

# **The Original Model 89 Prototype: Part One and a Half**

Once we realized that we had to design our own action for the 500 S&W, we pondered how to do it.

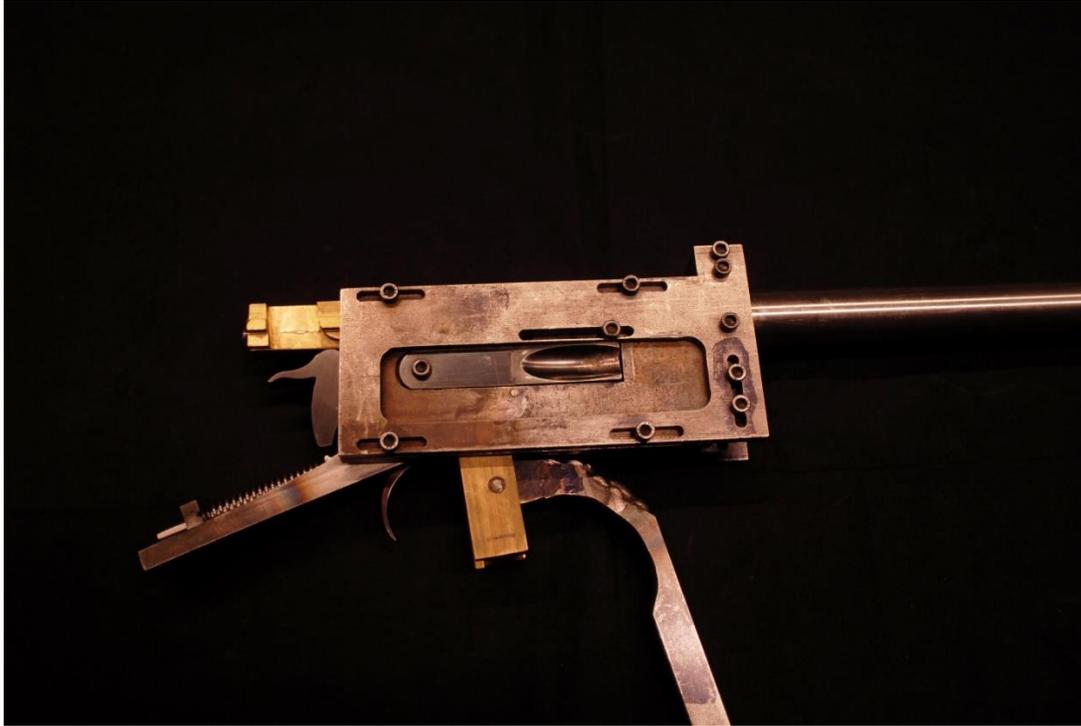
Fortunately, we have a resource just down the road which provided many helpful ideas: the [Cody Firearms Museum at the Buffalo Bill Center for the West Museum complex](#). There, we were able to review lever gun designs from early Volcanics and Henrys to Burgesses and Whitneys through John Browning's classic Winchesters.

Existing actions that might work would be Winchester M1886 and M1892. These are very strong; strong enough for our 60,000-psi cartridge. However, obtaining these actions to modify would be difficult, since they were made on a sporadic basis for Winchester by Miroku of Japan.

While these are good guns, we also thought about a couple of issues. First, the M1892 was a little too small for the 500 S&W Magnum. Second, the M1886 was a little too big. Third, these guns were made in Japan. The quintessential lever guns should be made in America. Somehow, levers guns made in Japan didn't seem right.

The too small, too large issues would require modifications to the receiver's length and width. As such, we would need to build our own receivers to create the just right fit.

Back to square one, we figured out the proper receiver length was halfway between the M86 and M92 which gave us the Model 89 moniker. We did not have a clue on how to scale the internals so the guns would function correctly. We decided to build an adjustable plate receiver to help.

