17cv1017

Case 3:17-cv-01017-BEN-JLB Document 50-11 Filed 03/05/18 PageID.4973 Page 1 of 40

1 2		EXHIBITS TABLE OF CONTENTS	
3	Exhibit	Description	Page(s)
4	1	Expert Report of James Curcuruto	00019-26
5	2	Expert Report of Stephen Helsley	00027-38
6			
7	3	Expert Rebuttal Report of Professor Gary Kleck	00039-102
8	4	Expert Rebuttal Report of Professor Carlisle Moody	00103-167
9	5	Expert Report of Dr. Christopher S. Koper	00168-195
$0 \mid$	6	Expart Dabuttal Dapart of John I. Dapahua	00203-241
1	0	Expert Rebuttal Report of John J. Donohue	00203-241
$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	7	Wikipedia page for "Magazine (firearms)", <a href="https://en.wikipedia.org/wiki/Magazine">https://en.wikipedia.org/wiki/Magazine</a> (firearms)	00242-249
3 4	8	Dagger 22 26 of NDA Cuide to the Paging of Distal	00250-255
5	0	Pages 33-36 of NRA Guide to the Basics of Pistol Shooting (2d ed. 2009)	00230-233
6	9	Pages 22-36 of John Malloy, Complete Guide to Guns	00256-273
7		& Shooting (DBI Books, Inc. 1995)	
8	10	Pages 95-99 of John Malloy, Complete Guide to Guns	00281-288
9		& Shooting (DBI Books, Inc. 1995)	
0	11	Rick Hacker, Magazine Disconnect, Am. Rifleman	00289-292
1		(Sept. 11, 2015)	
2	12	David B. Kopel, The History of Firearm Magazines	00293-333
3		and Magazine Prohibitions, 78 Albany L. Rev. 849 (2015)	
4			
5	13	Pages 168-70 of Lewis Winant, <i>Firearms Curiosa</i> (2009) (1st pub. 1954)	00334-339
6		· · · · · · · · · · · · · · · · · · ·	
7 8	14	16-Shot Wheel Lock, Am.'s 1st Freedom (May 10, 2014)	00340-342
		396 EXHIBITS 20-26 TO THE DECLARATION OF ANNA M. B.	

1	E-libit	Description	<b>D</b> a = a(a)
1	Exhibit	<b>Description</b>	Page(s)
2	15	Clayton E. Cramer & Joseph Olson, <i>Pistols, Crime,</i> and <i>Public Safety in Early America</i> , 44 Willamette L.	00343-366
3		Rev. 699 (2008)	
4	16	"Defence" Rapid-Fire Gun Patented: 15 May 1718,	00367-369
5		History Channel	00307 307
6	17	Pages 91-103 of Jim Garry, Weapons of the Lewis	00370-385
7	17	and Clark Expedition (2012)	00370-363
8	10	Dagge 60 70 of John Dlaston The History of Spining	00386-390
9	18	Pages 69-70 of John Plaster, <i>The History of Sniping</i> and Sharpshooting (2008)	00380-390
10	10	D 21 CT C ' D W' 11 10 D'''	00201 204
11	19	Page 31 of Jim Supica, Doug Wicklund & Philip Shreier, <i>Treasures of the NRA National Firearms</i>	00391-394
12		Museum (2013)	
13	20	Wikipedia page for "Girandoni Air Rifle",	00402-405
14		https://en.wikipedia.org/wiki/Girandoni_air_rifle	
15	21	Page 683 of Norm Flayderman, Flayderman's Guide	00406-409
16		to Antique American Firearms and Their Values (9th	00100 109
17		ed. 2007)	
18	22	Page 33 of Jim Supica, Doug Wicklund & Philip	00410-413
19		Shreier, Treasures of the NRA National Firearms	
20		Museum (2013)	
21	23	Pages 16, 148-49 and 167 of Jack Dunlap, American	00414-420
22		British and Continental Pepperbox Firearms (1964)	
23	24	Pages 249-50 of Lewis Winant, Firearms Curiosa	00421-425
24		(2009) (1st pub. 1954)	
25	25	Page 66 of Catalogue of Contents: Doe Run Lead	00426-428
26		Company's Museum (July 1, 1912)	
27	26	Pages 711, 713, and 716 of Norm Flayderman,	00429-434
28		Flayderman's Guide to Antique American Firearms	
20		and Their Values (9th ed. 2007)  397	
		EXHIBITS 20-26 TO THE DECLARATION OF ANNA M. B	ARVIR

17cv1017

1	Exhibit	Description	Page(s)
2	27	Pages 9-17, 19-44 of Harold F. Williamson,	00442-479
3		Winchester: The Gun That Won the West (1952)	
4	28	Pages 303-06 of Norm Flayderman, Flayderman's	00480-486
5		Guide to Antique American Firearms and Their Values (9th ed. 2007)	
6	29	Joseph Bilby, <i>The Guns of 1864</i> , in Am. Rifleman	00487-497
7		(May 5, 2014)	
8 9	30	Page 49 of Harold F. Williamson, Winchester: The	00498-501
10		Gun That Won the West (1952)	
11	31	Pages 11 and 22-35 of R.L. Wilson, Winchester: An	00509-526
12		American Legend (1991)	
13	32	Pages 116-29 of Louis A. Garavaglia & Charles G.	00527-543
14		Worman, Firearms of the American West (1985)	
15	33	Pages 307-12 of Norm Flayderman, Flayderman's	00551-559
16		Guide to Antique American Firearms and Their Values (9th ed. 2007)	
17	34	Pages 137, 1240-41 of the 2014 Standard Catalogue	00560-565
18		of Firearms (Jerry Lee ed. 2013)	
19	35	Pages 108-09 of Jim Supica, Doug Wicklund &	00566-570
20		Philip Shreier, Treasures of the NRA National	
21		Firearms Museum (2013)	
22	36	Pages 122-23 of Norm Flayderman, Flayderman's	00571-575
23		Guide to Antique American Firearms and Their Values (9th ed. 2007)	
24	37	Pages 60 63 67 71 204 208 244 45 Lawis Winant	00576-594
25	31	Pages 60-63, 67-71, 204-208, 244-45 Lewis Winant, <i>Firearms Curiosa</i> (2009) (1st pub. 1954)	UUJ / U-J74
26			
27			
28			
		398	

1	Exhibit	Description	Page(s)
2	38	Pages 708-09 of the 2014 Standard Catalog of	00595-599
3		Firearms	
4	39	Pages 23, 30-32, 38-39, 54-55, and 272 of John W.	00600-611
5 6		Breathed, Jr. & Joseph J. Schroeder, Jr., System Mauser: A Pictorial History of the Model 1896 Self- Loading Pistol (1967)	
7 8	40	John Elliot, A Sweeping History of the Mauser C96 Broomhandle Pistol, Guns.com (Jan. 26, 2012)	00612-624
9 10	41	Pages 191-92 of Jim Perkins, American Boys Rifles 1890-1945 (1976)	00625-629
11 12	42	Page 84 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013)	00630-633
13 14	43	Page 104 of Patrick Sweeney, Gun Digest Book of the AR-15 (2005)	00641-644
15 16	44	Page 294 of Gun Digest 24th Anniversary Deluxe Edition (John T. Amber ed. 1969)	00645-648
17 18	45	Page 1102 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013)	00649-652
19 20	46	Page 1173 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013)	00653-656
21 22	47	Pages 182-83, 432-33 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013)	00657-663
23 24	48	Pages 464-65 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013)	00664-668
25 26	49	Pages 72-73 of the 2014 Standard Catalogue of Firearms (Jerry Lee ed. 2013) and pages 216-17 of	00669-677
27 28		Joseph J. Schroeder, Jr., System Mauser: A Pictorial History of the Model 1896 Self-Loading Pistol (1967)	
40		399	

