

Phosgene Necessary German Chemical

Chemistry

When a tank of phosgene gas exploded near Hamburg and felled hundreds, there were querying echoes on this side of the Atlantic. For phosgene is the most effective of the deadly lethal war gases and the treaty of Versailles specifically prohibits the manufacture of poisonous gases in Germany.

How, then, does it happen that there is phosgene in Hamburg? Are tales of war preparation in Germany true? The chemist has a better explanation. Despite the treaty, chemical production demands that poison gases must be manufactured. Phosgene has not only been manufactured in Germany since the war, but con-

siderable quantities have been shipped to America. Chemically phosgene is one part carbon, one part oxygen and two parts chlorine. It is the raw material for some dyes, particularly crystal violet, also used as an anti-septic. It is also used in the manufacture of some chemical solvents and several American chemical plants make it and utilize it for this purpose.

The phosgene explosion is reinforcement to the contention of chemical experts that disarmament of chemical warfare material is impossible because the same chemicals are effective on the battlefield and in the peacetime factory.

Despite the military effectiveness of

phosgene, it is quickly dissipated once it is liberated in the open air. After ten or fifteen minutes the concentrations should be so diminished as not to be deadly, chemical warfare experts declared today. In this respect phosgene differs from blistering mustard gas, which sticks to the ground and persists for days after it is let loose. Mustard gas is considered the most effective of all war gases. Ammonia and water are effective in neutralizing phosgene.

A less serious phosgene explosion occurred some time ago at Boundbrook, N. J.

Science News-Letter, June 9, 1928

Face to Face with a Wasp

Entomology

To most people, a wasp is a good thing to keep away from, but on our cover this week we present one—in the way that he would appear if you were as small as he, and should meet him face to face. The picture is from a photograph by one of the most enthusiastic and successful photographers of insects—Miss Cornelia Clarke, of Grinnel, Iowa.

Though it would take a person much better versed in insect physiology than any entomologist to distinguish one wasp from another in such a photograph, it is a fact that wasps do have personality. In his "Insect Book" (*Doubleday, Doran*), Dr. L. O. Howard, former chief of the U. S. Division of Entomology, tells of the observations of George W. and Elizabeth G. Peckham, two leading students of wasps. The personality of the wasps "was of such mental attributes as careful painstaking or carelessness, and industry or laziness. One seemed to hurry tremendously, and spent no time on non-essentials. Another was an artist, working for a long time on the closing of her burrow, arranging the surface with scrupulous care and sweeping away every particle of dust to a distance. Still another went to the extreme in carelessness, carrying the caterpillar in a very careless way and making a nest which was a very poor affair."

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