

The Model of 1922
Series of Springfield Rifles



Michael Raborn, M.D.

The Model of 1922 Series of Springfield Rifles looks at the history, conception, production and evolution of the only 22 caliber line of rifles ever produced at The Springfield Arsenal.

The Model of 1922 Series of Springfield Rifles

By Michael Raborn, M.D.

Order the book from the publisher Booklocker.com

<https://booklocker.com/books/14861.html?s=pdf>

**or from your favorite neighborhood
or online bookstore.**

The Model of 1922 Series of Springfield Rifles



Michael Raborn, M.D.

Copyright © 2026 Michael Raborn, M.D.

Paperback ISBN: 978-1-961267-12-1

Hardcover ISBN: 978-1-961267-13-8

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, recording or otherwise, without the prior written permission of the author.

Published by BookLocker.com, Inc., Trenton, Georgia, U.S.A.

BookLocker.com, Inc.

2026

Contents

Table of Figures	vii
Table of Tables.....	xiii
Acknowledgements.....	xv
Preface.....	xvii
1 Introduction	1
2 Model 1922 Springfield	12
3 Model 1922 Springfield	16
3.1 Collecting the Original Model 1922.....	16
Barrels	20
Stocks.....	20
Sights	21
Bolts.....	23
Magazines	25
Finish	26
3.2 Collecting the altered or upgraded Model 1922.....	27
Barrels	27
Stocks.....	27
Receivers	30
Sights	35
Bolts.....	35
Magazines	37
Finish	38
4 1924 International Match Rifle.....	39
5 Collecting the International Match Rifle.....	46
6 1922 M1.....	51
Stocks.....	51
Bolts.....	53
Barrels	56
Receivers	56
Sights	58
Magazine Design.....	61
7 Collecting the 1922 M1.....	62
7.1 Collecting the original 1922 M1.....	62
Receivers	62
Bolts.....	66
Stocks.....	66
Barrels	67
Finish	67

	7.2 Collecting the upgraded 1922 M1	68
	Bolts and Receivers.....	69
	Barrels	72
	Sights	73
	Finish.....	75
8	T1 and T1E1	76
9	Collecting the T1 and T1E1	88
10	Springfield M2 Rifle	89
	Stock.....	90
	Receiver.....	91
	Barrels.....	92
	Bolts.....	93
	Sights	104
	Magazine.....	104
	Finish.....	104
11	Collecting the Springfield M2 Rifle	105
	Early M2 with Non-Headspace Adjustable Bolt.....	105
	Later Headspace Adjustable Bolt	109
	Armory/Field Upgrades	109
	Special Categories.....	109
12	Springfield 22 Hornet.....	118
13	Collecting the Springfield 22 Hornet.....	125
14	Tutorials.....	138
	14.1 Disassembly of 1922M1 bolt by Art Douville.....	138
	14.2 Disassembly of Springfield M2 Bolt by Art Douville	148
	14.3 Disassembly of 1922 bolt by Michael Raborn.....	159
15	Lagniappe	176
	Service 22 Caliber Rifle.....	176
	Short Action Prototype.....	177
	Club Rifle	180
	Outdoor Match Rifle (tribute)	181
	Sporters.....	182
	Bibliography.....	185

Table of Figures

Figure 1: Photo of Wingate device.....	1
Figure 2: Photo of tip of Wingate device	1
Figure 3: Photo of Dotter Device case for Krag rifle	1
Figure 4: Photo of label for Krag rifle Dotter Device case	2
Figure 5: Photo of components for Krag rifle Dotter Device	2
Figure 6: Photo of 22 rolling block SN 84.....	2
Figure 7: Photo of open breech.....	3
Figure 8: Photo of Stevens- Pope barrel breech	4
Figure 9: Photo of Stevens Pope front sight	4
Figure 10: Photo of Krag/ Stevens Pope rifle.....	4
Figure 11: Photo of Krag/ Stevens Pope carbine	5
Figure 12: Photo of Model 1885 Winder Musket SN 127712.....	5
Figure 13: Photo of open breech of the Winder Musket	5
Figure 14: Photo of Krag Gallery Practice Rifle	6
Figure 15: Photo of the open breech-note the small pin on the left side of the receiver	6
Figure 16: Photo of the carrier in place.....	7
Figure 17: Photo of carrier engaged	7
Figure 18: Photo of the script JFC cartouche for the Krag Gallery Practice Rifle	8
Figure 19: Photo of the HT rifle.....	8
Figure 20: Photo of the HT system including carriers, stripper clips, reloading tool, and cartridges.....	9
Figure 21: Photo of 1919 Cartridge box.....	10
Figure 22 Gallery Practice Cartridge Model 1919.....	10
Figure 23: Photo of Model 1922 Springfield	11
Figure 24: Photo of Winchester Model SN 447.....	13
Figure 25: Photo of Rifle No. 1 taken from “Arms and the Man LXVII,” No 26 August 1, 1920	14
Figure 26: Photo of Rifle No. 2 taken from “Arms and the Man LXVII,” No 26 August 1, 1920	14
Figure 27: Drawings of Rifle No. 1 (above) and Rifle No. 2 (bottom) taken from the “The ’03 Era” by Clark Campbell	15
Figure 28: Line Drawing of Caliber 22 Prototype of 1920 (above) and Caliber 22 Model of 1922 (below) taken from The ‘03’ Era by Clark Campbell.....	15
Figure 29: Photo of 1922 Receiver SN 4	16
Figure 30: Photo of SN 20 receiver.....	17
Figure 31: Photos of SN 20 (note lack of grasping grooves).....	17
Figure 32: Photo of receiver area of SN 20	18
Figure 33 Hold open fixture in place SN 779	19
Figure 34: Photo of receiver SN 4 with hold open feature sans device.....	19
(Figure 35: Photo of hold open device.....	20
Figure 36: Photo of GG stock on SN 712	21
Figure 37: Threaded nozzle on SN 712	21

