THE HISTORY OF FIREARM MAGAZINES AND MAGAZINE PROHIBITIONS

David B. Kopel*

I. INTRODUCTION

In recent years, the prohibition of firearms magazines has become an important topic of law and policy debate. This article details the history of magazines and of magazine prohibition. The article then applies the historical facts to the methodologies of leading cases that have looked to history to analyze the constitutionality of gun control laws.

Because ten rounds is an oft-proposed figure for magazine bans, Part II of the article provides the story of such magazines from the sixteenth century onward. Although some people think that multi-shot guns did not appear until Samuel Colt invented the revolver in the 1830s, multi-shot guns predate Colonel Colt by over two centuries.1

Especially because the Supreme Court’s decision in District of Columbia v. Heller2 considers whether arms are “in common use” and are “typically possessed by law-abiding citizens for lawful purposes,”3 the article also pays attention to whether and when particular guns and their magazines achieved mass-market success in the United States. The first time a rifle with more than ten rounds of ammunition did so was in 1866,4 and the first time a

---

3 Id. at 624–25, 627.
4 See infra notes 50–55 and accompanying text.
handgun did so was in 1935.\(^5\)

The detailed history of various firearms and their magazines stops in 1979—a year which is somewhat ancient in terms of the current gun control debate. Back in 1979, revolvers still far outsold semiautomatic handguns.\(^6\) No one was trying to ban so-called assault weapons,\(^7\) although such guns were already well established in the market.\(^8\)

For the post-1979 period, Part II briefly explains how technological improvements in recent decades have fostered the continuing popularity of magazines holding more than ten rounds.

Part III of the article describes the history of magazine prohibition in the United States. Such prohibitions are of recent vintage, with an important exception: during prohibition, Michigan, Rhode Island, and the District of Columbia banned some arms that could hold more than a certain number of rounds; Ohio required a special license for such guns.\(^9\) The Michigan and Rhode Island bans were repealed decades ago; the Ohio licensing law was repealed in 2014, having previously been modified and interpreted so that it banned no magazines.\(^10\) The District of Columbia ban, however, remains in force today, with some revisions.\(^11\)

The Supreme Court's Second Amendment decisions in *District of Columbia v. Heller* and *McDonald v. Chicago*\(^12\) paid careful

---

\(^5\) See infra notes 102–03 and accompanying text.


\(^8\) Below, this article describes many models of semi-automatic rifles introduced since 1927. See infra notes 82–101 and accompanying text. All of them have been labeled an “assault weapon” by one or more proposed bills. See, e.g., LEGAL CMTY. AGAINST VIOLENCE, BANNING ASSAULT WEAPONS—A LEGAL PRIMER FOR STATE AND LOCAL ACTION 59–60 (2004), available at http://smartgunlaws.org/wp-content/uploads/2012/05/Banning_Assault_Weapons_A_Legal_Primer_8.05_entire.pdf (proposing a model assault weapons law).

\(^9\) See infra notes 129–30, 134, 140 and accompanying text.

\(^10\) See infra notes 131–33, 135–39 and accompanying text.

\(^11\) See infra notes 140–45 and accompanying text.

\(^12\) *McDonald v. City of Chi.*, 561 U.S. 742 (2010).
attention to history. Several post-*Heller* lower court opinions in Second Amendment cases have also examined history as part of their consideration of the constitutionality of gun control statutes. Part IV of this article examines the legality of magazine bans according to the various historical standards that courts have employed.

II. THE HISTORY OF MAGAZINES HOLDING MORE THAN TEN ROUNDS

In *District of Columbia v. Heller*, the Supreme Court ruled that the District of Columbia’s handgun ban was unconstitutional partly because handguns are in “common use.”13 The Second Amendment protects arms that are “typically possessed by law-abiding citizens for lawful purposes.”14

Magazines of more than ten rounds are older than the United States.15 Box magazines date from 1862.16 In terms of large-scale commercial success, rifle magazines of more than ten rounds had become popular by the time the Fourteenth Amendment was being ratified.17 Handgun magazines of more than ten rounds would become popular in the 1930s.18

A. Why Consumers Have Always Sought to Avoid Having to Reload During Defensive Gun Use

When a firearm being used for defense is out of ammunition, the defender no longer has a functional firearm. The Second Amendment, of course, guarantees the right to an *operable* firearm.19 As the *Heller* Court explained, the Council of the District of Columbia could not require that lawfully-possessed guns be kept in an inoperable status (locked or disassembled) in the home, because doing so negates their utility with respect to “the core lawful purpose of self-defense.”20

When the defender is reloading, the defender is especially vulnerable to attack. When ammunition is low but not exhausted (e.g., two or three rounds remaining), that may be insufficient to

14 *Id.* at 625.
15 See *infra* notes 21–24 and accompanying text.
16 See *infra* note 65 and accompanying text.
17 See *infra* notes 43–55, 172–73 and accompanying text.
18 See *infra* notes 102–03 and accompanying text.
19 See *Heller*, 554 U.S. at 630, 635 (declaring the District of Columbia’s requirement that all firearms in the home be “rendered and kept inoperable at all times” as unconstitutional).
20 *Id.*
deter or control the threat, especially if the threat is posed by more than one criminal. If the victim is attacked by a gang of four large people, and a few shots cause the attackers to pause, the victim needs enough reserve ammunition in the firearm to make the attackers worry that even if they rush the victim all at once, the victim will have enough ammunition to knock each attacker down. When guns are fired defensively, it is unusual for a single hit to immediately disable an attacker.

Accordingly, from the outset of firearms manufacturing, one constant goal has been to design firearms able to fire more rounds without reloading.

To this end, manufacturers have experimented with various designs of firearms and magazines for centuries. While not all of these experiments were successful in terms of mass sales, they indicated the directions where firearms development was proceeding. The first experiments to gain widespread commercial success in the United States came around the middle of the nineteenth century.

B. Magazines of Greater than Ten Rounds are More than Four Hundred Years Old

The first known firearm that was able to fire more than ten rounds without reloading was a sixteen-shooter created around 1580, using “superposed” loads (each round stacked on top of the other). A multi-shot gun continued to develop in the next two centuries, with such guns first issued to the British army in 1658. One early design was the eleven-round “Defence Gun,” patented in 1718 by lawyer and inventor James Puckle. It used eleven preloaded cylinders; each pull of the trigger fired one cylinder.

As with First Amendment technology (such as televisions or websites), the Second Amendment is not limited to the technology that existed in 1791. The Heller Court properly described such an asserted limit as “bordering on the frivolous.” But even if Heller

---

21 See Lewis WInant, Firearms Curiosa 168–70 (2009); A 16-Shot Wheel Lock, America’s First Freedom (June 2014), http://www.nrapublications.org/index.php/17739/a-16-shot-wheel-lock/ (NRA member magazine).
22 Cramer & Olson, supra note 1, at 716.
23 Id. at 716 & n.94.
25 Heller, 544 U.S. at 582.
26 Id. (“Some have made the argument, bordering on the frivolous, that only those arms in
had created such a rule, magazines of more than ten rounds are older than the Second Amendment.

At the time that the Second Amendment was being ratified, the state of the art for multi-shot guns was the Girandoni air rifle, with a twenty-two-shot magazine capacity. At the time, air guns were ballistically equal to powder guns in terms of bullet size and velocity. The .46 and .49 caliber Girandoni rifles were invented around 1779 for use in European armies and were employed by elite units. One shot could penetrate a one-inch thick wood plank or take down an elk.

C. The Nineteenth Century Saw Broad Commercial Success for Magazines Holding More than Ten Rounds

Firearm technology progressed rapidly in the 1800s. Manufacturers were constantly attempting to produce reliable firearms with greater ammunition capacities for consumers. One notable step came in 1821 with the introduction of the Jennings multi-shot flintlock rifle, which, borrowing the superposed projectile design from centuries before, could fire twelve shots before reloading.

Around the same time, pistol technology also advanced to permit more than ten shots being fired without reloading. “Pepperbox”

existence in the 18th century are protected by the Second Amendment. We do not interpret constitutional rights that way. Just as the First Amendment protects modern forms of communications, and the Fourth Amendment applies to modern forms of search, the Second Amendment extends, prima facie, to all instruments that constitute bearable arms, even those that were not in existence at the time of the founding.” (citations omitted).

30 See Supica et al., supra note 27, at 31.
pistols began to be produced in America in the 1830s. These pistols had multiple barrels that would fire sequentially. While the most common configurations were five or six shots, some models had twelve independently-firing barrels, and there were even models with eighteen or twenty-four independently-firing barrels. Pepperboxes were commercially successful and it took a number of years for Samuel Colt’s revolvers (also invented in the 1830s) to surpass them in the marketplace.

