# Nilitary Rifles of the World

Fifth Edition

Early Black Powder Models
200 New Photos
Every Model from 1871-1945

Robert W. D. Ball

# Military Rifles of the World Fifth Edition

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Robert W. D. Ball

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This book is dedicated to the millions of men who lost their lives while carrying Mauser rifles in conflicts around the world, both large and small ... in death may they find the peace for which they fought.

Third edition dedication to those friends and fellow collectors, without whom, these new pages would be rather bare: John Wall, for agonizing over pictures, reading and correcting material; Jack Carnahan for allowing his better pieces to be photographed by Colin Webster, a labor of love for both, and it meant that Jack didn't have to dig a trench for a waterline to his barn! Les Field of Chicago for his very erudite contributions and his wealth of arcane knowledge about the Mauser rifle. Last, but not least, my young friend and associate, Marcelo Diaz, without whom I would never have been able to come up with a single digital photo. Thanks to all of you for making a tiring task that much easier!

> I would like to add a further dedication in this edition of "Mauser Military Rifles of the World" to a deceased member of the collecting fraternity who, through his deep interest, study, and investment of time and knowledge, added to our information regarding the formative years of the Mauser rifle. It is with great regret that our ranks were thinned by the loss of David Stefanye Ph. D. on 30 July 2000; we can only hope that he now has the opportunity to put his questions directly to Paul Mauser! R.I.P, Dave.

I would like to dedicate this fourth edition of "Mauser Military Rifles of the World" to one of the grand old men of the Mauser collecting fraternity, the late Ludwig Olson, who broke the ice with his great first edition of "Mauser Bolt Rifles." Every collector of Mauser rifles had been searching for the book that would pull together the bits and pieces of available information on the Mauser systems, and Ludwig's book did the trick! I can remember saving the money to buy my first copy of his book, which quickly became extremely well-thumbed and read from cover to cover many times over. Lud stood his last "Retreat" on Easter Sunday, 16 April, 2006. Thank you, Lud, for all of your many contributions to the world of Mauser collecting; you will always be remembered for your many ground breaking successes.

Another dear friend who has gone on to the Great Gun Show in the sky is Henry Wichmann, a companion, confidante and fellow collector whom I was privileged to know and call friend; after more than 45 years of sharing experiences, Henry, I really miss you. Please save me a seat in the car for our next gun show trip together.

> Bob Ball 1 Sept., 2006

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The purpose of this book is to examine the significance of the Mauser rifle in the military and political histories of countries around the world. Mauser rifles have been, in all likelihood, the most widely used weapons system the world has ever seen.

This is not a book about the Mauser brothers, but some background is required in order to appreciate their genius. In 1866, Peter Paul Mauser was just one of many unheralded employees of the Württemberg government arsenal at Oberndorf when he developed a self-cocking system for the Dreyse needlerifle. Due to interests in other directions, the Württemberg Army showed little enthusiasm for his improvements. Unfazed, Mauser returned to the drawing board and came up with a modified rifle utilizing a completely self-contained metallic cartridge. Once more, the fates intervened, and his work was rejected by both Prussia and Württemberg. Hoping to seize some advantage from the Austrians' search for an improved rifle after the disastrous war with Prussia, Mauser called upon the Austrian ambassador, who was knowledgeable enough to realize the potential in Mauser's designs and forwarded the plans to Vienna. Here, however, the Mauser rifle faced stiff competition from the Remington Rolling Block rifle. The committee expressed a preference for a block action over a bolt action, albeit acknowledging the advantages of the Mauser system.

Word of Mauser's system came to the attention of Samuel Norris, the Remington Company's agent in Europe, resulting in an agreement wherein Norris would finance the project while the Mauser brothers saw to the startup of the business. Paul, the research and development genius, had by this time been joined by his brother, Wilhelm, the salesman extraordinaire. In 1867, Norris and the Mauser brothers moved to Liege, Belgium to develop the rifle, but Norris broke the contract after the unexpected failure of a deal with the French. Paul returned to Oberndorf in 1869, followed by Wilhelm in 1870.

Meanwhile, the Royal Prussian Military Shooting School became wildly enthusiastic over the Mauser rifle that had been supplied by Norris. This rifle was improved and accepted on 2 Dec 1871. Further improvements to the safety lock resulted in final acceptance of the Infantry Rifle Model 71 on 14 February 1872. Work on the G 71 Rifle was done in government arsenals and large, well-established firms, such as the Austrian Arms Company, Steyr, Austria.

In 1872, the Mausers were awarded contracts for three thousand sights for the G 71 Rifle; they were also awarded an order for one hundred thousand G 71 Rifle sights from the Bavarian Rifle Company in Amberg. At this time, the brothers purchased a factory site in Oberndorf on the heights overlooking the Neckar River. At the end of 1872, they negotiated a contract with the Württemberg government for one hundred thousand G 71 Rifles, and the Mauser brothers were off and running! In March 1874, they formed a partnership with a local bank, the Württemberg Vereinsbank, to purchase the Württemberg rifle order in 1878, and the factory continued to produce rifle sights for the Bavarian army, while at the same time manufacturing twenty-six thousand G 71 Rifles and Carbines for China. In 1881, a large contract for the Serbian Model 1878/80 Rifles helped ease financial strains.

On 13 January 1882, Wilhelm, master sales strategist for the company, died. In April of 1884, the Waffenfabrik Mauser (Mauser Arms Company), a stock company, was formed. Work was also started on the production of the G 71/84 Rifle, followed in 1887 by a huge contract with the Turkish government for a modified G 71/84 Rifle in 9.5mm. In December of 1887, the Württemberg Vereinsbank sold all shares of stock in Waffenfabrik Mauser, including those of Paul Mauser, to Ludwig Loewe and Company, Berlin. At this time, Loewe and Company owned over fifty percent of the shares of Fabrique Nationale

d'Armes de Guerre (FN), Herstal, Belgium. This company, FN, was formed in 1889 to make military rifles for the Belgian government.

On 22 October 1889, a license to allow Mauser rifles to be manufactured in accredited private factories was obtained by the Belgian Minister of War; in June of 1891, Loewe and Co. proposed to directly license FN's Mauser production, with the offer quickly being accepted and a contract signed on 26 November 1891. It was a different story with FN Contract Pattern rifles, since by the middle of 1894 FN had supplied rifles and cartridges to Spain, Serbia, Brazil, Chile, China, Norway, the Netherlands, and Costa Rica. When Chile asked FN to make sixty thousand Mauser rifles, Mauser objected to non-Belgian orders. The Chileans placed their order with Ludwig Loewe & Company.

In November 1896, the Deutsches Waffen-und-Munitionsfabriken A.-G. (German Arms and Ammunition Co., Inc.), otherwise known as DWM, was formed by the merger of:

- 1.) Deutsche Metallpatronenfabrik A.-G. (German Metallic Cartridge Co., Inc.), Karlsruhe
- 2.) Ludwig Loewe & Co., A.-G., Berlin
- 3.) Rheinisch-Westfaelischen Powder Co., Cologne
- 4.) Rottweil-Hamburg Powder Co., Rottweil

Because of Loewe & Co.'s control of more than fifty percent of the stock in FN, as well as ownership of the Mauser Company, these firms also became a part of DWM. Also included was Osterreichische Waffenfabriks-Gesellschaft. A cartel was then formed to divide production among the participants, with this effort ceasing in 1914.

On 5 April 1897, the Mauser Company became incorporated, and on 5 April 1898, one of the world's most famous rifles, the G 98, was adopted by Germany. This was the basic design upon which many different model designations and calibers were adopted by countries around the world; purchasers included Turkey, China, Serbia, Mexico, Costa Rica, and numerous others, with much of the production being handled by DWM. The Mauser plant had seven thousand employees during World War I and produced great quantities of G 98 rifles, pistols, and 13mm antitank rifles during the latter part of 1918, an operation that ceased with the armistice.

With the collapse of Germany in 1918, the cartel was broken, and of all of the prewar participants, only FN managed to carve a niche for itself in the now flourishing export market. A growing competitor was Ceskoslovenska Zbrojovka (CZ), the main arms manufacturer of the new Czechoslovakian Republic. After World War I, the Mauser Company converted to peacetime production, making precision tooling, calculators, sewing machines, etc. The name of the company was changed on 30 May 1922 to Mauser-Werke A.-G. (Mauser Works, Inc.). By 1929, employment stood at approximately 750, in sharp contrast to World War I years.

In the mid-1930s, Germany rearmed, and the Mauser factory responded with frenzied activity ... the DWM arms plant at Berlin-Wittenau was taken over as a branch factory, with between 4000 and 5000 employees. Oberndorf employed 7000 in 1936, and by 1944, there were 12,000 workers, 5000 of whom were slave laborers. In addition to vast quantities of K98k Carbines, MG-34 Machine Guns, MG 81 Aircraft Machine Guns, 2cm Flak 38 AA guns, MG 151 Aircraft Cannons, Lugers, P-38s, and Hsc Pistols were also manufactured.

The Mauser plant was occupied by French troops on 20 April 1945. German historical figures on bolt action rifle production were destroyed or lost, however one German estimate puts the figure at approximately 102 million rifles produced!

All of the companies referred to in the preceding pages have contributed in one manner or another to equipping many of the world's armies, small and large. This book is my effort to show, country by country, how the Mauser system, in its vast array of different models and calibers, became a worldwide phenomenon.

## **ACKNOWLEDGMENTS FOR THE FIRST EDITION**

I have, of necessity, turned to many collectors, curators, dealers, and friends in compiling the information in this book. I have also had the pleasure of contacting military personnel from almost every country represented here. Without exception, everyone has been most helpful and considerate. It would not be possible to name everyone who has helped me in ways both large and small, but know that I thank each and every one of you for helping me to accomplish my goal.

My old friends and companions, Hank Wichmann and Lothar Frank, have patiently read and reread this manuscript, as well as supplied rifles and accessories from their collections to be photographed; you guys have always been there for me! Bob Bennett and Cliff Baumann opened up their Mauser collections and allowed me full access to their material; that's what comes of thirty-plus years of friendship! I want to express my deep appreciation to Bruce Stern for the Sundays he spent with me photographing his fantastic collection, when he could have been spending the time with his family. Thanks to Bruce, I met Noel Schott, now a good friend, who most willingly shipped many of the gems from his collection to me for photographing, putting a lot of faith in the powers of UPS! Craig Brown, curator, cheerfully pulled rare items from his personal collection and carted them into downtown Boston on a really hot summer day for a Sunday photographic session ... deeply appreciated, Craig!

John McCabe of the Springfield Armory Museum and I really hit it off, with John spending more time than he could probably spare carefully carrying individual rifles out of storage so I could photograph them one at a time. You really made me feel welcome, John, and you have my thanks!

Thanks to Steve Kehaya and a host of other great people at Century International Arms, Inc. of St. Albans, Vermont. I spent four wonderful days climbing and crawling around warehouse areas searching for the elusive, rare rifle, and with the help of some great fellows in the warehouses, found many a gem to include in the book. Val Forgett, Jr. of Navy Arms Co., and Val Forgett III of Gibbs Rifle Co. most graciously offered me the use of their facilities and stock. I would be remiss if I did not mention Paul Reed of Navy Arms Co. and Larry Trial of Gibbs Rifle Co., who added their considerable knowledge and expertise to the search. Others who have been most helpful include Steve Fjestad of Blue Book Publications, along with John Allen of the same organization, Chris Cox of the Karabiner Collector's Network (KCN), and John Deeks, collector.

My special thanks go to Col. Guillermo Escobar F., Defense Attache and Chief of the Delegation of Paraguay to the Inter-American Defense Board. Col. Escobar's enthusiasm, knowledge, and helpfulness have been of great importance in compiling the section of the book related to Paraguay. I have come away from this experience feeling that I now have a good friend in the nation of Paraguay.

Major General Cyro Leonardo de Albuquerque, Military Attache of the Embassy of Brazil has devoted much time and effort to make certain that the military history section concerning Brazil is correct, and I owe him my deep thanks. Thanks also to the General, the section on the Mauser military rifles of Brazil was reviewed and corrected by Mr. Walter Merling, Jr. of Rio de Janeiro, a noted Brazilian collector and authority.

Lt. Colonel Milos Rydval, Military Attache of the Embassy of the Czech Republic, extended himself more than any author has the right to expect, enlisting the help of the Historical Institute of the Czech Armed Forces in Prague to assist in clarifying even the smallest question. Your help was invaluable, Colonel!

Express Photo of Avon, Connecticut has gone the extra mile in working with me closely to obtain the best possible results in the developing and printing of pictures used in this book. Thanks to everyone there—you're a great bunch of people!

It has been a joy to work with all of the people at Krause Publications. What could have been extremely difficult has been made a pleasure, and where the chance existed for discord, there has been only cooperation.

Hardly the least, my deep thanks and my heart go out to my wife, an excellent editor in her own right. God bless her, after reading and correcting these pages countless times, I don't think she ever wants to see or hear about a Mauser rifle again! Thanks, Joanne!

Since so many, many people went out of their way to help make this book a reality, if I have neglected to thank anyone by name, my apologies ... you know who you are, and you know I am indebted to you.

Robert W. D. Ball

# **ACKNOWLEDGMENTS FOR THE SECOND EDITION**

If you already have the First Edition of this book, I trust you will find the new photos and previously unavailable specimens and information to be of further help in identifying and classifying unknown pieces. I hope it sparks even more interest in the Mauser rifle, provides answers to other questions you might have had ... and gives you as much pleasure in perusing its pages as I had in putting it together.

After its initial publication, I received numerous letters asking why this or that model wasn't shown (although, by necessity, only a few were omitted!). In most instances, these particular models or variations were, and remain, so scarce as to be virtually unobtainable for photographing. However, if you have a Mauser bolt action rifle that you believe is authentic and not in the book, please contact me through the publisher, and perhaps it can be included in the Third Edition.

Friends and contributors Bob Jensen, John Wall, and John Sheehan must be added to my acknowledgments list, for without their assistance many of the new photos and information in this edition would not have been possible. Thanks, guys, for giving so generously of your time. Your efforts on my behalf were "above and beyond" ... but indicative of dedicated Mauser collectors who appreciate not only the variations of the weapon but its place in military history throughout the world.

# **ACKNOWLEDGMENTS FOR THE THIRD EDITION**

The following rifles have been loaned by Mrs. Dave Stefanya to the NRA National Firearms Museum, 11250 Waples Mill Road, Fairfax, Virginia, 22030, where they are presently on display and may be viewed there.

Mauser Jaeger Gewher M71, experimental repeater.

Mauser Experimental Rifle with Hooked Cocking Piece.

Mauser Interim M69/70 Experimental Prototype. Mauser Interim M69/70 Experimental Prototype.

Conversion. Prussian Dreyse M62 Needle Rifle

Chassepot Conversion.

Mauser-Norris M67/69

M67/69

Experimental

Experimental

Prototype

Chassepot

Mauser-Norris

## **ACKNOWLEDGMENTS FOR THE FOURTH EDITION**

With every new edition, I find the volume of enthusiastic help and utmost cooperation freely received from fellow collectors, both old and new, to be completely overwhelming and most appreciated ... and this is the way it has been for the fourth edition!

Just when it seems that fellow collectors have given their all, fellows like Richard Smith in Aurora, Colorado get on the phone and offer full access to their collection and photographic abilities; dear old friends such as John Wall find the time in their completely hectic business schedule to locate those rare pieces around the world that they either own or are willing to photograph for the book. John is dedicated to keeping me as accurate as possible, writes his own captions and generously makes his decades of knowledge available to all readers of this book. We should all be grateful for people like John!

Special thanks to Pat Hogan of Rock Island Auction Company for giving me full access to their excellent photo files. Numberless collectors with an unusual model Mauser rifle or piece of Mauser equipment have offered their special item to share with other collectors, thereby enriching all of us. My appreciation and deep thanks go out to all of them, for without their generous help, the greatest source of information would be unavailable.

## **ACKNOWLEDGMENTS FOR THE FIFTH EDITION**

Four fellow collectors who cannot be omitted from recognition for their hearty endeavors are Fred Masterton and Robert Skriven, both of whom did a heroic research job on information from Spain. Two other collectors who worked like Trojans to bring order out of chaos were Jim Golub and Branko Bagdanovic, all of whom deserve the grateful thanks of the author.

#### ARGENTINA

The Argentine army traces its roots to the colonial period when regular forces were recruited from throughout the region, amounting to a single regiment each of infantry and dragoons, totaling 2,509 men. This strength was increased to 14,141 by 1800. The British invasions of Argentina in 1806 and 1807 were repulsed by a force of infantry, grenadiers, and hussars, as well as a battalion each of coast and field artillery. This force became the new national army when independence from Spain was declared in 1816. In 1817, Argentina helped Chilean forces expel the Spanish from Chile and Peru during a grueling four-year war.

In 1825, the breakaway of Uruguay from Brazil fomented a threeyear-long war involving Argentina against Brazil. During the ensuing twenty-three years, there were times of great political confusion and turmoil, with the army fighting against the Patagonian Indians in 1832, warring with the Bolivians from 1837 to 1839, and entering into the affairs of Uruguay in 1844. In 1852, Buenos Aires seceded from the Republic, followed by an attempted overthrow of the national government in 1859, which proved unsuccessful. In 1865, Paraguayan dictator Francisco Solano López, while at war with Brazil, attacked the Argentine city of Corrientes, precipitating the war of the Triple Alliance, in which Argentina, Uruguay and Brazil were allied against Paraguay. This war lasted for five long years, ending in the defeat of the Paraguayan forces and the almost complete decimation of the Paraguayan nation.

1870 saw the transformation of the Argentine army into a truly professional force, occupied for the next ten years with subjugation and pacification of the Indians of the state of Patagonia, as well as controlling internal strife.

The late 1800s saw the reorganization and professional upgrading of the army. In 1879, the army adopted the .43 caliber Remington Rolling Block Rifle as standard, the Remington being supplanted by the Mauser Modelo 1891 magazine rifle and carbine in caliber 7.65mm. The Modelo 1891 weapons served faithfully, but were replaced by the more modern Modelo 1909 Rifle and Cavalry Carbine, also in 7.65mm. The Modelo 1909 was a faithful copy of the German Gew. 98 with slight modifications. These rifles and carbines were produced both in Germany, mainly by DWM, and in Argentine government plants, namely Fabrica Militar de Armas Portatiles (FMAP) "Domingo Mathieu" at Rosario and Santa Fe. Not often found is the Modelo 1909 Mountain/Engineers Carbine, closely resembling the FN Model 30 Carbine. It has been said that these were cut-down Modelo 1909 Rifles: however the author has not been able to determine that this is accurate. Also not seen frequently on the secondary market are the large numbers of FN Model 24 and Model 30 Short Rifles purchased by the Argentine army during the years between World War I and World War II.

In turn, the Modelo 1909 Rifle was replaced by the FN "FAL" Rifle in 7.62mm NATO, later used in the ill-fated invasion and occupation of the Falkland Islands.

**MODEL 1891 RIFLE:** Made in Germany, the Argentine Modelo 1891 Rifle is a Mauser magazine rifle, with the protruding, in-line box



The Argentine National crest as shown on the receiver ring.

magazine that was first developed for the Model 1889 Belgian Rifle, and used in the Turkish Model 1890 as well. These rifles all closely resemble one another, with only minor differences, the major one being the lack of a barrel jacket on the Argentinian and Turkish models.

The initial contract from Argentina called for 180,000 rifles and 30,000 carbines. Since Mauser was filling a Turkish order, Ludwig Loewe & Co. of Berlin handled the manufacture of the majority of the Argentinian weapons; the rest were produced by DWM.



*Muzzle covers for the M1891 rifle and carbine, as viewed from the front.* (*R. K. Smith collection*)



Full-length view of the Modelo 1891 Rifle.



Full-length view of the Modelo 1891 Carbine.



Full-length view of the M1891 Engineer's Carbine; note that these are essentially the M1891 Cavalry Carbine with the addition of an upper band incorporating a half-circle bayonet attachment and a lower band with a bayonet lug. The lowest band now incorporates a sling swivel, with another on the lower left side of the stock. Note that the sling ring bar has been removed and the hole in the stock filled.

The M1891 Engineer's Carbine with bayonet attached to illustrate the slot attachment for the half-round bayonet ring on the cutdown M1879 Remington Rolling Plock bayonet



Block bayonet. This is an altogether ingenious use of an alteration to an out-dated bayonet to utilize existing stocks.



Side rail markings of the Modelo 1891 Carbine. (Springfield Armory Museum)



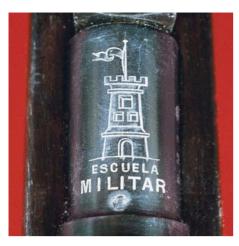
Side rail markings of the Modelo 1891 Rifle and Carbine, indicating that this specimen was produced by DWM.



Close-up view of the bayonet's lugs permanently attached by screws on the M1891 Engineer's Carbine.



Argentine crest, or coat of arms, on the receiver ring of the rifle.



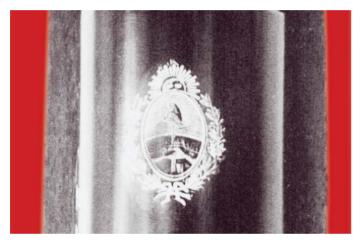
Crest of the Military Academy above the receiver ring of the Modelo 1891 Rifle.



Crest of the Naval Academy above the receiver ring of the Modelo 1891 Rifle.



The University Battalion of the Federal District crest above the receiver ring of the Modelo 1891 Rifle.



Argentine crest on the receiver of the Modelo 1891 Carbine. Note that this is a slightly different, earlier version of the crest from those shown later. (Springfield Armory Museum)



Special presentation plaque attached to the stocks of a Modelo 1891 Rifle and a Modelo 1891 Carbine presented to the United States War Department by the Argentine Ministerio de Guerra in the year 1906. (Springfield Armory Museum)



The Modelo 1891 Rifle with plaque attached to the right side of the buttstock. (Springfield Armory Museum)



The Modelo 1891 Carbine with special presentation plaque. (Springfield Armory Museum)

#### 12 • ARGENTINA

This rifle introduced the rotary lock, which engaged a notch on the front of the magazine to prevent the accidental loss of the magazine. Other modifications included a reinforced extractor and bolt, as well as extensions to both sides of the bolt sleeve.

The rifle is fitted with a straight-wristed stock, with a small upper hand guard in front of the rear sight base, wired to the barrel. There is a swivel on the bottom of the lower barrel band, with another at the bottom of the stock. The simple nose cap has a bayonet lug on the bottom for the attachment of the Model 1891 bayonet.

Length: 48.60"; Weight: 8.80 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical-column, box magazine; Sights: Inverted-V front sight, V-notch rear to 2,000 meters on large leaf, 350 meters on small leaf, and 250 meters on standard. Remarks: Argentine national crest on receiver ring, model designation and manufacturer's markings on side rail.

**MODEL 1891 CARBINE:** As can be seen, the Model 1891 Carbine is fully stocked to the muzzle with a straight wrist, and has a forend capped with protectors for the front sight, a turned-down bolt handle, and a carbine sling loop attached to the bottom of the stock. Many of these were imported into the United States in excellent condition.

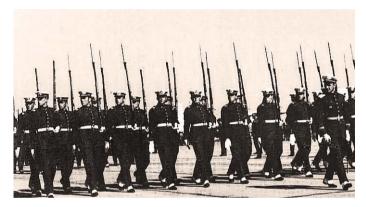
Length: 37.0"; Weight: 7.20 lbs.; Barrel: 17.63"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical-column, box magazine; Sights: Inverted-V front, V-notch adjustable from 400 to 1400 meters on large leaf, 350 meters on small leaf, and 250 meters on standard. Remarks: Argentine coat of arms on receiver ring, model designation and manufacturer's name.

**ARGENTINE MODELO 1909 RIFLE:** In 1909, a new model rifle began to replace the 1891 model rifles and carbines; this rifle was based upon the Gew 98 design, modified to Argentinian specifications. The differences included a tangent rear sight rather than the German "Lange Vizier" rear sight, a hinged magazine floorplate with the release in the front of the trigger guard, an upper hand guard extending from the front of the receiver ring to slightly in front of the lower barrel band, and an auxiliary bayonet lug fastened over the original bayonet lug, which enabled the Argentinians to use their large stocks of Modelo



Model 1909 Infantry Rifle with attached Argentine designed and manufactured Grenade Launcher.

1891 bayonets. It is impossible to determine exactly how many rifles were produced in Germany, but the Argentine production figures are estimated at approximately eighty-five thousand. By Argentinian law, the crest was to be ground off those rifles and carbines sold to foreign buyers, due to embarrassing sales to the Paraguayans during the Chaco



Argentine Air Force Academy cadets on passing out parade, carrying Model 1909 Rifles.



Full-length view of the Argentine Modelo 1909 Rifle.



Left full-length view of the Argentine Modelo 1909 Rifle.



The Modelo 1909 side rail, with designation and maker's name.



Markings on the left side of the receiver ring of the unmarked Modelo 1909 Rifle pictured above.



Argentine crest, or coat of arms, on the receiver ring of the rifle.



Full-length view of a variation of the Modelo 1909 Rifle. This rifle is unmarked, with the exception of the markings shown in the previous picture. Note that the nose cap does not have the auxiliary bayonet lug.



A full-length view of a most unusual variation of the Modelo 1909 Rifle. This rifle has been experimentally restocked in a Springfield Model 1903style "C" stock with grasping grooves, a Springfield-style rear and front sight, and a most unusual stud-type bayonet lug. The receiver ring is marked in the conventional manner.



Full-length view of the Argentine Modelo 1909 Sniper Rifle.



Top view of the Argentine Modelo 1909 Sniper Rifle; note the marking "Ejercito Argentino" over the scope number at the forward end of the barrel. The number visible at the rear of the scope is a collection identification number.

War of the 1930s; however, this law was later repealed and many of these weapons came into the United States in untouched, usually excellent condition. These rifles are a collector's dream when found in "as issued" condition, since they never saw combat, and only suffered minor handling dings and bruises.

Length: 49.20"; Weight: 9.0 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column flush box magazine; Sights: Inverted-V front sight, V-notch rear sight adjustable from 300 to 2000 meters. Remarks: Argentine crest on receiver, Mauser Modelo Argentino 1909, manufacturer's name, with some examples being marked Ejercito Mod. 1909 (Argentine Army Model 1909).

**ARGENTINE MODELO 1909 SNIPER RIFLE:** The Argentine Modelo 1909 Sniper Rifle is identical to the standard issue Modelo 1909 Rifle, except the bolt handle has been bent down to prevent the handle from striking the over-the-bore mounted scope. Sniper rifles were picked for their accuracy and smoothness of action. Note that the scope on this rifle is German-made for the Argentine army.



The scope and scope mount from the left hand side of the Argentine Modelo 1909 Sniper Rifle.



Side rail markings of the Modelo 1909 Cavalry Carbine.



Full-length view of the Modelo 1909 Cavalry Carbine.



Front view of Argentinean M1909 Cavalry Carbine scabbard. Note the complex arrangement of snaps and straps to provide stability. (R. K. Smith collection)



Rear view of Argentinean Cavalry Carbine scabbard; note how beautifully the scabbard is made! (R. K. Smith collection)

**ARGENTINE MODELO 1909 CAVALRY CARBINE:** Ordered at the same time as the Modelo 1909 Rifle, the 1909 Cavalry Carbine differed not only in length, but in general configuration. Many of these carbines were produced by DWM; however, the Argentine arms factories also were tooled up to manufacture this carbine, and many will be found with Argentine makers' marks. Equipped with a full Mannlicher-style, straight-wristed stock, the forend is protected by a forecap with sight "ears," and the muzzle extends enough so that it will accept the ring of the model 1891 bayonet, the lug being mounted on the



Argentine crest on the back of the Argentine M1909 Cavalry Carbine scabbard. (R. K. Smith collection)



M1909 Cavalry Carbine with the marking "C.F.S.," which translates into "Commando Federal Seguridad," which is the name of Juan Peron's Secret Police.



M1909 Cavalry Carbine with the markings of the "Gendarmeria Nacional," or National Police.



Full-length view of the Argentine Model 1933 Police-marked Mauser Banner Short Rifle.



*Left-side view of the receiver and side rail of the Argentine Model 1933 Short Rifle, showing the model number and part of the crest markings.* 



The rare Mauser Standardmodell-style Short Rifle called the Model 1933. Mauser Oberndorf made this 7.65mm Argentine rifle for the Buenos Aires provincial Police. Note that it has a standard 60cm (23.5 inch) barrel, and is the companion rifle to the similar and more common Buenos Aires provincial police carbine with the 55cm (21.5 inch) barrel also covered in this section. (John Wall collection)



The left side of the rare Mauser Standardmodell-style Short Rifle called the Model 1933, made by Mauser Oberndorf for the Buenos Aires Provincial Police. (John Wall collection)



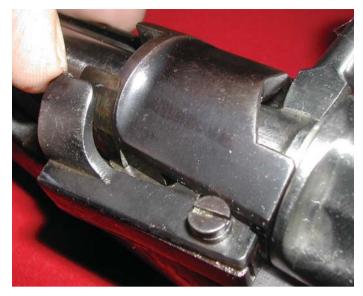
Although marked Mod. 1933 instead of "Standardmodell" on its side rail, this rifle is an almost complete duplicate of other standardmodell rifles sold to China and Ethiopia. So far, only the Argentine carbines and the Ethiopian rifles are known with the "Mod. 1933" side rail markings. (John Wall collection)



A close-up of the Buenos Aires Provincial Police property mark on the barrel of the Model 1933 Standardmodell-type 7.65mm Short Rifle. (John Wall collection)



The Model 1933 Short Rifle has the Buenos Aires police marking on its barrel and the trademark Mauser banner on its receiver ring. In comparison, the shorter Argentine Model 1933 carbine with the 55cm barrel has the Buenos Aires Provincial Police marking on its receiver, and the Mauser banner on its receiver bridge. (John Wall collection)



The single obvious feature of both types of Standardmodells rifles (55cm and 60cm barrels) which sets them apart from all other Standardmodells is the extended arm on the bolt release which curves up and over the receiver bridge, a feature common on all other Argentinian (as well as Peruvian) Mauser rifles. The bolt is an un-numbered Argentine replacement. The original bolt undoubtedly was numbered, blued and would have had German commercial proof marks. (John Wall collection)



*Full-length view of the right side of the Argentine Model 1935 Police-marked Mauser Short Rifle.* 





Right-side view of the receiver ring of the Argentine Model 1935 Policemarked Mauser Short Rifle, showing the Argentine crest atop the receiver ring and REPUBLICA/ARGENTINA on the lower right side.

View of the left side of the Model 1935 Argentine Model 1935 Policemarked Mauser Short Rifle, showing the Police markings on the left side of the receiver and the model designations on the side rail.



Full-length view of the Modelo 1909 Mountain Carbine.



Full-length view of the FN Model 1930 Short Rifle as purchased by Argentina for use by the Argentinian Marine Corps.

bottom side of the forecap. The upper hand guard extends from the front of the receiver to the lower barrel band. A well-made, handy weapon.

Length: 42.50"; Weight: 8.50 lbs.; Barrel: 21.50"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Argentine crest on the receiver ring, with the maker's name and model designation on the left side rail.

**ARGENTINE MODELO 1909 MOUNTAIN CARBINE:** There is no definitive history of the Modelo 1909 Mountain Carbine. Some authorities have also referred to it as the "Engineers" model. The few carbines that the author has inspected have all been marked identically to the Modelo 1909 Rifle. It has been speculated that these carbines were cut down from the Modelo 1909 Rifles as a special purpose carbine. Note that the specimen pictured has a short bayonet lug, and incorporates a parade hook on the upper band.

Length: 41.25"; Weight: 8.5 lbs.; Barrel: 21.25"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt; Feed: 5-round, staggered-column, flush box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Argentine crest on the receiver ring, maker's name and model designation on the side rail.



The crest of an Argentine provincial or city government police carbine made for the "Gobierno de San Juan." San Juan is both the name of an Argentine provincial capitol and the name of the province itself. (John Wall collection)



The FN side rail address text on the Argentine–San Juan Province police carbine. Note the serifs on the font, used on FN rifles from the mid-1920s to the mid 1930s. (John Wall collection)



Argentine Marine Corps markings of furled anchor surmounted by crossed cannons on the receiver ring of the FN Model 1930 Short Rifle. (Robert Jensen collection)



A very rare FN Mauser police carbine made for the city and/or province of San Juan, Argentina. This carbine has not been examined close up, but it is assumed that it is chambered for 7.65mm and uses the standard length Mauser receiver. (John Wall collection)



The right side of the rare San Juan Province police carbine, serial number 128. FN marketed these carbines in the international sales literature of the 1930s. As these rare carbines are discovered one by one, there is a growing picture of numerous small sales. Similar, more common carbines have been observed with Mexican and Dutch markings, and less common, if not rare, markings from China and Yugoslavia. Post WWII police carbines without any markings were made for Morocco (see the Moroccan section in the book). Note the piece of angled steel inlet into the stock. This bracket holds a leather strap which buckles tightly around the buttstock, and is attached on the left side to the belt of the mounted policeman, thereby preventing the carbine from striking the back of the policeman when the rifle is slung across his back while mounted. (John Wall collection)

#### **AUSTRIA**

After the fall of Rome, the territory that was to become Austria was overrun by the Huns, Lombards, Ostrogoths, and Bavarians. In 788 it was incorporated into the empire of Charlemagne, and from the 9th to the 13th century was divided among a number of feudal domains. In the late 13th century, Austria was reunited under Rudolph I of Hapsburg whose dynasty became synonymous with Austrian history for the following seven centuries. By the reign of Charles V (1500-1558), Austria ruled not only the Holy Roman Empire, encompassing most of central Europe, but also Spain, all of Spain's colonies, and the Netherlands.

After the Thirty Years War (1618-1648), Austria's power declined, but was confirmed in the valley of the Danube after the defeat of the Turkish siege of Vienna in 1683 and the subsequent reconquest of Hungary from the Turks. In 1804, the Austrian empire was founded, and two years later the defunct Holy Roman Empire was abolished. The Ausgleich, or compromise of 1867 transformed the empire into the Dual Monarchy of Austria-Hungary.

