	Case 2:17-cv-00903-WBS-KJN Document 13	5-8 Filed 08/18/23 Page 1 of 47
1 2 3 4 5 6 7 8 9	ROB BONTA Attorney General of California MARK R. BECKINGTON Supervising Deputy Attorney Gener ROBERT L. MEYERHOFF Deputy Attorney General State Bar No. 298196 300 South Spring Street, Suite 1 Los Angeles, CA 90013-1230 Telephone: (213) 269-6177 Fax: (916) 731-2144 E-mail: Robert.Meyerhoff@doj.ca. Attorneys for Defendants Rob Bont his official capacity as Attorney General of the State of Californ Allison Mendoza in her Official Capacity as Director of the Burea	ral 1702 .gov ta in 7 ia and
10	Firearms	
11		TES DISTRICT COURT
12		TRICT OF CALIFORNIA
13	SACRAMENT	D DIVISION
14		
15	WILLIAM WIESE, et al.,	Case No. 2:17-cv-00903-WBS-KJN
16	Plaintiffs,	DECLARATION OF DENNIS BARON IN
17	v.	SUPPORT OF DEFENDANTS ' OPPOSITION TO MOTION FOR
18	ROB BONTA, et al.,	SUMMARY JUDGMENT AND COUNTER- MOTION FOR SUMMARY JUDGMENT
19	Defendants.	Date: July 10, 2023
20		Time: 1:30 p.m. Courtroom:5, 14 <sup>th</sup> Floor
21		Judge: Hon. William B. Shubb
22 23		
23 24		
2 <del>4</del> 25		
23 26		
20 27		
28		
I		1

1 2

#### DECLARATION OF DENNIS BARON

I, Dennis Baron, the undersigned, declare as follows:

I have been retained by the Office of the Attorney 1. 3 General of the California Department of Justice to provide expert 4 opinion and testimony regarding Corpus Linguistics research. I am 5 being compensated at a rate of \$350 per hour. I have examined the 6 historical use of the terms arms and accoutrements in order to 7 determine whether magazines, including large-capacity magazines 8 (henceforth, LCMs), were considered arms during the Founding Era 9 (1750-1820) and the period surrounding Reconstruction and the 10 ratification of the Fourteenth Amendment (1868-1890). The term 11 "magazine" was not generally used to describe a 'bullet container' 12 until well into the nineteenth century, and that use of "magazine" 13 did not become common until the early twentieth century. 14 Ι therefore evaluated the lexical evidence for the analogous 15 ammunition cases in use before "magazine" became the common term: 16 "cartridge case," "cartridge box," or "cartouch case, or box." 17

18 2. I have also examined the lexical evidence for "repeater 19 air guns," which are sometimes referred to as "wind guns," and the 20 rare terms "magazine wind-gun" and "magazine gun" in the Founding 21 Era. "Air guns" used compressed air instead of gunpowder to propel 22 a ball. Repeater air guns were capable of firing multiple shots 23 before requiring the user to reload the weapon.

3. The lexical evidence leads me to conclude that (1) magazines (including what we would call LCMs today), as well as ammunition cases, cartridge cases, boxes and other ammunition storage containers, were considered accoutrements or accessories and not arms during the Founding and Reconstruction Eras; (2)

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 3 of 47

1 although a few artisans did invent air guns capable of firing 2 multiple balls without reloading the ammunition or recharging the 3 air cylinder, such guns were rare in England and America; (3) 4 although magazine guns were patented as early as 1860, they 5 remained military weapons during and shortly after the Civil War, 6 with only a few references to them in the corpora before the 1880s.

7

#### BACKGROUND AND QUALIFICATIONS

8 I am currently Professor Emeritus and Research Professor 4. 9 at the University of Illinois, where I have served as a member of 10 both the Department of English and the Department of Linguistics 11 since 1975. I served as Head of the Department of English for six 12 years and before that as Director of Rhetoric at the University 13 for 11 years. I earned my Ph.D. in English language and literature 14 from the University of Michigan in 1971, with a dissertation on 15 historical aspects of the English language from Old English to 16 Present-Day English, and I continue to publish widely on matters 17 of historical language use, in addition to topics related to 18 language and law. I am a life member of the Linguistic Society of 19 America, the American Dialect Society, and the Modern Language 20 Association, as well as a member of the National Council of Teachers 21 of English. I have held a Fulbright Fellowship (to France), a 22 National Endowment for the Humanities Fellowship for work on a book 23 on language and law, and, most recently, a Guggenheim Fellowship 24 for work on my latest book on language and law. I have also 25 published books on language reform, on usage, and on gender in 26 language.

27 5. Most relevant for this report, I published two books on
28 language and law: The English-Only Question: An Official Language

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 4 of 47

1 for Americans? (Yale Univ. Press, 1990) and You Can't Always Say 2 What You Want: The Paradox of Free Speech (Cambridge Univ. Press, 3 2023). In addition, I served as lead author on what came to be 4 called "the Linguists' Brief" in District of Columbia v. Heller, 5 554 U.S. 570 (2008), a brief cited both by Justice Scalia in the 6 majority opinion, and by Justice Stevens in his dissent. I was a 7 co-author on another brief by professors of linguistics and corpus 8 linguistics, cited in New York State Rifle and Pistol Ass'n. v. 9 Bruen (No. 20-843, 2022), which Justice Breyer cited in his 10 dissent. In that dissent, Justice Breyer also quoted directly from 11 my essay "Corpus Evidence Illuminates the Meaning of 'Bear Arms'" 12 (Hastings Constitutional Law Quarterly, 46.3: 2019). I have spoken 13 about historical meaning and the Second Amendment at the Federalist Society at the University of Chicago Law School, at the Neubauer 14 15 Symposium on Historical Semantics at the University of Chicago, at Brigham Young University Law School, at Stanford University, and 16 17 at the conference "Heller after Ten Years" at Hastings College of 18 Law. I have also written opinion essays on historical meaning and 19 the Second Amendment for the Washington Post and the Los Angeles 20 Times. And I have submitted the following declarations and reports 21 in the following cases: Ocean State Tactical, LLC, et al. v. State 22 of Rhode Island (Case No. 1:22-cv-00246-JJM-PAS) (D. R.I.); Hanson, 23 et al, v. District of Columbia, et al. (Civil Action No. 1:22-cv-24 02256-RC); Delaware State Sportsmen's Association, Inc., et al., 25 v. Delaware Department of Safety and Homeland Security; Nathanial 26 McQueen, Jr. (C.A. No. 1:22-cv-00951-RGA, Consolidated); National 27 Association for Gun Rights and Capen v. Baker (Massachusetts, C.A. 28 No. 22-cv-11431-FDS); NAGR and Flanigan v. Lamont, etal. Λ

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 5 of 47

1 (Connecticut: C.A. No. 3:22 CV 1118); National Association for Gun 2 Rights, et al., v. Lopez (Hawai'I, C.A. No. 1:22-cv-404-DKW-RT); 3 Oregon Firearms Federation, et al, v. Kotek, et al., (lead case 4 with three additional, consolidated, Oregon, Case No. 2:22-cv-5 01815-IM); and declarations on behalf of the State of California 6 in Rupp, et al. v. Bonta (Case No. 8:17-cv-00746-JLS-JDE), Duncan, 7 et al. v. Bonta (Case No. 3:17-cv-01017-BEN-JLB), and Fouts, et 8 al.v. Bonta (Case No. 3:19-cv-01662-BEN-JLB). In the past twenty 9 years I have also served as an expert in fourteen cases involving 10 document interpretation.

6. My recent essay, "Look It Up in Your Funk and Wagnalls:
How Courts Define the Words of the Law," an analysis of how judges
incorporate information from dictionaries and digitized corpora as
they ascertain legal meaning, appears in Dictionaries: Journal of
the Dictionary Society of North America, vol. 43.2 (2022): 95-144.

16 7. This report is made based on my professional knowledge 17 and expertise, and on my research using accepted scientific 18 linguistic methodology in the field of Corpus Linguistics, the 19 analysis of one or more large, digitized corpora consisting of many 20 millions of words.

21

22

#### **OPINIONS**

#### SUMMARY OF OPINIONS

8. Historical evidence from a number of large textual databases, or corpora, shows that during the Founding Era and the Reconstruction Era, "arms" is used as a general term for weapons (typically swords, knives, rifles, and pistols), but arms does not include ammunition, ammunition containers, flints, scabbards, holsters, armor, or shields, which are included in the category

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 6 of 47

1 "accoutrements." Nor does "arms" refer to parts of weapons, for 2 example the trigger of a gun, the hilt of a sword, or the cartridge 3 box or fixed or removable magazine that holds the bullets.

4 Instead, when this additional equipment is mentioned, we 9. 5 find phrases like "arms and ammunition"; "arms and accoutrements"; or "arms, ammunition, and accoutrements." The phrase "arms and 6 7 is frequently used in military contexts accoutrements" to 8 distinguish weaponry and related equipment from the rest of a 9 soldier's or militia member's equipment. For example, militia 10 requirements often specify that soldiers have certain arms 11 (pistols, swords, rifles, according to their rank) as well as certain "accoutrements" (the word is typically plural), including 12 13 horses, saddles, cartridge cases or boxes, scabbards, flints, and so on. "Cartridge boxes" and "cartouch boxes" are the terms used 14 15 for ammunition containers in the eighteenth and nineteenth 16 centuries and are analogous to today's "magazines." When "arms and 17 accoutrements" occurs as a phrase, there is a clear distinction 18 made between weapons themselves and the soldier's cartridge boxes 19 or cartouch boxes, which are typically identified as accessories 20 along with scabbards, saddles, holsters, belts, caps, pouches, and 21 the rest of a soldier's equipment. When the term "accoutrements" 22 occurs alone, as in "the accoutrements of a soldier," it functions 23 as a general term that may include both arms and accessories.

10. I have found no lexical evidence that repeater air guns were used as military weapons in England or America in the Founding Era, or that they were used as weapons of personal self-defense at that time.