The 1830s through the 1850s saw a number of different firearm designs intended to increase ammunition capacity. In 1838, the Bennett and Haviland Rifle was invented; it was a rifle version of the pepperbox, with twelve individual chambers that were manually rotated after each shot. This would bring a new chamber, preloaded with powder and shot, into the breach, ready to be fired. Alexander Hall and Colonel Parry W. Porter each created rifles with capacities greater than ten in the 1850s. Hall’s design had a fifteen-shot rotating cylinder (similar to a revolver), while Porter’s design used a thirty-eight-shot canister magazine.

The great breakthrough, however, began with a collaboration of Daniel Wesson (of Smith and Wesson) and Oliver Winchester. They produced the first metallic cartridge—containing the gunpowder, primer, and ammunition in a metallic case similar to modern ammunition. Furthermore, they invented a firearms mechanism that was well suited to the new metallic cartridge: the lever

---

34 Lewis Winant, Pepperbox Firearms 7 (1952).
36 Dot Run Lead Company’s Museum, Catalogue of Contents 66 (1912).
37 Dunlap, supra note 33, at 148–49, 167 (describing three European eighteen-shot models and one twenty-four-shot model); Supica et al., supra note 27, at 33 (describing the Marietta eighteen-shot model); Winant, supra note 21, at 249–50 (describing a twenty-four-shot pepperbox).
38 Winant, supra note 34, at 28.
40 See id.
41 Id. at 713, 716.
43 See Flayderman’s Guide, supra note 32, at 303 (“The self-contained cartridge was a special type, the hollowed out conical bullet containing the powder, and backed by the primer.”); Harold F. Williamson, Winchester: The Gun That Won the West 26–27 (1952).
action.\textsuperscript{44} Their company, the Volcanic Repeating Arms Company, introduced the lever action rifle in 1855.\textsuperscript{45} This rifle had up to a thirty-round tubular magazine under the barrel that was operated by manipulating a lever on the bottom of the stock.\textsuperscript{46} The lever-action allowed a shooter to quickly expel spent cartridges and ready the firearm for additional shots.\textsuperscript{47} An 1859 advertisement bragged that the guns could be loaded and fire thirty shots in less than a minute.\textsuperscript{48} In 1862, the Volcanic evolved into the sixteen-round Henry lever action rifle, lauded for its defensive utility.\textsuperscript{49}

The Henry rifle further evolved into the Winchester repeating rifle, and the market for these firearms greatly expanded with the first gun produced under the Winchester name.\textsuperscript{50} Winchester touted the Model 1866 for defense against “sudden attack either from robbers or Indians.”\textsuperscript{51} According to advertising, the M1866 “can . . . be fired thirty times a minute,”\textsuperscript{52} or with seventeen in the magazine and one in the chamber, “eighteen charges, which can be fired in nine seconds.”\textsuperscript{53} The gun was a particularly big seller in the American West.\textsuperscript{54} There were over 170,000 Model 1866s produced.\textsuperscript{55}

Next came the Winchester M1873, “[t]he gun that won the West.”\textsuperscript{56} The Winchester M1873 and then the M1892 were lever actions holding ten to eleven rounds in tubular magazines.\textsuperscript{57} There were over 720,000 copies of the Winchester 1873 made from 1873 to

\textsuperscript{45} FLAYDERMAN’S GUIDE, supra note 32, at 304.
\textsuperscript{46} Id. at 303; WILLIAMSON, supra note 43, at 13.
\textsuperscript{47} WILLIAMSON, supra note 43, at 25. Oliver Winchester had an ownership interest in Volcanic and acquired the company in 1857. FLAYDERMAN’S GUIDE, supra note 32, at 300.
\textsuperscript{48} WILLIAMSON, supra note 43, at 25.
\textsuperscript{50} See WILLIAMSON, supra note 43, at 49.
\textsuperscript{52} WILLIAMSON, supra note 43, at 49.
\textsuperscript{54} WILSON, supra note 51, at 34.
\textsuperscript{55} FLAYDERMAN’S GUIDE, supra note 32, at 306.
\textsuperscript{57} Id.
1919.\textsuperscript{58} Over a million of the M1892 were manufactured from 1892 to 1941.\textsuperscript{59} The Italian company Uberti, which specializes in high-quality reproductions of western firearms, produces reproductions of all of the above Winchesters today.\textsuperscript{60} Another iconic rifle of the latter nineteenth century was the pump action Colt Lightning rifle, with a fifteen-round capacity.\textsuperscript{61}

Manufactured in Maine, the Evans Repeating Rifle came on the market in 1873.\textsuperscript{62} The innovative rotary helical magazine in the buttstock held thirty-four rounds.\textsuperscript{63} It was commercially successful for a while, although not at Winchester’s or Colt’s levels. Over 12,000 copies were produced.\textsuperscript{64}

Meanwhile, the first handgun to use a detachable box magazine was the ten-round Jarre harmonica pistol, patented in 1862.\textsuperscript{65} In the 1890s, the box magazine would become common for handguns.\textsuperscript{66}

Pin-fire revolvers with capacities of up to twenty or twenty-one entered the market in the 1850s;\textsuperscript{67} they were produced for the next half-century, but were significantly more popular in Europe than in America.\textsuperscript{68} For revolvers with other firing mechanisms, there were some models with more than seventeen rounds.\textsuperscript{69} The twenty-round Josselyn belt-fed chain pistol was introduced in 1866, and various other chain pistols had even greater capacity.\textsuperscript{70} Chain pistols did not win much market share, perhaps in part because the large


\textsuperscript{59} Flayderman’s Guide, supra note 32, at 311. The Model 1892 was John Wayne’s gun in many movies. Supica et al., supra note 27, at 109.


\textsuperscript{61} The original Colt held up to fifteen rounds in calibers of .32–.20, .38–.40, and .44–.40. Flayderman’s Guide, supra note 32, at 122. Uberti currently produces a modern replica of the Colt Lightning, medium frame model, of which 89,000 were produced between 1884 and 1902. Id.

\textsuperscript{62} Id. at 694.

\textsuperscript{63} Dwight B. Demeritt, Jr., Maine Made Guns & Their Makers 293–95 (rev. ed. 1997); Flayderman’s Guide, supra note 32, at 694. A later iteration of the rifle held twenty-five or twenty-eight rounds in the buttstock. Demeritt, supra, at 301. The American Society of Arms Collectors endorses the Demeritt book as “the definitive work for historians and collectors” of Maine guns. Demeritt, supra, at vi.

\textsuperscript{64} Flayderman’s Guide, supra note 32, at 694.

\textsuperscript{65} Winant, supra note 21, at 244–45. The magazine stuck out horizontally from the side of the firing chamber, making the handgun difficult to carry in a holster, which perhaps explains why the gun never had mass success. Supica et al., supra note 27, at 33.

\textsuperscript{66} See infra notes 72–77 and accompanying text.

\textsuperscript{67} Supica et al., supra note 27, at 48–49; Winant, supra note 21, at 67–70.

\textsuperscript{68} Supica et al., supra note 27, at 49.

\textsuperscript{69} See, e.g., Winant, supra note 21, at 62–63, 207–08.

\textsuperscript{70} Id. at 204, 206.
The dangling chain was such an impediment to carrying the gun.\textsuperscript{71} The semiautomatic firearm and its detachable box magazine were invented before the turn of the century. It was the latest success in the centuries-old effort to improve the reliability and capacity of multi-shot guns.

In 1896, Germany’s Mauser introduced the C96 “broomhandle” pistol, which remained in production until the late 1930s, selling nearly a million to civilians worldwide.\textsuperscript{72} The most common configuration was in ten-round capacity, but there were a variety of models with capacities as low as six or as high as twenty.\textsuperscript{73} The latter was the Cone Hammer pistol, with twenty-round box magazine.\textsuperscript{74}

The Luger semiautomatic pistol was brought to the market in 1899 (although it is commonly known as the “1900”).\textsuperscript{75} Through many variants, it was very popular for both civilians and the military markets, and remained in production for nearly a century.\textsuperscript{76} The most common magazines were seven or eight rounds, but there was also a thirty-two-round drum magazine.\textsuperscript{77}

\textbf{D. Manufacturers in the Twentieth Century Continued the Trend of Increasing Ammunition Capacity and Reliability for Civilian Firearms.} The twentieth century saw improvements on the designs pioneered in the 1800s and expanding popularity for firearms with more than ten rounds.