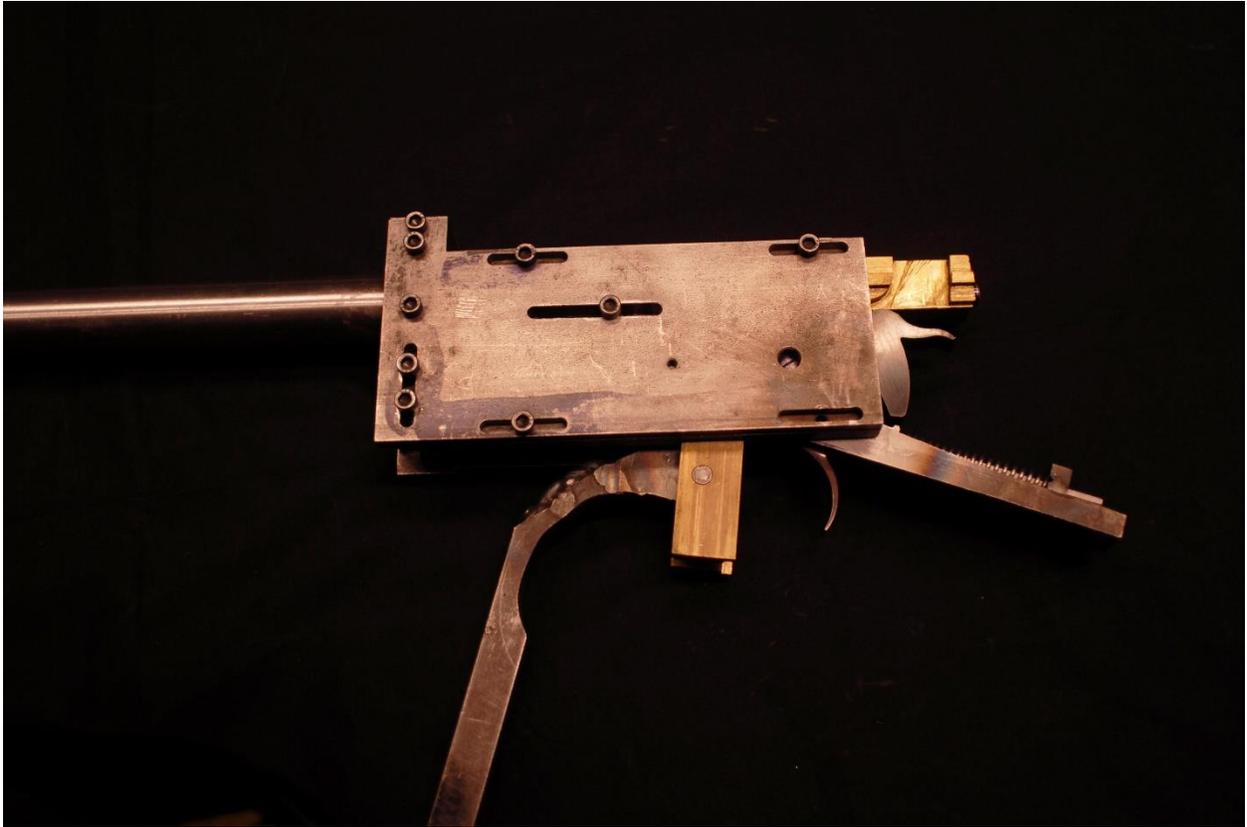


The adjustments allowed us to move pivot points for carriers, release points for cartridge guides, magazine tube location, and other critical parts locations. In doing so, we developed the correct geometry for all of the internal parts, making the gun capable of cycling the 500 S&W cartridge.

We built the bolt, locking bolts, and some internals out of hard brass. Since this was an adjustable receiver and not meant to withstand the 60,000-psi of the 500 S&W Magnum, this receiver was never tested with live ammunition. Dummy rounds of all known manufacturers were used in testing.

We rediscovered something that many older lever gun guys knew; lever guns, especially Browning-designed guns, are sensitive to cartridge length and bullet ogive shapes. We kind of knew this too, but it became readily apparent when testing the cartridges of the various manufacturers.

We also discovered that by adjusting various internal parts, we could make any individual cartridge feed well. However, when tuned for certain cartridges, almost nothing else would feed. We checked numerous settings and decided that tuning for large meplat hard cast lead bullets would make most cartridges feed well. No surprise that these were the type of cartridges that Winchester used in their guns back in the day.



This crude device was the very first Model 89. It now resides in the collection at the Cody Firearms Museum.