EXHIBIT 2

DECLARATION OF ASHLEY HLEBINSKY

I, Ashley Hlebinsky, declare as follows:

1. I am a firearms historian, museum professional, and public educator, specializing in material culture studies, as well as a firearms and ammunition-related museum consultant, expert witness, freelance writer, and guest lecturer. Previously, I served as the Robert W. Woodruff Curator-in-Charge of the Cody Firearms Museum (henceforth to be known as the CFM), where I curated and managed a collection of around 7,000 firearms from the 1200s through modern day, with over 20,000 related artifacts, including ammunition, edged weapons, and accoutrements. I also served as the Project Director on the museum's full-scale multimillion dollar renovation, responsible for every aspect including but not limited to research, content, exhibition, and installation, which reopened in 2019. In Summer 2022, I co-founded the University of Wyoming College of Law's Firearms Research Center with Second Amendment Scholar and University of Wyoming Law Professor, George Mocsary.

2. I have been retained by the Plaintiff's in this matter to provide historical testimony on firearms technology that falls under the legal definition of "assault weapons", with an emphasis on the history and origins of technology in relation to specific features generally listed in these laws, including but not limited to repeaters and magazine-fed repeaters - some with capacities greater than ten rounds - pistol grips, thumbhole stocks, and threaded barrels. I will also provide a brief look into general laws that existed at the time of the United States' Founding (ca 1791) and Second Founding (ca 1868) Eras to provide reference for any possible analogous comparisons as defined in the *New York State Rifle and Pistol Association, Inc. v. Bruen* (henceforth to be referred to as *Bruen*) ruling by the Supreme Court. This report was prepared for *Federal Firearms Licensees of Illinois v. Pritzker*, 23-cv-215-NJR (S.D. Ill.), which along with other cases has been consolidated into *Barnett v. Raou*l, 23-cv-209-RJD (S.D. Ill.). I have been retained to write a declaration at the rate of $450/hour.

Background and Qualifications

3. I have spent the last fifteen years immersed in the study of firearms history, technology, and culture. I earned both bachelor's and master's degrees in American History from the University of Delaware, during which I studied firearms history and culture and instructed undergraduate students about military weaponry throughout history. Much of my work since then focuses heavily on material culture surrounding the macro-history of firearms and how their developments have affected industry, culture, and society for centuries. I have been fortunate to work in some of the largest collections in the United States, beginning my career as a researcher and fellow in the Smithsonian Institution's National Firearms Collection housed in the National Museum of American History.

4. Additionally, I spent a decade working with and running an American Alliance of Museum's accredited museum, the CFM, a part of the Buffalo Bill Center of the West, which receives approximately 200,000 visitors annually.[1] Of the 200,000 people, it is estimated, based on initial survey data for the renovation, that only 50% of those people admit to having a background or specified interest in firearms. During my tenure, I also served as Project Director of the museum's full-scale multimillion-dollar renovation. With the aid of my team, I was responsible for all facets of the renovation including but not limited to concept, content, fundraising, and collections management. Final content for the museum was reviewed internally and by an external panel of experts, including academic historians, museum professionals, teachers, public educators, gun collectors, and people unfamiliar with firearms, as well as people with a range of different political views on guns. The resulting museum, which reopened July 2019, provides a more interpretive space to facilitate productive dialogue on firearms and their roles in history. Throughout this museum, terminology and definitions play a significant role in educating both visitors not familiar with firearms and those who consider themselves

[1] To my knowledge, while other accredited museums, such as the Smithsonian, have large firearms collections, none of them have a dedicated museum on the subject matter unlike the Buffalo Bill Center of the West.

aficionados. Because roughly half of the museum's audience is not familiar with firearms, we dedicated an entire gallery at the front of the museum to understanding the basics of firearms past and present, their features, ammunition, and safety. Since its opening, the museum has received favorable reviews from the Wall Street Journal and National Public Radio for its accessibility to diverse audiences and thoughtful handling of what can be a sensitive topic. It has also been praised for its efforts to educate on and impact firearms safety.[2]

5. During my time at the CFM and through my consulting, I have become nationally known for and sought after to provide a material culture perspective on firearms history that is often lacking in much of modern, academic, and legislative discussions on firearms. I guide museums as well other non- and for-profit organizations and government entities on the interpretation and understanding of that history. I have previously prepared declarations regarding the history of magazines, repeaters, and/or assault weapons for *Miller v Becerra (Bonta), Ocean State Tactical et al v Rhode Island, Virginia Duncan v Bonta, State of Washington v. Federal Way Discount Guns et al., Oregon Firearms Federation et al. v Oregon* and *Rupp v. Bonta*. In May 2021, I testified in front of the Senate Judiciary Subcommittee on the Constitution's Hearing regarding "Ghost Guns," for which I researched and discussed the long history of privately-made firearms and evolution of arms technology from the colonies through the 1960s. Because I have worked in several national collections that have upwards of 10,000 firearms each – collections that range from the earliest through most recent technology – I have developed a broad understanding of how firearms have evolved. Additionally, I have had the rare opportunity to work with, see, study and handle many of the firearms referenced in this declaration.

[2] Rothstein, Edward. "Handled With Care" *The Wall Street Journal.* September 27, 2019 <https://www.wsj.com/articles/handled-with-care-11569601047> Accessed December 15, 2022. Kudelska, Kamila. "Firearms Museum Focuses on Gun Safety, History and Culture." *NPR.* August 25, 2019 <https://www.npr.org/2019/08/25/753448348/firearms-museum-focuses-on-gun-safety-history-and-culture> Accessed December 15, 2022.

6. In addition to my historical scholarship, I also have played a role in public education around firearms. I have been responsible for the education of tens of thousands of students from elementary through college levels, teaching not only firearms safety and basics, but the historical and technical evolution of the firearm. In 2017, I developed the first full-scale symposium in the United States dedicated to the study of firearms in museums as material culture, which reoccurs annually. These symposia were organized to bring together firearms scholars from around the world to discuss their collections but also to create metrics to analyze the quality of scholarship that already has been done in the field. The study of firearms is a complicated one, especially since much of the information about the objects themselves have traditionally been conducted by well-known firearms researchers and collectors. However, not all those people fall under traditional definitions of academic scholarship. On the other side, because of limitations in the study of firearms, academic research often has flaws in terms of a general understanding of the firearms themselves. We have worked to lessen that gap to create more balanced scholarship. To continue that mission, I sit on the Editorial Board for the recently revived, peer-reviewed arms journal, Armax, and I recently co-founded the University of Wyoming College of Law's Firearms Research Center in 2022. Despite its location in the College of Law, this new center intends to encourage research of all types related to arms and ammunition.

7. Currently as a museum consultant, I am in the process of building several museums with heavy emphasis on firearms collections. I also conduct workshops on firearms, survey collections, and curate exhibitions at institutions such as the Houston Museum of Natural Science, CM Russell Museum & Complex, and the Mob Museum. I have served as a scholar and a panelist for the National Park Service and the Organization of American Historians on a forthcoming Coltsville National Historic Site. I am also an expert witness, freelance writer, guest lecturer, on-camera firearms historian, and television producer. A current copy of my Curriculum

Vitae summarizing my education and experience is attached at the end of this document as **Exhibit A.**

Prior Expert Witness Testimony

Rupp v. Bonta, February 2023

Oregon Firearms Federation et al v Oregon, December 2022

State of Washington v Federal Way Discount Guns et al, December 2022

Virginia Duncan et al v Bonta, November 2022

Ocean State Tactical et al v Rhode Island, October 2022

Senate Judiciary Subcommittee on the Constitution, Stop Gun Violence: Ghost Guns, May 2021

Franklin Armory et al v Rob Bonta, February 2021

FN Herstal v Sturm, Ruger & Co, January 2021

Sturm, Ruger & Co. v American Outdoor Brands Corp., October 2020

Guedes v BATFE, June 2019

Miller v Becerra (Bonta), November 2019

Regina (Nova Scotia) v Clayton, January 2019

Garrison v Sturm, Ruger & Company, Inc. 2018

Scope of Work

8. This report will provide a brief look at firearms and their features relevant to the Illinois Assault Weapons Ban, HB 5471, titled the "Protect Illinois Communities Act." And codified at Ill. Pub. Act 102-1116 §1. Firstly, the report will provide a brief statement on the long history of the interconnectivity between military and civilian arms. It will address how the advancement of technology often was driven by the civilian market; the multi-purpose use of early arms for civilians and the military; the private acquisition of firearms to be used on the

battlefield; and the postwar weapons surpluses that have flooded and continue to flood the civilian market. Secondly, it will provide a brief history of features often associated with the term "assault weapon." It will conclude with a look at historically relevant laws through 1868.

9. For this report, I will be using the term assault weapon based on the definition used in the Cody Firearms Museum: a legislative catch-all term that has differing definitions dependent on proposed legislation that typically center around largely cosmetic features of a semi-automatic firearm. Please note that I will, at one point, refer to the historical and technical term, assault rifle. I use that term as defined by the Defense Intelligence Agency (1970) to mean a machine gun that is single soldier portable, selective fire (meaning it has both automatic and semi-automatic functions) and chambers an intermediate cartridge from a detachable magazine. I will also make a distinction between repeater and magazine-fed repeater. A magazine is a vital part of the firearm; it is a container, detachable or fixed, that holds ammunition while it feeds into a repeating firearm. In the periods being discussed, there are repeating firearms that do not use magazines, such as revolvers, which use a rotating cylinder that is as important and integral as a magazine is in order to fire a gun. When I am discussing a repeater that has a magazine, I will qualify it as such. Additionally, I will use capacity to refer specifically to the number of rounds of ammunition that can be held within a firearm. When I am discussing magazine capacity, I will qualify it as such.

General Statement of the Interconnectivity of Sport and War

10. The expression weapon of war is used a lot in modern and historical discussions surrounding firearms. Today, it is used as an umbrella term to describe a range of different firearms that people perceive as being useful to warfare, regardless of whether they were actually used on or designed for the battlefield. How the expression is used today implies a distinct line between firearms made for the military and firearms made for the civilian market. However, that line for seven hundred years has always been blurred.