\textsuperscript{71} See id. at 205.
\textsuperscript{72} JOHN W. BREATHED, JR. & JOSEPH J. SCHROEDER, JR., SYSTEM MAUSER, A PICTORIAL HISTORY OF THE MODEL 1896 SELF-LOADING PISTOL 272 (1967) (production of 1,150,000, of which “almost a million” were sold on the commercial, non-military market); see John Elliot, \textit{A Sweeping History of the Mauser C96 Broomhandle Pistol}, GUNS.COM (Jan. 26, 2012), http://www.guns.com/2012/01/26/a-sweeping-history-of-the-mauser-c96-broomhandle-pistol/.
\textsuperscript{73} 2014 \textsc{standard catalog of firearms}, supra note 60, at 708–09.
\textsuperscript{74} \textit{Id.}; BREATHED & SCHROEDER, supra note 72, at 23, 30–31, 38–39, 54–55. At least between 1896 and 1905, Mauser’s direct sales to the United States were small. \textit{Id.} at 266–67.
Spain’s Astra brought out its own versions of the Mauser, with several models having twenty-round magazines starting in 1928. \textit{Id.} at 208. But these do not appear to have had much distribution in the United States. \textit{Id.} at 286–67.
\textsuperscript{75} See 2014 \textsc{standard catalog of firearms}, supra note 60, at 650.
\textsuperscript{76} Among the many models was the 1906 American Eagle. \textit{Id.} at 653. George Luger’s invention was licensed to many companies, including Mauser (Germany) and Vickers (England). \textit{Id.} at 657–58. The gun was never manufactured under Luger’s own name. See \textit{id.} at 650–62.
\textsuperscript{77} JEAN-NOËL MOURET, \textsc{Pistols and Revolvers} 126–27 (1993); SUPICA ET AL., supra note 27, at 86.
Since the late 1890s, the Savage Arms Company has been one of the classic American firearms manufacturers. In 1911, the company introduced their bolt-action Model 1911, a twenty-shot repeater with a tubular magazine in .22 short caliber. The rifle was popular for boys and for shooting galleries.

By the 1930s, American manufacturers such as Remington, Marlin, and Winchester were producing many tubular magazine rifles in .22 caliber. These firearms are classic rifles for “plinking” (casual target shooting), especially popular for young people. Based on firearms catalogues from 1936 to 1971, there are over twenty such firearms models from major American manufacturers with magazines of sixteen to thirty rounds in one or more of the calibers.

In 1927, the Auto Ordnance Company introduced their
semiautomatic rifle that used thirty-round magazines. These rifles are still in production today.

The M-1 carbine was invented for the citizen soldier of World War II. Thereafter, the M-1 carbine became and has remained a popular rifle for civilians in America. The U.S. government’s Civilian Marksmanship Program, created by Congress, put nearly a quarter million of these guns into the hands of law-abiding American citizens starting in 1963, at steeply-discounted prices. Partly using surplus government parts, the Plainfield Machine Company, Iver Johnson, and more than a dozen other companies cumulatively manufactured over 200,000 for the civilian market, starting in the late 1950s. The standard magazines are fifteen and thirty rounds.

The most popular rifle in American history is the AR-15 platform, a semiautomatic rifle with standard magazines of twenty or thirty rounds. The AR-15 was brought to the market in 1963, with a

84 See T1-C, supra note 83.
85 See BRUCE N. CANFIELD, BRUCE CANFIELD’S COMPLETE GUIDE TO THE M1 GARAND AND THE M1 CARBINE 163 (1999).
86 See id. at 163, 279 (noting high desirability and demand for the firearm after the war ended); see also Joseph P. Tartaro, The Great Assault Weapon Hoax, 20 U. DAYTON L. REV. 619, 622 (1995) (“[T]he M1 carbine [is] beloved by millions of war veterans, collectors, and recreational shooters.”).
88 See CANFIELD, supra note 85, at 163, 279 (noting the large quantity of surplus carbine parts and that firms created commercial carbines using these parts in the 1950s and 1960s). The largest producers were Plainfield’s 112,000 from 1962 to 1978 and Iver Johnson’s 96,700 from 1978 to 1992. Post WWII Commercially Manufactured M1 Carbines (U.S.A.): Iver Johnson Arms, M1CARBINESINC.COM, http://www.m1carbinesinc.com/carbine_ij.html (last visited Feb. 21, 2015); Post WWII Commercially Manufactured M1 Carbines (U.S.A.): Plainfield Machine Co., Inc., M1CARBINESINC.COM, http://www.m1carbinesinc.com/carbine_plainfield.html (last visited Feb. 21, 2015). The U.S. Government sold 240,000 of its own surplus in 1963 into the Civilian Marksmanship Program. CANFIELD, supra note 85, at 163. Thereafter, the program (then known as “DCM”—Director of Civilian Marksmanship) sold M1s to Americans from the supply of World War II M1 carbines that had been exported to allied nations and subsequently returned to the United States when the allied nation switched to a newer type of rifle. See RUTH, supra note 87, at 575, 723. As of 2014, the Civilian Marksmanship Program’s supply of carbines for sale has been exhausted. M1 Carbine, CIV. MARKSMANSHIP PROGRAM, http://www.thecmp.org/Sales/carbine.htm (last visited Feb. 21, 2015).
89 RUTH, supra note 87, at 575.
then-standard magazine of twenty; the thirty-round standard magazine was developed a few years later.91 The 1994 Supreme Court case Staples v. United States92 described the AR-15 as “the civilian version of the military’s M–16 rifle,” and noted that many parts are interchangeable between the two guns.93 The crucial distinction, explained the Court, is that the AR-15 is like all other semiautomatic firearms in that it can fire “only one shot with each pull of the trigger.”94 The Court pointed out that semiautomatic firearms “traditionally have been widely accepted as lawful possessions.”95 So legally speaking, the semiautomatic AR-15 is the opposite of the M-16 machine gun: “[C]ertain categories of guns—no doubt including the machineguns, sawed-off shotguns, and artillery pieces that Congress has subjected to regulation—... have the same quasi-suspect character we attributed to owning hand grenades... But... guns falling outside those categories traditionally have been widely accepted as lawful possessions...”96

By 1969, the AR-15 faced competition from the Armalite-180 (twenty-round optional magazine), the J& R 68 carbine (thirty rounds), and the Eagle Apache carbine (thirty rounds).97

Springfield Armory brought out the M1A semiautomatic rifle in 1974, with a twenty-round detachable box magazine.98 The next year, the Ruger Mini-14 rifle was introduced, with manufacturer-supplied standard five, ten, or twenty-round detachable magazines.99 Both the M1A and the Mini-14 are very popular to this day.100

93 See 2014 STANDARD CATALOG OF FIREARMS, supra note 60, at 1102 (noting the twenty-round box magazine); M1A Series, SPRINGFIELD ARMORY, http://www.springfieldarmory.com/m1a-series/ (last visited Feb. 21, 2015).
94 See M1A Scout, What is an M1A Rifle, M1A Rifles (July 2, 2009), http://www.m1arifles.com/tag/m1a/; Shawn Skipper, 8 Things You Might Not Know About the Ruger Mini-14, DAILY CALLER (June 3, 2014), http://dailycaller.com/2014/06/03/8-things-you-might-not-know-
By 1979, all of the above guns were challenged in the American market by high-quality European imports such as the Belgian FN-FAL Competition rifle (optional twenty-round magazine), the German Heckler & Koch HK-91 and HK-93 rifles (twenty rounds), the Swiss SIG AMT rifle (twenty rounds), and the Finnish Valmet M-71S rifle (thirty rounds).101

Citizen firearms with detachable magazines holding more than ten rounds were not limited to rifles, however. In 1935, Browning introduced the Hi-Power pistol.102 This handgun was sold with a thirteen-round detachable magazine and is still in production.103

In Europe, more so than in America, Browning had to compete against the Spanish Gabilondo twenty-round Plus Ultra, introduced in 1925.104 Spain’s Arostegui, Eulogio brought out the Azul—a semiautomatic with standard magazines of ten, twenty and thirty—in 1935.105

Browning’s first notable American competition came with the 1964 introduction of the Plainfield Machine Company’s “Enforcer,” a pistol version of the M1 carbine with a thirty-round magazine.106

A tremendous commercial success was the Beretta model 92, a nine millimeter pistol with a sixteen-round magazine, which entered the market in 1976.107 In various configurations (currently the Beretta 92F) the Beretta is one of the most popular of all modern handguns.108 Browning introduced another popular handgun in 1977, the fourteen-round BDA (Browning Double Action).109 Also coming on the market at this time were European handguns such as Austria’s L.E.S. P-18 (eighteen rounds) and

---

101 GUN DIGEST 1980, at 319–21 (Ken Warner ed., 34th Anniversary Deluxe ed. 1979). Also on the market were the Commando Arms carbine (five, fifteen, thirty or ninety rounds), and the Wilkinson Terry carbine (thirty-one rounds). Id. at 319, 322.
102 2014 STANDARD CATALOG OF FIREARMS, supra note 60, at 182.
103 Id. at 432–33.
104 See id. at 465.
105 Id. at 72; BREATHEDE & SCHROEDER, supra note 74, at 216–17.
107 2014 STANDARD CATALOG OF FIREARMS, supra note 60, at 121.
108 Id. at 122. In 1985 the M9 version of this pistol became the standard U.S. military issue sidearm. Id. at 124.
109 Id. at 184.
Germany’s Heckler & Koch VP 70Z (also eighteen rounds).  

