

RADIO NEWS

Published by EXPERIMENTER PUBLISHING COMPANY, INC.
 Publishers of "Radio News," "Science and Invention" and "Practical Electronics."
 Publication Office: Jamaica, N. Y. Editorial and General Offices: 53 Park Place, N. Y. City
 H. GERNSBACK, President S. GERNSBACK, Treasurer R. W. DEMOTT, Secretary

VOL. 5 CONTENTS FOR DECEMBER NO. 6

	Page		Page
Editorial	By H. Gernsback 679	C.W. and Radiophone Transmitters—Part III,	By L. R. Felder 705
Multiple Broadcasting	By S. R. Winters 680	The Dope on the Second National A.R.R.L.	Convention
Radio Vision	By H. Gernsback 681	By L. W. Hatry 706	
The Radio Chauffeur Call, By Dr. Lee De Forest	682	Canadian Station 9BP Reaches Arctic.	By Jack Barnsley 707
The Clariphone, a New Static Eliminator,	By S. R. Winters 683	Duplex Reception	By R. E. Sablin 708
The Radio Controlled Aeroplane.	By Maurice Percheron 684	Simplifying Amplifier Construction.	By F. M. Holbrook 709
A New and Ultra-Sensitive Detector, the Sodian,	By John V. L. Hogan 686	A Regenerative Loop Receiver.	By Edwin K. Borchard 710
A New High Power Tube	By Laurence S. Lees 688	Notes on the Autopex Circuit.	By M. L. Muhleman 711
Awards of the Reflex Prize Contest	689	Observations at the Receiving End of the	Radiophone
Construction of Super-Heterodyne Receivers,	By F. de Willy and R. E. Lacault 690	By W. A. Knight 712	
Simplifying the Radio Receiving Set.	By James Ashton Greig 692	Crystal Detectors and Their Possibilities as Am-	plifiers and Oscillators.
Audio Frequency Amplification	By Louis Frank 693	By John W. Millon, Jr. 714	
A Complete Radio Library at Amateur Price.	By S. R. Winters 694	Outline of the Problem of Radio Control.	By Ole D. Engstrom 716
Fertile Florida	By Armstrong Perry 695	The Pritchard Universometer	By P. A. Price 719
Solanders Radio Tomb	By Ellis Parker Butler 696	Awards of the \$50 Radio Wrinkle Contest	720
Radio Oddities	697	Radio News Laboratories	722
Commercial Possibilities of Wired Radio for	Central Stations	Radio Trade News	By L. A. Nixon 723
By Bert T. Bouaventure 698		I-Want-To-Know	724
With the Amateurs	700	New Radio Patents	726
The Transmitter at Station 8AZ	By J. E. Fetzer 702	Correspondence From Readers	727
An Efficient Amateur Station.	By Baldwin G. Sullivan 703	Complete List of Broadcasting Stations—Cor-	rected to September 25th
Fixin' Up the Shack	By Howard S. Pyle 704	728	
		Radio Poems	789
		Book Review	814
Index to Advertisers	668		

General Advertising Dept., 53 Park Place, New York City. Western Advertising Representatives, Finucan & McClure, 720 Cass Street, Chicago, Ill. Kansas City Representative, Geo. F. Dillon, Republic Bldg., Kansas City Mo. Pacific Coast Advertising Representatives, A. J. Norris Hill Co., Hearst Bldg., San Francisco, Cal.

RADIO NEWS is published on the 15th of each preceding month. There are 12 numbers per year. Subscription price is \$2.50 a year in U. S. and possessions, Canada and foreign countries, \$3.00 a year. U. S. coins as well as U. S. stamps accepted (no foreign coins or stamps). Single copies, 25 cents each. A sample copy will be sent gratis on request. Checks and money orders should be drawn to order of EXPERIMENTER PUBLISHING CO., INC.