11. Once firearms were developed, technology often advanced too quickly for common battlefield use, finding popularity in the civilian market. Military firearms in a general sense were limited by tactics, government bureaucracy, and expense, while civilian arms until recently were predominantly limited by individual budget. Additionally, civilian arms can be employed for far greater number of uses, including hunting, self-defense, and target shooting. The earliest firearms technology appeared on the battlefield by the thirteenth century. The hand cannon, or handgonne, was little more than the name suggests, a cannon for your hands. The user utilized a touchhole and external fire source to ignite powder and fire the gun. This primitive technology may not have been designed for a sporting purpose, but once it was designed, inventors pushed the boundaries, capabilities, and usages of firearms into the future. And while the hand cannon specifically may not have been used for sport, other military weapons of the time such as longbows and crossbows were popularly used for target shooting competitions in fairs during the Middle Ages.

12. The first true ignition system, the matchlock, was developed around 1400. This firearm, which utilized a burning match cord, was a popular military arm used for centuries around the world. By the end of the 1400s, however, matchlocks and subsequent ignition systems also began appearing in early target shooting competitions.[3] Another example of a firearm being adopted for civilian use dates a century after the matchlock. In the first decade of the 1500s, a highly advanced handgun was developed, the wheel-lock. This gun, developed for use on horseback, was operated by the turning of a spring-loaded wheel. While it saw some battlefield use, it was expensive and difficult to repair. As a result, it was used for specialized purpose on the battlefield in Europe, but not as much in the colonies. However, the technology was considered so advanced, some European countries made and used wheel-locks for sport into the 1800s. Another example of superior technology being used by civilians rather than military is rifling. Rifling, the boring out of the inside of a barrel with spiral lands and grooves to spin a

[3] Matchlocks and wheel-locks can be seen depicted in period imagery and in medals for shooting competitions.

projectile, thus making it more accurate, was developed in the mid-1400s and appeared predominantly in civilian arms, with a few military exceptions in the American Revolution, until improved developments in ammunition technology allowed it to be more commonly adopted on the battlefield by the mid-1800s. Although in many instances, such as with the infantry, it wasn't until later in the nineteenth century that tactics caught up enough to be fully utilized.[4]

13. Before the ability to mass manufacture firearms, guns often were privately made by gunsmiths. Although two armories did exist in the United States around the time of the Founding Era, many guns for the battlefield were made or assembled by individuals or received via foreign aid.[5] It is estimated that 2,500-3,000 gunsmiths worked in the colonies alone.[6] They, as private citizens, were responsible for making guns for both the military and civilians. While the standard infantry arm during the American Revolution was a smoothbore (no rifling) musket, there were some regiments during the War that used a common civilian firearm at the time, the American long rifle. The long rifle was a modified design from the German jaeger (hunting) rifle that tended to have a longer barrel and a smaller caliber than its German counterpart. The rifle was the superior firearm in terms of accuracy compared to the inaccurate smoothbore musket. However, because of the type of projectile employed at the time – a round musket ball – the process to load was slower for rifles because the ball had to fit snuggly within the lands and grooves of the rifling. There was a trade off in terms of effectiveness for specific purposes.[7]

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[4] Examples of rifled matchlocks do exist. Rifled wheel-locks are far more common as they were so often used for hunting. Halbrook,Stephen. *America's Rifle: The Case for the AR-15,* pg. 101: "Around 1450, a German gunsmith cut spiral lands and grooves inside a gun barrel…such guns were called riffeln"

[5] Springfield Armory was the first armory that began production in 1794 <https://www.nps.gov/spar/learn/historyculture/index.htm> Accessed 10/25/2022. The second armory was Harpers Ferry Armory and Arsenal, which began construction in 1799 <https://www.nps.gov/hafe/learn/historyculture/harpers-ferry-armory-and-arsenal.htm> Accessed 10/25/2022

[6] Moller, George D. *American Military Shoulder Arms: Volume 1.* University of New Mexico Press, 2011. P.107

[7] Until the development of a successful conically shaped bullet (rather than a round musket ball) by Claude Etienne Minie and modified by James Burton at Harpers Ferry, rifling was expensive and slow to load. For a round ball to effectively spin in rifling, it had to fit perfectly which slowed the loading process. However, it was perfect for target shooting as well as hunting and specialized military use. Since tactics by the military were still shoulder-to-shoulder fighting,

However, there are examples of long rifles that were made with two barrels to compensate for that limitation.[8] The long rifle in the colonies served as a multi-purpose tool. It was capable of being used for hunting, self-defense, and target shooting. Important to note though that unless being made for large-scale military adoption, such as the smoothbore musket, and/or produced with the use of parts kits ordered from overseas, many civilian arms were made at the request of individuals or in small runs.

14. Target shooting was a part of American culture before the formation of the United States with colonists taking part in competitions known as "Rifle Frolics." In fact, David Ramsay in his "History of the American Revolution" (1789) spoke about the Battle of Bunker Hill (1775). He wrote, "None of the provincials in this engagement were riflemen, but they were all good marksmen. The whole of their previous military knowledge had been derived from hunting, and the ordinary amusements of sportsmen. The dexterity which by the long habit they had acquired in hitting beasts, birds, and marks, was fatally applied to the destruction of the British officers."[9] This tradition has continued throughout American history, especially after the Civil War. For example, the National Rifle Association was founded by Union officers in 1871, and its core purpose was "to promote and encourage rifle shooting on a scientific basis." What resulted was the proliferation of international shooting competitions.[10] Another example is the Olympic sport of Biathlon, a sport which involves both skiing and target shooting, dating to 1767 in Europe. It was initially created for government use in places like Norway. That purpose persisted for centuries, even after becoming an international sport. In the 1930s, Finnish troops still used skis and rifles for patrol. Until recently, the firearms used in Biathlon and other disciplines of the

accuracy was not of prime importance, so militaries used smoothbore (unrifled) barrels for their standard equipment.

[8] Examples can be found in the Cody Firearms Museum.

[9] Halbrook, Stephen. *The Founders of the Second Amendment: Origins of the Right to Bear Arms.* Pg. 96-97

[10] The National Rifle Association of America was founded after the National Rifle Association in the United Kingdom (1859). <https://home.nra.org/about-the-nra/> Accessed 10/25/2022

shooting sports, often used modified versions of centerfire NATO cartridge firearms.[11] By the nineteenth century, progress on manufacturing processes allowed more firearms of more varieties to be available to the US government as well as civilians. Many repeaters of all sorts produced during this century came in specific models indicating sporting vs military variants.[12]

15. The line between military and civilian arms was certainly blurred at the founding of the country. While the military as previously referenced sometimes utilized superior civilian arms, civilians also possessed guns that were traditionally associated with the military, such as cannons.[13] That blurred line also extended to the role of the civilian and soldier. In the colonies and in early America, certain citizens were required to serve in their militias with firearm and ammunition requirements and some soldiers carried their personal firearms into battle. By the American Civil War, it was not unheard of for soldiers to privately purchase firearms that the US government had not adopted or did not issue to them for use in battle. After the war, even issued weapons that were used in war were often sold on the civilian market. After the Civil War, soldiers could buy their firearms and many dealers and distributors sold the surplus in mass in their catalogs or at stores for even lower prices. According to Springfield Armory National Historic Site, "many thousands [of] cheap surplus weapons were released into private hands through General Orders 101, providing rifles, pistols, carbines, and muskets that found their ways into the hands of Americans in the decades following the Civil War."[14] The tradition of selling military arms to civilians continues today with firearms such as the Springfield Model

[11] An example of a centerfire modified firearm can be found in the Cody Firearms Museum.

[12] Flayderman, Norm. *The Flayderman's Guide to Antique American Firearms…and their Values*. 9th Ed (2019). This book is considered the gold standard in the evaluation of antique American made firearms. It provides not only firearms organized by manufacturer but also by type, such as repeater, sporting, military etc. Here is just one example: pgs. 694-695

[13] Moller, George D. *American Military Shoulder Arms: Volume 1*. University of New Mexico Press, 2011. P.107

[14] Springfield Armory details this information here <https://www.nps.gov/spar/learn/historyculture/a-springfield-rifle-musket.htm> Accessed 10/24/22

1903 bolt action rifle and even with semi-automatics such as the M1 Garand rifle, the M1 carbine, and the Model 1911 pistol.[15]

16. There has always been an ebb and flow of civilian and military firearms for centuries, some with clearer lines than others. However, the assertion that historically a gun could be completely understood as only for war in a time when there was such interchangeability, is presentist at best.

Historical Origins of Technologies Generally Associated with Assault Weapons Bans

17. There are many terms used to define rifles, pistols, and shotguns regulated in assault weapons bans. A few overarching categorical terms that appear across the type of firearm are the terms: repeater, magazine (fixed or detachable), centerfire, and semi-automatic.

Repeater

18. It is important to note that while this report will acknowledge the ceiling of ten rounds, it is unfair to assume that a person until recently would make a clear distinction between capacities under and over ten rounds and thus, is historically arbitrary, particularly for the time frame being discussed.[16]

19. The concept of a repeating firearm dates to the earliest technology of firearms. Hand cannons even came in repeating variations.[17] While some repeaters were employed or simply attempted on the battlefield, repeating technology would not be widely popular for use in war until the late nineteenth century. That did not mean however that innovation in repeating technology was stymied. In fact, it was quite the opposite. Without the confines of wartime

[15] Today, postwar weapon surplus guns including several semi-automatic firearms such as the M1 Garand are sold through the Civilian Marksmanship Unit <https://thecmp.org/sales-and-service/1911-information/> <https://thecmp.org/sales-and-service/services-for-the-m1-garand/> Accessed 11/25/2022

[16] The federal government itself did not make this distinction until the 1990s. This date is referencing the Public Safety and Recreational Firearms Use Protection Act (1994). Additionally, there are many resources that can showcase the number of repeaters available in this time frame in the United States, but the place that aggregates them the best is Flayderman, Norm. *The Flayderman's Guide to Antique American Firearms…and their Values*. 9th Ed.