E. Magazines After 1979

We end this story in 1979, when Jimmy Carter was President,111 the Bee Gees bestrode the AM radio Top 40,112 Gaston Glock was manufacturing curtain rods in his garage,113 Americans were watching Love Boat on broadcast television,114 and people on the cutting edge of technology were adopting VisiCalc, the first spreadsheet program, run from huge floppy discs.115

Long before 1979, magazines of more than ten rounds had been well established in the mainstream of American gun ownership. Indeed, they had been so established before almost everyone alive in 1979 was born.

After 1979, technological improvements continued to foster the popularity of magazines holding more than ten rounds. First of all, there were improvements across the board in manufacturing, so that magazine springs became more reliable, particularly for magazines holding up to thirty rounds. This greatly reduced the risk of a misfeed. Reliability was also enhanced by improvements in shaping the magazines’ “lips”—the angled wings at the top of the magazine which guide the next round of ammunition into the firing chamber.116

Magazines of all sizes benefited from increasing use of plastic polymers in manufacturing.117

---


111 JULIAN E. ZELIZER, JIMMY CARTER 3 (2010).


made from plastic, rather than metal. Closer tolerances in manufacturing, lower costs, and increased durability have all improved magazine quality and reliability.

Likewise, the vast majority of magazines today have a removable baseplate (also known as a “foot plate”).\textsuperscript{118} Removal of the baseplate allows the magazine to be disassembled for cleaning (e.g., removal of gunpowder residue) or repair (e.g., replacing a worn-out spring).\textsuperscript{119} The existence of a removable baseplate also makes it possible for consumers to add after-market extenders to a magazine.\textsuperscript{120} These extenders may simply increase the grip length (to better fit a particular consumer’s hands), and they may also increase capacity by one, two, or three rounds.\textsuperscript{121} Thus, a consumer with a ten-round factory magazine can add a two-rounder extender to create a twelve-round magazine.

Most importantly, the double-stack magazine was perfected. In some box magazines, the ammunition is contained in a single column.\textsuperscript{122} In the double-stack magazine, there are two columns of ammunition, side-by-side and touching.\textsuperscript{123} When the gun is used, the magazine will first reload a round from column A, then a round from column B, then from column A, and so on.\textsuperscript{124}

The practical effect is this: for a handgun, a single stack magazine of seventeen rounds would stick out far below the bottom of the grip, making the gun unwieldy for carrying andholstering. With a double-stack configuration, a seventeen-round magazine can fit inside a standard full-sized handgun grip. The practical limitation of grip size (the size of the human hand) means that relatively larger capacity magazines are possible for relatively smaller cartridges. Thus, a double-stack magazine for the midsize nine millimeter round might hold up to twenty or twenty-one rounds, whereas a double-stack for the thicker .45 ACP cartridge would hold


\textsuperscript{120} Michael Shain, Expert Report and Opinion at 5–7, Cooke, No. 13-cv-01300-MSK-M JW.

\textsuperscript{121} See, e.g., Magazine Adapters, TOP GUN SUPPLY, http://www.topgunsupply.com/gun-accessories-for-sale/magazine-adapters.html (last visited Feb. 19, 2014) (selling magazine adapters that increase capacity and/or increase grip length).


\textsuperscript{123} Id.

\textsuperscript{124} Id.
III. THE HISTORY OF AMMUNITION CAPACITY BANS

An important factor in the consideration of the constitutionality of firearms laws is whether they are traditional and longstanding. For example, the *Heller* Court pointed out that “[f]ew laws in the history of our Nation have come close to the severe restriction of the District’s handgun ban.” 125 The handgun ban was contrasted with “longstanding” guns controls, such as those prohibiting gun possession by felons or the mentally ill.126 Following *Heller*, the Tenth Circuit has explained that Second Amendment cases must consider “the rarity of state enactments in determining whether they are constitutionally permissible.”127

At the time the Second Amendment was adopted, there were no laws restricting ammunition capacity. This was not because all guns were single-shot. As detailed above, multi-shot guns predate the Second Amendment by about two hundred years, and Lewis and Clark carried a powerful twenty-two-round gun on their famous expedition.128

The first laws that restricted magazine capacity were enacted during the prohibition era, nearly a century and a half after the Second Amendment was adopted, and over half a century after the adoption of the Fourteenth Amendment. In 1927, Michigan prohibited “any machine gun or firearm which can be fired more than sixteen times without reloading.”129 Also in 1927, Rhode Island banned “any weapon which shoots more than twelve shots semi-automatically without re-loading.”130

The Michigan ban was repealed in 1959.131 That same year, the

126 Id. at 626, 629.
127 Kerr v. Hickenlooper, 744 F.3d 1156, 1178 (10th Cir. 2014).
128 See supra notes 21–31 and accompanying text.
129 Act of June 2, 1927, No. 373, § 3, 1927 Mich. Public Acts 887, 888 (repealed 1959) (“It shall be unlawful within this state to manufacture, sell, offer for sale, or possess any machine gun or firearm which can be fired more than sixteen times without reloading . . . .”). In 1931, the provision was consolidated into section 224 of the Michigan Code.
131 Under the 1959 revision: “Any person who shall manufacture, sell, offer for sale or possess any machine gun or firearm which shoots or is designed to shoot automatically more than 1 shot without manual reloading, by a single function of the trigger . . . shall be guilty of a felony . . . .” Act of July 16, 1959, No. 175, sec. 1, § 224, 1959 Mich. Pub. Acts 249, 250. Michigan’s current statute on machine guns contains very similar language. See Mich. Comp. Laws Serv. § 750.224 (LexisNexis 2014) (“A person shall not manufacture, sell, offer
Rhode Island law was changed to fourteen shots, and .22 caliber rimfire guns were excluded. The Rhode Island ammunition capacity law was fully repealed in 1975.

The two statutes applied only to firearms, with Rhode Island only for semiautomatics. Neither statute covered a magazine that was not inserted in a firearm.

In 1933, Ohio began requiring a special permit for the possession or sale of a semiautomatic firearm with an ammunition capacity of greater than eighteen rounds. In 1971, during a recodification of the state criminal code, an exemption for .22 caliber was added, and for other calibers the limit was raised to thirty-two or more rounds.

Significantly, the Ohio statute was interpreted to not ban the sale of any magazine or any gun, but to forbid the simultaneous purchase of a magazine and a compatible gun. (Of course purchase was allowed if one has the special permit.) With or without the permit, one could buy a sixty-round magazine in Ohio. The licensing law was fully repealed in 2014.

---


133 This was accomplished by changing the Firearms Act’s definition of “Machine gun” to mirror the federal definition:

[A]ny weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, any combination of parts designed and intended for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.


The only longstanding statute banning magazines is found in the District of Columbia. In 1932, Congress passed a District of Columbia law prohibiting the possession of a firearm that “shoots automatically or semiautomatically more than twelve shots without reloading.” In contrast, when Congress enacted the National Firearms Act of 1934 to impose stringent regulations on machine guns, it chose to impose no restrictions on magazines. When the District of Columbia achieved home rule in 1975, the district council did not choose to repeal the law but instead promptly enacted the bans on handguns and on self-defense with any gun in the home, which were later ruled unconstitutional by the Supreme Court in *Heller*. The District of Columbia interpreted the magazine law so that it outlawed all detachable magazines and all semiautomatic handguns. The District stands alone in its historical restriction of magazines.

The only widespread restriction on magazine capacity came in 1994 when Congress enacted a ban on new magazines holding more than ten rounds. The law was in effect until 2004, at which point Congress allowed it to sunset. The effects of this law were studied extensively in a series of U.S. Department of Justice reports authored by Doctor Christopher Koper and two others. The final report, issued in 2004, concluded: “there has been no discernible reduction in the lethality and injuriousness of gun violence, based on indicators like the percentage of gun crimes resulting in death or the share of gunfire incidents resulting in injury . . . .” Further,

---

144 See supra notes 13–14, 19–20 and accompanying text.
145 See VIVIAN S. CHU, DC GUN LAWS AND PROPOSED AMENDMENTS 5–6 (2011) (“Prior to *Heller*, the DC Code’s definition of ‘machine gun’ included ‘any firearm, which shoots, is designed to shoot or can be readily converted to shoot . . . semiautomatically, more than 12 shots without manual reloading.’ By virtue of this broad definition, any semiautomatic weapon that could shoot more than 12 shots without manual reloading, whether pistol, rifle, or shotgun, was deemed a ‘machine gun,’ and prohibited from being registered. It appears that under the District’s old definition, registration of a pistol was largely limited to revolvers.” (quoting D.C. Code § 7-2501.01(10) (LexisNexis 2008))).
“the ban has not yet reduced the use of [such magazines] in crime . . . ”

Doctor Koper noted also that state-level firearm bans have not had an impact on crime.

In the modern era, only a few states have enacted magazine restrictions, starting with New Jersey’s 1990 ban on magazines over fifteen rounds. That ban applies only to detachable box magazines for semiautomatic firearms. A couple years later, Hawaii banned handgun magazines over twenty rounds, and later reduced that to ten. Maryland in 1994 banned the sale or manufacture of magazines over twenty rounds; the ban did not affect possession, loans, acquisition, or importation. The Maryland limit was reduced to ten in 2013.