1

#### THEORY AND METHODOLOGY

Corpus linguistics as a field developed in the late 11. 2 1960s, when scholars began using computer programs to analyze large 3 bodies of digitized text. Initial work in corpus linguistics did 4 not typically involve legal issues. Literary scholars, taking 5 advantage of the ability of computers to search large digitized 6 databases, facilitated their analysis of print materials by 7 developing computerized concordances to the works of Shakespeare, 8 9 Milton, and other major English writers. They plotted the frequency of words and phrases in order to develop a picture of an author's 10 style, and to determine authorship of a particular work when the 11 provenance was in doubt. Soon, in addition to solving literary 12 mysteries, linguists successfully applied computerized textual 13 analysis in a number of criminal cases in the United States and in 14 England involving, for example, the authorship of a ransom note or 15 an email. Lexicographers, who began compiling analog databases of 16 text in the late nineteenth century, began to digitize their 17 analogue data and to add to that material, assembling computerized 18 databases of historical and contemporary text and, more recently, 19 of spoken language as well, in order to arrive at more precise 20 definitions of the multiple senses of words and phrases. 21

The Oxford English Dictionary (OED) is the standard 12. 22 English language compiled on historical dictionary of the 23 principles. As a graduate student at the University of Michigan in 24 1970, I coded analog texts from the relevant OED files to help 25 build the computerized database for the Dictionary of Early Modern 26 English, the period from 1500-1800 that is particularly relevant 27 to the language of the Founding Era. Today, major dictionaries like 28

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 8 of 47

1 the OED and the Merriam-Webster suite of dictionaries rely on 2 public databases of oral and written language, as well as their 3 own proprietary databases, in order to revise older definitions 4 and to track the spread of new words and meanings. The major 5 dictionary makers working on other languages use similar databases 6 in their own work.

7 Over the past twenty years, legal corpus linguistics 13. 8 (LCL) has developed as a subset of corpus linguistics. LCL involves 9 the analysis of digitized corpora of current and historical English 10 to establish meaning-often referred to as "original public meaning" 11 -in statutes and in the Constitution. LCL often provides more 12 information about the meaning of words and phrases than can be 13 gleaned from dictionary definitions. Over the past decade, LCL has 14 become an important tool in helping to determine original public 15 meaning when such meaning is in doubt. In Muscarello v. United 16 States, 524 U.S. 125 (1998), we find an early use of computer 17 searching to help determine the meaning of a word in a statute. In 18 Muscarello, the Supreme Court considered whether "a person who 19 knowingly possesses and conveys firearms in a vehicle, including 20 in its glove compartment or trunk, can be deemed to be within the 21 scope of the statutory phrase 'carries a firearm.'" To answer that affirmative, Justice 22 question in the Breyer searched two 23 computerized newspaper databases (Lexis/Nexis, for the New York 24 Times, and Westlaw, for "US News") to clarify the meaning of the 25 words "carry," "vehicle," and "weapon." In 2012, Judge Richard 26 Posner, of the Seventh Circuit, was perhaps the first jurist to 27 use a general internet search in order to determine a word's meaning 28 in a statute. Not satisfied with the dictionary definition that

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 9 of 47

the government relied on in the case before him, Judge Posner ran a Google search to confirm that the word "harbor" in the Immigration Act of 1917 does not mean 'shelter,' as the government claimed, but rather 'hide, conceal from view,' as he felt it must mean in the context of the statute. United States v. Costello, 666 F.3d 1040 (7th Cir. 2012).

7 principled, scientific database 14. More searches soon 8 followed, and in 2018 Justice Thomas Lee, of the Utah Supreme 9 Court, a long-time champion of corpus linguistics, together with 10 the legal scholar Stephen Mouritsen, summarized the latest research 11 in corpus linguistics and LCL as a way to determine ordinary 12 meaning, and more specifically, original public meaning, with more 13 clarity (Thomas Lee and Stephen Mouritsen, "Judging Ordinary 14 Meaning," Yale Law Journal 127(2018): 788-879). Jurists over the 15 past few years have found that in several cases, LCL proves more 16 useful than the period dictionaries (for example, the dictionaries 17 of Samuel Johnson and Noah Webster) that courts have often relied 18 on to determine historical meaning. LCL often supplements the 19 historical interpretations found in older dictionaries and in the 20 Oxford English Dictionary, as well, allowing a more precise 21 interpretation of historical text data.

22 15. In addition to the publication of several significant 23 law review articles by experts in the field of corpus linguistics, 24 there have been several conferences on legal corpus linguistics in the past few years, and a number of continuing-education seminars 25 26 on LCL are now offered for judges and lawyers. As a result, corpus 27 linguistics has drawn increased attention from the courts, 28 including recent mentions in decisions in the Sixth, Seventh, and

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 10 of 47

1 Ninth Circuits, as well as a comment by Justice Alito in his 2 concurrence in Facebook, Inc. v. Duguid, 141 S. Ct. 1163 (2021), 3 where he suggested that LCL may one day provide a useful alternative 4 to the canons of interpretation.

5 16. Several large databases have come online in the past few 6 years that facilitate LCL research. Brigham Young University's 7 Center for Law and Corpus Linguistics hosts the Corpus of Founding 8 Era American English (COFEA), with more than 126,000 texts, 9 comprising close to 137 million words and covering the years 1760-10 1799. BYU's Corpus of Early Modern English (COEME), with data from 11 1475-1800, contains over 40,000 texts and 1.1 billion words. For 12 the nineteenth century, the Corpus of Historical American English 13 (COHA), initially developed at BYU but now independent of that 14 institution, currently contains 475 million words of text from 15 1820-2020. The size of these databases continues to grow as more 16 works are digitized, coded, and added to the corpora. In compiling 17 this report, I reviewed each of these databases. Some of the corpora 18 provided data for some lexical searches, but not for others. The 19 examples cited in this declaration specify which corpus they are 20 drawn from.

21 Critics of LCL have objected that databases like COFEA 17. 22 and COEME contain only texts written by "elites," whose language 23 may differ from that of "ordinary people" who do not write at all, 24 or who for various reasons do not write texts likely to be included 25 in the available corpora. It is certainly the case that many printed 26 books and periodicals, along with documents like the Constitution, 27 its amendments, and state and federal statutes, tend to be written 28 educated specialists and professional writers. by Although

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 11 of 47

1 "ordinary people" are expected to understand the language of the 2 Constitution, the Declaration of Independence, and other founding 3 documents, as well as the laws that govern the nation, such texts 4 typically require specialized knowledge. A reading-difficulty 5 formula like the commonly used Flesch-Kincaid scale suggests that 6 the Declaration of Independence and the Constitution require a 7 fifteenth-grade reading level, while according to one comprehensive 8 study, Adult Literacy in America (National Center for Education 9 Statistics, U.S. Department of Education, 1993; 10 https://nces.ed.gov/pubs93/93275.pdf), the average American adult 11 tends to have a seventh- or eighth-grade reading level. The 12 National Center for Education Statistics no longer uses "grade 13 level," instead rating literacy levels for Americans between ages 14 16 and 65 on a scale from 1 to 5; measurements conducted in 2003 15 showed no significant change from the 1993 NCES report; and the 16 most recent data, from 2014, confirm that most adult Americans 17 still test at or below level 2, with 4.1% testing below level 1 18 (https://nces.ed.gov/pubs2019/2019179/index.asp).

19 In order to counter any "elite" bias that may be found 18. 20 in databases like COFEA, COEME, and COHA, I rely as well on five 21 digitized newspaper databases covering the period 1750-1900, 22 focusing for this report on the Founding Era and on the period of 23 Reconstruction after the passage of the Fourteenth Amendment. 24 Newspapers of the eighteenth and nineteenth centuries were the 25 principal means of communicating news and information. As such, 26 they embodied much of the language of the "ordinary people" who 27 read them. These early newspapers also provide researchers with 28 more data for the nineteenth century than a corpus like COHA, which

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 12 of 47

1 covers the same period but tends to focus on literary and 2 specialized texts rather than material for the general reader. 3 Because of changes in print technology and the spread of literacy, 4 Founding Era newspapers differed from the newspapers of the post-5 Civil War era. Print technology remained relatively static between 6 the 1450s, when printing presses first appeared in Europe, and the 7 nineteenth century, Industrial early when the Revolution 8 drastically changed printing methods. The first printing press was 9 adapted by Gutenberg from the design of the traditional wine press, 10 and for centuries, printing was a slow and labor-intensive process. 11 As a result, newspapers in the founding era were small, averaging 12 four to eight pages. Publication was less frequent as well. Papers 13 tended to appear weekly or semi-weekly, rather than daily. Even 14 newspapers in the Founding Era and later, so, during 15 Reconstruction, provided average Americans with their principal 16 access to all the critical events and documents of their time, 17 along with coverage of local and international news. Although 18 newspaper subscribers tended to be "elites," newspaper content was 19 widely shared by word of mouth: ultimately, most Americans in the 20 Founding Era, including those who would be classified as illiterate 21 or poorly educated by today's standards, got their news from 22 newspapers.

19. Since the 1960s, database compilers have been able to track contemporary spoken English more successfully, though none of the databases for the Founding Era and for the post-Civil War period cover the spoken language of Americans. Although scholars can reconstruct some of that oral language, we are always doing so

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 13 of 47

1 through the lens of print versions purporting to represent or 2 comment on ordinary speech.

3 The newspaper databases that I have examined are Readex 20. 4 Historical American Newspapers; Chronicling America (newspapers 5 digitized by the Library of Congress); the British Newspaper 6 Archive (compiled by the British Library); and two private 7 subscription services, newspapers.com and newspaperarchive.com. 8 For this report, both Readex and newspapers.com provide the most-9 complete picture of the language of the Founding Era newspapers as 10 well as the ordinary language of the later nineteenth century.

11 All the databases contain some duplicates. COFEA and 21. 12 COEME digitize multiple editions of the same work; and the 13 newspaper databases not only duplicate some, though not all, of one another's content, but they also contain a number of duplicate 14 15 stories because, particularly in the period of newspaper growth 16 during the nineteenth century-in an age before the wire services 17 and syndication appeared, and before the larger papers began to 18 set up news bureaus in key areas around the country and around the 19 world-newspapers routinely printed each other's stories, sometimes 20 acknowledging their source and sometimes not (I exclude duplicate 21 citations from all my corpus searches). The databases often offer 22 more insight into the meaning of words and phrases than simply 23 going to a dictionary. Jurists from Learned Hand and Felix 24 Frankfurter to Frank Easterbrook and Richard Posner have warned 25 their colleagues not to make a fortress of the dictionary. Like 26 dictionaries, corpora are by necessity incomplete. LCL does not 27 replace dictionaries, but it does provide an important supplement 28 to them. Typical LCL analyses are conducted using a keyword and a

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 14 of 47

few words surrounding it, to supply context. Sometimes a limited specific citation is ambiguous. And sometimes, a search of the data set returns only small number of citations, perhaps ten or twenty rather than a few hundred. In such cases, I supplement my use of LCL with a reading of the full context of the citations in order better to determine the keyword's meaning and the relevance of the citation to the search question.

