

Fog Dispelled by Oil Film on River Surface

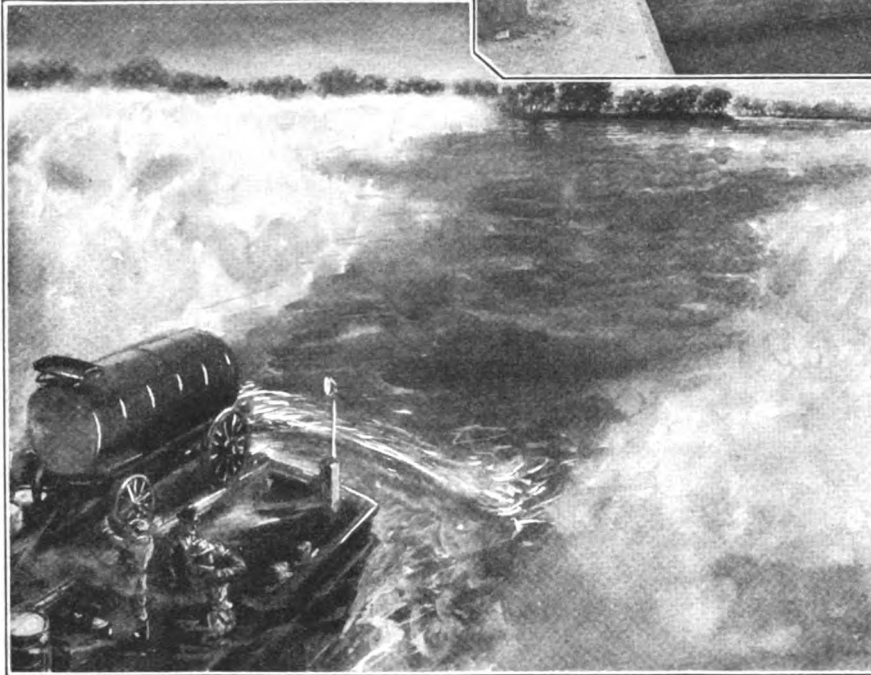
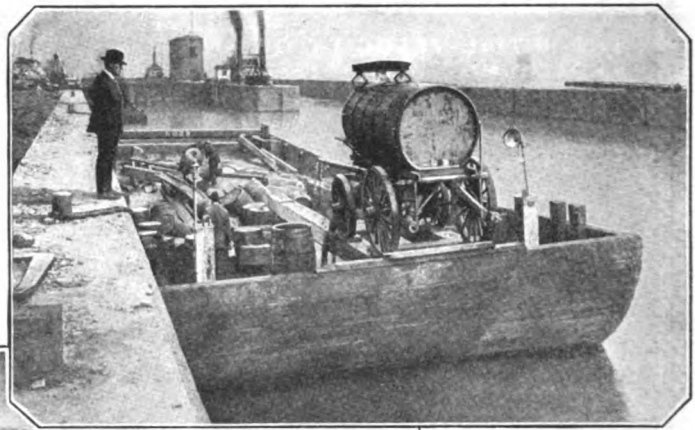
ARMED only with a city sprinkling wagon placed on a government barge, a mixture of oil and organic acid, and data obtained in laboratory experiments, Pittsburgh, Pa., scientists, co-operating with the United States Engineering Department and the Weather Bureau, recently outwitted nature, proving that fog prevention is possible.

By pouring an oil film over the surface of the Monongahela River from Rices Landing, 35 miles south of Pittsburgh, to a point 1½ miles upstream, the scientists succeeded in cutting a

distinct lane through the river mists, demonstrating that any city situated on an inland body of water can rid itself of much of its fog nuisance. In Pittsburgh, where the Monongahela and Allegheny rivers join to form the Ohio, the fog nuisance has been so serious at times as to tie up traffic. By shutting off sunlight, it has menaced the city's health and has cost thousands of dollars in damages and in abnormal consumption of electricity for lighting.