In 1999 California banned the sale of magazines over ten rounds but allowed grandfathered possession, and New York did the same in 2000. (Currently, large capacity magazine bans in Colorado, Connecticut, and Massachusetts also have grandfather provisions, while New Jersey, the District of Columbia, and Hawaii do not.)

In 2013 New York removed grandfathering and reduced the limit to seven. The seven-round limit was suspended shortly thereafter, since there are no seven-round magazines available for many guns. Instead, the legislature forbade owners of ten-round magazines to load more than seven rounds. This restriction was

149 Id. at 2.
150 Id. at 81 n.95.
152 § 2C:39-1(y). There is an exemption for certain competitive target shooters. Id. § 2C:39-3(j).
declared to violate the Second Amendment in a federal district court decision.161 New York City outlaws rifle or shotgun magazines holding more than five rounds.162

Also in 2013, Colorado enacted a ban on magazines over fifteen rounds,163 and Connecticut did the same for magazines over ten.164 Both statutes allowed current owners to retain possession.165

Finally, one state has followed Ohio’s former approach of magazine licensing, rather than prohibition. In 1994, Massachusetts began requiring that possession and additional acquisitions of magazines over ten rounds be allowed only for citizens who have a “Class A” firearms license—which most Massachusetts gun owners have.166

IV. WHAT DOES THE HISTORY MEAN?

Given the history above, what does modern legal doctrine say about the permissibility of outlawing magazines, as in the so-called SAFE Act’s ban on possession of magazines of more than ten rounds and loading more than seven rounds in a magazine, or New York City’s ban on long gun magazines of more than five rounds? What about bans in other states of more than ten rounds (Maryland, Connecticut, the District of Columbia, California, and Hawaii for handguns only) or more than fifteen rounds (New Jersey and Colorado)?

This Part analyzes these questions in light of Second Amendment

---

165 COLO. REV. STAT. § 18-12-302(2) (permitting a person to maintain possession of a banned magazine if he/she owned it prior to the effective date of the law and maintained “continuous possession” thereafter); CONN GEN. STAT. §§ 53-202w(e)(4), 53-202x(a)(1) (permitting a person to maintain possession of a banned magazine if he/she possessed it prior to the effective date of the law and declared it to the government).
precedents from the *Heller* Court and from subsequent cases that have relied at least in part on history and tradition in judging Second Amendment cases.

**A. The Crucial Years: 1789–1791 and 1866–1868**

For original meaning of the Second Amendment, the most important times are when the Second Amendment was created and when the Fourteenth Amendment was created, since a core purpose of the latter amendment was to make the individual’s Second Amendment right enforceable against state and local government.\(^{167}\) Congress sent the Second Amendment to the states for ratification in 1789, and ratification was completed in 1791.\(^{168}\) The Fourteenth Amendment was passed by Congress in 1866, and ratification by the states was completed in 1868.\(^{169}\)

1. **Magazines in 1789–1791 and 1866–1868**

As of 1789 to 1791, multi-shot magazines had existed for two centuries, and a variety of models had come and gone.\(^{170}\) The state-of-the-art gun between 1789 and 1791 was the twenty- or twenty-two-shot Girandoni air rifle, powerful enough to take down an elk with a single shot.\(^{171}\)

By the time that the Fourteenth Amendment was introduced in Congress, firearms with magazines of over ten or fifteen rounds had been around for decades.\(^{172}\) The best of these was the sixteen-shot Henry Rifle, introduced in 1861 with a fifteen-round magazine.\(^{173}\) The Henry Rifle was commercially successful, but Winchester Model 1866, with its seventeen-round magazine, was massively successful.\(^{174}\) So by the time ratification of the Fourteenth Amendment was completed in 1868, it was solidly established that firearms with seventeen-round magazines were in common use.

\(^{167}\) *See, e.g.*, Ezell v. City of Chi., 651 F.3d 684, 702–03 (7th Cir. 2011).

\(^{168}\) [JOHNSON, KOPEL, MOCSARY & O’SHEA, supra note 90, at 218.]

\(^{169}\) *Id.* at 299.

\(^{170}\) *See supra* Part II.B.

\(^{171}\) *See supra* notes 27–31 and accompanying text.

\(^{172}\) *See supra* notes 32–35 and accompanying text.

\(^{173}\) RICHARD C. RATTENBURY, A LEGACY IN ARMS: AMERICAN FIREARM MANUFACTURE, DESIGN, AND ARTISTRY, 1800–1900, at 135 (2014); *see supra* note 49 and accompanying text.


From the colonial period to the dawn of American independence on July 4, 1776, and through the ratification of the Fourteenth Amendment, there were no prohibitions on magazines. Indeed, the first magazine prohibition did not appear until the alcohol prohibition era in 1927. Thus, the historical evidence of the key periods for original meaning strongly suggests that magazine bans are unconstitutional.

B. “Typically Possessed by Law-Abiding Citizens for Lawful Purposes” or “Dangerous and Unusual”?

The Supreme Court’s _Heller_ decision distinguished two broad types of arms. Some arms, such as handguns, are “typically possessed by law-abiding citizens for lawful purposes.” These arms are also described by the Court as being “in common use.” In contrast, some other arms are “dangerous and unusual.” Examples provided by the Court were short-barreled shotguns or machine guns. The common, typical, arms possessed by law-abiding citizens are protected by the Second Amendment; the “dangerous and unusual” arms are not protected. By definition, “unusual” arms are not “in common use” or “typically possessed by law-abiding citizens for lawful purposes.”

The _Heller_ Court did not expressly mandate that historical analysis be used when deciding whether an arm is typical or common or “dangerous and unusual.” The _Heller_ Court approvingly quoted the 1939 Supreme Court decision _United States v. Miller_, which had described the original meaning of the Second Amendment as protecting individually-owned firearms that were “in common use at the time.” The _Miller_ Court’s 1939 decision did not extend Second Amendment protection to sawed-off

---

175 See _supra_ notes 129–30 and accompanying text; see also Act of June 2, 1927, No. 372, § 3, 1927 Mich. Public Acts 887, 888–89 (repealed 1959) (regulating the possession of and carrying of certain firearms that were capable of firing sixteen shots without reloading).
176 See _id._ at 625, 629 (majority opinion).
177 _Id._ at 627 (quoting _United States v. Miller_, 307 U.S. 174, 179 (1939)).
178 _Heller_, 554 U.S. at 627.
179 See _id._ at 625, 627.
180 See _id._ at 627.
181 See _id._
182 _Id._ (quoting _Miller_, 307 U.S. at 179).
183 _Heller_, 554 U.S. at 627 (quoting _Miller_, 307 U.S. at 179) (internal quotation marks omitted).
shotguns;\textsuperscript{184} as \textit{Heller} explained \textit{Miller}, the \textit{Miller} principle was that sawed-off shotguns are dangerous and unusual.\textsuperscript{185}

To be precise, \textit{Miller} did not formally rule that short shotguns are \textit{not} Second Amendment arms; the Court simply reversed and remanded the district court’s decision granting criminal defendant Miller’s motion to quash his indictment.\textsuperscript{186} The Supreme Court said that the suitability of sawed-off shotguns as Second Amendment arms was not a fact that was subject to “judicial notice.”\textsuperscript{187} Presumably the federal district court in Arkansas could have taken up the remanded case and then received evidence regarding what sawed-off shotguns are used for and how common they are. But Miller and his co-defendant Frank Layton had disappeared long before the case was decided by the Supreme Court.\textsuperscript{188}

Regardless, subsequent courts, including the court in \textit{Heller}, read \textit{Miller} as affirmatively stating that sawed-off shotguns are not protected by the Second Amendment.\textsuperscript{189}

Even though \textit{Heller}’s “common” or “typical” versus “dangerous and unusual” dichotomy seems primarily concerned with contemporary uses of a given type of arm, history can still be useful. As detailed in Part II, magazines of more than ten rounds have been very commonly possessed in the United States since 1862.\textsuperscript{190} Common sense tells us that the small percentage of the population who are violent gun criminals is not remotely large enough to explain the massive market for magazines of more than ten rounds that has existed since the mid-nineteenth century. We have more than a century and a half of history showing such magazines to be owned by many millions of law-abiding Americans.\textsuperscript{191}

Thus, a court which today ruled that such magazines are “dangerous and unusual” would seem to have some burden of explaining how such magazines, after a century and a half of being

\textsuperscript{184} \textit{Miller}, 307 U.S. at 178.
\textsuperscript{185} \textit{Heller}, 554 U.S. at 625.
\textsuperscript{186} \textit{Miller}, 307 U.S. at 177, 183.
\textsuperscript{187} \textit{Id.} at 178. “Judicial notice” is when courts rely on facts that are not in the record of the case, but which are indisputably true. \textsc{Fed. R. Evid.} 201. For example, they may be a subject of common knowledge (e.g., that in Arkansas, the sun is never visible in the sky at midnight) or can be ascertained from indisputable sources (e.g., that a particular section of the Code of Federal Regulations contains certain language). \textit{See id.}
\textsuperscript{189} \textit{Heller}, 554 U.S. at 621–22.
\textsuperscript{190} \textit{See supra} Part II.
\textsuperscript{191} \textit{See supra} Part II.
“in common use” and “typically possessed by law-abiding citizens for lawful purposes,” became “dangerous and unusual” in the twenty-first century.