8

#### THE MEANING OF ARMS AND ACCOUTREMENTS IN THE DATABASES

9 22. In this report I look at the meaning of "arms" and 10 "accoutrements" as used individually, along with the phrase "arms 11 and accoutrements" in the Founding Era and during the period 12 following the adoption of the Fourteenth Amendment. I focus on 13 whether the term "magazine" as used today falls within the meaning 14 of the term "arms" when used on a standalone basis during those 15 eras, or whether the magazine and its earlier analogues, the 16 cartridge case and cartouch box, are treated as accessories or 17 accoutrements, rather than arms. I look as well at lexical evidence 18 in the Founding Era on the "air rifle," or "air gun," and assess 19 any lexical evidence about the availability and popularity of the 20 repeater air gun and the use of the term "magazine" in association 21 with such guns.

22 23. In the eighteenth and nineteenth centuries, "magazine" 23 was a word that meant "storehouse, depot." A magazine was a place, 24 often a building or warehouse, to store goods and supplies. When 25 used in a military sense, a magazine was a building designated for 26 storing gunpowder, and because gunpowder was an explosive 27 substance, it was subject to strict regulation: some towns banned 28 or heavily regulated the storage of gunpowder within city limits.

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 15 of 47

1 The word "magazine" was not typically used to refer to the 2 compartment of a gun containing bullets until late in the 3 nineteenth century. Although the term "magazine" appears in the 4 phrase "magazine wind gun" in 1744, that usage is marked as "rare" 5 by the Oxford English Dictionary, which also marks the phrase 6 "magazine wind gun" as "obsolete." References to "magazine guns," 7 "magazine rifles," or "magazine carbines" appear as early as 1860, 8 when C. M. Spencer received a patent for a "magazine gun" (U.S. 9 Patent No. 27,393, March 6, 1860). B. T. Henry patented a "magazine 10 fire arm" that same year (U.S. Patent No. 30,446, Oct. 16, 1860). 11 And N. King patented another "magazine fire arm" in 1866 (U.S. 12 Patent 55,012, May 22, 1866).

13 24. Although patents for guns with "magazines" capable of 14 holding multiple bullets appear as early as 1860, in its separate, 15 main entry for "magazine," the OED gives the earliest use of 16 "magazine" meaning 'a bullet storage container' as 1868, typically 17 associated with weapons designed for military rather than civilian 18 use.

19 25. The data suggests that "cartridge boxes," analogous to 20 today's LCMs, would have been viewed as accoutrements, the 21 ancillary equipment associated with soldiering, or service in the 22 military.

23 26. The OED defines "accoutrements" as, "items of apparel; 24 (more generally) additional pieces of dress or equipment, 25 trappings; (Military) the outfit of a soldier other than weapons 26 and garments." [OED online, s.v. "accoutrement"; the word typically 27 appears as a plural.]

# Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 16 of 47

1	27. Thus, the military sense of "accoutrements" generally
2	refers, not to weapons, but to other accessories worn or carried
3	by soldiers. The OED illustrates this second, military, sense, with
4	an example from the Duke of Wellington's dispatches in 1813: "In
5	order to collect the wounded and their arms and accoutrements."
6	Here Wellington, widely recognized as a consummate soldier, and
7	who would soon defeat Napoleon at the Battle of Waterloo in 1815,
8	makes a clear distinction between "arms" and "accoutrements."
9	28. The OED definitions are instructive. But in order to
10	determine more specifically whether the term "accoutrements"
11	included "cartridge boxes," the predecessor to modern magazines, I
12	consulted two digitized historical databases: COFEA and COEME. A
13	COFEA search returns these examples where "cartridge boxes" and
14	"cartouch boxes" are specifically included in the category of
15	accoutrements, not arms:
16	a) 1774 — "The cartouch boxes and other military accoutrements belonging to the noncommissioned officers
17	and privates" (Journals of the Continental Congress).
18	b) 1774 — "The cartouch boxes and every other species of military accoutrements annexed to the persons of the
19 20	officers and soldiers of General Burgoyne's army."
20	(Journal of the Continental Congress).
21	c) 1776 — "The General is surprised to find the Militia applying for Cartouch Boxes and other Accoutrements."
22	(George Washington, General Orders, February 17).
23	d) 1777 "Many of their Arms are indifferent, and almost the whole [of Washington's troops] are destitute of
24 25	pouches and Other necessary Accoutrements." (George Washington, Letter to John Hancock, October 10-11; the
25 26	pouches in question are ammunition holders).
26 27	e) 1777 — "The officers and men were to … deliver up their arms, the cartouch boxes and other military
	accoutrements" (William Duer, Congressional
28	Resolution: A State of Facts, December). 16

Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 17 of 47 1 f) 1778 - "[T]he board, on the 17<sup>th</sup> of April, impowered a Capt. Starr of Middleton in Connecticut to receive a 2 quantity of public leather of Colo. Trumbull, and get it made up into shoes and accoutrements, half of each, the 3 cartridge boxes upon the new model; and to send on both to the main army...." (Timothy Pickering, Letter to George 4 Washington, June 9, 1778. At the time, cartridge boxes were made of wood or leather, or a combination of the 5 two). 6 q) 1783 - "And as to cartridge boxes and other leathern 7 accoutrements, saddles & other furniture for dragoons .... " (Timothy Pickering, Letter to George Washington, April 8 22). 9 29. And COEME adds this example, where "cartridge box" 10 appears in a list that includes "accoutrements" but not "arms": 11 a) 1788 - "If you could only tell us how to keep papa at home, my drum, spontoon, cartouch box, and accoutrements, 12 should all be yours." (The Children's Friend, Translated from the French). 13 30. of also confirmed My review the corpora that 14 "accoutrements" are regularly referred to separately from "arms." 15 A COFEA search for the occurrence of "accoutrements" within 6 words 16 "arms" returned 873 hits (including a small of number of 17 duplicates). A similar search of COEME returned 126 hits, the 18 earliest from 1656. I determined that the two search terms, "arms" 19 and "accoutrements," often appear together as a single phrase, 20 "arms and accoutrements," typically in military contexts having to 21 do with an army or militia unit. "Accoutrements" often occurs in a 22 list alongside, but from, ammunition: separate "arms, 23 accoutrements, (and) ammunition," though when ammunition is not 24 listed separately, the term "accoutrements" will generally include 25 ammunition. The second OED citation for "accoutrements," dated 26 1902, differentiates "ammunition" from "accoutrements": "When they 27 landed they brought on shore besides a quantity of ammunition 28

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 18 of 47

and accoutrements...and large stores of flour, sugar and tobacco, 1 2 &c." (G. S. Whitmore Last Maori War i. 4). 3 "Arms" as a stand-alone term refers to weapons. "Arms" 31. 4 almost never includes ammunition or ammunition storage containers 5 such as cartridge boxes. These are the three examples that a COHA 6 search returns: 7 a) 1821 - "It is necessary to obtain ammunition, arms and accoutrements, and as many horses as you can get" 8 (William Dobein James, "A Sketch of the life of Brig. Gen. Francis Marion and a history of his brigade"). 9 b) 1909 - "Lyon was ordered to deliver to Governor Yates 10 10,000 stand of arms with accoutrements and ammunition." (Robert J. Rombauer, "The Union Cause in St. Louis in 11 1861). 12 c) 1949 "It will be necessary that arms, 13 ammunition, accoutrements, tents and camp equipage be deposited there for them the troops." (Francis F. Beirne, 14 "War of 1812"). 15 32. The "cartridge box" or "cartouch box"-the precursor to 16 today's "magazine"-is typically mentioned in lists of 17 accoutrements, often in connection with other items worn with a 18 soldier's uniform. The "cartridge box" almost never appears to be 19 included among a soldier's weapons. The OED defines "cartridge box" 20 as "a box for storing or carrying cartridges; the case in which a 21 soldier carries his supply of cartridges" (OED online; this 22 definition covers "cartouch box" as well). The OED cites the 23 definition in Smyth and Belcher's Sailor's Word-Book (1867) to 24 illustrate its function. Here is the full definition of "cartridge-25 box" in that dictionary of navy terminology: "a cylindrical wooden 26 box with a lid sliding upon a handle of small rope, just containing 27 one cartridge, and used for its safe conveyance from the magazine 28

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 19 of 47

1 to the gun-borne to and fro by the powder-monkeys (boys) of old. 2 The term is loosely applied to the ammunition-pouch" (Admiral W. 3 H. Smyth and Vice-Admiral Sir E. Belcher, The Sailor's Word-Book: 4 An Alphabetical Digest of Nautical Terms, London, 1867; see ¶ 55, 5 below, for the authors' definition of "magazine" as a gunpowder 6 storeroom either on land or on a ship). The OED offers an 1892 7 citation for "magazine" as the equivalent of a cartridge box, 8 calling such usage "obsolete and rare": "W. W. Greener, Breech-9 loader 184 Cartridges are best carried in a magazine of solid 10 leather" (OED online, s.v. magazine, IV (d)). By that time, 11 "magazine" was more typically used in the sense we use it today, 12 "A container or (detachable) receptacle in a repeating rifle, 13 machine-gun, etc., containing a supply of cartridges which are fed automatically to the breech" (OED online, s.v. magazine, sense IV 14 15 (b)).