In 1914, the assassination of the Archduke Franz Ferdinand, heir to the Austrian throne, led to the outbreak of World War I, with all its resultant tragedy. At the end of the war there was a wholesale redrawing of national boundaries in Central Europe, with Austria emerging as a small Alpine republic retaining about 12 percent of the territory of the old Dual Monarchy. Austria was faced with a terrible political and economic situation following World War I. After the rise of Hitler in 1933, Germany finally forced Austrian unification (the Anschluss) with Greater Germany in 1938. Overrun by American and Russian forces in 1945, Austria was divided into four zones of occupation, American, British, Russian and French, with the occupying forces permitting the formation of a unified national government. The occupation ended in 1955 with the signing of the Austrian State Treaty and the withdrawal of the four power forces.

The Austrian economy, decimated after World War II, has flourished in the post-war years under a modest form of socialism and with a great boost from the Marshall Plan. Petroleum reserves, tourism, and a highly developed manufacturing sector have greatly contributed to the prosperity of Austria.



Right side view of the Austrian Model 1914 Mauser Rifle; note the oversize sling swivel on the bottom of the buttstock. (John Sheehan collection)



Left side view of the Austrian Model 1914 Mauser Rifle with the bolt in the fully open position. (John Sheehan collection)



The Mexican Model 1912. This rifle is one of 70,000 Mexican M1912 long rifles made at Steyr in Austria that were brought into Austro-Hungarian Army service in 1914 as the "Repetiergewehr M.14 (Mexicanische)." Prior to issue to A/H troops, the receivers were blued. In Mexican service, the M1912 was issued with a bright, unblued receiver. (John Wall collection)



The lower sling boss on the Mexican M1912 was, in Austrian service, replaced by a large swivel design to accommodate the wide Austrian M95 rifle sling and its thick metal buckle. (John Wall collection)



This Austrian Model 14 Rifle was commandeered from the Chilean contract. Note the enlarged sling swivel under the butt and the Model 95 Austrian sling. The roller buckle engaging the tongue of the sling on the upper band had to be passed through the lower swivel in order to properly attach the sling. It was the presence of this buckle that necessitated the enlarged lower sling swivel. (John Sheehan collection)





The oversized lower sling swivel is the only feature that distinguishes the Austrianissued Model 14 from the original Model 1912 Steyr contract rifle. (John Sheehan collection)

The receiver markings on the Austrian-issued M14s were of each of the three countries that contracted the Model 1912 rifles from Steyr. In the case of this rare example, the Chilean crest appears above "Model 1912" on the top of the receiver. (John Sheehan collection)

**AUSTRIAN MODEL 1914 MAUSER RIFLE:** In all respects, this rifle is identical to the Model 1912 rifles produced for Mexico, Chile and Columbia, with the exception of the key identifier to Austrian use. Pressed into use because of the ever-increasing need for more rifles at the beginning of the World War I, rifles issued in the Austrian service had their Mauser-style detachable swivel base converted to fit the standard-issue Austrian sling. A very large sling swivel was added to the original base in order to accept the large retaining buckle of the Austrian-pattern sling. Many, but not all rifles were unit marked on either the buttplate, or the buttplate tang.

The total number of Model 1912 Mausers commandeered from each of the three contracts in the production line at Steyr in 1914 is as follows: Mexican contract - 66,979 rifles; Colombian contract - 5,000 rifles; Chilean contract - 37,500 rifles, 5,600 carbines.



The siderail markings shown here were identical on the Chilean, Colombian and Mexican contract Model 1912s. (John Sheehan collection)



The view beneath the muzzle showing the stacking bar and the protected cleaning rod near the muzzle of the Steyr-made Mauser 98 experimental short rifle. (U.S. Army Ordnance Museum collection, Aberdeen Proving Grounds, Md.)



An experimental Mauser Cut-away Demonstration Rifle using the Model 1898 Mauser action constructed by the Osterreichische Waffenfabrik Gesellschaft (Austrian Arms Company of Steyr, Austria) sometime between 1929-1935. During this era, Steyr produced a small number of experimental Mauser rifles, including a small production run on contract for Colombia. This rifle is similar, but features many design aspects from Steyr's earlier work on the Austro-Hungarian Army's Mannlicher Model 1895 straight-pull rifle, such as the handguard and stock design, the sidemounted stacking bar, sling swivels and barrel bands. (U.S. Army Ordnance Museum Collection, Aberdeen Proving Grounds, Md.)



Top view of the Steyr Mauser Short Rifle with cut-away areas showing key areas of Mauser Model 1898 functionality. (U.S. Army Ordnance Museum, Aberdeen Proving Grounds, Md.)



Cut-away bolt sleeve illustrating the operation of the Mauser Model 1898 safety on the Steyr-made experimental Mauser Short Rifle. (U.S. Army Ordnance Museum, Aberdeen Proving Grounds, Md.)



Cut-away buttstock of the Steyr-made Mauser 98 experimental Mauser Short Rifle, showing a cleaning kit accessible through a butt trap. Note the large sling swivel, used earlier on certain Austro-Hungarian M.95 straight pull carbines and the Czechoslovak VZ.23. (U.S. Army Ordnance Museum collection, Aberdeen Proving Grounds, Md.)



The right side of the Steyr Mauser Cut-away Rifle showing the distinctive pointed pistol grip, a feature often associated with stocks made at Steyr. (U.S. Army Ordnance Museum, Aberdeen Proving Grounds, Md.)



The double button rear sight leaf on the Steyr-made experimental Mauser Short Rifle as used on the Czechoslovak VZ.24. Note the manner in which the handguard surrounds the sight with a protective steel cap at the receiver end, a feature Steyr used on all M.95 Mannlicher straightpulls made for the Austro-Hungarian and Bulgarian Armies. (U.S. Army Ordnance Museum, Aberdeen Proving Grounds, Md.)



Cut-away section of the full left side of the Steyr-made Mauser 98 action. (U.S. Army Ordnance Museum collection, Aberdeen Proving Grounds, Md.)



Cut-away section of the full left side of the Steyr-made Mauser 98 action. (U.S. Army Ordnance Museum collection, Aberdeen Proving Grounds, Md.)

#### BELGIUM

From the beginning of the recorded history of gunmaking, Belgium has been in the forefront of firearms development, as well as being an innovator in the design and development of the machinery necessary to produce the guns. The ingenuity of the Belgians produced the machinery that enabled the English and the Germans to start up their early gunmaking facilities. Belgian production efforts ran the gamut from the finest, most modern factories, to the poorest garage jobshops that turned out weapons of highly questionable quality for the overseas markets.

The "Manufacture De L'Etat a Liege," a state-run facility, no longer manufactures firearms, but Fabrique Nationale d'Armes de



Belgian troops carrying Model 1889 Rifles march in a rear area of Belgium, C.1914.



Cut-away section of the barrel and muzzle area of the Steyr-made Mauser 98 experimental Short Rifle. Note the Steyr Mannlicher M.95type stacking bar next to a modified Mauser Gewehr 98 style bayonet bar, which almost fully conceals the tip of a Mauser Gewehr 98-type cleaning rod. (U.S. Army Ordnance Museum collection, Aberdeen Proving Grounds, Md.)

Guerre, more commonly known as "FN," is one of the largest privately-held arms manufacturing plants in the world. This company was formed in 1889 by a syndicate of Liege and Ludwig Loewe & Co. of Berlin, Germany, with the intent of producing Mauser rifles for the armed forces of Belgium. With the defeat of Germany in World War I, FN took over the overseas markets formerly monopolized by Germany, becoming, along with Czechoslovakia, one of the largest suppliers of military weapons in the world.

The Belgian armed forces used the Model 1889 Rifle and Carbine, in all its various models and variations, during the First, as well as the second world war. Ever a thrifty people, the Belgians modified the 1889 model rifle in 1916, and again in 1936, thus utilizing the vast stocks of Model 1889 weapons on hand and at the same time bringing them into closer conformity with guns produced in more recent years. These weapons have seen service in the jungles of Equatorial Africa, as well as on the battlefields of Europe.

MODEL 1889 RIFLE: This rifle is the grandfather of all Mauser onepiece bolt designs, with only slight differences between it and those developed at a later date by the Germans. Adopted on 6 February 1892, it was produced at FN, Fabrique d'Armes de L'Etat, Hopkins and Allen in Norwich, Connecticut, as well as in Birmingham, England. Produced for the Belgian armed forces until 1925, total production of this rifle is estimated in excess of 275,000, with approximately 8,000 of those made at the Hopkins and Allen plant. The barrel is covered with a barrel casing for protection of the barrel and the user's hand during operation. The bolt is equipped with only two forward locking lugs, the end of the striker is threaded and has a rib that engages a lengthwise slot in the bolt sleeve to prevent the firing pin from rotating, the cocking piece is held by a notch at the rear of the bolt to keep the sleeve from accidentally turning, there is no safety flange on the bolt sleeve, and the extractor is a short steel claw in the bolt between the two locking lugs. The detachable, single line, vertical column box magazine projects beneath the receiver.

During the invasion of Belgium in World War I, large quantities of this rifle were seized by the Germans, with many issued to support



Full-length view of the Model 1889 Rifle.



Shown here are seven of the eight known variations of the Belgian Model 1889 Infantryman's Rifle. From left to right, they are:

- 1. Model 1889 made by Fabrique National d'Armes d'Guerre (FN) of Herstal, Liege, Belgium, captured by the German Army during World War I, converted to 7.9mm and stamped with the Reichsadler (Imperial eagle) firing proof and "Deutsches Reich" in a roundel on the buttstock.
- 2. An un-numbered re-built Model 1889, marked with the receiver text crest: "W.W. Greener, maker" over "Birmingham." Presumably a World War I-era sample of the Greener factory's capability to re-build the Model 1889.
- 3. An FN-made Model 1889 rifle with a black enamel finish, serial number 7. Weighing 12 lbs., although this extra-heavy rifle appears to have a standard Belgian barrel jacket, this is actually a solid steel barrel. Although this rifle bears the "EGB" Belgian Government proof mark, no record of this rifle has yet been found in Belgium.
- 4. An FN-made standard Model 1889 infantry rifle, with the normal FN blued finish. Unit marked "V" over "7431," the property inventory number. The letter "V: before 1919 indicated a combat engineer's unit. After 1919, the "V" was used to denote a Telegraph Company. Both the buttplate and cleaning rod tip are stamped "7431." Only the buttplate tang is stamped with the letter "V."
- 5. A Model 1889 rifle made by "MAE," the State Armory, known as Manufacture D'Armes De L'Etat, also located in Herstal, Liege, Belgium. This rifle bears the stock cartouche of King Albert I, who became King of the Belgians in 1909.
- 6. A Model 1889 originally manufactured by FN in Liege, but re-built during World War I in Birmingham, England, where it was re-stamped "Etat Belge" over "Birmingham."
- 7. A Model 1889 made in the USA during World War I for the Belgian Government by the firm of Marlin Rockwell Inc. of Norwich, Connecticut, successors to the bankrupt Hopkins and Allen Arms Co., also of Norwich, Connecticut. The eighth Model 1889, not shown here, is the true Hopkins and Allen rifle, recognized by its letter "A" or "B" serial number prefix. Only about 15,000 rifles with the A and B prefixed serial numbers were actually Hopkins and Allen products, the remaining 165,000 rifles having been manufactured in the old H&A facilities by the new owners, Marlin Rockwell.

(John Wall collection)



This Belgian Model 1889 7.65mm Long Rifle is made by Fabrique Nationale. This all-matching Long Rifle is stamped on its buttplate tang with both unit and property inventory marks. Its serial number is in the "S" block, indicating probable manufacture in the early 1900s. (John Wall collection)



The buttplate of an FN-made Model 1889 Long Rifle. The letter "V" was the unit code used before 1920 to indicate issue to a combat engineer unit, while after 1920, it was used by "Compagnies des Telegraphistes." The number "7431" is the rifle's inventory number. Note that the inventory number of the rifle is not the rifle's serial number, which is stamped separately on the flat of the buttplate. (John Wall collection)

troops without alteration; however it appears that sizable quantities were converted to accept the German 7.92mm cartridge.

Length: 50.0"; Weight: 8.1 lbs.; Barrel: 30.7"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round single line, vertical-column detachable magazine; Sights: Ramp-and-leaf sight graduated to 1,900 meters. Remarks: Name of manufacturer on receiver ring, serial number on the side, along with proof marks.



The cleaning rod of a matching FN-made Model 1889 Infantry Rifle. Note that the property control inventory number stamped in the buttplate tang, "7481" is also stamped on the head of the cleaning rod. (John Wall collection)



Belgian M1889 Rifle stock cartouche. (Robert Jensen collection)



M1889 Rifle buttplate tang numbers.



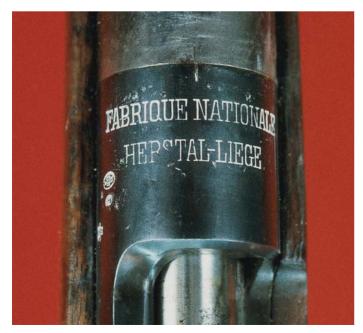
This picture shows the serial number on the left side of the barrel, the side rail, and the stock of the Belgian Model 1889 Rifle.



Full-length view of the Belgian Model 1889 Rifle as made by Hopkins and Allen, Norwich, Connecticut. (Cliff Baumann collection)



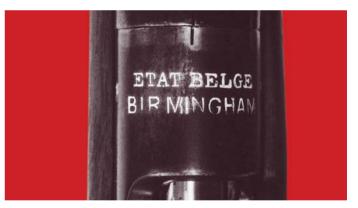
Receiver markings of the Belgian Model 1889 Rifle produced by Hopkins and Allen of Norwich, Connecticut. (Cliff Baumann collection)



The receiver markings on the Model 1889 Rifle.



World War I Belgian troops equipped with Model 1889 Rifles, firing at the Germans from a fixed position.



Belgian M1889 Rifle receiver markings indicating that this piece was made in Birmingham, England under the direction of a group of patriotic Belgian refugees.



Belgian M89 Rifle buttplate markings. (Robert Jensen collection)



A full-length view of the Belgian Modelle (Model) 1889 Long Rifle produced by Manufacture D'Armes de L'Etat, also known as "MAE." This facility was located in Herstal, Belgium, a suburb of Liege and was a producer of Model 1889 Carbines before 1910. The MAE-made rifle differed only in its markings from FN-made Model 1889. (John Wall collection)



A full-length view of the Belgian Modelle (Model) 1889 Long Rifle produced by "MAE." (John Wall collection)

The major stock cartouche on Belgian Model 1889s is the large roundel on the lower portion of the right hand side of the buttstock, just below the smaller fourth mark. The roundel contains two sets of unknown initials. the model of the rifle (Not the year made !) and the initial of the then reigning King. In this case, the initial is "A" for King Albert I, which helps in the tentative dating of the rifle to the period of 1909 to 1914. King Albert ascended to the Belgian throne in 1909. Arms production at MAE ended in 1914 with the German occupation of Liege, and likely did not continue after WWI, since at least 140,000 Model 1889 rifles and carbines are believed to have arrived from the USA just as the war was ending. (John Wall collection)





The receiver text crest of a Belgian Model 1889 Long Rifle. The markings on the receiver include the letter "M" over "89," and the Government's "EGB" in an oval proof mark. "EGB" stands for the French phrase "Proved by the Government of Belgium." There are no proof marks from the Liege proof house on this rifle. (John Wall collection)



An inspector's stamp on the fore stock, just in front of the trigger guard of the MAE Model 1889 Long Rifle. This mark is one of four major stock cartouches found on this MAE rifle. The second is located on the wrist just in front of the receiver tang, and the third and fourth are on the flat area on the right side of the buttstock. (John Wall collection)



The right side of the receiver of an unissued MAE-made Model 1889 Long Rifle. (John Wall collection)



An inspector's stamp on the wrist of the matching and unissued Model 1889 made by MAE. (John Wall collection)



The left side of the action of the MAE Model 1889 Long Rifle. The serial number, b3366 is stamped on the stock below the ejector box, barrel jacket and receiver side wall. Note that the serial number prefix is a lower case letter. Observed newly-manufactured Model 1889 Long Rifles appear to use a serial number prefix unique to manufacturers; the FN serial number prefix is a capital letter, the MAE rifle uses a lower case letter, and the Hopkins and Allen-marked rifles use a cursive letter. (John Wall collection)



The muzzle, fore end and front sight of an MAE-made Belgian Model 1889 Long Rifle. Note that the last two digits of the rifle's serial number, "66" are also stamped on the front sight blade. (John Wall collection)



This Belgian Model 1889 7.65mm Long Rifle was re-built and re-proofed in Birmingham, England by the famous British gun making firm of W.W. Greener. This is only one of a few known to exist, and all reportedly came from the estate of the Greener firm when it was sold at auction several decades ago. This rifle is made up of many older and slightly abused Model 1889 parts, including the receiver, which have been scrubbed, cleaned and reblued. Little is known of the original of the Greener '89s, although it is assumed that they originated in the early days of the war when the Belgium Government decided to set-up a firm in Birmingham to act as a rework depot for the Belgian army.



The right side of the Greener Model 1889 Belgian Mauser.



Notice that the Greener Model 1889 lacks any of the normally seen Belgian stock cartouches and roundel applied by Fn and MAE.

The receiver text crest pf the "W.W.Greener, Maker, Birmingham" Belgian Model 1889 Mauser. Note the proof mark, the only such mark on the rifle. The mark was used at the Birmingham Proof House between 1868 and 1925 to denote barrels definitely proved with loads for provisional proof.





The action of the W.W.Greener Model 1889 Long Rifle. This rifle has no serial numbers, except for a faint number "40" on the bolt, likely a leftover mark from the original part. Other components such as the ejector assembly appear to be newly manufactured.



The W.W.Greener-made Belgian Model 1889 Rifle viewed from above. Note the high quality of the blued finish.



Full-length view of the Belgian Model 1889 Carbine. (Springfield Armory Museum)



Receiver markings on the Belgian Model 1889 Carbine. (Springfield Armory Museum)

**MODEL 1889 CARBINE WITH BAYONET:** This carbine model of the 1889 rifle differs only in dimensions. It has a shorter barrel and shorter overall length—41.0 inches. Utilizing the standard rifle bayonet, this carbine is commonly referred to as the Carbine M1889 with Bayonet.

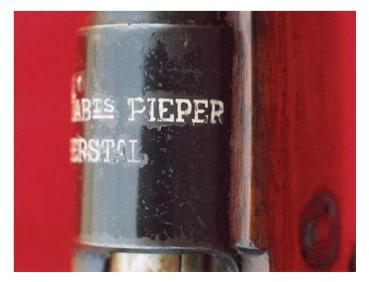


Interesting variant of a Belgian M1889 Carbine and its markings. This shows that the carbine was marked with the Fabrique Nationale 'crest' originally, and with the 'etat belge' 'crest' at Birmingham, England. The theory is that the Belgian refugees took machinery and/or parts with them when they fled to England. (R. K. Smith collection)

**MODEL 1889 CARBINE WITH "YATAGHAN":** Issued to Foot Gendarmes and fortress Artillery troops, this carbine has the action, stock, and barrel band/nose cap of the Infantry rifle. The barrel band is closer to the nose cap than to the rear sight, and the bolt handle is generally bent downward. The term "with Yataghan" refers to the



View of an Model 1889/36 Short Rifle receiver made by Pieper; there is a question as to whether or not Pieper made Model 1889s originally, or did they use some of their receivers when they were making M1889/36s? (R. K. Smith collection)



*A further view of the M1889/36 Short Rifle receiver ring, showing the 'Pieper' receiver marking. (R. K. Smith collection)* 



Belgian troops armed with the Model 1889 Carbine in a shallow firing position. These troops are obviously not in contact with the enemy.



*Close-up view of the slotted sling attachment on the left side of the wrist of the stock of the 1889 Carbine, lightened version.* 



Full-length view of the right hand side of the Belgian Model 1889 Carbine, standard version converted for Cavalry use.



Full-length view of the left hand side of the Belgian Model 1889 Carbine, standard version converted for Cavalry use. Note the slotted sling attachment.



The Model 1889 "Lightened" Mounted Gendarmerie Carbine, shown here with the Model 1889 Yataghan bayonet with which it was issued. Note the unusual elbow bracket on the right side of the stock. The overall length of this diminutive carbine is 35 1/8". (John Sheehan collection)



The Mounted Gendarmerie Carbine has a lower band mounted a scant 1" below the top band. This view shows both upper bands with the bayonet mounted on the carbine. This model is extremely rare. (John Sheehan collection)



The bayonet lug and tenon added to this carbine were silver soldered and riveted to the barrel jacket. (John Sheehan collection)



This carbine was adapted to utilize a surplus Model 74 French Gras bayonet. Gras bayonets were readily available, and a similar adaptation is known to have been added to a small number of Model 89 Infantry rifles. Bayonets were in short supply from time to time, and alterations such as this were to be found in nearly every army that fought in WWI. (John Sheehan collection)



The elbow bracket mounted on the right side of the stock of the Model 89 "Lightened" Mounted Gendarmerie Carbine is only found on this particular variation of the Model 89. (John Sheehan collection)



This Model 89 "Lightened" Carbine variation is one of two known examples of this rare variation. Note the addition of sling swivels, the removal and plugging of the stock bracket and the addition of the bayonet lug and tenon mounted on the right side of the barrel jacket. (John Sheehan collection)



The left side of the muzzle of the short barreled Mounted Gendarmes' Carbine showing the manner in which the upper band is secured to the forestock. (John Wall collection)



A close-up of the holding device inlet into the stock of the Belgian M1889 Gendarme's Carbine to prevent the upper band from slipping back and forth. (John Wall collection)



The FN receiver text crest on the Model 1889 Mounted Gendarmes' Carbine. (John Wall collection)



The rear sight configuration on the Model 1889 Mounted Gendarmes Carbine. (John Wall collection)



The buttplate of the Mounted Gendarmes' Carbine, showing the Carbine's serial number, 11767, its Unit mark, "W" for Gendarmes, and its property inventory number, 1825. (John Wall collection)



The side rail serial number marking on the Belgian Model 1889 Mounted Gendarmes Carbine. Belgian sources indicate that these carbines may be circa 1904 conversions of Model 1889 carbines made earlier in the 1890s. (John Wall collection)



The left side of the receiver of the Model 1889 Gendarmes Carbine showing the "EGB" Belgian Government proof mark, in addition to earlier proof marks which appear to have been partially removed, perhaps during a conversion process. (John Wall collection)



The Belgian Garde Civique is the National Guard, or militia, of Belgium. It was organized in the larger cities and communes of the country, and was equipped normally with Model 1889 Mauser Rifles. Units on bicycles however, were issued special 7.65mm carbines of the type shown here. Produced by FN, these rare carbines appear to have been 1893 Long Rifles cut down and modified for a new mission. The rifle shown is in the former Pattern Room Collection, now in the Royal Armories Museum in Leeds, England, where it was photographed. It is unclear how Model 1889 rifles care into Belgian military issue when the Model 1889 rifles and carbines had been adopted only a few years before.



The Garde Civique Bicyclist's Rifle, showing the unique double slots cut in the butt. The purpose of these is likely to use a side-mounted sling for carry across the back of the bicyclist, but this is as yet undocumented. Note the presence of Garde Civique cartouche or roundel. (Pattern Room Collection, Royal Armories Museum, Leeds, England)

Nationale. FN. address text crest on the Garde Civique Bicyclist's Rifle. This same address crest appears on all known Model 1893 Rifles and carbines made by FN except those provided to the Brazilian Government. (Pattern Room Collection, Roval Armories Museum, Leeds, England)

The Fabrique





A side view of the Garde Civique Rifle showing the FN address and the "EGB," the official Government proof mark found on firearms accepted into Belgian military service. None of the FN Model 1893 rifles have been observed with this mark. (Pattern Room Collection, Royal Armories Museum, Leeds, England)



The large Garde Civique stock cartouche on the left side of the Bicyclist's Rifle. Mauser Garde Civique rifles with this mark, either M1889 or M1893, are very rarely seen. (Pattern Room Collection, Royal Armories Museum, Leeds, England)



The side-mounted sling swivel of the Garde Civique Bicyclist's Rifle. Note that the earlier swivel was located closer to the rear sight. (Pattern Room Collection, Royal Armories Museum, Leeds, England)

sword bayonet used with this weapon. These bayonets that were in the hands of the Foot Gendarmerie were replaced with the Mle 16 epee-type bayonet in 1916. Overall length of the carbine is 41.14 inches, with a barrel length of 21.65.

MODEL 1889 CARBINE "LIGHTENED": During WWI, the Belgian Army established an arms depot in the French port city of Calais, which was directly behind the Belgian-held section of the Western Front. The depot in Calais was responsible for the immediate salvage of battlefield-recovered weapons. Weapons that required major overhauls were sent to the Belgian-established arsenal in Birmingham, England. Those weapons that could be repaired quickly in Calais and returned into service were reworked locally. The Calais Depot, in the course of salvaging weapons, produced some unusual variations based on available parts. This rare example has been converted from a Model 1889 Carbine "Lightened" into a configuration roughly equivalent to the Mounted Gendarmerie Carbine. The original stock brackets have been removed and the stock plugged. There are several additional patches in the stock. Sling swivels have been added underneath both the stock and forearm. The most interesting addition, however, is that of a bayonet lug and tenon mounted on the right side of the barrel jacket. The style of the tenon and lug are unmistakably designed to accommodate a French Model 1874 Gras bayonet. This carbine, along with the Turkish Model 1890 listed in this section, represent two examples of the attempts made during WWI to fill the constant need for replacement weapons. The massive concentrations of heavy artillery used during WWI, firing high-explosive shells, consumed both men and equipment on an unprecedented scale. Rifles of all types were utilized whenever possible to help fill the constant need for replacement weapons.

**MODEL 1889 CARBINE "LIGHTENED WITH YATAGHAN":** This variation of the Model 1889 Carbine was produced in very small numbers for issue to the Mounted Gendarmerie. It is an extremely rare Model 89 variation. The stock has a longer forearm than the standard carbine and is capped off with the same top barrel band with bayonet lug as is used on the Model 89 rifle. An additional barrel band, with a bottom-mounted sling swivel, has been added 1 inch behind the top barrel band. The lower swivel is mounted underneath the buttstock. In addition to the sling swivels, the Mounted Gendarmerie carbine has an unusual elbow bracket mounted on the right side of the stock. This



The forestock, muzzle and cleaning rod of the Garde Civique Bicyclist's Rifle. (Pattern Room Collection, Royal Armories Museum, Leeds, England)

bracket is only found on the Gendarmerie carbine. The carbine lacks the cavalry crossbelt bracket found mounted in the stock of all of the other Model 89 carbine variations. To help compensate for the diminutive size of this short carbine, it was issued with the Model 1889 Yataghan bayonet. This unusually long bayonet has a 21.65" blade mounted in the standard pattern Model 89 hilt and crossguard. As is evidenced by the serial numbers of the few surviving examples, the small production run of Gendarmerie carbines were converted from existing inventories of Model 1889 "Lightened" Cavalry carbines.

Length: 35 1/8"; Weight: 5 lbs.; Barrel: 15.75"; Caliber: 7.65x53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round single line, vertical column detachable magazine; Sights: ramp-and-leaf sight graduated to 1,800 meters; Remarks: Name of manufacturer on receiver ring, serial number on left side of barrel, receiver and stock, on the bottom of the magazine and on the rear of the bolt stem, along with proof marks and acceptance stamps on the left side of the receiver and underneath the barrel.

**MODEL 1890 TURKISH MAUSER RIFLE:** Captured by the British and supplied to the Belgians. During the Mesopotamia campaign and the ill-advised Gallipoli expedition, the British captured large numbers of Turkish Model 1890 rifles which were the same caliber as those used by the Belgians. These were converted to conform as closely as possible to the Belgian-pattern weapons by replacing the rear sight with the M1889 pattern, eliminating the hand guard, and heavily proofing the



M1889 Rifle, converted to 7.92 x 57mm. (Jan Gardiner collection)



Right side view of the Belgian acquired Turkish Model 1890 Mauser Rifle, converted to conform to Belgian standards; note the bent bold handle. (John Sheehan collection)



Left side view of the Belgian/Turkish Model 1890 Mauser Rifle with bolt in the fully open position. (John Sheehan collection)

barrel and receiver. Other than the proofs, no additional markings were added, and all of the original Turkish markings were allowed to remain.

**MODEL 1916 CARBINE:** Adopted during the first world war to replace the various types of carbines in use, this carbine is similar to the Model 1889 with "Yataghan" bayonet, but has a new style bracket in the buttstock.

**MODEL 1935 SHORT RIFLE:** At first, Gew 98s were converted at the Manufacture d'Armes de L'Etat, but between 1935 and 1940, the Model 1935 Short Rifle was manufactured by FN at Liege. This short rifle is a typical standard Model 1898-pattern Mauser action with a non-rotating extractor, a safety lug on the bolt, and most of the improvements to be found on the Gew. 98. The magazine is flush with the bottom of the action, and the barrel jacket is discarded. Interestingly, hinged barrel bands are used, and a stacking swivel is included at the rear of the bayonet lug.

Length: 43.58"; Weight: 8.995 lbs.; Barrel: 23.43"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round staggered-column, flush box magazine; Sights: Tangent leaf sight graduated to 2000 meters. Remarks: Manufacturer's markings on the receiver ring.

*The serial-numbering* convention used on the rare Belgian FN (Fabrique Nationale) Model 1893 long rifles and carbines. Made for Brazil, Spain, Belgian Gendarmerie and the army of the Congo Free State, production of Model 1893 long rifles and cavalry carbines began at Herstal in 1894 after FN's production contract for the M1889 Belgian



Army rifles was completed. (John Wall collection)



The boxed letter "N" mark seen on many Mauser components made by FN. Its meaning is still unknown. (John Wall collection)



Receiver ring of the Belgian Model 1935 Short Rifle, showing the crown over "L" for Leopold, King of the Belgians.



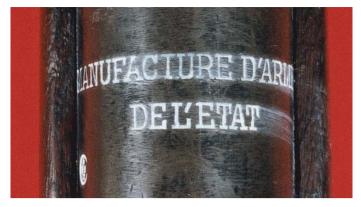
Full-length view of the Belgian Model 1935 Short Rifle.



Side view of the action of the Belgian Model 89/36 Short Rifle, showing proofs and serial number. (Cliff Baumann collection)

**MODEL 1889/36 SHORT RIFLE:** In 1936, in order to standardize along the lines of the Model 1935 Short Rifle, conversion of the stocks of Model 1889 Rifles and Carbines commenced in the factory of Pieper and Cie. in Herstal, as well as at the Manufacture d'Armes de L'Etat, and continued until 1940. The resulting rifle combined the action and the shortened stock of the Model 1889 with the barrel, sights, forend, and hinged upper barrel band of the Model 1935 Short Rifle. In order to strengthen the stock, a recoil bolt was also incorporated through the stock beneath the chamber, just forward of the magazine.

Length: 43.07"; Weight: 8.31 lbs.; Barrel: 23.62"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt; Feed:



Receiver ring markings on the Belgian Model 89/36 Short Rifle. (Cliff Baumann collection)

5-round, vertical column, box magazine; **Sights:** Tangent leaf sight graduated to 2000 meters. **Remarks:** Manufacturer's name on receiver ring.

**MODELS 35/46 AND 50 SHORT RIFLES:** After World War II, the Belgian armed forces were supplied with tremendous quantities of surplus U.S. weapons and ammunition with which to re-equip. All surviving Model 1935 Rifles were converted to handle the U.S. .30-06 cartridge. These conversions required cutting a notch in the face of the receiver ring to accommodate the longer U.S. cartridge, while the guides on the receiver were recut to accept the U.S. chargers, or clips.

Production of new Mle 1950-type rifles began in the FN factory in Herstal, with the magazine well lengthened to accept the American



Full-length view of the Belgian Model 89/36 Short Rifle. (Cliff Baumann collection)



A small number of Belgian M1889 rifles and carbines were converted to the Model 1889/36 Short Rifle configuration by a Liege firm known as "Anciens Establishment Pieper," which like FN itself, was located in in Herstal near Liege, Belgium. Pieper conversions are marked with an abbreviated form of the Pieper corporate name, over the name of the town, "Herstal." (John Litt collection)



The left side of the Pieper M1889/36 conversion. Note the Liege proof marks in combination with the faint "EGB" oval Government proof mark. (John Litt collection)



The action of the Pieper Model 1889/36 conversion. Note the checkered surface of the underside of the bolt handle, indicating that the bolt had originally been a turned down bolt for a Model 1889 Carbine, which Pieper straightened for the conversion. (John Litt collection)



View of the crest of the Belgian Model 24/30 naval .22 caliber Training Rifle. This shows the crown/"B"/"ABL"/date of manufacture markings common to this rifle.



The receiver ring of the Belgian Model 24/30 army.22 caliber Training Rifle. Note the crown over "B" (Baudoin), over "ABL" (Armee Belge Leger), over the date of manufacture.

The bolt-marking conversion used on Belgian Army Model 1899 Infantry rifles. The top mark. the star over the letter "T," is the individual mark of a "Controleur" of the Liege Proof House; the mark below this is the "Perron," a large column or obelisk, a famous Liege city public monument, which has been used by the Liege Proof House for over 300 years. Since 1853, it has been used to indicate the proof or inspection of breeching systems. Until 1903, the Lion over the "P.V." indicated the successful proving of military rifles with



smokeless powder. After 1903, the same mark was used to indicate nitro proofing. Belgian Army M1889 bolts were always numbered on the flat surface of the handle facing the shooter. (John Wall collection)



The inspection and proof marks of the Proof House in Liege Belgium on 7mm FN-made Model 1893 long rifles and carbines in Spanish, Uruguayan and Brazilian service. Other M1893 Mausers were purchased by the Belgian Government and converted to carbines. Known as the "Carabine de Cyclist de la Garde Civique," these were issued to bicycle-mounted police serving with the Belgian "Civil Guard." Other FN-made M1893s were issued "Force Publique" of the Belgian Congo where they were known as "Brazilian carbines."



Post-World War II unmarked FN Model 30-style Short Rifle with a straight bolt handle.



Composite grouping of Belgian weapons, from top to bottom: 1) M1889 Rifle; 2) M1889 Carbine; 3) M1935 Short Rifle; 4) M89/36 Short Rifle. (Robert Jensen collection)



FN manufactured .22 LR single shot Military Training Rifle. Parkerized black finish. (Rock Island Auction Co.)



Full-length view of the Belgian Model 24/30 .22 caliber Training Rifle developed for the Belgian army. The army model has a blue/black finish.



Full-length view of the Belgian Model 24/30 naval .22 caliber Training Rifle. The naval model is done in a gray-green finish.