This is not possible. Today, magazines of more than ten rounds are more common than ever before. They comprise about forty-seven percent of magazines currently possessed by Americans today. The AR-15 rifle (introduced in 1963) is the most popular rifle in American history, with sales of several million; its standard magazines are twenty or thirty rounds.

C. “Longstanding” Controls Versus “Few Laws in the History of Our Nation”

Just as Heller distinguishes types of arms (common or typical versus dangerous and unusual), Heller distinguishes types of arms-control laws. One type of arms controls are “longstanding,” and these are “presumptively lawful.” Examples listed by Heller are bans on gun possession “by felons and the mentally ill,” bans on carrying guns “in sensitive places such as schools and government buildings,” and “conditions and qualifications on the commercial sale of arms.”

The Heller Court highlighted the unusual nature of the District of Columbia anti-gun laws:

Few laws in the history of our Nation have come close to the severe restriction of the District’s handgun ban. And some of those few have been struck down. In Nunn v. State, the Georgia Supreme Court struck down a prohibition on carrying pistols openly (even though it upheld a prohibition on carrying concealed weapons). In Andrews v. State, the Tennessee Supreme Court likewise held that a statute that forbade openly carrying a pistol “publicly or privately, without regard to time or place, or circumstances,” violated

---

192 See Fyock v. City of Sunnyvale, No. C-13-5807-RMW, 2014 U.S. Dist. LEXIS 29722, at *13 (N.D. Cal. Mar. 5, 2014) (agreeing with and incorporating affidavit from plaintiffs’ expert that “whatever the actual number of such magazines in United States consumers’ hands is, it is in the tens-of-millions, even under the most conservative estimates.”).
193 Id. (“Plaintiffs cite statistics showing that magazines having a capacity to accept more than ten rounds make up approximately 47 percent of all magazines owned.”).
195 SWEENEY, supra note 194, at 99.
197 Id. at 626–27.
the state constitutional provision (which the court equated with the Second Amendment). That was so even though the statute did not restrict the carrying of long guns.\footnote{Id. at 629 (citations omitted) (citing Nunn v. State, 1 Ga. 243, 251 (1846); Andrews v. State, 50 Tenn. 165, 187 (1871)); see also Heller, 554 U.S. at 629 (“A statute which, under the pretence of regulating, amounts to a destruction of the right, or which requires arms to be so borne as to render them wholly useless for the purpose of defence, would be clearly unconstitutional . . . .” (quoting State v. Reid, 1 Ala. 612, 616–17 (1840)) (internal quotation marks omitted)).}

What was the history that led the Court to declare the handgun prohibition to be “unusual”—that is, to be the opposite of a traditional gun control that was presumptively constitutional? The District of Columbia handgun ban was enacted in 1975 and took effect in 1976.\footnote{Edward D. Jones, III, The District of Columbia’s “Firearms Control Regulations Act of 1975”: The Toughest Handgun Control Law in the United States—Or Is It?, 455 ANNALS AM. ACADEM. POL. & SOC. SCI. 138, 139 (1981).} Chicago enacted a similar ban in 1982, and a half-dozen Chicago suburbs followed suit during the 1980s.\footnote{See McDonald v. City of Chi., 561 U.S. 742, 749 (2010); Steve Chapman, Chicago’s Pointless Handgun Ban: City Gun Ordinances Proved to Be a Failure, CHI. TRIB., Mar. 4, 2010, at C21.} In 1837, the Georgia legislature had enacted a handgun ban, but that was ruled unconstitutional on Second Amendment grounds by the unanimous Georgia Supreme Court in 1846.\footnote{Nunn, 1 Ga. at 246, 251. The Heller Court cited this case with approval. Heller, 554 U.S. at 612.} In 1982 and 2005, San Francisco enacted handgun bans, but they were both ruled unlawful because of their plain violation of the California state preemption statute, which forbids localities to outlaw firearms which are permitted under state law.\footnote{Fiscal v. City & Cnty. of S.F., 70 Cal. Rptr. 3d 324, 326, 341–42 (Ct. App. 2008); Doe v. City & Cnty. of S.F., 186 Cal Rptr. 380, 381 (Ct. App. 1982).}

These are the facts under which the Supreme Court declared handgun bans to be suspiciously rare in America’s history—at the other end of the spectrum from the presumptively constitutional “longstanding” controls.

The 1975 District of Columbia handgun ban was thirty-three years old when the Supreme Court decided \textit{Heller} in 2008. This suggests that thirty-three years is not sufficient for a gun control to be considered “longstanding.”

As detailed in Part III, the first of today’s magazine bans was enacted by New Jersey in 1990, at fifteen rounds.\footnote{See supra note 151–52 and accompanying text.} The first state-level ten-round ban did not take effect until California passed such
a law in 2000. These statutes, and other post-1990 magazine bans, would not qualify as “longstanding.”

Previously, three states and the District of Columbia had enacted some magazine restrictions during the alcohol prohibition era. The District of Columbia ban, with modifications, is still in effect. The Michigan and Rhode Island bans were repealed long ago. The Ohio special licensing statute allowed the free purchase of any magazine, but required a permit to insert a magazine of thirty-two rounds or more into a firearm; the permit requirement was repealed in 2014. It is indisputable in the modern United States that magazines of up to thirty rounds for rifles and up to twenty rounds for handguns are standard equipment for many popular firearms.

Several post-\textit{Heller} lower courts have conducted in-depth examinations of the history of particular gun control laws. The next Part examines each of those cases and then applies their methodology to the historical facts of bans on magazines of more than five, seven, ten, and fifteen rounds.

\textit{D. Lower-Court Decisions Applying History}

1. Ezell v. City of Chicago

After \textit{McDonald v. City of Chicago} made it clear that the Second Amendment applies to municipal governments, the Chicago City Council relegalized handgun possession and outlawed all target ranges within city limits. Assessing the constitutionality of the ban, the Seventh Circuit used a two-step test, similar to analysis that is sometimes used in First Amendment cases: (1) Is the activity or item within the scope of the Second Amendment, as historically understood? If the answer is “no,” then the restrictive law does not violate the Second Amendment. (2) If the answer to the first question is “yes,” then the court will apply some form of the heightened scrutiny. The intensity of the scrutiny will depend on how close the restriction comes to affecting the core right of armed self-defense.

\begin{itemize}
\item \textsuperscript{204} See \textit{supra} note 156 and accompanying text.
\item \textsuperscript{205} See \textit{supra} notes 129–30, 134, 140 and accompanying text.
\item \textsuperscript{206} See \textit{supra} notes 140–45 and accompanying text.
\item \textsuperscript{207} See \textit{supra} notes 131, 133 and accompanying text.
\item \textsuperscript{208} See \textit{supra} notes 135–39 and accompanying text.
\item \textsuperscript{209} Ezell v. City of Chi., 651 F.3d 684, 690–91 (7th Cir. 2011).
\item \textsuperscript{210} \textit{Id.} at 702–03.
\item \textsuperscript{211} \textit{Id.} at 703.
\end{itemize}
So the *Ezell* court began the step-one analysis by considering whether target practice was historically considered part of the Second Amendment right.\(^{212}\) Chicago had argued to the contrary, listing some eighteenth- and nineteenth-century state statutes and municipal ordinances restricting firearms discharge within city limits.\(^{213}\) The Seventh Circuit found almost all of the listed ordinances to be irrelevant.\(^{214}\) Many of them did not ban firearms discharge but simply required a permit.\(^{215}\) Others were plainly concerned with fire prevention, an issue that would not be a problem at a properly-designed modern range.\(^{216}\) Thus:

Only two—a Baltimore statute from 1826 and an Ohio statute from 1831—flatly prohibited the discharge of firearms based on concerns unrelated to fire suppression, in contrast to the other regulatory laws we have mentioned. This falls far short of establishing that target practice is wholly outside the Second Amendment as it was understood when incorporated as a limitation on the States.\(^{217}\)

So according to the Seventh Circuit, the historical example of repressive laws in one state and one city are insufficient to support the inference that the repressed activity is outside the scope of the Second Amendment.\(^{218}\) The historical basis of restrictions that would affect magazines over fifteen rounds is nearly as thin: two states with statutes enacted in 1927, and later repealed, plus the District of Columbia's 1932 law.\(^{219}\) As for imposing a ban for guns with magazines of more than ten rounds (or seven or five), there is no historical basis.

Thus, under the *Ezell* analysis, bans on magazines infringe the Second Amendment right as it was historically understood, and such bans must be analyzed under heightened scrutiny.