[17] An example can be found in the Cody Firearms Museum Collection

tactics and budget, many repeating firearms were commissioned by civilians who utilized them. The simplest method of producing arms capable of firing more than one round at a time initially was to fit a firearm with more than one barrel. However, due to weight limitations, gunmakers began experimenting with other means of producing repeating arms during the sixteenth century. One of the first methods attempted involved superimposed loads, which were successive charges of powder and ball on top of each other that were separated by wadding or the projectile itself in one barrel. They were fitted with locks that either had multiple cocks and pans or a single lock that could slide upon a rail. One such example was a sixteen-shot firearm made in 1580.[18]

20. By the 1630s, a Dutch gun making family, Kalthoff (also spelled in some sources, Calthoff), began experimenting with a design that allowed up to fifteen shots to be fired in rapid succession. It utilized a tubular magazine located in a pistol's butt or a fowling piece's stock to hold powder and balls.[19] This system was so innovative it was reproduced and modified for over 150 years. According to late historian Herbert G. Houze, "their longevity is perhaps best demonstrated by the fact that Admiral Horatio Nelson owned a repeating flintlock pistol of their basic design, as did President Thomas Jefferson."[20] Also, by the mid-seventeenth century in Italy, other magazine-fed repeaters were being developed. According to the Royal Armouries (Leeds), the earliest example can be found at the Musée de l'Armée which was made by Giacomo Berselli of Bolognia in the late 1660s.[21] However, more well-known is Michele Lorenzoni of Florence. He developed a magazine-fed repeater, in pistol and rifle form, known as the Lorenzoni system. This design was copied and modified by numerous designers after its invention with various configurations and magazine capacities. In 1724, another designer

[18] This firearm was on display at the National Firearms Museum's location in Missouri. Winant, Lewis. "A 16-Shot Wheel Lock," *America's 1st Freedom* (2014).

[19] Houze, Herbert G. Co-Curator. "Art of the Hunt: Decorated European Sporting Arms from 1500-1800." Exhibition. Houston Museum of Natural Science, 2019.

[20] Ibid

[21] For more information, visit: https://royalarmouries.org/stories/our-collection/the-christmas-connection-to-captain-souths-lorenzoni-pistol-our-collection/ Accessed 10/24/2022.

Emmanual Wetschgi of Augsburg advertised his flintlock magazine firearm in a handbill. According to Houze:

> "Not only did he describe his design's advantages and the ease with which it could be used, he also included an engraving showing one of his pistols being fired. This image, which is believed to represent Christian III, Count Palatine of Zweibrucken with the inventor by his side holding a sporting gun built on the same system…More importantly, it also incorporates what may be the first true advertising slogan…'What other pistols can shoot multiple rounds on one loading as accurately, rapidly, and as far, as today's Wetscghi?'"[22]

21. An example of a copy of the Lorenzoni was a firearm designed by British gunsmith, John Cookson in the late seventeenth century. A gunmaker in Boston, also named John Cookson – it is not clear if this person was the same Cookson from England, a relative, or a coincidence – published an ad in the *Boston Gazette*, in 1756, advertising a nine-shot repeating firearm. Around the same time a Cookson-type twelve-shot repeater was made by gunmaker John Shaw.[23] Another example from the 1750s in America is the Belton repeating fusil. This gun was invented by Joseph Belton around 1758. Not a magazine repeater like the Lorenzoni, the Belton utilized superimposed loads. Notably, he petitioned the Continental Congress during the American Revolution to adopt his firearm. In 1777, he wrote Congress saying he designed a firearm that could fire eight shots in three seconds. Washington ordered one hundred Belton firearms for use in the Continental Army. However, this order was canceled. Surviving examples of the Belton design were made by his partner in the 1780s, including examples at the Royal Armouries in Leeds, that also include detachable magazine versions of the Belton.[24] Around 1779, the Girardoni (also spelled Girandoni) air rifle was developed. It was a repeating arm that

[22] Houze, Herbert G. Co-Curator. "Art of the Hunt: Decorated European Sporting Arms from 1500-1800." Exhibition. Houston Museum of Natural Science, 2019.

[23] An example of this firearm can be found in the National Firearms Museum <https://www.nramuseum.org/the-museum/the-galleries/the-road-to-american-liberty/case-22-the-paper-cartridge/cookson-volitional-repeating-flintlock.aspx> It is also discussed here in this site linked directly from the Royal Armouries: < http://firearmshistory.blogspot.com/2014/02/the-cookson-repeater.html> Accessed 10/24/22

[24] The Royal Armouries has two of these detachable magazine Belton repeaters. It can be seen here: < https://www.youtube.com/watch?v=-wOmUM40G2U> Accessed March 22, 2023

could fire twenty-two rounds from a tubular magazine.[25] The Girardoni was used by Meriweather Lewis on the Lewis and Clark Expedition (1804-1806). Over 1,000 Girardonis were made for service with the Austrian military, but light weight examples were produced in sporting variations.[26] This design also was copied by gunmakers around the world.[27]

22. Around the ratification of the Second Amendment, other repeaters were being developed throughout the world, including volley guns, such as the Nock Volley gun and Duck's Foot pistol.[28] There is also a surviving example of a firearm commissioned by an individual around the turn of the eighteenth century. It is a fourteen-barrel double Nock volley gun-style rifle. Each set of seven barrels has its own lockplate and trigger. In order to better facilitate loading, the firearm came with a speed loader that allowed the user to pour the charge into a small device that the user could then pour down seven barrels simultaneously. This firearm was a sporting arm. To facilitate accuracy at such a large size, it has a hand rest forward of trigger, under the barrels. In the event the user only wanted to use one set of seven barrels, he had a replaceable stock made with one lockplate and trigger.[29] In America Joseph Gaston Chambers devised a repeating musket that could fire, according to him, twenty rounds a minute. He

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[25] Kopel, David. "The History of Firearms Magazines and Magazine Prohibitions." Albany Law Review, Vol. 88, 2015, pg. 853

[26] For more information on Lewis and Clark and the Girardoni, the most comprehensive research on the Girardoni air rifle was done by scholar Michael Carrick. His research is footnoted in this summary article of the Lewis and Clark firearms that can be found here: <http://www.westernexplorers.us/Firearms_of_Lewis_and_Clark.pdf> Accessed 10/22/22 Additionally, Ian McCollum, one of the foremost authorities on firearms technology in the United States, has done several videos and articles about the firearm. This is one article he wrote <https://www.forgottenweapons.com/rifles/girardoni-air-rifle/> Accessed 10/22/2022. A surviving example of a Girardoni can be found: <https://www.nramuseum.org/guns/the-galleries/a-prospering-new-republic-1780-to-1860/case-8-romance-of-the-long-rifle/girardoni-air-rifle-as-used-by-lewis-and-clark.aspx> Accessed 10/22/22 Rock Island sold a sporting variation in 2018: <https://www.rockislandauction.com/detail/75/3293/girandoni-system-repeating-air-gun > Accessed 10/22/22

[27] An example of a Russian copy of a Girardoni Rifle can be found in the Cody Firearms Museum

[28] An example of the Duck's Foot Pistol can be found here: <https://www.recoilweb.com/ducks-foot-pistol-old-school-172784.html> Accessed January 31, 2023. An example of the Nock Volley Gun can be found here by British scholar Matthew Moss https://armourersbench.com/2020/01/12/nock-volley-gun/ Accessed January 31, 2023

[29] McCollum, Ian. Forgotten Weapons: <https://www.youtube.com/watch?v=ivdlcHUwaEw> Accessed January 31, 2023

approached the U.S. War Department in 1792 with his invention. The Secretary of War, Henry Knox, was interested in finding a firearm that would supply more power and requested that one of Chambers' firearms be acquired for testing. A demonstration was set up at Alexander Hamilton's "Seat" on the Schuylkill.[30] Furthermore, Chambers petitioned Thomas Jefferson for help spreading the word of his invention. To which Jefferson referred him to the US Patent Office.[31] His invention was not adopted initially with concerns for structural stability, but his repeating muskets, pistols and seven-barreled swivel guns were adopted by the US Navy and Pennsylvania for the War of 1812. Between September 1813 and September 1814, Philadelphia arms makers would produce at least fifty-three seven-barreled swivel guns that could fire two-hundred bullets a piece, two hundred repeating muskets, and one hundred repeating pistols. Outside of the United States, European countries were also interested in his inventions.[32] Another repeater designed in 1821 was known as the Jennings repeating flintlock. It was capable of firing twelve rounds before having to reload.[33]

23. The above text serves merely as an example of the numerous types of repeating firearms which existed leading up to, around, and directly after the time of the ratification of the Second Amendment and in some cases had direct ties to Founding Fathers. While some criticize these repeaters as "one-off examples," it is important to keep in mind that this was typical as they were often made by private gunsmiths and sometimes individually commissioned. During the Founding Era and after, firearms at large weren't produced in volume as they would have been by the late nineteenth century in an industrialized America. Another argument is that these guns only predominantly existed in Europe. However, the existence of a technology in one country does not preclude the knowledge of it elsewhere, which is evident since surviving examples from

[30] Fagal, Andrew J.B. "The Promise of American Repeating Weapons, 1791-1821. *Age of Revolutions*. As of the time of this article, Fagal was an assistant editor at Princeton University's Papers of Thomas Jefferson. <https://ageofrevolutions.com/2016/10/20/the-promise-of-american-repeating-weapons-1791-1821/> January 31, 2023

[31]<https://founders.archives.gov/?q=Joseph%20chambers%20bursted&s=1111311111&sa=&r=1&sr=> Accessed January 31, 2023

[32] Fagal

[33] Flayderman, Pg 683

America are sometimes styled after contemporary European designs. Some also argue that individual models could be considered unsuccessful by modern and/or historic standards. However, just because some firearms designs had flaws, imperfections, or issues, does not mean the technology ceases to exist or should be ignored. In fact, in circumstances where these technologies did indicate dangerous design flaws, it is interesting that the Founding Fathers, who were aware of the Belton and other designs with potential issues, did not intervene in the name of public safety as they did with fire safety laws and gunpowder. It is also interesting to note that the reason we are aware of these firearms, in most cases, is, in fact, that examples have survived. There are many surviving repeaters that can be found in collections around the world. So many artifacts are lost over time, that it is impressive that these individual or limited-run firearms were deemed significant enough in their time of invention and beyond to be preserved into the present.