1	Exhibit	Description	Page(s)
$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	50	Page 121 of the 2014 Standard Catalogue of	00678-681
3		Firearms (Jerry Lee ed. 2013)	30070 001
4	51	Page 184 of the 2014 Standard Catalogue of	00682-685
5		Firearms (Jerry Lee ed. 2013)	
6	52	Pages 369-74, 377-78, 380-87, 391, 395-96, 398-99,	00693-736,
7		401-07, 409-11, 413-14, 438-47, and 454 from <i>Gun Digest</i> 2017 (Jerry Lee ed., 71st ed. 2016)	00744-747
8		Digest 2017 (Jeffy Lee ed., 71st ed. 2010)	
9	53	Pages from websites of firearm manufacturers advertising firearms	00748-774
10		_	00
11	54	Pages 73-97 of <i>The Complete Book of Autopistols:</i> 2013 Buyer's Guide (2013)	00775-800
12		•	
13	55	Robert A. Sadowski, <i>The Evolution of Glock Pistols</i> , <i>Pistols</i> , Handguns Buyer's Guide Mag. (Nov. 25,	00801-811
14		2015)	
15	56	Pages 87 and 89-90 of Massad Ayoob, The Complete	00819-823
16		Book of Handguns (2013)	
17	57	Pages 183-87 NRA Guide to the Basics of Personal	00824-829
18		Protection in the Home (1st ed. 2000)	
19	58	Christopher S. Koper, Daniel J. Woods & Jeffrey A.	00830-866
20		Roth, An Updated Assessment of the Federal Assault Weapons Ban: Impacts on Gun Markets and Gun	
21		Violence, 1994-2003 (Nat'l Instit. J. 2004)	
22	59	What Should America Do About Gun Violence? Full	00867-903
23 24		Comm. Hr'g Before U.S. Sen. Jud. Comm., 113th	
25		Cong. At 11 (2013)	
26	60	Gary Kleck, Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility	00904-924
27		of Linkage, 17 J. Research & Pol'y 28 (2016)	
28			
20		400	

EXHIBITS 20-26 TO THE DECLARATION OF ANNA M. BARVIR

1	Exhibit	Description	Page(s)
2	61	U.S. Dept. of Justice, Bureau of Justice Statistics,	00925-928
3		National Crime Victimization Survey, <i>Criminal</i> Victimization in the United States, 2008 Statistical	00,23,720
4		Tables, Table 37 (Mar. 2009)	
5	62	Massad Ayoob, Five Gunfighting Myths Debunked by	00929-938
6		Massad Ayoob, Personal Defense World (Oct. 14,	
7		2014)	
8	63	Jacob Sullum, The Threat Posed by Gun Magazine	00939-941
9		Limits (Jan. 13, 2016)	
10	64	Charles Remsberg, Why One Cop Carries 145	00942-946
11		Rounds of Ammo on the Job, PoliceOne (Apr. 17, 2013)	
12			
13	65	Gus G. Sentementes & Julie Bykowicz, <i>Documents Detail Cross Keys Shooting</i> , Balt. Sun (Mar. 21,	00947-949
14		2006)	
15	66	Gun Shop Owner Shoots, Kills Man During	00950-952
16		Attempted Robbery, WIS TV (Aug. 9, 2012)	
17	67	Nieson Himmel, Police Say Watch Shop Owner Kills	00953-955
18		4 <sup>th</sup> , 5 <sup>th</sup> Suspects, L.A. Times (Feb. 21, 1992)	
19	68	Jewelry Store Burglarized, Scene of Deadly 1994	00956-958
20		Robbery Attempt, nbc12.com (2012)	
21			
22			
23			
24			
25			
26			
27			
28			
		401  EVHIDITS 20 26 TO THE DECLARATION OF ANNA M. P.	ADVID

EXHIBITS 20-26 TO THE DECLARATION OF ANNA M. BARVIR

### WikipediA

# Girandoni air rifle

The **Girandoni air rifle** was an <u>airgun</u> designed by <u>Tyrolian</u> inventor <u>Bartholomäus Girandoni</u> circa 1779. The weapon was also known as the *Windbüchse* ("wind rifle" in <u>German</u>). One of the rifle's more famous associations is its use on the <u>Lewis and Clark Expedition</u> to explore and map the western part of North America in the early 1800s.

## **Contents**

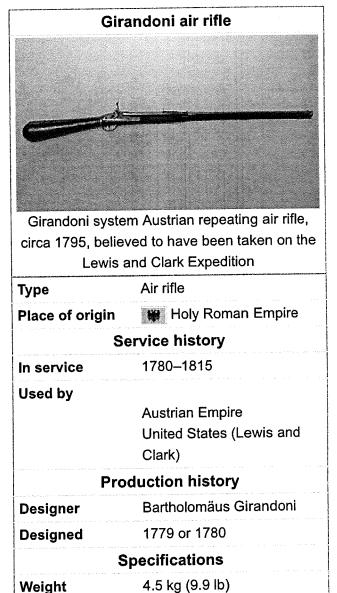
History and use
Design and capabilities
Importance
See also
Footnotes
Sources

# History and use

The Girandoni air rifle was in service with the Austrian army from 1780 to around 1815. The advantages of a high rate of fire, no smoke from propellants, and low muzzle report granted it acceptance. It did have problems and was eventually removed from service for several reasons decades after introduction. While the detachable air reservoir was capable of around 30 shots it took nearly 1,500 strokes of a hand pump to fill those reservoirs. Later, a wagon-mounted pump was provided. The reservoirs, made from hammered sheet iron held together with rivets and sealed by brazing, proved very difficult to manufacture using the techniques of the period and were always in short supply.

In addition, the weapon was very delicate and a small break in the reservoir could make it inoperable. Finally, it was very different from any other weapon of the time and any soldier using it needed to be highly trained.

The <u>Lewis and Clark Expedition</u> used the rifle in the demonstrations that they performed for nearly every <u>Native</u> American tribe they encountered on the expedition. [1][2]



120 cm (3.9 ft)

spherical balls

117 ft lbs (159 J)

Iron

.46, 210 grains (13.6 g)

about 500 fps (152 m/s),

20/21 round vertical hopper

Length

Cartridge

Muzzle velocity

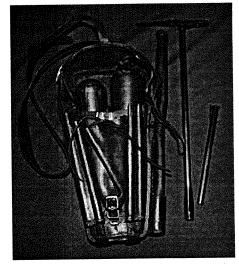
Feed system

Caliber

**Sights** 

# Design and capabilities

The rifle was 4 ft (1.2 m) long and weighed 10 lb (4.5 kg), about the same basic size and weight as other muskets of the time. It fired a .46 caliber ball<sup>[3]</sup> (caliber is contested, original sources such as Dolleczek<sup>[4]</sup> describe the caliber as 13mm (.51cal)) and it had a tubular, gravity-fed magazine with a capacity of 20 balls. This gravity operated design was such that the rifle had to be pointed upwards in order to drop each ball into the breech block. Unlike its contemporary, muzzle-loading muskets, which required the rifleman to stand up to reload with powder and ball, the shooter could reload a ball from the magazine by holding the rifle vertically while lying on his back and operating the ball delivery mechanism. The rifleman then could roll back into position to fire, allowing the rifleman to keep a "low profile". Contemporary regulations of 1788 required that each rifleman, in addition to the rifle itself, be equipped with three compressed air reservoirs (two spare and one attached to the rifle), cleaning stick, hand pump, lead ladle, and 100 lead balls, 1 in the chamber, 19 in the magazine built into the rifle and the remaining 80 in four tin tubes. Equipment not carried attached to the rifle was held in a special leather



