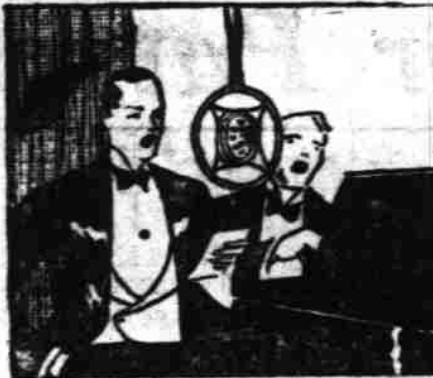


Enjoy the Radio Programs This Winter



RADIATION METHOD BASIS MODERN RADIO

Conduction System Discovered By Professor Steinhell About 1838

CHICAGO—(AP)—Radio, once known as "wireless," underwent a process of elimination before the present radiation method was adopted.

The conduction system was discovered by Professor Steinhell, a German inventor, in 1838. He stumbled upon it when experimenting with steel rails in an endeavor to substitute them for telegraph wires.

Steinhell next tried the telegraph solely through the earth. This experiment is said to be the first successful attempt to telegraph without wires, and fifty feet were covered.

S. B. Morse, inventor of wire telegraph and the telegraph code, followed up Steinhell's experiments and in 1844 transmitted messages across a canal 75 feet wide.

Professor Dolbear of Tufts college, Boston, in 1892 invented an induction transmission device. By this method an electrical influence exerted by a charged body or by a magnetic field is sent to neighboring bodies without wires.

The radiation method is used today in both broadcasting and commercial radio. It comprises a means of disturbing the ether so that a series of electrical waves are produced.

LISTEN IN

- SUNDAY MORNING**
 12:00-9:00—KXII (250). Sleep Wreckers
 8:30-9:15—KOW (492). Comic strip reading.
 9:00-11:00—KXII. Morning music.
 9:00-12:00—KWJJ (239). Courtesy concert.
 10:00-11:00—KWB (206). Music.
 10:30-12:00—KTBB (283). First Presbyterian church services.
 11:00-12:00—KOW. Services from Church of Our Father.
 11:00-12:00—KXII. First Methodist church service.
- SUNDAY AFTERNOON**
 12:00-1:00—KWJJ. Organ concert.
 12:30-2:00—KXII. Afternoon presentation.
 1:00-3:00—KTBB. Music.
 1:00-3:00—KWJJ. Studio programs.
 2:00-3:00—KXII. Special musical features.
 3:00-4:00—KOIN (319). Municipal concert.
 3:00-5:00—KOW. NBC programs.
 3:00-5:00—KTBB. Symphony orchestra.
 5:00-6:00—KXII. Evening presentations.
 5:00-6:00—KXII (240). Studio program.
 5:00-6:00—KTBB. Varied program.
 5:00-6:00—KOW. NBC programs.
- SUNDAY NIGHT**
 6:00-6:30—KOW (492). Music.
 6:00-6:30—KTBB (283). Salon orchestra.
 6:00-7:00—KOIN (319). Organ concert.
 6:00-7:30—KXII. Dinner concert.
 6:00-7:30—KEX. Dinner concert.
 6:30-7:30—KOW. NBC program.
 7:00-8:00—KOIN. Orchestra.
 7:30-8:00—KOW. Courtesy program.
 7:30-8:30—KEX. Mount Taber Presbyterian church service.
 7:30-9:00—KXII. Music and features.
 8:00-9:00—KXII. First Church of Christ, Scientist, services.
 8:00-9:00—KOW. Studio program.
 8:00-9:00—KEX. Studio program.
 9:00-10:00—KOIN. Musical comedy hour.
 9:00-10:00—KOW. Concert.
 9:00-10:00—KEX. Bible students.
 10:00-11:00—KOW. Symphony orchestra.
 NBC—3:30. "Judean Love Lyrics."
 3:30-4. orchestra and soloists; 4-4:30.

Marion County Child Health Work Fine Story

Demonstration Established in This Community Over Three Years Ago; Over 11,000 Inspections Made and 10,000 Health Examinations

Over three years have passed since Marion county requested the Commonwealth Fund of New York City to consider its bid for the establishment of a Child Health Demonstration in its midst.

These three years contain a big story. They mean the giving of over 10,000 health examinations to the children of Marion county.



Dr. William De Kline, Director

they mean the making of 11,742 inspections of school children to prevent the spread of communicable diseases and promote health; they mean the protecting of over 3,000 children against diphtheria; they mean the protecting of about 2,000 children against smallpox; they mean that Marion county's 10,000 school children have been thinking and living health every day; they mean that every baby, every boy, and every girl in Marion county has had the biggest opportunity for health west of the Rocky mountains.

During 1927 alone over 5,700 health examinations have been given Marion county's children, and over 13,000 visits have been made by public health nurses in the interest of the health of Marion county's people.

All this happened because a family in the eastern part of the United States decided, several years ago, that the greatest good their wealth might accomplish lay in serving the children of America.

