

ference will make any kind of reception impossible. The uninitiated reader most certainly will be impressed by such an argument, but I believe it falls flat if certain factors are included. That is, if a station with increased power were directly in the heart of the city in which the interference was caused, there is no question that great interference would be created. However, if such a powerful station is placed somewhere in the country, even 25 or 30 miles outside the city, there would be no such interference. This is because the signal intensity falls very rapidly the first few miles from the station and more gradually afterwards. The reason for this is that the signal intensity varies inversely as the square of the distance from the transmitter. That is, two miles from the station the signal intensity is one-fourth what it is at one mile, and three miles out, it is one-ninth what it is at one mile. Fig. 1 shows how the signal intensity drops as the distance from the station increases. The greatest drop occurs at the start and by the time it has reached the

VOTING BLANK

ARE YOU FOR OR AGAINST HIGH POWER BROADCASTING?

In order to ascertain the popularity of the scheme to open Super Power Broadcast Stations it is desirable on the part of the Editor of **RADIO NEWS** that you cast your vote on this blank and mail it to Radio News, 53 Park Place, New York City, before December 31.

The results of the vote will be published in the forthcoming issue.



For

Mark cross in one
or the other box.



Against

therefore, means should be employed by which this matter can surely reach all the people interested. Some available means have been here outlined, and it will be of interest to have further discussion on the subject.

BROADCASTERS AUTHORIZED TO INCREASE POWER

The Department of Commerce has announced that licenses will be immediately issued for increasing power of broadcast stations under a plan permitting the addition of 500 watts at a time. Such increases, however, are emphasized as being wholly experimental and entirely at the risk of the station, and at all times under the control and regulation of the District Supervisor of the Department. The announcement specifies a maximum of 5 000 watts and cautions that the announcement does not deal with so-called super-power stations of 25,000 or 50,000 watts.

(Continued on page 1297)

Broadcasters Authorized to Increase Power

(Continued from page 1137)

It is expected that it may be some time before the general reallocation of wave-lengths can be made. First of all, the class 1 band must be cleared of old class A and C stations. Whenever practical, the present wave-length of a station will not be changed. The general plan that will be followed in granting wave-lengths to class 1 stations will be to separate stations in the same zone by 50 kilocycles, stations in adjoining zones by 20 kilocycles and stations in removed zones by 10 kilocycles. Under the tentative plan, there will be adequate wave-length for the 20 or 30 expected new class 1 stations.

An Ideal Broadcast Receiver

(Continued from page 1163)

One advantage of this receiver is that the amplifier will not howl or cause trouble and when correctly connected it works immediately without any critical adjustments.

When a receiver is to be operated in the vicinity of broadcast stations, selectivity is of the utmost importance; otherwise the local stations will be heard all over the dials and distant stations cannot be tuned in until the local stations sign off. But a selective receiver, such as the one just described, will tune right through the local stations and pick up distant ones without any trouble. The selectivity of this receiver is remarkable. A turn of two or three degrees on the dial will tune in and out a local station with loud enough volume to shake the loud speaker, making a vernier type condenser or dial essential for proper tuning.

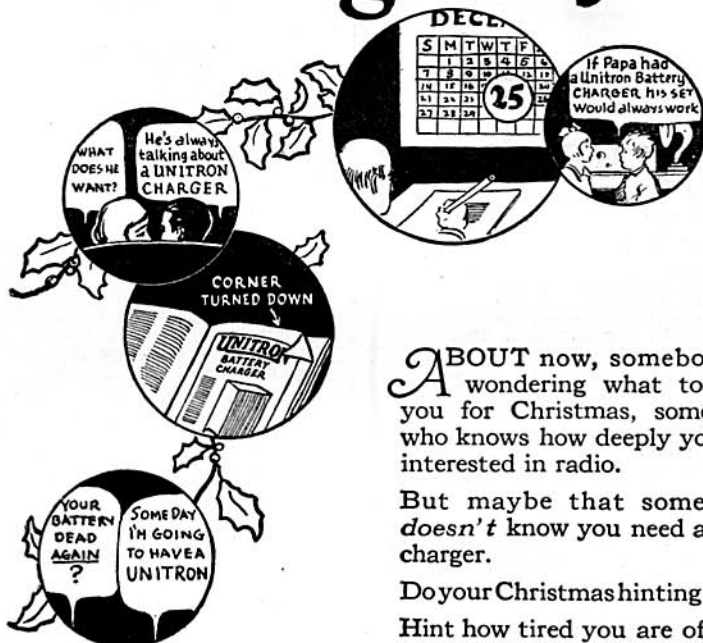
Radio vs. Wireless

(Continued from page 1165)

perimented with, back in 1915, they called these experiments "wireless telephone." But today the same thing is being done only on a wholesale basis, and for no reason at all the name has been changed to "radio." But radio is not a new word and its real meaning isn't broadcasting of music or speeches. Radio is simply the process of communication by either voice or telegraphic code by using the ether and ground in place of direct wires. Thus, don't say you "have a radio" in your house. What you mean is that you have a radio receiver or a wireless receiver in your home. If you think that there's any difference between a radio receiver and a wireless receiver then how do you explain hearing code signals on your so-called "radio"? No, there's no difference; the same circuits that the ships and amateurs use for reception of radio telegraph or wireless telegraph signals will be found in a so-called "radio." The famous "Reinartz Circuit" was originally made for the reception of code signals, not soprano broadcasts.

So get it straight now, that the thing you have in the living room that makes noises like the victrola is not "a radio," but a "radio receiver" or "wireless receiver"; the two terms are synonymous. The code signals which sometimes justly drown out a political speech should not be called "wireless," for that is too broad a term. Call it "wireless telegraph" or "radio telegraph." The jazz band music you hear is NOT "radio." It is "radio telephone" or "wireless telephone"

Do Your Christmas Hinting Early



Send for the Booklet
"A Little Less Noise....Please"

Model 00 \$18
Charges any type of A battery



Model 0 \$30
Charges A and B batteries and automobile batteries

ABOUT now, somebody is wondering what to give you for Christmas, somebody who knows how deeply you are interested in radio.

But maybe that somebody *doesn't* know you need a good charger.

Do your Christmas hinting early.

Hint how tired you are of your battery going dead on evenings when the family wants its service most.

Hint what a good battery charger does for batteries, uninterrupted reception and the increased radio joy of the entire family.

Hint that it saves you trouble and money. Hint that it saves rugs, furniture and clothes.

Hint that you've got to get one some day. And hint for a good one—a Unitron.

Hint—but do your *Christmas* hinting early.

[No adjusting, watering, oiling, tinkering. Nothing to wear out. No noise. Fireproof and trouble-proof. Being a low-loss charger the Unitron is economical.]

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