Figure 38: Photo of 48B	22
Figure 39: Photo of inside of 48B	22
Figure 40: Photo of 1922 bolt	23
Figure 41: Photo of forward end of 1922 bolt	23
Figure 42: Photo of the 1922 bolt disassembled	24
Figure 43: Photo of heat code.....	24
Figure 44: Photos of 1922 magazines left is standard with right being the presumed prototype	26
Figure 45: Photo of issue stock	28
Figure 46: Photo of altered M1 issue stock	28
Figure 47: Photo of M2 Stock	28
Figure 48: Photo of wood loss around grasping grooves in a refinished stock.....	29
Figure 49: Photo of NRA marked stock.....	29
Figure 50: Photo of SN 179 with early M2 bolt marked with SN 179. Note lack of A or B.	31
Figure 51 SN517.....	31
Figure 52 SN 517, note early M2 bolt.....	31
Figure 53 SN 517 Receiver Without Remark	32
Figure 54 SN 517 Early M2 bolt Serial Numbered to Rifle	32
Figure 55 SN 517 Barrel date 12/33.....	32
Figure 56 SN 517 Benicia Arsenal Cartouche.....	33
Figure 57: Photo of M2 and A marked receiver.	33
Figure 58: Photo of M2 and A marked receiver	33
Figure 59: Photo of M2 and B marked receiver.	34
Figure 60: Photo of B marked receiver and unusual MII.	34
Figure 61: Photo of M2, A and B marked receiver.....	34
Figure 62: Photo of Lyman 48B (left) and 48C (right)	35
Figure 63: Photo of machine tool for grinding locking lug on Model 1922, Model 1922 M1, and Early M2 bolts	36
Figure 64: Photo of early (top) and later (bottom) M2 bolts.....	36
Figure 65: Photos of 1922 (left), 1922M1(center), and M2 (right) magazines.....	37
Figure 66: Photos of sporterized 1922M1 rifle with M2 bolt.....	38
Figure 67: Photo of SN 1930 (top) and SN 2010 (bottom).....	40
Figure 68: Photo of Woody (top) and Rimkunas (bottom) Triggers.....	41
Figure 69: Photo of bolt from SN 2010.....	42
Figure 70: Photo of Firing Pin Rod from SN 2010.....	42
Figure 71: Photo of firing Pin Rod from SN 1930 (standard pin rod on 1922M1).....	43
Figure 72: Note shorter throw of 2010 firing pin (top).....	43
Figure 73: photo of SN 2023	44
Figure 74: Receiver of SN 2023.....	44
Figure 75: Photos of Model 1922M1 Heavy Barrel Rifle SN 11001	47
Figure 76: Photos of the Sedgley Heavy Barrel rifle SN 9027	48
Figure 77: Photos of the Commercial Heavy Barrel rifle SN 8128.....	49
Figure 78: Photos of a Gilkey Heavy Barrel rifle SN 9736	50
Figure 79: Photo of the Issue rifle SN 226.....	52
Figure 80: Photo of Issue stock without trap	52
Figure 81: Photo of Issue stock with trap.....	53
Figure 82: Photo of 1922 M1 bolt assembled.....	54

Figure 83: Photo of M1 Bolt Assembled.....	54
Figure 84: Photo of 1922 M1 bolt disassembled.....	55
Figure 85: Photos of standard 1922 M1 firing pin rod (top) and later lightened flat sided firing pin rod for 1922M1 (bottom).....	55
Figure 86: Photo of barrel markings	56
Figure 87: Photo of early receiver. Note location of Model of 1922 drilled.	57
Figure 88: Photo of later style receiver markings. Note abbreviated M1922M1	57
Figure 89 Right side of receiver SN 5613	58
Figure 90 Left side of receiver SN 5613.....	59
Figure 91 Schematic of Hatcher Sight from The Springfield 1903 Rifle	59
Figure 92 Line Drawing of Hatcher Sight from The '03 Era.....	60
Figure 93 1922M1 SN 9189 with Winchester A5 Scope.....	60
Figure 94: Photos of 1922 magazine (left), 1922M1 magazine (center), and M2 magazine (right)	61
Figure 95: Photo of Early Issue rifle SN 5283.....	62
Figure 96: Photo of Early Issue receiver SN 5283	62
Figure 97 Barrel date 3/26 Early Issue Rifle SN 5283.....	63
Figure 98: Photo of Late Issue rifle SN 11836	63
Figure 99 Late Issue SN 11836.....	63
Figure 100 Late Issue Barrel Date 12/26.....	64
Figure 101: Photo of heat code of Late Issue rifle SN 11836	64
Figure 102: Photo of Early NRA rifle SN 7951	65
Figure 103: Photo of Early NRA receiver SN 7951	65
Figure 104: Photo of heat code for Early NRA rifle SN 7951	65
Figure 105: Photo of Late NRA rifle SN 20277	66
Figure 106: Photo of Late NRA receiver SN 20277.....	66
Figure 107: Photo of 1922M1 issue rifle SN 226	67
Figure 108: Photo of 1922M1 Issue receiver SN 226	67
Figure 109: Photo of issue stock	68
Figure 110: Photo of altered issue stock.....	69
Figure 111: Photo of M2 stock.....	69
Figure 112: Photo of remarked M1 receiver	70
Figure 113:Photo of M1 bolt (top) compared to early M2 bolt (bottom)	70
Figure 114: Early M2 bolt (top) compared to Late M2 bolt (bottom)	71
Figure 115: Photo of M1 bolt disassembled.....	71
Figure 116: Photo of late M2 bolt disassembled	72
Figure 117: Photo of flat muzzle (top) and rounded muzzle (bottom) in a 1942 barrel.....	72
Figure 118 Lyman 48C without and with slot	73
Figure 119 Photo of Issue Rifle SN 16290	73
Figure 120 Issue Rifle SN 5179.....	74
Figure 121 Open Anti Aircraft Apertures	75
Figure 215 Garand Bolt.....	76
Figure 216 Photo of Garand Bolt Disassembled	77
Figure 217 Face of Garand Bolt Face (left) Face of 1922 Bolt (right)	77
Figure 218 T1 SN3	78
Figure 219 T1 SN 3	78
Figure 220 T1 SN 3 Magazine Cage System.....	78

