

RADIO

New Device Takes Advertising Out of Radio Programs

Talk Eliminator, Similar to Automatic Volume Control, Depends for Operation on Pauses in Human Speech

A DEVICE that automatically takes the talk, including advertising, out of radio programs has been developed by Prof. Gleason W. Kenrick, of Tufts College, Mass., who demonstrated this radio talk eliminator to the American Association for the Advancement of Science.

Seemingly endowed with intelligence and discrimination, this robot radio censor looks like a supplementary radio set that is hooked up with a conventional radio broadcast receiver. Actually, the talk eliminator works automatically and utilizes a combination of electrical devices which result in the impartial suppression of all talk and announcements, along with advertising "plugging," that some radio listeners find objectionable.

The radio talk eliminator hook-up is such that whenever there is a quarter of a second silence in the program, the radio set is silent for ten seconds. When a speaker stops for breath, his momentary silence, detected by the talk eliminator, in turn silences the radio to his message for ten seconds. The detecting "brain" in the talk eliminator is a detector amplifier similar to the automatic volume control devices now commercially incorporated in radio sets. Whenever the current in the "brain" tube drops to zero for the predetermined fraction of a second, a selective relay comes into action that silences the radio for a predetermined length of time.

Ten-Second Omissions

Prof. Kenrick has found that setting the talk-hating robot for ten seconds of silence is an effective antidote for most radio chatter. A very fast talker, like Floyd Gibbons, can beat the eliminator which can not silence him until he stops for breath. Music, which is usually continuous, passes inspection by the censor robot except in the rare instances when there are dramatic pauses as there often are in symphonic compositions.

Radio broadcasting stations will be able to counteract the use of the talk

eliminator, if many listeners equip their sets with them, by supplying a musical background to all announcements and advertising speeches. But if the talk eliminator is thus thwarted, Prof. Kenrick promises to improve it by adding some sound filters which will have the ability to differentiate between musical sounds and the sound of the human voice.

Science News Letter, January 6, 1934

PHYSIOLOGY

Blood, Not Nerves, Carries Tetanus Poison to Brain

"LOCKJAW" poison is carried to the brain and spinal cord by the blood, members of the American Association were told by the retiring president of the Association, Dr. John Jacob Abel, emeritus professor of pharmacology at the Johns Hopkins Medical School and now director of the laboratory of endocrine research at the same institution.

This conclusion, which is contrary to the now widely held belief that this poison is carried to the brain by the nerves themselves, was reached as a result of studies carried out during the past year by Dr. Abel and his associates.

"A boy with 'lockjaw' is as truly poisoned as if he had been bitten by a rattlesnake," Dr. Abel said in describing this frightful disease.

The disease occurs as a result of infection with a germ called the bacillus tetani. It is fortunately one of the rarer diseases of man, Dr. Abel pointed out, but it appears more frequently during time of war and on such occasions as Fourth of July celebrations.

The tetanus toxin or poison, which is the true cause of the disease, appears during the growth of the bacilli in an infected wound or cut. Nothing whatever is known of the chemical nature of the poison. When it reaches certain cells of the brain and spinal cord it induces generalized convulsions of the most violent nature. Only the poison of the botulinus organism is stronger than tetanus poison.

Dr. Abel described briefly the scientific experiments which led to his conclusion that this extremely potent poison is carried to the brain and spinal cord by the blood rather than by the nerves.

Science News Letter, January 6, 1934

PLANT PATHOLOGY

Copper Cures Sickness of Florida Orange Trees

COPPER, used with success in the treatment of certain types of anemia in animals and men, has been used to cure a lack of the green coloring matter, chlorophyll, in plants. At the meeting of the Botanical Society of America, Prof. W. E. Burge of the University of Illinois told of experiments with copper sulphate on "frenched" orange trees, whose leaves were spotted yellow.

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