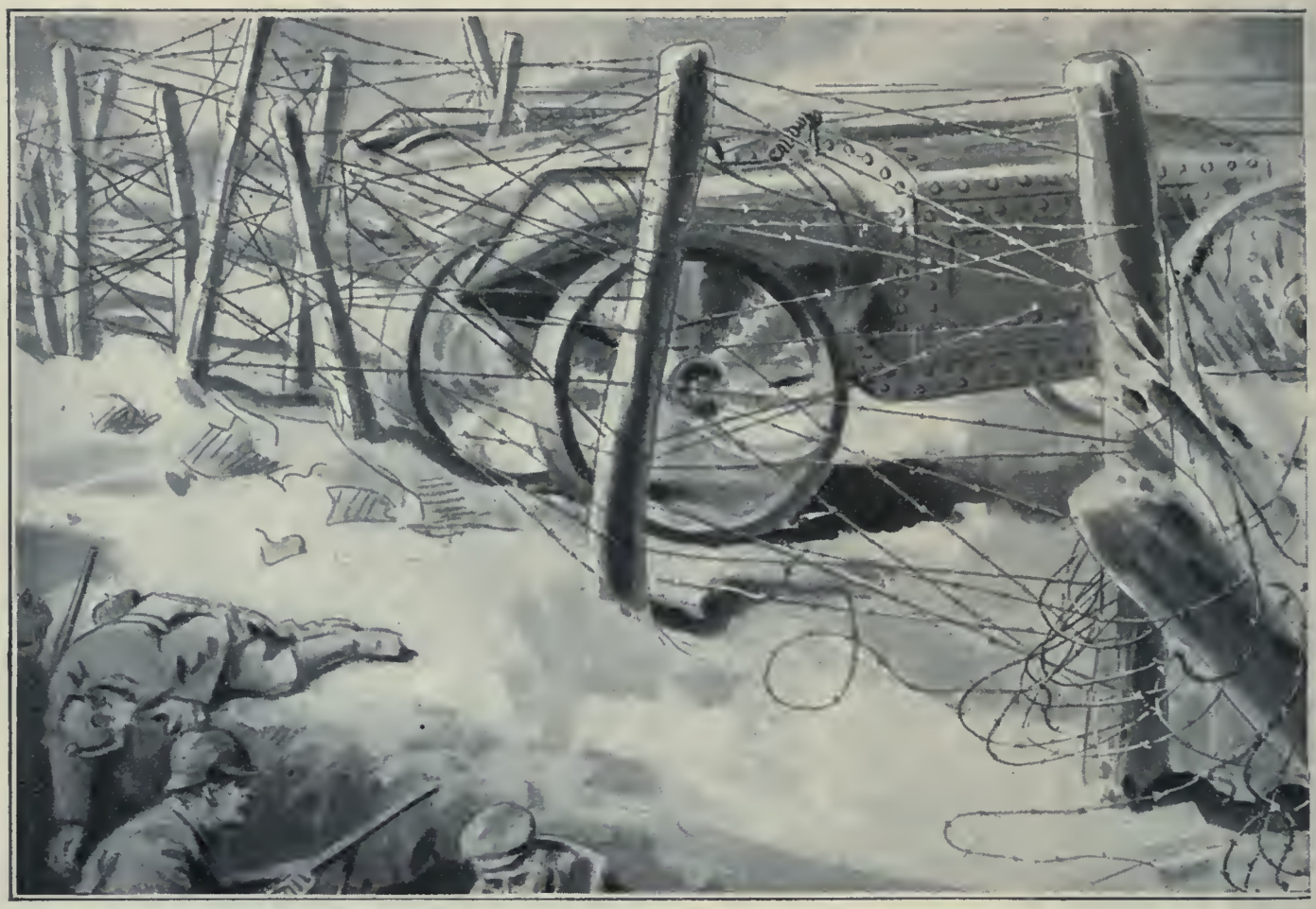


Why spend great sums in bombarding the enemy's entrenched position with artillery when a fleet of torpedo automobiles, each carrying a charge of high explosive, could be launched with