Figure 221 T1 SN 3 Magazine Cage System Disassembled.....	79
Figure 224 T1 SN 3 Magazine Cage System Assembled	79
Figure 225 T1 SN 11	80
Figure 226 T1 SN 11	80
Figure 227 T1 SN 11	80
Figure 228 T1 SN 11 Magazine Cage System.....	80
Figure 229 Model 1922 SN 1089.....	81
Figure 230 SN 1089.....	81
Figure 231 Barrel Date 5/25.....	82
Figure 232 T1 SN 8	82
Figure 233 T1 SN 8 Barrel Date 9/27	83
Figure 234 T1 SN 8	83
Figure 235 T1 SN 8	83
Figure 236 T1 SN 8. Magazine Cage System.....	84
Figure 237 T1 SN 8 Magazine Release	84
Figure 238 T1E1 SN 12.....	84
Figure 239 T1E1 SN 12.....	85
Figure 240 T1E1 SN 12.....	85
Figure 241 T1E1 SN 12 Magazine Well.....	85
Figure 242 T1E1 SN 12 Barrel Date 2/27	86
Figure 243 Comparison of T1 SN 8 (above) and T1E1 SN 12 (below)	86
Figure 149 The Springfield Arsenal Today	88
Figure 130: Photo of broken bolt hooks	89
Figure 131: Photo of broken bolt hook	90
Figure 132: Photo M2 stock rifle.....	90
Figure 133: Photo of 1903 Receiver (top) 22 Receiver (bottom).....	91
Figure 134: Photo of NRA M2 rifle SN 5604	92
Figure 135: Photo of NRA M2 receiver SN 5604.....	92
Figure 136: Photo of late (top) and early (bottom) crowns	93
Figure 137: Photo of M2 (left) and M1 (right) magazine	94
Figure 138: Photos of three magazine retention springs from different angles.....	95
Figure 139: Photo of posterior aspect of magazine to show notch.....	96
Figure 140: Photo of early (left) and late (right) extractors.....	97
Figure 141: Photo of M2, 1922M1 and Model 1922 bolt faces with maximum firing pin travel.....	97
Figure 142: Photo of late M2 bolt	98
Figure 143: Photo of late M2 bolt disassembled	98
Figure 144: Photo of M1 bolt and M2 bolt ejectors	99
Figure 145 Photo of M1 Ejector (top) and M2 Ejector (bottom).....	99
Figure 146: Photo of Model 1922 SN 856	100
Figure 147: Photo of bolt SN 856	100
Figure 148: Photo of bolt of SN 856.....	101
Figure 149: Photo of bolt SN 856	101
Figure 150: Photos of types of adjustment features of the later M2 bolt (flat head screwdriver, lead plug [middle], and Allen head screw [far right]). Note lack of adjustment feature on early M2 bolt (far left).....	102