Recreation of an Austrian Girardoni system Accoutrements Bag, including spare air flasks, air pump, wrenches, bullet mold and ladle

knapsack. It was also necessary to keep the leather gaskets of the reservoir moist in order to maintain a good seal and prevent leakage.<sup>[5]</sup>

The air reservoir was in the club-shaped butt. With a full air reservoir, the Girandoni air rifle had the capacity to shoot 30 shots at useful pressure. These balls were effective to approximately 125 yd (114 m) on a full air reservoir. The power declined as the air reservoir was emptied.<sup>[6]</sup>

# **Importance**

The Girandoni air rifle was an important first. It was the first <u>repeating rifle</u> of any kind to see military service. It was one of the first uses of a tubular magazine.

## See also

Weapons of the Austro-Hungarian Empire

## **Footnotes**

- 1. Wier, S.K. (2005). "The Firearms of the Lewis and Clark Expedition" (http://www.westernexplorers.us/Firearms\_of\_Lewis\_and\_Clark.pdf) (PDF). p. 12. Retrieved March 12, 2013.
- 2. Girandoni air rifle as used by Lewis and Clark. A National Firearms Museum Treasure Gun. (https://www.youtube.com/watch?v=-pqFyKh-rUI) at YouTube
- 3. The Beeman article on Girandoni air rifles in the sources section and an article in the German gun magazine *Visier* (issue 1/2007, page 141) claim the caliber was actually .463" (11.75 mm).
- 4. Die Entwicklung der Handfeuerwaffen im österreichischen Heere, 1896, Anton Dolleczek
- 5. A letter detailing regulations, "Signed, Vienna, 24th January 1788"; reproduced in Baker, G; Currie, C. The Austrian Army Repeating Air Rifle 2nd Ed., 2007.

### Case 3:17-cv-01017-BEN-JLB Document 50-11 Filed 03/05/18 PageID.4983 Page 11 of 40

6. Military writer August Haller claimed in an 1891 treatise *Die österreichische Militär-Repetier-Windbüchse* that the first ten shots would be effective to about 150 paces, the next ten shots up to 120-125 paces, the next ten out to 100 paces, and then the remaining air pressure in the reservoir would be too low.

### **Sources**

- Beeman's History on Austrian Large Bore Airguns (http://www.beemans.net/images/Austrian%20airguns.htm)
- I Benemeriti Di Cortina D'Ampezzo (http://staff.sunrise.it/polovalboite/giacomel/benemeriti1.htm)
- Die Windbüchse (http://www.braunschweiger-feldkorps.de/windbuechse.htm)
- [1] (https://www.youtube.com/watch?v=2dZLeEUE940) (original 1780 example)
- Girandoni air rifle as used by Lewis and Clark. A National Firearms Museum Treasure Gun. (https://www.youtube.com/watch?v=-pqFyKh-rUI)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Girandoni\_air\_rifle&oldid=807617820"

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The Leading Reference for Antique American Arms

# FLAYDERMAN'S GUIDE TO ANTIQUE AMERICAN FIREARMS ... and their values



### **ABOUT THE COVER**

Representing the newer end of the contents spectrum, the Colt Model 1911 pistol has become a sought-after collectible, and continues in use by military units, law enforcement personnel and private citizens.

The Model 1911 autoloading 45-caliber pistol was adopted in 1911, and Colt's first deliveries were made to Springfield Armory in early January 1912. Subsequently the Model 1911, with numerous modifications, has compiled an enviable service record with total production (to 1970) of over three million units, with most going to military contracts.

Author Norm Flayderman acquired the illustrated M-1911, frames and drawing from the Winchester Gun Museum in the mid-1970s when the museum contents were moved to the Buffalo Bill Museum in Cody, Wyoming. The Flayderman letter documenting the details of the acquisitions appears in the background, as does a letter from the Winchester Gun Museum, and is the sort of provenance that collectors value greatly. (Courtesy Little John's Auction Service)

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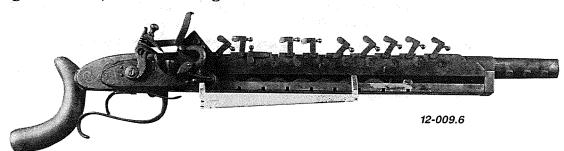
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Printed in the United States of America

Exhibit 21 00408

### XII: Perc. Sporting, Target & Plains Rifles; F.L. N. E. Rifles & Pistols

### Jennings All-Metal, Muzzleloading Multi-Shot Flintlock Rifle



Isaiah Jennings All-Metal Muzzleloading Flintlock Repeating Rifle. Invented and patented by Isaiah Jennings of New York City, 1821. Quantity unknown; extremely rare. Illustrated here is a twelve-shot specimen; a three-shot variant similar in appearance is illustrated and described in C.W. Sawyer's Our Rifles, 1800-1920. All brass construction, skeleton-type shoulder stock (identical to above) that is easily removable; the 21-inch octagon barrel is also quickly removable by merely loosening the thumbscrew at the breech and twisting. Lock marked I.JENNINGS. The multi-shot rifle illustrated takes twelve

individual, superposed loads of powder and ball, one on top of the other, and is fitted with twelve individual touchholes, each with a swivel cover which also act to position and align the lock as it slides from its forward position towards the rear to align the shots in reverse order. 21-inch octagon brass barrel; rifled 44 caliber bore. (See also Ellis-Jennings Repeating Flintlock Military Rifles 9B-009/010 purchased under contract by U.S. Government, 1829.) Value for these rarities indeterminate; estimates in mid-to high five-figure range would not be inordinate. 12-009.6

**Underhammer Rifles** 12-010 Plain Grade Underhammer Rifle 12-011 Fancier Grade (all 3 guns) Quite a variety of underhammer percussion rifles are seen on the collectors' market. They represent an

American makers. By far the great majority of underhammers were made in New England, although certainly all Eastern states are well represented as is California; these latter worth a premium. Underhammers are found in a wider range of sizes than almost any other American rifle. Quite a few are seen in lightweight "boys" or "buggy" sizes with correspondingly smaller proportions and dimensions while others increase to massive 20pound and 25-pound bench rest match target rifles made by some of the era's most noted riflesmiths, e.g., Billinghurst and Brockway. Specimens illustrated here are the most typical of those encountered. Underhammers run the gamut in quality from primitive, awkward, unmarked specimens to those displaying the very highest quality of workmanship and possessing pleasing,

interesting cross-section of arms by

artistic qualities.

As the underhammer mechanism was more simply fashioned than the full side lock type, their manufacture was obviously attempted by not a few unskilled craftsmen and gunsmiths—or more likely, blacksmiths! Thus, quite a few primitive appearing specimens are to be seen. If identifiable

markings as to maker and localities are present, values may be increased proportionately.