All communications and contributions to this journal should be addressed to Editor, RADIO NEWS, 53 Park Place, New York, N. Y. Unaccepted contributions cannot be returned unless full postage has been included. All accepted contributions are paid for on publication. A special rate is paid for novel experiments; good photographs accompanying them are highly desirable.

RADIO NEWS, Monthly. Entered as second-class matter at the Post Office, at Jamaica, N. Y., under the act of March 3, 1879. Title registered U. S. Patent Office. Copyright, 1923, by E. P. Co., Inc., New York. The Experimenter Publishing Co., 53 Park Place, N. Y. The contents of this magazine are copyrighted and must not be reproduced without giving full credit to the publication.

RADIO NEWS is for sale at all newsstands in the United States and Canada; also at The International News Co., Ltd., Bream's Building, London E. C. 4, England and at Brenano's 41 Avenue de l'Opera, Paris.

HOW TO SUBSCRIBE FOR RADIO NEWS. Send your name, address and remittance to Experimenter Publishing Co., 53 Park Place, New York. Mention the name of the magazine you are ordering. We also publish SCIENCE AND INVENTION and PRACTICAL ELECTRICS. Write early.

RATES AND TERMS. The subscription rate for RADIO NEWS is \$2.50 per year, (12 numbers). When remitting do so by check, money order, or registered letter if cash is enclosed. Avoid sending cash through the mail if possible. Subscriptions for less than one year are not accepted. Subscription may be made in combination with SCIENCE AND INVENTION or PRACTICAL ELECTRICS with considerable saving.

POSTAGE. We prepay postage in all parts of the United States, Mexico and island possessions. For foreign or Canadian subscriptions we require 50 cents in addition to the subscription price for additional postage charges.

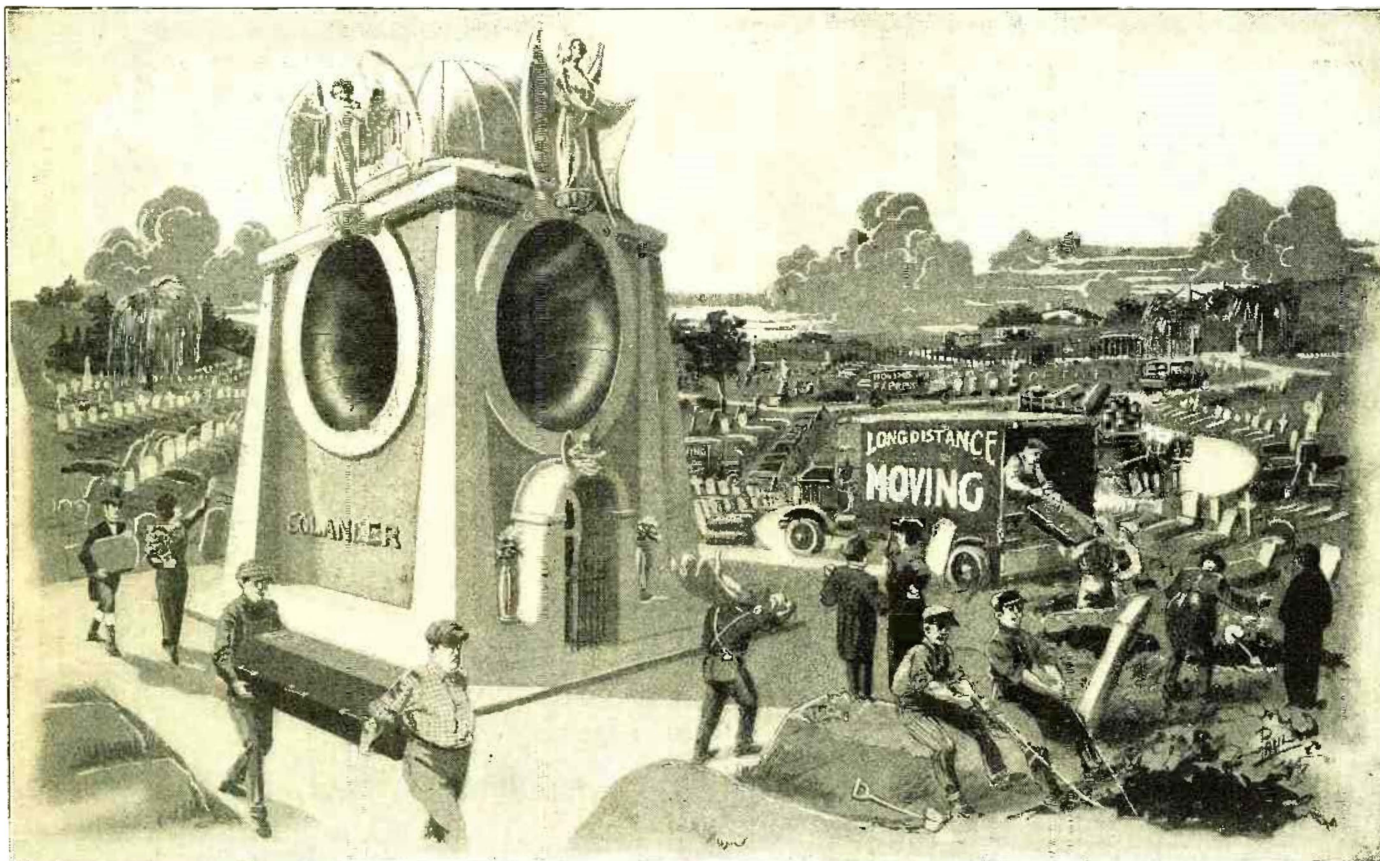
CHANGE OF ADDRESS. Notify us as far in advance as possible. It requires several weeks to make an address change on our records. Always write clearly, giving your old address as well as your new.

