

## THE CIVIL WAR – ARTILLERY - FUSES

Most people think only cannon balls were shot out of cannons. This isn't true. Many different kinds of things were shot out of cannons during the Civil War. No matter what it was, it had to explode at the right time. Time fuses were used to make sure this happened. The most common time fuses were paper cylinders packed with slow-burning black powder. There were markings on the paper wrapping for shortening the burning time. The gunner had to decide where the target was. Then one of his crew members would tell him where to cut the fuse. Cutting the fuse shorter allowed the gunner to shoot at something closer. Leaving the fuse longer allowed him to shoot at something farther away. All the paper time-fuses used by the North during the Civil War were made at the same factory. This helped make sure the fuses would burn at the same rate. Southern fuses were made at many different factories. The South's fuses did not burn at the same rate. Why do you think this was so? Why do you think it was so important for the fuses to all burn at the same rate?

Metal fuses were also used in the Civil War. They were called Bormann time-fuses. Metal fuses didn't work as well as paper fuses. Many units decided to use only paper fuses.

The flame from the exploding charge in the cannon tube ignited the powder in the paper or metal time-fuse. Once the fuse powder was ignited it began to burn. It burned a certain number of seconds. Then the fuse flame entered the powder chamber inside the projectile in the cannon. Boom! It would explode out of the cannon and head towards the target.