24. Prior to the American Civil War, there were many makers and manufacturers of repeating firearms, however, the tradition of individual gunmakers was still prominent. As manufacturing processes advanced, these concepts evolved into repeaters produced in greater and more standard quantities. The transition of firearms being made by private gunmakers began shifting to factories by the mid-nineteenth century. Inline manufacturing, interchangeable parts, and mass production impacted not only the types of firearms that were available, but also quantity and quality. While repeating firearms, magazine-fed or not, exceeded ten-rounds centuries prior, the number of distinct types of repeaters in general by the middle of the nineteenth century was staggering.

25. With these industrial changes, repeaters continued to evolve as they had for centuries. Pepperbox pistols, a revolving pistol with multiple barrels that were manually rotated on a central axis, were popular in the United States by the 1830s, some were even taken out west with California gold miners. One maker of pepperboxes alone, Ethan Allen, between the 1840s and 1850s made over forty variations of this style of firearm.[34] While many pepperbox pistols

[34] Flayderman, pg. 56-61

typically fired four to six shots, some were capable of firing twelve, eighteen, or twenty-four rounds.[35] It becomes difficult to quantify the number of repeaters on the market though because makers were so plentiful. In 1836, a year before Samuel Colt's first patent in England of his revolving mechanism, the patent process was standardized through the United States Patent Act. That year, Samuel Colt took out two patents for five or six-shot revolving rifles and pistols. As a result, he owned the legal right to produce, essentially the revolver, until it expired in the mid-1850s. This Act created a flurry of production, innovation, and design especially towards repeaters and magazines to varying degrees of success. The fact though that so many people were trying to design the next great repeater shows the desire to capitalize on this technology.[36]

26. It has been cited and challenged that the Winchester Model 1866 was the first magazine-fed repeater that held more than ten rounds to achieve commercial success.[37] The Winchester Model 1866 lever action rifle was the first firearm sold using the Winchester name. Between 1866 and 1898, approximately 170,101 Model 1866s, in .44 Rimfire, were produced. Of that model alone, around ten variations existed. It was hoped that the Winchester Model 1866 would see successful adoption by the US military, however, it did not. Only a small percentage, roughly 1/3 of total production, were made ultimately for use by foreign militaries.[38] The Winchester factory records before 1900, show that only 3,835 musket configurations of the Model 1866 were produced, beginning after serial number 124,995.[39] However, it should also be

[35] Kopel, pg. 854. Additionally, pinfire pistols and long guns can be found in museum collections with capacities greater than ten rounds

[36] Examples of these patented repeaters include Volcanic lever actions, the Jarre Harmonica pistol and rifle, Porter and Genhart turret rifles, Josselyn Chain Revolvers etc. More successfully were revolvers and repeaters by Smith & Wesson, Remington, Merwin & Hulbert, Henry, Winchester etc.

[37] Kopel, pg. 869

[38] Flayderman's also provides the number of Mexican contract firearms there were. The records are not complete for the Model 1866. The Records can be found in the Cody Firearms Museum's Records Office. Here is a breakdown of what has survived through the Winchester collector. https://winchestercollector.org/models/model-1866/ This article also provides a breakdown of other military contracts. < https://www.americanrifleman.org/content/winchester-lever-actions-go-to-war/> Accessed 10/22/22

[39] McCracken Research Library. Production Serial Number Ledgers, Series 23, MS 20. Winchester Repeating Arms Company Archive Collection.

noted that while reference to this military contract exists in secondary source material, primary source evidence of foreign contracts are not well documented and in some cases, questionable.[40] In reference to his Model 1866, Oliver Winchester referred to it as "one of [the company's] best sporting guns" in a letter, dating 1871, to prominent gunmaker R.S. Lawrence.[41] In a Winchester testimonial from 1865, W.C. Dodge, Late Examiner of the US Patent Office, boasted that Winchester's "Magazine Rifle, with the recent improvement, is superior to any other arm ever presented to the public."[42] In the beginning, Winchester did lean into its previous involvement with the Henry rifle as a marketing tool because it was a known commodity, however, within a decade after the company's founding, Winchester catalogs detailing their sporting models and diverse product lines were interspersed with testimonials from hunters and civilians about their love of the technology.[43] The categories for their 1875 catalog reads: "Winchester's Repeating Fire-Arms, Rifled Muskets, Carbines, Hunting and Target Rifles, &c…"[44] One such testimonial was from famous performer, William F. Cody, whoproclaimed, "I have tried and used nearly every kind of gun made in the United States, and for general hunting or Indian fighting, I pronounce your improved Winchester the *boss*."[45] Despite the ways that Winchester chose to frame and market their firearms though, it should be noted that while advertising can influence a consumer, a consumer also has agency to purchase and use the product they want for their own purposes.

[40] According to the current Curator, Daniel Michael, who has done extensive research in the Winchester archives before, during, and after the renovation, the Cody Firearms Museum has no known record to indicate this contract existed.

[41] Oliver F. Winchester's letter to R.S. Lawrence, dated 10 February 1871. McCracken Research Library, MS20, Box 51, Folder 6

[42] Dodge is most likely referencing the 1865 King's Patent Improvement which incorporated a side loading gate to improve the speed of loading the firearm. Winchester's Repeating Firearms Rifled Muskets, Carbines, Hunting, and Target Rifles, &c…Metallic Cartridges of all Kinds, manufactured by the Winchester Repeating Arms Company." Catalogues Vol. 1 (1865-1881). McCracken Research Library TS 533.5.W5431991v1c2

[43] McCracken Research Library TS 533.5.W5431991v1c2

[44] Ibid

[45] Ibid, pg. 28-29

27. While Winchester would provide the United States smaller runs of their firearms designs modified for military service around the turn of the twentieth century, Winchester would not truly be seen as a military manufacturer until their involvement in World War I when government owned armories could no longer meet the demand for military arms. Winchester and other manufacturers such as Remington stepped in initially producing firearms – sometimes not even associated with their brands - invented by other designers, companies, and/or armories, such as the British Pattern 1914 Enfield and the American version, the U.S. Model 1917. These military contracts however would ultimately be the financial demise of the company as it went into receivership in 1931.[46]

28. Outside of those early small contracts, Winchester continued designing guns for the civilian market. With so many firearms produced during this time frame, it begs the question of where those guns went since it wasn't military service. The Winchester Model 1873 boasted a total production of around 720,610 manufactured in at least twelve variations, including almost 20,000 in .22 caliber rimfire – a caliber used for target shooting and varmint hunting. Model 1873 rifles were chambered in .32-20, .38-40, .44-40, and .22 caliber. The Model 1876 had a manufacturing run of 63,871 firearms with around fifteen variations. This Model was a larger version of the Model 1873 and chambered in heavier calibers (.40-60, .45-60, .45-75, .50-95), which made the firearm more desirable for hunters, including President Theodore Roosevelt.[47] At one point, they produced an exclusive line of high-level sporting arms of the Models 1873 and 1876 known as the "1 of 100" and "1 of 1,000" models. Between the start of the company until 1898, Winchester released fourteen repeating models. Those models would eventually be produced in over one hundred variations, chambered for around thirty different cartridges.[48]

[46] This information can be found in pretty much any book about Winchester. The author also knows this information for the decade she spent running the Cody Firearms Museum, formerly known as the Winchester Museum, which is home to Winchester's firearms collection as well as archives from the company

[47] Flayderman, pg 309

[48] Ibid pg 306-322

Winchester continued mass producing repeating firearms throughout the rest of the nineteenth century and beyond.

29. As an aside, while Winchester may be most recognized for their lever action, they also made other repeaters, such as double barrel shotguns, straight pull and standard bolt action rifles, slide action rifles and shotguns, semi-automatic rifles and shotguns, and even machine guns. In terms of the handgun market, Winchester attempted to make revolvers in the 1870s and during World War I received a commission late in the war to make Model 1911 semi-automatic pistols. Winchester even is credited of having designed what is considered one of the earliest if not the earliest "assault rifles" per the Defense Intelligence Agency's definition from 1970.[49] Winchester, in 1917, designed a selective fire (meaning capable of switching between semi-automatic and automatic functions), single person portable rifle with twin top-mounted twenty-round detachable magazines, chambered for an intermediate cartridge. Not only did Winchester designer, Frank Burton, develop this firearm, he also invented an accompanying intermediate cartridge, the .345 WSL with a spitzer bullet.[50]

30. As plentiful as variations in Winchester firearms are though, the above information does not consider the gargantuan amount of ammunition Winchester manufactured. In general, not enough is said about Winchester's innovation in cartridge design and the fact that ammunition production was responsible for much of the financial success of the company. According to David Kowalski, author of the *Standard Catalog of Winchester*: *The Most Comprehensive Price Guide Ever Published,* "cartridges played a larger role in the business operations of the Winchester Repeating Arms Company (W.R.A. Co.) than most collectors

[49] Not to be confused with assault weapons, according to the Defense Intelligence Agency: "Assault rifles are short, compact, selective-fire weapons that fire a cartridge intermediate in power between submachinegun and rifle cartridges." Johnson, Harold E. *Small Arms Identification and Operation Guide – Eurasion Communist Countries.* An Army Intelligence Document. US Army Foreign Science and Technology Center November 1970, pg. 68.

[50] While there are some texts on this firearm, including Forgotten Weapons: <https://www.forgottenweapons.com/burton-1917-light-machine-rifle/> The only known example is in the Cody Firearms Museum. It is accompanied by field testing notes and ammunition, providing a more accurate picture of the rifle than what has been previously published. Accessed 12/19/2022

realize. Because ammunition is a high-volume, high profit product, it literally carried the W.R.A. Co. for most of its existence."[51] Their cartridge designs were so popular that other companies, such as Colt, would offer variations of their iconic firearms, such as the Colt Single Action Army revolver, to accommodate Winchester developed cartridges, such as the .44-40. Ammunition production was so vital to Winchester that the company who bought them out of receivership, the Olin Corporation, was their ammunition competitor. Today, the only surviving thread of the company is Olin's Winchester Ammunition. The various firearms brands that bear the Winchester name, are produced by companies that license the name from Olin.