16 A search of Readex America's Historical Newspapers for 33. 17 "cartridge box," and the synonymous "cartouch-box," for the 18 Founding Era years 1750-1790 returns 176 citations. including 19 multiple duplicates. A Readex search for the period after the 20 adoption of the Fourteenth Amendment, from 1868-1890, returns 1,306 21 citations, also with many duplicates. The following examples show 22 instances where "cartouch boxes" or "cartridge boxes," are 23 categorically separate from arms or appear in the list of 24 accessories to arms (examples (a), (b), (d), (e), (g), (h), (i). 25 Note that in example (d) the list separates small arms from 26 cutlasses as well. And examples (f), (j), (k), (l), (n), (o), (p), 27 (q), and (r) clearly show that cartridge boxes are accoutrements, 28 not arms:

C	se 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 20 of 47	
1	a) 1756 — "Every such Male Person provide himself wit	
2	one well fixed Musket, or Fuzee, with a Worm and Primir Wire, one Cartouch Box, with nine charges of Gun Powder	-
3	and Ball suitable therein, and three good Flints ar shall keep such Arms and Ammunition by him, in goo	
4	Order." Pennsylvania Gazette, May 13, 1756.	
5	b) 1774 — "That each man be provided with a good fireloc and bayonet fitted thereon, half a pound of powder, tw	
6	pounds of lead, and a cartouch box, or powder-horn ar	
7	emergency." Proceedings of the Continental Congress Pennsylvania Journal, December 21, 1774.	-
8		-
9	c) 1775 — "That each Inhabitant, or Person, as aforesaid who shall provide Arms for himself, well fixed with	a
10	good Bayonet and Cartouch-Box, shall be paid a minimu of 10s." The Massachusetts Gazette, May 19, 1775.	ım
11	d) 1775 - "We hear from Charlestown, South-Carolina, the	
12	on the 21st of March, at Night, about eight Hundred Star of Small Arms, 2 Hundred Cutlasses, and all the Cartouch	1-
13 14	Boxes, fit for Service, with several Bundles of Match some Flints, were taken out of the public Armoury." Ne Hampshire Gazette, June 2, 1775.	
15		
16	e) 1775 — "Deserted from Colonel Woodridge's regiment Martin Nash carried away a long gun of Ger	n.
17	Pomeroy's make, a cartridge box and good stock of ammunition belonging to the province." New Englar Chronicle, November 9, 1775.	
18	f) 1778 — "numbers of the cartouch-boxes and several othe	٦r
19	articles of military accoutrements annexed to the person of the non-commissioned officers and soldiers in Genera	ns
20	Burgoyne's army, have not been delivered up. Massachusetts Spy, February 19, 1778.	
21		
22	g) 1778 — "List of Necessaries and Accoutrements for eac Horseman: 1. A well-tempered sword 2. A carbine	e,
23	fusee, or short blunderbuss 3. A pair of pistol and holsters. 4. A sword-belt—a belt for the carbine .	
24	<ul> <li>5. A cartridge-box to buckle round the waist, wit twelve tin pipes for the cartridges.</li> <li>6. A helmet</li> </ul>	5h
25	7. A saddle" New-Jersey Gazette March 25, 1778.	•
26	h) 1785 — "A Neapolitan officer was killed in the sam	
27	engagement by a cartouch box taking fire while chargin the guns." <i>South-Carolina Weekly Gazette</i> , August 4, 1785	-
28	20	
	20	

d	ase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 21 of 47
1	i) 1787 — Abstract from the Militia Law. "That every non- commissioned officer and private soldier of the said
2	militia shall equip himself with a good fire-
3	arm, with a steel or iron ramrod, a spring to retain the same, a worm, priming wire and brush, a bayonet fitted
4	to his fire-arm, and a scabbard and belt for the same, a cartridge box that will hold fifteen cartridges at least,
5	six flints, one pound of powder, forty leaden balls suitable for his fire-arm, a haversack, blanket, and
6	canteen." Massachusetts Gazette, February 2, 1787.
7	j) 1787 — "All persons liable to do Militia Duty must provide themselves with proper arms and accoutrements,
8 9	viz. a musket and bayonet, a cartouch box or pouch that will contain twenty-four cartridges." State Gazette of South Carolina, July 16, 1787.
10	k) 1868 — "Government Sale at Watertown Arsenal Mass
11	Lot of cavalry accoutrements, consisting of Cartridge Boxes, Pistol Holsters, Sabre Belts, Knots, &c.: lot of
12	Infantry accoutrements, consisting of Bayonet Scabbards, Cap Pouches, Cartridge Boxes, Gun Slings." Evening Star
13	(Washington, D.C.), January 9, 1868. [Perhaps the
14	clearest and most direct citation specifying cartridge boxes as accoutrements.]
15	l) 1868 - Another government sale lists weapons (carbines,
16	muskets, rifles, and pistols) followed by a list of items that are separate from weapons: "254 carbine cartridge
17	boxes," carbine slings, cavalry sabre belts, bayonet scabbards, cap pouches, "1,619 cartridge boxes," "257
18	cartridge-box Belts," gun slings, waist belts, "and various other articles." Daily Morning Chronicle
19	(Washington, D.C.), April 22, 1868.
20	m) 1869 — This account describes the new French
21	"Mitrailleuse," a field weapon which would seem to be analogous to what we call a machine gun today, and the
22	cartridge box would be the equivalent of what today we call a removable magazine. The Mitrailleuse is "a new
23	'ball syringe' in the shape of a small cannon It contains thirty-seven common infantry cartridges,
24	arranged like cigars in a bundle. As soon as it is attached to the breech of the cannon, the Mitrailleuse
25	is loaded. A man sitting on the carriage fires it by
26	turning a crank The crank is turned once more and the cartridge box is removed from the cannon; a man to
27	the right takes it, removes it from the 'cigar box'; the men to the left put a new one in." Daily Albany Argus,
28	November 6, 1869.
	21

d	ase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 22 of 47
1	n) 1870 - In this description of the French National Guard,
2	the writer notes the importance of rapid-fire rifles for defense against the Prussian troops. Several paragraphs
3	later, the cartridge box is listed along with a guard's uniform requirements: "a uniform will be obligatory for
4	all. Each one must be provided with a weather-proof knapsack , a cartridge-box or pouch, and a half-
5	woolen covering of the material of a tent." <i>New York Tribune</i> , November 5, 1870.
6	o)1871 — Article about a memorial statue in which the
7	cartridge box is identified as part of the soldier's uniform: "a soldier dressed in full uniform (overcoat,
8	cartridge box, belt, etc.,) leaning on his musket."
9	Boston Journal, November 12, 1870.
10	p) 1872 — This list of government ordnance and ordnance stores for sale groups weapons and accoutrements
11	separately, with cartridge boxes clearly identified as accoutrements. The weapons for sale are muskets, rifled
12	muskets, and revolvers, followed by this comment, "Nearly
13	all the Starr's Revolvers and about two-thirds of the other arms are in fair order." After the arms list comes
14	the list of accoutrements, consisting of cap pouches, waist belts, bayonet scabbards, "cartridge box and belt
15	plates," musket and pistol appendages, "and an assortment of other accoutrements and appendages." Daily Morning
16	Chronicle (Washington, D.C.), February 3, 1872.
17	q) 1876 — In this description of a dead body of a soldier found on a beach, the cartridge box is described as an
18	article of the deceased's uniform: "The body was clothed
19	in a blue overcoat and pants, and had on waist-belt, cross-belt and cartridge-box." Wilmington Morning Star
20	(North Carolina), February 8, 1876.
21	r) 1879 — The cartridge box forms part of a new military
22	uniform: "In the rest of the brigade the multiplicity of
23	belts is done away with, and in place is substituted a
24	simple body belt to which the bayonet scabbard and
25	cartridge box is attached. Equipped in such a uniform .
26	the brigade will present a solid and soldierly
27	appearance." New Haven Register, July 28, 1879.
28	22

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 23 of 47

1 34. In sum, in the vast majority of examples, arms referred 2 to weapons. Arms generally did not include ammunition or other 3 weapon accessories, including the cartridge box, the historical 4 analogue to the magazines. Instead, "cartridge boxes" and "cartouch 5 boxes" were considered "accoutrements," or accessories, like the 6 other military equipment (scabbards, belts, and so forth) that was 7 separate from, and did not include, arms.

8 But English usage is never simple. As linguists often 35. 9 put it, "all grammars leak"-which is to say, there are always a 10 few counterexamples in the data. The existence of such outliers 11 does not invalidate the data or undercut an interpretation, it simply shows that although the users of a language share a common 12 13 sense of what words and grammatical constructions mean, variation 14 in meaning and usage occurs in all human language. Given the volume of samples, that is not surprising. Thus, for example, as in this 15 16 example from COFEA, "accoutrements" may occasionally encompass 17 arms:

18 1789 - A few years since, some boys, equipped in mock military accoutrements, such as paper-caps, paper-belts, wooden swords, &c. were beating up for recruits in Parliament-street, Boston. [The American jest book: Part I[-II]; emphasis added; here military accoutrements includes toy swords.]

22 In these four citations from the Readex newspaper corpus, it is 23 not always clear from the context whether cartridge boxes are 24 arms or accoutrements, or they are simply not being categorized: 25 a) 1753 — "[E]very listed Soldier and other Householder . . . be always provided with a well-fix'd Firelock . . . 26 a Snapsach, Cartouch Box, one Pound of Powder, twenty Bullets fit for his Gun, twelve Flints, a good Sword or 27 Cutlass, a Worm and Priming Wire, on penalty of six Shillings for want of such Arms as is hereby required, 28

c	ase 2:17-cv-00	0903-WBS-KJN Document 135-8 Filed 08/18/23 Page 24 of 47
1		and two Shillings for each other Defect." Boston Post-
2		Boy, April 30, 1753. Considering citation (c), below, dated 1756, it is likely that the fine for not having a
3		cartouch box in this example would not be the higher fine for a weapons defect, but rather the lower fine of
4		2s. levied for "other defects."
5	b)	1755 — "whoever provides himself a good Firelock, Sword
6		or Hatchet, Belt and Cartridge-Box, to receive 16s. more but the Arms to be returned when the
7		Service is over." Boston Gazette, April 21, 1755. It is not clear from the context whether the cartridge boxes
8		are part of the arms that must be returned. In other articles, cartridge boxes are treated as personal items. They may bear a variety of decorations, and they
9		are sometimes listed along with other uniform items in
10		a description of a soldier's funeral.
11	C)	1756 — "That every Male Person shall provide himself with one well fixed Musket, or Fuzee,
12		with a Worm and Priming Wire, one Cartouch Box with nine Charges of Gun Powder, and Ball suitable therein,
13		and three good Flints and shall keep such Arms and Ammunition by him, in good Order, and fit for
14 15		Service, at all Times under the Penalty of Twenty Shillings for Want of a well fixed Musket or Fuzee,
15 16		with a Worm and Priming Wire, and Two Shillings for the Want of every Cartouch Box, and Two Shillings for the
17		Want of nine Charges of Gun Power and Ball, and three Flints, or any of them." Pennsylvania Gazette, May 13,
18		1756. The larger fine for lack of arms, along with
19		lower fines for missing Cartouch Boxes and ammunition, suggest that cartouch boxes and cartridge boxes do not
20		belong to the category "arms" but are instead a form of accessory.
21	d)	1785 — "His European weapons consisted of a musket,
22		bayonet and cartouch-box; a fowling piece; two pair of pistols; and two or three swords or cutlasses." <i>History</i>
23		of Capt. Cook's Voyage, Massachusetts Centinel, January 15, 1785. Here cartouch box appears among the list of
24		weapons carried by an islander that Cook encountered.
25	26	Another site from 1777 referrs to firecorms and other
26		Another cite, from 1777, refers to firearms and other
27	_	accoutrements, implying, too, that arms may be a ry of "accoutrements":
28	Subcalego	Ly OL accouctements :

# Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 25 of 47

1

2

3

"any drafted soldier . . . who is unprovided with a firearm, and other military accoutrements prescribed by the militia law." Massachusetts, Acts & Laws, March Session, Colony of Massachusetts Bay, 1777, p. 10 (but see Par. 38, ex. a).