ON EXPIRATION of your subscription we enclose a renewal blank in our last number to you; we send out delivery to you on expiration. COMMUNICATIONS to us should always bear your full name, address and when possible the number which appears on your wrapper every month.

Solander's Radio Tomb

By ELLIS PARKER BUTLER

Author of "Pigs is Pigs"



Within a Week the Inmates of Our Cemetery Began to Move Out. Friends of People Who Had Been Buried There Over a Hundred Years Came and Moved Them to Other Cemeteries and Took the Headstones and Monuments With Them, and in a Month Our Cemetery Looked Like One of Those Great War Battlefields—Like a Lot of Shell-Holes. Not a Man, Woman or Child was Left in the Place—Except Remington Solander in His Granite Tomb on the Top of the High Knoll.

I FIRST met Mr. Remington Solander shortly after I installed my first radio set. I was going in to New York on the 8.15 A. M. train and was sitting with my friend Murchison and, as a matter of course, we were talking radio. I had just told Murchison that he was a lunk-headed noodle and that for two cents I would poke him in the jaw, and that even a pin-headed idiot ought to know that a bulb set was better than a crystal set. To this Murchison had replied that that settled it. He said he had always known I was a moron, and now he was sure of it.

"If you had enough brains to fill a hazelnut shell," he said, "you wouldn't talk that way. Anybody but a half-baked lunatic would know that what a man wants in radio is clear, sharp reception and that's what a crystal gives you. You're one of these half-wits that think they're classy if they can hear some two-cent station five hundred miles away utter a few faint squeaks. Shut up! I don't want to talk to you. I don't want to listen to you. Go and sit somewhere else."

Of course, this was what was to be expected of Murchison. And if I did let out a few laps of anger, I feel I was entirely justified. Radio fans are always disputing over the relative merits of crystal and bulb sets, but I knew I was right. I was just trying to decide whether to choke Murchison with my bare hand and throw his lifeless body out of the car window, or tell him a few things I had been wanting to say ever since he began knocking my bulb set, when this Remington Solander, who was sitting behind us, leaned forward and tapped me on

the shoulder. I turned quickly and saw his long sleeplike face close to mine. He was chewing cardamon seed and breathing the odor into my face.

"My friend," he said, "come back and sit with me; I want to ask you a few questions about radio."