Figure 151: Adjustable headspace surfaces of the M2 bolts. Note far left early M2 bolt lacking this feature.	102
Figure 152: Fixation Devices left to right: Early M2 bolt (none), Later M2 bolts with screws, and finally a copper plug.....	103
Figure 153: Photo of Ordnance Stamp in Lead Covering the Adjusting Device.....	103
Figure 154: photo of bolt serial number placement	104
Figure 155: Photo of early rifle SN 1283.....	105
Figure 156: Photo of Early M2 receiver SN 1283.....	105
Figure 157 Barrel Date 7/32 Rifle SN 1283	106
Figure 158: Photo of A marked M2 Receiver.....	106
Figure 159 Barrel marking on late 1942 barrel	107
Figure 160 Receiver Marking on M2 SN 13982B	108
Figure 161: Photos of B Marked M2 Rifle and Receiver.....	108
Figure 162: Photo of early [top] and later [bottom] M2 bolts.....	109
Figure 163: M2 NRA SN 5604.....	110
Figure 164 M2 NRA SN 5604.....	110
Figure 165 M2 NRA SN 5604.....	110
Figure 166: Photo of NRA marked stock.....	112
Figure 167 M1/M2 SN 20197	113
Figure 168 M1/M2 SN 20197 (note early M2 bolt).....	113
Figure 169 Bolt for 1922M1/M2 SN 20197	113
Figure 170 M1/M2 SN 20197	114
Figure 171 M1/M2 Barrel 11/31 SN 20197.....	114
Figure 172 Photo of Rifle and receiver 1922M1/M2 SN 19334.....	116
Figure 173 Barrel Date 5/37 of Rifle 1922 M1/M2 SN 19334.....	117
Figure 174: Photos of Bolts (M1 and M2) of Rifle 1922 M1/M2 SN 19334.	117
Figure 175 Photo of 25-20 Cartridges	118
Figure 176: Photo of 25-20 Cartridges	118
Figure 177 Winchester 22 WCF Cartridge.....	119
Figure 178: Photos of Velodog Cartridges	119
Figure 179: Photo of Captain Grosvenor Liebenau Wotkyns.....	120
Figure 180: Photo of Colonel Townsend Whelen	121
Figure 181: Photo of Al Woodward and Captain George A. Woody.....	121
Figure 182: Photos of early Hornet Cartridges (note lack of 22 notation).....	122
Figure 183 Colonel Whelen's Hornet	124
Figure 184: photo of SN 20196	125
Figure 185: Photos of SN 9104	126
Figure 186: Photo of SN 20307	127
Figure 187: Photos of altered stock with checkering SN 20803	128
Figure 188 SN 8214.....	129
Figure 189 SN 8214.....	129
Figure 190 SN 8214.....	129
Figure 191 SN 8214.....	130
Figure 192 SN 8214.....	130
Figure 193: SN 8214.....	130
Figure 194: Photo of Griffin & Howe SN 1050.....	131

Figure 195: Sedgley 1922M1 Hornet SN 19543	132
Figure 196 Unknown Gunsmith Model 1922 SN 942	133
Figure 197 Unknown Gunsmith Model 1922 SN 942	133
Figure 198 Unknown Gunsmith Model 1922 SN 942	134
Figure 199 Unknown Gunsmith Model 1922 SN 942	134
Figure 200: Photos of Model 1922 SN 942 bolt.....	135
Figure 201: Photo of receiver marked “7” “22 EX” “NO. 101”	136
Figure 202: Photo of what appears to be an M2 Hornet in an NRA style stock.....	136
Figure 203: Photo of an early M2 bolt converted to center fire.....	136
Figure 204: Photo of barrel dated 1942.....	137
Figure 205: photos of S Stock M2 Rifle.....	176
Figure 207: photos of the short action rifle taken from an article in U.S. Martial Arms Collector Issue 152 page 15.....	178
Figure 208: photo of short action rifle full length	179
Figure 209: photo of short action rifle rear sight.....	179
Figure 210: M2 bolt compared to short action rifle bolt.....	179
Figure 211: photo of M2 extractor compared to short action rifle extractor.....	180
Figure 212: Photo of Club Rifle SN 15553B.....	181
Figure 213: Photos of Tribute Outdoor Match Rifle SN 1984.....	182
Figure 214: Photos of Tribute Outdoor Match Rifle SN 1984.....	182

Table of Tables

Table 1: Distribution of first 500 Winchester Model 52 rifles.....	12
Table 2: Bore and Groove dimensions of rifle No. 2	20
Table 3: Bolt spring measurements for the Model 1922.....	25
Table 4: Dimensions of changes made to the Model 1922.....	51
Table 5: List of A Marked M2s.....	107
Table 6: List of B marked M2 receivers.....	107
Table 7: List of NRA M2 rifles	111
Table 8: Known Serial Numbers of M1922M1/M2 Rifles.....	112
Table 9: List of potential 1922 M1/M2s.....	115

1 Introduction

The search for an inexpensive way to teach marksmanship to troops stretches back to Civil War times when Confederate Major General Henry Heth introduced the idea of using just the primer-armed muzzle-loader aiming at a candle three feet away from the end of the muzzle.

In 1875, using nonexplosive systems, Colonel George Wingate produced the Manual for Rifle Practice. His system was adopted by the New York National Guard and utilized a spring-loaded rod device introduced into the barrel of its .50-70 caliber rolling-block muskets. By cocking the musket and aiming at a paper target, the soldier could pull the trigger and release the device to strike the target, leaving a small hole and indicating his likely point of impact. Later, the Dotter Device, built on the same concept but only smaller, would be used in firearms from the Krag to the Model 1911 pistol.



Figure 1: Photo of Wingate device



Figure 2: Photo of tip of Wingate device



Figure 3: Photo of Dotter Device case for Krag rifle



Figure 4: Photo of label for Krag rifle Dotter Device case

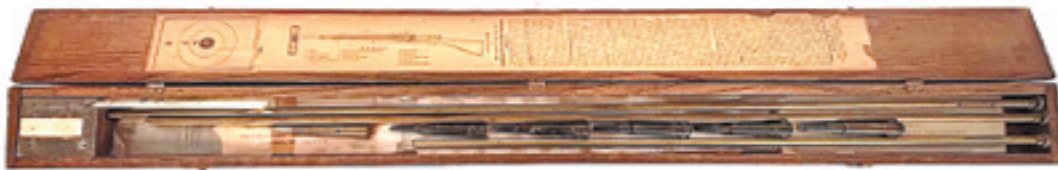


Figure 5: Photo of components for Krag rifle Dotter Device

In 1883, Winchester would modify one hundred of the US Navy's Springfield rolling block muskets to use .22 rimfire cartridges. This was done by fitting a 24-inch barrel liner and altering the firing pin block to rimfire configuration. These were used by the US Naval Academy Midshipmen to good effect. A number of these were used for shipboard gallery practice during the Spanish-American War. Figure 6 shows a photo of one of these .22-caliber rolling-block rifles.