4 But the fact that "arms" are sometimes included as a 37. 5 subcategory of accoutrements, when "accoutrements" is used in its 6 most general sense, referring to 'the equipment of a soldier,' does 7 not mean that "arms" includes accessories or other "accoutrements." 8 38. Despite a handful of exceptions like those just cited, 9 in literally hundreds of cases, "arms" and "accoutrements" are 10 treated as separate categories of military gear. Here are some 11 typical examples from the Founding Era: 12 a) 1776 - "The Sum of ten Shillings ... to purchase said Fire Arms and Accoutrements" (Acts and Laws March Session, 13 Colony of Massachusetts Bay; here arms and accoutrements are separate, unlike the citation from 1777, above, from 14 the same source, where arms and accoutrements are lumped 15 together). 16 b) 1780 - "arms, ammunition, accoutrements, drums and fifes in possession of the respective regiments" (George 17 Washington, General Orders January 22). 18 c) 1783 - "Such of the Noncommissioned officers and privates ... shall be allowed the fire arms and accoutrements as an 19 extra reward" (George Washington, General Orders, May 1). 20 d) 1795 - "you will march .... with arms and accoutrements in 21 good order." (Incidents of the Insurrection in the 22 Western Part of Pennsylvania, in the year 1774. This example is from COEME; the other examples in this list 23 are from COFEA). 24 e) 1798 — "To hold his powder and his ball, his gun, accoutrements and all .... "[French Arrogance, or, "The Cat 25 Let Out of the Baq." This poetic example shows that the idiomatic phrase arms and accoutrements has become part 26 of the general language available not just to military 27 specialists but also to poets and novelists.] 28

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 26 of 47

1 39. A newspapers.com search for "accoutrements" returns 2 1,392 hits. There are 692 matches for the exact phrase "arms and 3 accoutrements."

4 40. Here is a mid-eighteenth-century British example from 5 the newspapers.com corpus where "arms" and "accoutrements" are 6 separate categories, as is "ammunition": "This Militia shall 7 receive their Arms, Accoutrements, and Ammunition from the 8 Ordnance." Derby Mercury, March 19, 1756, p. 3.

9 41. Similarly, there is this "ploughshares into swords"
10 example of a Cambridge University library to be converted to
11 military use: "[T]he new Building intended for a publick Library .
12 . may be converted into a Barrack, and be supplied with
13 Provisions, Arms, and Accoutrements, at the Expence of the
14 University" (Jackson's Oxford Journal, March 20, 1756, p. 2).

15 A search of "arms and accoutrements" in the Readex 42. 16 database of America's Historical Newspapers returns 3,103 hits from 17 1750-1800; and 2,036 hits from 1868-1880. This early example from 18 the colonial period appeared in the Boston Evening Post in 1750. It distinguishes "arms" from uniforms, "accoutrements," and other 19 20 military equipment: "All Gentlemen Volunteers [in Nova Scotia] . . 21 . shall be completely Cloathed in blue Broad Cloth, receive Arms, 22 Accoutrements, Provisions, and all other Things necessary for a 23 Gentleman Ranger."

43. This cite from the *Pittsburgh Gazette* in 1789 reflects a clear sense that "arms" and "accoutrements" are distinct categories in the new nation as well: "The militia . . . must be considered as the palladium of our security .... The formation and discipline of the militia of the continent should be absolutely uniform; and

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 27 of 47

1 that the same species of arms, accoutrements, and military 2 apparatus, should be introduced in every part of the United 3 States."

4 The text of a bill in Congress to establish a uniform 44. 5 militia appeared in the New York Journal in 1790. It confirms the Founding-Era sense that "arms," "ammunition," and "accoutrements" 6 7 make up distinct and separate elements of a soldier's kit: "There 8 shall be appointed an adjutant general for each state ... whose duty 9 it shall be to ... report[] the actual situation of their arms, 10 accoutrements, and ammunition .... Every non-commissioned officer or 11 private ... for appearing at such meeting or rendezvous without his 12 arms, ammunition, or accoutrements, as directed by this act, shall 13 pay the sum of twenty-five cents."

45. And this cite from 1868 clearly distinguishes what counts
as "arms," and what counts, separately, as "accoutrements": "At
Watertown Arsenal, Massachusetts ... the following Arms, &c., will
be sold:10,699 rifled and smooth-bore Muskets ...; 261 Carbines ...;
305 Sabres ...; lot of cavalry accoutrements, consisting of Bayonet
Scabbards, Cap Pouches, Cartridge Boxes, Gun Slings, Waist Belts,
&c." Daily Morning Chronicle (Washington, DC).

46. The newspaper data parallels that of COFEA: the phrase "arms and accoutrements" is almost always military. The phrase sometimes occurs alongside "ammunition" as a separate list item. "Accoutrements," when it appears alone in a military context in these newspapers, is a more general term, used for gear and rarely, for arms as well.

27 47. It is clear that "arms and accoutrements" was, during
28 the eighteenth and nineteenth centuries, a common military phrase,

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 28 of 47

1 in both England and America. English often yokes terms commonly 2 found together into idiomatic pairings, sometimes called binomials, 3 like "bacon and eggs" or "salt and pepper." Such pairs take on the 4 characteristics of a formula and often appear in the same order 5 (this order may be dictated by logical succession of events, or it 6 may be random). "Eggs and bacon" is rarer than "bacon and eggs." 7 Such ordered pairs are called "irreversible binomials," though 8 there is often nothing but custom to prevent anyone from reversing 9 the order.

10 48. The word "accoutrements" typically occurs in a list after 11 "arms" (more rarely, it may occur before "arms" as well), and it 12 is typically a separate category from "arms" (though not always, 13 as the above examples show).

14 There are over 47,000 citations in newspapers.com for 49. 15 "arms" or "accoutrements" in the period 1868-1900, and 15,799 cites 16 for the exact phrase "arms and accoutrements." Examining a 17 selection of the 15,799 citations of the phrase confirms that both 18 in England and the United States, "arms" and "accoutrements" are 19 separate categories. Here is one example from Gloucestershire, in 20 England, in 1868: "[A] letter was received from the Home Secretary, 21 pointing out the danger of permitting an accumulation of arms and 22 accoutrements to take place in prisons, and requesting, if there 23 were any arms or munitions of war stored in the prison, that they 24 should be removed to the nearest military depot." Gloucester Chronicle, January 4, 1868, p. 2. 25

2650. A similar cite from Iowa in 1868 states, "Persons having27in their possession any arms, accoutrements or ammunition belonging28to the State, are requested to return the same at once to the

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 29 of 47

1 Adjutant General, as proper places have been provided by the State 2 for the safe keeping of all such property." Cedar Falls Gazette 3 (Cedar Falls, Iowa).

51. And this, from Stroudsburg, Pennsylvania, also 1868, states: "More than half of the Seventh Cavalry (Custer's) decamped with their horses, arms, and accoutrements, and probably made their way to the gold regions of Colorado and Montana." *The Jeffersonian* (Stroudsburg, Pennsylvania).

9 52. The circa-1868 data confirmed the Founding Era data that 10 "accoutrements" is primarily a military term, and that when 11 "accoutrements" co-occurs with "arms," the terms refer to separate 12 categories of equipment.

13 One final note on "accoutrements": the United States 53. 14 Supreme Court's recent decision in New York State Rifle and Pistol 15 Association v. Bruen (No. 20-843, 2022) references North Carolina 16 v. Huntley (25 N.C. 418, 1843), a decision by the North Carolina 17 Supreme Court affirming Huntley's conviction for carrying a shotgun 18 illegally "to the terror of the people," as forbidden by the Statute 19 of Northampton in 1328. In that decision, the North Carolina 20 Supreme Court stated, "A gun is an 'unusual weapon,' wherewith to 21 be armed and clad. No man amongst us carries it about with him, as 22 one of his everyday accoutrements-as a part of his dress."

54. In the citation above, "accoutrements" does not refer to weaponry, but to the more general category of "everyday attire, or clothing." The court is saying that it may be normal to wear a shirt, or a belt, or shoes, but it is not normal to wear a gun in North Carolina in 1843. It is legal—the court agrees—to carry a gun for any lawful purpose, "either of business or amusement"—but 29

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 30 of 47

1 it is not normal or typical to do so. In affirming Huntley's 2 conviction, the court noted that his purpose in carrying a shotgun 3 was not a legal one.

