

# FRENCH SOLDIERS MOBILIZING



French Troops Mobilizing in a Provincial Town.

## Significant Sentences Showing the Efficiency of the Modern British Army in Time of War

From an account describing "The Mobilization of the British Army," shown by the Famous Players' Film Service of Canada and exhibited at Loew's Winter Garden Roof last week.

**I**N TWO SECONDS any target up to a range of over six thousand yards can be sprayed with 4284 bullets from a single brigade of Royal Horse Artillery. There are six guns in a battery and three batteries in a brigade.

Only a few months ago, in an artillery practice camp, a single thirteen-pounder located and completely destroyed a moving cavalry target at a range of over two miles.

A 8.2 gun is practically the heaviest howitzer used by the Royal Garrison Artillery. It hurls a 312-pound shell with the utmost accuracy and rapidity of fire, dropping shrapnel bullets or high explosives down on an enemy.

The Royal Flying Corps has developed the science of mid-air scouting and dropping of bombs at a height from both aeroplanes and dirigibles. Both of these have yet to be tried in actual warfare.

In attacking a fortified position, the Royal Engineers can tunnel under the parapet of a fort, even tho it be solid rock. While the men work, protected by rifle or maxim fire above them, a man equipped like a diver stands ready to enter the mine and bring out any worker who may be overcome inside the shaft.

To check the advance of an enemy, the sappers construct an impenetrable hedge of barbed wire many feet thick, thru which no human being could hope to cut his way with wire cutters, or by using explosives.

To hinder an enemy anxious to get to close quarters in a big hurry, the sappers construct "fourgrasses," or small mines, loaded with stones, bricks, or small live shells. They are improvised mortars, which explode on the approach of a hostile force, and scatter destruction in every direction.

In something less than five hours, the Royal Engineers can demolish an ordinary house and utilize the timber, joists, etc., thereby obtaining a bridge a stream, the time varying with the conditions. Bridges of this kind can be built to sustain a weight of five tons.

In destroying the bridges of an enemy, or even their own in case of need, the Engineers ascertain the strength of the explosive they need

to use by measuring the main supports and making calculations.

### Trenches Are Not Straight.

In digging trenches, the Engineers adopt the method of zig-zagging and twisting the direction of a trench, instead of making it straight. This is to stop enfilading fire taking effect, and makes the trench look as if it had no front or sides at all.

To bombard such a trench effectively, a gunner officer would have to arrange for frontal fire, enfilade fire and oblique fire all at once. Invisibility being the underlying idea of trenchment, rifle loop-holes are cunningly arranged so that they cannot be seen a few feet away. At the same time, an overhead shelter is provided for the gunners.

Modern military practice has made obsolete the phrase "dying in the last ditch." The defenders of a trench think nothing of leaving cover and delivering a vigorous counter-charge, the moment an attack wavers in the least.

Regimental colors have been left out of wars for so long that even the average civilian is well aware of the fact that battalions no longer march into action with flags flying.

### War is Drab-Colored Now.

Not only colors, but facings, time-honored regimental numbers, territorial traditions, and many distinctions of a like character have been eliminated in order to maintain uniformity in action.

Infantry arms consist of the rifle, bayonet and machine gun. The "pom-pom," which figured so much in South Africa, has been withdrawn.

The service machine gun is the .303 maxim, which will fire a continuous leaden stream of bullets at the rate of 600 a minute, or 10 bullets every second, at ranges of from 900 to 1200 yards.

The maxim weighs 60 pounds, and its lightness enables it to be carried anywhere the troops can go. It can be taken along roads on wheels, across country on pack animals, or, if needs be, shouldered by a single soldier—right up into the firing line.

The weak point of the maxim is that its mechanism is liable to jam and render it useless. In the hands of trained gunners, its destructive power is greater than land mines, bursting shrap-

nel, cavalry charges, bayonet charges, or any variety of rifle fire.

The force behind a modern bullet gives it a muzzle velocity of nearly two thousand five hundred feet per second, and a penetration which enables a bullet to knock a hole clean thru a brick wall, a yard of soft wood, a couple of feet of oak, or four or five feet of clay.