Belgian M1924 Contract Rifle, 7.65x53mm, overhead view of the action. (Jan Gardiner collection)



Top view of the "Force Publique" crest (Rampant Lion) on a Belgian Congo M24/30 .22 caliber Training Rifle. (R. K. Smith collection)



Belgian M1924 Contract Rifle, 7.65x53mm, right side of the receiver ring, showing serial number 3. (Jan Gardiner collection)



The single shot Model 1924 Belgian Mauser Training Rifle, cal. 22 long rifle shown from the right side. This rifle was made at FN Herstal in 1952 for use by the Belgian Congo, by the Force Publique, the private army founded by King Leopold II in the Congo Free State (1885-1908) in 1888. (John Wall collection)



Model 1924 Belgian Mauser Training Rifle, cal. 22 long rifle shown from the left side. The finish on this rifle, like the 7.65mm and .30-06 variations, is black enamel. The Force Publique, or Public Force was an army officered by Europeans with native conscripts. It was initially created for the purpose of suppressing slavery, but generally served as a police force to control the native populations. (John Wall collection)



The receiver crest of the Model 1924 Belgian Mauser Training Rifle, cal .22 long rifle. "F.P." stands for "Force Publique," the army of the Belgian Congo. "1952" is the year of manufacture. (John Wall collection)



The rear sight leaf of the Model 1924 Belgian .22 caliber Mauser Training Rifle, showing range gradations of 25 to 200 meters. (John Wall collection)



The side rail text of the FN Liege address on the Model 1924 Belgian Training Rifle; the simple italic font used here is indicative of post-WWII FN production. (John Wall collection)



The flat single piece side plate covering the area which on the standard large bore Model 1924 Mauser Service Rifle accommodates the five round magazine. On .22 caliber training rifles, the plate simply covers stock wood since this trainer is single shot and has no magazine well. (John Wall collection)



A rare Belgian Model 1889 Heavy Barrel Rifle, serial number 7, chambered for the official 7.65mm cartridge. Made by Fabrique Nationale (FN), in Liege, the official purpose of this rifle has yet to be determined. Although it bears the Belgian Government's "EGB" proof/inspection stamp, it has not yet been proven that it was a regulation or officially adopted rifle. Although it appears to have a standard Belgian Army barrel jacket, this is actually a solid steel barrel, adding an extra 3 pounds to the overall weight of the rifle! (John Wall collection)



The Belgian Model 1889 Heavy Barrel Rifle. The illustrated example has no stock cartouches, and lacks the muzzle protrusion that holds a bayonetlocking ring. The factory finish on the heavy-barrel Model 1889 is black enamel, suggesting that it was made in the 1920s or 1930s. No record of rifles of this type has yet been uncovered in Belgium, so its tactical purpose, if any, is unknown. (John Wall collection)

## Production Data for Mauser Military Rifles made for the Belgian Government, and for export, by Fabrique Nationale Armes de Guerre, (Herstal) and other manufacturers, 1890 to 1950

**Note:** The data below is drawn only from published sources that use factory production record, references material written using factory data or statements by corporate officers. Unfortunately, there is a great deal of data on Belgian military production data that has not been published. Rifles and carbines produced by MAE, and in Birmingham, England during WWI is particularly lacking. Also missing is production data for the pre-WWII M1936 and M1889/35 short 7.65mm rifles, and the post WWII "Fusil Mle 1924" (a.k.a. "M1950") .30-06 short rifles. Many other FN and MAE rifles and carbines were produced, but are not included below, since reliable production number have never been published, and/or serial number observations and research is lacking.

**Note:** FN corporate histories and sales publications have confirmed the sale of FN rifles to many countries not on this list. Unfortunately, production data, and in many cases, examples of the rifles themselves, are not available. The following countries, NOT on the list below, are known from FN sources to have purchased FN rifles and/or carbine models: Argentina, Colombia, Costa Rica, France, Haiti, Iran, Mexico, Paraguay, Peru, Saudi Arabia, Uruguay, and Yemen.

Principal Sources:

- 1 FN: 100 Years, The Story of a Great Liege Company, by Claude Gaier and Auguste Francotte
- 2 The Norwich (Connecticut) Bulletin daily newspaper, Norwich, CT, U.S.A.; various issues, 1918, 1919.
- 3 Serial number research
- 4 FN factory letter

Date	Country	Number Produced	Model/Caliber	Type/Comments
1890 - 1927	Belgium	180,000	Fusil Mle 1889 long rifles and Mle 1889 carbines, 7.65mm	These figures reflect only published FN production numbers. The only FN-made MIe 1889s observed so far have been long rifles and two-banded carbines. (Source: 1) Cavalry and other special service rifles have been produced by MAE, whose production figures are unavailable.
1916 - 1918	Belgium	150,000	Fusil Mle 1889 long rifles and Mle 1889 carbines, 7.65mm	Hopkins and Allen of Norwich, Connecticut, U.S.A., was contracted to make 140,000 Fusil Mle 1889 long rifles, and 10,000 carbines. The order was completed in full and shipped in September 1918. All 150,000 rifles are marked "Hopkins and Allen Arms Co Norwich, Connecticut", even though only 8 percent of the total order was completed by H&A before their bankruptcy in 1917. Fully 92 percent of the 150,000- rifle order was produced by Marlin Rockwell Firearms Co., which purchased the assets of H&A. The H&A name was used on all production. No known rifles exist bearing the name "Marlin Rockwell." See the "Norwich Bulletin" issue of Sept. 17, 1918; and the Oct. 16, 1919 interview with A. F. Rockwell. (Source: 2)
1952	Belgium	1,000	Fusil Mle 1924 d'etrainement, caliber .22	This Fusil Mle 1924 short rifle trainer in .22 caliber, is marked "ABL, 1952." (Source: 4)
1948 - 1952	Belgian Congo	300	Fusil Mle 1924 d'etrainement, caliber .22	Fusil Mle 1924 d'etrainement (short rifle trainer) in .22 caliber, marked "F.P." over "1948." "F.P." indicates ownership by the "Force Publique" of the Belgian Congo. 1952-dated trainers have also been observed. (Source: 4)

Date	Country	Number Produced	Model/Caliber	Type/Comments
1896	Spain	14,000	Model 1893 long rifles and carbines, 7mm	It is unknown exactly how many of this order were rifles and how many were carbines. To date, no FN M1893s have been found with unequivocally Spanish markings. It is therefore likely that these weapons were those M1893 FN arms made without national markings, bearing on the FN commercial address crest: "Fabrique Nationale" over "Herstal, Liege." (Source: 1)
1894	Brazil	FN Rifles: Estimate 20,000+ FN Carbines: Est. 15,000	Model 1894, 7mm	The Brazilian contract was signed in June of 1894, and was divided between Ludwig Loewe and FN Herstal. Both long rifles and carbines were produced by both manufacturers. Production numbers data is based on serial number observations. Loewe rifles have been observed in the No-prefix, and A through G blocks, FN rifles in the I and J blocks. All Loewe carbines have so far been records with a prefix, with FL carbines having an "A" prefix. (Source: 1)
1922	Brazil	Est. 20,000+	Model 1922 carbine, 7mm	(Source: 3)
1930- 1939	China	188,720	Fusile Mle 1930, 7.9mm	Short rifles and carbines have been observed. The crest is typically the large "FN" logo, or simple a year date, (such as "1938") or both. (Source: 1)
1935	Ethiopia	25,000	Fusile Mle 1930, 7.9mm	Short rifles and carbines. (Source: 1)
1937- 1939	Greece	75,000+	Fusile Mle 1930, 7.9mm	Fusil Mle 1930 in 7.9mm short rifles and carbines. Short rifle serial numbers up to the "H" block have been observed. (Source: 3)
Late 1930s	Lithuania	75,000+	Observed rifles are exact duplicates of the Brno VZ.24 pattern	Fusil Mle 1930 in 7.92. Serial numbers up to the 75,000 range have been observed; 3 observed crest variations, no carbines. All rifles have the "Mod.24L" receiver marking. (Source of production estimate is serial number observation and research. (Source: 3)
Mid. 1930s	Venezuela	16,500	Mle 1930, 7mm	Short rifles and carbines, delivered before WW II. After WW II, many thousands more ("massive quantities") were delivered to Venezuela. (Source: 1)
1924- 1927	Yugoslavia	90,000	Mle 1924	The model purchased by the Yugoslav Government was the Fusil Mle 1924, an early variant manufactured with intermediate length 8.25-inch-long receiver. Short rifles and carbines were produced. 50,000 were contracted in 1924, and another 40,000 in 1926. (Source: 1)



The top of the action of the Model 1889 Heavy Barrel Rifle made by FN, showing the serial number and the rifle's black enamel paint finish. (John Wall collection)



The bolt of the FN-made Model 1889 Heavy Barrel Rifle, showing the serial number "7" stamped on the bolt flat which faces the shooter, and various inspection marks. (John Wall collection)



The crown and the muzzle of the Belgian Model 1889 Heavy Barrel Rifle. (John Wall collection)



The small oval stamp shown above is the "EGB" proof mark of the Government of Belgium. This is very difficult to read and decipher when a rifle has been given a black enamel finish. (John Wall collection)



A comparison of the officially adopted 7.65mm Model 1889 Infantry Rifle muzzle on the left, with the blunt muzzle of the Model 1889 Heavy Barrel Rifle on the right. Although the upper band of the heavy barrel rifle does have a bayonet lug, the lack of the protruding muzzle and the associated extra barrel length means that the heavy barrel rifle prevents it from accepting a bayonet. (John Wall collection)

cartridge, even though the notch in the face of the receiver ring was retained. The track for the left locking lug was milled through the shoulder in the receiver ring, while the receiver was marked with a crowned "B" (for "Baudoin") above "ABL" and the date of manufacture. This rifle is basically the 1924 export model rechambered for .30-06 ammunition.

Length: 43.50"; Weight: 8.95 lbs.; Barrel: 23.23"; Caliber: .30-06; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: Tangent leaf sight graduated to 2000 meters. Remarks: Manufacturer's markings on the receiver ring, or on the 1950 models, a crowned "B" / "ABL" / date. Apparently, "L" marked specimens also exist.

Between the first and second world war, FN developed contract model Mauser rifles for overseas sales, trying to fill the gaps in the ranks of the suppliers caused by the defeat of Germany. Some of the finest weapons developed were the Models 1924 and 1930, which were almost custom designed to fit the customer's specifications. There is little difference between the two basic model designations, with customer modifications counting in large part for the differences.

After the second world war, Model 24/30 .22 caliber training rifles were produced for both the Belgian army and the navy. These rifles were standard in every way with the exception of caliber.

Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography			
. Argentina	a. Model 1930	7.9 m/m	Crossed cannons over an Anchor	Unknown	Unknown	MMRW, page 18; NS; RWDB			
	<b>Comments:</b> Reported in MMRW to be an Argentine Navy/Marine rifle; identification was confirmed by Argentine Naval officers.								
	b. Model 1935	Believed to be 7.65 m/m	Argentine national crest	Half	Turned down	Mauser Bolt Rifles-MBR, 160; FN-Cat2; Cweb			
	as the "L" Rifle (1 30s by Gov. Dr. 1 M.1935 in at lea 1) The Arger 2) It lacks the 3) The Arger bar. 4) The Arger products. 5) The Arger on Maus and 1933 receiver in apparent on this ea Delivery of M19 Belgium, FN wa doing that same CWeb illustrates	for the King Leop Manuel Fresco for st 5 significant for the retainer for the entine rifle has a mathematic for the mathematic for the mathematic for the entine M1935 re- mathematic for the serial nu- made not at FN Belgian or Lieg arly M1935 expo 35 rifles to Arge s making the fire of the bayonet for	bold's "L" crest on the Bel or the Buenos Aires prov eatures: urned down bolt. cleaning rod tip found u bayonet lug directly und eceiver lacks any manu ars non-Belgian proof m ctured in Germany for p mbering format, side ra but at Mauser Werke A. e proof marks on Model rt contract by subcontract entina began in January, st of the Mle 1935s for th cled Imperial German G	Igian Model 1935 incial police. The nder the Belgian er the front band afacturer's marki arks, the unique urchasers other il lettering, font, G. in Oberndorf 1935 L rifles. It cting receiver cor 1935 and endec ne Belgian Army ewehr 98 receive It is in fact not	5, 2a below), this is Argentine Model front sight. I, as opposed to the ngs and is there non-military <u>Ger</u> than the German and marking loc a/N, Germany in appears likely the nponents to Mau d in May 1936. At while the State A ers. Also of possil an FN export ba	t this time, it was likely that Arms Factory, MAE, was bu ble importance is the fact th ayonet but the German Ar			
. Belgium	a. M1935, or "Fusil Mle 1935"	7.65 m/m	"Manufacture' D'Armes de le Etat"	Half	Straight	Observed; MBR, p. 159; article, LAAFR-BD, p.15 153, TVan			
	LAAFR-BD report then in service we containing the lease rifles with serial higher. Original numbers were r	orts that MAE M vith the Belgian etter "L" for King numbers from 6 German Geweh emoved, and we	e 1935s were built using Army. Stocks are number Leopold, and the date "- 378 to a high in the low r 98 stocks were retaine	g receivers stripp red on the outsid 1935" when MAE 50,000 range ha d and modified; r	ed from German e, just under the l began productio ave been observe many kept their u	I .E.) in Liege from 1935-19- Gewehr 98 rifles, which wo polt release. Stock cartouch on, have been observed. M rd, and the range may well nit marking disc. German b ing swivels and a third, upp			
	b. M1935, or "Fusil Mle 1935"	7.65 m/m	Crown over cursive letter "L". the emblem of King Leopold III of Belgium	Half	Straight	Observed; MBR, p. 159 LAAFR-BD, p.152-153; ,			
	for King Leopold rifles have beer finish on all me contains only or numbered on th HERSTAL BELC	d and the year of reported in the tal except for the date, 1940, whe exterior, just GIQUE in an Aria	late "1940", and the rece serial number range of bolt. In keeping with the hen production at FN st under the bolt release. al-like font without serifs.	eiver crest of a c 69,000 through ne Belgian custo arted up. No othe The side rail is Sights are gradu	rown over a large 76,000. Most rifle m, the stock roun er dates have bee marked: FAB. N nated from 100 to	ouche containing the letter e cursive letter "L". At least es have a black enamel pa ndel on FN-made Mle 193 en reported so far. Stocks AT. D'ARMES DE GUERF 1900 meters. Barrel, recei Mle 1935 has been repor			

•		•	Charts of Fa m Military Rifles	•		• •			
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography			
2. Belgium, continued	c. M1935 Sniper Rifle	7.65 m/m	Crown over "L" over year date	Half	TBD, KfG does not show bolt	Kennblätter fremden Geräts (KfG)			
	<b>Comments:</b> See page 12 of the 1-9-43 KfG Belgian supplement for a photo of this rifle fitted with a high turret telescopic mount and scope, with an elevated cheek pad, and scope container and carrying case.								
	d. <u>Navy</u> "Fusil Mle 1924"	.30-06	Crown over "L" for Leopold III, over "ABL", over "1951"	Half	Straight	MBR, p. 159; LAAFRBD (Les Armes à Feu Réglem- entaires Bel-ges depuis 1830) p.153; AC			
	built around the (8.5") receiver. Mauser receiver "Fusil Mle 1924 "Belgian Army" observed. (King stock near right pointed asterisk mark. Sight lea rifles also have	<b>comments:</b> Although nomenclatured the "Fusil Mle 1924" by the Belgian military, this and the following .30-06 rifles are uilt around the standard length (8.75") receiver referred to by FN as their "M1930", not the intermediate length "M1924" 8.5") receiver. The Belgian "Fusil Mle 1924", has a double broach cut receiver. (Prior to circa 1950, all FN military lauser receivers were single broach-cut.) The Fusil Mle 24 receiver is notched to accept the longer .30-06 cartridge. Fusil Mle 1924" rifles with gray parkerized finish are reported to be Belgian Navy arms, although the "ABL" mark means Belgian Army" in French and Flemish, "Armee Belge/Belgisch Leger". Only 1951-dated "L" crested rifles have been beserved. (King Leopold died in 1951.) Some rifles appear to have been rebuilt, with old serial numbers removed from tock near right side of the receiver ring, and then restamped. Some receivers also bear the stamp "C" over "AA" and 6-ointed asterisk, similar to the 2 broad arrow marks, tip to tip, used as the British Government's Crown Property disposal bark. Sight leaf distances are graduated from 100-1900 meters on all observed Fusil Mle 24 .30-06 ABL rifles. These fles also have thin, ribbed butt plates, and the standard French-language side rail address without serifs: FAB. NAT. 'ARMES de GUERRE, HERSTAL – BELGIQUE.							
	e. <u>Army</u> Fusil Mle 1924 Short Rifle	.30-06	Crown over "L" Leopold III, over "ABL", over 1951	Half	Straight	LAAFRBD, p.156			
	<b>Comments:</b> Belgian Army rifle with black enameled finish, otherwise same configuration as the Navy rifle above. Some rifles appear to be refurbished with renumbered stocks. Same side rail address as Rifle #2e above. Receivers are double broach cut, and notched for the .30-06 cartridge.								
	g. <u>Navy</u> "Fusil Mle 1924" Short Rifle	.30-06	Crown over "B" for King Baudouin I, over "ABL", over "1951" or "1952"	Half	Straight	MBR p. 159; AC; LAAFRDB, p.156; MMRW, pp. 24-25			
	<b>Comments:</b> Belgian Navy: 1951 & 1952 dates observed in crests on rifles with a gray parkerized type finish. These rifles have double broach cut receivers, with "C" over "AA" and asterisk. Same side rail address as Rifle #2e above.								
	h. <u>Army</u> "Fusil Mle 1924" Short Rifle	.30-06	"Crown-over-B" crest of King Baudouin, as above	Half	Straight	MMRW, p. 24-25; obs, LAAFRDB			
		he non-parkerize as Rifle #2e abov		to be the Army	model. Same	side rail address and other			
	i. "Fusil Mle 1924 d'etraine- ment" (Trainer)	.22 LR	"ABL" over "1948" and "ABL" over "1952" are known	Half	Straight	Observed, LAAFRDB, FN Ltr (dated 3/31 1985), MMRW, pp. 24-25			
	1,000 ABL 1952 plates. Two type 1. Leaf sigh	2 .22 caliber rifles as of rear sights: t graduated in 25	s, numbered 0001 throu	gh 1000, were pu 00 meters, 2. A s	urchased for Arm	ue/black Belgian Army finish. y and Police use. Ribbed butt naped peep sight fixed to the ide rail address data.			
3. Belgian Congo	a. Fusil Mle 1924 Short Rifle	7.65x53 m/m	Crown over a wreath and Lion rampant guardant, over "F.P."	Half	Straight	Observed, WJ Collection			
	bolt and bayone meters. It has a features stop or	et attachment whi a ridged steel bu guard screw loc	ch are parkerized. The ri tt plate without a trap a	fle is single broad ind a black enam tion screws. The	ch cut; and its rea nel painted finish	h is black paint except for the r sight leaf graduated to 1900 . The trigger guard assembly king is all caps, in a sans-serif			

			Charts of Fa	•		• •
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography
3. Belgian Congo, continued	b. "Fusil Mle 1924" Short Rifle (aka M1950)	.30-06	Crown over a wreath and Lion rampant guardant, over "F.P. 1952"	Half	Straight	MBR, p. 353 for crest photo LAAFRDB, p. 156
	which has the range, with a bo	standard FN side	e rail address in a font	with serifs. The A rifle similar to t	reported rifle's se	y one rifle has been reported rial number is in the 12,9XX in the wreath, but without the
	c. Fusil Mle 1924 (d'etraine- ment) Trainer	.22 LR	Lion in wreath crests of "FP"; over the year date	Half	Straight	LAAFRDB, p.156; FN Ltr. (dated 1985.), NS Collectio
	Congo. Three h	undred rifles wer		P 1948" crest. R		ublique" in the former Belgia es of 1948 & 1952 have bee
4. Brazil	a. M1922 Carbine	7 m/m	Brazilian Star - National Crest, with "Mod. 1922" on right side of receiver at the wood line	Half	Turned down	MMRW, p. 34; AC; FN catalogs; F&G, p. 56; Khn pg. 214, CSch.
	production occu 8.5" long, as o modell. Barrel le the narrow (11 serial numbere Star-in-sunburs 1930s and 195 carbine is mart have blued rece	urred in 1923-19. pposed to stand ength of the M192 m/m) type with a d. The Brazilian 5 t cartouche on lo 0s. One carbine ked "Arsenal de	24. M1922 and M1924 ard length (8.75") received a parade sling hook; received star appears of wer right side of butt. Ars is marked "Recuperad Guerra", "General Campads: "FAB. NAT. D'ARI	FN rifles were m ver of the later f few Model 98-ty eiver is in the w on all parts. A "B senal rebuilt rifle: o" over "AGG" o ara", "Recuperad	hade with an inte FN Model 1930, /pe rifles with a st hite; sights 200 - " in a circle follow s have been obse over "1954" unde do", "AGGO 1953	and Gaier (F&G) report tha rmediate length receiver onl Vz.24 and Mauser Standar traight stock. The front band i 1400 meters. Many parts ar vs the receiver serial numbe erved with rebuild dates in lat r a star. Another refurbishe 5". Observed rebuilt carbine BELGIQUE." written in a for
5. China See NOTE on authenticity of Chinese FN	a. M1924 Short Rifle	7.92 m/m	Date crests of "1931" an "1932" have been observedBut none with an "FN" logo	Full	Straight	Obs
Mausers in "Comments" column.	Note that this ri rifles. This is th M1924s in Chi	fle has a short in e last known sale na, or the sell-of	termediate length receive of the M.1924 with its	ver, not the stand shorter receiver ntermediate leng	dard length receiv , and may point t	ported from China after 1986 ver normally found on M.193 o earlier yet unknown sale c components. No M1924 Fl
	b. M1930 Short Rifle (SR)	7.92 m/m, others possible	"FN" commercial logo, No year date	Half	Straight	MBR, p. 159, AC; FN-Cat2 Obs, F&G, pp. 72 and 82., StanZ
	model occurred purchasing 164 rifle is single bu section can be British Foreign China through	d before 1934 t ,500 rifles. Anoth oach cut, and h attributed with 1 Office public rec the British Empir	to Chinese Nationalists er substantial order (no as painted and branded 00 percent certainty to ords indicate that 152,55	E. From 1937-19 number stated) v Chinese text or a Chinese cont 55 Model 1930 r nd Rangoon bet	939, China was was placed postw n its buttstock. Th ract. Serial numb ifles were purcha ween February 7	of 24,220 rifles of an unknown FN's most important client var, 1945-1948. One observer berefore, no rifle in the China ver 4228 has been observed sed from FN and imported to , 1935 and 27 October 1939 at the FN factory.

	•	•	Charts of Fa m Military Rifles	•		• •				
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography				
5. China, continued	c. M1930 Short Rifle	7.92 m/m	"FN" commercial logo, over "1938"	Full	Straight	Obs				
		<b>Comments:</b> Two examples, reported to have been imported from China to the US after 1986. both with serial numbers under 1000. Original manufacturing and import data on the 1938-dated rifles is provided in the "China" above.								
	d. M1924 or 1930? Carbine	No Data	"1933" without FN Logo	Full	Curved	RTS, pgs 39, 41; StanZ				
	around the stor carbine secure carbine was re positioned clos Mauser carbine carbines since	k which in turn a when riding. The ecently imported e to the pistol gri es" for China arriv no M1924 rifles	ttaches to a horseman's e same bracket can be from China, has the e p. Its receiver length is u ved from Belgium at the or carbines are known	ammunition belt seen on the FN arly side rail tex inknown. British F Port of Hong Ko made after 193	and shoulder ha M1924 Yugoslav t address with s Foreign Office pu ong on 3 June 19 32. An earlier sh	he bracket which holds a strap straps which in turn seeps the v and Mexican carbines. This serifs, and lower sling swivel blic records indicate that "600 338. These were likely M1930 ipment of "500 reconditioned nodel, system and caliber are				
6. Colombia	a. M1930 Short Rifle	7 m/m	"Colombia - Fuerzas Militares" in oval crest	Half	Straight	MBR, p. 159; FN-Cat2, F&G, p. 72				
	Comments: Report of sale in FN Catalog is circa 1937-1939.									
	b. M1930 Carbine	7 m/m	"Colombia - Fuerzas Militares" in oval crest	Half	Straight	AC, FN-Cat2, Obs				
	Comments: Re	Comments: Report of sale in FN catalog is circa 1937-1939.								
	c. M1930 Short Rifle	7 m/m	"Republica de Colombia" national crest, dated "1940" on left of receiver ring	Half	Straight	Obs, See crest in Hdbk, p. 12, Fig 1; (Handbook of Military Rifle Marks)				
	<b>Comments:</b> Marked "1940" on left side of receiver ring at the wood line. Receivers are in the white; both black enamel and blued barrel finishes have been observed. Two of eight rifles reported have front sight bases cut for a 98k-type of sight hood. Crest is the national emblem but not enclosed in a circle. Under the crest is "Republica de Colombia". Standard side rail address "Fab. Nat. D'Armes de Guerre, Herstal - Belgique", without serifs.									
	d. M1930 Short Rifle	.30-06	Oval Crest w/ national emblem, w/ "Colombia Fuerzas Militares"	Half	Straight	MBR, p. 161, and P. 354 for crest; AC				
	Fabrica de Mat	<b>Comments:</b> Converted in Colombia, marked "R. FRAMAGE 1952", an acronym for the Spanish phrase: "Reformado, Fabrica de Material de Guerra", which means "Modified, Factory of Military Equipment". Butt plate curls around edge of butt stock. New postwar production in .30-06 is possible but has so far not been confirmed.								
	e. M1930 Carbine	.30-06	"Colombia Fuerzas Militares" crest as above	Half	Bent	Observed; BJdtB, p. 25.				
	to accommodat	te the .30-06 rou		ed bearing the sta	ar-over-Z mark of	duction with a notched receiver f the Liege Proof House most k.				
	f. M1930 or 1950 Short Rifle	7.62 m/m NATO	No crest; undated	Half	Straight	Observed				
			y target rifle with uniqu pt for the rear sight.	e flip up rear si	ghts. Its outward	appearance is that of three				
7. Costa Rica	a. M1930	7 m/m	Unknown	Unknown	Unknown	MBR, p. 159; FN-Cat2				
	Comments: No	o rifles observed.	The sale was noted in a	late 1930s FN s	ales catalog.					

-		-	Charts of Fa m Military Rifles	-						
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography				
8. Ethiopia	a. M1930 Short Rifle (SR)	7.92 m/m	Lion of Judah crest of King Haile Selassie on receiver ring	Half	Straight	F&G, p. 72; APG; MBR, pp. 157 and 351 for crest; Obs,				
	is a second and report sale of D'ARMES de (	<b>Comments:</b> A large serial number is located on receiver <u>bridge</u> . In addition to the main crest on the receiver ring, there is a second and smaller crest, depicting a standing lion with a sword is located on left side of barrel near receiver. F&G report sale of 25,000 rifles between 1933-1935. The standard French language side rail address, "FAB. NAT. D'ARMES de GUERRE, HERSTAL – BELGIQUE", is written in a font using serifs, typical of pre-1935 FN rifles, and all of the M1924s with intermediate length receivers.								
	b. M1930 Carbine	7.92 m/m	Lion of Judah crest of King Haile Selassie	Full	Turned Down	PA, Obs, MMRW, RotW, MBR, APG, SANHS				
	examined at the side rail marks a clamp-on sigh	e Springfield Arm are the same as ht hood in the Ge	nory National Historic Si Rifle #8a. Carbine numb rman 98k fashion. Numb	ite (SANHS) Mus per 1706 howeve per 1748 bears Li	seum in Springfie r has a front sight ege and Birmingl	987. Carbine #1706 has been Id MA. Receiver number and t base which has been cut for nam proofs and is in a private f Nicolas Woit (1911-1940).				
	c. M1924 Long Rifle	7.92 m/m	Lion of Judah Crest as above	Unknown	straight	JGar				
			rifle with a 29" barrel, c ock crest as on the FN c		known and obse	rved, with plain text side rail				
9. France	Unknown	Unknown	Unknown	Unknown	Unknown	F&G, p. 72; OTS-HS, page 58.				
	The Hoffman sa	ale catalog illustra	ates an FN police carbin	e with the "FN" o	val crest, without	e took place circa 1935-1940. national markings but said to r use outside of Metropolitan				
10. Greece	a. M1930 Short Rifle	7.92 m/m	Crown and shield with Greek cross over "YII.1930"	Half	Straight	MBR, p. 159; MMRW, p. 148; F&G, p. 72; IMAS-B; KfG; BJdtB, p. 25 ; ChrisZS, p. 557				
	stock's left side sale occurred 1 the "H" block ha this rifle the "FN (Salmon Antoir Sazanidis (Chri standards in 15 German invasic is in apparent c production of ov	A cartouche of 935-1940. Serial we been noted. S MIE 30". Liege ne, 1937-1968) isZS) reports tha 337 with a purch on of Belgium in ontradiction with ver 80,000 rifles.	a mounted St. George f number consists of a b Stock number is stamped Proof House Contrôleau have been observed at the Greek Army adop nase of 25,000 rifles. Af 1940 however permitted the existence of Greek I	ighting a dragon lock letter followed d on right side, p ur marks "Star/F" on Greek M1930 bted the M1930 ter delivery in 1 the delivery of 0 M1930s with "H"- d only if many of 3	is stamped atop ed by a four-digit arallel to butt plat (Alexandre Lam 0s, suggesting FN Mauser and 939, another 45, nly 25,000 of the block serial numb all of the final 20,	Republic" is impressed on butt the wrist. F&G state that this number. Numbers as high as e, as on VZ.24. The KfG calls bert, 1924-1953) and "Star/L" production around 1937-39. the 7.92mm cartridge as its 000 rifles were ordered. The 45,000 total. This information bers, which would point to the 000 rifles were manufactured he summer of 1940.				
	b. M1930 Carbine	7.92 m/m	Believed to be same as above	Half	Turned Down	As above, and IMAS, Vol. I, #, 4.				
						large roundel as 11a, and an rtunately do not mention FN				
11. Haiti	M1930 (?) Short Rifle	.30-06	No crest or date, but "ARMEE D' HAITI' is on the left side recvr ring	Full and Half	Straight	OTS HS, p. 41; Obs; MMRW p. 151-152				
	down bolts, star	ndard FN front s		935 Peruvian ty	pe posts and sigh	ndguards; straight and turned nt guards. M1935 type stocks pecific variations.				

	•	•	Charts of Fa m Military Rifles	•		• •
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography
12. Indonesia See also Netherlands East Indies, #20a and 20b	M1930 Carbine	7.62 m/m NATO	Either or both "POLITIE" or "IOB". One "IOB" crest observed with an Indonesian star added above it.	Half	Bent	DAV; OTS-HS Catalog, p.42 Obs.
	Ondernemersb (Same as carbi	ond") carbines, c nes 20a and 21a)	onverted to 7.62 NATO	in the Netherland nes in 7.62 NATO	ds. Carbines in o have been noted	<ul> <li>and ex-"IOB" (the "Indische riginal 7.9mm may also exist.</li> <li>being carried by members of er Dutch New Guinea.</li> </ul>
13. Iran (Persia)	M1924 Short Rifle	7.92 m/m	Lion with sword in front of sun burst surrounded by wreath, under the crown of Reza Shah Pahlavi	Full	Straight	MBR, p. 159; FN Cat-2; Obs; MMRW, p. 200.
	manufactured M which is a quar unlike earlier M numbered. (M1 M1922.) Iraniar made Iranian I triggerguard bo markings are u the receiver and surface facing t	A1930. Like all FI ter-inch shorter t 11924s, compone 924 bolts will only n manufacture oc Mausers. Dark r w. Both receiver ncertain on the c d barrel, the seria he shooter. The f	N M1924s, the Iranian ri han all later FN M1930s ents on Iranian FN M19 y interchange with the of curred around 1929-32, eddish-brown stock fin and sight leaf face are observed rifle, #154. The al numbers are Latin. Th	fle was made wit s, and all other p 24s appear to b ther M1924s mad one of the last k ish. Three swive blued. A marking e receiver serial r be bolt handle is blade are mounted	h an "intermediat ost WWI Mauser e precision manu- le for Mexico and mown M1924s m dis, all under the g disc is inlet in t numbers are in P numbered in Pers ed on a K98k typ	M1924 and the precision- te" length (8.5" long) receiver military production. However ifactured and are NOT seria Yugoslavia, and the Braziliar ade. Same crest as on Brno- e stock, the 3 <sup>rd</sup> one on the he left side of the butt. Stock ersian numerals, while under sian numerals along the shaf e band. Early French side rai
14. Israel	crest are comm magazine well longer cartridge Observed rifles permanently ins	non. The receiver spacers to enab e, like 7.9 m/m. s had double bro stalled and secur	rs observed were all or le feeding the shorter N Whether FN-Hertsal e pach-cut receivers indic	n rifles chambere NATO round, indi ver made compl ating manufactur ved stocks were	d for 7.62 NATO cating that the re ete rifles for Isra re after 1950. A manufactured wit	MMRW, P. 155, observation on short rifles with the Israel . Each of these rifles utilized eceivers were designed for a ael is not known for certain 98k-type front sight hood is thout a cleaning rod channel plate.
	98k stock, no re large "0.22" on	od, cut for a side the right side of b	-mounted 98k sling. On butt under the 98k-style	e thousand (1,00 sling slot. Side ra	0) reported mad il is marked with	Obs; VT t stocked in the unique Israel e. Stocks are stamped with a single line address: <i>FAB NA</i> d finish; 98k type front sigh
15. Liberia	Unknown Comments: FN	No data I source data spe	Unknown ecifying this sale is the 1	Unknown 937-1939 catalog	Unknown series. Quantity	MBR, p. 160; FN Cat-2 and types are unknown.

