

APPENDIX No. 1

PAST HISTORY OF CHEMICAL WARFARE: THE HAGUE CONVENTIONS

The use of poisonous gases in warfare was forbidden by International agreement.¹ The relevant clauses of the Hague Conventions of 1899 and 1907 are as follows:

“The Contracting Powers agree to abstain from the use of projectiles the object of which is the diffusion of asphyxiating or deleterious gases.”²

“Besides the prohibitions provided by special Conventions, it is especially prohibited:

- (a) To employ poison or poisoned arms;
- (b) To kill or wound treacherously individuals belonging to the hostile nation or army;
- (c) To employ arms, projectiles, or material calculated to cause unnecessary suffering.”³

Neither in conception nor in practice is chemical warfare (as is often implied) a new thing. The ancient world did its best with such

¹ For the factual data for this introduction the Author has relied chiefly on the following writers. A. A. Roberts (*The Poison War*), Edward B. Vedder (*The Medical Aspects of Chemical Warfare*), Rudolf Hanslian (*Der Chemische Krieg*), Victor Lefebure (*The Riddle of the Rhine*), together with the several Official Histories of the War, and relevant Official Publications, as the text of the Hague Conventions.

² Many of the powers did not sign this declaration until considerably later. Germany and Great Britain signed and ratified it. The United States did not. The reason for this is stated in a memorandum from Sir J. A. Fisher to The Marquess of Salisbury, 20 July 1899 as follows.

“On Captain Mahan (the United States Naval Delegate) being pressed to-day by the President at the meeting on the first Commission to withdraw his original voice in favour of the employment of asphyxiating shell, he reiterated his argument that he considered the use of asphyxiating shell far less inhuman and cruel than the employment of submarine boats. . . . The United States Government was adverse to placing any restriction on the inventive genius of its citizens in inventing and providing new weapons of war” (*The Poison War* by A. A. Roberts, Appendix VI, pp. 142, 143.) See also *The Medical Aspects of Chemical Warfare* by Edward B. Vedder.

³ Appendix to the Hague Convention 1907, Article 23. This article was adopted at the fourth Plenary Meeting held at The Hague on 17 August 1907. The Convention as a whole was signed and ratified by 25 powers (Austria-Hungary, Belgium, Bolivia, Brazil, Cuba, Denmark, France, Germany, Great Britain, Guatemala, Haiti, Japan, Luxembourg, Mexico, Netherlands, Norway, Panama, Portugal, Roumania, Russia, Salvador, Siam, Sweden, Switzerland, United States). Ethiopia signed it in 1935.

"chemical" substances as could be assembled and applied effectively to the purposes of war. Thus in 429 B.C. in the Peloponnesian War the Spartans used the poison gas of the day—fumes from burning sulphur, pitch and charcoal against the city of Plataea.⁴ The Romans scorned and would have none of it but throughout the wars of the Middle Ages chemicals as smokes, gases, vapours, liquids and solids⁵ were used on occasion as weapons of offence and defence in siege and trench warfare—until the advent of gas shells, their only useful place. The only inherent difference between these crude applications of "chemical" knowledge and the "triumphs" of 1915-18 lay in the immense extension of this mode of warfare and the accuracy with which the chemical weapon was applied to promote tactical offence and defence. The development of chemical warfare was not more unnatural nor its technique more remarkable than was the application of chemical research (as by Nobel) to the science of ballistics, as seen in smokeless powder, the machine-gun, and the high explosive shell.

Between the throwing of quicklime or burning of sulphur, and the modern gas cloud, or barrage of complex and scientifically selected chemicals projected in gas shells, lay the vast edifice of modern science, the modern industrial system and "mass production"—in short, the German Interessen Gemeinschaft ("I.G.") the Colossus of Chemical Industrialism. It is well to recall that as late as 1854 the vision of gas warfare had not advanced from that of fumes from burning sulphur.

The material source of this vast new menace to humanity lay in the industrial exploitation of chemical discovery. "The chief cause of the chemical war" says Victor Lefebure, "was an unsound and dangerous world distribution of industrial organic chemical forces."⁶ Before the war Germany led the world in applied (industrial) chemistry in particular in the synthetic production of dyes and drugs. She thus possessed a highly developed technical plant and trained personnel available for the large scale production of chemical weapons, and for their tactical exploitation. Of even greater importance she had developed—*more sua*—a vast interlocking organisation, the Interessen Gemeinschaft which could readily be integrated with the correspondingly "scientific" organisation of the German Army.

"British chemical supply was weak," says Lefebure,⁷ "owing to the absence of a strong organic chemical industry . . . German flexibility of supply meant flexibility in meeting the requirements of military policy, and, given sound military policy, this flexibility meant surprise, the essence of successful war."