The experimenters aboard the government boat "Evelyn," towing a barge equipped with a crude sprinkling apparatus, began their work at 10 o'clock one evening, after a heavy fog had settled. As the sprinkler began pouring a path of oil in the wake of the barge, a strange phenomenon occurred. Everywhere ahead of the boats was a heavy blanket of mist; but in the rear the

Spraying the water with a mixture of oil and organic acid from an old sprinkling wagon mounted on a scow (at right), experimenters cleared a path through heavy fog on the Monongahela. Fog remained on each side of the oil film, as shown below



On the following morning, a trip of inspection showed that the oil covered the entire surface, but was too thin in spots to be effective. Yet for the first time in five mornings, government men at Rices Landing could see across the river.

The following facts are significant:

Less than \$75 worth of oil and organic acid was consumed.

Scientists estimated that if a proper amount had been available, the oil film would have been effective for about 100 days.

An organic mixture added to the oil made

possible a film of one one-thousandth of an inch in thickness—the thinnest film ever created in open air.

The treated oil spreads 25 times as fast as untreated oil.

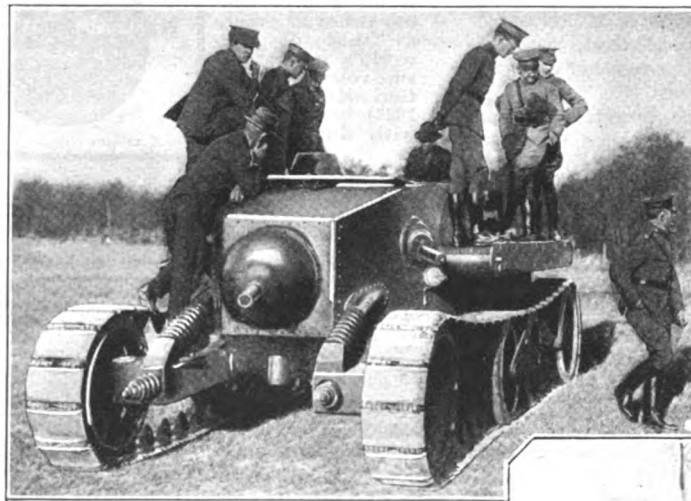
Speedy New Battle Tanks for Army

FOLLOWING recent amazing exhibitions by a new amphibious gun carriage tank that "runs like a rabbit, climbs like a squirrel, and swims like an otter," nearly a hundred military authorities of this country pronounced it one of the most revolutionary war machines ever invented. Now a second new development of the war tank, exhibited by the army at Washington, known as a "speedster," attains a speed of 40 miles an hour, and is considered almost shellproof because of the pace it sets.

Tank Crosses the Hudson River

The amphibious tank, carrying a "six pounder" and three machine guns, traveled at a speed of 30 miles an hour down Riverside Drive, New York City, was then converted into a tractor and easily climbed a 45-degree hill, finally completing its performance by accomplishing the astounding feat of propelling itself across the Hudson River and back—1.7 miles each way—in 44 minutes.

Uncle Sam owns the patents on this tank, which is the result of work by Walter Christie, former daredevil auto driver. The tank, 15 feet long, six feet wide, and



© International

weighing six tons, has four wheels on each side that run on a track laid down by the endless tread. When operating with the endless tread removed, the machine attains a speed of from 30 to 40 miles an hour. In the water, the tank is driven by detachable propeller blades.

The new speedster tank is equipped for long runs, carries a 75-millimeter field gun, can accommodate 10 men and supplies and ammunition sufficient to last 10 days.

The army's new "speedster" tank, shown at left, is equipped for long distance runs and can attain a speed of 40 miles an hour. Below: The Christie amphibious tank is shown starting to climb a 45-degree hill in a recent amazing exhibition in New York City, afterward propelling itself across the Hudson like a boat

