Within two months [of the beginning of the war], over a million men were dead, and the armies had ground to a halt. Machine weapons—quickfiring artillery, and machine guns spewing out six hundred bullets a minute—filled the air with a lethal steel sleet, and anybody trying to move above ground was almost certain to be hit....

And as the trenches spread and linked up with each other, [a] great revolution in military affairs occurred: the continuous front. Nobody planned it, and nobody expected it. . . As the Allies and the Germans repeatedly tried to get around the remaining open flank of the [enemy's] trenches, only to collide, halt, and end up in a new stretch of trench, the front reached the sea, and there were no more flanks; it was theoretically possible to walk 475 miles from the English channel to the border on neutral Switzerland along either of two parallel lines of trench, sometimes as close as ten or twenty yards apart (more usually several hundred), without ever setting a foot in the surface.

The mathematics that created the continuous front were quite straightforward. For almost all of history the weapons in use had forced soldiers to crowd together practically shoulder to shoulder in order to be able to control the space in front of them—only ten feet in front of them in the case of a phalanx [formation] of pikemen [soldiers armed with pikes], but no more than a hundred yards or so even in the case of an eighteenth-century battalion using smoothbore muskets. Battles were therefore extremely congested events occurring in a small space, and relatively compact armies spent most of the rest of their time marching through open country seeking an advantageous position for the critical few hours before they would meet on

the battlefield.

But as firepower grew by leaps and bounds in the latter half of the nineteenth century—rifles able to deliver ten shots a minute at a thousand yards, followed by machine guns and modern artillery dispersion became the key to success....

But the generals had not done the crucial calculation, which was to multiply the width of the front an individual infantryman could now hold by the millions of men who would be available in [World War I]. The answer, of course, was that the armies could now spread out to fill all the space available in a continuous front.

And so they did. Not only in France [were trenches dug], but across the vast distances of Russia, and later across northern Italy, northern Greece, northeastern Turkey, and even Mesopotamia and Palestine. For the men in the trenches it was a kind of war such as few soldiers had experienced before. Instead of fighting a battle one or two days of the year, they were in the field, within shouting distance of the enemy, all the time. Each day they faced the risk of being killed, and each day they endured the misery of living in a ditch. . . .

...It was no place for a human being to be, really. —Canadian veteran

Constantly having your feet in this gruellike muck caused a complaint which became known as "trench foot." There were dozens of amputation cases in the regiment.

—British veteran

Rats bother you; rats eat you if you get wounded and nobody can look after you. It was a dirty lousy place to live with all the corruption that is known to mankind.

—British veteran

The essence of the general's art had always been to maneuver his forces, but now no movement at all was possible until he had broken through the trench lines facing him—and the continuous front meant that every attack had to be a frontal attack. Since infantrymen could not hope to survive the hail of fire that would greet them if they tried to advance unaided—that was why they had dug the trenches in the first place—the only way to break through was to eliminate the sources of that fire by shelling the enemy's trenches and gun positions into ruin before the attack. At least that was the theory.

So the trench war became a war of artillery, and over half the casualties were now caused by shell-fire. The greatest problem . . . for every country was not at the front but at home, where shell production could not keep up with demand. . . . At the Third Battle of Ypres in 1917 [for example], the nineteenday British bombardment used 4.3 million shells

weighing 107,000 tons, a year's production for 55,000 workers.

And still the infantry could not break through....

With strategy paralyzed and tactics narrowed to the search for ever bigger bombardments, the war became a simple matter of attrition...

Battles had become an industrial operation in reverse, in which the rates of destruction at the front matched the rates of production in the industries at home. . . .

It is significant that the phrase "home front" came into use during World War I, when the role of munitions workers, and of civilian production more generally, was becoming as important to victory as the soldiers in the trenches. Without a constant flow of supplies equal to the vast consumption at the front, the soldiers would soon be helpless.

Source: War by Gwynne Dyer