The rejection by the British Government in 1855 of the suggestion by Lord Dundonald to employ the fumes of burning sulphur on a large scale against the defenders of the Malakoff and Redan works in the

⁴ *Thucydides, Book II, 77*

⁵ In the attack on Belgrade in July 1456 the Turks used the acrid smoke from burning straw. The Hungarians, under Hunyadi retaliated effectively with faggots steeped in sulphur. Quicklime was used with useful lachrymatory effects in local Italian wars of 1284.

⁶ *The Riddle of the Rhine, p. 24* (The Chemical Foundation, Inc. New York City, 1923).

⁷ *Ibid., p. 65* In 1887 Prof. Baeyer, the renowned organic chemist of Munich, suggested the harmless lachrymators as proper and peculiarly suitable substances for use in war.

siege of Sebastopol⁸ marks a cardinal phase in the evolution both of gas warfare and of international ethics. The decision is in the direct line of human social progress with the Geneva Convention of 1864, the anti-slavery bill, the social legislation initiated by Charles Dickens and Lord Shaftesbury and The Hague Conventions. A definite move was made for the first time to apply the Christian ethic in the sphere of social and international relations. In the belief that the most promising line of approach to the problem of warfare was by achieving a general recognition of its essential inhumanity by incriminating its most obvious and repugnant cruelties, The Hague Conventions denounced some of these as illegal. Among these (whether rightly or wrongly matters little) was included the use of poisons, and of asphyxiating gases (in shells). It is irrelevant to the fundamental issue that the contentions advanced by Admiral Mahan have been justified by the developments of gas warfare; in particular the success of the "gas mask" and extensive use of "persistent" vesicant and non-lethal irritants. The relatively "humane" and non-lethal character of the chemical weapons used in the later part of the war was incidental, not deliberate, and depended chiefly on the efficiency of the defensive measures possible to the *military forces of a scientifically organised nation*, and on the low vapour tension of dichloro-ethyl-sulphide. That this state of things is liable to shocking reversal under other conditions, such as those of totalitarian warfare, hardly needs to be stressed. The gas first used, chlorine, though among those most easily resisted, is the most cruel of any in its action. Even "boiling in oil" could hardly bring a death more dreadful.⁹

It is however unprofitable to attempt a too nice or scientific adjustment between the relative degrees of cruelty of various weapons and modes of warfare, which is best left to human common-sense and sensibility. The "crime" of the Germans did not lie only, or even chiefly in the fact that gassing can involve a cruel death, but in the breaking of international law, whereby alone the social cosmos is maintained. The social sin that is without forgiveness is treachery. The supreme treachery is that against our common humanity; and when, on 22nd April 1915, without provocation, without denunciation of The Hague Convention, and after exact and prolonged preparation,¹⁰ the German High Com-

⁸ *British Official History, Diseases of the War, Vol. II, p. 242.* Hanslian, *loc. cit.* (orig. ref Panmure papers—1908). It was rejected "on the score of its inhumanity, for it was felt that an operation of this nature would contravene the laws of civilised warfare".

⁹ "Most of the men were in a choking condition, making agonising efforts to breathe, clutching at their throats and tearing open their clothes. At one moment they propped themselves up to gasp, at another they fell back exhausted by their struggle. The skin was cold. There was marked cyanosis, especially of the lips and ears, and in a few cases a light yellowish frothy discharge was escaping from the mouth and nose. Some, especially the older men, were in a state of collapse, their faces and hands were of a leaden hue, their heads fallen forward on their chests. The majority of such cases did not rally. All, except those moribund or collapsed, were fully conscious and fighting desperately for life. Fourteen men died out of the first batch of seventeen taken off the motor ambulances." (*British Official Medical History, Diseases, Vol. II, pp. 384-5*)

The cases described resulted from cloud gas used in May, 1915 composed of chlorine.

¹⁰ *Provocation.* This was candidly acknowledged by Prof. Haber, the German expert responsible for the introduction of gas warfare. (*British Official History, France and Belgium, 1915, Vol. I, p. 194.*)

Preparations for gas warfare began within a month or two of the outbreak of war. (Lefebure *The Riddle of the Rhine, p. 35.*)

mand, with the willing co-operation of German scientific and industrial leaders, released chlorine gas from cylinders at the British-French junction in the Ypres salient, it was guilty of a treason against humanity for which modern history before Hitler can provide few parallels. A staggering blow was dealt at the sanctity of human pledges and the sense of humane obligation, and, with these, to the high hopes that had been held that "religious" emotion and "scientific" rationalism might together give a clear lead to the human race in its long and terrible ascent to the stars.