	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography				
6. Lithuania	a. M1930 Short Rifle	7.92 m/m	Large, oval "FN" commercial logo over "MOD. 24_L." No year date.	Full	Straight	FN Cat-2, F&G, MBR, p. 350; Obs, PA, GR, p. 81, PA 12/87 ; Khn, page 214. BJdtB, p. 25.				
	Gaidis article i unsubstantiated items: 1) the Fa handle knob is left of the receiv over-A", the Lie Gediminas" ico called a "Model Vz.24. This rifle been "Fab. Nat.	n "Gun Report", d. This first M.24 abrique Nationale tear drop shaped ver ring, not on th ge Proof House ns can be found 24", in fact this ri- uses the standa D'Armes de Gue	January 1981. Note t L is a faithful 99 percer e receiver markings; 2) t d rather than round; 4) th le buttstock. Reported se Contrôleaur's mark of Ni under sight leaf, on fro fle is a Model 1930 since ard full-length 8.75" rece erre, Herstal - Belgique",	hat Gaidis' prod the duplication of the lack of the ho re stock is serial rial number rang icolas Woit (1911 nt band, muzzle bits components iver. The observe without serifs.	luction figure of the Czechosloval ble in 24L's trigge numbered just be le so far is 744X ti -1940) on the bc cap, front sight are un-serialized ed side rail addre	ns", June 1987. See also th 100,000 FN rifles is as ye k Vz.24 except for these four guard bow; 3) the 24L's bo elow the serial number on th to 20,2XX. Small marks: "stai bit and receiver; tiny "Pillars of base, etc. Note that althoug and interchangeable with th tess for rifles 16a, b and c ha				
	b. M1930 Short Rifle	7.92 m/m	The "Pillars of Gediminas" icon over "24L", No date	Full	Straight	MBR, p. 157; PA, GR, FN Cat-2, F&G, p. 72, Obs.				
	<b>Comments:</b> The second of the 3 Lithuanian crest types. The noted serial numbers are in the 25,600 to 52,900 range. Stock design, as in number 16a., above, is the Czechoslovak vz.24 type, with two sets of sling swivels, one mounted on the left side of the stock, and the other under the stock.									
	c. M1930 Short Rifle	7.92 m/m	"Ginklu Fondas" over "1937", over the "Pillars of Gediminas" icon over "24L"	Full	Straight	MBR, p. 157; FN Cat-2, Ob F&G, p.72; PA, 12/87; BJdtt p. 25.				
	<b>Comments:</b> Serial numbers observed are in the 73,XXX to 75,2XX range. A small stick-figure rendition of the "Pillars of Gediminas" image has been observed as the small parts mark on the upper barrel band, under the sight leaf, under the stem of the bolt handle, etc. As Rifle #16a above, this rifle is stocked exactly like the VZ.24. Liege Contrôleaur's mark: star over "W" noted – name and dates unknown.									
7. Mexico	a. M1924 Short Rifle	7 m/m	Mexican National Crest over "1924"	Full	Straight	MBR, p. 159; Observed; Fl Cat-2; F&G p. 56; Khn, pg 214, CSch.				
	intermediate len bolts are not int Kar 98k-type sig rack numberpla FAB. NAT. D'A	ngth receiver only erchangeable wit ght hood. The slo ite is often found	/ 8.5" long as opposed to th M1930s. Most compor t is deep at back, shallov I tacked to heel of the b CRRE, HERSTAL – BE	o standard length nents are serial n w at front. Two sli putt stock. Early	(8.75") receiver numbered. The fro ng swivels, both u French language	I Mexicans were built with a of the FN Model 1930. M192 ont sight pedestal is slotted fo under the stock. An oval bras side rail address with serifs hed and delivered unblued, i				
	b. M1924 Carbine	7 m/m	Mexican National Crest over "1924"	Half	Turned down	Observed; FN-Cat1 circa 1931 w/ photo; Khn, pg. 214 MMRW; CSch				
	numbered. Fror narrow front ba cavalry lanyard length (8.5") rea	nt sight pedestal s nd. Its swivels and . May have an o ceiver common to	slotted or cut for a Kar 9 re both under the stock. val brass plate with a r	8k-type hood wh A squared meta ack number tack	ich is more round al bracket is inset ad to the heel o	- 1927. Most parts are seria led in shape. No bayonet ba in the right side of butt for f the butt stock. Intermediat s in French, with serifs: FAE				
	a. M1930	7.62 m/m	No Crest	Half	Bent	Observed; MMRW, pages 185-186.				

-		-	Charts of Fa m Military Rifles	-			
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography	
<b>18. Morocco,</b> continued	b. M1930 Carbine	.30-06	No Crest	Half	Bent	Observed; MMRW, pages 185-186.	
	address has be		b. Nat. D'Armes de Gu			nly the traditional FN siderai iiten is a script without serifs	
<b>19. Netherlands</b> <b>See also Indonesia,</b> #12, for conversions of "Politie" carbines to 7.62 NATO	a. "Mauser- Karabijn Model 98" for the "Rijks Politie" (National Police) and "Karabijn F.N. Systeem Mauser."	7.92 m/m	Crown over "W" (for Queen Wilhelmina, who reigned 1890- 1948)	Half	Bent	MBR, p. 165; Observed, IMAS Bulletin Vol. 2, No. 2, 1978, F&G p. 82; VMK title page. MMRW, 187-188; DB JFr	
	<b>Comments:</b> Ordered from FN in 1947 and nomenclatured by the Dutch as the "Karabijn F.N. Systee model of carbine was known at FN as the "Fusil Modele 35, carbine pour Gendarmerie. Often incom Model 1948 in North America, it has a 17.5" barrel. The first and only purchase of 5,000 Wilhelmina c came near the end of the reign of Queen Wilhelmina. "W"-crested carbines <u>with</u> city police markings ( A'DAM ("GEMEENTELIJKE POLITIE AMSTERDAM" meaning "Amsterdam City Police Force"), and markings have been reported. Only standard length receivers and single broach cut barrels have been of "H" type front barrel bands, blued bayonet bars, and a short cleaning rod. No cavalry lanyard rings or have been observed. All reported have solid, non-ribbed unblued butt plate. F&G indicate that F Netherlands began as early as 1945. Observed carbines have the standard French side rail of "Fab. N Guerre, Herstal - Belgique", written without serifs.						
	b. "Mauser- Karabijn Model 98", as above	7.92 m/m	Crown over "J" (for Queen Juliana who reigned 1948-1981)	Half	Bent	MBR, p. 165, Observed, IMAS Bulletins, Vol. 1, No 4, Vol. 2, No. 2; DB; JFr	
	"GEM POL A'D/ carbines were of Edwin De Grood yet known. Early multi-directional p. 31. Observed the wrist in such launching. The I	AM" for GEMEET ordered. The seco e article in refere / Juliana carbine: lower swivel (as receivers were o a way that it car nighest serial nur	ELIJKE POLITIE AMST ond is marked just "GEN enced IMAS Bulletin, p. 1 s have been noted with on Steyr M.95 carbines double broach cut. Three not accept a sling swive	ERDAM, meanin 1 POL" for district 1.) The third vari- side and under-th ). See David M. / e Juliana carbines el, but could prote POL carbine) is in	g Amsterdam Cit police use in sm ation observed is le-stock upper ba Armstrong letter i s noted with a rei ct the small of sto	The first is marked on side rail ry Police. Approximately 1,000 naller cities and districts. (See "GARD POL", meaning is not and sling swivels, and a single in Vol. 1, No. 4, IMAS Bulletin, inforcing crossbolt installed at ock from the recoil of grenade b. By 1965, the FN carbines of	
20. Netherlands East Indies	a. Mauser- Karabijn Model 98	7.92 m/m	"IOB" in 6-sided box	Half	Bent	MBR, p. 351 for crest; MMRM, p. 100 for translation; MMRW, p. 292; NS collection; Jan Free; D. de Wit.	
	same type as 1 made, 1946-199 IOB carbine has appears on Ind reports that app Indies. NOTE: T has not yet bee	9a, this is the "F 50. Some were la s been observed onesian M1895 proximately 40,00 here were also on n determined if th	Politie" (Police) karabijn ater converted to 7.62 N with the Indonesian sta Dutch Mannlicher carbin 0 FN police carbines of carbines ordered by the	manufactured fo IATO at the State ar symbol stampe ne receivers, whi all marking varie ALS (Algemeen ). ALS carbines r	r a corporate en Arsenal at Hem ed above the "IO ch have been co ties were purcha Landbouw Synd nay well be some	Entrepreneurs. (MMRM) The Entrepreneurs. (MMRM) The brug in the Netherlands. One B" crest. (The same star icon onverted, to .303 British.) JFr ised for use in the Dutch East licaat) for use in the Indies. It e of the well-known unmarked	

Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography			
20. Netherlands East Indies, continued	b. Mauser- Karabijn Model 98	7.92 m/m and 7.62 m/m NATO	No crest, but "POLITIE" (Police) is stamped on right of receiver	Half	Bent	JFr; OTS-HS (Hoffman Collection) Catalog, p.42 Jan Free; D. de Wit.			
	imported from In 19b except that	ndonesia. It has a the top of the re-	a full-length buttstock an	d 4 sling swivels ial numbers are	. This carbine is the	the OTS-Hoffman Sale was ne same as carbines 19a ar ower numbers are written of			
	Police. The wor	k was done at th	e Artillerie Inrichtingen	near Zaandam	and Hembrug. Th	) for the Papua, New Guine ese carbines were fitted wit yonet system was altered.			
	c. Shortened Karabijn 98	7.92 m/m, but with reduced load	TBD, issued by Dutch prior to independence; a "POLITIE" stamp is probable.	Half	Bent	IMAS Bulletin, Vol. 2, No. 2 Jan Free; D. de Wit.			
	the referenced police carbine	<b>Comments:</b> Markings unknown at this time but may be the same as other Dutch FN police carbines (see 20a and b). In the referenced Edwin De Groote letter on p. 11 in IMAS Bulletin, Mr. De Groote states that the Papua, New Guinea police carbine was issued with a "reduced butt length" to accommodate the stature of local police personnel. This carbine may be the same as 20b, above.							
21. Paraguay	Believed to be M1930	7.65 m/m	Unknown	Unknown	Unknown	MBR, p. 159; FN Cat. F&C p. 72;			
			I catalog is circa 1936-1 razil in the 1960s where			35-1940. Many of these rifle NATO.			
22. Peru	a. Modelo 1935 Short Rifle (SR)	7.65 m/m	Peruvian National Crest	Half	Bent, with knurled surface under knob	MBR, p. 161; FN catalog circa 1935-1939; Observe F&G, page 72.			
	stamped on left	t butt stock paral el on butt. Ribbe	lel to butt plate. Side a d butt plate; Front sight	nd under-the-sto guards. Promine	ock sling swivels ont elevated clip g eiver. Standard Fre	s over 25,900 noted. Serial on upper band, with a sing uides. "Modelo 1935" on rig ench language side rail: "Fa es made with stock fullers of			
	side of the rece	e Guerre, Hersta	I - Belgique", without se	erifs. This is one	of the few FN rifl				
	side of the rece Nat. D'Armes d	e Guerre, Hersta		erifs. This is one Half	Bent	MBR, p. 162; Observed			
	side of the rece Nat. D'Armes d grasping groove b. Modelo 1935 Carbine <b>Comments:</b> Th	e Guerre, Hersta es. 7.65 m/m is short-barreled	I - Belgique", without se Peruvian National Crest	Half guards, and squa	Bent ared metal bracke				

•	•	•	Charts of Fa m Military Rifles	•		• •	
Country	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography	
22. Peru, continued	d. Modelo 1935 Short Rifle	7.62 m/m NATO	Peruvian National Crest	Half	Bent	Observed	
	range. Its barre The rifle is mar converted, or w	I appears to have ked "7.62" on its whether they were n noticed with the	e been made by FN ori receiver bridge, just be made for target work	ginally in 7.62mm hind its elevated or actual issue. U	n NATO, and fact clip guides. It is ses and magazi	serial number is in the 15,200 tory-numbered to its receiver. unknown how many were so ne filler. Rebuilt Modelo 1935 er stamped above. Made with	
23. Saudi Arabia	Unknown	Unknown	Unknown	Unknown	Unknown	RotW, p. 283; F&G, p. 82.	
		hn Walter's listing ere purchased 19		y FN data in Frai	ncotte and Gaier.	"Substantial" numbers of FN	
24. Siam	M1922 Long Rifle	7 m/m	Marked "Mod. 1922" on its receiver	Half	Straight	MBR, p. 156	
	<b>Comments:</b> A single FN "M1922" long rifle has been reliably reported, and is illustrated on page 156 of the late Ludwi Olsen's book "Mauser Bolt Rifles". This rifle has the early very narrow (11 m/m) upper barrel band with a hook for parade sling. This M1922, is likely a test or sample rifle, one of the few FN rifles with a 29" barrel made for foreign expor 1922-1940. Unlike the straight stock on the Brazilian M1922, the Siamese M1922 stock has a pistol grip. Marked "Fal Nat. D'Armes de Guerre, Herstal - Belgique" on its side rail. Single digit serial number. A similar rifle, 8c, has bee reported with Ethiopian markings.						
25. Uruguay	M.1930 Short Rifle	No Data	Unknown	Unknown	Unknown	MBR, p. 159; FN Catalog 2	
	Comments: Re	port of this sale i	s in an FN catalog circa	1931-1934.		I	
26. Venezuela	a. M1930, Short Rifle, made before WW II	7 m/m	Venezuelan Crest	Half	Straight	MBR; p. 159; FN Catalog 2, F&G, pgs 66 and 72; MMRW, p. 283-284, Observation	
	<b>Comments:</b> The sale of FN short rifles occurred both before and after WW II. The prewar sale took place in the timeframe, and was for 16,500 rifles. Prewar rifles are believed to have a lower sling swivel that is positioned inch below the stock's PG. The receiver is in the white. The French language FN side rail address uses a font wi found on FN rifles made before 1935-7: FAB. NAT. D'ARMES de GUERRE, HERSTAL – BELGIQUE. P rifles, used an Arial-type font (such as this font) without serifs. A small " $\pi$ " circular cartouche containing two cursive script is stamped in the stock just behind the rear action screw. This is not found on postwar Venezue Post WW II, F&G report the sale of "massive quantities" of FN rifles and carbines. Lower sling swivels on the por rifle are positioned lower on the stock (just above the butt plate) than the pre-WW II rifle. Observed receivers a broach cut. These were reportedly delivered with individual test targets.						
	b. M1930 Target Rifle	7 m/m	Venezuelan Crest	Half	Straight	MMRW, p. 284; Observed	
			l rrel but still in a Mle 193 and elevation; reported			l eatures special target sights, an games.	
	c. M1930 Carbine	7 m/m	Venezuelan Crest	Half	Bent	MBR; FN Catalog 2; MMRW, p. 284, F&G, p. 72, observed	
	Generally, it ca solid butt plates to be blued with "Zero". A high n Armadas de Ve 018,XXX are of double sets of s bolt. The upper	n be said that ea and the FN add white bolts, ripp number in the 02 enezuela" (Armed ten found unissu sling swivels, side band has a larg	arly production carbines ress written in a serif for led butt plates, double b 24,XXX range has been d Forces of Venezuela) ed with highly polished e and under stock. Lowe	have been obse nt. Postwar receive proach-cut receive reported. All pos on the left side stocks. A few pre er side swivels ar e of the VZ.33. C	rved with "arsena ers started out a ers and six digit s stwar reported ca of the receiver. - and post-war ca e mounted at the one early carbine	of Greek and Dutch carbines. al bright" receivers and bolts, s white, but after1950 appear serial numbers beginning with arbines are marked "Fuerzas Carbines with serial #'s over arbines have been noted with wrist via a VZ.24-type cross a has been reported with two lanyard.	

	Model	Caliber	Crest and/or Date	Hand guard	Bolt Handle	Sources: See Bibliography	
27. Yemen	Unknown	No Data	Unknown	Unknown	Unknown	MBR, p.160; FN-Cat2; F&G, p.72	
	Comments: F&G and FN Catalog 2 report that Yemen bought many rifles circa 1935-40, as does MBR p. 160.						
28. Yugoslavia (a.k.a. Kingdom of the Serbs, Croats and Slovenes)	a. M1922 Short Rifle	May be  7.92 m/m	Unknown	Unknown	Unknown	F&G, p. 56; KfG supplements of Decembe 1941 and September 1943 RotW, p.487.	
	<b>Comments:</b> The existence of a Yugoslav Mauser short rifle called an "Mle 22" is reported in RotW. However, neither a actual rifle nor a photograph of one have been observed. Further, the "Mle 1922" rifle does not appear in the Germa Army's D.50/1 manual, the "Kernblätter fremden Geräts" (KfG) which in 1941 and 1943 published supplement inventorying over 50 Yugoslav Army small arms. The absence of this rifle from both Kernblätter supplements significant. In reality, the "Mle 22" is probably the "Mle 24", below.						
	b. M1924 Short Rifle	7.92 m/m	Yugoslav Royal Crest, over "Model 1924" written in Cyrillic text.	Full	Straight	AC, F&G, p. 56; MBR, p. 156; FN-Cat1, KfG, MMRV pp. 217-229; RotW, p. 487 Khn, pg. 214, CSch.	
	<ul> <li>Comments: As with all other known M1924 FN rifles, Yugoslav M1924s were made with an intermediate length receiver (8.5") and bolt, as opposed to standard length (8.75") receiver of the FN Model 1930. (In post-WW I Yugoslavia, the standard first line infantry rifle was the former Serbian Model 1910 Mauser, which was also made on an intermediate length receiver with a special bolt face, described below.) Mention of the Yugoslav sale in the FN catalog is circa 1937 1934. F&amp;G state that an initial contract for 50,000 rifles was signed on 14 Jul 1923 or 1924, depending on how F&amp;G ambiguous translated text is read. In 1926, another 40,000 FN-made rifles were contracted. Additionally, FN sold a fu M1924 production line to Kragujevac Arsenal in 1924. Besides the receiver crest, Yugoslav FN-made rifles possess fiv (5) distinguishing features:</li> <li>1. The early French side rail address; FAB. NAT. D'ARMES de GUERRE, HERSTAL – BELGIQUE written will serifs.</li> <li>2. A four-letter Cyrillic abbreviation on the left side of the receiver ring, which stands for the Slavic words for "Kingdom of the Serbs, Croats and Slovenes", not the later, more commonly, seen "Kingdom of Yugoslavia".</li> <li>3. A royal cartouche stamped in the right side of the buttstock consisting of a crown over a letter "A" (for Kin Alexander I) over the Roman numeral "I", and a crown over "C" for Serbia on the lower stock comb.</li> <li>4. The serial numbering of 12-15 parts, typical of the FN M1924 (Brazil, Yugoslavia, Mexico).</li> <li>5. The unique bolt face: It surrounds the base of the cartridge case, and was made <u>without</u> the two protrusions of the split locking lug which enable efficient cartridge case ejection.</li> </ul>						
	RotW states that a third purchase of FN rifles occurred in 1935. This is unconfirmed. No post-1930 Yugoslav-marked FN-made rifles have been observed or reported.						
	c. M1924 Carbine	7.92 m/m	Yugoslav Royal Crest over "Model 1924"	Half	Bent	MMRW; p. 227; NS Collection, Khn, pg. 214,	

Note: The abbre	<b>FN Bibliographical References and Abbreviations</b> eviations in the left column are the primary (and some secondary) used in the "Source" column of the FN Model 1898 Summary Charts				
Updated: 9/06					
1. AC	Al Castle; indicates an FN rifle cited by Mr. Castle in his FN article in the March 2001 issue of "The Military Rifle Journal".				
2. Obs	Observed; a rifle examined by the writer, or seen as a photograph, or owned and reported by other reliable sources.				
3. F&G	<i>FN 100 Years: The Story of a Great Liege Company</i> by Auguste Francotte and Claude Gaier, a corporate history published by Didier Hatier in Brussels on the occasion of FN's 100 <sup>th</sup> birthday in 1989. Appears to contain the text of th 1964 FN corporate history (see #36 below) with updates.				
4 LAFRB	Les Armes à Feu Réglementaires Belges depuis 1830, Edité à l'occasion de l'exposition organisée au Musée Royal d l'Armée et d'Histoire militaire, du 15 septembre 1988. (An outstanding reference, with much new information: a 200- page catalog of Belgian military firearms after 1830 from an exhibition organized by Belgian Royal Museum of Military History, 15 Sept. 1988.)				
5. KfG	Kennblätter fremden Geräts, (translation: "Identification of Foreign Equipment") D.50 Series, Handwaffen, Heft 1, 1943. Cover marked "Vom 1.2.40, Berlin, 1940, Oberkommando des Heeres" (The German Wehrmacht's foreign and captured ordnance technical manual series, updated with monthly supplements.) My copy of the KfG is the small arms volume, (E 50/1) and has monthly supplements and change pages posted as late as 1 November 1943.				
6. MBR	Mauser Bolt Rifles by Ludwig Olson, 3 <sup>rd</sup> edition, 14 <sup>th</sup> printing, Brownells, Montezuma, IA; October, 1999.				
7. MMRW	Mauser Military Rifles of the World, by Robert W. D. Ball, 2nd Ed, Krause Publications, Iola, WI, 2000.				
8. RWDB	Robert W. D. Ball, personal communications, April, 2002.				
9. NS	Noel P. Schott, personal e-mail correspondence dated April 9, 2002.				
10. Hdbk	Handbook of Military Rifle Marks, 1866-1950: An Illustrated Guide to Identifying Military Rifle Marks by Noel P. Schor Richard A. Hoffman, 2 <sup>nd</sup> ed., 1998, Maple Leaf Publications, St. Louis, MO.				
11. MMRM	Mauser Military Rifle Markings by Terrance Lapin, Hydrax Publications, Arlington, VA, 2001, second edition.				
12. RotW	Rifles of the World by John Walter, Krause Publications, 2 <sup>nd</sup> Edition, 1998, Iola, WI.				
13. GR	Gun Report Magazine, "Lithuanian Military Arms" by H. L. Gaidis, January 1981, pages 14-19.				
14. SANHS	Springfield Armory National Historic Site Museum, Springfield, MA; a rifle examined in the Museum's study collection.				
15. APG	Aberdeen Proving Grounds, A photograph from U.S. Army's APG Museum Collection from the Charles H. Yust Libra Collection.				
16. FN-Cat1	FN Sales Catalog, circa 1930-34, published by FN in Herstal, Belgium.				
17. FN-Cat2	FN Sales Catalog, circa 1935-39, published by FN in Hertsal, Belgium.				
18. IMAS-B	"International Military Arms Society (IMAS) Bulletin", Vol. 1, No. 4; Vol. 2, No. 2.				
19. PA	"Present Arms", Vol. I, No. 5, June, 1987, pages 14-15, etc.				
20. OTS-HS	"Military Arms Catalog", Old Town Station Catalog of the James Hoffman Collection Sale, May 1999, published by Old Town Station Ltd, Lenexa, Kansas.				
21. BAR	Bolt Action Rifles by Frank De Hass, DBI Books Inc., Northbrook, Illinois, revised edition, 1984. See discussion and photograph of single/double broach cut FN rifles on pages 173 and 174.				
22. FN Ltr	Letter from FN's Chief of Cultural Affairs (and historian) Claude Gaier, dated 31 March 1985, responding to two questions on FN's post WW II .22 caliber/5.5mm training rifles and standard service rifles issued to the "Force Publique in the Belgian Congo.				
23. VT	Vic Thomas; personal e-mail correspondence, July 22-24, 2001.				
24. MM	Book Review - FN 100 Years by Marion Mericle, "The Military Rifle Journal", July, 1992, p. 106.				
25. DAV	Doc AV: Dr. Astrid Vallati, Brisbane, Australia, personal correspondence, 2001.				
26. OF	Otakar Franek, Zbrane Pro Cely Svet (Arms for the Whole World), published by Blok in Brno, Czechoslovakia, 1970.				
27. VM-K	Voorschrift Mauser-Karabijn Model 98 ten Dienste van de Politie, a Dutch National Police (Rijks Politie) technical manual, 1952.				

FN Bibliographical References and Abbreviations (cont.)					
28. Sada	Ceskoslovenske Rucni Palne Zbrane a Kulomety (Czechoslovak Small Arms and Machine Guns) by Col. Dr. Miroslav Sada, published by Nase Vojko in the Czechoslovak language, Prague, 1971. Translated by the US Army Foreign Science & Technology Center, Charlottesville, VA, 1973.				
29. TBoR	The Book of Rifles by W.H.B. Smith and Jos. Smith, The Stackpole Co, Harrisburg, PA, 1965.				
30. DPM	Dutch Police Manual, untitled, produced circa 1945-1950, printed in Dutch in the Netherlands.				
31. MtMP	Muskets to Mass Production, The Men and the Times that Shaped American Manufacturing by Edwin A. Battison, The American Precision Museum, Windsor VT, 1976. In 1976, Battison was Curator of Mechanical Engineering at the Smithsonian Institution. He later founded the American Precision Museum in the old Robbins and Lawrence Armory i Windsor VT.				
32. CWeb	<b>Colin Webster</b> , 1) "Argentine Mauser Rifles, 1871-1959", Schiffer Military History, Atglen, PA, 2003, pages 226-229; and 2) in an internet posting, with photographs, on the Argentine M1935, dated 3.13.02. See Parallax's "Spanish, Central and South American Military Firearms Forum", at URL: http://pub42.ezboard.com/ fparallaxscurioandrelicfirearmsforumsfrm10.showMessageRange?topicID=755.topic&start=1&stop=20				
33. PMesA	Paul Mauser et ses Armes by Yves Cadiou, Argout Éditions, Paris; circa 1970, (in French), 72 pages, highly illustrated.				
34. FN-B	FNBROWNING, Armorer to the World by G. Gangarosa Jr., Stoeger Publishing, Wayne, NJ, 1999.				
35. FN-TN	Fabrique Nationale, Then and Now, by Charles E. Petty, a five-page article in The America Rifleman, July, 2001.				
36. FN-64	<i>Fabrique Nationale d'Armes de Guerre S.A., Herstal, Belgique 1889-1964</i> , by Claude Gaier, published on the occasion of the Company's 75 <sup>th</sup> anniversary at Herstal-lez-Liege in 1964.				
37. CSch	<b>Charles Scharpf</b> , personal correspondence and discussions, May, 2002; FN bolt Interchangeability tests, and receive dimension measurements conducted 11 May 2002 using Model 1922, Model 1924 and Model 1930 FN rifles and carbines.				
38. Khn	Jerry Kuhnhausen, The Mauser Bolt Actions: A Shop Manual, VSP Publishers, McCall ID, 1991.				
39. BJdtB	Bruno Joos de ter Beerst, <i>Trade and Hallmarks on Firearms in Belgium</i> , Pandora, Antwerp, Belgium, 1998 (text in French, Flemish and English).				
40. CG	Claude Gaier, L Epreuve des Armes A Feu A Liege 1672-1972, Liege, 1972 ("The Proof of Firearms at Liege, 1672-1972").				
41. GSAP	German Small Arms Plants in Liege and Paris, Wing Commander A. Day, (British); and Major J. M. Crews (U.S.), December, 1944, published by The Office of Publication Board of the U.S. Department of Commerce, Report No. 312.				
42. DB	David Billingsley, personal correspondence, February 2003 on FN Dutch carbines.				
43. LKen	Lee Kennett, "A History of Proof Marks, Gun Proof in Belgium", The Gun Digest, 32 <sup>nd</sup> Edition, 1978; pages 129-138.				
44. RTS	Robert T. Shimek, "Model 98 Mauser", an article in "The Big Book of Surplus Firearms", 1998.				
45. JFr	Jan Free, Netherlands, an internet posting on FN Police carbines made for the Netherlands, 2003.				
46. AVan	Anthony Vanderlinden, "The Belgian Military Mausers" in "American Rifleman", January, 2004.				
47. ChrisZS	Christos Z. Sazanidis, "The Arms of Hellenes, A Historical Survey of the Small Arms of the Hellenic Armed Forces, Th Security Forces and Guerrilla Bands, 1821-1992", published in Greek with English chapter summaries and photo captions; Thessaloniki, Greece, 1995.				
48. LewMay	Lewis Maynard, Australia, in an internet posting on gunboards.com's Mauser Military Rifle Forum, on 8 May 2004 on the Peruvian M1935. http://www.gunboards.com/forums/ topic.asp?TOPIC_ID= 41634				
49. StanZ	<b>Dr. Stanley Zeilinski</b> , "Rifle Imports from China", published in "The Military Rifle Journal"; FN rifles imports to China through the Port of Hong Kong from Colonial Office files in the Public Records Office, London England.				
50. FC	Frank Crow, collector; private correspondence on FN-made Chinese rifles, dates, serial numbers.				
51. JG	Jan Gardiner, collector, private correspondence on FN-made Ethiopian, Belgian and Siamese arms.				
52. D. de Wit	<b>David de Wit,</b> Dutch collector and author of "De Nederlandse FN-Mauser karabijnen, p. 26-32, in the Dutch periodical "SAM 93".				

## BOLIVIA

While Bolivia was the first of the South American countries to rise in rebellion against Spanish rule (with an uprising in 1661) ironically, in 1825, it became the last country of the southern continent to achieve independence from royalist Spain. From 1835 to 1839, Bolivia formed a confederation with Peru, which, although able to resist attempted invasions by Argentina and Chile, finally collapsed from internal dissension.

The War of the Pacific (1879-1883) was an utter disaster for Bolivia, which was allied with Peru against an invasion by Chile. Chile won the war; Bolivia lost the province of Antofagasta and along with it, their access to the sea. In 1904, after a short and bitter war against Brazil (the Acre War), Bolivia lost even more of her territory.

Unable to gain a seacoast advantage on the Pacific coast, the Bolivians turned eastward, hoping to gain a route to the Atlantic Ocean by establishing a port on the navigable Paraguay River. The territory in question was equally claimed and occupied by Paraguay, which was justifiably upset by any Bolivian incursions. Following years of international diplomatic discussions, including arbitration by U.S. President Rutherford B. Hayes, and armed incursions in the areas by both countries, full scale war erupted between Bolivia and Paraguay. The resulting conflict, the Chaco War of 1932-1935, again saw defeat and territorial losses for Bolivia. The Bolivians did, however, obtain access to the sea as a result of the peace negotiations.

The defeats suffered by the Bolivians resulted in extreme and continuing political instability, the final result being the revolution of 1952. In 1967, Che Guevara decided that Bolivia was ripe for communist rebellion, but with full credit to the Bolivian military, Guevara's failing efforts were intercepted, resulting in his capture and eventual death. This provided a necessary boost in morale to the Bolivian armed forces.

Despite international disfavor because of the apparent lack of concerted effort to interdict the drug suppliers of the area, the Bolivian army has been in a position to re-equip during the 1970s and 80s, and are now acknowledged to have made great progress in recent years.

During the late 1890s, Bolivia was able to acquire weapons from Argentina, including fifteen thousand Modelo 1891 (Argentine Pattern) Mauser Rifles. In 1905, realizing that the military establishment needed serious upgrading, a French military mission was engaged. During this period, four thousand Modelo 1907 Mauser Rifles and one thousand Modelo 1907 Short Rifles were purchased from DWM of Berlin, Germany. The first world war cut off the easy access to military equipment that had been previously enjoyed. After the war, there was reorganization and re-equipping on a modest level. In 1926, due to the increased tensions with Paraguay, Bolivia contracted with Vickers Ltd. of Great Britain for huge quantities of war material, including thirty-six thousand Czech-made VZ 24 Short Rifles; this contract was later suspended, but not before at least thirtynine thousand rifles had been delivered. The great majority of these were VZ 24s, with an undetermined number of German Export Model



Bolivian crest as found on the receiver ring of Bolivian rifles. (Springfield Armory Museum)

Standard Modell Rifles making up the balance. During a truce in 1933, an additional forty-five thousand VZ 24s were purchased to compensate for the huge battle losses suffered by the Bolivian army. By 12 June 1935, both sides were exhausted and an armistice was signed, with hostilities ceasing two days later. During the armistice, Bolivia continued to purchase Czech VZ 24 Short Rifles, buying a further twenty thousand prior to 1938. The last Mauser rifles to be obtained by Bolivia were the M1950 Czech-made Short Rifle, very similar to the German 98K. These rifles were identified as "Fusil Mauser Boliviano Serie B-50," and were purchased during the period 1950-1952.

**MODELO 1895 RIFLE (ARGENTINE MODELO 1891 PATTERN RIFLE):** This rifle, purchased from the Argentinian government and presumably made in Argentine Government Arsenals, is identical to the Argentine Modelo 1891 Rifle, with the exception of the Bolivian markings on the receiver ring. All information relative to the rifle will be found under the Argentine section.

**MODELO 1907 RIFLE:** The Modelo 1907 Rifle and Short Rifle were standard German export model pattern 1904 rifles; these were sold commercially, and were available in calibers 6.5mm, 7mm, 7.65mm and 7.92mm. The rifle is fitted with a pistol grip stock, with the upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. There is a swivel on the bottom of the lower



Full-length view of the Bolivian Modelo 1895 version of the Argentine Modelo 1891 Rifle.



Full-length view of the Modelo 1907 Rifle. Note that this rifle is missing the lower sling swivel and cleaning rod. (Springfield Armory Museum)



The Star-over-"B" property mark found on the DWM-made Bolivian M1907 Long Rifle and Carbine in the collection of the Springfield Armory National Historic Site (SANHS) Museum. (SANHS)



"DWM" marking on the side rail of the Modelo 1907 Short Rifle. (Springfield Armory Museum)



The side rail of the Bolivian Modelo 1907 Rifle, with the DWM markings. (Springfield Armory Museum)

barrel band, with another on the bottom of the buttstock; there is also a hole in the upper front of the trigger guard to shorten the sling with the use of the sling attachment. Note that the rifle is equipped with the narrow upper band, short bayonet lug, tangent leaf rear sight, and parade hook common to this export version of the Gew 98. Approximately four thousand rifles were purchased from Germany.

Length: 49.0"; Weight: 8.30 lbs.; Barrel: 29.50"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: Tangent leaf rear sight adjustable to 2000 meters. Remarks: Bolivian crest on the receiver ring, manufacturer's markings on the side rail.

**MODELO 1907 SHORT RIFLE:** According to records, approximately one thousand Modelo 1907 Short Rifles were purchased from Germany for troop use. These short rifles are identical to the 1907 rifle, except for length, weight, turned-down bolt handle,



Full-length view of the Bolivian Modelo 1907 Short Rifle. (Springfield Armory Museum)

The cursive letter "f" in a circle found on the receivers and bolt knobs of the DWMmade M1907 Bolivian Mausers. The meaning of this marking is not yet known. (SANHS)



straight wristed stock, and a carbine-style sling loop at the bottom of the wrist.

Length: 41.50"; Weight: 7.80 lbs; Barrel: 22.25"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: Tangent leaf rear sight adjustable to 2,000 meters. Remarks: Bolivian national crest on the receiver ring, manufacturer's markings on the side rail.