Figure 6: Photo of 22 rolling block SN 84



Figure 7: Photo of open breech

From William Brophy's work, we learn of General Order No. 13, National Guard of Pennsylvania dated April 26, 1904. This order authorized the use of .22-caliber rimfire barrels, which were then being designed by H.M. Pope and produced by the J. Stevens Arms & Tool Company. No military organization moves without orders, and this order led to the use of these excellent, accurate eight-groove barrels with the relatively slow rifling of one turn in 28 inches. Mounting these barrels in Krag actions, the bore was eccentrically placed, putting the chamber at twelve o'clock. This allowed the use of the standard Krag center-fire bolt and the Krag extractor (not ideal but pushing down on the Krag extractor would usually work without requiring additional engineering for an extractor). The .22-caliber cartridges facilitated rifle practice at a much lower cost using the standard small arm of the Guard.

These Stevens-Pope barrels were first used by the New Jersey National Guard, but they would eventually be used by National Guard units in Ohio, Washington, and Pennsylvania. In addition to the 30-inch rifle barrels used in Krag rifle actions, a few 22-inch carbine barrels were used in New Jersey.



Figure 8: Photo of Stevens- Pope barrel breech



Figure 9: Photo of Stevens Pope front sight



Figure 10: Photo of Krag/ Stevens Pope rifle

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES



Figure 11: Photo of Krag/ Stevens Pope carbine

In 1905, upon hearing of the Stevens-Pope barrels, Springfield would begin developing its own .22-caliber barrels for use in the Krag receivers. This was a busy time at Springfield because while work was going on with the development of a .22-caliber Krag rifle work was also being done to develop the 1903 Model Springfield. Plans for the 1903 would involve not only a .30-caliber rifle, but a .22-caliber model as well. Finally, since the decision to use a .22-caliber trainer had apparently been made, several orders had been placed for numbers of .22 short rim fire, single-shot Model 1885 Winchester rifles (i.e. Winder muskets). Figure 12 shows an example of the Winder musket.



Figure 12: Photo of Model 1885 Winder Musket SN 127712



Figure 13: Photo of open breech of the Winder Musket

These Winder muskets would be in use from 1904 until 1923 when the army would officially designate a new .22-caliber trainer. Use of the Winder musket would go on as late as 1928 in National Guard units and ROTC programs. The rifles were sold through the Department of Civilian Marksmanship (DCM) through 1942. Overall, a total of 11,419 ordnance-marked Winder muskets were delivered to the US Army.

Both the Krag rifles and the 1903 designs would involve cartridge-holders, offset bores and barrel liners similar to the later Numrich Arms conversion kits. Initial designs were single-shot rifles. Offset bores and attempts to utilize the stock extractors would be tried. Eventually, Springfield would produce the Krag Gallery Practice Rifle. This design would be a single-shot affair with a complicated carrier and extractor system that would handle the only caliber. .22-Long rimfire cartridge ever used by the US military. To load the rifle, the cartridge would be placed into the carrier and the bolt closed. After firing, the bolt would be opened and the full extent of the bolt travel would be used to extract the carrier holding the fired case and to engage a small pin in the left-hand side of the receiver, which would raise the extractor and release the fired case. A total of 465 were produced in 1907: 341 rifles that were completed and inspected, and 124 barreled receivers that were “completed” in the field, three years past the production of the last .30-40-Krag rifle.



Figure 14: Photo of Krag Gallery Practice Rifle



Figure 15: Photo of the open breech-note the small pin on the left side of the receiver

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES



Figure 16: Photo of the carrier in place



Figure 17: Photo of carrier engaged



Figure 18: Photo of the script JFC cartouche for the Krag Gallery Practice Rifle

This system was plagued with poor accuracy, poor extraction, jammed bolts and breakage of the delicate carrier.

With the 1903 production in full swing, work on the .22 caliber was well underway. Having negotiated barrel liners, offset bores, and various carrier systems, Springfield Arsenal had settled on a centerfire carrier system in .22 Short rimfire that could function as a repeater operating in much the same way as its .30-caliber big brother. This design would be called the Hoffer-Thompson, named after Major J.E. Hoffer and Major J.T. Thompson. The system would utilize a carrier that looked much like a .30-06 cartridge that could be loaded on a stripper clip and cycled through the rifle, ejecting the fired carrier with the spent .22 shell case still in the carrier. While Major Hoffer's carrier would be loaded from the base and would require a rimfire bolt, Major Thompson devised a carrier that could be loaded from the side and could utilize the standard centerfire bolt. This design used the .22 LR (long rifle) cartridge and despite recommendations to use the LR cartridge, the final decision was to use the .22 Short.