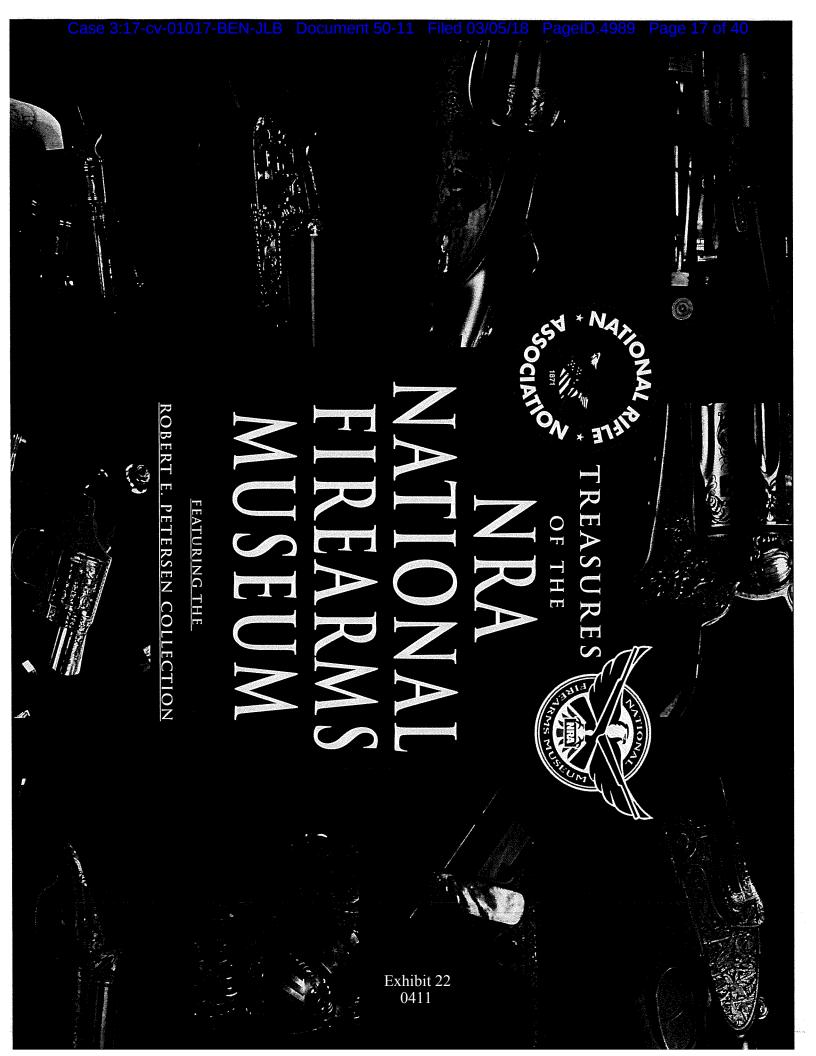
A factor to be considered for evaluation is the type of wood used for the stock; curly maple being quite desirable and worth a premium and is in equally stronger demand.

Undoubtedly one of the most prolific makers was Nicanor Kendall of Windsor, Vermont. Judging by the specimens seen over the years, he turned out a notable number of underhammers in varying degrees of quality circa 1830s to 1840s. Another well-known maker of this type was David H. Hilliard of Cornish, New Hampshire. The reader is referred to Chapter VII, American Percussion Pistols (Section E) for further information about the principle and use of the underhammer, and to the classic work on the subject, Underhammer Guns, by Herschel C. Logan.

The specimens illustrated here are all of the off-hand size and weight. Heavy bench rest match type underhammer rifles are classed and evaluated in the "Bench Rest Rifles" section of this

Plain grade underhammer rifle usually brass mounted; made without patchbox, plain walnut or maple stock (curly maple worth 10 percent to 20 percent premium on this type):

12-010 Values-Good \$300-600 Fine \$500-900



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or by visiting their Web site, www.nra.org/museumoffer

And you can view the collection of the National Firearms Museum at www.NRAmuseum.com

The museum is open every day of the week, except Christmas, at NRA Headquarters in Fairfax VA, near Washington DC. There is no admission charge.

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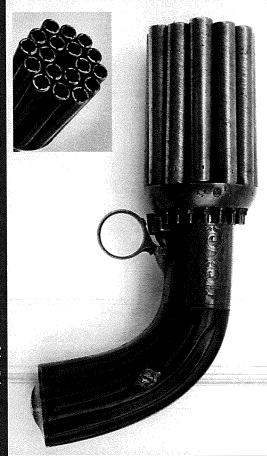
Printed in China.



shots into battery. Petersen Gallery After the first two barrels were fired, the barrel cluster could swivel to bring two more Four barrel flintlock pistol - This European pistol, ca. 1810-30, took 9mm lead balls



Jarre harmonica pistol – A European alternative to the revolver, this ten-shot 9mm percussion handgun, ca. 1860-70, advanced a fresh shot under the hammer by sliding the charge bar. Petersen Gallery



Europe, most pepperboxes held four to six shots in a cluster of rotating barrels that advanced Mariette 18 shot pepperbox – The pepperbox repeater was a contemporary of the Colt revolver, and its major competitor in the 1840s and 1850s. Made in both America and 33

Exhibit 22 00413



to a fresh charge with each pull of the trigger. This is a rare high capacity 18 shot .32 caliber

model Obsession College

tribe. This one varies from usual configuration with longer fixed knucks rather than folding, and century, it is named after the Parisian Apache street gangs of that era rather than the American

restriction of the baryoner Determine Callen

# AMERICAN BRITISH & CONTINENTAL



# PEPPERBOX FIREARMS



Exhibit 23 00415

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# CHAPTER 3 The Darling Pepperbox

HE brothers Barton and Benjamin M. Darling were granted a patent for the first American pepperbox, and the Darling patent was dated April 13, 1836. Mr. Benjamin Darling maintained until his death that he invented the first American revolver. (The word "Pepperbox" was not in vogue at the time of his invention.) The Darling patent claimed the rotation of the cylinder by cocking the hammer, but the Colt patent—dated February 25, 1836, some seven weeks earlier—also claimed this mechanical feature. Conflict with the Colt patent may have been the determining factor in causing the Darling brothers to cease manufacturing their Patent Rotary Pistol.

The great fire at the Patent Office in December 1836 destroyed nearly all records. There is almost no information existing either about the contents of early patents or about the routine of filing and recording applications and caveats. Obvious discrepancies are not susceptible to explanation. As an instance, it has not been possible to ascertain why Re-issue #124 obtained by Samuel Colt on September 24, 1848, reads: "Specification forming part of Letters Patent No. 138, dated February 25, 1836." That the original Colt patent is frequently referred to by collectors as Patent #138 brought the response that no Colt patent bears the number 138 and that patent #138 was granted to B. S. Gillespie and covered a machine for breaking ice. The Patent Office states that the 138 considered by collectors as the number of the original Colt patent "may refer to the annual number which might have been used at that time." For a few

years patents were numbered throughout the year, with the No. 1 repeated at the beginning of each year. The present system of numbering dates from July 4, 1836. Whether the annual numbers which antedated the present series were based on the British system of patent application numbers and were given at the time the applications were filed or whether the numbers were assigned when the patents were granted is not known.

