

## **How Warren Commission Decided 3 Shots Were Fired**

*Following is the the portion of the text of the Warren Commission's final report dealing with the number of shots fired in the assassination of John F. Kennedy.*

The consensus among the witnesses at the scene was that three shots were fired. However, some heard only two shots, while others testified that they heard four and perhaps as many as five or six shots. The difficulty of accurate perception of the sound of gunshots required careful scrutiny of all of this testimony regarding the number of shots. The firing of a bullet causes a number of noises: the muzzle blast, caused by the smashing of the hot gases which propel the bullet into the relatively stable air at the gun's muzzle; the noise of the bullet, caused by the shock wave built up ahead of the bullet's nose as it travels through the air; and the noise caused by the impact of the bullet on its target. Each noise can be quite sharp and may be perceived as a separate shot. The tall buildings in the area might have further distorted the sound.

The physical and other evidence examined by the commission compels the conclusion that at least two shots were fired. As discussed previously, the nearly whole bullet discovered at Parkland Hospital and the two larger fragments found in the presidential automobile, which were identified as coming from the assassination rifle, came from at least two separate bullets and possibly from three. The most convincing evidence relating to the number of shots was provided by the presence on the sixth floor of three spent cartridges which were demonstrated to have been fired by the same rifle that fired the bullets which caused the wounds. It is possible that the assassin carried an empty shell in the rifle and fired only two shots with the witnesses hearing multiple noises made by the same shot. Soon after the three empty cartridges were found, officials at the scene decided that three shots were fired and that conclusion was widely circulated by the press. The eyewitness testimony may be subconsciously colored by the extensive publicity given at the conclusion that three shots were fired. Nevertheless, the preponderance of the evidence, in particular the three spent cartridges, led the commission to conclude that there were three shots fired.