here, after we had graduated and had become scattered over the Dominion, our knowledge to teach and to lead in time of crisis would be invaluable to our country.

Colonel Hemming very shrewdly pointed out that our present action was least likely to lead to militarism, as all Canadians were fully occupied with their own labors.

It is most pleasing to note the enthusiasm which some of the professors have joined in the movement. With their co-operation the students, nearly one hundred of whom have already signed the roll, feel confident that a full corps will be able to go into camp next fall.

Science.

FOR about two hours last Friday afternoon the members of the Engineering Society listened to one of the most interesting lectures heard before that Society for some time. The speaker, Mr. P. M. Sothman, Chief Engineer of the Hydro-Electric Power Commission of the Ontario government, gave a comprehensive review of the work done by the commission and with the aid of lantern slides explained many details of the work.

Mr. Sothman said that the people of Ontario had no cause to mourn the fact that they had no coal for their water powers more than made up for the loss, and placed them in a position where they could successfully compete with their American cousins immediately across the border in the midst of a coal mining district. The power on being generated at Niagara is transmitted to Dundas at 110,000 volts where the distributing station is situated. From Dundas there is a direct line to Toronto; to the west there is a loop line taking in Brantford, London, St. Thomas, Stratford, Berlin, Guelph and other important places. In all there are twelve transforming stations built, lines from which will transmit power to any distance up to ten miles. This, when put into operation will be the largest power scheme in existence—the total length of line being two hundred and ninety-three miles and voltage as mentioned at one hundred and ten thousand. Up to a few years ago sixty thousand volts was considered almost the limit for experimental work, but the speaker remarked that now it is as easy to "play" with one hundred and ten thousand volts as it was to experiment with fifty thousand volts three years ago.

The most difficult point in connection with the transmission was found to lie with the insulation. For a considerable length of time ninety thousand volts was all that could be safely handled, but by a series of experiments extending through a period of four and a half months an insulator was at last found which suited the purpose. To show how thorough and severe the tests made upon the insulators in question were, it would be interesting to mention that the men conducting the test went to the extent of causing so many inches of rain at a certain temperature to fall on the insulator while the experiment was being carried on.

To find a design for towers suitable and strong enough to carry the lines was another matter which gave considerable trouble. Several prominent Can-