

Tim Cook, *No Place to Run: The Canadian Corps and Gas Warfare in the First World War* (Vancouver: UBC Press, 1999).

The desperate stand of Canadian troops against the German gas attack at Second Ypres has long been immortalized but as Tim Cook astutely argues, gas itself has been relegated to the historical periphery of the First World War. Indeed, the first official Canadian historian, Colonel A.F. Duguid, concluded that gas was simply another addition to the horrors of war and he praised the performance of Canadian troops at Second Ypres as an instance "in which courage and tenacity triumphed over metal and gas."

It is this uncomplicated version of the nature of gas warfare that is challenged and demolished in *No Place to Run*. Cook asserts that while gas was not the war winning weapon originally envisioned, or even as deadly as often thought, it became a pervasive and terrifying part of a soldier's everyday life, one that required careful training and constant vigilance for survival.

Such preparedness was an evolutionary process as soldiers were issued with gas masks that were progressively more effective and culminated in the development of the small box respirator in August 1916. However simply handing out protective devices was insufficient: soldiers had to be taught how to use them, which necessitated the creation of the Canadian Corps Gas Services. The CCGS eventually became a sophisticated organization of gas officers, instructors and schools that all worked to instill a strict and potentially life saving anti-gas discipline among the troops. Here the homogeneity of the Corps played a role as a centralized gas school allowed information to be disseminated consistently and permitted divisional gas officers to be closer to their men. Yet in Cook's opinion, the Gas Services' greatest achievement lay in demystifying gas and convincing soldiers that their equipment and training would actually protect them.

The defensive reaction to gas was accompanied by the development of an offensive gas doctrine and advances in the medical treatment accorded gas victims. Just as mass infantry assaults were replaced with fire and movement tactics, so too were the massive gas clouds of 1915 replaced with gas drum projectors and gas shells camouflaged within barrages of high explosives. By the end of the war, a coherent offensive doctrine had developed that saw gas used extensively in counter-battery work, to disrupt communications and supply, to harass and exhaust soldiers, and to cover the flanks of attacking units as well as to cover retreats. Similarly, the medical services went from bewilderment to developing effective treatments, especially for mustard gas, that were able to save the majority of gassed men. Not all 'cures' were helpful, such as the quickly discontinued practice of injecting calcium chloride into soldiers' eyes to cure blindness.

The real strength of the book lies in Cook's description of the gas environment and the psychological terror it invoked. As he points out, a gas attack could not be countered, only endured, as soldiers were forced to wear uncomfortable respirators that fogged up, filled with vomit, and impeded normal respiration. At the same time, gas masks were dehumanizing, making soldiers appear as devils or 'goggle-eyed frogs' in the words of one. Additionally, the persistence of mustard gas required soldiers to be vigilant long after an attack had passed. Being gassed was only the start of a soldier's misery as many were forced to stumble to aid stations while slowly going blind, only to face a lengthy recuperation. Cook should also be commended for reminding us that gas was especially deadly to animals, with scores of horses and carrier pigeons succumbing, further disrupting supply and communications. It also corroded metals, requiring additional maintenance to arms and ammunition and it further devastated an already blasted landscape.

One of the few criticisms that can be made is that *No Place to Run* lacks a genuine comparative perspective. All the major combatants make appearances and there are tantalizing references to opposing doctrines and policies, but there is no sustained attempt to compare and contrast the Canadian experience with that of other armies. To be fair, this was never Cook's intent, but it does leave unanswered questions, such as how did the French move from being routed at Second Ypres to developing mustard gas ahead of the British?

One of Cook's more puzzling assertions is that current fears regarding chemical weapons are exaggerated. Cook argues that developments in protective and warning devices have matched the growing sophistication of modern delivery systems and the lethality of today's chemical and nerve agents. As he ably demonstrates, coming to terms with gas warfare is a lengthy and costly process, one which modern combatants will have to relearn, despite their training. Moreover, the likely future of chemical weapons is not on the battlefield, a reality which the Iraqi use of mustard gas against Kurdish villages, the threat of gas against Israel during the Gulf War, and the 1995 Tokyo subway bombings so chillingly illustrate.

These points aside, Cook writes with a welcome elegance and clarity, making *No Place to Run* an important and overdue contribution to our understanding of the Great War.

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