



Behind the Gas Mask: The U.S. Chemical Warfare Service in War and Peace by Thomas I. Faith.

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*If you could hear, at every jolt, the blood
Come gargling from the froth-corrupted lungs*

Wilfred Owen had good reason to use the effects of a gas attack as emblematic of the horrors of combat in his famous poem “Dulce et Decorum Est.” There is something particularly horrifying about the idea of drowning in the fluid of your own liquefying lungs. Or having your skin melt away as if burned by a fire that water only makes worse. Or living on blinded or mutilated and struggling year after year to breathe. The special revulsion people feel for chemical weapons poses a problem for military professionals who must concern themselves with or even prepare such devices. To do their job, they need funding for research, equipment, and training, and to get those funds, they must in turn gain the support of the people.

In *Behind the Gas Mask*, State Department historian Thomas Faith tells the story of the advent, rise, and decline of the US Army Chemical Warfare Service during and after World War I. Though his succinct account barely touches on the broader context of First World War remembrance and the antiwar movement of the interwar years, it is still a compelling case study of the dilemmas the US Army faced in that period.

Needed advances in artillery, machine guns, signals, air force, or chemical warfare required rapid innovation despite limited budgets. Contrary to the picture drawn in much of the scholarly literature, the US Army did not go blind into World War I. In the half-century since the Civil War, it had trained a large cadre of professional officers who carefully studied new developments in warfare on the battlefields of Asia and Europe. But changes were occurring so rapidly that they could not keep pace with the required investments in matériel and training.

Faith observes that the Germans’ introduction of large-scale use of deadly gas at the Second Battle of Ypres (22 April–15 May 1915) triggered a chemical arms race among the belligerents. Still two years from entering the war and stuck with a peacetime budget, the Americans trailed behind the Europeans. Indeed, the Bureau of Mines in the Department of the Interior, not the War Department, led US research into chemical warfare. Much as proponents of airpower had to forge deals between civilian and military institutions, the funds and brains to research and develop chemical weapons came from both public and private organizations. Chemists, engineers, doctors, ordnance officers, production firms, universities, and foreign researchers all contributed in fits and starts.

Not until its entry into the war in 1917 did the United States begin devoting significant resources and organizations to the problem of chemical warfare. Much bickering and deal-making delayed the formal creation of the Chemical Warfare Service until June 1918, only five months before the war’s end. The Americans had precious little time to develop and produce gas masks and to train their troops to deal with gas attacks, not to mention prepare medical facilities and techniques to treat victims of poison gas.

To start, they relied heavily on Allied equipment and training practices. But then the problem worsened when the planned US offensive was moved up from 1919 to late summer 1918. The result was a higher proportion of gas casualties among American troops than those of any other belligerent. This did not stop them at St. Mihiel or during the Meuse-Argonne offensive, but gas certainly made their lives miserable. A lack of will, opportunity, expertise, and experience kept the Americans from themselves using gas very effectively.

The problems experienced in the First World War motivated American chemical warfare specialists in the interwar period. This is the subject of the second half of *Behind the Gas Mask*. Like every other department in the postwar Army, the chemical service had to fight to survive at a time when military budgets were being cut to a bare minimum. Maj. Gen. Amos Fries, the head of the Chemical Warfare Service—despite the abhorrence US citizens felt for gas warfare and the institutional Army's lack of enthusiasm for it under Chief of Staff Gen. Peyton March—successfully allied with industrial and academic chemists to move the service to the Army's Engineering branch, as codified in the National Defense Act of 1920.

This victory did not last long, and, Faith shows, Fries struggled in 1921–25 to keep the Chemical Warfare Service alive in an environment increasingly hostile to gas warfare. Arguing against State Department efforts to negotiate international bans on the use of gas, he led attempts to get chemical warfare into the color-coded scheme of war plans, especially “Green” for Mexico. He cultivated relationships with congressmen, supported the dye industry, and endorsed dubious studies claiming gas had no long-term health effects! He touted the efficacy of gas for pest control, security measures in banks and post offices, crowd control, and as a method of capital punishment.

In the end, civilians worldwide as well as many military officials so decried World War I-style gas warfare that Fries's efforts to keep “chemical weapons on the public agenda” actually “sowed the seeds of popular censure” (113). As the Chemical Warfare Service morphed into the Chemical Corps during and after World War II, it focused more on defensive measures like, for example, improving gas masks and devising non-lethal smokescreens. (Faith does not discuss the use of white phosphorus, ostensibly as a smoke weapon, but also as a nasty incendiary.)

In concentrating on the Chemical Warfare Service's case for gas weapons as a more humane form of warfare, Faith sometimes gives short shrift to the opposition view. His final observation that “the international community's attempts to limit the use of chemical weapons have been an overwhelming success” thus comes as a bit of a surprise (115). Perhaps he agrees with the view of chemical warfare advocates that choking to death on gas is no worse than being blown to bits by a bomb or artillery shell, but he seems almost wistful when he writes

Perhaps if the CWS were to have effectively used chemical weapons against an enemy in a subsequent war, it is possible that poison gas could have become more generally accepted and been incorporated into the battlefield doctrine of the world's superpowers. Instead, chemical weapons have continued to be regarded as barbaric, and U.S. policymakers have prohibited rather than promoted their use. (116)

Whatever the intent in Faith's brief foray into the counterfactual, the abiding fact is that people hate chemical weapons—Wilfred Owen has won out over Amos Fries.