financial aid for the Engineering Standards Association, and asked the meeting to pass a resolution supporting the application, which was done.

M. R. Riddell, chief engineer, Canadian Aeroplanes, Ltd., Toronto, began an illustrated address on the "Development and Future of Aviation in Canada," but before he finished, it was necessary to adjourn for luncheon, Hon. Arthur Meighen and other guests having been invited for a fixed hour.

## HON. ARTHUR MEIGHEN, MINISTER OF

#### INTERIOR, ADDRESSES THE ENGINEERS

H ON. Arthur Meighen, Minister of the Interior, addressed the members of the Engineering Institute of Canada at luncheon, February 12th, at the Chateau Laurier. He said that 86 men in his department belong to the engineering profession, and all but one are members of the institute. These men are engaged in the water-power branch, the surveys branch and the newly established irrigation service.

He called attention to the very high standard of efficiency and devotion to duty of the men of the civil service in general; "and without any flattery to the engineers," said Mr. Meighen, "the men of that profession stand at the head of the service for efficiency and interest in their work."

The engineering profession is as old as the world itself, said Mr. Meighen. It was born of war. Until the middle of the eighteenth century, all the engineers were military engineers, but at that time a distinction was made between military and civil engineering, and a distinct branch of the Profession arose.

He welcomed the engineers to Ottawa and expressed the hope that they would join with the government in the solution of problems of an engineering nature during the period of reconstruction.

Col. Leonard, who presided at the luncheon, said that when he was chairman of the Transcontinental Railway Commission, he was much worried by his inability to get before the Exchequer Court a claim that was a very large one. The witnesses disappeared or something happened to his case every time it came up. Finally he went to Mr. Meighen, who was then solicitor-general, and requested him to handle it.

"It is most unusual for a solicitor-general to handle a case of this kind," said Mr. Meighen, "although that is what he is appointed for. However, I will have a try at it." As a result of Mr. Meighen's efforts a judgment of only \$600,000 Was obtained on a claim totaling \$10,000,000, said Col. Leonard.

# HOW CAN THE WORLD BE MADE SAFE

### FROM SCIENCE? ASKS DR. IRA HOLLIS

**D**<sup>R</sup>. IRA HOLLIS, president of the Worcester Polytechnic Institute, Worcester, Mass., and former president of the American Society of Mechanical Engineers, delivered one of the most striking addresses of the whole meeting. He referred to the slogan of the Institute, which is as follows:--

"To facilitate the acquirement and interchange of professional knowledge among its members; to promote their professional interests; to encourage original research; to develop and maintain high standards in the engineering profession; and to enhance the usefulness of the profession to the public."

He said that this was a splendid statement of the aims and objects of an engineering society. He has been on a committee that has been working for a year to formulate such a statement without succeeding in such a good expression of high motives.

He felt, however, that the first part of the slogan is more or less giving away to the last part, and that the percentage of technical papers originating in engineering societies is decreasing as the percentage of papers dealing with the usefulness of the engineering profession to the public is increasing.

He was not certain whether that was the best thing for engineers or not, but he felt that it made for good citizenship at least. With regard to technical papers, however, the society should remember that its first object is education, -to teach members how to do their work better-and then to improve their relations and usefulness to the public.

He congratulated the engineers on having but one society in Canada, whereas in the United States there are four big national societies, each of which has crystallized its policies to such an extent that it is very difficult to get them together.

Mankind is entering the third period of its development, said Dr. Hollis,—the period of human control over power. The possibilities of this period are barely touched. This age in which we are now living will soon seem like the dark age to our descendants. Man can only advance through the control of power outside of himself, and therein lies the function and place of the engineer.

Yet what does the engineer's work amount to without the spirituality which makes life worth while? Science is not safe when it can be used to cover the ground with blood and to sow the bottom of the ocean with ships. How can the world be made safe from science? This is a more important question than how can the world be made safe for democracy.

#### Reverent Attitude Required

Dr. Hollis felt that the world would be safe only if science is approached in that reverent attitude which would prevent its use as a destructive agent. What does science amount to if it leads to control of the earth?

"God help us," exclaimed Dr. Hollis, "from that efficiency that places in the hands of a few the control of a people like the ass is controlled by man."

Mr. Hollis outlined the tremendous saving of coal that had been accomplished in his state, and asked whether conservation of this sort could be allowed to cease with the end of the war.

He also referred to the great conservation that could be effected by greater water power development. Next to conservation, the most important problem before the engineering profession is standardization. There is no one phase of manufacturing under the control of the engineer that is not susceptible to standardization. Articles made for like **pur**poses must be standardized. The commercial supremacy of this continent depends upon that.

Then there is labor. No man is better fitted to take a hand in the labor question and the re-employment of soldiers than is the engineer. Not because he is an engineer; we have had much talk about the engineer in politics, said Dr. Hollis, but should he be given a political place in the life of the country? Not at all, unless he fits himself for it. The engineering profession is a great one only to the extent to which we make it so, and not merely because it is called "engineering." But the engineer has the ability to fit himself to handle labor problems and problems of state. Hollis referred to the war service statistics of the institute, and said that he was going to ask the American engineering societies to prepare the same statistics, to see how they compare with the Canadian figures.

#### Proposes Gigantic Engineering Convention

It is not machinery that runs the world, he said, but it is the willingness to give service, to sacrifice life for a great cause. The same truth applies to peace as to war; the willingness to give one's self in time of peace is called service. The same formula that has made the profession great in the war should make it great in peace,—service, unlimited service to the people.

Dr. Hollis again referred to the reverent spirit in which the materials of the world should be handled and protected. No league of nations can survive, he declared, if the spirit is not behind it.

Two months ago, he said, it was proposed that the American Society of Mechanical Engineers should go to Lon-