2. *United States v. Rene E.*

In 2009, the First Circuit heard a Second Amendment challenge

\(^{212}\) *Id.* at 704.

\(^{213}\) *Id.* at 705–06.

\(^{214}\) *Id.*

\(^{215}\) *Id.* at 705.

\(^{216}\) *Id.* at 706.

\(^{217}\) *Id.* (quoting District of Columbia v. Heller, 554 U.S. 570, 632 (2008)); see also Heller, 554 U.S. at 632 ("[W]e would not stake our interpretation of the Second Amendment upon a single law . . . that contradicts the overwhelming weight of other evidence . . . ").

\(^{218}\) See *Ezell*, 652 F.3d at 706.

\(^{219}\) See *supra* notes 131, 133, 140 and accompanying text.
to a federal statute that restricted, but did not ban, handgun possession by juveniles.\(^\text{220}\) The federal statute was enacted in 1994,\(^\text{221}\) and so of course was not “longstanding.”\(^\text{222}\) The First Circuit looked at the history of state laws restricting juvenile handgun possession, to see if they were longstanding.\(^\text{223}\)

The First Circuit found state or local restrictions on handgun transfers to juveniles and judicial decisions upholding such restrictions from Georgia (1911 case), Tennessee (1878 case),\(^\text{224}\) Pennsylvania (1881 case),\(^\text{225}\) Indiana (1884 case),\(^\text{226}\) Kentucky (1888 case),\(^\text{227}\) Alabama (1858 case),\(^\text{228}\) Illinois (1917 case upholding a Chicago ordinance),\(^\text{229}\) Kansas (1883 case allowing tort liability for transfer), and Minnesota (1918 case allowing tort liability for transfer).\(^\text{230}\)

Thus, the First Circuit was able to point to six state statutes, all of them enacted well over a century previously.\(^\text{231}\) They were buttressed by one municipal ordinance and two cases allowing tort liability, both of these being nearly a century old.\(^\text{232}\)

The history of magazine restrictions is considerably weaker than that of the juvenile handgun statutes analyzed in *Rene E.* There were six statutes on juveniles, all of which were enacted before 1890, and one of which predated the Civil War.\(^\text{233}\) This is much more than the pair of state statutes on magazines dating from the late 1920s.

The *Rene E.* case does not attempt to quantify how many state statutes are necessary for a gun control to be longstanding; however, we can say that magazine restrictions fall well short of the historical foundation that the First Circuit relied on to uphold juvenile handgun restrictions.

While *Rene E.* and *Ezell* both used history, the particular way that they used it was different. For *Rene E.*, history was mixed in

\(^{220}\) 18 U.S.C. § 922(x)(2)–(3) (2013); United States v. Rene E., 583 F.3d 8, 16 (1st Cir. 2009).
\(^{221}\) *Rene E.*, 583 F.3d at 12.
\(^{222}\) *Id.*
\(^{223}\) *Id.* at 14–15.
\(^{224}\) State v. Callicutt, 69 Tenn. 714, 716–17 (1878).
\(^{226}\) State v. Allen, 94 Ind. 441, 441 (1884).
\(^{227}\) Bankers v. Commonwealth, 9 S.W. 702, 703 (Ky. 1888).
\(^{228}\) Coleman v. State, 32 Ala. 581, 582–83 (1858).
\(^{229}\) Biffer v. Chicago, 116 N.E. 182, 184 (Ill. 1917).
\(^{230}\) Schmidt v. Capital Candy Co., 166 N.W. 502, 503–04 (Minn. 1918).
\(^{231}\) United States v. Rene E., 583 F.3d 8, 14–15 (1st Cir. 2009).
\(^{232}\) *Id.*
\(^{233}\) *Id.*
with substantive analysis of the modern federal statute, which the First Circuit praised for its “narrow scope” and “important exceptions.”

For *Ezell*, history was just the first step. *Ezell* used history to determine that the range ban was not presumptively lawful; once that question was answered, *Ezell* proceeded to analyze the ban under heightened scrutiny.

3. **Heller II**

a. **Majority Opinion**

In the 2008 case *District of Columbia v. Heller*, the Supreme Court ruled that two District of Columbia ordinances violated the Second Amendment: the handgun ban and the ban on the requirement that any firearm in the home be kept locked or disassembled and thus unusable for self-defense. Further, the District of Columbia required a permit to carry a gun anywhere (even from room to room in one’s home) and permits were never granted; the Court ordered that plaintiff Dick Heller be granted a permit.

The Council of the District of Columbia responded by repealing all three of the unconstitutional ordinances and enacting the most severe gun control system in the United States. Dick Heller and several other plaintiffs challenged the new ordinances in the case known as *Heller II*.

Using the two-step test, the District of Columbia Circuit majority first examined whether any of the challenged provisions were “longstanding.” If so, then the provision would be held as not violating the Second Amendment right, with no further analysis needed.

Regarding handgun registration, the majority identified statutes from New York (1911), Illinois (1881), Georgia (1910), Oregon

---

234 Id. at 11–16 (“[T]his law, with its narrow scope and its exceptions, does not offend the Second Amendment.”). Exceptions include farm and ranch work as well as target shooting or other activities under parental supervision. 18 U.S.C. § 922(x)(3)(A)(i)–(ii) (2013).
235 *Ezell v. City of Chi.*, 651 F.3d 684, 706 (7th Cir. 2011).
237 Id. at 574–75.
238 Id. at 635.
240 Id. at 1247.
241 Id. at 1252–53.
242 See id. at 1252.
In addition, some jurisdictions required handgun buyers to provide information about themselves to retailers, but did not require that the retailer deliver the information to the government: California (1917), Territory of Hawaii (1927), and the District of Columbia (1932). \[244\] So “[i]n sum, the basic requirement to register a handgun is longstanding in American law, accepted for a century in diverse states and cities and now applicable to more than one fourth of the nation by population.” \[245\]

The requirement that the government be provided with some basic information about persons acquiring handguns, in a manner that was “self-evidently de minimis” was therefore constitutional. \[246\] Seven states, with laws originating between 1881 and 1927, were apparently sufficiently numerous and “diverse” to qualify as “longstanding.”

However, although de minimis registration of handguns was longstanding, many of the new District of Columbia requirements went beyond traditional de minimis systems. \[247\] Further, “[t]hese early registration requirements, however, applied with only a few exceptions solely to handguns—that is, pistols and revolvers—and not to long guns. Consequently, we hold the basic registration requirements are constitutional only as applied to handguns. With respect to long guns they are novel, not historic.” \[248\] So the case was remanded to the district court for further fact-finding, since the District of Columbia government had provided the court with almost no information about whether the novel requirements passed heightened scrutiny by being narrowly tailored. \[249\]

The case had come to the District of Columbia Circuit following cross motions for summary judgment. \[250\] While the circuit court decided that the novel registration requirements needed a more complete factual record, the panel also decided that the record contained enough information for a ruling on the merits of the District’s ban on various semiautomatic rifles, which the district council labeled “assault weapons,” and on the District’s ban on

\[243\] Id. at 1253–54.
\[244\] See id. at 1254.
\[245\] Id. The court listed seven states that today have handgun registration laws. Id. at n.*.
\[246\] Id. at 1254–55.
\[247\] Id. at 1255.
\[248\] Id.
\[249\] See id. at 1247.
\[250\] See id.

magazines holding more than ten rounds.251

The District of Columbia Circuit majority stated “[w]e are not aware of evidence that prohibitions on either semi-automatic rifles or large-capacity magazines are longstanding and thereby deserving of a presumption of validity.”252 In a footnote, the majority cited the 1927 Michigan magazine statute and the 1932 District of Columbia ordinance detailed in Part III of this article.253 There is no reason to think that the majority’s determination on this point would change if the 1927 Rhode Island statute had also been cited.

Importantly, the majority did not suggest that the magazine bans enacted in 1990 or thereafter had any relevance to whether magazine bans are “longstanding.”