From the Concert Platform: 4:30. "Great Moments of History"; 6:30. Symphony hour. KPO—San Francisco (423). 6:30. NBC; 7:30. organ; 8:30-9. orchestra. KTON—Long Beach (242). 6. orchestra; 7. Pakimo twins; 7:45. church service; 8-13 all stars. KPOA—Seattle (447). 6.30. NBC. KPI—Los Angeles (468). 6.30. NBC; 7:30. Solo Killers; 8. Aeolian organ; 9. 10. orchestra. KGO—Oakland (384). 6.30. NBC; 7:35. church service; 9. orchestra. KHQ—Spokane (370). 6.30. NBC; 7:30. church service; 9. Bible students. KTB—Oakland (580). 7:45. church service. KOMO—Seattle (306). 6.30. NBC; 7:30. music; 8. church service; 9. health KJR—Seattle (48). 6. sports; 6:30. concert; 7:30. 9. vocal; 10-12. dance or orchestra. KPWC—San Francisco (454). 6. talk; 6:30-8:30. orchestra; 8:30-12. dance orchestra. KPWS—Los Angeles (361). 7:50. music; 8. light opera; 9. news; 9:10. song; and orchestra. KPWW—Los Angeles (275). 6:30-9:30. revival service, Aimee Semple McPherson; 10. organ. KIIJ—Los Angeles (416). 6. concert; 6:45. news; 7. church service; 8:10. concert orchestra and vocalists.

demonstrations in the United States. Their purpose was to work out the best methods possible for protecting and promoting the health of the children of a community, methods that would be effective, simple, and as inexpensive as possible, and to bring to the public the important discoveries of modern science, which if generally applied would benefit society.

Marion county's was the last Demonstration to be established. Of the other three, one is in Athens, Georgia, one in Rutherford county, Tennessee, and the third, which has just been taken over by the local community, is in Fargo, North Dakota.

Marion county's highly developed agriculture, its steadily growing industries, ranging from lumbering to linen manufacturing, its problem of migratory labor, its excellent educational facilities, all give it a decided personality, and necessitate the working out of a slightly different program from that of the other three communities.

The Little Japanese mother at Lake Labish who begs the public health nurse, who has just helped little Mexican mother at Detroit, wife of a section hand, who brings her well-nigh perfect small son to clinic "to keep him so"; and the lovely baby of a banker in a small community, coming regularly to clinic for a "health checking"; tell the story of the diversity of folk found in Marion county's 1,193 square miles, and also intimate the complexity of the process of teaching health to Marion county's children.

As child health necessitates to bring her we daughter into the world, to give the baby "a nice, short American name"; the community health, 13 of Marion county's communities have organized a health council during the

last three years to better avail themselves of every service of the Demonstration. They are: Aurora (Butterfield, Donald, White), Gervais, Hubbard, Jefferson (Marion, Sidney, Talbot), Mill City (Gates and Detroit), Mt. Angel, Salem, Silvertown, Scott Hills, Stayton, Woodburn, Red Hills, North and East. Each of these 13 health councils have provided and are maintaining their own Health Center, where the children may come to receive a health examination from the physician and dentist, and receive inspection of information and advice from the nurse.

The health centers are organized and kept running entirely by volunteer workers—interested men and women of the community. It is estimated that about 200 hours of volunteer service for health are given each month by the citizens of Marion county. Without it the success of the work of the regular staff of the Child Health Demonstration would be almost impossible.

The volunteer performs a real and needed service for the pediatrician (or child specialist), who makes the medical examination of babies and children at the clinics; for the dentist who examines the children's teeth; for the nurse who serves the child through the home, the school, the family physician, and the family dentist, and who is really the connecting link between these, helping each to serve the child more effectively; the volunteer serves the health officer who conducts clinics offering protection against diphtheria and smallpox, in addition to his countless other jobs of controlling communicable disease, guarding the milk and food supplies, and safeguarding the public's health in every way possible.

There are other members of the Demonstration staff not served directly by the volunteers, but benefited indirectly by the services. The Director of Health Education works under the direction of the county and city superintendents of schools to help the teacher in her health program in the classroom. A statistician is continually recording, checking, and interpreting the findings of the other members of the staff, who work in the field.

The activities of the Demonstration were begun with only the director, then Dr. Walter H. Brown, and his stenographer, one January day, in 1925. June of that year found a fairly complete staff, and the work well under way.

March of the next year witnessed the establishment of a full time county health unit, with the director of the Demonstration ap-

pointed health officer, and a full time deputy health officer secured to devote his entire energies to the health of Marion county. This replaced the old arrangement of a part time health officer for the city, one for the county, and one for the Salem schools.

"In unity there is strength," and the results achieved by the County Health Unit since its formation demonstrated this. A concentrated campaign has been waged against diphtheria, in cooperation with a committee of physicians over the county. The following table shows the death and case rate for diphtheria since 1928 (the County Health Unit was established in 1926):

Deaths:	Cases:
1923 20	1923 250
1924 17	1924 266
1925 18	1925 169
1926 8	1926 94
1927 1	1927 44

(approx.)

