

Chemical Wars

Many developing countries have what it takes to make poison gas.

WAR OF NERVES

Chemical Warfare from World War I to Al-Qaeda.

By Jonathan B. Tucker.

Illustrated. 479 pp. Pantheon Books. \$30.

By GARY J. BASS

A FOUR-MILLIGRAM droplet of VX can kill you in under an hour. Your first symptoms will probably include drooling, sweating, difficulty breathing and the constriction of your pupils to zombie pinpoints. Then come gastrointestinal spasms, vomiting, convulsions and finally death by asphyxiation.

This is not obviously more barbaric than, for instance, being ripped apart by shrapnel in so-called legitimate warfare. Chemical weapons are less devastating than nuclear or biological weaponry, and are trickier to use in combat than high explosives. Yet poison weapons have been widely reviled for centuries. They are easier to make than nuclear or biological arms, and, since soldiers with advance notice can shield themselves, they are tempting for use against unwary civilians.

Jonathan B. Tucker's chilling "War of Nerves" is a history of the race between the advance of this taboo technology and the political efforts to abolish it. Tucker, who has a gift for making military science readable, wants a world secure from such repellent weapons. But human destructiveness always seems a step or two ahead of civilization.

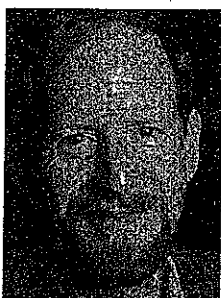
As early as 1675, France and Germany outlawed poison bullets. In the 1899 Hague Convention, the major European countries — including Britain, France, Germany and Russia — and the United States swore not to use "poison or poisoned weapons," and signed an additional declaration renouncing projectiles meant only to carry asphyxiating gas.

But these humane efforts were dashed by the battlefield necessities of World War I. In April 1915, hoping for a military breakthrough, Germany launched the war's first major chemical attack, releasing chlorine gas to blow toward French and Algerian troops in their trenches at Ypres, in Belgium. As Tucker gruesomely recounts, along four miles of the front line, tons of yellow-green gas rose to a height of 30 feet as the wind slowly edged it forward. The lethal cloud scorched the eyes and lungs of the terrified French and Algerian soldiers, who vomited and collapsed in agony. Hundreds died, coughing up blood and green froth. The soldiers' silver insignia and buckles immediately turned greenish black. Five months later, Britain launched its own retaliatory chlorine attack, and by 1916 both the Allies and the Central Powers were using artillery packed with chemicals — a total collapse of the Hague declaration.

Gary J. Bass, an associate professor at the Woodrow Wilson School at Princeton University, is writing a book on humanitarian intervention.

The diplomats tried again in 1925, with the Geneva Protocol banning the use of chemical weapons in war, although not the manufacture and stockpiling of them. But the United States would not ratify the treaty until 1975, and Weimar Germany and the Soviet Union signed but secretly developed chemical weapons anyway. And even though Italy had ratified the Geneva Protocol, Mussolini used mustard agent during the 1935-36 conquest of Ethiopia.

Nazi Germany pioneered a new generation of odorless and quick-killing nerve agents like sarin, designed to overcome Allied protective gear. In a report for Hermann Göring, the head of I. G. Farben's board of directors boasted that chemical weapons were "the weapon of superior intelligence." But Hitler, while mass-murdering defenseless Jews with



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Zyklon B, was more cautious on the battlefield: fearing Allied retaliation against German cities, he planned to use chemical weapons in World War II only if the Allies did first.

During the cold war, the United States and the Soviet Union raced to improve their arsenals

of nerve agents, and America used Agent Orange and tear gas in Vietnam. By the 1960's, the technology spread into the developing world. During its 1962-67 war in Yemen, Egypt (another cheating Geneva member) used chemical bombs on villages. Although Iraq was also a party to Geneva, Saddam Hussein authorized chemical warfare against Iranian troops in the 1980's (using weapons made with help from West German, Dutch, Swiss, American and French companies) and gassed his own Kurdish population in the 1988 Anfal extermination campaign. In 1983, in a 90-minute meeting with Hussein in Baghdad to discuss improving ties with Iraq, Donald Rumsfeld, as Reagan's special envoy, never mentioned Iraq's chemical strikes.

The current stage of chemical proliferation, Tucker warns, involves terrorist groups, like the Aum Shinrikyo cultists who killed 19 people with sarin in two incidents in Japan in 1994 and 1995. Two years before the 9/11 attacks, Osama bin Laden said that he had the right to seek nuclear, biological and chemical weapons.

Tucker wants to strengthen the effectiveness of international norms. He optimistically notes that the overwhelming majority of countries have joined the Chemical Weapons Convention, isolating and stigmatizing non-signatories like North Korea and Syria, and helping to keep precursor chemicals beyond their grasp. But he warns that "determined cheaters may not be deterred without a credible threat of economic or military sanctions." America and Russia are both taking too long to destroy their huge stockpiles, as well as insisting on the right to use incapacitating chemicals to foil terrorists — as Russian security forces disastrously tried to do during the 2002 Chechen terrorist seizure of a Moscow theater, where Russian gas accidentally killed 127 hostages. Tucker's book makes a sobering case for a less poisonous world, but governments do not seem to be getting much wiser. □

BOOK REVIEW

The New York Times

February 12, 2006 \$15.50