4 5

# Some EARLY USE OF THE WORDS "MAGAZINE" AND "MAGAZINE WIND GUN," ALONG WITH INSTANCES OF REPEATER OR MAGAZINE GUNS IN THE FOUNDING ERA AND THE YEARS 1860-1880

Although most uses of the word "magazine" today still 6 55. 7 refer to printed periodicals, during the nineteenth century, one 8 sense of the term "magazine" narrows, referring more and more to 9 an "ammunition container," a primary sense of the word in reference 10 to firearms today. The OED defines magazine, sense IV b, as "A 11 container or (detachable) receptacle in a repeating rifle, machine-12 gun, etc., containing a supply of cartridges which are fed 13 automatically to the breech," with the earliest citation in this 14 sense from 1868 (OED online). It is noteworthy that as late as 15 1867, the British naval dictionary The Sailor's Word-Book retains the older definition of "magazine" as a gunpowder storage facility 16 17 on land or at sea: "A place built for the safe-keeping of 18 ammunition; afloat it is confined to a close room, in the fore or 19 after part, or both, of a ship's hold, as low down as possible; it 20 is lighted occasionally by means of candles fixed in the light-21 room adjoining it, and no person is allowed to enter it with a lamp 22 or candle" (Admiral W. H. Smyth and Vice-Admiral Sir E. Belcher, 23 The Sailor's Word-Book: An Alphabetical Digest of Nautical Terms, 24 London, 1867; the authors suggest that the placement of the 25 magazine room "as low down as possible" minimizes the risk of a 26 direct hit by enemy fire, and they note as well that no one is 27 permitted to carry a lighted flame into the ship's magazine room 28 to minimize the risk of an accidental explosion; see ¶ 32, above, 30

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 31 of 47

1 for the authors' definition of the term "cartridge-box" to refer 2 to the box or pouch used for transporting ammunition to a small 3 arm or a large gun). In addition, Smyth and Belcher define 4 "repeating fire-arm" as "One by which a number of charges, 5 previously inserted, may be fired off in rapid succession, or after 6 various pauses. The principle is very old, but the effective 7 working of it is new." Their definition-which does not mention 8 "magazine" in connection with such guns-acknowledges the existence 9 of earlier repeater guns, but judges them to have been ineffective. 10 Only the repeater guns designed and manufactured in quantity during 11 the period just before the dictionary's publication in 1867 are 12 actually judged to be "effective." The earliest example in COHA of 13 "magazine" referring to the ammunition compartment of a firearm is 14 dated 1882: "Solitary travelers still find it prudent to make a 15 display of a magazine rifle, and to keep a sharp eye on any roving 16 bands" (E. V. Smalley, "The New North-West," Century, September, 17 1882, pp. 769-79). COHA lists only 40 examples of "magazine rifle," 18 most of them between 1890 and 1930. "Magazine gun" appears in the 19 COHA data 16 times between 1920-2010. And an 1893 editorial in the 20 New York Times refers to the army's "new magazine rifle" ("New 21 Powder for the Army," New York Times, December 7, 1893, p. 4). 22 However, as with a very few instances of "accoutrements" including 23 "arms," there extremely small number are an of early 24 counterexamples between 1744 and 1820 where "magazine" refers to 25 the bullet compartment of a gun-not a pistol or rifle using 26 conventional gunpowder and bullets, but an air gun.

2756. The common, single-shot "wind gun" or "air gun" used28compressed air rather than ignited gunpowder to propel a ball, and

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 32 of 47

1 was much quieter than a traditional gun. Although the air gun did 2 not require powder or a match, the user had to re-charge the 3 compressed air cylinder once the air had been expended. The writer 4 Oliver Goldsmith found air guns to be useful for experiments in 5 physics, adding, "THIS, however, is but an instrument of curiosity, 6 and sometimes of mischief" (Oliver Goldsmith, A of survey 7 experimental philosophy, considered in its present state of 8 improvement, 1776). This newspaper story from the same period 9 reports that the scientist Joseph Priestley was injured by an 10 accidental discharge of an air gun: "We hear from Birmingham, that 11 the celebrated Dr Priestley, in a late trial of some experiments 12 with an air gun, was badly wounded by an accidental discharge of 13 it; the ball with which it was loaded, passing thro' one of his hands, and shattering it to pieces" (The Leeds Intelligencer and 14 15 Yorkshire General Advertiser, June 5, 1781, p. 3).

16 57. A number of newspaper references suggest that its 17 relative quietness made the air gun popular with criminals, and 18 many references to air guns refer either to accidental discharges 19 or to criminal assaults (to cite an example of the latter, numerous 20 newspaper accounts in 1785 suggested that the weapon which broke a 21 window in an attack on King George III's carriage was an air gun). 22 58. Air guns typically fired a single shot. However, there 23 are references in the corpora to approximately eight inventors 24 between 1744 and 1820 who built air guns capable of firing anywhere 25 from 9 to 50 balls without reloading the ammunition or recharging 26 the compressed-air cylinder. Lexical evidence suggests almost all 27 of these repeater air guns were experimental models rather than 28 guns available for military or civilian use.

# Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 33 of 47

1	59. The OED dates the term "magazine wind-gun" to 1744 in a
2	reference to an air gun capable of firing more than one shot without
3	reloading. "Magazine wind-gun" is the term used by its inventor, a
4	man named L. Colbe. I have found no other examples of the term
5	"magazine wind gun" in any database, suggesting that the phrase is
6	a hapax legomenon, or "oncer," terms that lexicographers use to
7	define a word that merits a definition, but that does not appear
8	anywhere else. Colbe also uses the term "magazine gun" for his
9	device, and that term does occur twice more in the data, suggesting
10	that it was never a common term. In an entry separate from its
11	entry for "magazine," the OED marks the usage of both "magazine
12	wind gun" and "magazine gun" as "rare" and "obsolete":
13	tmagazine wind-gun <i>n. Obsolete rare</i> a type of wind-gun
14	fitted with a magazine of bullets. 1744 J. T. Desaguliers Course Exper. Philos. II. 399 An ingenious Workman
15	call'd L. Colbe has very much improv'd it [sc. the old Wind-Gun], by making it a Magazine Wind-Gun; so that 10 Pulleta are so lodg(d in a Couity that they may
16	Bullets are so lodg'd in a Cavitythat they may besuccessively shot. [Oxford English Dictionary Online, s.v. magazine wind-gun.]
17	5.v. magazine wind-gun.]
18	60. The OED citation is from John Theophilus Desaguliers, A
19	Course of Experimental Philosophy (London, 1744), vol. II: 399-
20	402. Desaguliers, an assistant to Isaac Newton, was a member of
21	the Royal Society who specialized in mechanics and hydraulics. In
22	his treatise, Desaguliers offers an elaborate description of the
23	common, single-shot wind gun, more typically referred to as an air
24	gun, along with a three-page description of Colbe's so-called
25	"Magazine Wind-Gun," accompanied by a detailed drawing of the
26	mechanism of that gun. I have found no biographical information
27	about L. Colbe, inventor of the gun, and I have found no lexical
28	
	11

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 34 of 47

1 evidence that Colbe made more than one such gun, or if he did, that 2 it was produced in any significant numbers. Although Desaguliers 3 suggests that this "magazine gun" may be "the best Defence against 4 Highway-men, or Robbers that Travellers are aware of because when 5 they have cause to suspect them, they may make five or six 6 Discharges before a Thief can come within Pistol-Shot" (p. 402), 7 there is no evidence in any of the corpora that Colbe's invention 8 was ever used either by the military or by civilians for individual 9 self defense. And there is no lexical evidence that the other 10 repeater air guns invented before the mid-nineteenth century were 11 ever more than curiosities until workable models of what we now 12 call machine guns or automatic weapons, using conventional 13 gunpowder and bullets, not compressed air and balls, were produced during and after the Civil War. 14

15 61. As further confirmation that the magazine wind gun was 16 an anomalous and uncommon term, the OED definition of "magazine," 17 updated most-recently in 2022, gives the earliest date of the sense 18 of the word as 'a bullet-container' as 1868. The corpus evidence 19 confirms that the magazine wind gun is correctly dated by the OED 20 as 1744, and I have found only two references to "magazine guns" 21 in the 1790s and early 1800s, confirming that this usage of the 22 word remained rare. "Magazine wind-gun" and "magazine gun" do not 23 appear in the COEME or COFEA corpora. I have found no information 24 in the corpora on the availability or popularity of such guns, but the sparse lexical data suggests that they were not in common use. 25 26 A small number of references to later repeater wind guns 62. 27 indicate they were made, not by armorers, but by clockmakers and 28 other highly-skilled artists or artisans. There is no indication 34

## dase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 35 of 47

1 in the lexical evidence that repeater air guns were ever mass 2 produced or publicly available in the Founding Era. Several of the 3 citations I found treat these guns as curiosities and their owners 4 charge a small fee to anyone interested in looking at them (and in 5 one case, trying the gun out). Like Colbe's wind gun, they seem to 6 be rare inventions or curiosities, not weapons commonly available 7 to the military or to the American or English public. Besides 8 Colbe's gun, there are only two examples from the data that use 9 the word "magazine" in connection with a repeater air gun:

a) 1784 - "An artist of this town [Birmingham, Eng; the artist is also identified as a compass maker | has lately invented a magazine gun, that will discharge 45 bullets separately in two minutes and a half, each bullet would kill an ox at 40 yards distance; it is only charged once, and aim is taken with more certainty than with the fowling piece" (New York Packet and American Advertiser, New York, NY, August 5, 1784).