Well, I couldn't resist that, could I? No radio fan could. I did not care much for the looks of this Remington Solander man, but for the last few weeks my friends had seemed to be steering away from me when I drew near, although I am sure I never said anything to bore them. All I ever talked about was my radio set and some new hook-up I was trying, but I had noticed that men who formerly had seemed to be fond of my company now gave startled looks when I neared them. Some even climbed over the nearest fence and ran madly across vacant lots, looking over their shoulders with frightened glances as they ran. For a week I had not been able to get any man of my acquaintance to listen to one word from me, except Murchison, and he is an utter idiot, as I think I have made clear. So I left Murchison and sat with Remington Solander.

In one way I was proud to be invited to sit with Remington Solander, because he was far and away the richest man in our town. When he died his estate proved to amount to three million dollars. I had seen him often, and I knew who he was, but he was a stand-offish old fellow and did not mix, so I had never met him. He was a tall man and thin, somewhat flabby and he was pale in an unhealthy sort of way, but, after all, he was a millionaire and a member of one of the "old families" of Westcote, so I

took the seat alongside of him with considerable satisfaction.

"I gather," he said as soon as I was seated, "that you are interested in radio."

I told him I was.

"And I'm just building a new set, using a new hook-up, that I heard of about a week ago," I said. "I think it is going to be a wonder. Now, here is the idea: instead of using a grid—"

"Yes, yes!" the old aristocrat said hastily. "But never mind that now. I know very little of such things. I have an electrician employed by the year to care for my radio set and I leave all such things to him. You are a lawyer, are you not?"

I told him I was.

"And you are chairman of the trustees of the Westcote Cemetery, are you not?" he asked.

I told him I was that also. And I may say that the Westcote Cemetery Association is one of the rightest and tightest little corporations in existence. It has been in existence since 1808 and has been exceedingly profitable to those fortunate enough to hold its stock. I inherited the small block I own from my grandfather. Recently we trustees had bought sixty additional acres adjoining the old cemetery and had added them to it, and we were about ready to put the new lots on the market. At \$300 apiece there promised to be a tremendous profit in the thing, for our cemetery was a fashionable place to be buried in and the demand for the lots in the new addition promised to be enormous.

"You have not known it," said Remington Solander in his slow drawl, which had the

(Continued on page 804)

Solander's Radio Tomb

(Continued from page 696)

effect of letting his words slide out of his mouth and drip down his long chin like cold molasses, "but I have been making inquiries regarding you, and I have been meaning to speak to you. I am drawing up a new last will and testament, and I want you to draw up one of the clauses for me."

"Why, certainly, Mr. Solander," I said with increased pride. "I'll be glad to be of service to you."

"I am choosing you for the work," Remington Solander said, "because you know and love radio as I do, and because you are a trustee of the cemetery association. Are you a religious man?"

"Well," I said, a little uneasily, "some. Some, but not much."

"No matter," said Mr. Solander, placing a hand on my arm. "I am. I have always been. From my earliest youth my mind has been on serious things. As a matter of fact, sir, I have compiled a manuscript collection of religious quotations, hymns, sermons and uplifting thoughts which now fill fourteen volumes, all in my own handwriting. Fortunately, I inherited money, and this collection is my gift to the world."

"And a noble one, I'm sure," I said.

"Most noble," said Mr. Solander. "But, sir, I have not confined my activities to the study chain. I have kept my eye on the progress of the world. And it seems to me that radio, this new and wonderful invention, is the greatest discovery of all ages and imperishable. But, sir, it is being twisted to cheap uses. Jazz! Cheap songs! Worldly words and music! That I mean to remedy."

"Well," I said, "it might be done. Of course, people like what they like."

"Some nobler soul's like better things," said Remington Solander solemnly. "Some more worthy men and women will welcome nobler radio broadcasting. In my will I am putting aside one million dollars to establish and maintain a broadcasting station that will broadcast only my fourteen volumes of hymns and uplifting material. Every day this matter will go forth—sermons, lectures on prohibition, noble thoughts and religious poems."