Accordingly, the majority proceeded to analyze the rifle and magazine bans. The majority provided two paragraphs of explanation of why the rifle ban passed intermediate scrutiny and one paragraph on why the magazine ban did so.254

Discussion of whether intermediate scrutiny was the correct standard, or whether magazine bans pass intermediate scrutiny, is beyond the scope of this article. However, it does seem to appear that the District of Columbia Circuit would have acted more prudently by remanding the case for fact-finding in the district court. To support the ban, the panel majority could only point to legislative testimony by a gun-prohibition lobbyist and by the District of Columbia police chief, plus a Department of Justice report on the 1994 to 2004 federal ban on such magazines.255 Notably, the panel majority did not address the report’s finding that a ten-year nationwide ban had led to no discernible reduction in homicides, injuries, or the number of shots fired in crimes.256

b. Dissent

A forceful dissent by Judge Brett Kavanaugh critiqued the majority’s application of intermediate scrutiny.257 He argued that

251 Id. at 1246, 1260, 1264.
252 Id. at 1260.
253 Id. at 1260 n.5.
254 Id. at 1262–64.
255 Id. at 1263–64.
256 KOPEL ET AL., supra note 148, at 92.
257 Heller II, 670 F.3d at 1285 (Kavanaugh, J., dissenting) (“A ban on a class of arms is not an ‘incidental’ regulation. It is equivalent to a ban on a category of speech. Such restrictions on core enumerated constitutional protections are not subjected to mere intermediate scrutiny review. The majority opinion here is in uncharted territory in suggesting that intermediate scrutiny can apply to an outright ban on possession of a class of weapons that have not
the majority’s approach was necessarily incorrect, because its logic on banning semiautomatic rifles would allow a ban on all semiautomatic handguns—which constitute the vast majority of handguns produced today.\footnote{Id. at 1285–86.}

More fundamentally, he argued that \textit{Heller} does not tell courts to use tiered scrutiny to assess gun control laws.\footnote{See id. at 1282.} Rather, \textit{Heller} looks to history and tradition.\footnote{Id. (\textit{Heller} was resolved in favor of categoricalism—with the categories defined by text, history, and tradition—and against balancing tests such as strict or intermediate scrutiny or reasonableness.”).} So gun controls that are well-grounded in history and tradition are constitutional; gun control laws which are not so grounded are unconstitutional.\footnote{See id.}

Using the standard of history and tradition, Judge Kavanaugh argued that the entire District of Columbia registration scheme was unconstitutional.\footnote{Id. at 1286.} Regarding de minimis handgun registration, the statutes cited by the majority were mostly record-keeping requirements for gun dealers, not centralized information collection by the government.\footnote{See id. at 1292–93.} The novel and much more onerous requirements of the District of Columbia registration system for all guns had no basis in history and tradition.\footnote{Id. at 1294.} For all firearms, any registration system beyond dealer record-keeping requirements was unconstitutional.\footnote{See id.}

Judge Kavanaugh examined the history of semiautomatic rifles and found them to be in common use for over a century and thus protected by the Second Amendment from prohibition.\footnote{See id. at 1287 (citing \textit{Johnson, Kopel, Mocsary & O’Shea, supra} note 90, at 11).} He did not have similar information on magazines and thus urged that the magazine issue be remanded for fact-finding.\footnote{Heller II, 670 F.3d at 1296 n.20 (Kavanaugh, J., dissenting) (“The D.C. ban on magazines of more than 10 rounds requires analysis in the first instance by the District Court. In order to apply \textit{Heller}’s test to this prohibition, we must know whether magazines with more than 10 rounds have traditionally been banned and are not in common use. The parties here did not brief that question in much detail. Evidence presented to the District Court on the history and prevalence of magazines of more than 10 rounds would be helpful to the proper disposition of that issue under the \textit{Heller} test. Therefore, I would remand to the District Court for analysis of that issue.”).} In light of the evidence on magazines that has been presented subsequent to the 2011 \textit{Heller II} decision, Judge Kavanaugh’s methodology traditionally been banned.”).
straightforwardly leads to the conclusion that the District of Columbia magazine ban is unconstitutional. The \textit{Heller II} majority rightly recognized that magazine bans are not “longstanding,” and this article has demonstrated that magazines of more than ten rounds have been a common part of the American tradition of firearms ownership since before the ratification of the Fourteenth Amendment in 1868.

4. \textit{Silvester v. Harris}

Another decision carefully employing historical analysis is \textit{Silvester v. Harris}, from the United States District Court for the Eastern District of California.

A California statute requires that firearms purchasers wait ten days before they can take their gun home from the store. In California, background checks on firearms buyers are sometimes completed within minutes and sometimes can take a week or longer. Senior District Judge Anthony Ishii (appointed to the federal court in 1997 by President Clinton) ruled the waiting period unconstitutional, to the extent that the waiting period lasted longer than the time required to complete the background check on a given buyer.

Like the Seventh Circuit in \textit{Ezell}, Judge Ishii looked to 1791 and 1868 as the crucial periods.

California Attorney General Kamala Harris had directed the court to a book arguing that between 1790 and 1840 many Americans might have to travel for several days in order to buy a gun, so there was a de facto waiting period between the time a person decided to buy a gun and when a person could take possession of the gun. Judge Ishii held this irrelevant; the court’s job was to consider the legality of government regulations that

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{269} \textit{Heller II}, 670 F.3d at 1260.
\item \textsuperscript{271} CAL. PENAL CODE §§ 26815(a), 27540(a) (West 2014).
\item \textsuperscript{272} \textit{Silvester}, 2014 U.S. Dist. LEXIS 118284, at *82.
\item \textsuperscript{274} \textit{Silvester}, 2014 U.S. Dist. LEXIS 118284, at *101–02.
\item \textsuperscript{275} Compare id. at *30, \textit{with Ezell v. City of Chi.}, 651 F.3d 684, 702–03 (7th Cir. 2011).
\item \textsuperscript{276} \textit{Silvester}, 2014 U.S. Dist. LEXIS 118284, at *8–9.
\end{itemize}
\end{footnotesize}
might impede the exercise of a constitutional right and the book provided no evidence that government-imposed waiting periods for firearm purchases existed between 1790 and 1840.277

Another book explained that the first waiting period law was proposed in 1923—a one-day waiting period for handguns.278 The law was adopted in California and eventually by eight other states.279 This too was irrelevant, ruled the court, because it had nothing to do with 1791 or 1868.280

The court explained that “[i]t is Defendant’s burden to show that the 10–day waiting period either falls outside the scope of Second Amendment protections as historically understood or fits within one of several categories of longstanding regulations that are presumptively lawful.”281

The complete absence of evidence of waiting periods in 1791 and 1868 eliminated the first possibility.282 What about the question of whether waiting periods were “longstanding regulations that are presumptively lawful”? The answer to this question is not confined to 1791 and 1868.

The court explained that “the concept of a ‘longstanding and presumptively lawful regulation’ is that the regulation has long been accepted and is rooted in history.”283 California’s 1923 statute did not come close. Besides that, the California wait was only one day and only for retail handguns.284 Not until 1975 was the number of days extended to double digits and not until 1991 to long guns.285 Consistent with the unusual nature of waiting periods, only ten states and the District of Columbia today have a waiting period for at least some firearms.286

Thus, the court concluded that the plaintiffs’ challenge had passed step one of the two-step test,287 and the court proceeded to apply heightened scrutiny.288 The court stated that it did not have to decide whether to use strict or intermediate scrutiny.289 The
waiting period statute failed intermediate scrutiny, as applied to persons who already possessed a firearm (based on state registration data), and who passed the background check when purchasing an additional firearm. Therefore, a fortiori, the statute would fail strict scrutiny. The court gave the state legislature 180 days to revise the statute so as to eliminate the post-background-check waiting period for persons who already have a gun. The plaintiffs had not challenged the waiting period as applied to first-time gun buyers, nor as to persons who had not yet passed the background check.

V. CONCLUSION

Rifle magazines holding more than ten or fifteen rounds have been common in the United States since the mid-nineteenth century. Handgun magazines over ten rounds have been common since 1935, and handgun magazines over fifteen have been common since the mid-1960s.

Magazine prohibition has historically been rare. There is no historical basis for a magazine limit of ten rounds or lower. As for prohibitions with higher limits, there are only two examples, both of them from 1927, the outer edge of what courts have considered to be examples of state statutes that may be considered “longstanding”: Michigan (enacted 1927, repealed 1959), Rhode Island (enacted 1927, loosened 1959, repealed 1975). Ohio formerly required a special permit to actually insert a magazine above a certain size into a firearm but never banned sales. (The original limit was eighteen rounds or more and later was thirty-two rounds or more.) As is often the case, the District of Columbia is the sui generis outlier, with its 1932 restriction still in effect today, with some modifications.

Of all the courts that have examined history when ruling on gun control issues, no court has ever held that laws of two or three states plus one city are sufficient to establish a gun law as being...
“longstanding” or part of American history and tradition. To the contrary, ammunition capacity limits are far outside the norm of the traditional exercise and regulation of Second Amendment rights. Not until California in 1999 did any state set a magazine limit as low as ten.299

What does this mean for modern legal analysis? Under judicial methods which hew closely to history and tradition, the historical absence (of limits of ten or less) or the extreme rarity (limits of fifteen or less) would be sufficient for any such modern limit to be ruled unconstitutional. Owning such magazines is very long-established manner in which the right to arms has historically been exercised in America.

Other courts perform a two-step test. Challengers to magazine limit laws should always pass step one, since magazine limits are not “longstanding.”

As for step two—review under some form of heightened scrutiny—the Supreme Court taught in Heller that when the “severe restriction” of a “ban” has support from “[f]ew laws in the history of our Nation,” the law’s constitutionality is very doubtful. This was true for the prohibition of handguns, and it is also true for the prohibition of magazines holding more than five, seven, ten, or fifteen rounds.

299 See supra note 156 and accompanying text.