

Bertram, Geo. W. Watts and Thos. Cantley as that Committee, whose appointment was confirmed by cable by the British War Office. Colonel Bertram was elected to act as Chairman of the Committee and it was subsequently enlarged by the addition of E. Carnegie as another manufacturer, Colonel Greville Harston, Lt.-Col. F. D. Lafferty and General Benson, Master General of Ordnance. About two weeks later, Mr. David Carnegie was appointed by the Minister as Ordnance Advisor.

This group of men constituted the original Shell Committee and, while the work they undertook was small, compared with our present views of magnitude, it was of vital importance not only for the future of Canada, but to the conduct of the war. They had as assets the assurance of the Minister that he would stand back of them, although, technically speaking, they were individually responsible as contracting parties for the fulfillment of their undertaking with the British Government, and the fact that, at the little Dominion Arsenal at Quebec, shrapnel shells had been forged and completely finished, apart from the fuse, cartridge cases made and fixed ammunition produced, all, however, in small quantities and under adverse conditions. They had as liabilities the absolute unfamiliarity of Canadian manufacturers with Ordnance requirements, the unwillingness of the majority of manufacturers to undertake the work, except as a patriotic duty, specifications and inspection requirements which presented opportunities for unlimited trouble and expense, and a number of minor difficulties which would have to be investigated and overcome before the manufacture could proceed smoothly. The great asset they possessed however was the knowledge and experience at the Quebec Arsenal.

Many have, no doubt, visited this Arsenal before war was thought of and smiled at the conditions under which the work was performed, but this Arsenal was actually producing ammunition, it knew how such work had to be done, the methods and the difficulties, and it is safe to say that, while shells would have been produced in Canada had no Arsenal been in existence, they could not possibly have been produced as quickly or as economically if it had been necessary to visit the munition plants in the United States or gradually discover the proper way with the assistance of information from England. To Colonel F. D. Lafferty, the Superintendent, all Munition Manufacturers owe a deep debt of gratitude. No trouble was too great for him to go to, any information he possessed was available, any assistance he could render was offered freely; he simply placed himself and his entire staff at the service of every manufacturer to help in every way in the production of the munitions which he knew were so seriously needed.

In view of the numerous firms that have so successfully manufactured munitions, there is a tendency to consider it a comparatively easy kind of work. There is a certain degree of truth in this view, in the sense that, once all the difficulties attendant to any particular line of work have been mastered by a group of manufacturers, who are willing to freely impart their knowledge and experience to others engaging in the same work, the balance of the ability necessary is largely of an executive character. With-