The history of the operations of the Darling brothers is obscure, but it is known that not many of their patented pepperboxes were made. The Darlings were established gunsmiths in Bellingham, Massachusetts, when their invention was patented. Their first pepperbox was undoubtedly made there. A few more — perhaps twenty-five — were reported made in Shrewsbury, Massachusetts. Then the Darlings settled in Woonsocket, Rhode Island, and for a short time continued to manufacture the pepperboxes they had patented. Of the original iron frame Darling pepperbox, probably less than a dozen survive including those marked with the name of a dealer.

The first model Darling pepperbox is marked "B. & B. M. Darling" with a number following the word "patent." The gun pictured in Figure 1 bears the number "113" and is the highest number encountered, assuming that these are serial numbers—and most collectors agree on this assumption—the indication is that slightly more than 100 pieces were made. There is a possibility, however, that guns other than their patented pepperbox were included in this series of

# CHAPTER 11 Pepperboxes of Continental Europe

THE PEPPERBOXES of Continental Europe range from very ordinary to very elaborate and beautifully made pieces. Some were cheaply made to be sold at a low price. Others, especially those made by the top makers of France and Belgium, were works of art that sold at high prices. These sometimes have gold inlaid frames and barrels and may even have gold inlaid screw heads. Belgium has produced many of the poorest and cheapest guns ever made, but Belgium has also produced some of the finest weapons — including pepperboxes — ever manufactured.

Of all the Continental pepperboxes those marked "Mariette Brevete" are probably the most common. These were forerunners of the ring-trigger under-hammer pepperboxes to which J. R. Cooper of England claimed patent rights and produced in equal profusion.

Judging from the numbers that have survived, the pepperbox marked "Mariette Brevete" were obviously produced in great quantity. In fact, they were produced in such quantity that the maker should have attained fame in their making. Yet there is very little known about Mariette and his activities as a gunsmith. The definition of the French word "Brevete" in its noun form is: Patentee or patent; the verb form is: to patent or to license. A likely theory is, therefore, that Mariette licensed many makers to produce his patented pepperbox. That Mariette was not a gunsmith but merely the patentee is also a plausable answer.

The many forms in which the Mariette pepperbox is found leads to the conclusion that various makers participated in their production.

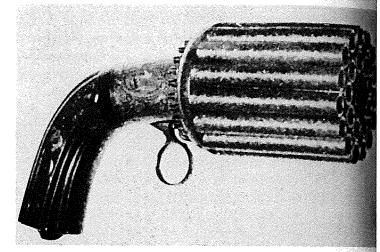


Fig. 1-

(Paul Mitchell Collection.)

These various shapes and forms, although basically similar, tend to make up a very colorful collection. Like the British bar hammer pepperbox, the exceptionally large and the very small size are the least common. The six-shot, ranging in overall length of from 7 to 8 inches, is the type most frequently encountered. The 4-shot, although not as common as the 6-shot, appears much more often than does the 5 or the 8-shot. A Mariette pepperbox with a barrel group in excess of eight is extremely scarce.

The 24-shot Mariette pictured in Figure 1 is from the material gathered by Mr. Winant before his death. The only information available is that it was, at the time the photo was taken, in the Paul Mitchell collection.

The barrels of the 18-shot pepperbox pictured in Figure 2 are arranged in a circle, the vents leading straight to the outer barrels and curving to the inner barrels. Successive trigger pulls

# PEPPERBOXES OF CONTINENTAL EUROPE

will fire two outer barrels and then one inner barrel.

The three Mariettes pictured in Figure 3 are of exceptionally fine quality. The bottom gun is of an unusual size for a Mariette. Top gun is 7% inches overall, 2% inch barrels, 8-shot .31 caliber. The middle gun is a piece of outstanding quality; 7 inches overall, 2½ inch barrels, 4-



Fig. 2-

(Frank Horner Collection)

shot of .36 caliber. Bottom gun: 5 inches overall, 2% inch barrels, 4-shot .22 caliber.

The pepperbox pictured in Figure 4 has a Mariette type mechanism, but is unlike a Mariette in that the barrel group is bored and milled from a single piece of metal. In addition, it has a simple, but very effective method of feeding caps to the nipples. A tube, removable for reloading, is mounted at the inside of the butt plate and runs up through the inside of the side plate and connects with an opening in the breech block. A spring controlled lever, mounted on the left side of the breech-block and manually operated, opens and closes this opening to allow caps to be fed to the nipples. With the exception of Belgian proof marks, this piece is unmarked. 64 inches overall, 3 inch barrel group, 6-shot of about .28 caliber.

The pepperbox pictured in Figure 5 is of the ring-trigger under-hammer type but is not

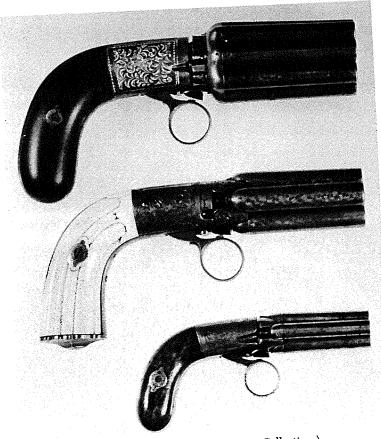


Fig. 3-

(Harry Mann Collection.)

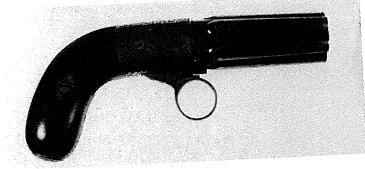


Fig. 4 - Mariette with capping device. (Frank Homer Collection)

marked Mariette Brevete. Marked "EONTAINE & LORON BTES. i VERSAILLES" on top of the frame, and "LORON" on two of the nipple partitions. This piece was probably produced before the filing of the Mariette patent, for Loron is known to have operated prior to 1836, the usually accepted date of the Mariette patent. The grips are of ebony carved in high relief. The

#### PEPPERBOXES OF CONTINENTAL EUROPE

a one-sixth turn of the cylinder, the opposite button rises and the pin indexes the barrel group at the proper position for firing. After the barrel group has completed a full rotation, it must be turned in the opposite direction for the next six shots. The overall length is 7% inches with a 3% inch barrel group of about .40 caliber.

Figure 63 shows a double-action German Reform Pistol chambered for the .25 ACP cartridge. The four barrels are in a vertical block. After the top barrel is fired, another pull on the trigger lifts the block and fires the cartridge in the second barrel. As the second barrel is fired, gas escapes from it through a small hole in the first barrel and ejects the shell from that barrel. The empty case from barrel two is ejected when barrel three is fired, and barrel three is cleared when the lowest barrel is fired. It is necessary to remove the case from the lowest barrel with a rod when the barrel block is removed for reloading. There is a safety lock on the left of the frame. The Reform is extremely thin and flat and has been a popular weapon on the Continent to carry in evening clothes.

