The Original Model 89 prototype Part Two



Big Horn Armory decided to develop a lever action capable of handling the 60,000 psi pressures of the 500 S&W Magnum. We determined that John Browning's design for the 1886 Winchester was perfect. Its locking bolt/bolt system was more than adequate for the job.

Purchasing readymade actions from Winchester was a non-starter. They were made on a limited run basis for Winchester by Miroku of Japan. While these are fine guns for what they are, a lever gun should be made in America. The very idea of building our gun on a foreign made action was unthinkable.

We were resigned to the fact that we would have to build the action from scratch. We examined several Browning lever guns. Recognizing that Browning's 1886 design was very strong, we decided to use it as the general basis for the gun. The Model 1892 was too small for the 500 S&W, the Model 1894 was not quite strong enough and the Model 1895 was not what we were looking for with its box magazine.



Closeup of the original M89 receiver with a removable bottom.

The 1886 was designed for a much longer cartridge, so we sized the action to fit the 500 S&W. The design evolved into a shorter 1886 style exterior with 1892 internal working parts as they seemed more suitable to our shorter cartridge length. This gave rise to the name Model 89, which is half way between 86 and 92.



The internal parts of the original Model 89. Note the bottom cover next to the lever.

The 1892 internals used the same bolt/locking bolt system as the 1886. This made it as strong as the 1886. We upgraded the materials used to modern metals like 17-4PH stainless steel. These are more than three times as strong as the materials used by Winchester in their day and about twice as strong as the materials used on their modern day Japanese made versions.

The current Model 89 is very strong. In an effort to destroy one, we fired 24 - 86,000 psi proof loads through a single gun. We checked the headspace on this gun before and after firing the proof loads there was no change. None of the parts on this gun showed any signs of deformation whatsoever. We realized that it might take hundreds or thousands of proof loads to induce enough metal fatigue to get this gun to fail. We gave up.

This gun currently resides in the collection at the Cody Firearms Museum.