

SAFEST SPOT IN NEXT WAR MAY BE AT FIGHTING FRONT, BATTLE OF CONFLAGRATIONS

(By FREDERIC J. HASKIN
in Boston Traveller)

Washington, July 3—The burning of entire cities by means of incendiary bombs is one of the weapons with which the war department is concerning itself. Military men have tossed aside all idea of regarding civilian population as noncombatants.

Indeed, there is a school of thought in the military service that the most effective means of waging war may prove the concentration of attack on noncombatants on the theory that this civilian branch of any national population is the backbone which really supports the offensive branches.

Removing Bones

To destroy the civilian population behind an army would be like removing the bones from a mailed fist. It would still be a fist but there would be nothing to thrust it at the enemy.

The turning of attention to incendiary bombs, designed to ignite cities, munition factories, forests, shipyards, or anything else inflammable has resulted largely from the realization that too much has been expected from the poison gas. Gases are deadly but not on as large a scale as the next war seems to call for. Men were not killed and maimed, blinded and crazed at rapid enough rate in the last great war to meet the requirements of the next onward step in nationalistic competition.

Such men as Capt. Liddell Hart of

the British army, acknowledged to be one of the outstanding military experts, regard gas warfare as somewhat old-fashioned—something like the bow and arrow compared with the rifle. He says: "As an attack with gas bombs, this most popular bogey would seem to have still less substance when examined."

And Maj. Leon A. Fox of the medical corps, United States army, declares: "There are no chemical agents so powerful that one airplane can destroy New York City. Such agents do not exist. Improvements may be made but chemical principles do not change. But, of course, scientific facts never stop sensationalists." Maj. Fox characterizes those who regard poison gas as particularly efficacious as dreamers.

Maj. Fox has a better weapon himself, in the use of bacteriological germs. He has pointed out to the army how bacterial warfare may be waged so that plagues may be harnessed and slay millions of men by the spread of dread diseases.

Deadly Aid to Warfare

One weapon of warfare is always succeeded by a more effective one, and if military men feel that poison gas is not sufficiently effective they can turn to the plans of Col. J. E. Zanetti of the chemical warfare reserve, who champions the ultra-modern effectiveness of warfare by conflagration.

Towards the close of the last century a scientist by the name of Goldschmidt invented thermite. It is a mixture of aluminum powder and oxide of iron. When a spot of this material is heated, as it readily may be by a primer, a violent reaction is set up which spreads rapidly, forming aluminum oxide and metallic iron.

The temperature of the mass is increased to 3000 degrees centigrade. As laymen are more familiar with Fahrenheit, it may clarify the statement to say 3,000 degrees centigrade or 5,400 degrees Fahrenheit. Such a tremendous temperature not only melts iron, it is 1400 degrees centigrade above the fusing point. Thermite, therefore, made in the form of a bomb would distribute a mass of superheated iron, fused to a pervasive quality which, instantly, would fire anything in its vicinity.

In the closing days of the last century, more or less humanitarian rules of warfare were observed. Dum-dum bullets had been outlawed. They are regarded as toys now. Submarines were outlawed as inhuman. Now they are a matter of course. Poison gas was utterly rejected. Now it is passe.

Thermite was never intended by its inventor, or anyone else at the time, to be used except industrially. It was employed for welding rails, anchors, and very heavy pieces of machinery. Only in the closing months of the world war did anyone seriously consider the use of thermite in warfare. The armistice came before any wide use was made.

War by Conflagration

Now that the effectiveness of poison gas has been somewhat belittled, attention is being turned to warfare

by conflagration. The plan would be to send high speed airplanes over cities, industrial centres, administrative centres and any important concentrations of buildings and population and drop thermite bombs. On touching a surface, such as the roof of a house, the thermite would be released and metallic iron, in molten form, at 5400 degrees Fahrenheit, would flow out. This tremendous heat would set anything the least bit inflammable, afire.

A great city would be ignited in from one to twenty places at once. Many cities probably would be burned as Chicago, Rome or London were burned in accidental conflagrations. Large civilian populations would be demoralized and become a burden on the military. In the case of industrial cities, countless explosions would likely be caused to increase the difficulties and casualties.