I assured him that some people might be glad to get that—that a lot of people might, in fact, and that I could write that into his will without any trouble.

"Ah!" said Remington Solander. "But that is already in my will. What I want you to write for my will is another clause. I mean to build, in your cemetery, a high class and imperishable granite tomb for myself. I mean to place it on that knoll—that high knoll—the highest spot in your cemetery. What I want you to write into my will is a clause providing for the perpetual care and maintenance of my tomb. I want to set aside five hundred thousand dollars for that purpose."

"Well," I said to the sheep faced millionaire, "I can do that, too."

"Yes," he agreed. "And I want to give to

my family and relations the remaining million and a half dollars, provided," he said, accenting the "provided," "they carry out faithfully the provisions of the clause providing for the perpetual care and maintenance of my tomb. If they don't care and maintain," he said, giving me a hard look, "that million and a half is to go to the Home for Flea-Bitten Dogs."

"They'll care and maintain, all right!" I laughed.

"I think so," said Remington Solander gravely. "I do think so, indeed! And now, sir, we come to the important part. You, as I know, are a trustee of the cemetery."

"Yes," I said, "I am."

"For drawing this clause of my will, if you can draw it," said Remington Solander, looking me full in the eye with both his own, which were like the eyes of a salt mackerel, "I shall pay you five thousand dollars."

Well, I almost gasped. It was a big lot of money for drawing one clause of a will, and I began to smell a rat right there. But, I may say, the proposition Remington Solander made to me was one I was able, after quite a little talk with my fellow trustees of the cemetery, to carry out. What Remington Solander wanted was to be permitted to put a radio loud-speaking outfit in his granite tomb—a radio loud-speaking outfit permanently set at 327 meters wave-length, which was to be the wave-length of his endowed broadcasting station. I don't know how Remington Solander first got this remarkable idea, but about that time an undertaker in New York had rigged up a hearse with a phonograph so that the hearse would loud-speak suitable hymns on the way to the cemetery, and that may have suggested the loud-speaking tomb to Remington Solander, but it is not important where he got the idea. He had it, and he was set on having it carried out.

"Think," he said, "of the uplifting effect of it! On the highest spot in the cemetery will stand my noble tomb, loud-speaking in all directions the solemn and holy words and music I have collected in my fourteen volumes. All who enter the cemetery will hear; all will be ennobled and uplifted."

That was so, too. I saw that at once. I said so. So Remington Solander went on to explain that the income from the five hundred thousand dollars would be set aside to keep "A" batteries and "B" batteries supplied, to keep the outfit in repair, and so on. So I tackled the job rather enthusiastically. I don't say the five thousand dollar fee did not interest me, but I did think Remington Solander had a grand idea. It would make our cemetery stand out. People would come from everywhere to see and listen. The lots in the new addition would sell like hot cakes.

But I did have a little trouble with the other trustees. They balked when I explained that Remington Solander wanted the sole radio loud-speaking rights of our cemetery, but someone finally suggested that if Remington Solander put up a new and artistic iron fence around the whole cemetery it might be all right. They made him submit his fourteen volumes so they could see what sort of matter he meant to broadcast from his high-class station, and they agreed it was solemn enough; it was all solemn and sad and gloomy, just the stuff for a cemetery. So when Remington Solander agreed to build the new iron fence they made a formal contract with him, and I drew up the clause for the will, and he bought six lots on top of the high knoll and began erecting his marble mausoleum.

For eight months or so Remington Solander was busier than he had ever been in his life. He superintended the building of the tomb and he had on hand the job of getting his endowed radio station going—it was given the letters WZZZ—and hiring artists to sing and play and speechify his fourteen

volumes of gloom and uplift at 327 meters, and it was too much for the old codger. The very night the test of the WZZZ outfit was made he passed away and was no more on earth.

