I think belonging to newspapers, have been licensed to transmit facsimile experimentally on their regular sound frequencies during the off-night hours. I have been describing the result of the transmission of facsimile as a newspaper.

I think perhaps that is not quite a correct description.

Again, unlike television, the costs involved in facsimile are quite moderate. Naturally, at this stage, there is no precise information as to costs. The figure which is mentioned for the facsimile scanner, required for the transmitter, is in the order of \$3,000 to \$4,000 per unit, although one of the inventors whom I met in New York told me they were saleable at the present time for \$1,500. The facsimile receiving attachment for ordinary radio sets ranges from \$25 to \$250, depending on the type of system used. At the present time I believe they are selling in the United States largely by way of novelty at about \$75. I learned when I was there that the Crossley Radio Corporation were manufacturing some hundreds of thousands of sets which would sell at a figure considerably less. So far as the problem of costs is concerned, although the present estimate of annual upkeep is about \$120, facsimile would appear, at least from the broadcasting point of view and from a limited receiving point of view, to be a practical and imminent development.

In the United States at present, there are at least three facsimile systems

which have been developed for broadcast use:-

The Young system (RCA).

The Hogan system.

The Finch system.

These three systems, as far as can be learned, are essentially the same in principles of operation, their patentable differences being related mostly to details. Certain mechanical features, however, make considerable difference

in cost of operation and in the speed or detail of the record.

An important technical problem with respect to network facsimile broad-casting in Canada is created by the fact that 25 cycle power is used in some parts of Ontario while 60 cycle power is used in Quebec. This may have a decisive bearing on the merits of respective systems as applied to Canadian needs. And, of course, as always when there are conflicting patents, there is the need, even in the United States, of consolidating and standardizing equipment. As far as I can find out from inquiry, any printed matter can be broadcast by the method of facsimile through any radio station, that is, where sound can be broadcast on a medium wave. I believe scientists are experimenting and expect to extend the broadcasting of facsimile to super-high wave. Whether it can be done on short-wave is a matter that is not yet determined. Theoretically an editorial of the New York Times can be printed in Grande Prairie the same morning it is distributed in New York. What the effect will be of such broadcasting will be on newspapers and propaganda, I cannot say at the moment; it is too early to judge.

We have thought it advisable to see if it is possible to give this committee a demonstration of what facsimile is, and while there has been some hitch as regards the date we have made tentative arrangements to bring one of the inventors to Ottawa to install a scanner in station CBO. He will put in this room a receiving set and, either visually in your presence if it can be arranged or, if not, nocturnally during your absence, we will produce for you a facsimile

sheet so that you may what it is.

When I end my presentation this morning I shall endeavour to visualize for you the meaning in terms of national interest of some of these new developments, such as facsimile and television. We have made this our policy, that we will not alienate to any private broadcasting interest any rights with regard to facsimile. We propose, ourselves, as soon as feasible, to use it in whatever way it can be used for the advancement of the interests of the people of Canada.

[Mr. Leonard W. Brockington, K.C.]