

TELEPHONING ROUND THE EMPIRE

Amazing Achievement of Wireless is near to Accomplishment. London and Overseas Dominions to Converse.

"Hello, Australia! Are you there?"
 "Yes—Bruce speaking."
 "This is Baldwin. I've just been talking to Canada and South Africa. They're agreeable to meeting with us in London four weeks from today to discuss New Zealand's inter-empire air and steamships proposal. Will that suit you?"
 "We'll come: probably by air."
 "Right. Keeping well?"
 "In the pink."
 "So long."
 "Happy days."

And Premier Baldwin of Britain and Premier Bruce of Australia, sitting in their offices in their respective capitals, turn from their wireless telephones to take up new tasks of government.

Imaginary! For the moment yes; but Marconi and other wireless experts are authority for the assurance that it will be an actuality in a comparatively short time. Not only so but they declare that such conversations may be as private as the parties concerned desire to make them. That stage of efficiency would solve many problems for Britain and the Empire. Its attainment is regarded by leaders in the world of radio as absolutely beyond question. People who pick up on their home radios concerts, addresses, and plays from points a thousand miles and more away, have no doubts about it, either. It is not a far step from present accomplishment to the day when the listener and the sender may shut out all that they do not care to hear, and bar those who want to hear them but who should not.

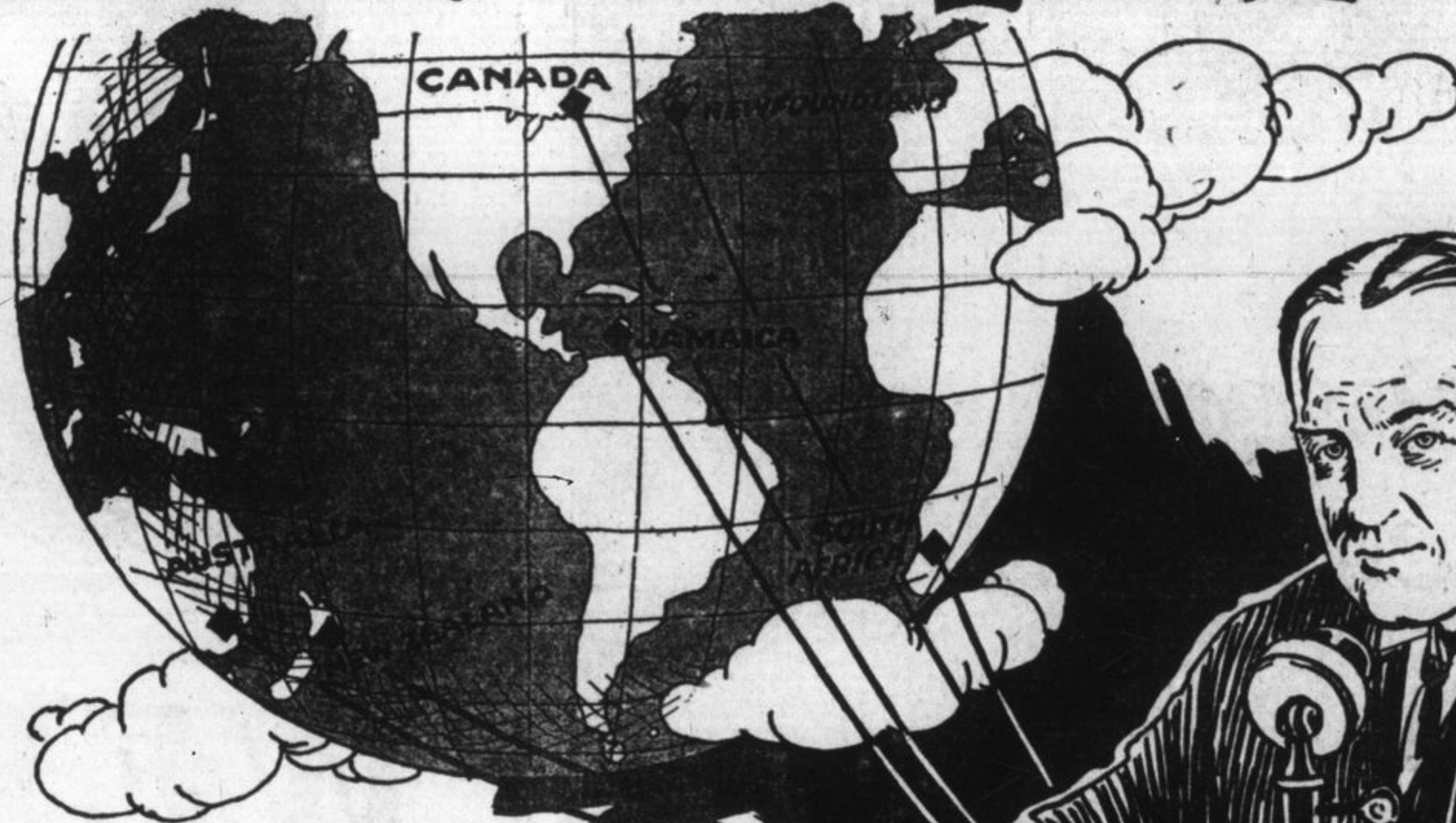
Beam transmission is the answer to the thousand and one queries that such assertions are bound to cause, especially among those who are not radio or wireless devotees. Perhaps the best explanation from the layman's point of view, is that given by a London, England, newspaper, in these words: "It is possible to direct a beam of electrical energy along a selected path, instead of having to broadcast it

simultaneously in every direction, as has hitherto been the case. There is thus removed the danger of the clashing of one set of waves with another, and there can be no tapping of messages outside the direct path of the beam. It means greater secrecy, higher efficiency and lower cost."