His funeral was one of the biggest we ever had in Westcoats. I should judge that five thousand people attended his remains to the cemetery, for it had become widely known that the first WZZZ program would be received and loud-spoken from Remington Solander's tomb that afternoon, the first selection on the program—his favorite hymn.

Beginning as the funeral cortege left the church and the program continuing until dark.

I'll say it was one of the most affecting occasions I have ever witnessed. As the body was being carried into the tomb the loud-speaker gave us a sermon by Rev. Peter L. Ruggus, full of sob stuff, and every one of the five thousand present wept. And when the funeral was really finished, over two thousand remained to hear the rest of the program, which consisted of hymns, missionary reports, static and recitations of religious poems. We increased the price of the lots in the new addition one hundred dollars per lot immediately, and we sold four lots that afternoon and two the next morning. The big metropolitan newspapers all gave the Westcoats Cemetery full page illustrated articles the next Sunday, and we received during the next week over three hundred letters, mostly from ministers, praising what we had done.

But that was not the best of it. Requests for lots began to come in by mail. Not only people in Westcoats wrote for prices, but people away over in New Jersey and up in Westchester County, and even from as far away as Poughkeepsie and Delaware. We had twice as many requests for lots as there were lots to sell, and we decided we would have an auction and let them go to the highest bidders. You see, Remington Solander's Talking Tomb was becoming nationally famous. We began to negotiate with the owners of six farms adjacent to our cemetery; we figured on buying them and making more new additions to the cemetery. And then we found we could not use three of the farms.

The reason was that the loud speaker in Remington Solander's tomb would not carry that far; it was not strong enough. So we went to the executors of his estate and ran up against another snag—nothing in the radio outfit in the tomb could be altered in any way whatever. That was in the will. The same loud speaker had to be maintained, the same wave-length had to be kept, the same makes of batteries had to be used, the same style of tubes had to be used. Remington Solander had thought of all that. So we decided to let well enough alone—it was all we could do anyway. We bought the farms that were reached by the loud-speaker and had them surveyed and laid out in lots—and then the thing happened!

Yes, sir, I'll sell my cemetery stock for two cents on the dollar, if anybody will bid that much for it. For what do you think happened? Along came the Government of the United States, regulating this radio thing, and assigned new wave lengths to all the broadcasting stations. It gave Remington Solander's endowed broadcasting station WZZZ an 855-meter wave-length, and it gave that station at Dedwood—station PKN—the 327-meter wave-length, and the next day poor old Remington Solander's tomb poured forth "Yes, We Ain't Got No Bananas" and the "Hot Dog" jazz and "If You Don't See Mama Every Night, You Can't See Mama At All" and Hank Tulbs in his funny stories. Like "Wel", one day an Irishman and a Swede were walking down Broadway and they see a flapper coming towards them. And she had on one of them short skirts they was wearing, see? So Mike he says 'Gee, be jabbers, Olu, I see a peach.'

So the Swede he says, lookin' at the silk stockings, 'Mebby you ban see a peach, Mike, but I ban see one mighty nice pair.' Well, the other day I went to see my mother-in-law—"

You know the sort of program. I don't say that the people who like them are not entitled to them, but I do say they are not the sort of programs to loud-speak from a tomb in a cemetery. I expect old Remington Solander turned clear over in his tomb when those programs began to come through. I know our board of trustees went right up in the air, but there was not a thing we could do about it. The newspapers gave us double pages the next Sunday—"Remington Solander's Jazz Tomb" and "Westcote's Two-Step Cemetery." And within a week the inmates of our cemetery began to move out. Friends of people who had been buried there over a hundred years came and moved them to other cemeteries and took the headstones and monuments with them, and in a month our cemetery looked like one of those Great War battlefields—like a lot of shell-holes. Not a man, woman or child was left in the place—except Remington Solander in his granite tomb on the top of the high knoll. What we've got on our hands is a deserted cemetery.

They all blame me, but I can't do anything about it. All I can do is groan—every morning I grab the paper and look for the PKX program and then I groan. Remington Solander is the lucky man—he's dead.