Figure 19: Photo of the HT rifle

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES



Figure 20: Photo of the HT system including carriers, stripper clips, reloading tool, and cartridges

While the HT design allowed repeat fire using the same motions as the .30-caliber rifle, problems appeared. Accuracy was again a problem. The carriers were delicate and often would be damaged when they hit the floor. With the ammunition of the time, fouling of the carriers was a constant problem and, for the same reason, excessive bore wear was also encountered as every collector of HT rifles can attest. With the Winchester Winder Muskets around to provide an alternative to the Hoffer-Thompsons, their use gradually lessened. Later in 1919, an alternative .30-caliber cartridge was developed and appeared to be the answer the Army was looking for over the .22-caliber rifles. The Caliber .30 Model Gallery Practice cartridge would become the standard mode of practice with the individual soldier using his own rifle. As for the HT rifles, they would give way to the Winder musket. Later, on September 10, 1927, orders would come from the Chief of Ordnance to scrap all remaining HT rifles. Parts that could be used to repair .30-caliber rifles would be salvaged and all remaining parts be “mutilated to such an extent that they cannot be used for replacement purposes!”



Figure 21: Photo of 1919 Cartridge box

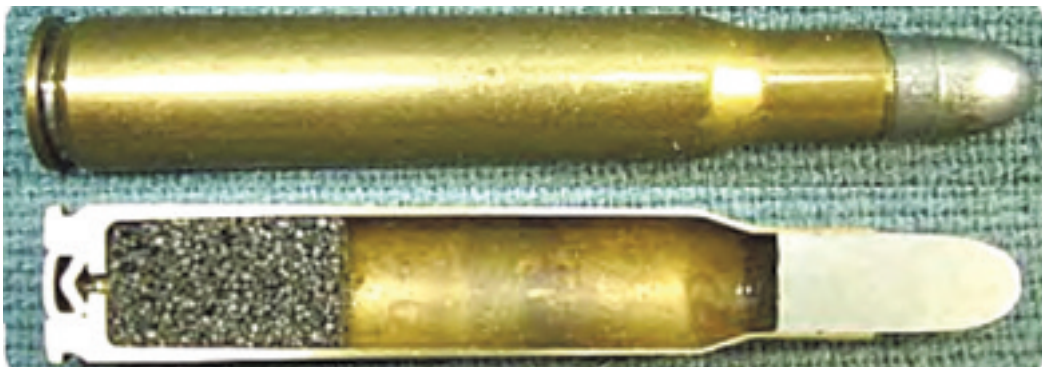


Figure 22 Gallery Practice Cartridge Model 1919

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES

Interestingly, the next .22-RF rifle would not be the brainchild of the US Military. Working with the NBPRP (National Board for the Promotion of Rifle Practice), the NRA would approach Springfield Arsenal about designing a rifle that could be used for civilian rifle training as well as for use by the ROTC and reserve military units.



Figure 23: Photo of Model 1922 Springfield

2 Model 1922 Springfield

Date September 12, 1919

Henry Brewer was the vice president of Winchester Arms at the time Winchester was putting the final touches on its new Model 52 rifle. Hoping for a military contract to boost production, Brewer met with Colonel Townsend Whelen, the Army General Staff's small arms authority. Unfortunately for Winchester, Colonel Whelen stated that he believed the Army had an overall negative opinion of the idea of a .22-caliber trainer. For starters, Ordnance had been told in a letter dated March 24, 1919, from the Adjutant General that for the future the issue of the gallery practice rifle, caliber .22 with related equipment would be discontinued. The experience with the .30-caliber Gallery Practice Cartridge had been completely satisfactory, precluding any need for a .22-rimfire trainer. In addition, Captain Elliot, Small Arms Department of U. S. Army Ordnance, had poor experience with the .22-caliber Hoffer-Thompson rifle then in use. As these trainers were assigned to a group of soldiers, not an individual, no one soldier was responsible for the cleaning and maintenance of the rifle, hence it quickly fell into disrepair and became unserviceable. Alternatively, with the use of the practice rounds each soldier used his own rifle for which he was responsible, thus avoiding any problems with poor maintenance.

The communication between Brewer and Colonel Whelen was not totally negative, though, as Colonel Whelen felt there was a possibility of sales to ROTC units and civilian rifle clubs. However, at the time there were around 3,000 Winder muskets in use and there was no immediate need for a replacement rifle. There was the possibility that these would need to be replaced at some point in time, though the \$40 price tag for the Model 52 Winchester was of concern, since a comparable Model 1919 Savage could be purchased for \$20. These communications can be found in Robert Houze's book: *The Winchester Model 52*. At this time, the first 500 Winchester Model 52 rifles had been distributed to a number of US Government departments. In issue 83 of *Springfield Research*, the distribution of these 500 rifles is shown in Table 1.

Table 1: Distribution of first 500 Winchester Model 52 rifles

Date	Quantity	Recipient
11/14/1920	100	Benicia Arsenal
1/14/1921	149	RIA
1/14/1921	1	DCM
1/29/1921	50	San Antonio Arsenal
1/29/1921	200	Raritan Arsenal

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES

No information is available concerning the evaluations of these rifles, though we will see plans for another rifle were already in motion. Figure 24 is an example of one of the first 500 Winchester Model 52 rifles.



