

It is the duty of all Canadians, and especially those who have received special training, to concentrate all their energies so that Canada may do its full share in the crushing of the fiendish power which is threatening to overthrow civilization. How may this be done?

Experience has shown that the physical training of such large bodies of men as needed in the present war can only be obtained by long years of intense work. That means that the training must be begun in boyhood. This is so well known that in France it has been the practice for the last thirty years, to begin this training in the schools.

This training is so thorough that when a young man is drafted into the army he feels quite at home, and his body is so trained and inured to fatigue, that he can endure without hardship the intensive training which he receives in the army. It is not only the army that profits by this physical fitness, but when the young man reverts to civil life the entire nation benefits by it.

### Thoroughly Equipped Along Technical Lines

A striking example of the benefit of this early training is to be found in the class which has been just drafted into the French army. According to competent military authorities, no body of recruits has ever been found so thoroughly fitted for military service. This has proved to be equally true for technical training, for the officers have not only shown that they were physically fit, but they have proved that they were thoroughly equipped along the technical lines required for the multitudinous services of a modern army. This result has been obtained by long and arduous special training in military schools, supplemented by actual experience on active service.

In France, as all know, military service is compulsory. Every young man of twenty who is physically fit is drafted into the army, and remains on active service for three years. He is then put on the reserve of active service for ten years; that is, until his thirty-third year. During this period he is called twice to take part in the general manoeuvres for twenty-eight days. He is then transferred to the territorial army for six years, and remains till his thirty-ninth year. During this period he is called once for thirteen days. He then passes to the reserve of the territorial army for six more years; that is, till his forty-fifth year.

Having been brought up myself under these conditions, I noticed how little attention was being paid to physical training in this country.

### Advocating Compulsory Training

To remedy this defect, in Montreal, where I was stationed for eighteen years, I succeeded after several fruitless attempts, in having gymnastics introduced into the schools. The result was so satisfactory that after three years we were able to send a team, chosen after a competitive elimination from among several hundreds of young men, to Europe. This team won the first prize, and there were several individual prizes. Two or three years later, another team was sent to Europe and had almost an equal success.

A few years before the war broke out, at least 6,000 boys were taking physical training in the Montreal schools, and I have no doubt but that some of them have given a good account of themselves during the present war.

My great desire would have been to see this movement spread throughout Canada, and to have organized inter-provincial competitions. Unfortunately, my removal from Montreal and more absorbing occupations prevented the realization of this dream. More than ever, at the present juncture do I believe in the opportuneness of this aim.

For the purpose of preparing men who are likely to be called in the near future, I would suggest, therefore, the immediate introduction of compulsory physical training for the men of Class 1 who are still to be called, the men who will be entering Class 1 within a year, and the men of classes 2 and 3; this physical training to be undergone at least three times a week, say, two hours at a time, outside of the ordinary working hours, especially by men who now lead comparatively inactive lives in banks, offices, stores, factories, etc.

In order to accomplish this, instructors could be chosen especially among the returned officers, non-commissioned officers and men who have distinguished themselves at the front, and who know by hard-won experience the value of physical training.

I would also suggest the immediate introduction of compulsory physical training in all the universities, colleges and schools of Canada.

Regarding the students who are at present taking engineering courses, I would suggest that the classes be continued all the year round in order to allow them to complete their courses before being called to the colors; thus enabling them to render the greatest possible service in engineering corps. I understand this has been done in the United States universities.

Now, as regards engineers proper, who at the present moment are in great demand at the front as officers of engineers, I would suggest that all engineers likely to be called should be immediately put through such a course of special physical and technical training as should enable them to discharge efficiently their very arduous and tremendously important duties at the front. It must not be forgotten that this war is eminently an engineer's war.

### WOULD TRAIN WOMEN FOR DRAFTING, TESTING AND INSPECTION WORK

IN joint session on May 3rd, the Detroit Section of the American Society of Mechanical Engineers and the Detroit Engineering Society passed the following resolution:—

"Whereas the demands of the country for men and means to fight the war has resulted in a deficiency of skilled workers in the trades and professions; and

"Whereas the women of this country could with a short period of training fit themselves to fill these positions, as women have done in other countries at war; and

"Whereas among the things which women could do advantageously are drafting and tracing, inspection and testing of materials, both physically and chemically; therefore

"Resolved that the universities, colleges and technical schools throughout the land be asked to consider the question of meeting this demand by providing special courses of instruction open to women students qualified to pursue such courses; and further

"Resolved that employers who could use such skilled help exert their influence with their universities, colleges and technical schools, and co-operate with them in developing and making available a great body of intelligent and adaptable women who are as eager and willing to serve their country as their brothers;

"Thereby bringing about not only increased effectiveness in fighting the war, but also a greater mutual respect and saner relationship of our men and women."