Audiences of 50,000,000 Soon

Engineers Foresee Amplifiers Bearing President's Voice to Entire Nation.

IN ITS INFANCY, THEY SAY

Current From Arlington Was Multiplied 3,000,000,000,000,000,000,000,000 Times—Rival of "Canned Music."

New York.—President Harding, who set a record for long-distance oratory on Armistice day by addressing simultaneously three great throngs of more than 100,000 persons, gathered at Arlington National cemetery, San Francisco and New York, may easily find himself talking to an audience running high into the millions and scattered through every state in the Union, before he leaves the White House.

Indeed, says R. W. King, one of the American Telephone and Telegraph company engineers, whose work on the loud-speaking device made possible the ushering in of a new epoch in space annihilation at the ceremonies over the bier of America's unknown soldier, it is well within the range of possibility that President Harding may see the day when a President can sit at ease in the White House and talk at once to every city, town and hamlet in the United States that is tapped by telephone wires. An audience of 50,000,000 perhaps! Or 100,000,000!

They don't even blink at figures like that—these telephone company engineers. For ability to look, unabashed, into the faces of a column of ciphers, marching in threes across great open white spaces, is one of the prerequisites even to thinking about that marvelous contrivance, the electrical amplifier, of which the loud-speaking device is only one in a long list of practical applications.

Sees Nation as Audience.

For instance, the electrical current that carried President Harding's funeral oration to the crowds at Arlington, San Francisco and New York was multiplied 3,000,000,000,000,000,000,000,000,000 times before it rolled out, converted into great sonorous sound waves, over the heads of three audiences.

It took 3,000,000,000,000,000 amplifications to convey the oration and the other ceremonies to San Francisco so that they could have been heard through an ordinary telephone receiver. Then they had to be amplified a million million times by the loud-speaking device.

A mere ten-million billions—10,000,000,000,000,000—of amplifications were necessary to bring the ceremonies out clear and strong in New York. Ten thousand were used to bring the ceremoines here, and a million million to raise them to audibility for the New York audience. The other million million amplifications were used to carry the President's voice to the Arlington crowd.

By providing a few more scores of thousands of miles of wire, some thousands of loud-speaking devices and a few foolscap sheets filled with tiny ciphers indicating more amplifications, the entire country might hear future public ceremonies, Mr. King said.

It would be relatively simple, he declared, to set up equipment in the capitals of the 48 states through which 150,000 persons in each city—a total of 7,200,000—could hear a ceremony in Washington or elsewhere as distinctly as if they were seated within a few yards of the speaker.

A Rival of "Canned" Music.

"Canned" music, too, faces a potential rival in the loud speaker. Telephone engineers say the Armistice day experiment proved that music could be reproduced over the wire circuits at least as purely as it is reproduced on the best phonograph records and that it will be a matter of but a few years when the last vestige of metallic ring will be eliminated.

Mr. King believes it will be but a short time, too, until all the principal public halls and large university auditoriums are equipped at least with local loud speakers. These, he pointed out, could easily be switched on long-distance circuits carrying public addresses and similar events from other cities.

While the loud-speaking device is a development of the last two years, the amplifier which made it posible has been in widespread use, piling up ciphers unseen on every long-distance telephone line in the country, since the transcontinental circuits were opened in 1915. A long-distance call from New York to San Francisco involves 400,000,000,000,000 amplifications. The number of amplifications necessary between any two points depends not only upon the distance but upon the nature of the circuit.

But the principle of the amplifier is not limited to telephonic use. It is a fundamental of radio and wire telegraphy, of radio telephoning, of all long-distance electrical signaling. It was the amplifier that picked up during the war the water vibrations caused by enemy submarines and translated them into sounds by which commanders of allied warships were able to locate the hidden foe.

