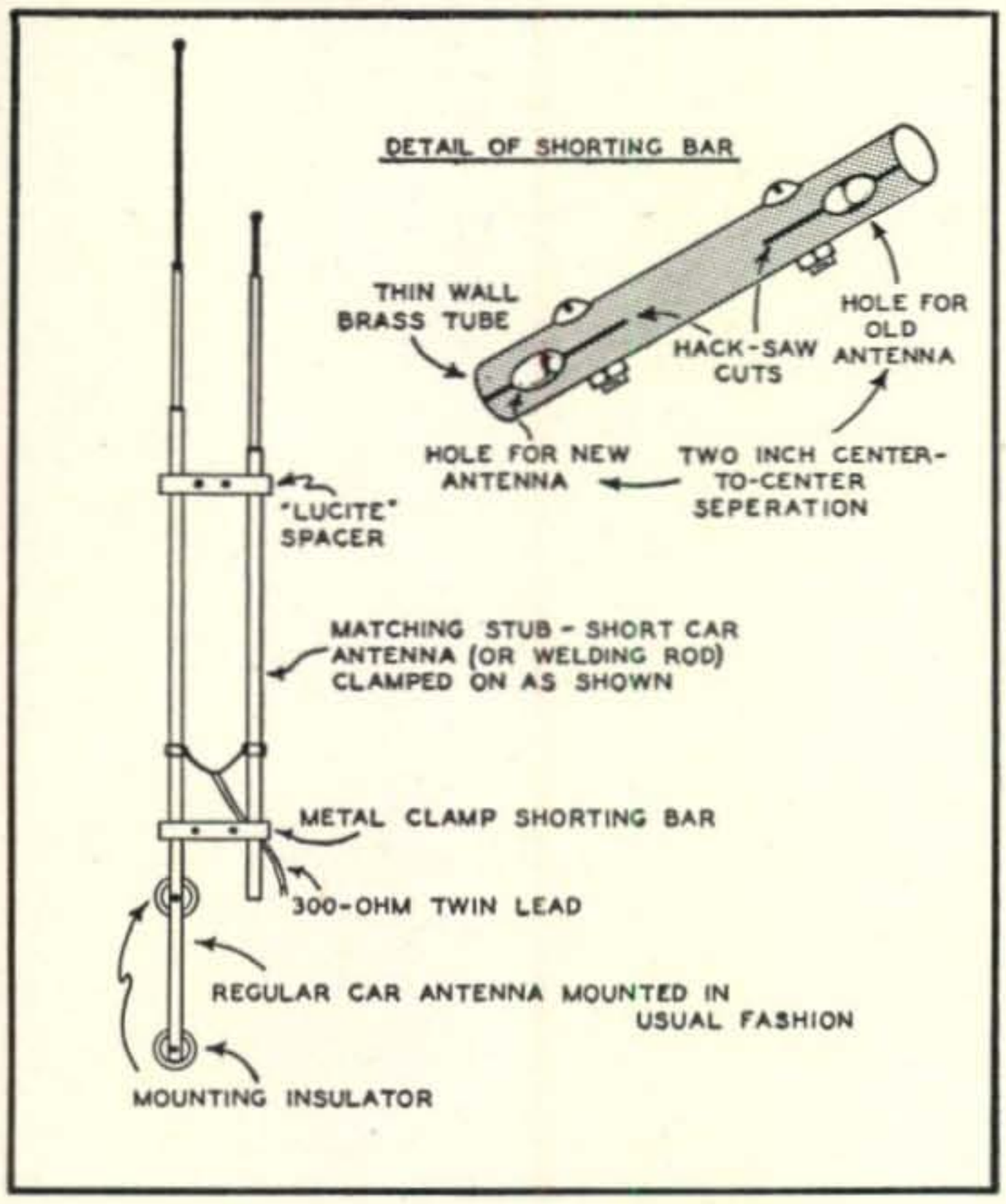


A dual purpose J-type antenna mounted and ready to go places. The short whip antenna that was removed from the car is now used as the matching stub. The 300-ohm feed goes to the mobile rig while connections to the BC set are made in the usual fashion. Either fender or side cowl mounting may be used.



Construction detail of the dual purpose mobile antenna. An extra long whip antenna is used to replace the common shorter variety. The BC connections remain the same, while the mobile rig works into a J-type antenna through 300-ohm feedline.

MOBILE ANTENNA

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of the line does not appear to be critical. With the clips opposite each other as shown in the illustration, slide them up and down until the transmitter loads sufficiently or if on *receive*, until the incoming signal is the loudest. The usual 2-meter lengths for the elements is about 19 inches for the matching stub and 57 to 58 inches for the long whip. When using a super-regen as a receiver it may be best to work with the elements a little longer than usual as this will displace the *dead-spots* to the low frequency side of the band.

Once the antenna has been installed and tuned up there is little left to say about its operation. Anything below the shorting bar and into the regular BC has no effect on the mobile performance of the ham rig. When the XYL wants to use the BC set, just simply switch off the mobile rig and listen to your favorite BC program. No wires to switch and no relays to be thrown.

SCRATCHI

(*from page 10*)

Next programs are fellow reviewing a book, so I are deciding to try out rig on see-w as are getting too late for phone contacts on ten meters. Heering a VK7 calling seek-you, I are plugging key in and going back to him. As I are starting to call him I are heering voices from downstairs, but I go ahead and call the VK7. He are going back to a W9 so I are getting disgustipated and going down to television set again. Everyone are very disturbed as when fellow giving book review his head are turning upside down then right side up, all at reel fast rate. When landlady are telling me that it stopped just before I came downstairs, Scratchi are beginning to see lite—television antenna not hurting ten meter antenna, but dipole antenna for rig are reely messing up television program!!

I are doing some reel quick thinking, and so I are telling landlady that probably sum little thing wrong with television set, and as I are somewhat of a expert on radios, I will fixing the set for her. I are getting my tool kit and spending next fifteen minutes behind television set, unplugging tubes and putting them back in, unsoldering connections and soldering them back again, and in general making it look like Scratchi are high-powered whiz-bang radio expert. After plugging in television set it are natchurally working, so landlady and everybody reel happy now, as they are knowing that pictures will not be turning upside down, seeing as how Scratchi are doing good fix-up job.

Scratchi are now having 1/c problem on his hands. Only way television set stay fixed is for Scratchi to stay off the air. So, I are going to put on thinking cap and solving this problem. Of course, I are lucky in that my ten meter sigs only cause television picture to turn upside down. If you are having any suggestions, please letting me know.

Respectively yours,
Hashafisti Scratchi