

Radio

Elimination of Static on Radio

Device to End Man-Made Interference Announced; Silencer Shuts Off Interfering Noise-Waves; Nature's Pranks on Wane

In the early days of radio nothing came through the earphones so well as static. To-day static is no problem at all to the average radio listener.

The static of the early days came more from the sets themselves than from atmospheric conditions. With the perfection of receiving sets much of it has been eliminated.

"Ever since Marconi rigged up his wireless set, static has been the great enemy against which all radio men have struggled," George Morse wrote in an article, "Staticless Radio," in *Today*. "The ogre takes two forms. One is caused by electrical gadgets, such as refrigerators and vacuum cleaners, and by building elevators, trolleys, etc. The other is caused by nature and is something over which engineers have no control."

While natural static has been on the wane, man-made interference has been increasing by leaps and bounds.

Last week James J. Lamb, technical editor of *QST*, the publication of the American Radio Relay League, an organization of radio engineers and amateurs, announced the perfection of a device to cut down man-made interference and static in radio receiving sets.

Barrage Silenced

In showing the effectiveness of the silencer Mr. Lamb started a spark-plug tester a short distance away from the receiver. With the silencer out of play the sound resembled a machine-gun in action. When the silencer was switched on, the noise from the loud-speaker decreased as the strength of the noise within the receiver was increased.

On an oscillograph, where the cathode ray was portraying the sound in its green light, the jagged edges of the noise-waves were eliminated and the rhythmic sound-waves of the musical selection being received were shown.

"This is no radical presto change," Mr. Lamb explained to *THE LITERARY DIGEST*. "It is merely a natural step in the course of the development of the radio art."

Tho the device was developed primarily for amateur communication, it may prove

extremely useful to the average listener in home and automobile receiving sets. It will be particularly useful for the short waves and in localities where there is constant man-made interference.

The apparatus can be added to a set already in operation.

"It seems to be a sincere and competent attack on a very real problem," said John V. L. Hogan, consulting radio engineer, inventor of radio devices and ex-President of the Fellow Institute of Radio Engineers.

Wired Radio on Tap at Home

Probably you've heard of wired radio, and probably you are not quite sure what it is. In *Radio Mirror*, this month, Norton Russell explains it:

"Wired radio, in brief, is the following: For a certain monthly sum, you will have on tap in your home, eighteen hours a day, a continuous flow of three types of music of which you take your choice. It will come through a brand new loud-speaker, and at no time will it be interrupted by announcements of any kind.

"In Cleveland, Ohio, a goodly portion of that city already has been equipped with the necessary apparatus, and, for some time, music . . . has been flooding steadily into these homes, and two of the country's largest businesses are connected with this vast enterprise—the telephone companies and the electric light companies.

Monthly Charge

"It's up to you, the listening public, whether such a scheme of broadcasting will ever be a public institution of a sort. For, in place of sponsors who advertise their wares on the air, there will be the monthly sum charged to each and every one who uses this new plan.

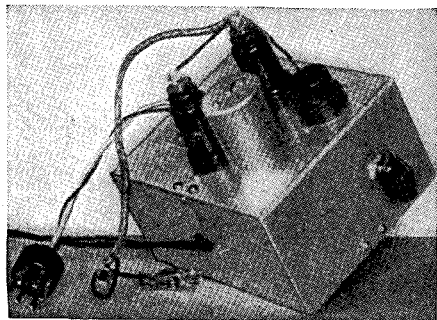
"The sum? For smaller, more inexpensive types of loud-speakers, six cents a day, or roughly, two dollars a month. For the larger, easier-to-look-at speakers, fifteen cents a day, or \$4.50 a month. . . . The equipment you rent from the company as you rent a phone now.

"You can have jazz-music. . . . Or you can have the Victor Herbert type of music—you know, the kind you get in your local tea-room, only better. Or third, you can have the semiclassical, the light Sunday evening music. . . .

" . . . All this music will be electrical recordings. . . .

"It is only for those times when you want pure, unblemished music that you will press wired radio into service. . . .

