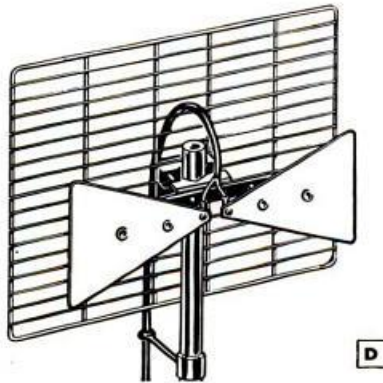
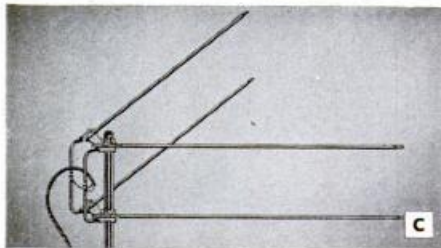
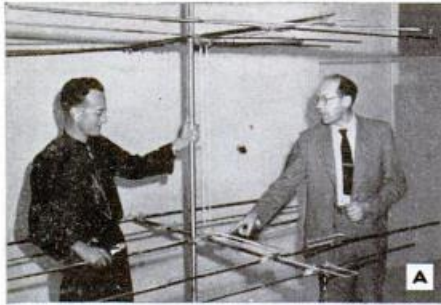


HOW TO SELECT YOUR

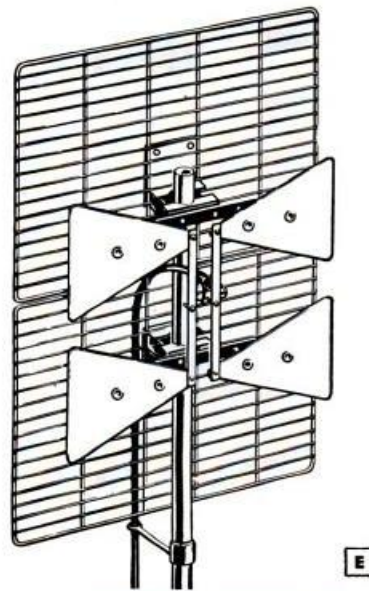


YOUR LOCATION is the deciding factor in choosing the correct type of TV antenna from a wide variety of designs. The new UHF channels 14 to 83 require additional antennas. The long-awaited color-TV programs will require no antenna change, and that is welcome news to many prospective color-television-set owners.

For maximum results, your television-antenna array must be highly selective on the TV channels employed by the stations in your area. If it is not efficient on each channel, it will include scattered and delayed reflected signals and the result is troublesome ghosts. To receive the AM (video) picture and FM (audio) signals head-on at greatest efficiency, it must be cut to favor those particular channels, and correctly oriented in the direction of such stations. If this is not done, the best TV-set tuner made will be handicapped even on strong local stations.

This becomes more important in fringe areas remote from TV-broadcasting stations. Multiple-bay TV-antenna arrays, and specially designed "Yagi"-type multiple parasitic-element arrays are employed to advantage in such areas.

There are about 45 or 50 different VHF and UHF TV-antenna designs available. Each manufacturer uses standard electrical formulas, and supplements these with months and sometimes years of field test-



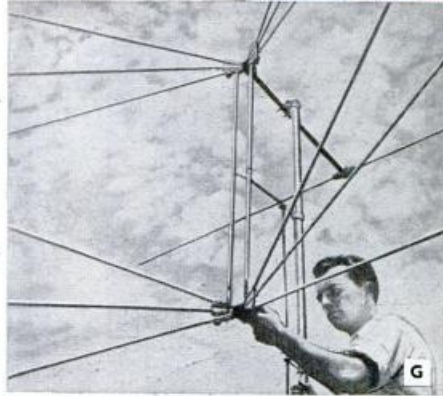
TELEVISION ANTENNA

ing in order to solve specific location receiving problems. Ordinary homemade "plumbing" construction jobs with the difficult to obtain hard-aluminum tubing are not recommended except for the dyed-in-the-wool experimenter.

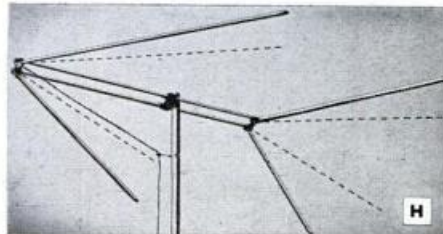
One of the simplest, and usually sure-fire methods for the new TV-set owner to select an efficient type for his particular location is to visit the neighbors and check up on their results. In some areas you will find a number of different types in use but they will usually follow a general pattern as the TV servicemen have learned by experience just what type gives maximum results in that particular neighborhood. The necessary height is determined by the distance from the transmitting stations, and the topography of the surrounding country. Even though you may be located comparatively near the desired stations, intervening hills and buildings may make it necessary to do some experimenting if you have no near-by neighbors to check with.

The fringe-area TV antenna must be carefully selected to include the desired channels, and if the broadcasting stations are not all located in the same general direction a remotely controlled rotating device, such as the one illustrated in photo J, may be employed to "aim" the antenna array to the desired station. In ultra-fringe

(Continued to page 234)



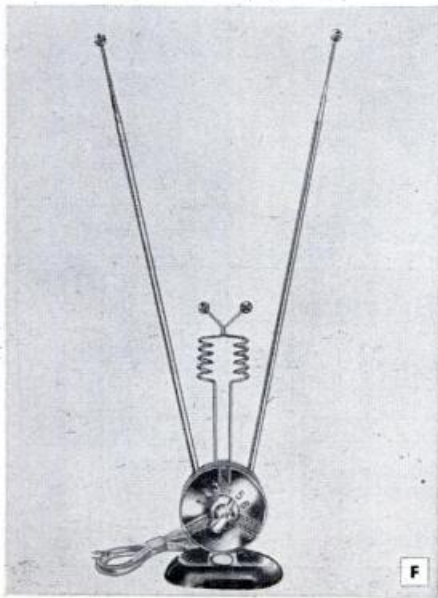
G



H

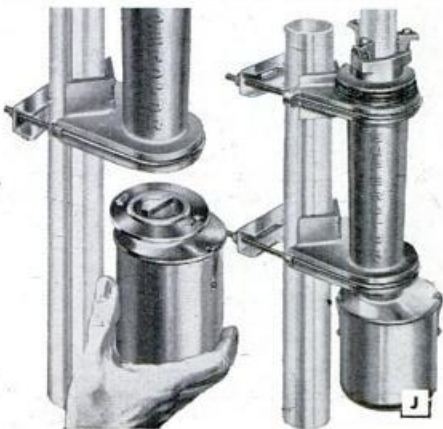


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JULY 1954



J

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