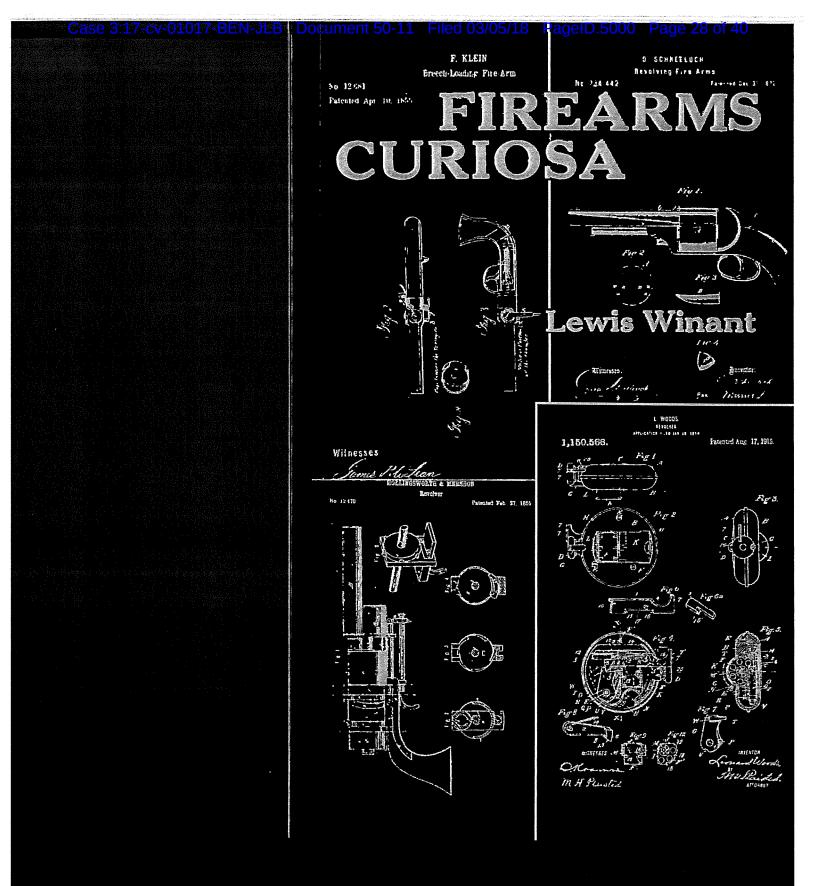
RECEIVED TOO LATE TO INCLUDE IN TEXT.



Fig. 64 - Marked "Herman Brevete" on top tang. 18-shot, 12 barrels in outer circle-6 in inner circle. Successive trigger pulls fire two outer barrels and one inner barrel. 9% inches overall, .31 caliber weight approximately 4 pounds.

(Dr. J. Otto Lottes Collection.)

Fig.65 - Another 18-shot Mariette but considerably smaller than Figure 64. 7¾ inches overall. 3¼ inch barrels of .31 caliber. (Dr. J. Otto Lottes Collection.)



# Firearms Curiosa by Lewis Winant

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Published several times since

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we find one with eight barrels, but rarely with more than eight. One with twenty-four barrels is a curiosity. Of the few in existence, a fine example is shown in figure 288. This is a European ring trigger percussion cap Mariette with the barrels in two concentric rows, fifteen in the outer row and nine in the inner.

An American revolver with twenty-four chambers is shown in illustration 289. This piece was formerly in the Philo Remington collection and was designed by Fordyce Beals. I do not know of the existence of another example of this gun, or in fact of any other 24-shot American revolver. Revolvers having two barrels and with from fourteen to twenty chambers were described in an earlier chapter. This gun has twelve chambers in each of two rows, but it has only one barrel. The barrel, shown in position to guide bullets from the outer row, is pivoted near the muzzle and has a rotating lock at the breech end. The barrel may be depressed against spring pressure and locked in position to direct bullets from the inner row of chambers. The nipples are staggered and there is a rotating lock back of the hammer that may be set to limit the motion of the hand so the hammer will strike nipples in the inner row. The rammer has a double head that reaches both rows of chambers.

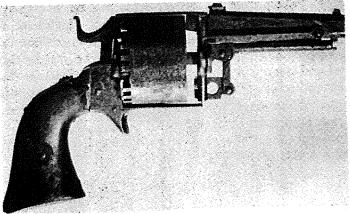
In illustration 290 is shown an all-metal folding revolver and in illustration 291 an all-metal folding pistol. Both guns are small and designed to be carried inconspicuously. The 5-shot revolver is Belgian and marked NOVO. It is double-action, hammerless and fires small low power cartridges. The thin curved metal grip may be put in the folded position shown when a stud is pressed. The folding pistol, figure 291, fires a single small caliber pin-fire cartridge and has several unusual features. It may be loaded by drawing back a pivoted breech section of the barrel when the gun is folded. After pulling up on the barrel muzzle until the barrel locks at a right angle to the frame, the gun may be cocked by pulling up the rear end of a heavy spring. This spring, which is screwed tight to the muzzle end of the barrel, acts as the striker to drive in the detonating pin of the cartridge. When the spring hammer is cocked, the gun may be fired by pressing a folding trigger which is aftached to the barrel. The gun may be unlocked for folding when a button on the side of the frame is pressed. An ejecting rod is carried under the frame.

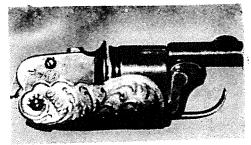
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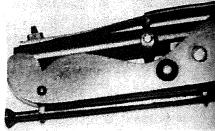
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FIREARMS CURIOSA









288. 24-shot pepperbox/ Paul Mitchell collection.
289. 24-shot revolver/ Henry M. Stewart collection.
290. Novo revolver/ Eddie Reider collection.
291. Folding pistol/ Dr. W. R. Funderburg collection.

# Catalogue of Contents

# Doe Run Lead Company's

MUSEUM

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MISSOURI

JULY 1, 1912

Articles	Price
3 Confederate carbines and cavalry guns	
14 Union carbines, Cavalry guns 4 Union muskets, Springfield, etc	
4 Union muskets, Springfield, etc	
3 Old style, 1st. breechloading, etc	ř
3 Old style, 1st. breechloading, etc	
Lyons battlefield	
Lyons battlefield  1 Old musket, flint lock, "Harpers Ferry"  2 Old muskets, flint lock, "Harpers Frrry"	[
2 Old muskets, flint lock, "Harpers Frrry"	
1 Old Indian fint lock rifle	
1 Old rifle	į
1 Old rifle and shot barrel combined	į.
18 Old swords and sabers, scabbards, bayonets, etc., from Union	ľ
and Confederate soldiers quarters	
1 Bayonet, flat trowel shape	ľ
3 U.S. belts and cartridge boxes, etc	'
1 Muzzle load, filmt lock pistol	
2 Muzzle load, flint lock pistols, large	k l
I Muzzle load, single barrel, cap and ball.	<b> </b>
1 Muzzle load, double borrel, cap and ball.	1
I Muzzle load, single, dueling pistol	
I Muzzle load, double barrel, changeable.	
I Revolver, 5 shot, small	Yesperica .
1 Revolver, 5 shot, large	
3 Revolvers, 5 shot. Army size	
I Revolver, 6 shot, French style.	
1 Revolver, 6 shot, French style	
1 Large muzzle loader Horse pistol.	
5 Large Navy revolvers, 38-44.	1 1
1 Large revolver, 6 shot. Starr	
1 Large revolver, 6 shot, Rogers Spencer.	
I Large old muzzie loader, fint lock, said to have belonged to Presi-l	
dent Wm. McKinley's father, initials cut F. McK.  1 Very large revolver, found on "Ousters" Battle field.	
1 Very large revolver, found on "Ousters" Battle field	
1 Revolver, Fepder Box, 4 Darrel	
1 Revolver, Pepper Box, 6 barrel	İ
1 Revolver, Pepper Box. 6 barrel	l i
1 Revolver Pepper Box, 12 barrel	
1 Colts small revolver in box G. W. C.	
1 Very old Spanish piece, brass barrel, pistol and knife combined.	1
1 Flint lock pistol, very fine finish, single and safety slide	
1 Double barrel pisto', patent safety slide	
1 Single barrel pistol, hammer and trigger underneath	
1 Small brass sash nistol, burglar proof, J. P. Wilson patent 1859	
1 Gun. Cut off and made to pistol	1
1 Old Rifle stock, was found at Hildebrand's Cave and given me	
by Willis Perryman, 1878	<b>l</b>
1 Very heavy rifle "Sharp" and said to have been used by Life	
Saving Crew, and can shoot a rod carrying line about two	
mfles out to sea	1
1 Large Shrapnel projectile for a Cannon 8 inch bore, it is now	
filled with nine cannon balls of 3 inches in diameter	
1 Large shell, exploded	ł .
1 Large shell, unloaded, whole Large conical shell, unexploded, found Battle Pilot Knob-	
Large conical shell, unexploded, found Battle Pilot Knob	
I Cannon Ball, from J. Shelby Co.	
1 Large cannon ball	ļ
I Small cannon ball	ž į
1 Time set explosive shell, round	ŧ ·
Time set explosive shell, round	
2 Time set explosive shells, oblong shape	1
1 Time set explosive shell, upright	
1 Piece shell found Fort Sumpter, 1863	1