**CZECH MODELO VZ 24 SHORT RIFLE:** This short rifle, imported from Czechoslovakia during the 20s and 30s, is covered under the section on Czechoslovakia. The Bolivian model is in caliber 7.65mm.



Bolivian soldier guarding VZ 24 Rifles and German ammunition cases during the Chaco War. (Kurt Severin)



The Bolivia national coat of arms appearing as the crest on the VZ24 Service Rifles made in Czechoslovakia by Ceskoslovenska Zbrojovka Brno. (John Wall collection)



A Bolivian foot patrol making its way through the extremely dusty, arid Chaco undergrowth The first and third men on patrol are carrying Czech VZ 24 Short Rifles, while the second man appears to be using a Steyr-Solothurn MP 34 Submachine Gun. (Hist B&W) (Kurt Severin)

The Flying Condor cartouche, used apparently as a national ownership mark on Bolivia Mauser service rifles and carbines. The image was photographed on the Model 1907 Carbine in the Springfield Armory Museum Collection. It also appears on the two M1907 Long Rifles in the SANHS collection and one Czechoslovakian-made Bolivian VZ 24 rifle. (SANHS)





The 7.65mm VZ 24 Service Rifle, serial number 52147, made on contract for Bolivia, one of 101,000 such rifles purchased from Brno between 1928 and 1938. Except for its markings, this rifle was the very model issued to the Czechoslovakian army. The sling is an original Czechoslovak-Bolivian sling. (John Wall collection)



The 7.65mm VZ 24 Service Rifle, serial number 52147, made on contract for Bolivia. (John Wall collection)



A Bolivian two-man mounted patrol, armed with Czech VZ 24 Short Rifles, checks before leaving heavy cover during the Chaco War. (Kurt Severin)

**EXPORT MODEL 1933 "STANDARD MODELL MAUSER BANNER" SHORT RIFLE:** This rifle was developed by the Germans after World War I and incorporated design features that had been found desirable from the Germans' experience in the war, resulting in a shortened version of the Gew 98 with the improved tangent leaf rear sight. This short rifle was available in 7mm, 7.65mm, and 7.92mm, and was produced with a straight bolt handle, an upper hand guard extending from in front of the rear sight to just beyond the lower barrel band, an upper band with parade hook, and grasping grooves in the stock. The gun is marked with a Mauser banner trademark on the receiver bridge, while the side rail is marked "Standard Modell."



The receiver ring, crest and side rail markings of the Bolivian VZ 24 Service Rifle. Note that the same receiver markings also appear on the buttstock. (John Wall collection)



The original stock cartouches on the left side of the buttstock of a Bolivian contract Mauser rifle, serial number 52147; note the flying condor mark, over the letters "M" and "Y" in a circle. The meaning of these marks is currently unknown, but all three also appear on the receiver ring of the rifle. The flying condor also appears on the stocks of DWM-made M1907 Mausers produced for Bolivia. (John Wall collection)



Full-length view of the Export Model Standard Modell Short Rifle.



Bolivian M1950 Short Rifle (Fusil Modelo Boliviano Serie B-50). (Jan Gardiner collection)



The Bolivian crest on the Modelo B-50. (Jan Gardiner collection)

Length: 43.60"; Weight: 8.80 lbs.; Barrel: 23.62"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: Tangent leaf rear sight adjustable to 2000 meters. Remarks: Manufacturer's marks on the receiver bridge, with model designation on the left side rail.

**BOLIVIAN MODELO 1950 RIFLE (FUSIL MAUSER BOLIVIANO SERIE B-50):** The last Mauser rifle to appear in the Bolivian arsenal was the Modelo 1950, made by BRNO of Czechoslovakia from 1950 to 1952. Combining features of the Czech VZ 24 Short Rifle and the German 98K Carbine, the trigger guard assembly, magazine, cupped buttplate, and upper barrel band were stamped steel. The upper and lower barrel bands are held by a single spring on the right side of the stock, and the stock is furnished with a sling swivel on the lower barrel band and the underside of the buttstock.

**Length:** 43.30"; **Weight:** 8.58 lbs.; **Barrel:** 23.62"; **Caliber:** 7.65 x 53mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action;

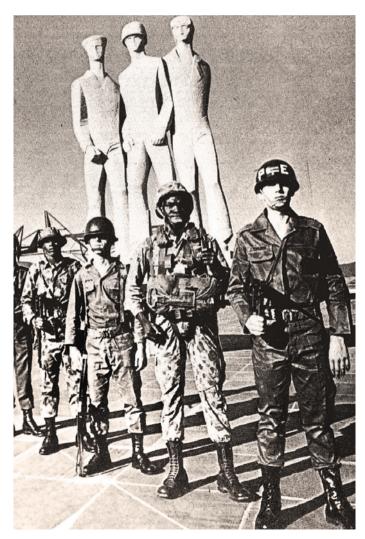


*Left side view of the Bolivian Serie B-50 buttstock, showing alternate sling swivels. (Jan Gardiner collection)* 

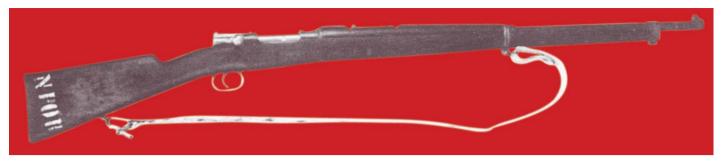
**Feed:** 5-round, staggered-column, flush, box magazine; **Sights:** Tangent rear sight graduated to 2000 meters. **Remarks:** Bolivian crest over "Serie B-50" on the receiver ring, Czech manufacturer's markings on the side rail.

## BRAZIL

At the end of the eighteenth century, Portugal, allied with Spain, was being ground under the heel of Napoleon as battles were raging over



*Brazilian soldiers from various branches of the army in a composite picture.* 



Full-length view of the Brazilian Model 1894 Rifle. (Century International Arms, Inc.)



Side rail of the Model 1894 Rifle, showing manufacturer's markings, with the Portuguese spelling of "Berlin." (Century International Arms, Inc.)

the Portuguese countryside. The Portuguese royal family was forced to flee to Brazil, an overseas possession that had been under Portuguese rule from 1500. Prince Pedro, the son of the King of Portugal, was left in Brazil as Regent upon the return of the royal family to the motherland. In 1822, without the consent or the opposition of the royal family, Pedro was crowned Emperor of Brazil.



Early version of the Brazilian national crest on the Model 1894 Rifle. (Century International Arms, Inc.)

Between 1826 and 1828, the recently incorporated Province of Cisplatina rebelled against Brazil and became independent following a disastrous military confrontation conducted by the Brazilian forces. Although Argentina supported the rebels, there was no declaration of war, so no action was taken against the Republic of Argentina during that particular period of time. The conflict resulted in the secession of Uruguay, which became an independent Republic. A military revolt soon occurred, with Emperor Pedro abdicating in favor of his five-year-old son, who became Emperor Pedro II, although he remained under the tutelage of a Regent until he reached his fifteenth birthday. During Pedro II's reign, he proved to be an enlightened, democratically inclined leader of his country, encouraging greatly increased European immigration and improving the lot of his subjects. During his reign, there was a brief war in 1852 against the Argentinian tyrant, Rosas, and in 1865, Brazil headed the Triple Alliance of Argentina, Brazil, and Uruguay in the war against Paraguay, which lasted for five years and resulted in the death of the Paraguayan dictator, Francisco Solano López. The war also caused the utter decimation of the Paraguayan nation, leaving only twenty-three thousand males alive in the entire country.

In his attempt to emancipate the slaves of Brazil, Pedro II evoked the wrath of wealthy landowners and was forced to abdicate; a Republic was declared in 1889, administered by a military government until 1894. For the forty years following, Brazil enjoyed peace and prosperity, aside from some occasional internal dissension. In 1917 the Brazilian government entered World War I on the side of the Allies, providing naval assistance for the balance of the war. A revolution by Governor Getulio Vargas of Rio Grande do Sul ended Brazilian democracy in 1930. Assuming the presidency, in 1937 Vargas proclaimed a corporate state, "O Estado Novo," fashioned along the lines of Mussolini's Italy. Despite this political leaning, Brazil came into World War II on the side of the Allies in 1942, sending a well-trained Expeditionary Force to the Italian theatre of operations in 1943, as well as providing naval assistance. Vargas was forced to resign in 1945, and from 1945 through 1964, Brazil enjoyed a broad democracy, while facing significant internal political problems. After a decided turn to the left by then President Goulart, in 1964 the armed forces attained power, retaining control of the government until the early 1980s. Since that time, Brazil has enjoyed a more democratically inclined government.

**MODEL 1894 RIFLE:** After extensive and strenuous testing, the Brazilian government adopted the Model 1894 Mauser Rifle, known as the Fusil Mo. 1894. This rifle is identical to the Spanish Model 1893 Rifle, with the exception of a cylindrical bolt head, rather than a flatbottomed bolt head, allowing the bolt to close on an empty chamber. These rifles were produced by Ludwig Loewe & Co. (1894-1896), DWM (1897-189?), and FN (1894-1899); the author has been unable to determine the number of these rifles purchased by the Brazilian government. These rifles, as well as the carbines, were used by Brazilian forces sent to quell the Jagunco Rebellion of 1897, where regular troops were drawn into a merciless guerrilla war with locals around the town of Canudos.



Full-length view of the Brazilian Model 1894 Carbine. (Century International Arms, Inc.)

Length: 48.50"; Weight: 8.30 lbs.; Barrel: 29.1875"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered-column, flush, box magazine; Sights: V-notch rear sight adjustable from 400 to 2000 meters on large leaf, 300 meters on standard. Remarks: Brazilian national crest, early version, on the receiver ring, with manufacturer's markings on the left side rail. Note the Portuguese spelling (Berlim) of "Berlin."

**MODEL 1894 CARBINE:** Made strictly as a cavalry carbine, this handy little weapon was adopted at the same time as the Model 1894 Rifle, and with certain exceptions, it is patterned after the rifle. Note that there is no bayonet lug, and the straight wrist stock is equipped with a carbine sling loop on the underside. The upper hand guard extends from in front of the rear sight to just beyond the upper barrel band, the band held in place by means of a tightened screw assembly on the right side. Once common, these carbines are becoming rather scarce. This particular carbine was produced by FN.

Length: 37.38"; Weight: 6.85 lbs.; Barrel: 18.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch rear sight adjustable to 1400 meters. Remarks: Early



Recently, a small number of Model 1898 Long Rifles with the DWM commercial address have been reported. The above rifle features the DWM test crest (left) and German commercial proof marks (right) in use between 1891 and 1913; and a circle-B type serial number associated with Brazilian M1908s. The rifles observed with the DWM test crest address have their caliber stamped on the left side of their rear sight ramp (below). The illustrated rifle is chambered for the 7x57mm Mauser cartridge. (Ed Parada collection)



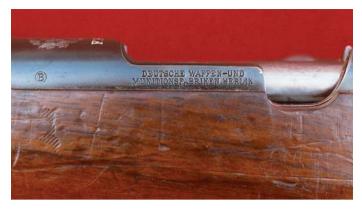
Side rail markings on the Brazilian Model 1894 Carbine. (Century International Arms, Inc.)

Brazilian national crest on receiver ring, with manufacturer's markings on the left side rail.

MODEL 1904 MAUSER-VERGUEIRO RIFLE: The Model 1904 Mauser-Vergueiro Rifle in caliber 7mm was purchased in small







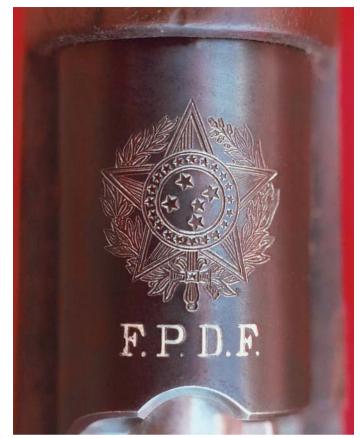
View of the left side of Brazilian M1904 Mauser-Vergueiro Rifle in 7mm, showing the D.W.M. logo on the side rail. (R. K. Smith collection)

quantities from DWM for use by the Brazilian military police. With the exception of caliber and markings, this version is identical to the Portuguese Model 1904, which is covered under the section on Portugal. The receiver ring has the Brazilian crest, under which are the letters "F.P.D.F.," which stand for Forca Publica Distrito Federal (Military Police of the National Capitol).

**MODEL 1907 RIFLE:** During the period 1904-1906, an undetermined quantity of Model 1904 rifles, designated the Model 1907, were purchased from DWM in caliber 7mm. This particular model rifle was sold commercially by DWM to many South American countries. The 98-style action rifle has a pistol grip stock, with the upper hand guard running from the front of the receiver ring to just beyond the lower barrel band. This model also incorporates the longer cocking piece and does not have lock screws.



Top view of the receiver ring of the Model 1907 Rifle as used by Brazil, showing the manufacturer's markings. (Springfield Armory Museum)



Overhead view of the crest and markings of the Brazilian Mauser-Vergueiro Rifle in 7mm. The initials "F.P.D.F." stand for 'Forca Publica Distrito Federal.' (R. K. Smith collection)



Left side rail of the Model 1907 Rifle as used by Brazil, showing the model designation. (Springfield Armory Museum)



Full-length view of the Model 1907 Rifle as used by Brazil. (Springfield Armory Museum)



Full-length view of the Model 1907 Carbine supplied to the Forca Publica of the Federal District; note the turned-down bolt. (Steve Kehaya)

Length: 48.3"; Weight: 7.70 lbs.; Barrel: 28.98"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight, graduated to 2000 meters. Remarks: Brazilian national crest on receiver ring, manufacturer's markings on the left side rail.

**MODEL 1907 CARBINE:** This little-known carbine was purchased from DWM during the period 1907-1912 for issuance to cavalry of the military police. This carbine is built with a Model 98 action, with a short, pistol grip stock, the upper hand guard running from in front of the receiver ring to just above the single, narrow, screw-clamping barrel band. The upper band, or nose cap, incorporates a Model 1893-style bayonet lug on the bottom of the band. The barrel band also has a swivel on the left side, while the other swivel is on a short bar attached to the bottom of the stock. The carbine has a tangent leaf rear sight to 2000 meters.

**MODEL 1908 RIFLE:** Produced by DWM, the Model 1908 Rifle was purchased by Brazil in large quantities between 1908 and 1914. According to some European sources, the rifle was said to have been produced by the Polish Radom plant between 1935-1938. The rifle is quite similar to the Gew 98, with a Gew 98-style action and a pistol grip stock, the hand guard running from the front of the receiver ring to the single barrel band. Swivels are attached under the barrel band and the bottom of the buttstock. The typical short German "H" bayonet lug (1.1875 inches long) requires a bayonet with muzzle ring; the standard German "H" type bayonet lug is 1.75 inches long. Note that the buttstock has a washer held by a slotted-head screw. This rifle and the short rifle version were Brazilian standard equipment for many years, and served the country well.

Length: 49.13"; Weight: 8.38 lbs.; Barrel: 29.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Brazilian national crest on receiver ring, manufacturer's markings on left side rail. Note: DWM contracted some of the work out to Mauser, and in this case the "DWM" over the Oberndorf address is seen instead of "Berlin."



The markings on the receiver ring of the Model 1907 Carbine; note the "F.P. DO D.F." markings and the model number. (Steve Kehaya)



Brazilian M1908 Mauser Rifle, 8x57 J, left side full-length view; note the high hump to the tangent rear sight. (Jan Gardiner collection)



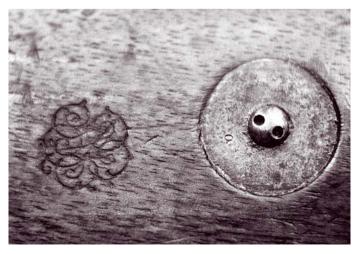
Brazilian M1908 Mauser Rifle, 8x57 J. Overhead view of the action. (Jan Gardiner collection)



Full-length view the Brazilian Model 1908 Rifle.



Left full-length view of the Brazilian Model 1908 Rifle.



M1908 Brazilian Rifle stock cartouche. (Robert Jensen collection)



Buttstock markings on the Brazilian Model 1908 Rifle.



Full-length view of the Brazilian Model 1908 Rifle with leather action cover.



Close-up view of the leather action cover on the Brazilian Model 1908 Rifle.

**MODEL 1908 SHORT RIFLE:** Apart from dimensions, the Brazilian Model 1908 Short Rifle is virtually identical to the Model 1908 Rifle. The short rifle has the bolt handle bent down, but like the rifle, it has a pistol grip stock, and the upper hand guard runs from in front of the receiver ring to just beyond the barrel band. Swivels are attached to the barrel band and the bottom of the stock.

Length: 41.875"; Weight: 7.95 lbs.; Barrel: 22.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Brazilian national crest on the receiver, manufacturer's markings on the left side rail.

**MODEL 1922 CARBINE:** During the period 1922-1924, Brazil imported considerable quantities of Model 1922 Carbines for cavalry and artillery troop use from FN; records available to the author do not give the exact numbers purchased. Based on the Model 98 action, the carbines featured a turned-down bolt handle, and a short, straightwristed stock. The upper hand guard runs from just ahead of the receiver ring to just beyond the spring-held barrel band. The upper band, or nose cap, features a parade hook and short German "H" type bayonet lug; note that the barrel band and nose cap are quite close together. There is a swivel attached to the lower barrel band and the bottom of the buttstock has a plate with loop for attachment of the detachable sling mount.



Side rail markings of the Brazilian Model 1908 Rifle.



Unusual markings on the right side of the receiver ring of the M1908 Rifle. (Robert Jensen collection)



Full-length view of the Model 1908 Brazilian Short Rifle.



Manufacturer's markings on the side rail of the Brazilian Model 1908 Short Rifle.

Length: 39.1875"; Weight: 6.60 lbs.; Barrel: 19.63"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Brazilian national crest on the receiver ring, manufacturer's markings on the left side rail.



Manufacturer's markings on the right side of the receiver ring of the Brazilian Model 1922 Carbine.

**CZECH MODEL VZ 24 SHORT RIFLE:** In 1932, revolutionaries from Sao Paulo, Brazil ordered fifteen thousand VZ 24 Short Rifles from Czechoslovakia; these are the standard export Model VZ 24 as covered in the Czechoslovakian section of the book, with the exception that the bolt handle has been bent and the bolt knob flattened and knurled on the underside. The stock has been cut for the



Full-length view the Brazilian Model 1922 Carbine.



Full-length view of the Czech Model VZ 24 Short Rifle specially ordered by Brazilian revolutionarie.



The left side rail of the Czech VZ 24 Short Rifle showing the model designation.

bolt knob. The safety operates in the standard manner. Czech side rail markings and Czech manufacturer's markings are found on the receiver ring.

**MODEL 1935 MAUSER BANNER RIFLE:** Among the last weapons purchased from Germany were the Model 1935 Mauser Banner Long Rifle and the Model 1935 Mauser Banner Short Rifle; unfortunately, the quantities purchased in each case are not available to the researcher. The Model 1935 Rifle is almost identical to the Gew 98, except that it has a tangent leaf rear sight, and an upper hand guard that extends from in front of the receiver ring to just beyond the lower barrel band. The stock has grasping grooves, and the lower barrel band has a swivel on the bottom, while the underside of the buttstock is equipped with a plate that has a loop for the attachment of a detachable sling mount. The upper band is also equipped with a parade hook.



Manufacturer's markings on the side rail of the Model 1935 Mauser Banner Rifle.



Manufacturer's markings on the receiver ring of the Czech VZ 24 Short Rifle used by Brazilian revolutionaries.



Brazilian national crest on the receiver ring of the Model 1935 Rifle.



Full-length view of the Brazilian Model 1935 Mauser Banner Rifle.



Full-length view of the Brazilian Model 1935 Mauser Banner Short Rifle.



Manufacturer's markings on the left side rail of the Model 1935 Mauser Banner Short Rifle.

Length: 49.25"; Weight: 10.0 lbs.; Barrel: 28.75"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Brazilian national crest on the receiver ring, Mauser Banner logo on the receiver bridge, manufacturer's markings on the left side rail.

**MODEL 1935 MAUSER BANNER SHORT RIFLE:** Purchased from Germany at the same time as the Model 1935 Rifle, the Model 1935 Short Rifle was also issued in an unknown quantity to Brazilian troops. The short rifle differed from the rifle in that it had a bent bolt handle, with the stock cut out to accommodate the handle and bolt knob; otherwise it is only a case of smaller dimension.



Model designation on the right side of the receiver of the Brazilian Model 1908/34 Short Rifle.

Length: 42.0"; Weight: 9.0 lbs.; Barrel: 21.5"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Brazilian national crest on the receiver ring, Mauser Banner logo on the receiver bridge, manufacturer's markings on the side rail.

**MODEL 1908/34 SHORT RIFLE:** In order to decrease the country's dependency on foreign arms suppliers, production of the Model 1908/34 Short Rifle was undertaken by the Brazilian government at the arms plant at Itajuba. This is an updated and modernized version (for that time) of the Model 1908 Short Rifle, employing local wood for the stocks as opposed to European walnut. The caliber is also a change in thinking, as the rifle was produced in U.S. .30-06.



Full-length view of the Brazilian Model 1908/34 Short Rifle.



Left full-length view of the Brazilian Model 1908/34 Short Rifle.

Length: 43.75"; Weight: 9.75 lbs.; Barrel: 23.50"; Caliber: .30-06; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Brazilian national crest on the receiver ring, with the manufacturer's markings on the side rail.

**M954 CALIBER .30-06 SHORT RIFLE:** Last in the series of Mauser rifles employed by the Brazilian armed forces is the M954 .30-06 Short Rifle, which has the unusual feature of a threaded muzzle, allowing for the attachment of a grenade launcher, or a flash suppresser. This is a rifle produced in Brazil in their arms factory at

Itajuba. The rifle is fitted with a pistol grip stock with grasping grooves, and the upper hand guard extends from the front of the receiver ring to beyond the lower barrel band. The upper band has a parade hook on the bottom. The nose cap incorporates a short bayonet lug. There is a swivel on the bottom of the lower barrel band, and the bottom of the buttstock has a fitting for a quick-release sling attachment. The stock is cut out for the bolt handle and bolt knob, and the buttplate is cupped.

Length: 43.50"; Weight: 8.85 lbs.; Barrel: 23.25"; Caliber: .30-06; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent



The receiver crest and side rail address of one of the 100,500 Brazilian "Mod. 1908/34" 7mm Police Carbines made on contract by Ceskoslovenska Zbrojovka Brno. Many of these were later converted to .30-06 at the Itajuba arms factory, where they were remarked "Mod. 08/34 .30." This same carbine was adopted by one other country, El Salvador, which purchased 5,600 carbines in 1937, also in 7mm. Brno's sales literature refers to this carbine as the Model 16/33. (Ed Parada collection)



Cartouches on the buttstock of the Brazilian M1908/34 Short Rifle; the left cartouche is the Brazilian crest, while the right cartouche is an entwined 'C' and 'A.' These are rarely seen together on the same rifle. (R. K. Smith collection)



M1908/34 Short Rifle cartouche on the buttstock, showing a close-up of the entwined 'C' and 'A.' (R. K. Smith collection)



The CZB-made "Mod. 1908/34" Carbine uses the Gewehr 98-style quick detachable sling swivel and boss, and is numbered across the lower comb in the German style.



Manufacturer's markings on the left side rail of the Brazilian Model 1908/34 Short Rifle.



Markings on the right side of the receiver ring of the Brazilian M954 Short Rifle.



Full-length view of the Brazilian M954 Short Rifle.



The Brazilian M954 (Model 1954), an updated version of the Czechoslovak-made Brazilian 1908/34 Carbine, is distinctive for its incorporation of several features from German WWII arms. The muzzle area, shown above, features a slotted front sight base that accommodates a German-type 98Kk sight hood. Additionally, the muzzle is threaded for what is assumed to be a grenade launcher and/or muzzle brake. The finish has been changed from bluing to a dark, olive colored Parkerizing. (John Wall collection)

The buttplate of the Brazilian M954 Mauser Carbine is cupped in the WWII era, German fashion. and features a well in the buttstock covered by a butt trap reminiscent of the German K43 semiautomatic service rifle. (John Wall collection)



leaf rear sight graduated to 2000 meters. **Remarks:** Brazilian national crest and model designation on the receiver ring, manufacturer's markings on the left side rail.

## CHILE

The military and political history of Chile is a tempestuous one. Colonized by the Spaniards in 1541, and forming part of the Viceroyalty of Peru under the colonial empire of Spain, Chile moved towards independence in the year 1810. The Chilean War of Independence lasted eight years, and was aided by an expeditionary force from Argentina, as well a powerful fleet under the command of British Admiral Thomas Cochrane. This fleet was largely manned by American, British, and Irish mercenaries, all eager to fight to help a country free itself.

The first President of the Chilean Republic was General Bernardo O'Higgins. In 1821 he led a force to the aid of the Peruvians, who achieved liberty in 1823. Not so fortunate, O'Higgins' policies led to his own overthrow in the same year, which ushered in almost a decade of anarchy, finally ending in 1830 with a conservative victory led by Diego Portales.

Chile was victorious in a war against the confederation of Bolivia and Peru in the years 1836 to 1839. Allied with Peru, Chile waged a victorious war against Spain in 1865 and 1866, but thirteen years later saw another turnaround when Chile went to war against Bolivia and Peru in the famous War of the Pacific. At the end of this war, the army turned its attention to subduing the Araucanian Indians, who had been a thorn in the side of the country since colonial times.

Considering the many wars involving other countries, a relatively stable government had enabled Chile to enjoy peaceful domestic progress, but this was broken by a short, but bitter, civil war in 1891. It was during this war that the Winchester Model 1886 Lever Action Rifle, as well as the Austrian Mannlicher Model 1888 Straight-pull Rifle, played an active part. The Constitutionalists, backed by the army, were the victors.

The Chilean army much admired the German military machine, which proved successful in the Franco-Prussian War, and this led to the engagement of Captain Emil Koerner, a much-decorated veteran of the war, to revamp the Chilean Military College. When he had completed his initial assignment, it included the addition of thirty-six German military instructors. The German military mission remained in place until the start of the first world war. This heritage is seen in the spike-top "pickelhauben" parade dress helmets and German-style steel helmets that were, until recently, to be found in the TO & E of the Chilean army. Koerner's influence remained evident in the Chilean army Prussian traditions, including the armaments purchased by the Chilean government.

The standard small arm in the army of Chile was the Mauser rifle, short rifle and carbine, Modelo 1895. Friction between Argentina and Chile caused a small arms race in 1896, and by 1898, the Chilean armory included eighty thousand Model 1895 Rifles and thirty thousand carbines of the same model.

The armed forces had to intervene in the governing of the country in 1924, when they supported President Alessandri; sometime later, Colonel Carlos Ibañez del Campo took over as President, ruling until 1931. Anarchy prevailed for one year during the depression, with elections in 1932 returning the country to a succession of



Full-length view of the Chilean Model 1893 Rifle. (Lothar Frank collection)



The Chilean national crest on the receiver of the Model 1893 Rifle. (Lothar Frank collection)

democratically-minded administrations until the somewhat inconclusive election of Salvador Allende in 1970. Allende's attempts to turn Chile into a Marxist State resulted in complete and total disorganization and economic collapse, and in 1973 this caused the armed forces to reluctantly assume control of the government. Under the regime of General Pinochet, stability was returned to the country and social and economic growth resumed. Chile is now proud of its full democratic representation, and the country is on the road to a sound political future.



Manufacturer's markings on the side rail of the Chilean Model 1893 Rifle. (Lothar Frank collection)

**MODEL 1893 RIFLE:** Among the many Model 1895 Mauser Rifles supplied to Chile were some "true" Model 1893 Rifles—true in the respect that they were manufactured and delivered with a bent bolt handle and no auxiliary shoulder behind the bolt handle as a safety; otherwise they were identical with the Model 1895 Rifle. All of the facts listed for the Model 1895 Rifle will apply in the case of the Model 1893 Rifle.

**MODEL 1895 RIFLE:** Initially supplied by Ludwig Loewe & Co. during the period 1897-1900, some later stands of arms were delivered by DWM. Many of the Model 1893 "OVS" Mauser rifles originally bound for the Boers during the war against the British in South Africa were diverted by DWM to fulfill the Chilean contract. The receivers were overstruck with the crest of Chile, but retained their "OVS" markings.

Almost identical with the Spanish Model 1893 Rifle, the Chilean model differed only in having a cylindrical bolt head and the rear of



The Chilean Navy used a small number of M1895 rifles marked with their naval anchor crest. Recently, a carbine, serial number 341, bearing the same crest (left) was discovered. The side rail marking (right) is the same as found on Chile's "Manufactura Loewe" M95 long rifles. (Ed Parada collection)



Full-length view of the Chilean Model 1895 Rifle.



Full-length view of the Chilean Model 1895 Rifle. This particular specimen was never issued, and was kept in the collection of Paul Mauser. (John Deeks collection)



*Chilean acceptance marking in the stock of the Chilean Model 1895 Rifle.* 

the follower rounded off so that the bolt would close on an empty chamber. An auxiliary shoulder on the receiver behind the bolt handle was intended to serve as a safety in the event the locking lugs gave way. The rifle has a straight-wristed stock, with the upper hand guard extending from in front of the receiver ring to the barrel band. The upper band has a bayonet lug on the bottom of the band to accept the Model 1895-style bayonet. Swivels are on the bottom of the lower barrel band and the buttstock.

Length: 48.60"; Weight: 8.80 lbs.; Barrel: 29.60"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch leaf rear sight graduated to 2000 meters. Remarks: The national crest of Chile on the receiver ring, with the manufacturer's markings on the side rail. In many cases, buttstocks will also be marked with the national crest on the right side, while rifles issued to naval units will carry a fouled anchor in place of the national crest.

**MODEL 1895 SHORT RIFLE:** The Model 1895 Short Rifle, or "mosqueton," is identical to the Model 1895 Rifle except for the length, the turned-down bolt handle, and the sling swivels on the left side of the stock and the barrel band.



Chilean national crest on the receiver ring of the Model 1895 Rifle.



Manufacturer's markings on the side rail of the Chilean Model 1895 Rifle. Note that the manufacturer is Ludwig Loewe & Co., Berlin.



Full-length view of the Model 1895 Short Rifle.



Full-length view of the 7mm Chilean Model 1895 Cavalry Carbine. On the left side of the Carbine, notice the distinctive inclusion of the saddle ring inside the standard sling swivel. Photos of mounted troops carrying a slung Carbine of this type are unknown, so we are unsure how the ring was actually used. However, it may have been the means by which the carbine is attached to the rider's belt to prevent it from bouncing against his back. (John Wall collection)



Full-length view of the 7mm Chilean Model 1895 Cavalry Carbine. (John Wall collection)



Side rail of the Chilean Model 1895 Carbine, showing the manufacturer's markings. (Springfield Armory Museum)

Length: 41.25"; Weight: 7.90 lbs.; Barrel: 21.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch leaf rear sight graduated to 1400 meters. Remarks: Chilean national crest on the receiver ring, manufacturer's markings on the side rail.

**MODEL 1895 CARBINE:** Made to Chilean specifications, the Carabina Mauser Chilean Modelo 1895 was made to accept the Model 1895 Chilean bayonet. The carbine retains the features of the short rifle, including the bent bolt handle, but in modified form. The sling swivels are on the left side of the barrel band, and on the stock behind the wrist.

Length: 37.25"; Weight: 7.50 lbs.; Barrel: 18.25"; Caliber: 7 x 57mm; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch leaf rear sight graduated to 1400 meters. Remarks: Chilean national crest on the receiver ring, with manufacturer's markings on the side rail.

**MODEL 1912 STEYR RIFLE:** As part of the effort to modernize and update standard equipment, purchases of the Model 1912 Rifle and Short Rifle were made from Osterrereichische Waffensfabriks-Gesellschaft of Austria just prior to the start of World War I. These rifles are identical to the Mexican and Colombian Model 1912 Pattern Rifles, which are close copies of the Gew 98. The rifle has a pistol grip stock, tangent leaf rear sight, and large receiver ring. The upper hand guard extends from in front of the receiver ring to just beyond the lower barrel band. The upper band has a parade hook and the nose cap incorporates an "H" type, short, flush bayonet lug that requires a



Full-length view of the Chilean Model 1912 Steyr Rifle. Note the identification disk on the right of the buttstock.



Left full-length view of the Chilean Model 1912 Steyr Rifle.



A converted Steyr-made Model 1912 rifle. (Ed Parada collection)



Many Chilean Model 1912 long rifles made by Steyr were converted to 7.62 NATO by being re-barreled with shorter 60 cm barrels. Some conversions have been noted without any identifying marks other than the short barrel. Others, as shown here, were re-marked on their receiver rings with the numeral "61" and the ancronym "NATO," thus identifying the rifle by its new nomenclature, the "Modelo 1912/61." (Ed Parada collection)



After the adoption of the 7.62 NATO cartridge, Chile converted a number of its Steyr-made Model 1912 rifles to the new standard caliber. Converted long rifles, which came from the factory with receivers in the white, were blued and marked "7.62" over "N" on the receiver bridge. Note the absence of marks on the receiver ring to the left. (Ed Parada collection)



*Chilean Model 1912 Rifle made by Steyr and converted to 7.62 NATO. (Ed Parada collection)* 



*Chilean acceptance marking in the stock of the Chilean Steyr Model 1912 Rifle.* 



*Chilean M1912 Pressure Test Rifle, close-up view of action. (Jan Gardiner collection)* 



Manufacturer's markings on the left side rail of the Chilean Model 1912 Steyr Rifle.



The Chilean national crest and model designation on the receiver ring of the Chilean Steyr Model 1912 Rifle.



Chilean M1912 Pressure Test Rifle. (Jan Gardiner collection)



Full-length view of the Chilean Steyr Model 1912 Short Rifle.



Manufacturer's markings on the side rail of the Chilean Steyr Model 1912 Short Rifle.

bayonet with the muzzle ring flush to the back of the hilt. A swivel is attached to the bottom of the lower band, with a quick-release attachment on the bottom of the buttstock. The total quantity delivered is undetermined.

Length: 49.0"; Weight: 9.06 lbs.; Barrel: 28.75"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: The Chilean national crest over the markings "MODELO 1912" is on the receiver ring, while the side rail bears the marking, "WAFFENFABRIK STEYR/AUSTRIA."

