affects, relatively speaking, only a few Canadians. It makes me think that Mr. Laxer, in his treatise, has certainly got to them and they are a little bit afraid to get on to the subject of economics and unemployment. Instead, they get into this very nebulous area of nuclear energy.

I recognize that the Hon. Member for Saskatoon East (Mr. Ogle) is a cleric and we should listen to him with some degree of concern. He raised the subject of morality and dealt pretty well entirely with the matter today. I do not want to take away from the importance of morality in the work of all of us here in this House with respect to issues we deal with. I do not pretend to be a cleric, although I am the son of a cleric, but I am a family physician, so I want to deal more today with the medical aspects of this problem. Before I do that, however, I want to touch on the issue of morality because it is a very important issue. I realize that from time to time one is confronted with difficult problems arising from moral considerations. However, something I have learned since being here is that the churches are increasingly speaking out allegedly on moral issues but they do so without having the information and adequate background to give credibility to what they say. This has been reinforced when I had occasion to travel in other countries and talk to our ambassadors. The enlightenment we get from some of our ambassadors points to the same problem that some of our churches have here in Canada. They come out with very strong views on certain issues, yet they do not have the background to support them. My own church, the United Church of Canada, is not immune to this problem. I am rather disappointed at times, as are some of my clergy friends in the United Church, that some of the people speaking on behalf of our churches do not have the scientific background, as in this case, for example, to be speaking out in such strong ways regarding the issues behind the use of nuclear energy.

Having said that, Mr. Speaker, let me point out that this motion implies there are a lot of problems connected with the use of nuclear energy. Not having heard the lead-off speaker for the NDP, I hope he dwelt at some length on the good things being done as a result of nuclear energy, particularly in the medical field, and the number of lives which have been saved here and around the world solely because of developments in the nuclear field. I think we have to measure those advances against the disdvantages we see from time to time with respect to the use of nuclear energy. There is a parallel here with that of gun powder. Obviously gun powder carries with it problems and the world would in some ways be better off if it had never been invented. However, I think that is a very childish and immature way of looking at any problem. As the days and years go by, we will be shown to have been expressing concerns about the hazards of nuclear energy in much the same way as concern was expressed about gunpowder and what bad things it can do. Certainly we have to be on our toes with respect to nuclear energy and its by-products, but I think that the human mind and the human being is capable of addressing those problems and handling them appropriately.

● (1630)

I would like to deal with the medical aspects only of these various stages in the uranium cycle that we mentioned, from the prospecting stage right down to the disposal of the waste products. It is fair to say that as far as prospecting goes there is probably little in the way of hazard apart from the hazard that goes with any kind of prospecting with respect to searching for sources of uranium. We will dispose of that particular point right now. The second aspect in this cycle is mining. We have to agree that hard rock mining, of which this is a type, certainly has its hazards. The hazards which are common to any kind of hard rock mining are common to those who are involved in the uranium mining industry as well. Those hazards include accidents and so on which are common to all these hard rock miners.

Of specific concern in the field of uranium mining is the effects which workers may have in the mines because of exposure to radon gases or, as they call them, the daughters of radon gas, which are very toxic to the human being and tend to be carcinogenic. One of the main complications that arise from that exposure is the development of carcinoma or cancer of the lungs, which is not unlike the effects in many cases of the use of tobacco. We are not unaware of the problem of lung cancer due to exposure to the radon gases and its daughters. There have been a number of studies done on this which have documented the problem fairly well. There is the report of the Ham committee. In addition, the Ontario Ministry of Labour has done a rather extensive study on the exposure to radon and its daughters that uranium miners suffer. Because of that all efforts possible are being made to minimize these hazards and exposures. We have to maintain our vigilance and try to proceed in furtherance of that as much as we can.

I would like to move on to the milling and production end of the total problem of the uranium cycle. We have some interesting problems of a medical nature here. Attempts are being made by the present Government to do something about that. I want to give credit where credit is due. There is no doubt that in the milling process we again have exposure to uranium dust. The type of dust that you have is present with uranium in different types of compounds. These dusts get into the human body by two routes, by inhalation through the lungs and by ingestion through the oral cavity, the mouth. There is no question that there are potential dangers from those two sources of injestion. The metabolism of these uranium compounds that takes place once they enter the body is somewhat less known. If there is any one area that we know least about it is this area of the metabolism of the various uranium compounds once they enter the body. It is possible to monitor the excretion of the waste products of the body that contain uranium compounds. One can measure that coming out of the expired air, the urine, and I daresay the stools, and certainly in the blood. This does not give the whole answer to the problem. It does not give the correlation that exists between the findings in those body fluids, whether air as a fluid, or blood or urine, and what you find in the laboratory when you do those tests, with what is actually going on in the body in a biochemical