Tinker 1

Immediately after World War I, the countries in Europe were afraid of another war with each other. This translated into them being afraid of being attacked by their own neighboring countries, after all the last war hadn't kept anybody safe. Of these major countries in Europe, Germany and France especially decided to build walls, barriers and fortifications to keep out the enemies they believed could very well be just outside their own borders. The Germans started to build, then put up a wall to keep out aggressors. As Hitler came to power, the military built up, and then a wall was constructed to match the French's' wall they had and were building. The Germans called the fortifications, "Westwall" while the rest of the world nicknamed it "The Siegfried Line".



This line was allegedly named after the General in charge of finishing and protecting the line, but I could not verify this. Originally built between the years 1936 through 1940, by the same man that supervised the building of the original German Autobahns, an engineer by the name of Todt. Todt was able to start such a gigantic undertaking, simply because the autobahns were finished. For him another job was started, the idea of a solid line of defense, later called the Siegfried Line was begun. The German government turned its attention to its borders, after all they needed to match the French Magiot Line. The Magiot Line was a huge, but unfinished line that ran the length of France, between France's borders with Germany and Belgium. Both of these lines were built as military fortress defenses, designed to slow down and hopefully keep out the other countries and away from their borders.

This project was a huge, in fact giant undertaking. The bulk of the work was completed over an 18 month period, but took almost four years to complete to Hitler's satisfaction. With 100,00 military technicians, 350,000 laborers working over a distance of 560 kilometers (346 miles) they constructed 23,000 fortified positions, with over 14,000 bunkers, using over 350 train loads of building materials. Each DAY for a steady 18 months, using a total of over 8 million tons of cement in the construction of the fortifications. That is an incredible amount of work spread over 8 hours a day, seven days a week for a total of 546 days of people and time spent to build these fortifications. The monetary cost was also enormous, over 3.5 billion German Marks were spent to make the wall.

What do all those facts mean?

- 18 months is a year and a half of steady, continuous work. That is equal to *TWO* school years! Working every day on the same project, without breaks or holidays with the bulk of the work completed in that time period. The actual building took over four years, but without breaks, you could finish a Master's Degree from the point of view of not having any college education to start with, in the time it took to actually complete the fortifications.
- 450,000 workers is more ½ the entire population of the state of Montana or the entire population of Columbus, Georgia and Tacoma, Washington combined.
- 560 kilometers equals 346 miles, the distance from Washington D.C. to Salem, North Carolina
- 23,000 fortifications are the bunkers, pillboxes, dragons teeth and other tank traps built to stop tanks and soldiers from being able to advance beyond the German last line of defense.
 - Pillboxes: These are small buildings or bunkers made out of cement and steel. Originally a frame of steel like an umbrella without the cloth, this is then framed by a wood or steel that is like a Jell-O mold. The mold has concrete poured into it and it is allowed to harden. This makes a thick (about 9 feet) building, designed to stop bullets and even tank rounds, but of tank rounds at the beginning of the war, not at the end of the war! Over 14,000 bunkers were made, 22 were placed every kilometer. The typical bunker was 7 meters wide (21 feet), 6 meters high (18 feet) and 13 meters

long (39 feet).



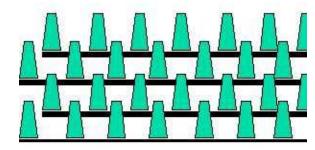


• Dragons Teeth: Between each bunker are rows and rows of concrete pillars set into the ground and connected to each other. The local people call them "Dragons Teeth". The picture shows you what the four to six rows of them look like. Each pillar is over three feet high, tapering towards the top like an over grown fudge sickle.

Dragon's Teeth are designed to stop vehicles such as; cars; trucks and even tanks from being able to just drive through to the other countries. They are set up like huge cement fences with three, four, five and sometimes even six rows of teeth built to stop vehicles.

The dragons teeth are heavy, cement pillars joined at the base with long lines of cement. The pillars are unevenly spaced, such as in the diagram and pictures above.

The miles of dragon's teeth and bunkers were spread along between German borders that separated the countries from each



other are; Belgium, France, Luxembourg, the Netherlands and of course Germany. They passed through the German Rhine valley, Pfalz area, Saarland area, the Triar valley and through the Eifel Mountains.

The teeth can be easily seen when you are driving the backroads of German towns near the borders of the Netherlands and Belgium. You can stop and walk among the pillars and imagine the time and effort to make them, the force needed to blow them up or unearth them, so the soldiers could go through them with their tanks and vehicle support. The uneven spacing is designed to make it difficult for the vehicles to go through or around the pillars. You stare at them, imagining an impenetrable wall of these pillars and bunkers. Unfortunately for the German builders of the dragons teeth, the weapons envisioned in 1939 were not the weapons and tanks used in 1945. In just five years time, the tanks and explosives were powerful enough too barely slow down the military might of the allied powers. If the pillboxes and teeth could be used in unison, then the pillboxes could keep the enemy soldiers from advancing towards the lines. Machine gun fire would keep the infantry away, preventing them from blowing up the teeth, which kept the tanks and armored vehicles from the lines.

Not only were the newer allied weapons more advanced than in 1939, but the German people did not have enough soldiers to man 346 miles of fortified defenses after six long years of horrible fighting. All types of men were ordered to defend the pillboxes along the Siegfried Line. One group of second line defense soldiers, were conscripted soldiers called the German Home Army, who had been gathered by the government from older men and wounded soldiers. They defended the line and were supplemented by men taken into service with other soldiers retreating across from France and the low countries, Belgium and Holland. Most of the Home Guard had little or no military training, or if they had training it from many years before. Some of the men were Policemen, Firemen or if the Home Guard was lucky, they received Luftwaffe men, air force, not infantry, but at least they had military training.

The Dragons Teeth made it more difficult for the Allies, but not impossible to advance their military line. The Dragons Teeth and Bunkers didn't slow them down very much, although as a soldier, you were scared to go too quickly without tanks or other armored vehicles to back you up.

Today, 58 years after the Siegfried line was built, there are still Dragons Teeth and a few bunkers remaining. Scattered here and there over the entire line, you see Dragons Teeth in the fields with trees, bushes and wildlife flourishing in these small areas of refuge from the surrounding homes and towns. A bunker suddenly there to remind you that the field once was not so pretty and innocent. Years ago most of the teeth and bunkers were torn up by the advancing forces and then after the war, the towns and cities tore them up to make way for roads and houses. Today, the remaining pillars or pillboxes are located where it is too difficult for the average person to remove them, from between fields, property boundaries or inaccessible areas.. Surprisingly, a few areas were left on purpose, to encourage wildlife, badgers, rabbits, and many species of birds to take over the overgrown weeds and keep man away.

If possible, stretches of the teeth and pillboxes should be kept in original condition, as reminders of our past and lessons for our children.