**MODEL 1912 STEYR SHORT RIFLE:** With the exception of a bent bolt handle and overall dimensions, the Chilean Model 1912 Short Rifle is identical to the Model 1912 Rifle.

Length: 41.75"; Weight: 9.0 lbs; Barrel: 21.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: The Chilean national crest and "MODELO 1912" on the receiver ring, with manufacturer's markings on the side rail.

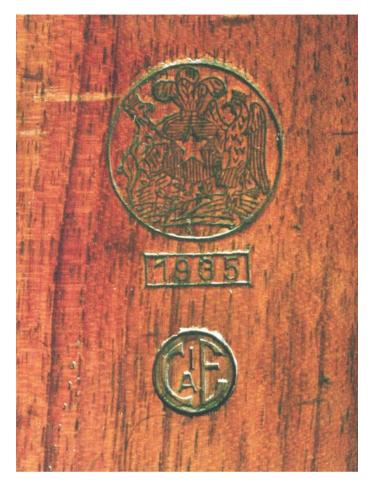
**MODEL 1935 "CARABINEROS" CARBINE:** Purchased from Mauser during the mid-1930s, this carbine was evidently intended for use by the elite corps of "Carabineros." The carbine has a pistol grip stock, with the upper hand guard extending from the receiver ring to just beyond the wide lower band. The nose cap incorporates an "H"



Full-length view of the Chilean Model 1935 "Carabineros" Carbine.



Left full-length view of the Chilean Model 1935 Carbine.



Stock markings on the left side of the buttstock of the Chilean Model 1935 Carbine.

type short, flush, bayonet lug. Sling swivels are on the left side of the stock at the wrist and on the left side of the lower barrel band. The bottom of the buttstock is also equipped with a quick-release attachment for the sling. The right side of the buttstock has an identification disk, while the left side of the stock has the national crest over the date "1935" in a rectangular block, which is above acceptance marks in a circle.

Length: 42.0; Weight: 9.25; Barrel: 21.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: On the receiver



The Mauser Banner logo on the receiver bridge of the Chilean Model 1935 Carbine.



Side rail markings of the Chilean Model 1935 Carbine. Note the series indication, which is special in this case, showing "Carabina Chileana" and the serial number.



Close up of the "quick release" attachment on the left side of the buttstock of the Chilean Model 1935 Carbine.

ring are the following: the word "CHILE" above crossed rifles, over the words "ORDEN Y PATRIA," which is over the date "1935." The side of the receiver ring has the series designation and number, while the side rail shows the manufacturer's markings. On the receiver bridge is the Mauser Banner logo.



The receiver ring markings of the Chilean Model 1935 Carbine.

## CHINA

The awakening giant that is China has, in all likelihood, been the most prolific user of Mauser military rifles in the world. Although there is no specific confirmation of this, from the Gew 71 on, China has probably employed every model and variant of the Mauser rifle ever produced. From the time that China first sent arms purchasing commissions to the West during the late 1800s, to the freelance arms merchants of the Far East, the armies of China, including the warlords of the 1920s, have had the most advantageous opportunities to acquire all manner of Mauser rifles. German military missions led by German General von Faulkenhausen in the 1930s helped to provide a further "Prussianization" of the Nationalist army of General Chiang Kai-Shek. The author had the good fortune to become friends with the daughter of General von Faulkenhausen in Heidelberg at the end of World War II. We had some wonderful conversations concerning her father's history, both prior to and during World War II. At the time, he was a prisoner of the Russians.

To attempt to trace the bewildering paths of the weapons used by Chinese forces would be a gigantic endeavor, if not an impossible task. Not only were Mausers plentiful, but there was also an abundance of every other firearm that had ever appeared on the surplus market; these included Mannlicher straight-pull rifles from the 1880s, French Gras and Chassepot single shot rifles, early Carcano and Vetterli models, as well as some U.S. Civil War cap-and-ball relics. China also contracted to produce their own version of the Mauser and Commission Model 1888 Rifle, called the "Hanyang" model; which was used throughout the first half of the twentieth century, and only appeared on the U.S. surplus market in the last five to ten years.

The Chinese army was initially equipped with a selection of Gew 71 Rifles and Carbines, which were replaced at a later date with the Hanyang model rifle, as well as an unknown quantity of Model 1895 Mauser Rifles. China experimented with a version of the Model 1904 Mauser Rifle, designated the Chinese Model 1907 in both 6.8mm and 7mm. The rifle was referred to as the Model 1904/07, while the carbine was officially called the Model 1907 Carbine. Production facilities must also have been set up in China, as the author has a Chinese-produced and marked Model 1907 in his collection. The Chinese revolution of 1911 interfered with testing and troop use of the Model 1907, and the further production of this model was cut short by the advent of the first world war, with the weapons in German factories being converted to 7.92mm and issued to German troops.

During the 1920s and the early 1930s, Chinese forces imported an unknown quantity of Model 98/22 Rifles from Czechoslovakia, as well as approximately 24,000 FN Model 1924 and 1930 Rifles between 1930 and 1934; from 1937 to 1939, it is believed that 165,000 more FN Model 1930 Rifles were purchased from FN. Copied from the FN Model 1930, the Chinese-produced "Model 21" Rifle was a reliable, albeit crude rifle manufactured at the Kwantung Arsenal between 1932 and 1937 for use by the Kuomintang, or North China Army. In 1937, China also purchased 100,000 VZ 24 Short Rifles from Czechoslovakia. These rifles are readily identifiable, as the receiver dates are always "1937," and the serial number is preceded



Cantonese soldier with a Chinese Model 1907 Rifle, ammunition, and Chinese-made "potato masher" grenades, C. 1935. (Edgar Snow collection)



Chinese infantryman with rifle, ammunition, grenades, and a Germanstyle Model 1935 helmet. (Edgar Snow collection)



Full-length view of the Gew. Model 71 Rifle as supplied to China.



Throughout China, Mauser rifles were widely used by both military and police organizations. This rare rifle, a German-made Mauser Model 71/84, was used by the Shanghai Police, and is so marked in Chinese on the receiver ring. (Stan Zielinski collection)



Typical manufacturer's markings on Model 71 Rifles supplied to China.

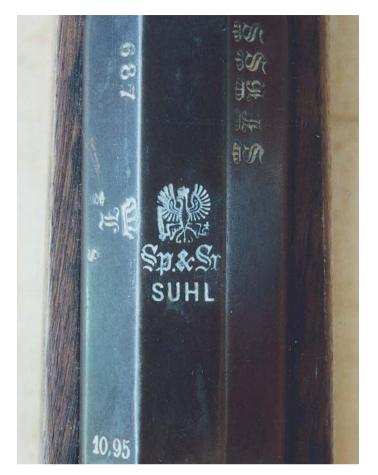
by a "P" prefix. Most of these VZ 24s were captured by the Japanese, who used them to arm approximately five divisions operating in China.

Also used to arm the Chinese were the Mauser Standard Modell Short Rifles, purchased from Germany during the mid-1930s. These rifles will bear the Mauser Banner logo, and will all presumably have a "B" prefix to the serial number.

**GEW. 71 RIFLE:** While the bulk of the production of Model 71 Rifles was by German government arsenals and the Austrian Arms Co. of Steyr, Austria, the Austrian Arms Co. also supplied a total of 70,000 Model 71 rifles to China, Japan, the Transvaal, Honduras, and Uruguay. In addition, in 1876, the Mauser Co. received a contract from China for 26,000 rifles and an undetermined number of carbines were purchased from Spangenberg & Sauer of Suhl, Germany. The Model 71 Rifle supplied to China is identical to that supplied to the German



Full-length view of the German Model 71 Carbine.



Receiver markings on the German Model 71 Carbine, showing the Spangenberg & Sauer markings.

armed forces in caliber 11mm, and technical information on the rifle will be found in the section on Germany.

**KAR. 71 CARBINE:** The quantity of Model 71 Carbines supplied to China from the stocks of Spangenberg and Sauer, of Suhl, Germany, is lost in the mists of time and records long destroyed by war. The author has been unable to determine the markings, if any, that are peculiar to the Chinese contract weapons. All pertinent data regarding the Model 71 Carbine will be found in the section on Germany.

**MODEL 1895 RIFLE:** In the year 1896, an unknown quantity of Chilean-style Model 1895 Rifles in caliber 7 x 57mm were ordered from Waffenfabrik Mauser A-G, with the delivery date also unknown. These rifles may bear ideographs on either the receiver or on the buttstock, but this cannot be positively determined. All data relative to this rifle will be found in the section on the Chilean Model 1895 Rifle. These rifles were apparently equipped with a version of the Spanish Model 1893 sword bayonet.

**CHINESE MODEL 1907 RIFLE:** Based on the German Model 1904 Rifle that was produced for commercial sale, the Chinese Model 1907 was originally chambered for the experimental Chinese 6.8mm round. As this rifle was in production when World War I started, it was an easy matter for the rifle to be rebarreled for the 7.92mm cartridge and issued to German troops. As a matter of course, the Chinese also rebarreled the rifle in 7.92mm when it was produced in China. Made with a pistol grip-style stock and an upper hand guard that extends from in front of the receiver to just beyond the lower barrel band, the rifle is identified by the narrow lower band. There are swivels on the bottom of the barrel band and the buttstock. The short bayonet lug requires a bayonet with a muzzle ring.

Length: 49.2"; Weight: 8.30 lbs.; Barrel: 29.13"; Caliber: Originally 6.8mm, later produced in 7.92 x 57mm; Rifling: 4groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Those rifles that were manufactured in Germany will have the name of the manufacturer



Full-length view of the Chinese Model 1895 Rifle.



Left full-length view of the Chinese Model 1895 Rifle.



Full-length view of the Chinese Model 1907 Rifle. Note the well-displayed ideographs on the right side of the buttstock.



Chinese markings on the receiver of the Chinese Model 1907 Rifle.

(Mauser or DWM) and the year produced. Those rifles manufactured in China will usually have two diamond shapes with one end superimposed on the other, over the Chinese date, which commences from 1911, the date of the Chinese revolution. Ideographs will also be prominently displayed on the buttstock.

**CHINESE MODEL 1907 CARBINE:** The Chinese Model 1907 Carbine was adopted at the same time as the Model 1907 Rifle. With the exception of the turned-down bolt handle, the shorter rear sight, and the full stock to the muzzle with sight protectors, the carbine is identical to the rifle. The carbine is fitted with a pistol grip stock without grasping grooves, with the upper hand guard running from the front of the receiver ring to just beyond the lower barrel band. There is a swivel on the bottom of the lower barrel band another on the bottom of the buttstock. The simple nose cap incorporates sight protectors, and there is no provision for the attachment of a bayonet.



Ideographs on the buttstock of the Chinese Model 1907 Rifle.



*View of stock, showing cut for German-style sling attachment. (Jan Gardiner collection)* 



Chinese M1907 Rifle, 6.8mm; overhead view of the action and markings. (Jan Gardiner collection)



Full-length right-side view of 7.92x57mm M1907 Carbine. (Jan Gardiner collection)



Full-length view of the Chinese Model 1907 Carbine. (Noel P. Schott)



Full-length view of a Chinese Model 1907 Carbine with bent bolt handle. These weapons eventually ended up in the hands of the civilian Red Guards as militia equipment.



Full-length view of a Chinese variant Model 1907 Carbine with straight bolt handle. This one is interesting in that the receiver ring is hand-marked "SPANDAU/1888!"



The left-hand side of the action of the Chinese Model 1907 Carbine. (Noel P. Schott)

Length: 41.25"; Weight: 8.1 lbs.; Barrel: 21.75"; Caliber: Originally 6.8 x 57mm; later rebarreled to 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Manufacturer's markings on the top of the receiver; in this case, "Waffenfabrik/Mauser/Oberndorf a/n," with serial number on the left side of the receiver and the model designation on the left side rail.

**CHINESE STEYR MODEL 1912 RIFLE:** Due to the destruction of war, the author has been unable to ascertain the number of Model 1912 Rifles in caliber 7 x 57mm ordered from the Austrian Arms Co. of Steyr, Austria. All of the pertinent data relative to this rifle will be found under the section on Chile.

**CZECH MODEL 98/22 RIFLE:** During the 1920s, China contracted for approximately seventy thousand Model 98/22 Rifles in caliber 7.92 x 57mm from Czechoslovakia. These were delivered over a period of years, and were used in the struggles between the Kuomintang, the Chinese Nationalist forces, and the Red Chinese Army, as well as the various Generals who reigned as warlords. Basically a modified copy of the Gew 98, the Model 98/22 Rifle is equipped with a modified tangent leaf rear sight, and has a pistol grip stock and an upper hand guard that runs from in front of the receiver ring to just beyond the narrow lower band. The lower band has a sling swivel on the bottom, as does the bottom of the buttstock at the rear of the wrist. The nose cap has the German "H" style bayonet lug, and the stock has the washer and rod combination for disassembly of the striker mechanism.

**FN MODEL 24 AND 30 SHORT RIFLES:** During the period 1930-1934, FN supplied approximately 24,000 Mle 24 and Mle 30 Short



Side view of the Czech Model 98/22 Rifle, showing location of the serial number.



Czech markings on the receiver of the Model 98/22 Rifle as used by China.



Full-length view of the Czech Model 98/22 as used in China. These will often be found with ideographs at some point on the stock.



General officer and troops of the Northern Army, C. 1930. (Hist B&W) (Edgar Snow collection)

Rifles in 7.92mm to China, while a further 165,000 Mle 30 Short Rifles were delivered from 1937 to 1939. These short rifles proved popular with the Chinese forces (as any of us who served in Korea will attest!), and facilities at the Kwantung Arsenal soon provided a native copy labeled the Model 21 Short Rifle.

As the Mle 24 and the Mle 30 Short Rifles are almost identical, and were produced in the same calibers, available information states that the only really distinctive difference is that the Mle 24 generally has an upper hand guard running from in front of the receiver ring to just beyond the lower barrel band, while the Mle 30 generally has an upper hand guard that runs from in front of the receiver ring to the upper barrel band. According to FN records, the Mle 30 also had a narrower upper band than the Mle 24, and often the front sight had special protective "ears."



Chinese troops armed with FN Model 24 Short Rifles and Standard Modell Short Rifles preparing for action, C. 1933. (Edgar Snow collection)

A typical short rifle has a pistol grip stock, with the upper hand guard running from just before the receiver ring to just beyond the lower barrel band, or to the upper barrel band, as the case may be. Sling swivels will be found on the bottom of the lower barrel band, with another on the bottom of the buttstock. The nose cap incorporates the typical German "H" style bayonet lug. The bolt handle is straight, and the rear sights are tangent, graduated to 2000 meters.



Model 1930 Chinese Carbine, full-length right side view. Note the lack of a bayonet lug. (R. K. Smith collection)



Full length view of the left side of the Model 1930 Carbine. (R. K. Smith collection)



Full-length view of the Chinese Model 21 Short Rifle. (Noel Schott collection)



Markings on the receiver ring of the Chinese Model 21 Short Rifle. (Noel Schott collection)

**MODEL 21 SHORT RIFLE:** The Model 21 Short Rifle was a "knockoff" of the FN Mle 30 Short Rifle, produced by the Kwantung arsenal in the early 1930s for the Chinese Nationalist army. There are no real records available for any historical analysis of this weapon, and there are differences in manufacture, i.e., dimensions, quality, and fittings. The typical Model 21 Short Rifle is equipped with a pistol grip stock, an upper hand guard running from the front of the receiver ring to the upper band, and a tangent rear sight. The lower band has a sling swivel, with another inlet into the bottom of the buttstock behind the pistol grip. The bolt handle is straight, and some specimens have been seen without bayonet lugs.

Length: 43.62"; Weight: 8.64 lbs; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent rear sight graduated to 2000 meters. Remarks: Unknown markings on the receiver ring and on the side rail.



The front of the trigger guard assembly of an FN-made Model 1924 Chinese Short Rifle, showing the faint remnant of the matching serial number. (John Wall collection)



Full-length view of the FN Mle 24 Short Rifle as supplied to the Chinese armed forces.



The left side of the FN Model 1924 Short Rifle made for China, bearing the "1932" date crest. The total production for the "1932" rifle is unknown. The rifle illustrated however bears a serial number in the 18,000-range, so production was significant. (John Wall collection)



The right side of the FN Model 1924 Short Rifle made for China, bearing the "1932" date crest. Note that neither side of the stock has Chinese markings or brands. Although no FN or Chinese records have been discovered, it is likely that this rifle was one of the earliest Mausers purchased in quantity after WW I, and may well be the basis for the Chinese Type 21 rifle. Type 21 Rifles, which also had intermediate length receivers, were made primarily at the Canton/Guangdong Armory after 1932. The Chinese year "21" is the western year 1932. (John Wall collection)



The "1932" receiver date crest of an FN-made 7.9mm Model 1924 Mauser Short Rifle made for China. As with all other known Mausers made by FN in the 1920s (China, Mexico, Brazil) this Model 1924 is characterized by an intermediate length receiver. Only this Chinese purchase and a small Iranian contract are believed to have occurred in the 1930s, when FN began producing their Model 1930 which featured a standard length receiver. (John Wall collection)



The side rail text of the FN Model 1930 Short Rifle dated "1938" Note that the letter font is without serifs, and characteristic of FN rifles made from the last of the 1930s to the early 1950s. (John Wall collection)



The action of the Model 1924 Chinese Short Rifle with the "1932" receiver crest, showing the FN side rail address using the serif font typical of rifles made at Herstal in the mid-1920s to the middle 1930s. (John Wall collection)



The marks of the Liege proof house found on the barrel under the handguard of the FN-made Model 1930 Short Rifle for China. The Controleur's mark "star over-K" belongs to Walthere Delaaux, who worked at the proof house from 1929 to 1968. (John Wall collection)



The receiver crest of an FN Model 1930 Short Rifle produced in "1938" for China. To date the only use of the FN trademark logo known is on rifles made for Lithuania and China. (John Wall collection)

"CHIANG KAI-SHEK" MODEL SHORT RIFLE: State arsenals in China made several million copies of the Mauser Standard Modell Short Rifle during the period from November 1936 to 1949, with this weapon becoming standard issue for Chinese troops. Manufacturing



Chinese ideographs on the receiver ring of the shorter version of the "Chiang kai-Shek" Model Short Rifle. These markings have been seen on rifles of the North China Army, probably the Northwestern Army of General Feng Yu-Hsiang. (Bob Bennett collection)

quality ranged from the very good (not up to German standards, by any means!) to the very crude, with little attention paid to the bedding of the action or the barrel, and very minimal standards of finish.



Full-length view of the Chinese "Chiang kai-Shek" Model Short Rifle.



A full-length view of a similar, though shorter version of the "Chiang kai-Shek" Model Short Rifle. (Bob Bennett collection)



A Chiang kai-Shek (Zhong Zheng Shi) pattern Mauser Short Rifle modified after the Standard-Modell Mauser Oberndorf rifle of the early 1930s, made at Guangdong (Kwantung) Arsenal during WWII when it had been moved inland away from Japanese Forces to the Province Guizhou, where it was known as the 41st Arsenal. According to the 1997 (page 152) Military Rifle Journal article by Stan Zielinski "Chinese Military Rifle marks: Part 5, The Kwantung (Canton) Arsenals," rifles made by the 41st. Arsenal are undated and marked only with this crest. (John Wall collection)



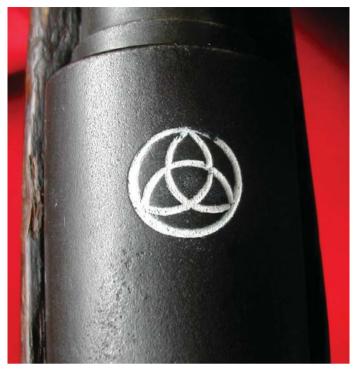
View of the Chinese markings on the receiver ring of the "Chiang kai-Shek" Model Short Rifle.



The receiver and barrel serial numbering conventions on a wartime Chiang kai-Shek Rifle made at the 41st. Arsenal. (John Wall collection)



The circular mark or stock brand, originally filled in with red paint, is the Chinese letter "dong," the second Chinese letter in the word "Guangdong," The name of the arsenal, also known as Canton or Kwangtung, where this rifle was made. At the time of manufacture, however, the arsenal had been moved inland to Guizhou Province where it was known as the 41st Arsenal. (John Wall collection)



The wartime Chinese arsenal mark of the 41st Arsenal, which before the Japanese invasion of China was known as the Kwangtung (Canton) Arsenals. (John Wall collection)



*Chinese troops, armed with Chiang kai-Shek Model Short Rifles, receiving training from U.S. officers during World War II. (U.S. Signal Corps photo)* 

Length: 43.60"; Weight: 8.8 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Receiver ring will show various markings of Chinese provenance.

CZECH MODEL VZ 24 CHINESE CONTRACT SHORT RIFLE: In the mid-1930s, China purchased one hundred thousand



Variant marking on the receiver ring of a "Chiang kai-Shek" Model Rifle. (Robert Jensen collection)



Variant ideograph on the receiver ring of the Chiang kai-Shek Model Rifle. (Robert Jensen collection)



Another variant ideograph marking on the receiver ring of the Chiang kai-Shek Model Rifle. (Robert Jensen collection)



Full-length view of the Chinese contract Czech VZ 24 Short Rifle. (Lothar Frank collection)



Captured Chinese M1937 dated VZ 24 Short Rifle with "P" Prefix number, modified to accept the Japanese M1930 bayonet. (Jan Gardiner collection)



Receiver markings on the Chinese contract Czech VZ 24 Short Rifle. (Lothar Frank collection)

Model VZ 24 Short Rifles from Czechoslovakia. These rifles are the standard issue VZ 24s, and all pertinent data regarding these rifles will be found in the section on Czechoslovakia. Those rifles delivered under this contract all bear the date "1937" on the receiver, and have a "P" prefix to the serial number. Most of these rifles were captured by the Japanese and were used to arm their own troops; the rifles were subsequently recovered from Japan at the end of the second world war and were reissued to Chinese forces.

**STANDARD MODELL MODEL 1933 SHORT RIFLE:** During the 1930s, in violation of the treaty of Versailles, the Mauser Co. produced a modified, short rifle version of the Gew 98 for commercial sale, called the "Standard Modell." This short rifle was offered in many calibers, but China ordered the weapon in caliber 7.92mm. Developed in the mid-1920s, production of the Standard Modell did not commence until 1933, at which time an alternative version in carbine form, identical to the German 98k with minor exceptions, also became available.

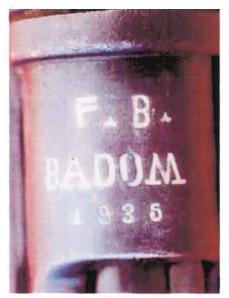
This rifle was made with a pistol grip stock and an upper hand guard that runs from in front of the rear sight to just beyond the lower



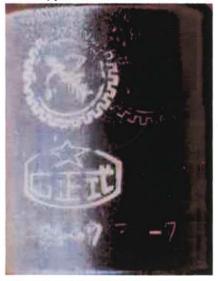
Full-length view of the Standard Modell Model 1933 Short Rifle.



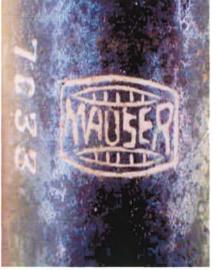
Full-length view of the alternate version of the Standard Modell Short Rifle. Note the side mounted sling, and lack of grasping grooves.



Copy Model 24 Random



Chang Kai-Shek Model short rifle



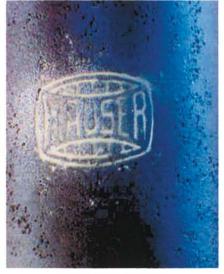
Banner Copy 1907



Chang Kai-Shek Model short rifle



Chang Kai-Shek Model short rifle



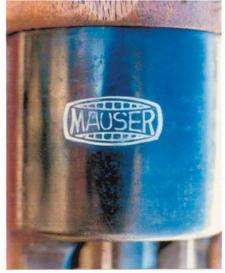
Banner Copy 1907



Chang Kai-Shek Model short rifle



Chang Kai-Shek Model short rifle



Real Mauser Model 1907

Various Chinese crests of officially manufactured Chinese rifles, along with obviously faked crests which are shown as copies. (R. K. Smith collection)



Model 1907 Early Brno Crest



Chinese Model 24



GEW Model 98 Copy

Second page of various Chinese crests as above. (R. K. Smith collection)



Chinese Model 1921



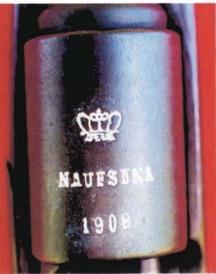
Chinese Model 1921



Model 1933 Carbine



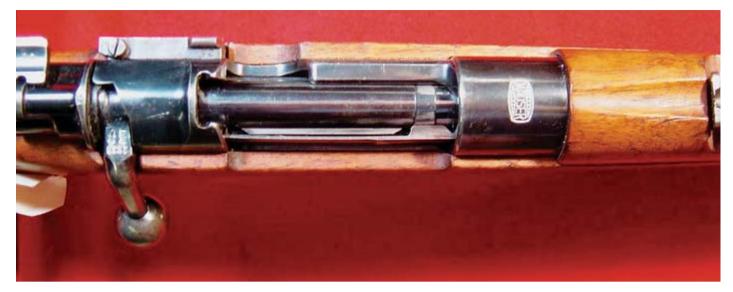
Chinese Model 24



GEW Model 98 Copy



Model VZ 24 P-Prefix

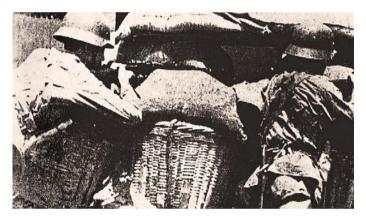


Close-up view of a Chinese Standard Modell Short Rifle in caliber 7mm, showing the normal markings on an export-model rifle.

barrel band. The upper barrel band incorporates a parade hook and the nose cap has the typical German-style "H" bayonet lug. Swivels are on the bottom of the lower band and the stock. The bolt handle is straight.

Length: 43.60"; Weight: 8.8 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Mauser Banner trademark on the receiver ring, with "Standard Modell" on the side rail. Mauser Banner logo on the receiver bridge.

**STANDARD MODELL MODEL 1933 CARBINE:** Identical to the German Model 98k, with a sling mounted on the left side and a turned-down bolt handle. The lower band is held by a short band retaining spring and the upper band is held by a pin. The stock will often be found with grasping grooves. This is the forerunner of Germany's standardized weapon of World War II.



Chinese Nationalist troops fighting in the defense of Shanghai against the Japanese, C. 1937. (Frederich Dahlmann)



A cartouche found on the buttstock of an unissued Chinese Standard Modell-type Chinese service rifle made at Kunghsien Arsenal. The translation of this Chinese marking is "Inspected." Dr. JY translation. (John Wall collection)



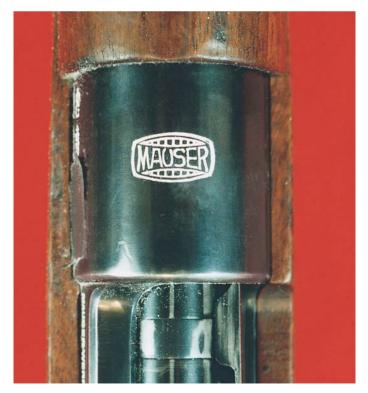
The receiver bridge of a Chinese-made Mauser "Standard Modell" (Chiang kai-Shek) Mauser Service Rifle. This particular rifle was manufactured at Kunghsien Arsenal in Honan Province in 1937. Note the untouched original serial numbers and the numbering convention on this unissued rifle. (John Wall collection)



Full-length view of a slightly different version of the Chinese Standard Modell Model 1933 Carbine. Note the bottom mounted swivel on the lower band, and the quick release sling attachment behind the pistol grip.



Side rail of the Standard Modell Model 1933 Carbine. Note the commercial markings and commercial proofs.



The receiver ring of the Standard Modell Model 1933 Carbine, showing the Mauser Banner legend.

Length: 43.60"; Weight: 8.60 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm (available in 7.65 x 53mm and 7 x 57mm); Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight adjustable to 2000 meters. Remarks: Mauser Banner trademark on the receiver ring, with "Standard Modell" on the side rail, Mauser Banner logo on the receiver bridge.



Right side of the stock of the Chinese Standard Modell Model 1933 Carbine, showing the Nationalist Chinese insignias stamped into the wood.



The Nationalist insignia stamped into the stock behind the rear guard screw of the Chinese Standard Modell Model 1933 Carbine.



The left side of the barrel and receiver of the Chinese Standard Modell Model 1933 Carbine, showing the Nationalist Chinese insignia on the side of the barrel and the receiver. Note the Mauser Banner logo on the top of the receiver ring.



Serial number font and convention used on the trigger guard assemblies of Kunghsien Arsenal Chiang kai-Shek Mauser rifles circa 1937. (John Wall collection)





Following the start of the Japanese invasion of China, the Chinese need for 7.92mm Mauser service rifles intensified enormously, and was satisfied by Mauser's Oberndorf and Berlin-Borsigwald plants. At this time, the sale of the Standard Modell style rifles transitioned over the German service rifle, the Karabiner 98k. By the 1937-39 time frame, all rifles sold to China are believed to have been of this type, as shown above. This rifle, numbered in the German fashion, 4580a, is an unissued matching Kar 98k, which has the Mauser banner on its receiver and buttstock, and is marked with the Chinese sunburst symbol on all locations where collectors normally expect to see German "Waffen Amt" (WaA) inspection and acceptance marks. (John Wall collection)



The left side of the circa 1937-1939 Chinese contract Kar98k Rifle showing the Mauser banner trademark stamped in the wood just below the bolt dismount tube and unit marking disc. (John Wall collection)



A closure on the right side of the Chinese Kar98k receiver and its Chinese sunburst emblem acceptance and inspection stamp. (John Wall collection)



The right side of the receiver area of the Chinese contract Kar98k Mauser Rifle. Note the presence of the famous Mauser Banner trademark on the receiver, and the distinctive K98k style curved bolt, stock recess, bluing, and the single Chinese government sunburst emblem used as an acceptance and inspection mark. (John Wall collection)



The left side of the Chinese Kar98k contract Mauser. Although this is the German Service Rifle reborn for sale in Asia, it lacks the normally seen "Md. 98" side rail markings found on the Wehrmacht version. Note the second Chinese Nationalist sunburst emblem on the left side of the receiver ring. (John Wall collection)



Star impression on the left side of the buttstock of the Chinese modified copy of the Czech VZ 24 Short Rifle with folding bayonet. (Springfield Armory Museum)



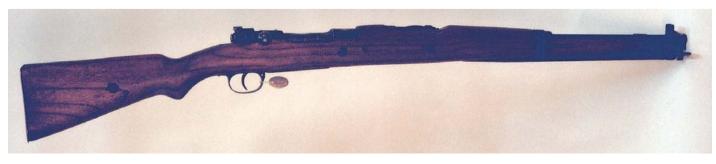
The Chinese contract Kar98 serial number 4580a. Notice that the numbering of all bolt parts is done in the font, format and location of comparable model rifles in German service. (John Wall collection)



Inspection cartouches on the stock wrist area of an unissued Chinese contract Kar98k Service Rifle. Notice that, just as on Wehrmacht rifles of this era, the action screws are also numbered to the rifle. (John Wall collection)

**CHINESE COPY OF THE VZ 24 WITH FOLDING BAYONET:** Obviously manufactured in a Chinese state arsenal, in all probability at the end of World War II, this copy of the Czech VZ 24 Short Rifle also incorporates the added feature of the Japanese Model 44 folding bayonet. It seems logical to assume that stockpiles of Japanese parts were cannibalized to aid in the manufacture of Chinese weapons.

Of typical, less-than-perfect Chinese manufacture of the period, the short rifle incorporates a pronounced pistol grip stock, straight bolt handle, and a shorter than usual barrel. The sling swivels are mounted on the left of the stock. It is absolutely unknown as to how many short rifles of this nature were produced.



Full-length view of the modified Chinese copy of the Czech VZ 24 Short Rifle with folding bayonet. (Springfield Armory Museum)



Chinese crest, or arsenal markings, on the receiver ring of the Chinese modified copy of the Czech VZ 24 Short Rifle with folding bayonet. (Springfield Armory Museum)

Length: 43.25"; Weight: 8.90 lbs.; Barrel: 23.25"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Chinese marking (crest or arsenal stamp) on the receiver, star on the left side of stock below sling swivel.

## **COLOMBIA**

Permanent settlement of the country now known as Colombia did not take place until 1525, although the Spanish had visited in 1500. This territory was subject to the Viceroyalty of Peru until 1718, when the Viceroyalty of Bogotá was established. In 1794 the movement for freedom began, leading to an abortive rebellion in 1796, which was squashed, but was followed by other attempts until the year 1810, when an independent junta was set up in Bogotá. Led by Simón Bolívar, the Republican forces defeated the Royalist forces in a number of battles and held sway over the western section of presentday Venezuela.

With the defeat of Napoleon, the Spanish were able to reorganize and concentrate superior forces in the country, which gradually led to the Spanish recovering most of the territory previously lost. Under the command of Santander of Colombia and Simón Bolívar of Venezuela, the nationalist forces, aided by American and Irish mercenaries, were able to turn the tide during four years of merciless conflict, culminating in the battle of Boyaca on 7 August 1819. This defeat of the Spanish secured the independence of Colombia, Ecuador, and Venezuela. A Republic of Gran Colombia was formed on 17 December 1819, consisting of the three independent countries. This experiment lasted for only ten years. Colombia was a federal republic from 1858 to 1885, but following a revolution in 1886, a new constitution proclaimed the country a unitary presidential republic. The country was torn by internal strife between the Conservatives and the Liberals for the rest of the century, culminating in a violent civil war between 1899 and 1902 that cost the lives of one hundred thousand people. In 1903, supported and manipulated by the United States, the people of the province of Panama revolted and declared the Republic of Panama. United States commercial interests, as well as the construction of the Panama Canal, guaranteed that the new Republic would not be overthrown.

In 1932, Peruvian nationalists, without government support, attacked and occupied the Colombian colony of Leticia, located in a remote corner of the Amazon region of Colombia. This incursion was later backed by Peruvian troops and Peruvian naval river units. These moves provoked and united the Colombians, resulting in a small frontier war known as the "Leticia Conflict." Although ill-equipped and fewer in number, the Colombians Armed Forces were victorious in the many small battles that led to the conclusion of the affair.