### Killing Only an Incident.

In theory, there is no particular need to kill anybody in war; it is only necessary to stop a foe from reaching a certain point, but he must be stopped; and ever since war began killing has been incidental to the stopping. The latest type of bullet is constructed on a principle which gives it a pronounced tendency to turn immediately after impact, thus plowing its way sideways thru its living target and inflicting a terrible wound.

The rifle of today is capable of delivering 28 rounds of aimed fire in a minute. Years ago, an infantryman had to aim at a point twice the height of a man above his body. Now the trajectory of a magazine rifle is so flat that, with the latest type of bullet up to 600 yards' range, there is not enough curve to render any alteration in the back sight necessary.

The modern bullet is a compound, consisting of a core and two parts—the front portion being an alloy of aluminum 90 per cent, zinc 10 per cent, and the rear portion being an alloy of 90 per cent lead and 10 per cent antimony.

The bullet is enclosed in an envelope of 80 per cent copper and 20 per cent nickel. As many as 6000 bullets of this type can be fired from a service rifle without wearing the weapon out.

### Bayonet Not Obsolete.

It is a great mistake to imagine that the bayonet is obsolete, or that the days of hand-to-hand fighting are over. When an advance begins, it must go on. To stop is bad, to retreat fatal. The bayonet is relied on to push the charge right home, when the desired spot is reached. Whatever may have happened to the sword and the lance, the bayonet is as important today as it ever was. The mere sight of it in the hands of a British soldier is often enough to frighten an enemy.

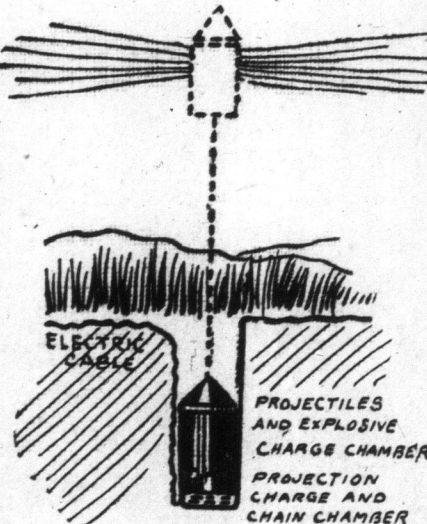
In marching, the length of the ordinary step is 30 inches, 75 to the minute. In "stepping out," the pace is lengthened by 3 inches. Quick march is now 120 paces to the minute, instead of 108, as it was in 1883.

In "double-time" the step has increased from 36 to 40 inches, and the rate from 150 to 180 steps per minute, so that the modern soldier covers 200 yards, while his predecessor of years ago covered 150.

In South Africa, the 19th Brigade, within a period of 30 days, fought 21 times and marched 327 miles. The casualties were between 400 and 600, the defeats nil.

## How Germans Met New And a Terrible Death

The mine-grenade whose working is illustrated is the invention of Mr. N. W. Aasen, a Norwegian engineer. Each grenade is buried in a place unsuspected by the advancing enemy; weighs about 9 pounds, including its accessories; contains 400 projectiles and about 12 ounces of an extremely powerful explosive; and is fired by an electric current supplied to it thru a flexible cable, which is also buried. To quote Dr. Alfred Gradenwitz in the "Scientific American": "The grenade consists of an iron cylinder with a conical point, which contains in its interior the projectiles and explosive charge as well as the mechanism causing the grenade to rise from the ground and eventually to explode. . . . At the bottom of the cylinder there is a small powder-charge, which is ignited by the electric current and projects the shell-body vertically thru



How the mine-grenade is buried — the dotted lines showing the exploding position. The grenades are buried by the hundreds, and are connected all on the one electric cable.



Destruction by the hidden death, controlled by hidden enemy; the explosion of a mine-grenade containing 400 projectiles.

the superincumbent earth-layers. The jettils in a horizontal direction, radiate from the center of the shell-body, which is ally from the centre, and parallel to the surface of the ground, which it end of which is fixed to the cylinder sweeps over an area of at least 960 square yards. At 40 feet the projectile occurs at the very moment that the chain is tightened. As a rule, least four inches thick, and they exert a height of about three feet. It then Grenades may remain in the ground for years without suffering damage.