31. Winchester wasn't the only manufacturer though of repeating firearms in the mid to late 19th century. Other companies were producing competitive repeaters, such as the Evans Repeating Rifle, which was made between 1873 and 1879. Approximately, 12,200 were made and they came in three variations, Sporting (approximately 4,350 made), Military (approximately 3,200), and Carbine (not specified as either sporting or military, approximately 4,700 made). The Evans held magazine capacities at twenty-eight, thirty-four, and thirty-eight rounds.[52] The Evans as well as other companies such as the Spencer Repeating Rifle, Fogerty Repeating Rifle, Adirondack Firearms, Bullard Repeating Arms, Burgess Gun, and the Whitney Arms Companies were making repeaters. However, they are lesser known, partially because Winchester realized the value in their designs and the threat of them as a competitor, so they acquired the companies.[53] Other major manufacturers, such as Marlin, quickly popped up as well by the 1880s as a direct competitor to the Winchester lever action. Additionally, by the end of the 19th century, major manufacturers were making fixed and detachable magazines in quantities greater than ten that were not only lever actions rifles. In fact, between 1887 and 1904, Colt manufactured an estimated 186,185 Colt Lightning slide action rifles, in small, medium, and

[51] Kowalski, David D. Ed. Standard Catalog of Winchester: The Most Comprehensive Price Guide Ever Published. Krause Publications 2000, pg. 159.

[52] Flayderman, pg. 694-695

[53] An entire exhibit at the Cody Firearms Museum is dedicated to the many repeating arms companies that Winchester acquired. Examples are archived in the Winchester Arms Collection.

large frames. While they came in several calibers, they also had fixed tubular magazines greater than ten rounds.[54] In all, there were over one hundred manufacturers or makers in the United States alone producing some type of repeating firearm leading up to and decades after the Civil War.[55]

Magazines

32. The report previously mentions eighteenth century magazine-fed repeaters such as the Lorenzoni, the Wetschgi, later Beltons, the Girardoni, and their copycats. By the time after the standardization of the patent act, magazines also began to be patented. Even though tubular magazines existed long before, the tubular magazine was first patented in the US in the 1840s, notably with the Hunt Volitional Rifle, which according to the patent was meant to hold twelve rounds and was the oldest direct ancestor to the Winchester rifle.[56] Magazines came in many shapes and sizes and became prevalent around this time. For example, not all tubular magazines are fixed to the firearm, some such as the Spencer lever action repeating rifle which utilized a detachable tubular magazine from the buttstock capable of holding seven rounds. A speed loader even existed for that magazine. In the 1850s, the Genhart turret rifle had a detachable circular magazine with an externally visible shot/round counter. Between 1859 and 1862, the Jarre Harmonica Pistol and Rifle received several patents. This gun has a horizontally seated magazine that slides after each round is fired like a typewriter. It is also detachable.

33. In terms of box magazines specifically, early ones were patented by designers including Rollin White in 1855.[57] A detachable version was patented in 1864 by Robert Wilson.[58] A vertically stacked box magazine was patented by James Paris Lee in 1879 which was applied to several rifles including the Mannlicher Model 1886 rifle.[59] In terms of early

[54] Flayderman, page 122-123
[55] Ibid, Chapters V: A-F pages 50-299; Chapter VII: A, B, C Pages 351-387; Chapter VIII: A Pg458-524; Chapter XIII pages 691-697; Chapter XV: pages 709-733
[56] Hunt, Walter. US Patent 6663A (1849)
[57] White, Rollin. US Patent No 12648 (1855)
[58] Wilson, Robert. US Patent No 45105 (1864)
[59] Lee, James Paris US Patent No 221328 (1879)

semi-automatic pistols, the Mauser C-96 had a fixed magazine, and the Borchardt C-93 had a detachable one. Semi-automatic models of Winchester utilized various types of magazines, including the Winchester Model 1907, a centerfire rifle capable of firing up to twenty rounds from a box magazine and the Winchester Model 1903 which could also be fixed with a lesser-known Sabo ninety-six round detachable magazine. By the end of the nineteenth century, the earliest versions of semi-automatic pistols such as the Borchardt C-93 contained eight rounds from a detachable magazine (1893) and the Mauser C-96 had a ten-round magazine (1895) but also came in configurations as high as twenty rounds.[60]

Centerfire

34. This term refers specifically to the type of ammunition the gun fires. Centerfire refers to the location of the priming compound. Self-contained cartridges typically consist of a case, primer, powder, and projectile. Centerfire has a separate primer in the center of the head of the cartridge case. This is to distinguish it from rimfire, which has an integral primer in the rim of the cartridge case. Traditionally, people are most aware of .22 caliber rimfires but there have been many larger calibers including the .44 Flat Henry Rimfire cartridge. Centerfire cartridges started in the early 1800s. In 1808, Jean Samuel Pauly invented an early form of centerfire cartridge and the true centerfire was developed in 1829 by French inventor Clement Pottet and perfected by the 1850s.

Semi-Automatic

35. Semi-automatic operation involves pressing a trigger to fire one round, eject a spent case, and load another to be fired on the next trigger pull. Today, a majority of firearms are semi-automatic rifles, pistols, or shotguns. Semi-automatic technology was developed in the 1880s around the same time as automatic technology. Mannlicher is generally attributed to creating the first semi-automatic rifle; handguns followed shortly after. The first mass produced semi-automatic pistol was the Hugo Borchardt designed C-93 with detachable 8-round magazine.

[60] Kopel, 857 referencing *Standard Catalog of Firearms.* (2014), Gun Digest Books, pg. 708-709

The Mauser C-96 followed, as did the John Moses Browning's Model 1899/1900 pistol. Often in the marketing of these pistols in the late 19th and 20th centuries, the companies would refer to them as "Automatic" pistols. However, please note they are still semi-automatic in function. According to the definitions of the Gun Control Act of 1968, such firearms made before 1898 are not federally regulated firearms, they are antiques. By that definition and regulation, some semi-automatic pistols and rifles are so old, they are not legally firearms according to the federal government. In the twentieth century, semi-automatic firearms used in conjunction with a variety of the features listed above have been and continue to be made into thousands of models by countless companies.

Pistol Grip

36. Pistol grips appear on long arms dating to at least the 1700s. Single shot flintlock and later percussion pistols sometimes would have the feature of a detachable stock. When assembled these long guns would use the grip from the pistol as a maneuverable device. This trend continued with repeating arms, including several models of Colt revolvers, in the civilian and military market. The Borchardt semi-automatic pistol of 1893 and the Mauser C96 also had a detachable stock option. If a user didn't have one of these models, universal holsters to convert a pistol to a rifle with a detachable stock existed. On firearms without detachable stocks, pistol grips appear on all variances of firearms actions. Machine guns, including the Colt Model 1895, French Chauchat (1907) and several Maxim models had pistol grips. Submachine guns like the Thompson (1918) had them as well. Pistol Grips not only appear in machine guns but also other guns, such as shotguns –the Ithaca Auto & Burglar (1922), the Harrington & Richardson Handy-Gun (1921), and the Marble Game Getter (1908) – as well as semi-automatic firearms including the M1A1Paratrooper Carbine designed with not only a pistol grip but folding stock.

Forward Grips

37. The aforementioned fourteen-barrel firearm (ca 1795) has a forward grip. Additionally, another example is the French Magot rifle from the 1860s. Possibly one of the only

copies of this gun is in the Cody Firearms Museum as it was purchased by Winchester during their lawsuit with the company Bannerman.

Thumbhole Stocks

38. While a traditional thumbhole stock is difficult to historically trace, their regulation has a deep impact on sporting and Olympic firearms in the modern era. The concept of a stabilizing entity to help with maneuverability and accuracy dates to the earliest civilian sporting arms. For example, Schuetzenfest, dating from the 1600s through today, had elaborate sporting rifles created with molded cheek pieces and places for the hand including palm rests – while not technically a thumbhole, these provided the same stability for which a thumbhole is used. German Frei pistol of the nineteenth and twentieth centuries, used handguns that were made specifically as a stabilizing placement custom for the individual athlete. Certain Olympic rifles feature thumbhole stocks, including several models of Winchester, dating to the 1950s. This type of concept or technology is a very prominent shooting sports feature.

Folding or Telescoping Stock

39. The Cody Firearms Museum has a folding stock snaphaunce blunderbuss that dates to around 1650-1700. With early firearms, folding or adjustable stocks are not necessarily common because pieces in the civilian world were made by artisans prior to mass production. However, the appearance of detachable stocks – converting a pistol to a rifle/carbine – appear in the 1700s on flintlocks and continue to be incorporated on percussion, revolver, and semi-automatic guns. The Luger Model 1902 semi-automatic carbine has an added stock to convert the pistol to a carbine. As guns begin to be mass produced in scale, various models are often made, such as a Junior or Ladies rifle that provide a different size option for the sport shooter. The flexibility of stock size is very strong in the civilian market where comfort and having firearms suited for the individual are preferable and feasible. In the early 1900s, and possibly earlier, Try Guns were carried by salesmen to allow the consumer to adjust the stock to fit them to see what size this person needed. Two examples in the Cody Firearms Museum collection are

the Winchester Model 12 and LC Smith Try Guns. This lays the foundation for a consumer market interested in customizing and adjusting their stocks to fit them appropriately. Folding stocks do make appearances in the military sphere with the M1A1 Paratrooper Carbine model as well as several submachine guns.

Grenade Launcher or Flare Launcher

40. Grenade launchers, also known as hand mortars, date to the 1600 and 1700s. Flare guns were in use by the 1800s.

30 Inches or Less

41. The idea behind a shorter rifle is known as a carbine. While the definition can vary, it typically refers to a barrel less than 20 inches. Additionally, many pistols with detachable stocks fall under this category. By adding a stock to a C-93, C-96 or Luger it converts a semi-automatic pistol into a semi-automatic rifle.

Flash Suppressor

42. Flash suppressors appear on machine guns from World War I and earlier including the Chauchat and Maxim but technically, any gun affixed with a Silencer, invented in 1902, could be considered to have a flash suppressor. Silencers were heavily marketed to the civilian population as target accessories, so this would have been available for numerous firearms models. The traditional flash hider on military arms, not classified as a machine gun, were used during WWII on guns such as the Lee-Enfield “jungle carbine” and have appeared on AR platform firearms, invented in the 1950s.