GET STONE FOR HERO'S TOMB

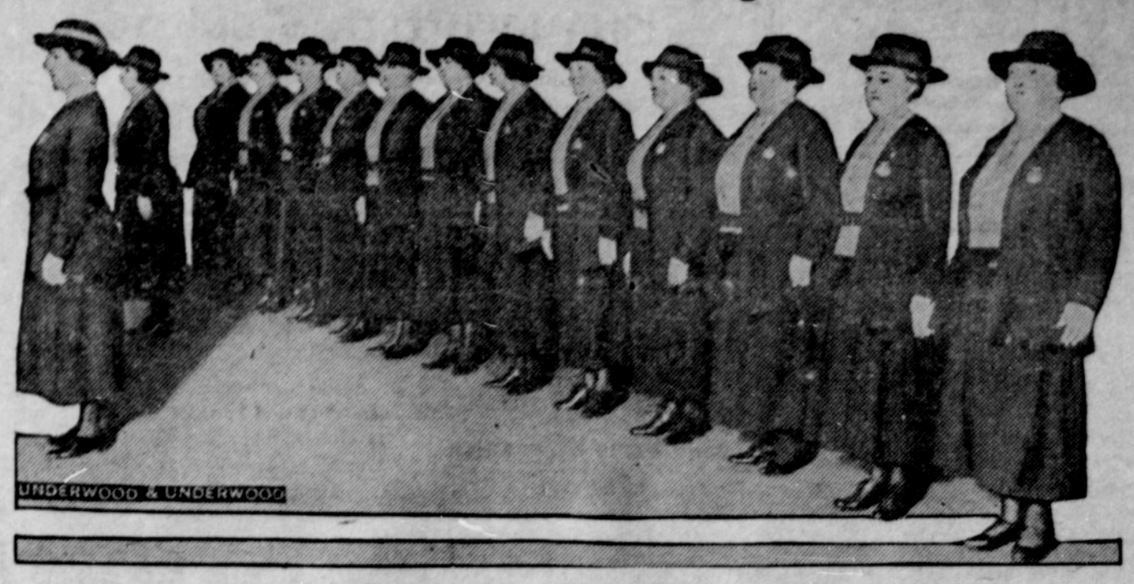
Canadians Pave Memorial Chamber With Marble From Battle Fields.

Ottawa, Can.—Stones gathered from every Canadian battle field in France and Belgium will pave the memorial chamber in which Canada's unknown soldier is to be entombed. Around the walls of the chamber will be a base of black marble, the gift of Belgium. Rising from this will be the columns of St. Anne's marble, also from Belgium. Between the columns will be walls of Savonniere stone, from France. In the chamber will be the altar of Great Britain carved from a solid block of marble.

COBLENZ TRAFFIC COP

Among the peaceful pursuits of the American soldiers in the army of occupation in Germany is that of directing traffic in Coblenz. This doughboy looks capable of handling the job.

New York Women Now Acting as Police



Because of the need of extra police in New York city during the milk wagon drivers' strike, 2,200 women were sworn in, given uniforms and placed on duty near the schools to direct traffic. Here is a squad of the "coppettes" receiving the day's orders.

Jobless Girls Storm New York

Lack of Work Fails to Retard Country Lass Seeking City Career.

SITUATION REALLY SERIOUS

Employment Bureaus Crowded With Women Who Have Been Thrown Out of Employment—War Work Brought Unrest.

New York.—The seriousness of the unemployment situation among women has apparently no terrors for the girl from upstate, the Middle West or the South, says Miss Amy Talbot of the Central Branch Y. W. C. A., according to the New York Sun. New York is the mecca toward which she turns her steps, confident that once here there will be jobs without number waiting her acceptance. Miss Talbot, who is head of the Rooms Registry Service, has noted little decrease in the number of applications for rooms received from out-of-town women seeking careers in the big city.

"As far as I have been able to discover," says Miss Talbot, "girls are not concerned with these reports of unemployment. Jobs seem of little importance compared with the fact that the young adventurer has reached New York. There is one difference. I find that now the demand is almost entirely for the $5 room, where it used to be that rooms were sought not so much for economy as for convenient locations.

Situation Is Serious.

"The situation is rapidly assuming serious proportions. Women, old and young, are now being laid off by firms which have employed them for long periods. Our employment bureaus are crowded with women who have been thrown out of employment, and yet every train that comes into our terminals brings its quota of newcomers—all of whom expect to be supplied with some means of earning their livelihood. Not an hour ago I talked with a girl who had just come in from upstate. Nothing I said in explanation of the seriousness of this problem that is confronting so many of our men and women today had any effect upon her. She has always wanted to come to New York; she had always had a good job, and she did not see why she should not find another one now. The idea that good positions are not floating around to be secured at will had evidently not entered her mind.

"We have daily to send back refusals to out-of-town applicants who would like to find rooming quarters in one of the Young Women's Christian association boarding houses. The waiting lists show there will be no vacancies for months. The pitiful part of it is that we have so many older women who are desperately in need of a place to stay, let alone the question of work to do. More and more women well past the thirty-year mark are being forced out by the stress of the times to earn their own bread and butter. They stand little chance of being met even half way—the competition is too strong for them, with these eager intelligent young minds ready to snatch up every good thing that comes along. Watch any line in an employment office and see how many of the women on it are gray-haired. There are few boarding houses and business women's clubs which will admit a woman to resident membership without considering her age most carefully. In many of these places thirty years marks the age limit. The reason that is given for this preference is that since there are not accommodations for all, it is felt that the younger woman is more in need of the protection afforded by these clubs.