Figure 24: Photo of Winchester Model SN 447

We know from a memo to The Small Arms Division, Ordnance Office, Washington, DC dated February 21, 1921, from Colonel T .L. Ames (Ordnance Department), that work at Springfield on developing a .22-caliber rifle had begun as early as 1915. Fred Coons was the lead developer on this project but was forced to put this work on hold owing to the needs of World War I. As stated in the memo:

As soon as the war was definitely over the matter was taken up again per orders of February 25th, 1919, S.A. 474.3/26. The letter states in part:

Mr. Fred Coons began work designing a rifle as referred to, but was unable to finish it owing to the great amount of work brought about by the war. The design of the new bolt and magazine is nearing completion, but as yet a model gun has not been constructed.

It is thought that this work should be resumed and model constructed and submitted to the Small Arms Proving Ground, Springfield Armory, Mass. for test.

In reply to this letter, Arsenal Order 20435-MS-4608, dated March 24th, 1919, was issued for the completion of a 22 caliber rifle of the design contemplated.

In the letter to the Small Arms Division, Colonel Ames goes on to say that at the time of this order, March 24, 1919, it was not known that any commercial firms were contemplating the development of any rifle of the type now being designed at Springfield. However, six months later, in September of 1919, two commercial firms produced completed rifles at the National Matches held that year at the Naval Ranges in Caldwell, New Jersey. These two firms were Winchester with its Model 52, and Savage Arms with its Savage Model 1919 NRA.

So, to the communications between Colonel Whelen and Brewer concerning US interests in a caliber .22-LR rifle, did Colonel Whelen know of the work of Fred Coons or was he unaware of the efforts to produce a .22 trainer? The answer may have been a little of both.

It is generally held that then-Major Julian Hatcher was the force behind the development of the .22-caliber Springfield rifle. In an article by Julian Hatcher in *Arms and the Man*, dated August 1, 1920, we get our first view of the work in progress. Started by Fred Coons before WWI, several bolt and barrel designs were tried. The initial bolt design, well described in Clark Campbell's book, *The '03 Era*, was a complicated affair and never developed beyond the concept. The bolt design eventually used in the two prototypes is essentially the bolt we find in the production Model 1922. This is a two-piece design in which the forward half of the bolt does not turn and is connected by a notched ridge (forward half) and spring-loaded hook (rear half) that holds the two parts together. The bolt throw is determined by the ejector and closely approximates that of the .30-caliber service rifle, 3.3 inches for the Model 1922 rifle and 4.5 inches for the .30-caliber 1903. The bolt has a two-piece firing pin apparatus with a two-point firing pin. The firing pin rod has the flared head but is shorter than the .30-caliber rifle though it uses the same firing pin sleeve. Both prototypes that debuted at the 1920 National Matches—now back at Camp Perry—had full length stocks. Initially, the rifle No.1 was sent to Washington and then to Camp Benning. No.2 underwent a few changes including a Lyman rear sight mounted at the rear of the receiver and then was fitted with a new barrel designed by Al Woodworth, which greatly improved accuracy. This would go on to be the barrel used for the Model 1922 rifle. For these two rifles, the standard .30-caliber receiver was used along with the 24-inch barrel that was produced from the 24-inch billet used for the .30-caliber rifles. To facilitate single loading, the barrel was moved farther into the receiver making the overall length slightly less than the service rifle. There are reports that more than one of both Rifle No. 1 and Rifle No. 2 were produced. Finally, ammunition selection was critical to produce maximum accuracy, and we will continue to see that Woodworth was involved in this area as well.



Figure 25: Photo of Rifle No. 1 taken from "Arms and the Man LXVII," No 26 August 1, 1920

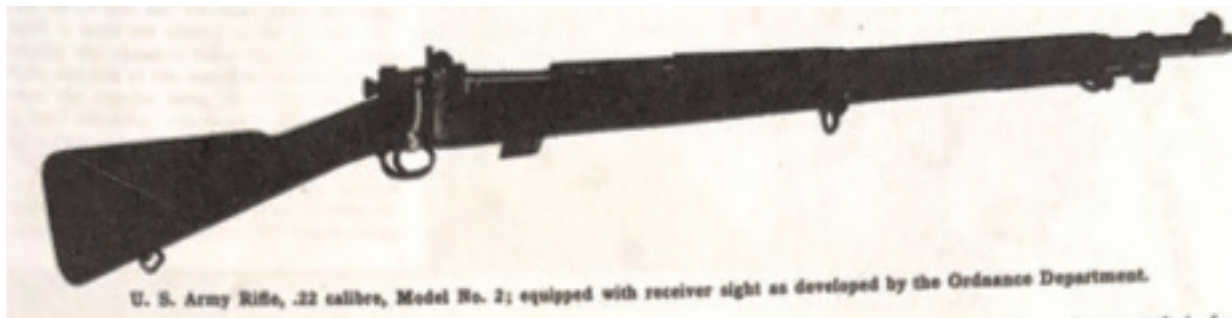


Figure 26: Photo of Rifle No. 2 taken from "Arms and the Man LXVII," No 26 August 1, 1920