Threaded Barrel

43. An early idea of a quick attachment system in or on a barrel of a gun is the bayonet. Developed in the sixteenth century, the bayonet was commonly used for both military and civilian firearms. There have been a variety of muzzle devices that have attached to a barrel since (compensators, silencers, muzzle brakes, flash hiders etc). While some early semi-automatic rifles, pistols, and shotguns had threaded barrels, the military did not always use

threaded barrels for their suppressed firearms, nor did the civilian market. This is because Hiram Percy Maxim, the inventor of the Silencer, sold his silencer often with an adapter that allowed a silencer to be affixed without a threaded barrel, making the need for a threaded barrel or the thought that no threaded barrel would prevent a silencer moot.

Barrel Shroud

44. The concern regarding a barrel shroud is that it would prevent "burning the bearer's hand." While typically not thought about, by that definition, any firearm with a full length stock fits the definition, like a Brown Bess or early single shot pistols. To speak in more modern terms, target shooting pistols also tend to have a partial barrel shroud on examples such as the Remington XP100 from the 1960s and the Browning Buckmark Silhouette.

Shotgun with a Revolving Cylinder

45. The earliest revolving firearms had shotgun models. For example, the Collier (1814), a flintlock and later percussion revolver in which the user had to manually rotate the cylinder, had shotgun models. Samuel Colt, the creator of the modern revolver, sold revolving shotguns as early as 1839, just four years after his first US patent.

Laws and Relevance

46. In the colonial period, the bulk of firearms laws were centered on restricting access to certain people rather than firearms themselves. Therefore, even if a firearm or weapon was specifically mentioned in a law, the type of weapon is not necessarily relevant, as other civilians were still permitted to own them even if some people were restricted. Each colony developed their own policies. In 1640, Virginia law stated, "that all such free Mulattoes, Negroes

and Indians…shall appear without arms."[61] South Carolina also had similar bans in 1712.[62] It is generally understood that, while intent is debated, early laws were largely categorized by race.[63]

47. The British government also used regulation to control the colonists through access to gunpowder by seizing public powder houses, also referred to as "magazines." Although it is not to be confused or conflated with the mechanical devices discussed throughout this declaration. They achieved this because, due to fire hazard, large stocks of black powder were kept in a communal powder house, which was a repository for both individuals and merchants to store their powder. It also provided powder for people who were unable to afford it.[64] In one instance of disarmament, Royal Governor Thomas Gage, in 1774, seized remaining powder in Charleston, causing a flurry of responses, known as the Powder Alarm, from the colonists that was considered preparation for the Battles of Lexington and Concord.[65] Shortly thereafter, King George III enacted a restriction to "prohibit the Exportation of Gunpowder."[66] As a result, Revolutionary leaders, such as Paul Revere, required possession of arms and ammunition by militiamen and many required powder and projectiles in quantities greater than ten pounds and rounds respectively.[67]

48. While the ownership of gunpowder was outright encouraged, there were still very real concerns about the instability of gunpowder. It is important to note that modern gunpowder

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[61] One of the best resources to search all firearms laws is the Repository of Historical Gun Laws, Duke University School of Law. <https://firearmslaw.duke.edu/> Accessed 10/25/2022. However, a concise summary of these laws is also broken down by: Ekwall, Steve. *The Racist Origins of US Gun Control.* <https://www.sedgwickcounty.org/media/29093/the-racist-origins-of-us-gun-control.pdf> Accessed 10/22/22 Here he references: 7 The Statues at Large; Being a Collection of all the Laws of Virginia, from the First Session of the Legislature, in the Year 1619, p. 95 (W.W. Henning ed. 1823) (GMU CR LJ, p. 67)

[62] Eckwall, 7 Statutes at Large of South Carolina, p. 353-54 (D.J. McCord ed. 1836-1873). (GMU CR LJ, p. 70)

[63] The abstract of Cramer, Clayton E. "Colonia Firearms Regulation" (April 6, 2016) puts it fairly succinctly: "Firearms regulation in Colonial America was primarily focused on encouraging gun ownership for defense against external threats (Indians, pirates, non-British European powers) and internal threats (slave rebellions)"

[64] Johnson et al. Firearms Law and Second Amendment Regulation, Rights, and Policy (3rd ed. 2021), pg. 271

[65] Ibid., pg. 271

[66] Ibid, pg. 272

[67] *Duncan v. Becerra*, 366 F. Supp. 3d 1131, 1150 (S.D. Cal. 2019)

is far more stable than historic black powder. Even so, it is still recommended to be stored separately from firearms in the home even today.[68] As a result of instability, fire prevention laws were enacted, not to disarm individuals but to provide them a safe place to store their powder while also reducing the potential for fire within communities. Philadelphia in 1725 enacted a law "for the better securing of the city of Philadelphia from the Danger of Gunpowder." Under this Act, safety was also defined as the distance of beyond two miles outside of town limits.[69] Similarly, Boston in 1783 also made a storage law citing the instability of black powder. "In the houses of the town of Boston, [it] is dangerous to the lives of those who are disposed to exert themselves when a fire happens to break out in town."[70] The idea of a required distance in which it was safe to use black powder for firearms and also for fireworks, was echoed in these laws. While in the above example it considered distance within town limits, some places legislated a safe distance from the powder house itself. For example, in 1762, Rhode Island enacted "that no person whatsoever shall fire a gun or other fireworks within one hundred yards of the said powder house."[71] Additionally, Rhode Island in 1798, provided guidance on how to safely store powder in the home. They also provided a safe space to store anything over twenty-eight pounds[72] These laws strongly focused on safety from a perspective of fire prevention rather

[68] According to the Sporting Arms and Ammunition Manufacturer's Institute, "ammunition should be stored in a cool, dry location away from solvents and other chemical heat sources, or open flames…ammunition should be stored separately from firearms" < https://saami.org/wp-content/uploads/2018/01/SAAMI_AmmoStorage.pdf> Accessed 10/25/22

[69] 1725 Pa. Laws 31, An Act for the Better Securing of the City of Philadelphia from the Danger of Gunpowder <https://firearmslaw.duke.edu/laws/1725-pa-laws-31-an-act-for-the-better-securing-of-the-city-of-philadelphia-from-the-danger-of-gunpowder-%c2%a7-2/> Accessed 10/25/22

[70] Thomas Wetmore, Commissioner, The Charter and Ordinances of the City of Boston <https://firearmslaw.duke.edu/laws/thomas-wetmore-commissioner-the-charter-and-ordinances-of-the-city-of-boston-together-with-the-acts-of-the-legislature-relating-to-the-city-page-142-143-image-142-1834-available-at-the-making-of/> Accessed 10/25/2022

[71] 1762 R.I. Pub. Laws 132 <https://firearmslaw.duke.edu/laws/1762-r-i-pub-laws-132/> Accessed 10/25/22

[72] 1798-1813 R.I. Pub Laws 85 < https://firearmslaw.duke.edu/laws/1798-1813-r-i-pub-laws-85-an-act-relative-to-the-keeping-gun-powder-in-the-town-of-providence-%c2%a72/> Accessed 10/25/22

than a position of regulating the amount of powder one could have since powder houses were built for large storage.

49. Racial firearm bans continued into the nineteenth century. States including but not limited to Louisiana, South Carolina, Florida, Delaware, Maryland, North Carolina, and Mississippi enacted race bans between ratification and the American Civil War.[73] Some states, for a time, would permit African Americans to carry guns with court approval, but they were eventually repealed.[74] Several laws upheld their justification for race-based regulation on the fact that Black people were not considered citizens, which was upheld in the 1857 case of Dred Scott v. Sandford.

50. During this period in between ratifications of the Second and the Fourteenth Amendments, some laws emerged restricting carry by any person. According to Professor of Sociology at Wake Forest University Dr. David Yamane, one of the earliest examples was in Kentucky in 1813. The General Assembly of the Commonwealth stated: "That any person in this commonwealth, who shall hereafter wear a pocket pistol, dirk, large knife, or a sword cane, concealed as a weapon…shall be fined in any sum, not less than one hundred dollars." However, nine years later in 1822, the Kentucky Supreme Court ruled that ban violated their 1792 Constitution.[75] Other states adopted similar carry regulations, some still only for certain groups of people.

51. Despite the abolition of slavery, discriminatory laws that included firearms regulation continued. One such way that could be legally achieved was through the Black Codes. While there were many aspects of discrimination in the various state "Codes," many included challenges to Black Second Amendment rights. For example, Alabama in 1866 not only banned

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[73] Ekwall

[74] Ibid, referring to Act of Nov. 17, 1828, Sec. 9, 1828 Fla. Laws 174, 177; Act of Jan. 12, 1828, Sec. 9, 1827 Fla. Laws 97, 100; Referring to Act of Jan. 1831, 1831, Fla. Laws 30

[75] Yamane, David. *Concealed Carry Revolution: Expanding the Right to Bear Arms in America*. A New Press (2021), pg. 17-18. David Yamane is a Sociology Professor at Wake Forest. This book was just a small portion of his larger research on gun culture that he calls, "Gun Culture 2.0." More of his research can be found at gunculture2point0.com

Blacks from owning firearms and other weapons, but also made it illegal to lend or sell to a black person.[76] The Civil Rights Act of 1866, the Fourteenth Amendment and the Second Freedmen's Bureau Act in 1866 attempted to dispel a variety of these issues.[77] Following the passage of these acts, however, southern states then passed laws, known as Army/Navy Laws, in which certain firearms, such as Colt Army and Navy model revolvers were permitted while cheaper versions were not legal.[78] Prohibiting the proliferation of inexpensive handguns on the market, whether intentionally or unintentionally imposed a classist restriction on those who could no longer afford to arm themselves– a trend that has continued well into the modern era.

52. Some scholars argue that the passage, despite the repeal in many instances, of state laws regulating the carry of specific types of weapons serve as sufficient evidence to support modern feature-based regulations. However, it is important to reiterate that these regulations regarding specific types of weapons have occurred in some cases to take away the rights of some but not others. For laws that did include everyone, weapons typically on that list had some sort of larger counterpart, as in the Army/Navy laws, which would have at least equal capacity or were still permitted via licensure. In all, these laws did not explicitly concern themselves with capacity or magazines but more often the size and/or other criteria related to concealment.