War Work Brought Unrest.

"Undoubtedly, the wanderlust which brings the younger women from the security of their homes here to combat an almost hopeless situation is a phase of the unrest which followed hard upon the heels of the war. So many of our girls who until that time were content to stay quietly at home jumped into all the hundred and one activities that suddenly required the services of women. They found themselves necessary in a way they had never before dreamed of. They swung big jobs, small jobs, middle-sized jobs, with an efficiency that amazed them. Now they are not content to fold their hands.

"The younger generation has acquired a marked distaste for staying at home, where they may lead a normal life. They find they must be up and doing and in their minds New York is the only place for their activities. The question is, 'Where are the jobs for them?'"

Captains of the Fencing Teams

Col. Ronald Campbell and Maj[illegible]t, captains of the British and American teams now competing in Washington.

1921 Healthiest Year in History

Insurance Figures Indicate Marked Lowering of Death Rate in United States.

AUTO DEATHS UP 15 PER CENT

Records Show Suicides and Homicides Four Times Normal Rates—Influenza Almost Wiped Out—Decrease in Tuberculosis.

New York.—The year 1921 was the healthiest year in the history of both the United States and Canada, according to the records of 37 leading American insurance companies. The figures for the first ten months indicate a lowering of the death rate among policy holders from 9.80 per thousand last year to 8.24 per thousand in 1921.

Among the striking things shown by the figures, which cover 27,000,000 persons, are that influenza has almost disappeared from the United States and Canada, and that pneumonia has decreased 50 per cent from 1920. On the other hand, mortalities due to automobile accidents—"bacillus automobilis" it is referred to in the report—show a 15 per cent increase, with an indication of 10,000 deaths from this cause. Homicides and suicides also show large increases.

The figures were analyzed by Robert Lynn Cox at the annual convention of the Association of Life Insurance Presidents, held here last week.

"The 37 companies constituting these figures transact about 80 per cent of the life insurance business of the country," he said. "Combining both ordinary and industrial life insurance business, these 37 companies report that, while they experienced in the first ten months of 1920 deaths numbering 205,941, for the same period this year only 184,860 deaths have occurred. This shows a reduction of 21,081 in the actual number of their death losses this year."

Causes of Death.

The causes of death for the first ten months of 1921 with the corresponding period of 1920 are as follows:

	First Ten Months 1920	First Ten Months 1921
Influenza	14,941	1,730
Pneumonia (all forms)	22,243	13,708
Tuberculosis (all forms)	25,288	22,443
Other respirat'y diseases	3,489	2,732
Bright's disease	14,652	14,359
Puerperal state	3,429	3,125
Measles	1,148	492
Whooping cough	895	547
Meningitis (all forms)	881	782
Diarrhea and enteritis	2,392	2,327
Typhoid fever	1,328	*1,379
Cerebral hemorrhage	12,732	*12,838
Organic disease of heart	23,738	*24,415
External causes (excluding suicides, homicides and automobile accid'ts)	10,481	10,084
Miscellaneous	45,035	*47,403
	182,672	158,364
Causes of death showing an increase in the death rate:		
Cancer	14,604	15,865
Suicides	2,096	2,852
Homicides	1,052	1,322
Automobile accidents and injuries	2,311	2,624
Scarlet fever	651	942
Diphtheria	2,556	2,891
	23,269	26,496
G'd total (all causes)	205,941	184,860

*Though certain causes of death show increases in actual number of deaths for 1921 over 1920, the rate per thousand is, in fact, lower because of the increased number of lives at risk in 1921.

"We see at the outset that about 28 per cent of deaths during this year have been caused by diseases which under our present habits of life are pretty sure to continue at high ratios among the various causes of death," said Mr. Cox. "These diseases are cerebral hemorrhage, organic diseases of the heart and Bright's disease. In the main they are ailments of the more advanced years of life. Therefore we turn for hope to the other causes of death, constituting 72 per cent of the total.