A Salem citizen stated recently that in his opinion the cut in diphtheria cases and death was a sufficient justification for the existence of the Marion County Health Unit. Dr. Vernon A. Douglas, Deputy Health Officer, states, however, that a community can not feel free from danger of deaths occurring from diphtheria until 90 per cent to 70 per cent of its children have received toxin antitoxin. Marion county has only about 40 per cent of its children immunized as yet.

In April of the same year in which the County Health Unit was established (1926), the Oregon Board of Dental Examiners entered into a cooperative agreement with the Commonwealth Fund to establish a Dental Unit which would work out the best methods for developing a program in public health dentistry in a community. After a year of experimentation in Marion county, the Unit has reached a stage where extension service into other communities is now feasible. In November, 1927, the first real piece of extension service was begun in Jackson county, by Dr. Estill L. Brunk, full time dentist for the Unit.

Both the medical and dental program have received the closest kind of cooperation from the medical and dental groups of Marion county. A dental advisory committee, appointed from the Marion-Polk-Yamhill District Dental Society, and a medical advisory committee, appointed from the Marion-Polk-Yamhill Medical Society, pass on every dental and medical procedure before it goes into effect.

This cooperation extends even farther. A report of the health examination given a child at a

clinic is sent to the family physician, whom the nurse goes to for instruction before following up the child's examination with a home visit. The family dentist receives a written report of Dr. Brunk's findings. The parents of the child also receive a written report of every examination.

In addition to the establishment of the County Health Unit and the Dental Unit, the past three years have proved a steady growth for all the services of the Demonstration. While the resignation of Dr. Brown as director in November, 1927 was a matter of real regret, it did not interfere with the routine and development of the program. The Demonstration was fortunate to secure the services of Dr. William DeKline as Dr. Brown's successor. Dr. DeKline came to Marion county with a wide background of experience in the public health field, and with several years experience as director of similar demonstrations.

The Demonstration is now entering its fourth year. The end of the following year (1929) will witness the withdrawal of the Commonwealth Fund from Marion county. It is hoped that the value of a general health program will have been thoroughly demonstrated by the end of the fifth year, and that a health unit, manned with an adequate staff to safely guard and promote Marion county's health will have become a permanent and indispensable part of the county's organization.

Large Area Covered By Flood Areas, Wyoming

PINEDALE, Wyo., Dec. 31.—(AP)—Moving slowly over ground covered in some places with six inches of snow, flood waters which yesterday escaped from the North Fork dam in northwestern Wyoming today had reached the junction of the Green river of Big Piney. The waters took out a bridge near Boulder, Wyo., today south-east of here and had spread over a mile wide level meadow land between Pinedale and Cora. The water had inundated a number of ranch houses in its path.

ruined hay and other feed and drowned an unestimated number of cattle, but no lives were lost of cattle and none of the ranchers are in danger. The water traveled about twenty miles south of the dam. Further progress of the flood waters was being halted tonight by freezing temperatures which slowly is turning the water into ice over a layer of snow. This condition is expected to work a severe hardship on the ranchers

who depend to a large extent upon the range land as a winter feeding ground for their herds.

BROKEN NECK FATAL. RAYMOND, Wash., Dec. 31.—(AP)—Charles Henderson of Raymond died from a broken neck and Elwood Scholts of Raymond was injured seriously today when the motorcycle they were riding crashed into a wood truck at Lebam, 15 miles east of Raymond.

BEN-HUR

RADIO SATISFACTION

WITH Zenith or Crosley

SEE RADIO HEADQUARTERS Exclusively Radio

175 So. High Telephone 1161

An Old-fashioned CHALLENGE to Combat

Time and again, Zenith has published this unwavering challenge to the world of radio:

"Under identical circumstances and conditions, and taking our various models in their proper grade, we challenge any make of radio receiver to equal or surpass Zenith performance in quality or quantity of tones, selectivity, sensitivity, distance; ease of operation; precision of manufacture and general all around performance."

The challenge stands today as it has stood from the beginning—so long as Zenith makes radio it will be the best radio.

Zenith is the only radio set that McMillan would take to the Arctic. Zenith is the holder of the world's long distance record—Japan to New Jersey.

ZENITH RADIO

LONG DISTANCE RADIO

16 Models—3 different circuits—6, 8 and 10 Tubes—Loop, antenna or antennaless, Battery or Electric—\$100 to \$2500.

Zenith has been first in most of the important developments in radio—25 original mechanical and electrical achievements that have revolutionized radio. That is why Zenith is the most logical choice in radio.

"The Quality goes in before the Name goes on"

Salem Music Co. 355 N. HIGH STREET—PHONE 734 L. LUNSFORD, Manager

Happy New Year!

Perry's Drug Store

118 S. Commercial St. SALEM OREGON

SPARTON USES NO BATTERIES

SMOOTH as velvet; rich as a rare old violin. Sparton users never cease to marvel at the true, clear quality of Sparton reception—the unalloyed purity of its tone.

Visit us. Hear the marvelous Sparton Electric—No Batteries

SPARTON RADIO

"The Pathfinder of the Air"

W.L. Stiff Furniture Co.

COMPLETE HOUSE FURNISHERS

Easy Terms No Interest