Difference in Cost
 The cost of a beam station in fact is given as one tenth that of the ordinary high power wireless station, hitherto considered so essential for long distance transmission. When the British government's new high power station at Rugby, England, was decided upon, the estimated cost was \$2,500,000 in our money. The difference in the cost and the prospective improved efficiency has given a great impetus to the projected wireless chain of the British Empire, already well under way. The Baldwin government will carry on the arrangements made by the late Labor cabinet, extending the combined state and privately owned wireless system which links the Empire. And wherever wireless is operative there wireless telephony is possible.

Several amateur wireless operators in England and New Zealand have picked up one another and have recorded their successes and the messages received, with the authorities.

Canadian amateurs, including many in the West, have within the last few weeks listened in on concerts given by bands, instrumentalists and vocalists in many parts of England and France. Much has already been accomplished by Britain in respect to wireless communication as a matter of fact. That oft-times criticized and some times despised institution, the British Post Office, in which as many people know operates the telegraphs in the old land, administers wireless services which reach Central and Eastern Europe, Egypt, Canada and India. These are in addition to a coastal system in Britain itself, and a special service for the mercantile marine. They do not embrace the privately



When Downing Street talks to the Empire by telephone.

owned services which reach many countries, including Australia, and the highly efficient separate services of the army, the navy, and the air forces.

To Link the Empire

What is now being brought to completion, with the aid of the overseas Dominions and private enterprise, is the extension and coordination of the wireless systems so as to form an absolutely perfect chain around the Empire. Independence of any foreign capital, operation or interest of any kind is assured. In this linking of the nations, colonies, and dependencies within the Empire, Canada will have at least one and perhaps two "beam" stations, in addition to the ordinary wireless stations existent or contemplated. An illustration of the beam station idea is given in the announcement from Ottawa that the re-assignment of waves to radio broadcasting stations in Canada and the United States is nearing completion. The government of each country is carrying on its own work on a basis which is really co-operation, the idea being to arrange the wave lengths so as to avoid con-

flicts between the stations on the opposite of the line. Of course every station in the two countries cannot be assigned a wave length and many will have to double up or "share time." Talk about dividing the atmosphere!

Two or three years ago experimenters in Canada conversed by wireless telephony over a distance of 1,100 miles. Some who were present or who read of these experiments recalled that Canadians were introduced to the possibilities of wireless, both for telegraphing and telephoning, in the battle of Passchendaele during the World War, and employed it to a still wider extent in the glorious days from Amiens on, when almost every hour witnessed a new advance and a fresh victory. To-day radiotelegraph stations are familiar in many parts of this country. From the Atlantic to the Pacific there are stations built or projected by government or private companies and individuals, and many of these are wireless or radiotelegraph stations. In the aid of the mercantile marine on the lakes as well as the sea coasts, and in keeping touch with the police stations, explorers, and

surveyors in the outposts of civilization, these services have been a boon and convenience of incalculable value. From Atlantic to Pacific Canada is using wireless, and Canadians are becoming more familiar with the idea that the world is becoming less of a mystery and more of a family, as man's genius makes new conquests of distance and time. Some one may object that wireless messages are "old stuff," and ask pertinent questionings about 'phoning round the Empire. It is on the way. Who would have imagined a few years ago that millions could have heard without seeing the speakers, the speeches delivered by various candidates in the British and United States elections?

Imperial Conferences

It is however in its Imperial aspect, that the Dominions are more keenly interested in the development of wireless. The agitation for changes in the functions of the Colonial Office, due to the growing importance of overseas Dominions influence in Imperial foreign policies, is significant of an evolution that means much for the Empire. Force of circumstances have brought Britain and the Dominions in still closer and warmer relationship than any one could have foreseen even in the World War days. Now we have Viscount Grey echoing some of the frank criticisms by British

newspapers, of that same Colonial Office, and its place in Empire building. These signs that Britain and her sister nations are preparing for changes in respect to Empire consultation and action, are significant. The proposed Imperial conference of last October was postponed for a variety of reasons, and a great deal of voluminous correspondence was then and has since been exchanged to temporarily deal with some of the subjects that would have been settled there. A new conference is in the making and will not long be delayed. What an advantage an Empire telephone system would be in making the preliminary arrangements for such a gathering.

GAS AS A UNIVERSAL MEDIUM FOR GENERAL DOMESTIC PURPOSES

Fuel conditions the last few years have been such as to encourage the use of substitutes for coal for both heating and cooking.

While we admit great advances have been made by electrically operated devices, the old reliable "GAS FOR COOKING" has more than held its own.

Let us enumerate some good reasons for furthering the use of GAS for general domestic purposes:

THE COST is reasonable.

GAS is always available at a moment's notice.

Gas for cooking is easily controlled, and unlike any other fuel, can be readily adjusted.

As regards HEAT, it is easily and immediately applied to the work.

There is NO ADDITIONAL EXPENSE entailed through ash or waste material, and you have no worry as to storage.

IF YOU CONTEMPLATE ANY EXTENSIONS OR INSTALLATIONS, ANY INFORMATION YOU MAY REQUIRE WILL BE GLADLY FURNISHED BY A TELEPHONE CALL TO, OR A PERSONAL INTERVIEW AT, THE OFFICE OF THE WORKS, QUEEN STREET.

R. N. F. McFARLANE, Chairman

C. C. FOLGER, Gen. Mgr.