



### D18 The Italian Killer of JFK: History and Evolution of Carcano Model 1891 — An Italian Bolt-Action Military Rifle

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After attending this presentation, attendees will understand the history of the rifle used in the JFK assassination, the Carcano Model 1891, an Italian bolt-action military rifle based on the introduction of the original 1881 model that continued production through World War II.

This presentation will impact the forensic science community by illustrating a different approach to the historical analysis of firearms.

Perhaps Oswald was not aware of the piece of history he had in his hands when he bought the weapon for the assassination attempt on President Kennedy; he based his choice on economic reasons, but that Carcano 91/38 rifle was the result of a long evolution of the main Italian service rifle during the two World conflicts.

This study proposes an anthropological approach similar to an evolutionary phylogeny of this weapon, attempting to illustrate the pressures that generated the different models which had been employed in the main war environments of the twentieth century.

The common ancestor of the Carcano Model 1891 was the Vetterli-Vitali 1870/90. The Carcano was developed in 1891 from this previous weapon after the invention of smokeless powder in 1884 and after the adoption of the bolt-action rifle Steyr-Mannlicher M1895 by the Austro-Hungarian army and the Mauser Kommission by the German army.

The Carcano rifle presents two divided branches of its “phylogenetic tree:” the first was the production of a short weapon (Moschetto Model 1891) mainly designated for the Cavalry Division, the Royal Carabinieri; and, the Bersaglieri light infantry, while the second would create the line that led to Oswald’s weapon.

The substantial difference between these two models, bolt-rifle and musket, is the dimensional reduction of the second one with respect to the rifle, to the barrel, and of the bayonet cost, entirely motivated by the need to provide the high-mobility of the infantry units with an efficient, light, and short weapon.

World War I introduced an upset in European structure and dynamics, and the Carcano Model 1891 had to adapt to the changes of the forthcoming conflict. No longer fossilized in trench warfare, it had to become a rather active tool in the more diffuse mechanization of the armies. This gave birth to the short Carcano Model 1891/38, a lighter and more manageable weapon that partly seems to inherit some of the musket’s characteristics. In contrast to the biological evolution that does not seem to step backward, this rifle took place a return to the caliber used in previous models (6.5 x 52mm; .268cal); this “involution” was not due to technical needs, but was realized for economic reasons: the Staff Officers wanted to recycle the surplus of old ammunitions from the first world conflict. This Model 1891/38, with strengthening of the range, made history because it fired the fatal shot to President Kennedy, but it was also the protagonist of numerous battles and action in WWII.

Nonetheless, this model does not represent the last evolutionary phase of the Carcano rifle, which is expressed by another descendent that seems again to look back upon the past. The Carcano Model 1891/41 turns out to be bigger and more cumbersome; however, it can reach an excellent performance in ballistic shooting. The extinction of the Carcano rifle as the main service weapon for the Italian Army is historically represented by the end of World War II, when a new “population” of weapons was introduced by the Allied troops.

This study will also propose to the scientific community a new evolutionary approach to reconstruct the history of a specific weapon’s model, also presenting historical aspects of a very infamous rifle often left in the background of the President Kennedy assassination.

**Military History, President Kennedy, Ancient Weapon**