"Though we learn that tuberculosis has caused the enormous total of 22,443 deaths, that is to say about one in nine of all deaths that have occurred in 1921, we have in mind for purposes of comparison the fact that no longer than ten years ago its ratio stood at one in four. Deaths from pneumonia, as reported in these tables, were only 13,708 in 1921, as compared with 22,243 in 1920, an actual reduction from this cause alone of 8,535 deaths, or nearly 40 per cent. If we take into consideration the greater number of lives at risk in 1921 we might say that pneumonia is only about one-half as serious a cause of death this year as it was last year. The most amazing factor in the health situation of the year is the almost complete disappearance of influenza as a cause of death. Only 1,730 deaths are reported for ten months of 1921, as against 14,941 for the corresponding period of 1920, which was not regarded as an epidemic year.

Increase in Suicides.

"But there are always some exceptions to be noted, and mention must now be made of certain causes of death that are showing increases over those of last year. Suicides and homicides amounting to 4,174, have increased by the number of 1,026, or about four times what the increase would have been had the rate per thousand of 1920 remained constant for 1921. This undoubtedly is a direct result of war reactions, business depression, unemployment and other phases of economic disturbance, and will largely cure itself as times improve.

"A matter of no small concern among the increasing causes of death is the steadily mounting mortality caused by automobiles and other motor-driven vehicles. The number of deaths in 1921 reported by the life insurance companies that furnished their figures for the compilation on which this paper is based was 2,624, which is an increase of nearly 15 per cent over 1920. We talk learnedly of bacteria and bacilli, but overlook the bacillus automobilus, whose presence behind the wheel of his juggernaut can be discovered without aid from the microscopes and whose homicides might be largely prevented by more effective policing of our congested highways. Our experience for ten months shows that 10,000 human lives will be brought to premature deaths in 1921 by motor-driven vehicles, at an economic loss to the world of at least $25,000,000.

"The death claims paid by the life insurance companies of the United States for the year 1920 amounted in round numbers to $350,000,000. Most of this was paid on insured men, women and children who died prematurely."

GETS A ROYAL WELCOME

Fleeing Eskimo Meets Danish King on High Seas and Is Given a Cigar.

London.—An amusing story of the king of Denmark's recent visit to Greenland was recently told by M. Aagaard of the Danish legation, to members of the Danish club in London.

As the royal yacht was approaching Greenland, a dark speck became visible on the open sea. It proved to be a solitary Eskimo in his little cayak (native canoe). The Eskimo came on board and his loyalty in having braved the perils of the sea in such a frail craft assured him, needless to say, the warmest of welcomes. The king presented him with a cigar and what the Eskimos most highly prize, a rifle.

On landing the king described the incident to the Danish commissioner in Greenland and asked him who the man was.

The commissioner in accents of horror, replied: "The man's an escaped convict. He broke prison, stole a canoe and put to sea. We thought he had been drowned."

ASK QUEEN ADMITTED TO BAR

London Templars Suggest She Be First Englishwoman Formally "Called."

London.—The interesting suggestion is being bruited about in the Temple that the honor of being the first woman to be "called" to the English bar should be proffered to the queen. The advocates of this course urge that the historic occasion on which a woman for the first time is admitted to the English bar would be observed in the most fitting manner if the queen would consent to stand as the pioneer in this great advance opened to the highest capacities of educated women. Two young women have already been admitted to the bar in Ireland.

Found Eating Wasp Nests.

Texarkana, Ark.—Eagerly eating wasp nests, a man who said he was John Zing was found the other day under a bridge near death from starvation. He said he had been unable to obtain sufficient food by begging. He was turned over to a charitable institution.

Rector Bans Short Skirts at Weddings

Rev. W. C. Robertson of Christ Episcopal church at Chattanooga, Tenn., has issued rules defining the length of skirts, and hints that any one violating the rules will not be permitted to take part in a church wedding ceremony. He asserts that no dress called technically an "evening dress" will be allowed.

Skirts must not be higher than where the spring of the calf of the leg begins, sleeves must not be shorter than above the elbow, and hats must be worn.

Lays Two Eggs Daily; One Just Shames Her

New York.—Wilton Green of Union Brick, N. J., near Belvidere, has a Plymouth Rock hen which, he says, lays two eggs a day, most days.

When she produces only a single egg she is so ashamed of her performance that she doesn't cackle, Green says.

Green says she has maintained the two-a-day speed since last spring, with few holidays.

The eggs, according to Green, are brown, well formed and of normal size.

Interesting Visitors From China

Mrs. G. T. Chao, wife of the director of the Chinese educational mission to the United States, with her two children, Merry May and Y. William Chao, photographed outside their hotel in Washington.