"It doesn't ask, nor does it hope, that you will listen and do nothing else. You might far too soon sicken of unadulterated music. That's why it won't compete with radio under its present set-up."



Courtesy of *QST* Magazine

Click-silencer: James J. Lamb's invention



Just a few days difference between these oils

IF YOU FOUND me putting this black, tarry, dirty-looking substance in your car, and charging you for oiling service, you'd never come to this place again.

And yet the really fine oil you are getting is exactly the same as this sample . . . after eleven days of steady driving, without the protection of a good oil filter.

You can't keep dirt and grit and fine metal particles and hard carbon out of your crankcase. But a GENUINE PUROLATOR OIL FILTER takes them out of the oil stream as it circulates . . . Keeps them from forming a destructive sludge that grinds away at cylinder walls and valves and bearings . . . keeps the oil so clean it retains its color after many thousand miles of driving . . . and if the maker of your car thought enough of his engine to give it this protection, it is certainly up to you to keep it in service.

That is simple and inexpensive. After about 8000 miles of driving the Purolator is so full of this destructive sludge it will hold no more. Ask your garage man to put on another GENUINE Purolator. He'll do it in a very few minutes. Motor Improvements, Inc., 365 Frelinghuysen Avenue, Newark, New Jersey.

*After 8000 miles of driving
renew your*

PUROLATOR

The Oil Filter on Your Motor Car

Thrills With a Broom

Scottish Game of Curling (on Ice) Beginning to Sweep United States; International Matches to Be Played Next Week

For years billiards, bowling, and horse-shoe-pitching have been played by millions of Americans. Yet few Americans know anything at all about a game played on ice that combines the principles of all three with some peculiar to itself.

Curling, which has been played in Scotland for more than 300 years, is attracting interest in the United States for two major reasons: the rapid growth of winter sports in the last few years and the need for a winter sport that would help pull golf and country clubs out of the red into which the depression plunged them.

International Matches

Next week (February 8) the most important international curling matches held on the North American continent will be played between Canada and the United States at Utica, New York.

"In a nutshell," John English wrote in the *Boston Herald* last week, "curling is played on a long, ice-covered rink by teams of four, usually. One member is the skip (or captain)."

"Each member curls (so described because the stone is thrown with a twisting motion to give it a curved course) toward a 'button' at the far end of the rink. The skip's job is to direct the throw so that the stone either will knock away the opponent's which is close to the button, or guard a team-mate's stone.

Scoring System

"Every stone of one team which is nearer the button than the nearest stone of the opposition counts one point. When all eight stones have been cast in one direction, that constitutes an end and the curlers then draw back. There are fourteen ends in a match and they usually require two and a half hours to complete.

"Brooms are used when a sliding stone is curving too much. Then the players sweep the ice before it so that it will gather speed and not curve too much. Because of variations in the ice surface, no stone will take an absolutely straight course and therefore the curved shot is better controlled."

Art of Sweeping

David Goodman described the art of sweeping in *Leisure*: "The most picturesque feature of the game is the way in which the players who are not curling at the moment run ahead of the stones as they are thrown and sweep off the ring . . . Sweeping is difficult because it has to be done quickly, while running on ice. Experienced players claim it takes a whole year or more of playing to learn how to sweep effectively."

The granite from which the forty-pound stones are made is quarried from deposits beneath the ocean and on river

bottoms. The only granite hard enough to stand the strain of curling is quarried in Scotland. The stones shaped like flattened balls, slide along the rim of a cup hollowed out in the bottom of the stone. Handles on the stones enable players to lift and turn them so that they will curl.

Players heave the stones toward a series of concentric circles at the opposite end of the rink. The largest circle is seven feet in diameter and a player must curl his stone within twenty-one feet of the circles or it doesn't count. Stones curled beyond the circles don't count, either. It takes considerable practise to get the knack of hitting an opponent's stone out of the ring and getting one's own stone inside at the same time.