The Leading Reference for Antique American Arms

# FLAYDERMAN'S GUIDE TO ANTIQUE AMERICAN FIREARMS ... and their values



### **ABOUT THE COVER**

Representing the newer end of the contents spectrum, the Colt Model 1911 pistol has become a sought-after collectible, and continues in use by military units, law enforcement personnel and private citizens.

The Model 1911 autoloading 45-caliber pistol was adopted in 1911, and Colt's first deliveries were made to Springfield Armory in early January 1912. Subsequently the Model 1911, with numerous modifications, has compiled an enviable service record with total production (to 1970) of over three million units, with most going to military contracts.

Author Norm Flayderman acquired the illustrated M-1911, frames and drawing from the Winchester Gun Museum in the mid-1970s when the museum contents were moved to the Buffalo Bill Museum in Cody, Wyoming. The Flayderman letter documenting the details of the acquisitions appears in the background, as does a letter from the Winchester Gun Museum, and is the sort of provenance that collectors value greatly. (Courtesy Little John's Auction Service)

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Exhibit 26 00431

### XV: Revolving Rifles

configurations of the guns on which they appear are correspondingly altered.

The field of revolving rifle collecting is noticeably less condition-conscious than most other American arms specialties. The usually low production figures of various makers and their relative scarcity on the collectors' market, combined with a certain erudition on the part of collectors who fancy these types, has placed emphasis (and consequently values) on their rarity factor with condition decidedly taking a back seat. Many of these types may be considered in great demand and eagerly sought after in almost any degree of condition. The foregoing, however, should certainly be modified and tempered by the fact that condition still plays a role in determining value.

### BIBLIOGRAPHY

(Note: There is a decided lack of published definitive information about American revolving rifles. Some material about them may be found in several books having general

coverage of American firearms and appearing in complete bibliographic listings elsewhere in this book. Most notable and valuable for the collector is *American Percussion Revolvers* by Frank Sellers and Samuel Smith. Others are *The Collecting Of Guns* edited by James E. Serven, *Spencer Repeating Firearms* by R. Marcot (best details on Ropers) and the numerous works covering Colt Firearms [the revolving rifles of this maker only have been adequately and completely covered].)

James, Edsall. The Revolver Rifles. Nashville, Tenn. Pioneer Press, 1974. Short monograph well illustrated on general history of revolving rifles.

(Author unknown.) The J. C. Lowe Collection Of Cylinder Guns. Issue No. 35 (February, 1951) The Gun Collector Magazine, Published Whitewater, Wisconsin. For many years a major source of reference on revolving longarms of all types. The entire issue devoted to a study of those in the collection of J. Churchill Lowe of St. Louis.

(\*) Preceding a title indicates the book is currently in print.

Allen & Wheelock Revolving Lip Fire and Percussion Rifles and Carbines See E. Allen Arms, Chapter V-A.

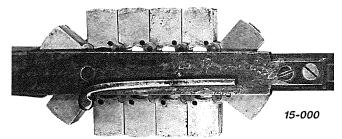
### Bennett & Haviland Many Chambered Revolving Rifle



Epenetus A. Bennett and Frederick P. Haviland, Waterville, Maine, Many Chambered Revolving Rifle. Made c. 1838-40. U.S. Patent No. 603, Feb. 15, 1838. Quantity unknown; likely less than ten

Twelve-shot. 40 caliber. 29" octagon barrel (dimensions, caliber likely will vary on all specimens).

Rectangular brass chambers horizontally mounted in linked belt fashion. Manually revolved by rotating disc at rear of



chambers. Locking latch for chambers on topstrap. Marking of well-known gunsmith N. KENDALL, WINDSOR, VT. observed on barrel of one specimen with BENNETT'S PATENT on frame.

Markings likely will vary on each. Very rare. Unique system:

15-000 Values—Good \$9,500 Fine \$20,000

## Billinghurst Revolving Pill Lock Rifles See J. & J. Miller

### Cochran Underhammer Revolving Turret Rifle

John W. Cochran, New York City, Underhammer Revolving Turret Rifle. Made by C. B. Allen, Springfield, Massachusetts c. mid-late 1830s. Total quantity estimated at slightly over 200.

36 and 40 caliber horizontally mounted turret or radial cylinder. First and Second Types nine-shot; Third Type seven-shot. Manually revolved. Single action; underhammer. Octagon barrels of varying length; 31" to 32" average.

Finish: Frames and turrets casehardened; barrels blued or browned. Walnut stock.

Topstrap over turret marked on forward section: COCHRAN®/MANY/CHAMBERD/ & /NON RECOIL/RIFLE Marked on rear of topstrap: C. B. ALLEN/SPRINGFIELD/MASS, and often, but not always, accompanied by an eagle motif.

Serial numbered from 1 to slightly over 200. Key to understanding variations of these arms as well as spotting occasional skullduggery with serial numbers, is the sequence in

which patents were granted. The initial patent claim filed by Cochran was followed closely by a claim for an improvement. Surprisingly, the improvement patent (which was the hinged top plate) was granted first (Patent No. 183) on April 29, 1837, while the original patent claim followed after as Patent No. 188, and granted on the same date. The Second Type bearing very low serial numbers would therefore be quite inconsistent.

(a) First Type: Topstrap completely circular in center with short vertical projection of narrow width at either end and bolted securely down over the turret by two screws; turret is not easily removable for loading. The underhammer is gracefully curved and entirely encircles the trigger acting in a dual capacity as trigger guard. Estimated quantity made approximately 30; serial numbers in the range of 1 to 30: 15-001 Values—Good \$5,000 Fine \$12,500

## XV: Revolving Rifles

latter, although far more rare than original flintlock, normally do not bring as much. The entire Collier story is yet to be told. Important data about them may be found in English Guns And Rifles by J. N. George (Small-Arms Technical Publishing

Company, Plantersville, South Carolina, 1947 and more recent reprint editions):

15-005 Values-Good \$12,500 Fine \$35,000

Colt Revolving Percussion Rifles and Shotguns See Colt Firearms, Chapter V-B.