An interesting sidenote to this border war is that the Colombian forces had to rely upon German Lufthansa pilots and flight crews, as well as American mercenaries, to help fly their newly purchased fleet of Curtiss Hawk II fighters with interchangeable floats and wheels, followed by a large number of Curtiss Falcon F8C reconnaissance bombers. German medal groups have been found on the market with Colombian awards amongst the German decorations.

Rivalry continued throughout the twentieth century between the Conservatives and the Liberals, erupting into one long period of prolonged strife, 1946 through 1958, known as "La Violencia," during which two hundred thousand people lost their lives.

Colombia made a token declaration of war against the Axis powers, but was too preoccupied with internal strife to do more. During the Korean War, in spite of the internal struggles, the Colombian Armed Forces sent four successive infantry battalions, as well as naval units, overseas to serve and gain experience in the Korean conflict. All of these highly trained units served with distinction and honor, proving themselves the equal of any troops then operating in the Korean theatre.

In 1953, the army under General Gustavo Rojas Pinilla took over control of the country and brought a halt to the civil war within four years. In 1957, the Army prevented an attempt by General Rojas Pinilla to extend his term in office, and after a brief period under a military junta, the control of the government was returned to civilian politicians. While striving to maintain a balance of power between Conservatives and Liberals, Colombia has remained one of the few Latin American countries to live under democratic conditions. Beset with internal problems created by the trafficking of drugs, Colombia strives to maintain its democratic principles while seeking to find ways to eradicate the drug trade from within its borders.

**MODEL 1891 RIFLE (ARGENTINE PATTERN):** As with many Latin American countries, one of the first Mauser rifles with which Colombia equipped itself was the venerable Model 1891 Argentine Pattern Rifle, produced by Loewe in caliber 7.65 x 53mm. The data on this rifle will be found under the section on Argentina.



Full-length view of the Model 1891 Rifle. (Argentine Pattern)



Full-length view of the Model 1904 Rifle.

**MODEL 1904 RIFLE:** Prior to 1914, Colombia was able to acquire small numbers of the Model 1904 Rifle, sold commercially by DWM. These rifles were identical to the Brazilian Model 1907, having a pistol grip stock, an upper hand guard that runs from in front of the receiver ring to just beyond the extremely narrow lower barrel band, a parade hook on the bottom of the upper band, the short German "H" style bayonet lug, sling swivel on the bottom of the lower band, and a quick-release sling attachment on the bottom of the buttstock. The rifle also has a long heavy cocking piece and no guard lock screws.

Length: 49.20"; Weight: 8.30 lbs.; Barrel: 29.13"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: National crest on receiver ring, manufacturer's markings on the side rail.

**MODEL 1912 STEYR RIFLE:** Shortly before the outbreak of the first world war, Colombia ordered an unknown quantity of Model 1912 Rifles from Osterreichische Waffenfabrik-Gesellschaft, Austria. These rifles are identical to those ordered by Mexico, and the order, in both cases, was not completed before hostilities broke out, with the balance of the order being pressed into service by the German army.

The rifle is a faithful copy of the Gew 98, with certain exceptions. The rifle is fitted with a pistol grip stock and the upper hand guard



Colombian national crest on the receiver ring of the Model 1904 Rifle.

extends from in front of the receiver ring to just beyond the lower barrel band. The lower band is equipped with a sling swivel, with another on the bottom of the buttstock. The upper barrel band has a parade hook on the bottom, and the nose cap incorporates the short



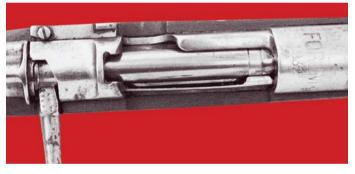
Full-length view of the Colombian Model 1912 Rifle.



Left full-length view of the Colombian Model 1912 Rifle.



Colombian national crest on the receiver ring of the Colombian Model 1912 Rifle.



*View of the action and receiver ring of an FN-made Model 1912 Rifle; note the markings "FORUM/1932." (Michael Gaddini collection)* 

German "H" style bayonet lug that requires a bayonet with muzzle ring. A screw-held washer is countersunk into the right side of the buttstock.

**Length:** 49.10"; **Weight:** 9.0 lbs.; **Barrel:** 29.13"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action;



Manufacturer's markings on the side rail of the Colombian Model 1912 Rifle.



Stock cartouche on the left side of the FN-made Model 1912 Long Rifle. (Michael Gaddini collection)

**Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** Colombian national crest on the receiver ring, with manufacturer's markings on the side rail.



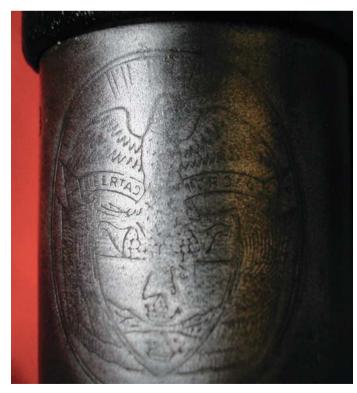
Between 1912 and 1914, Oesterreichische Waffenfabriks-Gesellschaft, (OWEG) the Austrian Arms Company of Steyr, Austria, produced a number of Model 1912 Long Rifles and Carbines for the Colombian Army. The Carbine version, shown here, was made with a 55cm (21.5 in.) barrel. Note the use of the Gew98-like quick detachable sling swivel, the short bayonet bar, and the presence of the unit-marking disc in the buttstock. (John Wall collection)



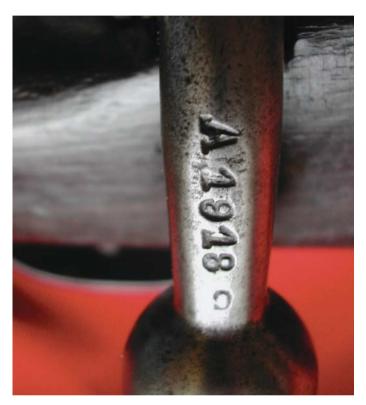
The Model 1912 Colombian Army Carbine. (John Wall collection)



The side rail of the Colombian "Modelo 1912" Carbine made in Steyr Austria. Note the A.1918 serial number and the Steyr "T in a circle" proof mark partially visible above the serial number. (John Wall collection)



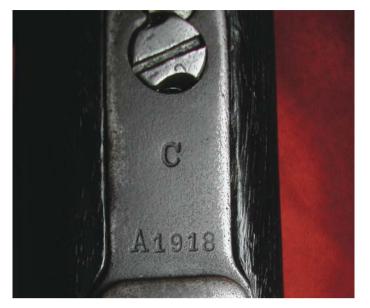
The receiver crest of the Colombian Model 1912 Carbine made by OWEG of Steyr, Austria. Note that this crest, unlike many other Colombian Mauser rifles, is not surrounded with a Colombian text. (John Wall collection)



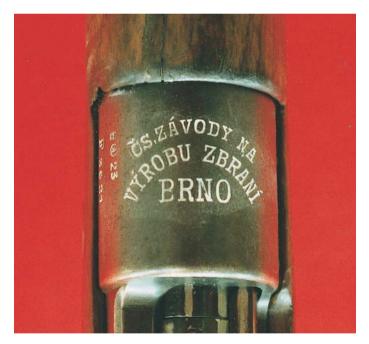
The turned down bolt handle of the Steyr-made Colombian Model 1912 Carbine. All parts on these carbines with the letter "C" acceptance mark. No doubt this also served to prevent parts accepted by Colombia from being intermixed with Model 1912 rifle and carbine parts then being manufactured at Steyr for Chile and Mexico. (John Wall collection)



Model 1912 parts markings. (John Wall collection)



All components for Steyr-made Model 1912 carbines were marked with a letter "C." Seen above are a number of parts in the Carbine's magazine assembly and upper barrel band, all with the "C" mark, including the screw heads. (John Wall collection)



Czech markings on the receiver ring of the Colombian VZ 23 Short Rifle.



The receiver side rail with Czechoslavak Brno markings in Spanish on the Colombian VZ 24 Service Rifle. (John Wall collection)

**CZECH VZ 23 SHORT RIFLE:** In 1929, Colombia acquired approximately five thousand Czech VZ 23 Rifles in caliber 7 x 57mm from Czechoslovakia. This was the first of the Czechoslovakian Short Rifle designs, and was based on the Kar 98AZ, but stocked in the manner of the Gew 98. The VZ 23 was essentially a VZ 24 Short Rifle, but slightly shortened and lightened for use by Latin American countries—it proved a highly popular weapon. Equipped with a pistol grip stock, the lower band of the VZ 23 is located only 2.75 inches from the upper band, with the upper hand guard running from in front of the receiver ring to the upper band. The lower band has an integral sling swivel machined into the left side of the band, while the sling swivel on the bottom of the buttstock is pivoted on the bottom of the buttstock, allowing for lateral movement as well as movement to the front and the rear. Further information on this short rifle will be found under the section on Czechoslovakia.



Manufacturer's markings in Spanish on the side rail of the Colombian VZ 23 Short Rifle.



Full-length view of the Czech VZ 23 Short Rifle as used by Colombia.

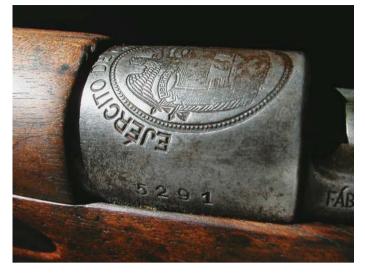


The rather worn receiver crest of the 7mm Colombian VZ 24 Service Rifle made on contract for Colombia by Ceskoslovenska Zbrjovka Brno in Brno, Czechoslovakia. Brno delivered 10,000 VZ.24s to Colombia between 1929 and 1937. "Ejercito de Colombia" translates into English as "Army of Colombia." (John Wall collection)

**STEYR-SOLOTHURN A-G MODEL 1929 SHORT RIFLE:** This Colombian contract short rifle was produced and purchased in limited quantities. It was the forerunner of the Model 29/40 Short Rifle that was produced by Steyr-Daimler Puch, A-G of Steyr, Austria for the German Luftwaffe prior to and during World War II. This short rifle shows marked Austrian influences, especially in the barrel bands used.

Equipped with a pistol grip stock, the upper hand guard extends from in front of the receiver ring to the upper band, which is secured by a screw through the stock. The lower band is clamped by a screw attached to the right side. The nose cap is fitted with the short German style "H" bayonet lug, requiring the use of a bayonet equipped with a muzzle ring. The lower band is fitted with a swivel on the bottom, and a swivel attachment on the left side; the buttstock is fitted with a quick release fitting on both the bottom and the left side at the wrist. Note the grasping grooves and the flat, countersunk screw-held washer in the right side of the buttstock.

Length: 43.25"; Weight: 9.0 lbs.; Barrel: 22.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Colombian national crest on the receiver ring, with manufacturer's markings on the left side rail.



Ten thousand VZ 24s were made for Colombia. Seen here is rifle number 5291. Except for their markings, Colombian contract VZ 24s are identical to Czechoslovak Army VZ 24s. (John Wall collection)



Colombian national crest on the receiver ring of the Colombian Steyr Model 1929 Short Rifle.



Full-length view of the Colombian Steyr Model 1929 Short Rifle.



Manufacturer's markings on the left side rail, including the serial number on the receiver ring of the Colombian Steyr Model 1929 Short Rifle.

**COLOMBIAN FN MODEL 24 AND MODEL 30 SHORT RIFLES:** The FN Model 24 and Model 30 supplied to Colombia in the early 1930s were almost identical, and will be discussed together in this section. Presumably at the request of the Colombian government, both models were equipped with the upper hand guard running from in front of the receiver ring to approximately one inch beyond the lower barrel band. Both models have pistol grip style stocks with grasping grooves, and bands that are retained by separate springs. The lower barrel band is fitted with an integral swivel on the left side and another swivel on the bottom of the band. There is a swivel on the bottom of the buttstock, and a quick release attachment on the left side of the stock at the wrist. On the FN Model 24, there is an inset, screwretained, flat washer on the right side of the stock, as well as a recoil crossbolt at the wrist, with another under the receiver.

Length: 43.25"; Weight: 10.0 lbs.; Barrel: 22.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Colombian national crest on the receiver ring, with date of



Side rail and receiver markings on the Colombian FN Model 24 Short Rifle.



Crest of Colombia on the receiver of the Colombian FN Model 24 Short Rifle.



Full-length view of the Colombian FN Model 24 Short Rifle.



Full-length view of the Colombian FN Model 30 Short Rifle. (Cliff Baumann)



Full-length view of the Colombian Czech Model VZ 12/33 Carbine. (Bob Bennett collection)



Manufacturer's markings in Spanish on the left side rail of the Colombian Czech VZ 12/33 Carbine. (Bob Bennett collection)

manufacture on the left side of the ring. Manufacturer's markings on the left side rail.

**COLOMBIAN CZECH VZ 12/33 CARBINE:** During the 1930s, Colombia ordered a small number of Czech VZ 12/33 Carbines, a lightened version of the VZ 24 Short Rifle, especially popular in Latin American countries.

The Colombian VZ 12/33 is fitted with a pistol grip stock, without grasping grooves. The upper handguard runs from the front of the receiver ring to just beyond the lower band. The lower and upper bands are only a few inches apart, with the lower band retained by a spring, and the upper band held in place by a screw through the stock. The front sight is not protected by "sight ears." There is a swivel on the bottom of the lower band, and a quick release sling attachment behind the pistol grip of the stock. The bolt handle is bent down, but the stock has not been recessed for ease of grasping.

Length: 41.75"; Weight: 8.0 lbs.; Barrel: 21.50"; Caliber: 7 x 57mm (some remaining stocks are believed to have been altered to .30-06 after the second world war); Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column,



Colombian crest on the receiver ring of the Colombian Czech VZ 12/33 Carbine. (Bob Bennett collection)

flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 1400 meters. **Remarks:** Colombian national crest on the receiver ring, with "EJERCITO DE COLOMBIA" in an arch above. Manufacturer's markings in Spanish stamped on the left side rail.

**COLOMBIAN FN MODEL 1950 SHORT RIFLE:** In the early 1950s, FN delivered an unknown number of new rifles chambered for the U.S. cartridge .30-06, at which time many of the early FN weapons were converted at Colombian government arsenals to the same caliber cartridge. The Model 1950 Short Rifle is a robust rifle, with a pistol grip stock, and an upper hand guard running from the receiver ring to approximately one inch beyond the lower barrel band. The upper and lower bands are retained by separate springs, with a swivel on the bottom of the lower band another on the bottom of the buttstock.



Full-length view of the Colombian FN Model 1950 Short Rifle.



*Caliber marking on the receiver bridge of the Colombian Model 1950 Short Rifle.* 



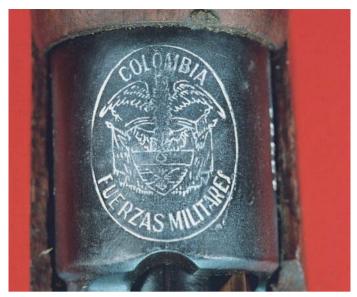
Manufacturer's markings on the left side rail of the Colombian FN Model 1950 Short Rifle.

One further identifying feature of this rifle is the buttplate, which is cupped and overlapping along the sides of the stock rather than being flush. The bottom of the buttplate is also corrugated to provide better contact with the shoulder.

Length: 43.0"; Weight: 9.50 lbs.; Barrel: 22.75"; Caliber: .30-06; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Colombian national crest (alternate version), with "Colombian Armed Forces" in Spanish in an oval.

## **COSTA RICA**

Discovered and named by Columbus in 1502, the region known now as Costa Rica was administered as a Spanish province under the



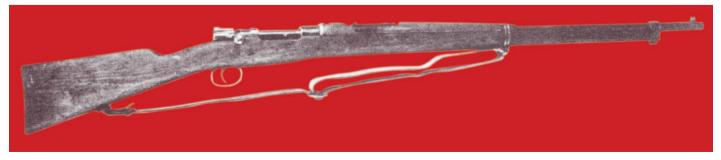
Colombian crest on the receiver ring of the Colombian Model 1950 Short Rifle.



Colombian "Lanceros" being inspected, C. 1988.

Spanish colonial viceroyalty of Guatemala. The group of provinces that made up the viceroyalty broke with Spain in 1821, and for a period of two years, the former province was absorbed into the Mexican Empire of Agustín de Iturbide. With the collapse of the United Provinces of Central America, Costa Rica became an independent republic in 1838, with the first democratic elections held in 1889.

With the exception of the military dictatorship of Tomás Guardia from 1870 to 1882, Costa Rica has enjoyed one of the most democratic governments in Latin America.



Full-length view of the Costa Rican Model 1895 Rifle.



Full-length view of the Costa Rican Model 1895 Rifle.

An attempt at election fraud led to a brief civil war in 1948, which was won by the National Liberation forces under the leadership of "Don Pepe" José Figueres Ferrer. As a result of this change in government, the Costa Rican army was abolished. Subsequent governments have directed their efforts towards economic matters, with the result that the country has made great progress in solving its economic problems, while at the same time promoting peace among its Latin American neighbors.

**MODEL 1895 RIFLE:** As is the case with many Latin American countries, one of the first Mauser rifles that was adopted was the Model 1895 Rifle, which saw long and dependable service in Costa Rica. The total number of rifles purchased is estimated at less than ten thousand, with some being bought from Ludwig Loewe & Co (1895-1896), and the balance from DWM (1897-1900). This rifle is virtually a duplicate of the Chilean Model 1895 and is fully covered under the section on Chile.

**COSTA RICAN MODEL 1910 RIFLE:** Made by Waffenrabrik Mauser A-G of Oberndorf am Neckar from 1911 to 1914, the Model 1910 Rifle is a close copy of the Gew 98, fitted with a pistol grip stock and an upper hand guard that runs from the receiver ring to just beyond



Side rail of the Costa Rican Model 1910 Rifle, showing the model designation.

the lower band. The upper band has a bayonet lug on the bottom for use with the Model 1895 bayonet. The lower band has a swivel at the bottom, and another on the bottom of the buttstock.

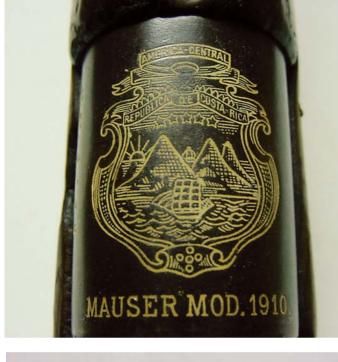
The major, and most outstanding difference, is the shrouded bolt face enclosing the cartridge case rim. This was patented in Germany in 1898, but rarely used on military weapons. Only the rim of the cartridge protrudes beyond the rear face of the barrel, with the cartridge head enclosed by the barrel, bolt, and extractor. The face of the chamber has a machined recess for the extractor, making barrel



Mauser Banner logo on the right side of the buttstock of the Costa Rican Model 1910 Rifle.



Full-length view of the Costa Rican Model 1910 Rifle.





The Waffenfabrik Mauser-Oberndorf side rail address on the Costa Rican M1910 Long Rifle. The same 1910 rifle with Costa Rican crest has also been observed with a DWM Berlin side rail address. (Ed Parada collection)



A small number of Costa Rican Model 1910 Long Rifles have turned up with barrels cut down to approximately 22 inches. Several of these have been further converted to chamber the.30-06 U.S. service cartridge. The Model 1910 rifle shown here is one such conversion; note the deep notch machined into the receiver ring to accommodate the extra length of the .30-06 round. (Ed Parada collection)



The Costa Rican national coat of arm used as the receiver crest on a "Mauser Mod. 1910" contract 7mm Long Rifle. The serial number convention and associated markings are shown at the right. This rifle is one of 5,000 rifles ordered from "Waffenfabrik Mauser-Oberndorf a/n" in 1911. (Ed Parada collection)



The receiver ring of the Costa Rican Model 1910 Rifle. This particular specimen has the Waffenfabrik Mauser Oberndorf markings instead of the Costa Rican national crest.



The Mauser trademark banner still remains in the buttstock of the Model 1910 Costa Rican Mauser rifle, even after having its barrel shortened by 6 inches and then being converted to .30-06. (Ed Parada collection)



Full-length view of the Costa Rican FN Model 1924 Short Rifle.

alignment and any repairs extremely critical. This also requires that the projection on the bolt head that supports and guides the cartridge during feeding and ejection be removed. Once common on the surplus weapons market, the Costa Rican Model 1910 Rifle is rarely, if ever, seen today.

Length: 48.80"; Weight: 8.8 lbs.; Barrel: 29.13"; Caliber: 7 x 57mm; Rifling: 4-grooves, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Costa Rican national crest on the receiver ring, manufacturer's markings and "Model 1910" on the left side rail.

**FN MODEL 24 SHORT RIFLE:** As supplied to Costa Rica by FN in the mid-1930s, the export model short rifle differs little from those supplied to other Latin American countries. Fitted with a pistol grip stock with grasping grooves, the rifle has an upper hand guard that extends from in front of the receiver ring to the upper band. The lower band has an integral sling loop on the left hand side, with another sling swivel on the bottom of the band. The buttstock has a sling swivel on the bottom of the stock and a quick release attachment on the left side of the stock at the wrist. The nose cap has the German "H" type bayonet lug for acceptance of bayonets without a muzzle ring. Note the flat, inset washer held by a screw on the right side of the stock.

Length: 43.25; Weight: 10.0 lbs.; Barrel: 22.50; Caliber: 7 x 57mm; Rifling: 4-groove r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: It is unknown as to whether or not the FN Model 24 Short Rifles were marked with the Costa Rican national crest, or simply with the FN logo. Manufacturer's markings are found on the left side rail.

#### **CZECHOSLOVAKIA**

With the collapse of the Hapsburg monarchy at the end of World War I, the new multinational state of Czechoslovakia, founded by Thomas Masaryk and Eduard Benes, emerged from the ashes. This was the most democratic state in central Europe between the wars.

The creation of the new state also established the nucleus of a soon-to-be effective arms industry, based on acquiring the Skoda factory. November 1918 was the month the Brno Arms Works was established by Czech officials, assuming control over the former Austro-Hungarian arms factories at Brno. Known in the beginning as the State Armament and Engineering Works, on 1 February 1919, the plant was reorganized and renamed Czechoslovak State Armament Works, Brno. On 12 June 1924, the name of the works was changed to the Ceskoslovenska Zbrojovka, A. S., or the Czechoslovakian Arms Factory Ltd.

With the disbanding of the Austro-Hungarian armies, the Czechs were supplied, by the order of the Armistice Commission, with one hundred thousand Mauser and Mannlicher rifles, all of which were reconditioned at the factory at Brno. In 1921, five thousand

Mannlicher short rifles were manufactured at the plant, and as war reparations, blueprints were supplied by the Mauser Works for the manufacture of Gew 98 military rifles. Parts were received from Mauser that enabled the Czechs to assemble forty-two thousand Gew 98 Rifles.

In 1919, the factory at Brno produced the first Mauser-Jelen short rifles (Puska Mauser-Jelena) in caliber 7 x 57mm. These were standard Model 1898-type short rifles with a distinctive pistol grip stock, and an upper hand guard running from in front of the receiver ring to the upper band. It was also fitted with a nose cap similar to that



Czechoslovakian guard drawn up in the courtyard of the Hradcany Castle. (Signal)



Czechoslovakian cavalry unit on patrol in a wooded area, C. 1938. (UPI)

of the British Short Lee Enfield, which runs under the forestock to an intermediate band. As on the SMLE, the nose cap incorporates a special boss for the muzzle ring of the bayonet. Sling swivels are fitted to the underside of the true barrel band and the bottom of the buttstock. These rifles were often fitted with a magazine floorplate quick release button inside the trigger guard. After troop testing by the Czechoslovakian army (some short rifles had also been sent to Yugoslavia), the Mauser-Jelen was abandoned in 1922 in favor of a rifle based upon the Mexican Model 1912.

The Model 1898/22 was the result of the updating of the Mexican Model 1912 Rifle. This rifle was produced from 1924 to 1930 and adopted for troop use by the Czechoslovakian army. Initially popular with foreign purchasers, the Model 98/22 was supplanted by the VZ 24 Short Rifle. 1923 saw the first of the new series of short rifles based on the overall design of the 98/22, but with lesser overall dimensions. The first weapons made were from cannibalized parts and were designated the Model 23, while the Model 23A was produced from completely new parts. The perfected short rifle, called the VZ 24, was produced in 1924, differing in a number of ways from the Model 1923. By 1925, sufficient quantities of the new short rifle had been produced to equip the Czech army infantry, cavalry, and armoured divisions. At this time, the first large orders for export were received, and continued until the time of the German occupation.

The military version of the Model 16/33 Carbine, essentially a shortened, lightened form of the VZ 24 Short Rifle, was exported in 1933. This same carbine was used by Czech gendarmerie and treasury guards, and upon the occupation of Czechoslovakia, became the basis for the German Gew 33/40 Mountain Carbine. The Model 12/33 Carbine was another lightened version of the VZ 24, intended primarily for export to Central and South American purchasers. This

model is derived from the Mexican Model 1912 pattern as supplied to Mexico in the 1920s.

Other Czech-made rifles that might be encountered by the collector are the "JC" series of Short Rifles, patterned again after a lightened version of the VZ 24. Lithuania ordered a number of "L" pattern rifles and carbines, easily identified by the oversize magazine that extends below the level of the stock in order to accommodate the British .303 rimmed cartridge for which they were chambered. These weapons also incorporate a bayonet lug on the bottom of the nose cap to accept the Austrian Model 1895 bayonet.

Other Czech-made weapons found with model numbers, such as "VZ 35," "VZ 32," etc. will usually be slight variations of the basic VZ 24.

**CZECH MODEL 1898/22 RIFLE:** This rifle, based on the design of the Mexican Model 1912 Rifle, was the first rifle adopted for service with the Czechoslovakian army. The rifle is fitted with a pistol grip stock, and the upper hand guard runs from in front of the receiver ring to just beyond the lower barrel band. Both the upper and lower bands are held in place by springs. There is a sling swivel on the bottom of the lower barrel band another on the bottom of the buttstock. Note the



*The later markings, used from 1922-1923, on the receiver ring of the Czech Model 98/22 Rifle.* 

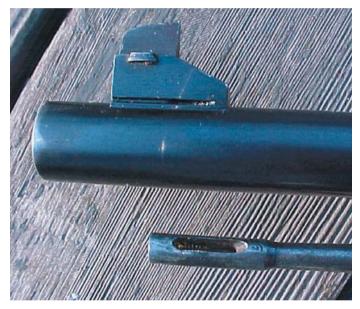


Full-length view of the Czech Model 1898/22 Rifle.

domed washers and hollow rod for bolt disassembly in the stock. This rifle was used by many countries and saw service in many of the world's smaller wars and skirmishes; Kurdistan rebels, for example, use and swear by their old 98/22 rifles even to this day! After the 1920-1922 Turkish War of Independence, the Turkish government bought the Model 98/22 by the thousands. Chinese armies were well equipped with the Model 98/22, with some even being used in the Korean War.

Length: 48.90 "; Weight: 8.55 lbs.; Barrel: 29.13"; Caliber: 7.92 x 57mm rimless; also available in 7 x 57mm, and 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Note that the sight may be found with Turkish or Farsi numerals. Remarks: The receiver ring is liable to show either the early Czech State Armament Works, or the later Czechoslovakian Arms Factory Ltd. markings.

**CZECH MODEL VZ 23 SHORT RIFLE:** Used mostly by Czech army units, the VZ 23 was the first attempt at producing a short rifle along the lines of the Kar 98AZ, but using the action of the Model 98/22. This rifle has a pistol grip stock, and the upper hand guard extends from the front of the receiver ring to the upper band. Note the



The front sight of a VZ 23 Czechoslovak Army Short Rifle. The VZ 23 featured a highly distinct slot for a sight hood cut in its sight base. Note that the rear of the slot is deeper than its front. VZ 23 sight hoods themselves are extremely rare. When transitional production of the VZ 24 began in 1924, this slot and its hood were some of the first features of the VZ 23 to be eliminated. (John Wall collection)



Left side view of the receiver ring showing Czech acceptance marks and the rifle serial number of the Czech VZ 23 Short Rifle. (Bob Bennett collection)



"Czechoslovakian Factory for Arms Manufacture, BRNO" marking on the receiver ring of the Czech Model VZ 23 Short Rifle. (Bob Bennett collection)



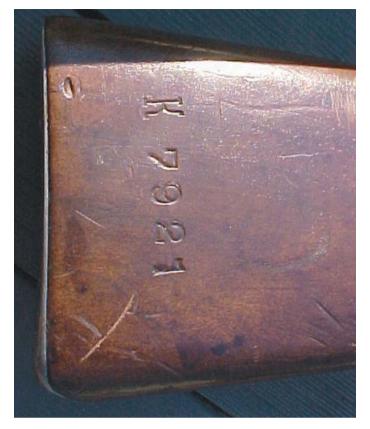
Full-length view of the Czech VZ 23 Short Rifle. (Bob Bennett collection)



Sales catalog pictures, showing the right side and top views of the Czech "JC"-series Short Rifle, "L" pattern for Lithuania. Note the oversize magazine to accommodate .303 caliber ammunition, and the bottom mounted bayonet lug for the Austrian Model 1895 pattern bayonet. (Courtesy of Les Field)



Sales catalog picture of the VZ 24 Short Rifle, showing right side and top views, as well as the bayonet and scabbard of the standard Czech Army Issue Rifle. (Courtesy of Les Field)

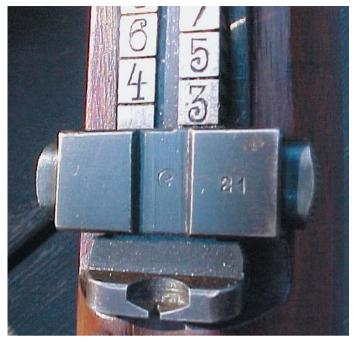


The buttstock of a "K" block Czechoslovak Army VZ 23 illustrating the stock-numbering convention for these rifles. Dr. Sada documents the Czechoslovak Army-authorized production of 130,000 VZ 23 rifles, which would account for 13 blocks of VZ 23s, serial numbered, 13-letter prefixes "A" through "M," with 9,999 rifles per production block. VZ 23 rifles in the "O" block with 1924 dates have been noted. (John Wall collection)

very short distance between the upper and the lower band; this was later changed in the VZ 24 by moving the lower band further back. The lower band is secured by a screw through the forestock, and a swivel is located on the left side, as well as the bottom of the band. There are also swivels on the side and the bottom of the buttstock. The bolt handle is straight.



Side view of Czechoslovakian Army Model VZ 23/24 receiver ring. (John Wall collection)



Because the plant at Brno was not technically capable of producing VZ 23s and early VZ 24s, which had an extremely high degree of component interchangeability, many VZ 23 parts, such as this sight slide, were serial numbered. Note the curled serifs on the sight leaf numbers, typical of the font used for sight numerals on all VZ 23s, the earliest VZ 24s and much of the early 1930s production at Mauser Werke, Oberndorf. (John Wall collection)

Length: 41.50"; Weight: 8.90 lbs.; Barrel: 21.50"; Caliber: As used by Czechoslovakia, the caliber is 7.92 x 57mm; 7 x 57mm and 7.65 x 53mm were available on order; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Note that two elevation side locks are provided, and that both sides of the leaf have locking notches. Elevation is in 50 meter increments. Remarks: Most VZ 23 Short Rifles will be marked "Czechoslovakian Factory for Arms Manufacture, Brno" on the receiver ring. Acceptance markings and serial number will be found on the left side of the receiver ring.

**CZECH VZ 24 SHORT RIFLE:** This is the most famous of the Czech Mauser rifles produced, the standard rifle for the Czech armed forces prior to World War II. Resembling the German Kar 98k to some degree, the VZ 24, unlike the 98K, has an upper hand guard extending from in front of the receiver ring to the upper band; the bolt



*The serial-numbering convention used on Czechoslovak Army VZ 23 bolt handles. (John Wall collection)* 



Full-length view of the Czech VZ 24 Short Rifle.

handle is straight, the lower band, which is secured through the forestock by a screw, has a swivel mounted on the left side and on the bottom of the band. There is another set of swivels on the bottom of the buttstock and left side of the stock. Many VZ 24 short rifles will be found with a front sight protector, which is secured by a screw clamp.

The VZ 24 Short Rifle was employed by many countries and served not only during World War II, but in many smaller, earlier, but nonetheless deadly wars. Chinese armies were equipped with the VZ 24 (all marked "1937" and having a "P" serial number prefix), which eventually were captured by the Japanese, who then equipped five of their divisions with captured weapons. The Romanian army standardized on the VZ 24 in the late 1930s, with the rifles serving them well on the Eastern front. Yugoslavia had purchased VZ 24 Short Rifles and produced their own version, and these dependable weapons served the Yugoslav partisans well in the mountains of Serbia, Bosnia, and Croatia.

Bolivian armies were equipped mail order-style with VZ 24 Short Rifles in their struggles with Paraguayan forces during the epic battles of the Chaco during the Gran Chaco War of 1932-1935; unfortunately for Bolivia, most of these VZ 24 Short Rifles ended up in the hands of the Paraguayans, who used them to good effect. Brazil, Colombia, Guatemala, Peru, and Venezuela were also satisfied users of the VZ 24 Short Rifle. The small army of Lithuania was also equipped with VZ 24 Short Rifles. Many of these were captured by the German



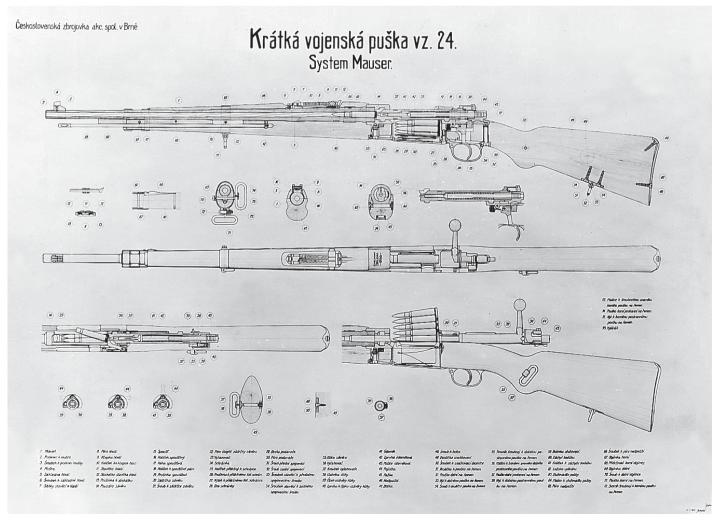
Markings on the receiver ring of the Czech VZ 24 Short Rifle.