Incendary or arson warfare is simpler than gas warfare. Much larger, heavier bombs have to be dropped at much closer range to produce a sufficient concentration of gas at one place to have any material effect. Also, civilian populations can be taught to use gas-masks. In France and Germany all civilians are drilled daily in gas mask defence right now. Moreover, the wind is the enemy of gas. A brisk breeze will clear the air of poison gas and dissipate it in a short time.

Tactics Reversed

Tactics would be reversed in conflagration warfare. Instead of being concentrated, wide dispersion would be sought. Thermite bombs are lighter than gas bombs. No low-flying groups of planes, easily attacked would be required. Remote specks in the sky could drop the thermite. The wind would be an ally. The brisker the gale, the more likelihood of the spread of conflagration. While civilian populations can be drilled into using gas masks, no one since Shadrach, Meshach and Abednego has been able to pass through a fiery inferno unscathed.

Another aspect of thermite warfare is in connection with the spiking of guns. In old time warfare, when cannons were loaded from the muzzle and ignited through a touch-hole, the gun could be put out of commission by the simple expedient of hammering a spike—an ordinary nail of fair size—into the hole. It would have to be drilled out, a tedious process, before the gun could be fired again.

A bit of thermite, can be tossed into the muzzle of a gun—even as huge a gun as the Big Bertha which shelled Paris from 90 miles away—and instantly render it useless. A little 5400-degree thermite causes the sides of the bore to run together.

These little touches of modernity which military men are working on today are indications of how the task of a disarmament conference grows larger every day. They also suggest that the safest place for a man in the next war may be the front.



Sealed Tenders addressed to the undersigned and endorsed "Tender for Public Building, McAdam, N. B." will be received until 12 o'clock noon day-light saving), Wednesday, July 18th, 1934, for the construction of a Public Building at McAdam, N. B.

Plans and specification can be seen and forms of tender obtained at the offices of the Chief Architect, Department of Public Works, Ottawa, the Resident Architect, Old Post Office Building, Saint John, N. B., the Caretaker, Public Building, Fredericton, N. B., and at the Post Office, McAdam, N. B.

Tenders will not be considered unless made on the forms supplied by the Department and in accordance with the conditions set forth therein.

Each tender must be accompanied by a certified cheque on a chartered bank in Canada, payable to the order of the Honourable the Minister of Public Works, equal to 10 per cent. of the amount of the tender, or Bearer Bonds of the Dominion of Canada or of the Canadian National Railway Company and its constituent companies, unconditionally guaranteed as to principal and interest by the Dominion of Canada, or the aforementioned bonds and a certified cheque if required to make up an odd amount.

Note.—Blue prints can be obtained at the office of the Chief Architect, Department of Public Works, by depositing an accepted bank cheque for the sum of \$20.00, payable to the order of the Minister of Public Works, which will be returned if the intending bidder submit a regular bid.

By order,
N. DESJARDINS,
Secretary.

Department of Public Works,
Ottawa, June 23, 1934.

SCHOOL GIRL CHUMS HAD MUCH IN COMMON

Pittsburgh, July 3—Two school girl chums, who hadn't seen each other for four years, were reunited here in divorce court.

There they found that they had more in common than their early friendship.

Each eloped to Wellsburg, K. Va., in 1930.

They were married by the same minister.

Each sued for divorce on the same day in the same court.

Both charged desertion.

The two, Mrs. Thelma Hytovitz and Mrs. Anne Elizabeth Reed, had not met since their marriages in 1930, before which they were close friends.

Once prices are raised, all we need is some way to keep poor people from doing without.

WOMAN DOESN'T EVEN SPARKLE

WOMAN DOESN'T EVEN sparkle in Rome, July 3—Italy's famous electric woman has flickered out.

During two months under strict observation at the Rome psychiatric clinic to which Guglielmo Marconi, as head of the National Council of Research, had her brought from Trieste, Anne Monaro failed to produce the rays of light that amazed the doctors in Trieste.

The psychiatric clinic announced today that Government agents took the woman back to Trieste yesterday.

The doctors here were disappointed at the failure of the "human firefly" to shine in Rome, but they said other doctors in Trieste would continue to look for illuminations.

Adversity does some good. Observe how many elevated noses have been improved by contact with the grindstone.

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