Conclusion

53. According to *Bruen,* time frames outside of the Founding and Second Founding Eras can be considered informative, providing context for the mindset and knowledge behind designs and legal decisions, although it does not hold the same weight. The proliferation of such technology in the twentieth and twenty-first centuries is astounding. As such and coupled with

[76] Ekwall
[77] A detailed explanation of this can be found in: Johnson et. al pg. 465-471
[78] Eckwall

the tertiary importance according to *Bruen*, I will not dive into a comprehensive survey at all features used as they developed into modern day.

54. In addition to a snapshot of the origins of relevant features, this report has also highlighted corresponding laws from those time periods. It has stated that in many cases these technologies and features date back centuries, often before the Founding Era. To my knowledge, there were no laws during this period that restrict access to certain types of repeating firearms. By the time of the Second Founding Era, there were exponentially more repeaters available on the market. The first federal law truly regulating firearms features was the National Firearms Act of 1934. However, the firearms and features within that law were still available for purchase on the civilian market after enactment. Laws specifically regulating detachable magazines date even later to the last decade of the twentieth century, with the ten round magazine limit only imposed through federal law for the first time in 1994, making the relevant conversation in this case much more recent history rather than the historical precedent under *Bruen*.

I declare under penalty of perjury that the foregoing is true and correct. Executed within the United States on March 23, 2023.

Ashley Hlebinsky
Declarant

EXHIBIT A

Ashley Hlebinsky Curriculum Vitae

Ashley Hlebinsky, President, The Gun Code, LLC
[redacted]

Education:

Master of Arts, American History, University of Delaware, 2013

Bachelor of Arts, American History, University of Delaware, 2011

Recent Honors/Awards:

Second Amendment Foundation's Defender of the Constitution, 2022

National Shooting Sports Foundation and Women's Outdoor Media Association's Top Five Finalist, Top Woman of the Gun Industry, 2022

National Shooting Sports Foundation's SHOT Business's Top 40 under 40, 2020

Wyoming Business Report's Top 40 Under 40, 2017

National Shooting Sports Foundation & Professional Outdoor Media Association's Shooting Sports Communicator of the Year Award, 2017

Wyoming's Non-Profit Woman of the Year Nominee, 2017

Selected Professional Experience:

Co-Founder and Senior Fellow, University of Wyoming College of Law's Firearms Research Center, Laramie, WY, 2020 (Current)

Consulting Director, Craig Boddington Wildlife and Firearms Museum, Independence, KS, 2022 (Current)

Consulting Curator, LA Police Museum, Pasadena, 2021 (Current)

Senior Consulting Specialist. Cowan's Auctions, Cincinnati, OH, 2021 -2022

Consultant, National Museum of Law Enforcement and Organized Crime (Mob Museum), Las Vegas, NV, 2016 (Current)

Guest Curator, C.M. Russell Museums and Complex, Great Falls, MT 2021 (Current)

Adjunct Scholar of Firearms History, Technology & Culture, Firearms Policy Coalition, 2020-2021

Curator Emerita & Senior Firearms Scholar, Cody Firearms Museum, Buffalo Bill Center of the West, 2020 – 2021.

Robert W. Woodruff Curator, Cody Firearms Museum, Buffalo Bill Center of the West, Cody, WY, 2015-2020

Project Director, Cody Firearms Museum Renovation, Buffalo Bill Center of the West, Cody, WY, 2015-2019

Consulting Curator, Houston Museum of Natural Sciences, 2018

Consultant. Adirondack Experience. November 2019

Consultant. Winchester Mystery House, August 2019.

Consulting Scholar. National Park Service & Organization of American Historians, March 2019.

Consultant/Curator. Daniel Defense, Black Creek, Georgia. 2017

Associate & Acting Curator, Cody Firearms Museum, Buffalo Bill Center of the West, Cody, WY, 2015

Guest Curator. C.M. Russell Museums and Complex, 2015-2016

Guest Curator. Cody Firearms Experience, 2015

Assistant Curator, Cody Firearms Museum, Buffalo Bill Center of the West, Cody, WY, 2013-2014

Teaching Assistant, The Jewish Holocaust: 1933-1945, University of Delaware, 2013
Teaching Assistant, Introduction to Military History, University of Delaware, 2012

Teaching Assistant, History Education, University of Delaware, 2011

Researcher/Fellow, National Museum of American History, Smithsonian Institution, 2010-2013

Archival Assistant, University of Delaware Special Collection, 2010-2011

Firearm Intern, Soldiers and Sailors National Memorial Hall, 2008

Expert Witness Testimony:

Oregon Firearms Federation, Inc et al v Oregon Governor Kate Brown et al, December 2022

Washington State v Federal Way Discount Guns et al, December 2022

Virginia Duncan et al v Rob Bonta, November 2022

Ocean State Tactical et al v Rhode Island, October 2022

Senate Judiciary Subcommittee on the Constitution, Stop Gun Violence: Ghost Guns, May 2021

Franklin Armory et al v Bonta, February 2021

FN Herstal v Sturm, Ruger & Co, January 2021

Sturm, Ruger & Co. v American Outdoor Brands Corp., October 2020

Guedes v BATFE, June 2019

Miller v Becerra (Bonta), November 2019

Regina (Nova Scotia) v Clayton, January 2019

Garrison v Sturm, Ruger & Company, Inc., 2018

Rupp v Bonta, February 2023

Selected Media Work:

Writer/Producer. Mountain Men: Ultimate Marksman. History Channel, May 2022 (Current)
Regular Contributor. *Our American Stories* Podcast, 2022 (Current)
Co-Host. History Unloaded Podcast. Various platforms with Wyoming Public Media, 2018-2022, 6 seasons (Current)

Producer & On Camera Expert. *Gun Stories with Joe Mantegna*, Outdoor Channel, 2015-2022, 8 seasons (Current)

Producer & On Camera Expert. *Man vs History*, History Channel & Matador Productions, 2020 (aired 2021)

Co-Host. *Master of Arms*, Discovery Channel & Matador Productions, 2018. 1 season

Consulting Producer. *Brothers in Arms*. History Channel, 2018. 1 season.

On Camera Expert. *Rob Riggle: Global Investigator*. Discovery Channel, 2020.

Recurring Expert. *Mysteries at the Museum.* Travel Channel. 2017-2019

Casting Consultant. *Gun Shop Project,* Vice Media & Cineflix Productions, 2020

On Camera Expert. *American Genius Colt V. Wesson*. National Geographic. 2015

Also appears on: Public Broadcasting Service, National Public Radio, Travel Channel, National Geographic, Popculture.com, Media, Entertainment, Arts, World Wide (MEAWW), Women's Outdoor News, Outdoor Life, Shooting USA, Gun Talk Media, National Shooting Sports Foundation, various firearms related podcasts.

Has been profiled by: The Bourbon Review, Recoil Magazine, Outdoor Life Magazine, Guns.com, Blue Press Magazine, and others

Selected Lectures/Panels:

Guest Speaker. Gun Rights Policy Conference, October 2022

Guest Speaker. Second Amendment Foundation Legal Scholars Forum, September 2022

Guest Lecturer and Panelist. AmmCon. Second Amendment Foundation, October 2021

Guest Lecturer. Armed for Revolution. Royal Armouries, September 2021

Guest Speaker. Preserving Firearms Heritage. Gun Rights Policy Coalition, 2020

Guest Lecturer. Art of Collecting. Nevada Museum of Art. January 2020

Panelist. Firearms and Museums in the 21st Century. National Council for Public History. March 2019.

Scholars Roundtable. Coltvsille National Historic Site. Organization of American Historians & National Park Service, March 2019.

Forum Speaker. The Art of the Hunt: Embellished Sporting Arms in America. New Orleans Antique Forum, August 2018

Guest Lecturer. Unloading the Gun: Firearms, History, and Museums. Yakima Valley Museum, June 2018

Guest Lecturer. Perpetrators and Protectors: The Mob, The Law and Firearms, National Museum of Law Enforcement and Organized Crime (Mob Museum), September 2017

Organizer. Arsenals of History: Firearms and Museums in the 21st Century, Buffalo Bill Center of the West, July 2017

Lecturer. The Cody Firearms Museum, Arsenals of History Symposium, Buffalo Bill Center of the West, July 2017

Moderator. Addressing the Press: Firearms and the Media, Arsenals of History Symposium, Buffalo Bill Center of the West, July 2017

Moderator. Forming an Association: Legitimizing Firearms in Academic Study, Arsenals of History Symposium, Buffalo Bill Center of the West, July 2017

Guest Lecturer. Displaying the "Politically Incorrect," C.M. Russell Museums and Complex, May 2017

Guest Lecturer. Displaying the "Politically Incorrect," Blackhawk Museum, March 2017

Panelist. Curator Roundtable, Firearms and Common Law Symposium, Aspen Institute, September 2016

Guest Lecturer. Displaying the "Politically Incorrect," Canadian Guild of Antique Arms Historians, April 2016

Guest Lecturer. The Cody Firearms Museum Renovation, American Society of Arms Collectors, September 2016

Guest Lecturer. From Protector to Perpetrator: Demystifying Firearms in History, Art Institute of Chicago, November 2015

Guest Lecturer. Winchester '73: The Illusion of Movie Making, Winchester Arms Collectors Association, July 2014

Guest Lecturer. Unloading the Six Shooter: Disassembling the Glamorization and Demonization of Firearms in the Arts, Buffalo Bill Center of the West, 2011

Selected Firearms Exhibitions:

Curator/Project Director. *Cody Firearms Museum Renovation*. Buffalo Bill Center of the West. 2019

Co-Curator. *The Art of the Hunt: Embellished Sporting Arms from 1500-1800.* Houston Museum of Natural Sciences. March 2019

Curator. *Glock Makes History: The Birth of the Polymer Handgun Market*. Buffalo Bill Center of the West. June 2016

Guest Curator. *Designing the American West: The Artist and the Inventor*. C.M. Russell Museum & Complex. February 2016

Curator. *The Greatest Gun Designer in History: John Moses Browning.* Buffalo Bill Center of the West. December 2015

Curator. *Journeying West: Distinctive Firearms from the Smithsonian Institution.* Buffalo Bill Center of the West. December 2015

Curator. *The Forgotten Winchester: Great Basin National Park*. Buffalo Bill Center of the West. June 2015

Curator. Western Firearms Gallery, including *Shoot for the Stars: The Tradition of Cowboy Action Shooting*. Buffalo Bill Center of the West. April 2015.
Curator. *Steel Sculptures: Engraving Individuality from Mass Production*. Buffalo Bill Center of the West. Winter 2014.