THE MODEL OF 1922 SERIES OF SPRINGFIELD RIFLES

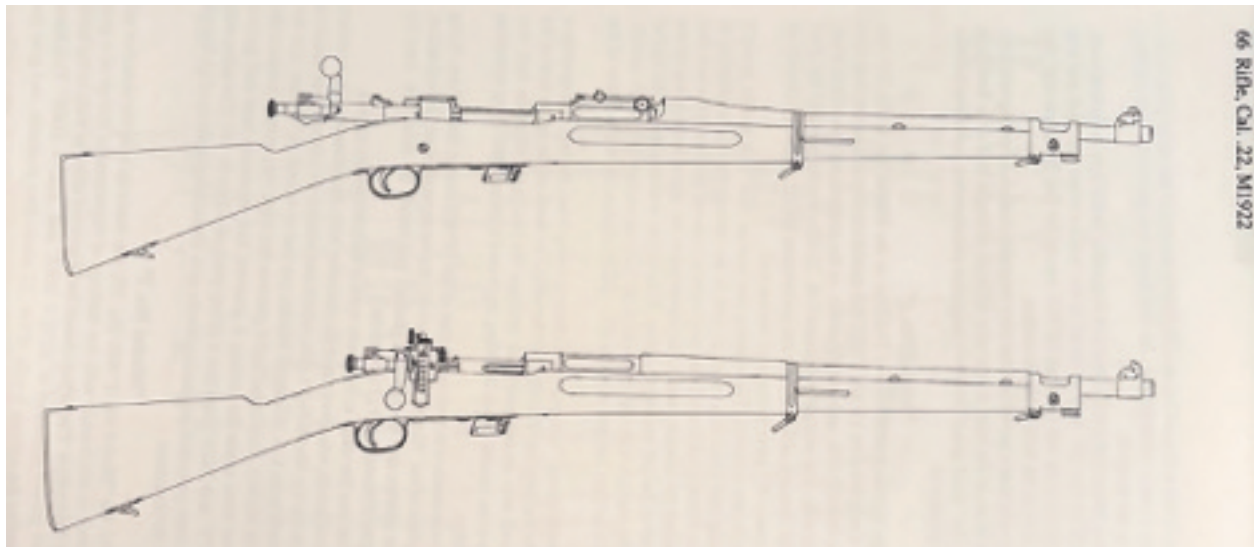


Figure 27: Drawings of Rifle No. 1 (above) and Rifle No. 2 (bottom) taken from the "The '03 Era" by Clark Campbell

Before leaving this part of the story of the Model 1922, we need to note the author of the article in *Arms and the Man*, then Major Julian Hatcher. In researching these rifles, this article is one of the few that mentions this man. However, it is generally recognized that Major Hatcher was the driving force in the development and acceptance of the Model 1922 series of rifles and the acceptance of the caliber .22-rimfire cartridge trainer.

Following the rifles showing at Camp Perry in the summer of 1920, more work would be done, and one final prototype would appear. While drawings and photographs can be found, the actual rifle, the Model 1920, has not been found. Gone is the long, straight-grip stock in favor of a pistol-grip design. The stock is smooth without grasping grooves and has a slightly longer nose piece beyond a smooth forward rifle band. The two-point firing pin is retained, though the firing-pin rod now is the headless style. As we will see, many of these design changes would be incorporated into the Model 1922.

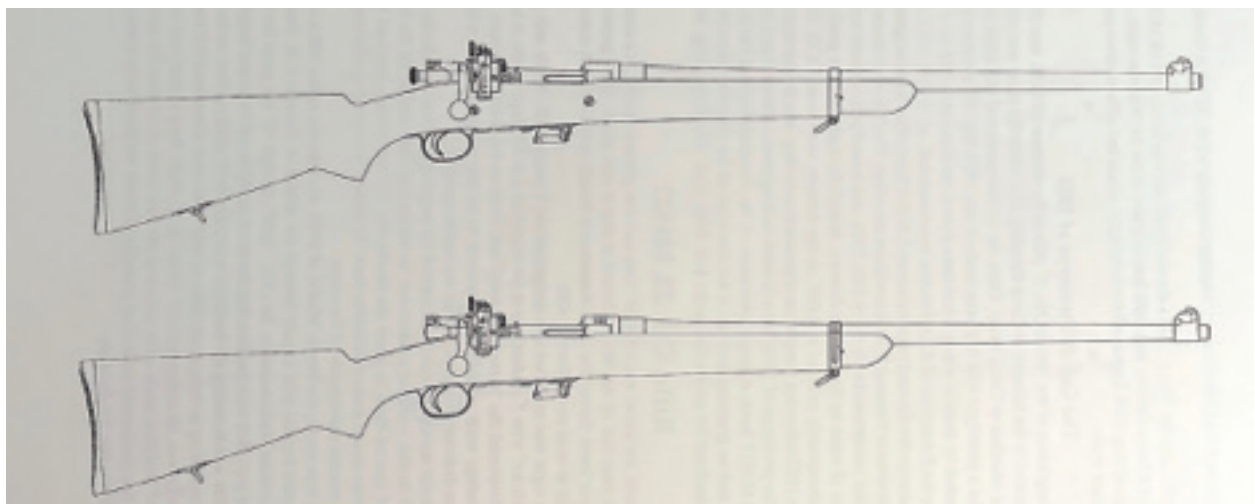


Figure 28: Line Drawing of Caliber 22 Prototype of 1920 (above) and Caliber 22 Model of 1922 (below) taken from The '03' Era by Clark Campbell

The Model of 1922
Series of Springfield Rifles



Michael Raborn, M.D.

The Model of 1922 Series of Springfield Rifles looks at the history, conception, production and evolution of the only 22 caliber line of rifles ever produced at The Springfield Arsenal.

The Model of 1922 Series of Springfield Rifles

By Michael Raborn, M.D.

Order the book from the publisher Booklocker.com

<https://booklocker.com/books/14861.html?s=pdf>

**or from your favorite neighborhood
or online bookstore.**