

## The Pleasures of Gas War

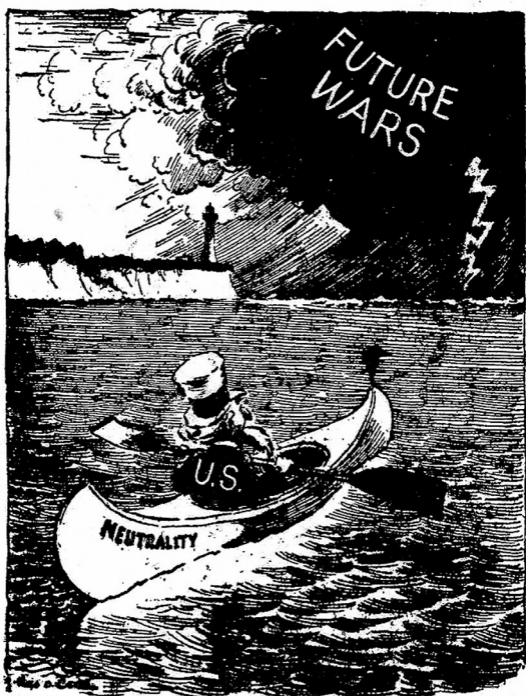
by Major W. F. Kernan in Harper's Magazine

IT IS high time that a few cold facts about the military possibilities of poison gas be set forth that the public be disabused of its superstitious terrors.

To begin with, it would be to the highest degree irrational to use lethal gas against a city, and any general who undertook such an operation would be guilty of violating the principle of economy of effort. In the first place, the outlay in chemical munitions and planes to transport them would be enormous. In the second place, the effect achieved, even granting the most fortunate conjunction of circumstances, would be negligible.

Gas, even in its most virulent form, is the most rational as well as the most humane weapon ever employed on the battlefield. It is also—and this should certainly be of interest to the advocates of strict neutrality—the only weapon in the arsenal of Mars which can truly be called “defensive.”

The war chemists differ on many things but they all agree that in order to attack a large area with gas the ground must be covered with a toxic cloud whose density approximates 15 grams per square meter. To build up such a cloud with diphosgene would require, for a city like Boston, 3000 bombing planes; and even



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if so many could be procured—which is extremely doubtful—little would be accomplished in the way of damage except that wrought by shell fragments. Bostonians who went into their homes or offices and closed all doors and windows would be safe enough from the purely chemical elements of the bombardment. At the end of an hour the gas cloud would have disappeared and business or pleasure might be resumed as usual. For 30 minutes is the average open-air “persistence” of chemicals of the diphosgene type.

If he knows his job, a gas-minded general can soon instill a sense of frustration into the most relentless enemy who pins his faith on the traditional tactics of “reeking tube and iron shard.”

For of what use are the fire-control instruments of the artillery to observers who cannot see for the bitter tears that halogen brings to the most optimistic eye? Where is the infantry platoon that can deliver accurate fire in a chlorine cloud, the general who can write an understandable field order six hours after having sat in a pool of Lewisite, the telephone operator who can transmit a message correctly with an arsenic molecule in his larynx? Where is the daredevil cavalry officer who will undertake to lead a column through an area well sprayed with mustard? If you know the answers to these questions you will know that the war chemicals are like a set of fine instruments, specially forged for an expert hand. But the purpose of these instruments is not to kill but to paralyze the enemy's power of killing.

While paralyzing the enemy's arms, legs, vocal cords, and trigger fingers and obscuring his vision, the commander of the future will be able to make a fairly accurate estimate of the extent and scope of his own effort. He will not need to tear up a whole county and eviscerate a thousand men in order to take a ridge or hold an escarpment. He can choose a means that is more exactly proportioned to the end in view. For in the war gases he possesses a set of instruments whose tactical impacts can be predetermined. But to make a constant of the act of force, which has always been the most tragic variable in the tragic business of battle, is to secure the re-entry of humanity and reason to war.

That is why poison gas is the most humane of military weapons and at present the most irrationally feared.