The skip directs the shots made by the other members of the team and also the sweeping. While the number one man of one side shoots, numbers two and three sweep. Then the opposing team does the same. Then the number two man of the first team shoots and numbers one and three sweep. Then number three shoots and one and two sweep. Finally the skip shoots with numbers one and two sweeping and three acting as temporary skip.

Picture of Thrills

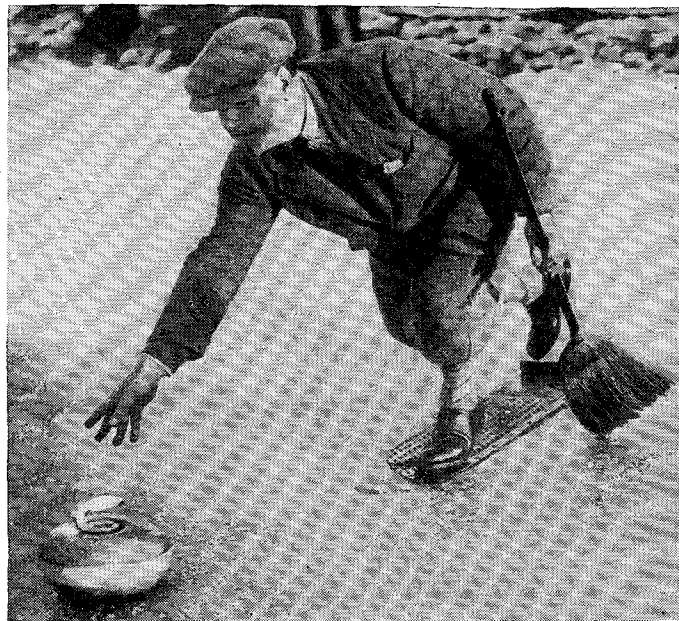
C. Campbell Patterson, Jr., president of the Grand National Curling Club of America, the governing body in this country, describes the thrills in curling in the current issue of *Sports Illustrated and the American Golfer*:

"If you have ever made an out-turn with just the right amount of weight and curve to lay the shot, if you have ever been told to lay a guard and placed your stone exactly where it should be, if you have ever drawn the 'port' with but an inch to spare, if you have ever made the wick you were asked to try, if you have ever put down a 'thunderin' cast' that has cleared the house of all opposing stones and heard the praises of your skip and the shrieks of delight from your team-mates and the groans of anguish from your opponents, you have experienced the thrill that comes once in a lifetime.

"If, on the other hand, you have ever been called upon to give an in-turn and have played an out-turn and hit the boards,

if you have ever been told to lay a guard and you 'hogged' your stone and have driven it through the house and given the opponent the shot, you will know how the proverbial whipped cur feels. . . ."

In Scotland, there are more than a thousand curling clubs to-day. The game is supposed to have been introduced into Canada in 1807 with the founding of the Royal Montreal Curling Club, and to have dribbled across the border into this country in the 1820s.



Underwood

Curling is no effete sport, as forty pounds of granite must be controlled

Two of the earliest curling clubs in the United States were founded in Pontiac, Michigan, and in Boston. Others have been formed in Philadelphia, New York, Detroit, Utica, Schenectady, Saranac Lake and in many other cities across the northern stretch of the country. Formerly dependent on natural ice which is not smooth enough for first-class curling, the game has grown rapidly with the increased use of artificial rinks.

The international parent body is the Royal Caledonia Curling Club of Edinburgh. Men from eighteen to eighty play the game. Women, who have learned to play at winter resorts, use a lighter stone. The stones cost from \$35 to \$45 apiece and artificial rinks with shelter have been erected at a cost varying from \$5,000 to \$30,000.

Lady Bowler

Rolling 300 in bowling—the perfect score—may be compared to scoring a hole in one in golf. Few women bowlers can do it, altho almost a million women bowl in this country.

Mrs. Floretta Doty McCutcheon has rolled 300 nine times.

Chubby, gray-haired, and quiet-spoken, she probably merits her superlative billing as "the world's greatest woman bowler." Last week, the forty-eight-year-old matron, who bounced into her bowling career in