Bay railway, possibilities for the shipment of certain commodities through Churchill, among others wheat, coal and poplar wood. All this, as well as research into other matters relevant to the whole question, is being done, and I am indebted to some of the findings of this particular committee for some of the facts which I shall produce later in this talk.

As to the actual use of the railroad and port since the debate in the House of Commons in 1945, in that season there were shipped from the port approximately 3,000,000 bushels of wheat, of which 2,000,000 bushels had been in storage at Churchill all during the war and which were in perfect condition after all that time. Import of commodities was very small, only some forty tons, made up in part of curling stones, Scotch whiskey, earthenware and some china from Britain destined for prairie points. These amounts were inadequate to furnish proof of anything except that shipment by the route is physically possible, and that, all other things being equal, such shipments would bring advantages to shipper and receiver alike.

I shall only briefly review the physical setup at Churchill. That is a matter of record. The port facilities as at present would allow the unloading and loading of about forty-five ships during the effective season. When I say unloading and loading I put the emphasis on the export of grain rather than on imports, because the situation is such that too great an import would interfere with the export business. Six or seven ships can be in the harbour at the same time and three can be loaded simultaneously. The loading of a ship a day is quite possible under the best conditions, but the average would be a day and a half. The capacity of a ship is, on the average, 325,000 bushels and storage capacity of the elevator at Churchill is 2,500,000 bushels.

With regard to the railway, this Hudson Bay railway is the property of the people of Canada. Its operation is in the hands of the Canadian National railway under a general manager.

The effective practicable capacity of the Hudson Bay railway in the navigation season is about 150 cars of wheat a day. I think that is fairly conservative. It could be increased, but I want to give the picture exactly as it is. The distance from The Pas to Churchill is 510 miles over an excellent roadbed. I am informed that there is none better in Canada from the point of view of handling freight. This roadbed is furnished with eighty-five pound steel. An old railroader who travelled that line for years told me that it was quite possible to haul the wheat to Churchill, unload

it, and have the cars back at The Pas inside of four days; and a car of cattle could reach the port within the thirty-six hour limit after which one must, by law, feed and water live stock in transit.

So we have a good port. We have modern elevator equipment with large storage capacity. We have a working railroad. Now let us look for a moment at the things which militate against the fullest use of these facilities.

In speaking of these difficulties, I am speaking of things as they are in relation to my proposal that the port be used to its maximum extent this present year of 1947. There is, first, the handicap of its geographical position -and, contingent upon that, its climate-and the brevity of the shipping season. There are three seasons. First, there is the effective shipping season of the ships' masters—that is to say, the season in which they are willing to come in there with their ships-and that lasts from sixty to sixty-five days. In the second place, there is the maximum insurance season, in which marine insurance can be obtained; and of course one has to obtain that to make operations anything like practical. That date is from August 5 to October 15. The third season is the natural one, which is considerably longer than the other two and is of a duration of three months upward.

The first of these—that is to say, the effective shipping season—can and must be lengthened if the port is to be a success; and I claim that we already have in our possession scientific discoveries by the use of which it will be so lengthened.

Mr. CHEVRIER: If the hon, gentleman will permit an interruption, will he tell us just what those scientific developments are which could be used to increase the period of navigation at the port of Churchill?

Mr. KNIGHT: If the minister does not mind, I shall develop that answer in the course of my remarks; or, if he prefers, I can give the answer now.

Mr. CHEVRIER: I did not mean to interrupt the hon. gentleman in his speech, and I am quite willing that he should proceed.

Mr. KNIGHT: The next drawback, and a direct result of the first, is the high marine insurance rate. About this we can do little or nothing except one thing, and that is to demonstrate the feasibility of the route by its use to capacity over at least one season; and I would ask hon. members to note that phrase "by its use to capacity over at least one season". Insurance is an important consideration, for it determines the maximum limits of the season ships may use, the cost of ocean