

other varieties of energy. If it were not for organized education over the years it would not have been possible for us to enjoy the benefits of the natural energy which we have developed. Any of us who read history at all realize that the discovery of steam power, of electrical energy, of the internal combustion engine, and—more recently—atomic energy, has been possible, not because somebody merely stumbled on the discovery, as we are sometimes erroneously led to believe, but because people skilled in science and research have, over a number of years, done work which they would not have been able to do had they not had the advantages of education.

Let me refer again to atomic energy. Most of us who read about it in the first instance might have had the idea that some bearded recluse, playing around with test tubes in his laboratory, stumbled across a startling discovery and so we had the atomic bomb. Of course we know that that is not so. It took the scientific experts not of one country but of several allied countries together, with a whole staff of trained men working for a long time and spending millions of dollars on equipment, before they, working as a team, came to the conclusion that the atom was divisible.

I would also ask hon. members to realize that education is so important that the race is actually between education and disaster in the future of the world. All we have to do is glance at the headlines each day to realize that there is grave danger of world conflict at almost any moment. Once again we are, so to speak, sitting on a powder keg; and in my view only through education can the peoples of the world solve their problems and face up to their great opportunities.

We must have education in order to solve our problems of the future—and we have great opportunities, because if we can apply the knowledge we have gained during the course of the war, especially in the discovery of new forms of power; if we can learn to control the power which we have discovered and developed, we shall be the masters of our destiny. But if we allow these new forms of power to control us; if we allow these new methods of destruction to gain mastery over us, the future of the world will be black indeed.

Some people will say that there is organized education all over the world, that the people of to-day are not as ignorant as the people of one hundred or even fifty years ago. Perhaps that is so, literally speaking, but comparatively speaking I would say that we are as ignorant to-day in relation to the complex-

ity of our environment as was primitive man in relation to the comparative simplicity of his environment. We sometimes laugh when we read about the centuries it took primitive man to discover that by rubbing two sticks of wood together he could create fire. We have since learned how to create fire in all its forms, and yet we have not learned to use it without burning our fingers.

I say, therefore, that in the interest of the future of civilization itself we must turn our attention more and more to education as our hope. We can make out of atomic energy either a utopia or a Frankenstein's monster. If we can so train ourselves and so train future generations of children that they can put atomic energy to use for peaceful purposes and the happiness of mankind, we shall have created a utopia or something very much like it. If on the other hand that skill and that knowledge are not there, then we may have created something which will devour us in the end.

Someone may ask why it is I express such concern about the present state of education. We may think that the educational system we have in Canada at present is adequate. It is certainly something better than we had years ago, but I would quote, from "Canada 1946", the official report on the state of education as the department responsible for this report sees it. These are not my words. They will be found at page 204 of "Canada 1946":

The Canadian Teachers Federation reported that, using the criteria of cost per pupil, no progress was made during the sixteen years ended in 1942. Teachers' salaries, which form a considerable percentage of this, began to increase after the outbreak of war but until 1943 rose no more proportionately than the increase measured by the cost of living. Since that time several of the provinces have increased their minimum salary standard and while none as yet has reached the mark set by the C.N.E.A., Saskatchewan's minimum of \$1,200 for teachers with permanent certificates and \$1,000 for others is a long way from the \$400 or less received by highly qualified experienced teachers in the middle 1930's.

The significant fact there stated is that, according to the Canadian Teachers Federation, an organization that should know, and does know, no progress has been made in relation to cost per pupil in the last sixteen years ending in 1942, which means that if the cost of education has risen, if teachers' salaries have risen, it has been only in proportion to the cost of living all round, and we are not proportionately any better off so far as the educational system is concerned.

I wish to turn now to an analysis of the present position in dollars and cents. The figures I will use are for comparative purposes