

Had a gas best be ejected from projectors brought close to the enemy's lines, or should it be put into shells? Is it advisable to disguise the odor of a gas by the admixtures of other gases? These are questions on which his decision should be final. This officer must be a man of intelligence, for it is up to him to either carry out new ideas or else pass them back to the laboratory to strengthen them for actual combat use, but his authority should not be allowed to extend beyond these specialized tasks.

The fourth type of mind is that of the general director who has before him an over-all picture of the entire war and whose word alone can release the invention. His judgment, not that of the military staffs or any other groups, should decide if, when and how a new weapon is to be put to practical use. If he fails, the invention fails, no matter how meritorious it may be *per se*. The German generals should not have shouldered a responsibility that properly belonged to a type of mind they did not possess.

The great achievement of chemistry in the first World War was the lesson we learned—or should have learned—how to utilize new chemical ideas cor-

rectly. Gases may or may not play a prominent part in our present conflict, but other chemical inventions may take their place, carrying with them that element of surprise which is so essential to military success. If such an invention should be brought forth, it will undoubtedly be developed and used with full consideration of the lesson the Germans taught us unwittingly by their abortive gas attack at Ypres almost thirty years ago.

Above all, of course, the first World War confirmed what the Civil War had indicated—that war has become an enormous business and that its direction should no longer rest exclusively on the military branch of the government; strategy, arms and manpower have ceased to be the only means by which war is waged. Each nation needs in addition much other new equipment, such as a research department—scientists. But equally important is a board of directors to coordinate all branches and infuse into the whole structure the shrewdness, experience and all-around brain-power without which no Big Business can be successfully conducted.

(To be concluded)

SCIENTIFIC EVENTS

DEATHS AND MEMORIALS

DR. EDMUND S. CONKLIN, formerly head of the department of psychology of Indiana University, died on October 6 at the age of fifty-eight years. Before going to Indiana University, Dr. Conklin was head of the department of psychology at the University of Oregon.

DR. WINFIELD SCOTT HALL, since 1919 emeritus professor of physiology of Northwestern University, died on October 2 at the age of eighty-one years.

DR. FRANK WILLIAM MARLOW, professor emeritus of ophthalmology of the College of Medicine of Syracuse University, died on October 4. He was eighty-four years old.

DR. HERBERT POTTS, professor emeritus of oral surgery of the Dental and Medical School of Northwestern University, died on October 7 at the age of sixty-nine years.

THE death is announced, while a prisoner of Japan, of Dr. Robert Cecil Robertson, professor of bacteriology at the University of Hongkong and a member of the League of Nations Medical Mission. He was fifty-three years old.

Nature announces the death of Dr. L. Aschoff, professor of pathological anatomy at the University of Freiburg in Breisgau, aged seventy-five years, and of

Dr. H. C. Lawrence, formerly of the Imperial Forestry Service, Burma, on August 25, at the age of sixty-seven years.

THE Soviet Academy of Sciences has set up a special committee, under the chairmanship of M. Krylov, the mathematician, who translated Sir Isaac Newton's works into Russian, to celebrate the tercentenary of Newton in December.

MICROFILM RECORDS OF THE LINNEAN SOCIETY OF LONDON

SOME time ago a grant was made by the Carnegie Corporation to the Linnean Society for the purpose of making a complete photographic record of all Linnean manuscripts and specimens. Although these documents were in storage outside London the task of photographing the material has now been completed. At the time the grant was made the officials of the Linnean Society offered to deposit a complete microfilm record in some American institution, and later the council of the society selected Harvard University as the place of deposit. The extensive series of microfilms, transmitted from London through British government channels, is now at the Arnold Arboretum. As soon as the necessary descriptive data are received these will be deposited at the Gray Herbarium, Harvard University. Once the material is organized arrangements will be made to supply