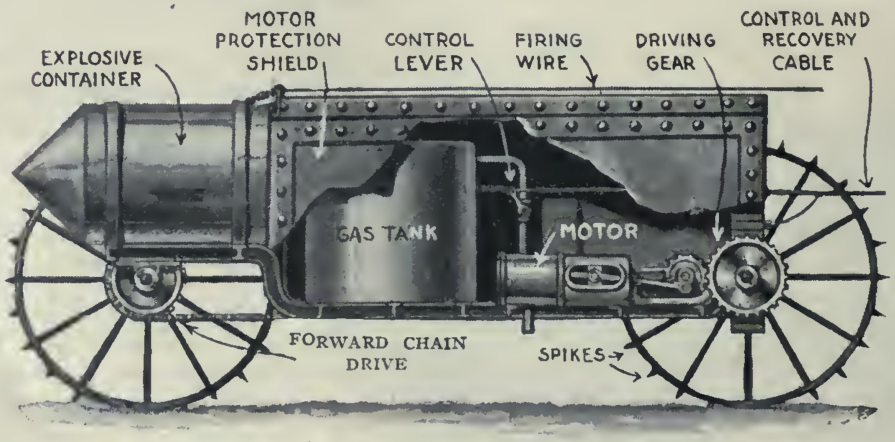
The Torpedo Car—It Destroys Trenches

Also it takes the place of artillery in preparing the way for infantry attack

A WELL-DIRECTED bombardment ("artillery preparation" is the polite military term) preceding an infantry attack obliterates breastworks and barbed-wire entanglements, and literally blasts the enemy from his entrenched position. From experience under such a hail has come the fighting man's dictum, "Better to face a whole regiment than brave an hour's artillery fire!"

But even though the use of modern artillery has worked a revolution in battle practice, preparing the way for an infantry charge entails a staggering cost. For that reason inventors have tried, and indeed still are trying, to substitute some agency which will replace the big guns and do their work cheaper but no less efficiently.

The device illustrated, which may be called a torpedo car, because it is nothing more than a torpedo mounted on an automobile chassis, is an attempt to relegate artillery to the scrap heap and substitute in its stead a cheap,



What the torpedo car looks like. Note that the control cable regulates the speed of the machine and that the firing wire sets off the explosive

unerring accuracy and deadly effect against the barbed-wire entanglements? One of these machines would cost but one thousand dollars; a modern naval torpedo costs seven thousand dollars

effective means of destroying the enemy's entrenchments. So far as the actual manufacturing cost goes, one of these torpedo cars could be built for one thousand dollars, whereas the modern naval torpedo represents an outlay of seven thousand dollars. This, in itself, is an important factor in its favor. Whether or not the torpedo car could withstand the concentrated fire of the defending force, rests entirely upon the distance over which it would have to travel and the material of which it is made.

Briefly, the torpedo car consists of a torpedo carrying several hundred pounds of high explosive mounted on a chassis. It may be propelled either by gas, steam, compressed air or a storage battery and electric motor, all depending on its contemplated use and the estimated range of action.

But the most important feature of the car concerns the method by which it is guided and fired. This is done by means of cables and wires in the hands of the attacking party, as illustrated on this page. The control cable is attached to a valve in the supply pipe connecting the cylinders of the engine with the boiler, operating the speed of the car. The charge is fired by means of a wire attached to the trigger.

If it is found that the torpedo cannot reach the enemy because of rough ground, the control cable may be used to close the valve and to draw the machine back to the trench, for aiming it in a new direction. A windlass is provided for this purpose. Spiked wheels insure traction.

The torpedo car is provided with a shield of sufficient strength to bear up under rifle fire, as there is little likelihood that the enemy could train artillery on it in the brief period during which it is exposed and the high speed with which it is driven.

In carrying out an offensive campaign the inventors, Victor A. Villar, of New York, and Stafford C. Talbot, of London, plan to supply an attacking force with a number of these torpedo cars. At a given signal these war implements, suitably spaced apart according to the length of the enemy's front to be attacked, are released. They travel toward the enemy's entanglements and obstructions with astonishing speed. When they have reached certain desired points, the torpedoes which they carry are automatically exploded by pulling the wires attached to the triggers, and everything within a radius of two hundred feet is blown to pieces, including the machines.