**Daniels Underhammer Percussion Turret Rifle** 15-006

Henry and Charles Daniels of Chester, Connecticut, Underhammer Percussion Turret Rifle. Made by C. B. Allen, Springfield, Massachusetts c. late 1830s. Patent No. 610, February 15, 1838 and Patent No. 677, April 3, 1838. Quantity made unknown, estimated at less than 50. Rare.

Calibers and dimensions vary; average approximately 40 caliber with 34" octagon barrel. Eight-shot horizontal turret or radial cylinder of octagon shape. Manually revolved. Turret removed for loading by raising the hinged topstrap (as on the Second and Third Type Cochran) with the latch also acting as

rear sight. Unique protruding lip at each chamber which locks into breech of barrel to form a tight gas seal; actuated by lever mounted beneath breech on left side of frame that moves turret forward to effect gas seal.

Finish: Frame and turret casehardened; barrels blued or

Marked on forward section of topstrap: H & C DANIELS/ PATENT/CHESTER, CONN. Marked at rear of topstrap: C. B. ALLEN/SPRINGFIELD/MASS. accompanied with an eagle motif.

Walnut stock and forend; German silver furniture.

It is quite apparent that C. B. Allen made this shortly after his manufacture of the Third Type Cochran (q.v.). Note the similarities in design with the hammer mounted ahead of trigger: Values-Good \$7,000 15-006 Fine **\$12,500** 

Hall 15-Shot Percussion Revolving Rifle 15-007

Alexander Hall of New York City, New York, 15-Shot Percussion Revolving Rifle. Made c. mid-1850s. Quantity unknown. Very rare.

Calibers and dimensions will undoubtedly vary; specimen viewed was 38 caliber.

Bronze frame; concealed hammer; large cocking lever/spur located inside the very wide trigger guard just ahead of trigger.

Massive 15-chambered cylinder suspended from frame by a hinge.

Marked in script on cylinder HALL'S/REPEATING RIFLE/PATENTED JUNE 10/1856.

Value estimated only with no known recorded recent sales: 15-007 Values—Good \$9,500 Fine **\$20,000** 

Jaquith Revolving Underhammer Rifle

Elijah Jaquith of Brattleboro, Vermont, Revolving Percussion Underhammer Rifle. Made c. late 1830s; manufacturer unknown, but believed same as for Nichols and Childs (q.v.). Patent No. 832 of July 12, 1838. Quantity made unknown; extremely limited, estimated at approximately 25.

15-008

Calibers and dimensions vary; approximately 36 to 40. Barrels 30" to 34" part round/part octagon. Seven- and eight-shot.

The unique feature of these distinctive appearing arms is the hollow cylinder with sighting through the axis or the center of the cylinder. The cylinder itself is mounted above the barrel discharging from its bottom chambers. The deep star shaped revolving and locking cuts on the rear of the cylinder were utilized in the Jaquith pistol made by Springfield Arms Company to avoid infringement on the Colt's Patent at later date.

Finish: Frame and cylinder casehardened; barrel browned. Barrel markings: E. JAQUITH BRATTLEBORO, VT. (with small design of hand and pointing finger) and PATENT.

## XV: Revolving Rifles

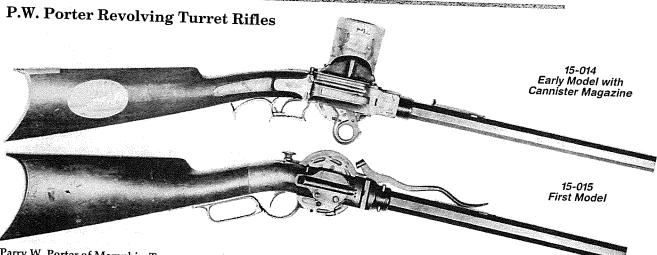


Average caliber 44, but could vary. Six-shot cylinder revolved, locked into position and hammer cocked by a downward motion of combination trigger guard and cocking lever. Round or part round/part octagonal barrels varying lengths; 23-1/2" average. Finish blued. Walnut stock.

Barrel marked: NORTH & SAVAGE/MIDDLETOWN CONN along top; PATENTED JUNE 1 1852 and CAST STEEL along sides. Additional markings also encountered THE WORLD'S REVOLVER

Also made in shotgun size of approximately 60 caliber with average 27" part octagonal/part round barrel, slightly longer frame and a full shield in front of cylinder. In place of the loading lever of the rifle there is a shotgun tamping rod/loading tool mounted below the barrel. Although fewer made, values either the same as rifle or slightly less as demand is not quite as strong:

15-013 Values—Good \$3,500 Fine \$7,500



Parry W. Porter of Memphis, Tennessee and New York City, Revolving Turret Rifles. Made c. 1850s. All (except for earliest model with cannister magazine) made by G. P. Foster of Taunton, Massachusetts. Total quantity estimated about 1,250. U.S. Patent No. 8,210 of July 18, 1851.

Calibers and dimensions as below. The vertically mounted radial cylinder or turret is rotated and locked by movement of the under-lever which simultaneously cocks hammer.

Markings on the barrels of all New York era types: ADDRESS/P. W. PORTER/NEW YORKand P. W. PORTER'S/PATENT 1851

An intriguing, though fictitious, legend has grown around Porter and his turret rifles stating that the inventor was killed while giving a demonstration of his arm to Colonel Samuel Colt, implying that but a few were made. Research has proven this story untrue and it seems likely that it was fabricated in the pre-World War II era to give color to an arms auction catalog! The wonderment is that so many specimens were produced since the arm had the same basic failing as the Cochran—at least one chamber aiming in the direction of the shooter at all times. Early Porter With Cannister Magazine. Believed made in Tennessee prior to Porter's move to New York to seek financial assistance for mass production. Quantity unknown; estimated at approximately 25. Very rare. It is a matter of record that this type was given government trials at the Washington, D. C. arsenal in February of 1853.

Automatic loading and priming; with a distinctive large round German silver cannister magazine mounted above the turret holding balls (on ramp around outer periphery), black powder (in mid section of cannister) and fulminate (in the tube mounted over center). 30 shots are held in the magazine; that

combined with the 8 loaded chambers gave the shooter a total of 38 shots providing all worked according to principle. Caliber average approximately 40; octagon barrels of varying lengths. All known specimens quite fancy with engraved symbolistic designs on the frame as well as the magazines and plaques inlaid in stocks (motifs such as clasped hands, sheaves of wheat, Masonic eye, town views and even an engraving of the capitol building at Washington, D.C.).

Most of those known specimens are without the magazine intact. Thus, prices reflected are for specimens without the cannister magazine. A premium of approximately 50 percent may be added to the price if complete with original magazine:

15-014 Values—Good \$9,500 Fine \$27,500

New York Types (Made by Foster in Massachusetts). Total quantity made estimated about 1,225 for all three models.

In debunking another arms collecting myth, it should be specifically noted that the First and Second Model Porters are not pill lock ignition as invariably described, but rather, are all percussion ignition, accepting the standard type percussion caps of the era and not pills. Caps are spring forced into alignment with the hammer as the gun is used. When the hammer struck, the cap was smashed flat against the outer wall of the turret (over the tiny flash hole which is often confused as a receptacle for pills) and the residue of the exploded cap fell clear through the slot provided underneath the magazine.

In the First and Second Models occasionally nipples may be found screwed into the frame (with magazines often removed or partly missing). Such alterations are usually performed by parties unfamiliar with the Porter system; thereby making it

Exhibit 26