10

11

12

13

14

15

16

17

19

20

21

22

23

25

26

27

28

- b) 1815 Advertisement for "one magazine Gun, when once loaded can be discharged ten times in a minute" (New York Gazette, Aug. 30, 1815).
- 63. corpora contain just nine other references to The 18 repeater air guns, none of them using the word "magazine":

a) 1783 - "Vienna. A watchmaker has invented an Air Gun, which, without recharging, fires 15 times successively. A corps of Hunters are to be armed with these guns." (The Newcastle Weekly Courant (England), May 10, 1783, p. 3). There is no follow-up to indicate whether the corps of Viennese hunters did employ such a weapon.

b) 1792 - A number of American newspapers report on the 24 invention by a man, only identified as someone from Rhode Island, of a repeating air gun capable of firing twenty times without reloading. Here is one: "A person in Rhode Island has invented an Air-gun, which can be discharged, to do execution, 20 times, each time it is loaded.-As nothing is cheaper, and easier to be transferred, than the ammunition for the above pieces; and as saving much expense, they recommend themselves strongly to the

# Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 36 of 47

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Secretary at War, to be used in the approaching campaign against the Indians" (*National Intelligencer: National Gazette*, April 26, 1792, p. 3). There is no indication that the Secretary of War knew of the invention or acted on this suggestion. In fact, the following advertisement suggests that the repeater air gun in question was treated as a curiosity to be admired in a museum:

- c) 1792 "An air-gun, made by a young man, a native of Rhode-Island, but now resident in this city [New York], and which has been purchased by the subscriber, with a view eventually to make it the property of the American museum but wishes to reimburse himself in the following manner, viz. He will exhibit it to the examination of all persons desirous of viewing it, and of discharging a shot, for which they shall pay six-pence. This gun, when properly filled with air, will do execution twenty times, without renewing the charge, and for several times will send a ball thro' an inch board, at the distance of sixty yards, to be seen at the subscribers, No. 13 Maiden Lane, every day in the week, from 10 to 12 in the forenoon, and from 3 to 5 in the afternoon, Tuesday and Friday afternoons excepted, at which time it may be seen at the Museum. Gardiner Baker, Keeper of the Museum" (New York Daily Advertiser, February 9, 1792).
- "This carabine, lighter and smaller than the d) 1796 common ones, is composed of two barrels, the smallest of which contains 25 balls: and by a slight movement, they pass from the one to the other; which ball, by lowering the firelock, goes off with the same rapidity and carries further than if fired with powder, without the least noise, and that as often as a hundred times alternately, during the space of 8 or 10 minutes; after which, the reservoir being exhausted, it requires to pump in fresh air, which takes up at most, 16 minutes (The Independent Gazetteer (Philadelphia), August 6, 1796, p. 1). This report adds that the repeater air gun, invented in the 1765-1790), reign of Emperor Joseph II (reg. was distributed to German troops, and that a sample weapon was given to the Prince of Wales. The writer suggests such guns would be useful at sea, since they are not affected by dampness. But there is no indication in the corpora that the Royal Navy ever considered such a weapon.
  - e) 1797 "An Air GUN has been constructed by Messrs. Darlings and Wilkinson, of Cumberland, Rhode Island, upon a plan entirely new. It can be discharged twelve times with once loading, and will do execution with great

d	ase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 37 of 47
1 2	exactness, at fifty yards distance" ( <i>Columbian Centinel</i> (Boston), June 21, 1797).
2 3	f) 1801 — Multiple newspapers run the story of a repeater air gun invented by a man known as Girardami, identified
4 5	as a peasant, artist, and watchmaker, and variously referred to in gun history articles as Girandoni or Girardoni (those spellings do not appear in the corpora
6	that I consulted): "Girardami, a Tyrolese peasant, and self-taught artist, has invented an air-gun, which may
7	be discharged fifty times without pumping again. The first twenty shots penetrate through a door at an
8 9	uncommon distance. Girardami makes these air-guns himself, and likewise very good wooden watches" ( <i>The</i> <i>Caledonian Mercury</i> (Edinburgh), March 2, 1801, p. 2).
10	g) 1802 - The Newly-Invented Philosophical Air Gun That can
11	be used as Gun or Pistol, and discharge 20 balls with one loading of the globe [that is, the compressed-air
12	cylinder], unless the charge of air is let out at once. To be seen at Mr. Wyant's tavern, Market street, both
13	night and day. Admittance one fourth of a dollar (Telegraphe and Daily Advertiser (Baltimore), March 17,
14	1802). "Philosophical" in this sense is often used to refer to physicists experimenting with air guns to
15	measure air temperature, pressure, and volume, among other things (see, for example, the work of Desaguliers
16	and the experiments of Goldsmith and Priestley mentioned above).
17	h) 1807 - An ad for an auction includes, among other items,
18 19	"an air gun in compleat order which, when loaded will discharge twenty five times after being pumped" (American
20	Citizen (New York, NY), May 28, 1807).
20	i) 1814 — One article in the corpora refers to a repeater air gun taken by Lewis and Clark on their expedition to
22	the Pacific some eight years earlier, though the article itself has nothing to do with the expedition. Instead,
23	this letter to the newspaper, criticizing a politician for repeating the same things that he has been saying
24	for years, suggests as well that the Lewis and Clark repeater air gun was used not for hunting or warfare but
25	rather to dazzle the Indians that the explorers encountered with their "great medicine," thereby
26	ensuring a peaceful encounter: "he [the politician in question], forthwith, becomes a "great medicine," as the
27	Shoshones called captain Lewis' air gun" ( <i>National Advocate</i> , Mar. 23, 1814). This article was written ten
28	years after the start and eight years after the

# Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 38 of 47

1

2

3

4

5

completion of the expedition. I did not find any contemporaneous articles or firsthand accounts in the corpora of such a gun or how it may have been used.

j) 1819 - Finally, there is an ad for a French repeater air gun, for sale at 90 crowns: "which discharges 20 times before the air is expended" (Salem Gazette (Massachusetts), February 5, 1819).

6 64. To summarize: the corpus data shows that the terms 7 "magazine gun," "magazine wind gun," and "magazine air gun" are 8 extremely rare, occurring a mere three times in the corpora, along 9 with nine instances of repeater air guns that do not include the 10 word "magazine." In contrast, there are approximately 1,200 11 references to the single-shot "air gun" in the several databases 12 that I consulted. Subtracting an estimated 150 duplicates, that 13 leaves about 1,050 references to a single-shot air gun. Two of the 14 references, ¶ 63 (b) and (d) in the list above, suggest that they 15 would be useful weapons for the military; one,  $\P$  63 (a) above, 16 recommends their use to hunters; and one writer, Desaguliers, in 17 1744 (above, ¶ 60), speculates that the weapon could be useful 18 for self-defense. But for the most part, the references listed 19 above to early repeater guns seem to be treated as curiosities: 20 marvels of engineering constructed by clockmakers or other skilled 21 artisans, items to be seen in a museum or exhibited at a tavern 22 (see examples ¶ 63 (c) and (g) above). There is no lexical evidence 23 that they were manufactured in quantity. Their mechanisms were 24 complex, requiring a clockmaker's skill to design, make, and 25 repair. And it took time to re-charge the air cylinder (one source 26 in the list above,  $\P$  63 (d), suggests sixteen minutes for one such 27 repeater air gun, which would render them suboptimal in battle 28

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 39 of 47

1 situations). A couple of entrepreneurs charged admission to view 2 them (¶ 63 (c) and (g) above), and in one case, in  $\P$  63 (c) above, 3 patrons may pay six pence to try shooting the gun. The writer who 4 cites the Lewis and Clark repeater gun ( $\P$  63 (i)) suggests that 5 the explorers used the gun to "impress" potentially hostile Native 6 Americans rather than as a weapon against them. It too may have 7 been a one-off. Furthermore, only three of the twelve references 8 to repeater air guns refer to the bullet container as a "magazine," 9 a further indication that this usage of "magazine" is extremely 10 rare before 1820 (see ¶¶ 59 and 62, above).

11 65. With advances in the design and manufacture of guns and 12 ammunition, by the mid-nineteenth century, the term "magazine" 13 starts to appear in the sense 'ammunition container' (gradually 14 replacing the earlier terms "cartridge box" or "cartridge case"), 15 not in air guns but in ones using gunpowder and bullets.

16 66. COFEA and COEME do not cover the period past 1800. COHA, 17 which does have nineteenth century coverage, turns up only a 18 handful of uses of "magazine" in collocation with bullets, guns, 19 rifles, or weapons in the 1890s, and only three such uses cited 20 above before 1820. Most COHA cites for "magazine" refer to print 21 magazines; a smaller number from 1820-1880 refer to gunpowder 22 storehouses.

67. Searching the word "magazine" in newspapers.com results in more than 3.3 million hits, the vast majority of them also referring to print journals. It is not currently possible to tease out the subset of these citations to determine exactly how many refer to weapons rather than print journals. In addition to the patents granted in 1860 (see above), I have found twelve citations

#### dase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 40 of 47 1 in newspapers.com for "magazine carbine" and "magazine rifle" from 2 1860 to 1880: 3 (a) 1864 - Advertisement for "Henry's Magazine Rifle, 15 shots" along with other firearms. Chicago Tribune, 4 January 25, 1864, p. 1. 5 1864 - The War Department establishes a Board of (b) 6 Officers "for the purpose of examining, testing and recommending for adoption a suitable breech-loader for 7 muskets and carbines, and a repeater or magazine 8 carbine." New York Times, Dec. 22, 1864. A few other newspapers carry notices of this commission and later 9 report on its findings. 10 (C) 1865 - "The Meriden Manufacturing Company have a contract for 5,000 breech-loading magazine carbines, 11 Trippett's patent, for the State of Kentucky." Sunbury 12 (Pennsylvania) Gazette, June 3, 1865, p. 3. No follow-up information in the corpora. 13 14 (d) 1866 - "The Board would be unwilling to dispense 15 entirely with magazine arms, and as these same can be used ordinarily as single-loaders." The military Board of 16 Officers (see (a), concluded that the repeater gun 17 patented by Spencer had promise, though it was not yet ready for service until improvements could be made to the 18 mechanisms. Chicago Tribune, Dec, 19, 1866, p. 4. 19 1868 - Report of another trial of various weapons under (e) 20 the auspices of the Board of Officers, including "magazine and single breech loaders," (one of them 21 patented by Spencer), . New York Daily Herald, July 7, 1868, p. 8. 22 23 1873 - Marksmanship contest sponsored by the National (f) Rifle Association includes one contestant firing a 24 "magazine carbine" and 36 contestants firing other rifles. Brooklyn Daily Eagle, September 1, 1873, p. 4. 25 26 1874 - Another NRA-sponsored contest at Creedmoor (g) offers a second prize in one competition for NY State 27 National Guard members, "an elegant Ward-Burton magazine 28

d	ase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 41 of 47
1 2	carbine" valued at \$50. New York Times, September 17, 1874, p. 2.
3	(h) 1877 — A museum in Birmingham, England, displays Russian and Turkish rifles, including one Turkish
4 5	"Winchester magazine gun." Birmingham Daily Post, December 29, 1877, p. 5.
6	(i) 1878 — A display in Sidney, Australia, of a variety of firearms, including "some novelties from America
7 8	[including] the Evans Magazine carbine." Sydney Morning Herald, April 29, 1878, p. 5.
9 10	(j) 1879 — Under "Military Items," this notice: "An invoice of Hotchkiss Magazine Carbines were received here this week." Vancouver (Canada) Independent, August 14, 1879,
11	p. 5.
12 13	(k) 1880 — Under the heading "Maryland Military Affairs," report on the Maryland National Guard. "Each infantry organization is armed with breech-loading magazine
14	carbines." Baltimore Sun, January 16, 1880, p. 1. (1) 1880 - Advertisement of F. Lassetter & Co. includes
15 16	"Evans' Magazine Military Carbines [that] will carry twenty-two rounds." Otago (New Zealand) Witness, May 15,
17	1880, p. 1. The advertisement ran on multiple days in multiple newspapers.
18 19	A number of these references are optimistic about the future of
20	such weapons, but several note that single-shot weapons will predominate until the repeater mechanisms of these new rifles are
21 22	improved. Perhaps because the term "magazine" was largely
23	associated with military weapons, it remained relatively rare until
24	the 1920s. In any case, before mid-nineteenth century, bullets were kept in "cartridge boxes," sometimes called "cartouch boxes," or
25 26	"cartridge cases" or pouches, and these bullet storage containers
26 27	were part of the general category of military accoutrements, not
28	arms.

## Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 42 of 47

1	68. I did try to estimate, indirectly, the frequency of the
2	gun-specific use of "magazine" by running a Google n-gram search.
3	Google's n-gram viewer searches the corpus of digitized Google
4	Books. It can give a rough approximation of a word's frequency in
5	relation to the other words in the Google Books corpus. The results
6	appear as a graph. The n-gram viewer is capable of showing the
7	relative frequency of several words on the same graph. My n-gram
8	search showed that between 1750-1880 the word "magazine" occurs
9	with a frequency of 0.0005121511% in 1789 and a frequency of
10	0.0007324368 in 1880.1 A search for "magazine gun" returns no hits
11	for that same period. But a search for "magazine rifle" shows that
12	it does not appear in the database before 1813; there are few
13	instances from 1813 to 1820, with a frequency of 0.000000185%;
14	and then a sharp rise between 1863 and 1880, when the frequency
15	reaches a high of 0.000000936%, reflecting both the increased use
16	of the revolver and the invention of repeating rifles and machine
17	guns during the Civil War. <sup>2</sup> Searching "magazine carbine" from 1860-
18	1880 shows the term to be even rarer than "magazine rifle," with
19	no occurrences in 1860, a peak frequency in 1866 of 0.0000002185%,
20	and a sharp drop thereafter. <sup>3</sup> In contrast, an n-gram search for
21	"carbine" during those years shows that "carbine" occurs about 370
22	times more frequently than "magazine carbine" in the Google Books
23	corpus. <sup>4</sup> The Google n-gram data shows that the use of "magazine"
24	

<sup>&</sup>lt;sup>1</sup>https://books.google.com/ngrams/graph?content=magazine&year\_start=1750&year\_end= 1880&corpus=en-2019&smoothing=3).

<sup>26 &</sup>lt;sup>2</sup>(https://books.google.com/ngrams/graph?content=magazine+rifle&year\_start=1750&yea r\_end=1880&corpus=en-2019&smoothing=3).

<sup>&</sup>lt;sup>3</sup>https://books.google.com/ngrams/graph?content=magazine+carbine&year\_start=1860&y ear end=1880&corpus=en-2019&smoothing=3

<sup>&</sup>lt;sup>4</sup>https://books.google.com/ngrams/graph?content=carbine&year\_start=1860&year\_end=1 880&corpus=en-2019&smoothing=3

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 43 of 47

1 in the Founding Era was not associated with guns. By 1880, the 2 association with guns had become more common. Comparing the use of 3 "magazine" in 1880 in all contexts with the use of "magazine rifle" 4 that same year, it appears that the gun-related sense of "magazine" 5 represents approximately 0.0012% of the occurrences of the word 6 "magazine." In other words, the association exists in the period 7 surrounding the ratification of the Fourteenth Amendment, but it 8 is still a rare term.

9 69. The n-gram estimate, together with the sparse evidence 10 in COHA and the OED, all suggest that "magazine" in the sense 11 'device for holding bullets' forms only a very small subset of the 12 3.3 million occurrences of "magazine" in the newspaper corpora. 13 Although "magazine" in the gun-related sense shows a distinct rise 14 between 1864 and 1880, it took another thirty to forty years for 15 the 'bullet holder' sense of the word "magazine" to become more 16 common. Even then, text references to ammunition magazines often 17 appear, not in general discourse, but in legislation passed early 18 in the twentieth century restricting their size or use.

19 Most militia laws and regulations from the Founding Era 70. 20 specify minimum requirements for soldiers' weapons, ammunition, 21 and accoutrements. In contrast, most laws regulating weapons in 22 the mid-nineteenth century restrict or ban specific kinds of 23 weapons, often enumerating them, sometimes in terms we find 24 colorful today but which were common at the time (Arkansas toothpicks, Bowie knives, slung shots, swords in canes, pistols 25 26 capable of being concealed in a pocket). Occasionally, these laws 27 further identified such weapons as those used by "brawlers," 28 thieves robbers, or others bent on illegal activities. Other 43

Declaration of Dennis Baron (2:17-cv-00903-WBS-KJN)

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 44 of 47

weapons restrictions follow the English tradition of limiting
 possession of weapons by social class, nationality, or race.

3 71. I surveyed the gun regulations in the Duke Historical 4 Database (firearmslaw.duke.edu) from the early medieval period 5 through 1885 to see what terminology was used. Although militia 6 laws do specify weapons and other required accoutrements or pieces 7 of military equipment, including horses for the officers, those 8 laws that prohibit certain kinds of weapons during the two critical 9 periods (1776-1810; 1868-1880) do not single out parts of weapons. 10 Here is one exception, from a 1776 Maryland statute: "Resolved, 11 that no muskets or rifles, except by the owner thereof on his 12 removal to reside out of this province, or any gun barrels, gun 13 locks, or bayonets, be carried out of this province, without the leave of the council of safety for the time being." [Proceedings 14 15 of the Conventions of the Province of Maryland Held at the City of 16 Annapolis, in 1774, 1775, & 1776, 147]

17 None of the laws that prohibit weapons, aside from the 72. 18 Maryland statute mentioned above, specifies a gun part or 19 ammunition case or accoutrements of any kind. Although many present 20 a list of banned or prohibited weapons, usually without defining 21 them (the assumption is that the reader knows what they refer to), 22 none of the laws mention cartridge boxes, bullets, barrels, or 23 other parts of any weapons.

24 73. Later however, in the decades after the introduction of 25 "magazines" as 'carriers or holders of one or more bullets,' laws 26 and regulations prohibiting or limiting their nonmilitary use 27 started to appear. A 1919 Maine law bans guns with loaded magazines: 28 "No person shall have a rifle or shotgun, either loaded or with a

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 45 of 47

1 cartridge in the magazine thereof, in or on any motor vehicle while 2 the same is upon any highway or in the fields or forests." [1919 3 Me. Laws 193, Possession of loaded shotgun or rifle in motor vehicle 4 on highways, fields or forests prohibited; penalty.]

5 Laws banning "machine guns" or firearms with "magazines" 74. 6 capable of firing multiple times without reloading appear in 7 Vermont (1923 Vt. Acts and Resolves 127, An Act to Prohibit the 8 Use of Machine Guns and Automatic Rifles in Hunting, § 10); Rhode 9 Island (1927 R. I. Pub. Laws 256, An Act to Regulate the Possession 10 of Firearms), and Massachusetts (1927 Mass. Acts 145, An Act 11 Relative to Machine Guns and Other Firearms, ch. 326), among other 12 In defining "machine gun," Rhode Island's law bans states. 13 magazines which fire automatically or which hold more than twelve 14 rounds: "'machine gun' shall include any weapon which shoots 15 automatically and any weapon which shoots more than twelve shots 16 semi-automatically without reloading."

17 75. A 1933 Texas law bans "machine guns" capable of firing
18 "more than five (5) shots or bullets." [1933 Tex. Gen. Laws 219–
19 20, 1st Called Sess., An Act Defining "Machine Gun" and "Person";
20 Making It an Offense to Possess or Use Machine Guns, ch. 82]

21 Finally, the Federal Firearms Act of 76. 1934, which 22 introduced a nationwide system of taxes, fees, and registration 23 requirements for the transfer of certain types of guns, specifies 24 in great detail the nature of the "firearms" covered by the statute, 25 including their barrel length and type of firing mechanisms: "(a) 26 The term 'firearm' means a shotgun or rifle having a barrel of less 27 than eighteen inches in length, or any other weapon, except a 28 pistol or revolver, from which a shot is discharged by an explosive

#### Case 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 46 of 47

1 if such weapon is capable of being concealed on the person, or a 2 machine gun, and includes a muffler or silencer for any firearm 3 whether or not such firearm is included within the foregoing 4 definition." Note that the muffler or silencer is listed separate 5 from the firearm.

6 77. The Act also provides a specific definition of "machine 7 gun": "(b) The term 'machine gun' means any weapon which shoots, 8 or is designed to shoot, automatically or semiautomatically, more 9 than one shot, without manual reloading, by a single function of 10 the trigger." [48 Stat. 1236. 73rd Congress, 2nd Session, Ch. 757, 11 HR 9741].

12

#### CONCLUSION

13 78. To repeat, there is virtually no lexical data that I have 14 found showing that "arms" includes "accoutrements," "cartridge boxes," "cartouch boxes," "magazines," or any parts of weapons. To 15 16 the contrary, while "arms" is used as a general term for weapons 17 (typically swords, knives, rifles, and pistols), it does not 18 include ammunition, ammunition containers, flints, scabbards, 19 holsters, armor, or shields, which are included in the category 20 "accoutrements." And there is no evidence from the small number of 21 mentions of the repeater air guns in the databases before the Civil 22 War that such guns were used in the Founding Era by the American 23 or British military, or that they were widely available in that 24 period to civilians for hunting or self-defense. 25 11

26 //

- 27
- 28

d	ase 2:17-cv-00903-WBS-KJN Document 135-8 Filed 08/18/23 Page 47 of 47
1	I declare that the foregoing is true and correct under penalty
2	of perjury under the laws of the United States.
3	Executed on April 25, 2023, at Champaign, IL.
4	
5	
6	Jennis & and
7	clemms 2 and h
8	Dennis Baron
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	47