Certifications:

Certified Firearms Instructor, Basic Pistol, 2016

Certified Firearms Instructor, Personal Protection Inside the Home, 2016

Well Armed Woman Instructor Certification, 2016

Museum Studies Certification, University of Delaware, 2013

Grants:

National Endowment for the Humanities, 2017

Institute of Museum and Library Services, 2017

Gretchen Swanson Family Foundation, 2015, 2016, 2017, 2018, 2019, 2020

Kinnucan Arms Chair Grant, 2012

Fellowships:

Firearms Curatorial Resident, Buffalo Bill Center of the West, 2013

Edward Ezell Fellowship, University of Delaware, 2012

Buffalo Bill Resident Fellowship, Buffalo Bill Center of the West, 2011

Committees and Memberships:

Board Member – Walk the Talk America

Founding President – Association of Firearms History and Museums
- Academic association for the study of firearms history in United States

Founder – Arsenals of History Symposia Series
- First international symposia series on the academic study of firearms

Spokesperson – NSSF/AFSP Suicide Prevention and Project ChildSafe Programs
American Alliance of Museums – Member

American Society of Arms Collectors – Member

Winchester Arms Collectors Association – Honorary

Remington Society of Arms Collectors – Member

Weatherby Collector's Association –Life Member

Publication History

Editorial Board – Armax Journal

Selected Articles:

Author. "Guns and Mental Health." *Recoil Magazine,* Upcoming

Author. "Colt Single Actions and Safety." *Armax Journal,* October 2021

Author. "Guns and Partisan Politics." *Recoil Magazine*, January 2021

Author. "Feminism & Firearms." *Recoil Magazine*, Summer 2020

Author. "Burton Light Machine Rifle." *Recoil Magazine*. October, 2019

Founder/Editor/Author. Arsenals of History Journal, Annual Publication, 2018 - Present

Author. "It's Complicated: The Short Answer to Firearms, Museums and History. *Journal of the Early Republic – The Panorama,* September 2018.

Contributor. "Firearms Curator Roundtable" *Technology & Culture Journal*, August 2018

Author. "Displaying the 'Politically Incorrect.'" *CLOG X Guns*: Chicago, IL, September 2017
Author. "Does History Repeat Itself? The Smith & Wesson LadySmith." *CLOG X Guns:* Chicago, IL, September 2017

Author. "Renovating the Cody Firearms Museum." *International Committee of Museums and Collections of Arms and Military History Magazine.* Issue 17, May 2017. Pg. 38 - 41

Author. "Renovating the Cody Firearms Museum." *American Society of Arms Collectors Journal*. Fall 2016.

Author. "Glock Exhibit Opening." *Glock Magazine.* Bang Media. Annual 2017

Author. "The 28 Most Notable Guns from Remington's 200-Year History." *Outdoor Life Magazine*. Bonnier Corporation, 2016

Author. "Cassie Waters: Businesswoman of the Old West." *Guns of the Old West.* Harris Publications, Spring 2016

Author. "Making History: GLOCK Pistols at the Cody Firearms Museum" *Glock Magazine.* Harris Publications. Annual 2016

Author. "Pocket Pistols: 10 Seminal Guns from the Past 300 Years." *Pocket Pistols.* Harris Publications. 2016

Author. "The Gun that Won the Western and the Unforeseen Stars of *Winchester '73*" *Guns of the Old West.* Harris Publications.

Author. "Frontier Profile: Jedediah Strong Smith" *American Frontiersman*. Harris Publications

Author. "Frontier Legend John Johnston." *American Frontiersman.* Harris Publications

Author. "The Guns of John Johnston." *American Frontiersman.* Harris Publications

Author. "Annie Oakley VS Lillian Smith: A Female Sharpshooter Rivarly." *Guns of the Old West.* Harris Publications, Spring 2015

Author. "Icons and Has-beens." *American Handgunner*. FMG Publications, 2014

Author. "Triggering Memory: American Identity in *Cowboys and Aliens*." *Points West.* Spring 2012

Author. "Unloading the Six-Shooter: Disassembling the Glamorization and Demonization of Firearms in the Arts." *Points West*, Fall 2011.

Columns:

Author. Old School Series. *Recoil Magazine*

Author. Flashback. *Concealment Magazine*

Author/Brand Ambassador. *The Bourbon Review.*

Author. *American Association for State and Local History*. Summer 2019

Author. "Weird West: Fact or Fiction" *Guns of the Old West*. Athlon Outdoors (formerly Harris Publications)

1st Assault Rifle

Colt VS Winchester Revolver

Did Winchester Really Win the West?

Oliver Winchester's Lever Action Shotgun

Remington Cane Gun

Author. "Cowboy Action Round Up." SHOT Show New Products. *Guns of the Old West*. Athlon Outdoors (formerly Harris Publications). 2015, 2016, 2017

Reviews:

Reviewer: Edited by Jonathan Obert, Andrew Poe, and Austin Sarat. Oxford: Oxford UniversityPress, 2018. *Journal of Technology & Culture*, Fall 2019

Author. "Everybody Loves an Outlaw: Taylor's Outlaw Legacy Revolver Series." *Guns of the Old West.* Harris Publications

Reviewer: Richard Rattenbury. *A Legacy in Arms: American Firearms Manufacture, Design and Artistry, 1800-1900*. *Chronicle of Oklahoma*, Spring 2016

Selected Blogs & Vlogs:

Recoil Magazine

Weekly video series beginning October 2017 to Present

Dillon Precision

Historical Videos on Ammunition (Upcoming)

Outdoor Life

Top 10 Guns in American History
Guns of the Old West: 10 Iconic Firearms and the Legendary Men (and Women) Who Shot Them
13 of the Biggest Gun Fails in Recent Firearms History
Gun of the Week:
John Martz Luger
Apache Revolver
German Frei Pistol
King Louis XV Embellished Blunderbuss
Armalite AR-17 Shotgun
Getting the Christmas Goose with a Goose Rifle & Cutaway Suppressor
Mossberg Brownie
Wesson & Leavitt Belt Revolver
William Harnett and the Faithful Colt 1890
Winchester Model 1894 Lever Action Rifle
Ruger Semi-Automatic Pistol, 1 of 5,000
Herb Parson's Winchester Model 71 Lever Action Rifle
Lincoln Head Hammer Gun
American Trap Gun
Browning Brother's Single Shot Rifle Patent
Feltman Pneumatic Machine Gun
U.S. Springfield-Allin Conversion Model 1866 Trapdoor Rifle
Winchester Wetmore-Wood Revolver
Webley-Fosbery Automatic Revolver
Hopkins & Allen XL3 Double Action Revolver
DuBiel Modern Classic Rifle
Colt Model 1877 "Thunderer" Double Action Revolver
Tom Tobin's Colt Model 1878 Frontier Revolver
Walch 10-Shot Double Hammers Pocket Revolver
Winchester Model 1887, Serial No. 1
Deringer vs Derringer
The Forgotten Winchester 1873 of Great Basin National Park

Range 365
To the One Who Got Away
Gun Review: New Glock 19 Gen 5
Ain't She a Pistol? 10 Historic Gun Ads Featuring Women
National Shooting Sports Foundation
The Gun Vault:

Winchester 1873 Found in Great Basin National Park
Col. Jeff Cooper's Colt MK IV Series 80
500+ Year Old Firearms, Matchlocks, Flintlocks
U.S. Presidents Guns
Cross Dominance Shotgun
Herb Parson's Winchester Model 71 Rifle
Audie Murphy's Colt Bisley Revolver
4 Gauge Winchester Wildfowler
Pocket Pistols
Henry Ford's Winchester Model 1887 Lever Action Shotgun
Tom Knapp's First Gun
Buffalo Bill Cody's Winchester 1873
Colt Model 1861 Navy Serial No. 1
Cassie Waters' Hopkins & Allen XL3 Revolver
Glock 17

The Truth About Guns

- Presidential Presentation Rifles
- Factory Cut-Away M16A1
- 1854 Smith & Wesson Repeating Rifle (Serial Number 8)
- Winchester World's Fair Model 1866 Deluxe Sporting Rifle
- Raymond Wielgus Collection
- Gastinne-Renette Muzzleloading Percussion Target Pistols
- Oliver Winchester's Jennings Repeater
- Henry Ford's Winchester Model 1887
- Winchester Model 1866 Musket in .44 Rimfire
- English Wheellock
- Southern Belle American Longrifle
- Annie Oakley's Model 1892 Smoothbore Rifle
- Catherine the Great of Russia's Blunderbuss Gift to King Louis XV of France
- Color Case-Hardened GLOCK 43: Merging the Old West with the New
- Buffalo Bill Center of the West – Unloading the Myth
- The Cody Firearms Museum – Yesterday, Today, and Tomorrow
- Guns of the Week – Christmas List
- Guns of the Week: December 15-19
- Guns of the Week – The Cody Firearms Museum
- Guns of the Week – German Firearms
- Guns of the Week – Scheutzenfest
- Guns of the Week – Air Guns
- Guns of the Week – Early Firearms Law
- Guns of the Week – October 13-17
- Guns of the Week – Ingenious Engineering
- Guns of the Week – Remington – Smoot
- Guns of the Week – September 22-26; 15-19; 8-12
- CSI: Firearms Museum Edition
- Confessions of a Gun Historian
- Art Guns: Aesthetics Over Function?
- What Good's a Gun Without a Firing Pin?
- Gun Installations, Trials & Tribulations

A True Test of Marital Trust and Love
Remembering Tom Knapp
Cody Firearms Museum Goes Hollywood
When Will My Firearms Go On Display
What's Your Cody Firearms Museum
To Vlog or Not to Vlog
We Don't Just Have Old Guns in Our Museum: SHOT Show 2014
Taking a Staba at Displaying More Guns
"Hi Yo Silver" Cook Away! Lone Ranger Display
The Shooting Wire
Winchester's 150th Anniversary Website
Remington's 200th Anniversary Website