One of several known Czechoslovak Army lion-crest VZ 24 rifles with its Czechoslovak Ministry of Defense acceptance stamp removed by stippling (left). The rifle has been refurbished and its stock renumbered in the manner and location used by the Spanish Army (right). This is likely one of the 40,000 VZ 24s purchased by the Soviet Union from Czechoslovakia in 1938 during the Spanish Civil War. These rifles were shipped to Republican forces in Spain aboard the French freighter SS Gravelines. A surviving copy of the freighter's manifest lists a cargo of 50,000 Czechoslovak rifles, Soviet T-26 tanks and SB medium bombers, and French 76mm field artillery. The SS Gravelines left Murmansk on 1 March, 1938, arriving later in Spain via Bordeaux. Franco eventually sold the surviving rifles as surplus to Interarms in 1959. Interestingly, the few known rifles of this type are in the same general serial number range and all have the "CS ZBROJOVKA AKC. SPOL. V BRNE" side rail address previously known only on the VZ 33 police carbine. (John Wall collection)



A Czechoslovak VZ 24E-series Rifle. Both stock and receiver serial numbers were prefixed with the letter "E." The original purchaser of E-series rifles is not known for sure, but all rifles observed so far have large "1937" and "1938" date crests on their receiver rings, and the standard Brno address on the side rails.



Sales catalog picture of the exploded view of the standard Czech VZ 24 Short Rifle. (Courtesy of Les Field)



The VZ 24-style stock on an "O" block transitional VZ 23/24, possibly a replacement stock since the block prefix letter has been dropped. When the VZ 24 stock was removed, band-wear spots under the handguard were found in the location of the VZ 23s unique lower band. (Anthony Guarassi collection)

forces, and then by the Russians, who later supplied them from storage to the Viet Cong, from whom they were captured by the Americans!

**Length:** 43.30"; **Weight:** 9.2 lbs.; **Barrel:** 23.23"; **Caliber:** 7.92 x 57mm; also available in 7x 57mm, and 7.65 x 53mm; **Rifling:** 4-



Stock number on a C-series VZ 24 number C47747, bearing a "1937" date crest. Receivers of C and D-series VZ 24s do not show the letter prefix; only a simple number. The "C" and "D" only appears on the stock. Rifles from the "C" series have been noted with Slovak, Romanian and Czechoslovak Army markings. Other examples are known with U.S. Army export papers issued in Japan at the end of WW II.

groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated in 50 meter increments to 2000 meters. **Remarks:** VZ 24 Short Rifles used by Czech forces will have either the rampant lion crest, or the markings "Ceskoslovenska/Zbrojov-ka/BRNO" on the receiver ring.

**CZECH VZ 12/33 CARBINE:** Developed for the export market, and purportedly derived from the Mexican contract Model VZ 12 Mex., the VZ 12/33 Carbine closely resembles a shortened and lighter Czech VZ 24 Short Rifle.



Czech VZ 24 Sniper Rifle, with turned down bolt handle for clearance of the claw-mounted Czech Sniper Scope. (Robert Jensen collection)



Full-length view of the Czech VZ 12/33 Carbine.



Full-length view of a presentation model of the Czech VZ 16/33 Carbine. Note the presentation plaque on the buttstock.



Full-length view of the Czech Model VZ 16/33 Carbine.

The carbine is fitted with a pistol grip stock, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The upper and lower barrel bands are quite close together, with the lower band secured by a retaining spring and the upper band by a screw through the stock. The bolt handle is bent down, but the stock is not cut out to facilitate grasping of the bolt knob. There is a swivel on the bottom of the lower band and a quick release attachment on the bottom of the stock behind the pistol grip. Length: 41.75"; Weight: 8.0 lbs.; Barrel: 21.50"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Normally stamped with the national crest of the country purchasing the weapon. The side rail will have the manufacturer's markings in either Spanish or Czechoslovakian on the left side rail.



*The Czech national crest on the receiver ring of the Czech Model VZ 16/33 Carbine.* 



*Close-up view of the presentation plaque on the buttstock of the Czech VZ 16/33 Carbine.* 

## Production Data for Mauser Military Rifles Produced by Ceskoslovenska Zbrojovka Brno A.S., Brno, Czechoslovakia, 1919-1942

Production figures and model variations for Ceskoslovenska Zbrojovka Brno (CZB) are taken from these sources:

- 1 Zbrane Pro Cely Svet, (Arms for the Whole World), by Otakar Franek, published by Blok in the Czech language, in Brno, Czechoslovakia in 1970, (This is Volume 2 in his four-volume history of CZB.) Rifle production information is summarized in Tables 2 and 3, on pages 167 to 175. Translated into English by Paul Slunecko.
- 2 Ceskoslovenska Rucni Palne Zbrane a Kulomety (Czechoslovak Small Arms and Machine Guns) by Col. Dr. Miroslav Sada, published by Nase Vojko in the Czechoslovak language, Prague, 1971. Translated by the U.S. Army Foreign Science & Technology Center, Charlottesville, VA 1973.
- 3 **Principal Models of Rifles** by Ceskoslovenska Zbrojovka Brno, circa 1930s, translated from the original Spanish by Leslie L. Field for the publisher, Mars Equipment Corporation, Lincolnwood IL, 1968.
- 4 *KCN*, the Monthly Newsletter of the Karabiner Collectors Network. High Point, NC, 1989-1999. See the Robert Jensen articles on the G.33/40 (March 1991), the G.24t (October 1991) and, Slovakia, (January 1990).
- 5 **The Military Rifle Journal**, Lodestone Publications, Tuscaloosa, AL. See articles by Robert Jensen (April and December 1992); Robert F. MacKinnon (February 1993); Wayne C. Warren, (December 1993)
- 6 **The Czechoslovak Rifle Research Database**, an internet site developed and managed by Robert Lukes with the support of hundreds of collector-contributors, and hosted by GunBoards.com
- 7 **Banzai**, Lodestone Publications, Tuscaloosa, AL. See articles by Dr. Stanley Zielinski on the Czechoslovak sale of Vz.24s to Japan, and Doss White ("Arisaka Fats"), February 1990).
- 8 "Cs. Zbrojni export do japonska" (Export to Japan in the late 30s) by David Pazdera, and published on the internet at www.guns-info.cz/news.
- 9 *Arms and Ammunition, Accessories*, Zbrojovka Brno National Corporation, Czechoslovakia. A post-WWII factory sales catalog describing all ZB bolt-action, semiautomatic and automatic individual and crew-served weapons and ammunition.

Date	Country	Number Produced	Model/Caliber	Type/Comments
1921-22	Czechoslovakia	150	Mauser-Jelen, 7 m/m and 7.9 m/m	A prototype short rifle with bayonets, for troop trials, produced in 2 calibers; and with 3 design variations: the stacking swivels, butt trap and sight covers. 300 were produced, with the order divided evenly between the Yugoslav and Czechoslovak Armies who sought to adopt a common service rifle. (Source: 2)
1922	Yugoslavia	150	Mauser-Jelen, 7 m/m and 7.9 m/m, as above	As above, a short rifle w/bayonets, for troop trials, delivered March 1922 (Source: 2)
1922	Czechoslovakia	10,000	Vz.22, (Type 1), 7.9 m/m	Initially, an exact copy of the German Gewehr 98 with Lange rear sight, assembled using WW I German components from Mauser Oberndorf. (Source: 2, 5, 6)
1922- 1923	Czechoslovakia	40,000	Vz.22, (Type 2), 7.9 m/m	An exact copy of the M1912 Mexican contract Mauser made at Steyr and used by the Austro-Hungarian Army during WW I. Manufactured at Brno using Mauser Oberndorf machinery, tooling and technical expertise, and many Gerrman components. (Source: 2)
1923	Czechoslovakia	120,000	Vz.23, 7.9 m/m	The first Czechoslovak Army universal short rifle. The Vz.23 was withdrawn from service after the introduction and issue of the Vz.24. Attempts to sell Vz.23 rifles abroad to Panama (1939) and other countries were unsuccessful. It is believed that all fell into German hands when Bohemia and Moravia were annexed by the Third Reich in 1938. (Source: 2, 5, 6))
1924	Czechoslovakia	10,000	Vz.23a, 7.9 m/m	The final block of 9,999 Vz.23s, the Vz.23a, is reported by Sada to have been made with a special replaceable "sight notch". The meaning of this is unclear, and no Vz.23a with any special variation like this have been reported to date. See also above. (Source: 2)

Date	Country	Number Produced	Model/Caliber	Type/Comments
1924- 1938	Czechoslovakia	775,600+	Vz.24, 7.9.m/m	A slightly redesigned Vz.23, adopted in December 1924 and issued on a large-scale beginning in 1926. Late Vz.23s have been observed restocked as Vz.24s. Three crest varieties: 1. A few transitional rifles with the Vz.23 arched text crest; 2. The three line CZB address crest starting in 1925, and 3. The large Czechoslovak lion crest after 1935. In August 1936, the first rifles were manufactured at the new rifle plant at Povaszka Bystrica in the Province of Slovakia. In September 1935, 50,000 Vz.24s were made up from used and new spare parts, and even old German Gewehr 98s. In the 62,000 rifle order placed in August 1936, 55,000 rifles were manufactured from standard materials; while 7,000 were made up using substitute materials including only domestic ore for steel, and at least 7 types of substitute stock woods. The last Vz.24 production order was placed in July 1938. Most of these rifles were made at Brno, while the remainder were produced at Povaszka Bystrica from domestic materials. The actual number manufactured is uncertain due to the German Annexation of Bohemia and Moravia. Primary sources: 2 and 6; see also all others cited.)
1941- 1942	Germany, in occupied Czechoslovakia	255,000	G.24t	The G.24t was a newly produced Vz.24 variant made for the Wehrmacht at the former CZB plant at Povaszka Bystrica, Slovakia (receiver code "dou"). In 1941, approximately 115,000 were made, while approximately 140,000 were produced in 1942 prior to changeover to Kar98k production. (Source: 5)
1935- 1938	Czechoslovakia	25,311	Vz.33 Police carbine, 7.9 m/m	The Vz.33 Carbine was manufactured for the Czechoslovak National Police or Gendarmerie ("CETN") and the Ministry of the Treasury Guard or Police (Finansi Straz or "F S"). The CETN received 20,011 carbines, while the F S took delivery of 5,300. (Organizational initials (CETN or F S) and the serial number were stamped on the unit-marking disc of most Vz.33 carbines.) (Sources: 1, 2, 6) One rare carbine is reported to have factory-original police markings on its receiver. ("Policijni komissasivi Konov'1") CZB Factory sales literature (Sources 3 and 9) refer to this carbine as the "Model 16/33". This appears to be a unique designation used only in company literature, and is not used elsewhere, even by the Czechoslovak Police. The only recorded sales of the Model 33 carbine mentioned in the CZB histories (Sources 1, 2) are to the F S and CETN Czechoslovak Police organizations.
1940- 1942	Germany, in occupied Czechoslovakia	Approx. 120,000	G33/30, 7.9 m/m	This carbine is a variation of the Vz.33 police carbine, redesigned for German mountain troops. In 1940, approximately 40,000 with manufacturer's code "945" were made. In 1941, approximately 35,000 with manufacturer's code "dot" were made in 1942, approximately 45,000 more "dot" carbines were manufactured. (Source: 5)
1939- 19??	Slovak Republic	Unknown, but, based on serial numbers, may be less than 10,000	Vz.24, 7.9 m/m	Reported rifles have scrubbed blank receivers, and four-digit serial numbers without letter prefix or suffix. All observed Slovak rifles are marked on the bolt knob and receiver with the Slovak doubled- barred crucifix and three-mountain peaks national icon. At least one Romanian Vz.24 rifle has been reported with the Slovak icon as well.
1926	Yugoslavia	40,000	Vz.24, 7.9 m/m	Brno's first export order. All rifles were drawn from Czechoslovak Army stores. (2)
1928, 1929, 1930	Yugoslavia	Over 10,000	Vz.24, 7.9 m/m	The total number of Vz.24s delivered to Yugoslavia has not been published in the referred sources. To date, no Yugoslav contract Vz.24s have been found with the royal crest. (Sources: 1, 2).

Date	Country	Number Produced	Model/Caliber	Type/Comments
1926	Norway	1	Vz.22	(Source: 2) A rifle for ammunition testing.
1926	Lithuania	2	Known in Brno literature as the "L" rifle "(L for Lithuania)	A "sample" prototype Mauser rifle and carbine built for the .303 British cartridge. Used an M.95 Steyr straight pull rifle type bayonet lug under the upper band. (Sources: 2, 3) Straight handle bolt on rifle, turned down bolt on carbine.
1935	Lithuania	15,000	Vz.24	(Source: 2, 3)
1931	Estonia	1	"L" rifle	(Source: 2, 3)
1929	"South America"	"Several"	"L" rifles and carbines	Given as sample rifles to several South American countries. The source does not list specific country names unfortunately. (Source: 2)
1930	Siam (Thailand)	"Several"	"L" rifle	The "L" rifle is of the 1926 Lithuanian pattern. Given by CZB as samples. (Source: 1, 2, 3)
1935	Latvia	15,000	Vz.24, 7.9 m/m	Bartered to Lativia by CZB for 20,000 No. 1, Mk III Lee-Enfield rifles which CZB refurbished and then resold to Iraq for hard currency which, in turn, paid for the Latvian Vz.24s. (Sources: 1, 2, 3)
1938- 194?	Rumania	Estimated by Source 1 (Franek) to be 400,000 to 750,000	Vz.24, 7.9 m/m	Brno's largest customer. Romanian Vz.24s are known with five receiver designs: Royal crested (King Michael, King Carol), date crested (1939, 1940) and blank or unmarked rifles, circa 1940+). Romanian Vz.24's were manufactured in blocks of 25,000 rifles. Each block was identified by a serial number consisting of an alpha- numeric phrase made up of a two-letter prefix followed by up to five numerals (1-25,000). In the two-letter prefix, the first letter was constant for 25,000 rifles, while the second letter is always an "R". (The first block thus was AR 1 through AR 25000, followed by BR 1 thru BR 25000, etc.) Blocks "AR" through "YR" have been reported, with blocks IR, JR, KR, LR, MR, NR, QR, VR and ZR as yet unreported. Most King Carol-crested rifles observed have had their crests crudely ground off. (Sources: 1, 2 and 6)
1938	USSR	40,000	Vz.24	Purchased by the USSR and shipped directly to Republican forces in Spain. (Sources: 1 2. See also Howson, "Arms for Spain" arms shipment records.) Surviving examples have been reblued and their stocks renumbered in the Spanish fashion just below the left side of the receiver ring. Czechoslovak acceptance codes have been stippled out.
1928- 1938	Bolivia	101,000	Vz.24, 7.65 m/m	The few rifles seen have complex Bolivian crests and the unique Bolivian flying condor mark. (Source: 1)
1928- 1938	Bolivia	Unknown	Vz.24/26, 7.65 m/m	A carbine with a "curved bolt and a lighten stock". None have been observed. (Source: 2)
1930	Brazil	15,000	Vz.24, 7 m/m	Although marked "VZ24" on its side rail. This rifle is actually a lightened VZ24 with a turned down bolt handle and a grasping recess. These were ordered originally from CZB by the "South Chinese Government" which was unable to pay for them. (Sources: 1, 2)
1937	Brazil	100,500	Model 08-34; 7 m/m	Brazilian sources refer to this as the Model 08-34; although CZB factory sales documents refer to this carbine as the "Musketon Model 12/33". The phrase "12/33" is a CZB marketing designation and is not known to have been used outside of Czechoslovakia. Franek indicates that only two countries purchased Model 12/33s: Brazil and El Salvador. Observed examples of the Brazilian 08/34 are the exact same rifle as the El Salvadoran "12/33". (Sources: 1, 2)

Date	Country	Number Produced	Model/Caliber	Type/Comments
1929- 1937	Colombia	10,000	Vz.24, 7 m/m	(Source: 1, 2) Observed rifles were made with the Columbia national crest.
1929	Colombia	5,000	M1912 Mexican type short rifles	5,000 newly manufactured M1912 Mexican-type short rifles with 556 m/m (21.5-inch) barrels, together with many Steyr-made spare parts. (Source: 2) One such carbine, called "Mexican" is pictured in Source 3.
1936	Ecuador	30,000	Vz.24, 7.9 m/m	Rifles with an Ecuadorian crest are unknown as yet. Ecuador likley accepted rifles directly from Czechoslovak Army reserves.
1937	Guatemala	4,000	Vz.24, 7 m/m	(Source: 1, 2)
1937	Nicaragua	1,000	Vz.24, 7.9 m/m	(Source: 1)
1937	El Salvador	300	Vz.24, 7.9 m/m	(Source 1, 2)
1937	El Salvador	5,600	"Musketon Model 12/33, 7 m/m	(Source: 1) The crest on this rare carbine reads: "Gobierno de El Salvador" over "P de H". This carbine is the exact same carbine as the Brazilian Model 08-34. (Source: 1, 2)
1937	Uruguay	4,000	Vz.24 in 7 m/m	(Source: 1)
1937	Uruguay	2,000	Vz.32/Modelo 1932, 7 m/m	A lightened Vz.24 carbine; See also Peru. (Sources: 1, 2)
1927- 1938	China	195,200	Vz.24, 7.9 m/m	Sold to various Chinese governing bodies, including the North and South Chinese Government, and the Shanghai Naval Patrol. No factory-original crests have been reported.
1938	Japan	40.000	Vz.24, 7.9 m/m	A direct sale to the Imperial Japanese Navy. (Source: 1, 2, and 8)
1929- 1939	Iran	30,000	Vz.24, 7.9 m/m	The first 10,000 Vz.24s were delivered from the Czechoslovak Army's own inventory. (Source: 1, 2) These rifles have the three-line CZB address crest. Two have ben observed with an image of the Pahlavi crown surcharged on the receiver ring.
1930- 1938	Iran	240,000	Model 98/29 rifles, 7.9 m/m	The standard Iranian infantry rifle of the day, 29" barrel, (Source: 1) One 98/29 made at the CZB factory in Tehran was recently discovered
1930- 1938	Iran	30,000	Model 98/29 "Musketon", 7.9 m/m	The standard Iranian cavalry carbine with an 18 inch barrel. Source: 1, 2) After WW II, starting in 1949, the CZB factory started before the war in Tehran began producing a simplified version of this carbine called the Model 1326 (1949)
1926	Turkey	30,000	Model 1922 (Vz.22) rifle, 7.9 m/m	Adopted in 1922 by the Czechoslovak Army, this long rifle was sold as surplus to the Turkish Army four years later. These rifles are also shown on this list under "Czechoslovakia".
1927	Turkey	10,000	Model 1922 (Vz.22) rifle	Purchased as new by the Turkish Army, not CZ Army surplus. (Source: 2)
1934	Peru	5,000	Lightened Vz.24-type rifle, 7.65 m/m	The Modelo 1932 or vz.32 was a special light weight version of the Vz.24. (Sources: 1, 2)
Approx. 1930	Venezuela	Unknown	Short rifle, 7 m/m	(Source: 2)







The VZ 33 Police Carbines were issued by two Czechoslovak organizations, the Finansi Straz (abbreviated as the "FS"), or Financial Guard, which guarded the country's frontiers, and the uniformed national Gendarmerie, known as the "Cetnictvo," abbreviated as "CETN." All marking discs are inlet into VZ 33 buttstock, and carry not only the carbine's serial number, but also the police property marks, either "FS" or "CETN."



The side rail of the Czech Model VZ 16/33 Carbine, showing the manufacturer and the model number.

**CZECH VZ 16/33 CARBINE:** The Czech Model VZ 16/33 Carbine is a lightweight carbine specifically designed for use by police and similar paramilitary organizations. The carbine is compact, with the bolt handle turned down and the bolt knob hollowed out on the underside. The stock is cut to facilitate handling of the bolt knob. The pistol grip stock has grasping grooves, and the upper hand guard extends from in front of the receiver to the upper band. The lower barrel band has an integral sling swivel on the left side, with another on the bottom of the band. There is a swivel at the bottom of the stock. On the sides of the small-diameter receiver, this carbine has lightening cuts that are concealed by the stock. The side walls of the receiver are also appreciably thinner. The Czech rampant lion coat of arms will always be found on the receiver ring. A special bayonet was made for this carbine, due to the shortened bayonet lug.

Length: 39.20"; Weight: 7.7 lbs.; Barrel: 19.29"; Caliber: 7.92 x 57mm as used in Czechoslovakia; also available in 7 x 57mm and 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1000 meters in increments of 100 meters. Remarks: The Czech national crest of the rampant Czech lion on the receiver ring, with manufacturer's markings and model designation on the side rail.

## DENMARK

After the second world war, Denmark made use of the captured and abandoned equipment left behind by the Germans. One of these uses



Receiver ring of the Danish Military Target Rifle made with a Model G 98 action, showing the original German markings.



Full-length view of a Danish Military Target Rifle utilizing the action of a German G 98 Rifle. Note the bending of the bolt handle.



Full-length view of the Danish Military Target Rifle made with the action of a German Model 98k Carbine.



The Danish stampings, "Gevaerfabriken, Otterup," on the barrel of the Danish Military Target Rifle made with a World War I Model G 98 action.



Receiver ring of the Danish Military Target Rifle made with a Model G 98 action, showing the original German markings.

was the conversion of weapons into military target rifles made from the actions of both World War I and World War II German rifles.

## **DOMINICAN REPUBLIC**

The Dominican Republic, the oldest continuously inhabited European settlement in the Americas, occupies two-thirds of the island of Hispaniola, sharing the island with Haiti. The country has had a tumultuous history, suffering occupation by various powers, including the forces of the United States, during its past. Under the reign of General Rafael Trujillo (1930-1961), a very efficient arms industry was established with the help of emigree Hungarian engineers and designers.

During the early 1950s, the national arsenal reconditioned surplus Brazilian Model 1908 Rifles and Short Rifles, removing all Brazilian



Receiver ring markings on the Danish Military Target Rifle made with a Model 98k Carbine action.



Full-length view of the Dominican Republic Model 1953 Rifle (Ex-Brazilian Model 1908).



Full-length view of the Dominican Republic Model 1953 Short Rifle (Ex-Brazilian Model 1908 Short Rifle).



The receiver ring of the Dominican Republic Model 1953 Short Rifle (Ex-Brazilian Model 1908 Short Rifle), showing the markings and caliber applied by the Dominican arsenal.

markings and restamping the weapons with Dominican markings. These rifles were also rechambered and rebarreled to .30-06, and began to appear on the U.S. surplus market in the 1960s. Presumably, they could have been in use by the Dominican forces during the political strife that occurred prior to the U.S. intervention in 1965 and 1966. All data relative to these rifles will be found under the section on Brazil.

## ECUADOR

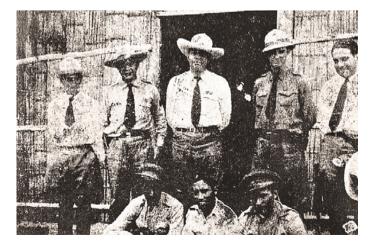
Although Spanish exploration from Peru pushed into southern Ecuador in 1527, Spanish rule over the territory was not firmly established until 1533. During the early period of the Spanish colonization, the country was constantly in turmoil from civil wars between opposing conquistadore factions. Administered consecutively through the viceroyalty of Peru and New Grenada (Bogata), Spanish control of Quito, the capital, was terminated by a local junta in 1809, with full independence achieved in 1821 with the defeat of the royalists by a combined Colombian and Venezuelan army under José Antonio de Sucre at Pinchincha.

As part of the Republic of Gran Colombia, Ecuador joined politically with Venezuela and Colombia from 1822 to 1830. General Juan José Flores, leader of the forces of independence, removed



Stampings on the left side of the receiver ring of the Dominican Republic Model 1953 Rifle.

Ecuador from the confederation in 1830 and ruled as a military dictator until ousted in 1845.



Ecuadoran army officers in the area of the Zarumilla River during the period of hostilities with Peru. (Col. Luis A. Rodriguez)



Full-length view of the Model 1891 Rifle (Argentine Pattern).

A brief war with Colombia firmly established the present day border between Colombia and Ecuador; however the border with Peru has been in contention to the present day (Peru/Ecuador incursions of January and February, 1995).

The first seventy years of liberty were beset with strife, insurrection, and continuous internal disturbances. The country was ruled as a theocracy by the religious fanatic Garcia Moreno from 1860 until his overthrow and assassination in 1875. However, it was during this period that the basis for the modern state of Ecuador was laid. Following the fall of Garcia Moreno, the country was torn apart by almost total anarchy for the next twenty years, followed by twenty years of enlightened secular rule by the Liberal party.

Boundary problems with Peru persisted, and in July 1941, Peru invaded at two separate points in southern Ecuador. Using paratroops for the first time on the America continent, as well as massive air, artillery, and naval support, fifteen thousand Peruvian troops, equipped with a battalion of new Czech tanks, pushed deep into the area of the Zarumilla River. This invasion was resisted by only 1,724 Ecuadoran troops from a total army strength of 5,610 men. Ecuadoran forces were mainly equipped with VZ 24 Short Rifles and VZ 12/33 Carbines. Ecuadoran resistance was finally broken by the capture of Puerto Bolivar by airborne troops. All fighting ceased after a campaign that lasted less than three weeks, with most of the territory in question being ceded to Peru by the Protocol of Rio de Janeiro. This protocol was never ratified by the Ecuadoran Congress, thus nothing changed.

After a period of economic instability following the brief war, Ecuador, which had been one of the poorest countries in South America, discovered oil fields that revolutionized the economy, boosting Ecuador into the position of being one of the continent's greatest oil exporters. Unfortunately, the majority of the fields of oil are found in the territory adjacent to the disputed boundary with Peru, thus ensuring a further bone of contention between the two countries, as evidenced by full-scale battles during January and February of 1981.

The frontier situation with Peru remains the major national problem for Ecuador, which keeps the bulk of its armed forces deployed in the southern area of the country. The Ecuadoran armed forces, while numerically smaller than the forces of Peru, are in a much more effective state of readiness than at any time since 1941, thanks to the infusion of oil money into the national economy. In the late 1800s, Ecuador's arsenal resembled the late Bannerman's Army/Navy Store, with the army acquiring approximately 12,000 obsolete German Model 71/84 rifles, 11,000 Model 1888 Mauser and Commission rifles, as well as a like number of mixed model (M1885, M1886 and M1888/90) Austrian Mannlicher straight-pull rifles; an ordnance officer's nightmare, to say the least!

**MODEL 1891 RIFLE (ARGENTINE PATTERN):** The earliest Mauser rifle adopted by the Ecuadoran armed forces was the venerable Model 1891 Rifle (Argentine Pattern) in caliber 7.65 x 53mm, produced by Ludwig Loewe & Co. The data for this rifle will be found under the section of the book on Argentina.

**MODEL 1907 RIFLE:** The Ecuadoran Model 1907 Rifle is the export model of the German Model 1904 Rifle, patterned after the Gew 98 Rifle. The quantity purchased by Ecuador is unknown. This rifle has a pistol grip stock, and the upper hand guard runs from in front of the receiver ring to just beyond the lower barrel band. Swivels are on the bottom on the lower barrel band and the bottom of the buttstock. The upper barrel band has a lug on the bottom to accommodate the Model 1895-style bayonet. This rifle uses the longer cocking piece and does not have guard locking screws.

Length: 49.20"; Weight: 8.30 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Ecuadoran national crest on the receiver ring, with either "EJERCITO DEL EQUATOR," or "EJERCITO EQUATORIANO" marked on the side rail, with manufacturer's markings.

**MODEL 1910 RIFLE**: Ecuador purchased an unknown quantity of Model 1910 Export Model Rifles from Waffenfabrik Mauser A-G. This model is a close copy of the Gew 98 Rifle, fitted with a pistol grip stock, with the upper hand guard running from in front the receiver ring to just beyond the lower band. The upper band is fitted with a bottom lug to accommodate the Model 1895 bayonet. There is a sling swivel on the lower barrel band, and another on the bottom of the buttstock.



Full-length right hand view of the M1910 Mauser Rifle as used by Ecuador.



Receiver ring markings on the Model 1910 Rifle as used by Ecuador.

Length: 48.80"; Weight: 8.8 lbs.; Barrel: 29.13"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Found with either the Ecuadoran crest, or the Waffenfabrik Mauser markings on the receiver ring, with the model designation on the side rail.

**CZECH MODEL VZ 24 SHORT RIFLE:** Substantial quantities of the Czech Model VZ 24 Short Rifle were introduced into the Ecuadoran army during the 1930s. These short rifles were supplied in caliber 7.65 x 53mm, and all pertinent data relative to the Model VZ 24 Short Rifle will be found under the section on Czechoslovakia. This short rifle was used to good effect in the War of 1941 with Peru.



Model designation on the side rail of the Model 1910 Rifle as used by Ecuador.

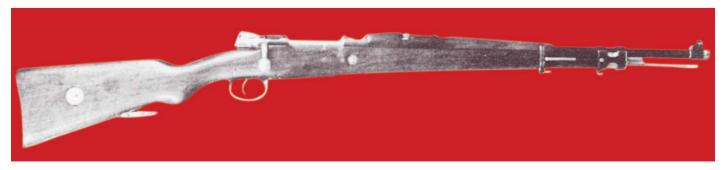
**CZECH MODEL VZ 12/33 CARBINE:** In conjunction with the orders for the Czech VZ 24 Short Rifles, an unknown quantity of Czech VZ 12/33 Carbines were also purchased by the Ecuadoran army during the 1930s. It is understood that this carbine was ordered in caliber 7.65



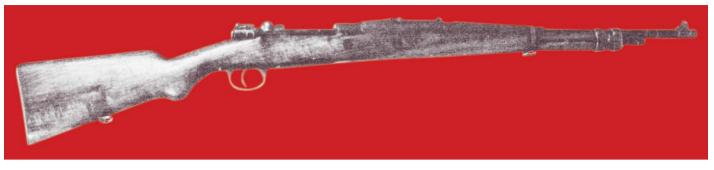
The side rail of the Czech VZ 12/33 Carbine, showing the manufacturer's markings in Spanish.



Full-length view of the Czech VZ 24 Short Rifle.



Full-length view of the Czech VZ 12/33 Carbine.



Full-length view of the Ecuadoran FN Model 30 Short Rifle. (Cliff Baumann collection)

x 53mm. This carbine would have been used during the 1941 War with Peru. All relative data on this carbine will be found in the section on Czechoslovakia.

**FN MODEL 1930 SHORT RIFLE:** This FN Model 1930 Short rifle is the standard FN export market short rifle as supplied to many Central and South American countries. Fitted with a pistol grip stock without grasping grooves, the rifle has an upper hand guard that extends from the receiver ring to just beyond the lower barrel band. The lower band has a swivel at the bottom, while a further swivel is on the bottom of the buttstock.

Length: 43.25"; Weight: 10.0 lbs.; Barrel: 22.50"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "FN" logo on the receiver ring, manufacturer's markings on the side rail.

## **EL SALVADOR**

Colonized by the Spanish in 1524, El Salvador gained its independence from Spain in 1821, first under the aegis of the Mexican Empire, and then, two years later, as a member of the United Provinces of Central America. This confederation fell apart in 1838, and in 1840 El Salvador emerged from a bloody two-year war as an independent republic.

The country of El Salvador has been dominated by an economy based on coffee production, with the means of production, land ownership, and political power resting in the hands of a small oligarchy. A reform president won election in 1931, but was dismissed by the army; this action was followed by a revolution in 1932, during which approximately fifteen thousand Salvadoran peasants were killed. The result of these tribulations was a period of relative peace that lasted into the 1970s.

In 1969, El Salvador was involved in a brief, but vicious war with Honduras. This war evolved from the massacre of Salvadoran natives in the border zone with Honduras. The outrages perpetuated upon the Salvadoran natives finally exploded during the qualifying rounds of the World Cup Championship: El Salvador won two of the three games, riots against Salvadorans living in the border area with



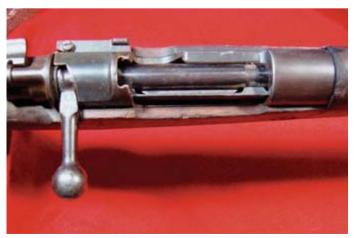
*Full-length view of the right side of the El Salvadoran Model 1904 Long Rifle in caliber 7mm.* 

Honduras immediately erupted, and what was labeled in the United States as "The Football War" was on! On 12 and 13 July 1969, Salvadoran forces pushed across the border of Honduras, immediately becoming engaged with the numerically inferior and less wellequipped Honduran forces. The Salvadoran Air Force achieved air superiority, and the army pushed twenty-five kilometers into Honduran territory, capturing several towns in the north and east before a cease-fire was imposed by the Organization of American States.

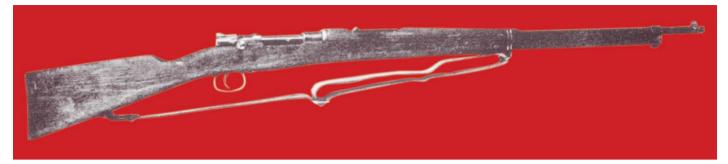
In 1979, President General Carlos Humberto Romero was overthrown by a group of junior military officers. After the resignation of two civilian-military juntas, a third government including Christian Democrat José Napolean Duarte assumed office on 5 March 1980, based on the army carrying out a policy of agrarian reform. Twelve long years of civil war followed, culminating in a peace treaty between the government and the armed opposition on 16 January 1992, at a cost of seventy-five thousand lives. This treaty also called for the reduction of the Salvadoran army by more than fifty percent.

The opportunity now exists for the country to bind up its wounds, and unite the people to work for the common good.

**MODEL 1895 RIFLE:** The government of El Salvador purchased unknown quantities of the Chilean-style Model 1895 Rifle directly from DWM. Other quantities of the Model 1895 rifle were ordered from Oviedo in Spain. These weapons were the mainstay of the Salvadoran army for many years, and were doubtless used throughout the many years of strife that were inflicted on the country during the first half of the twentieth century. Specific data on this rifle will be found under the section on Chile.



Top view of the receiver ring of the El Salvadoran Model 1904 Long Rifle, showing that these rifles were never marked with a national crest or any other form of national identification. This indicates that these were probably purchased off the rack!



Full-length view of the Chilean-style Model 1895 Rifle.



Full-length view of the Model VZ 12/33 Carbine.

**CZECH MODEL VZ 12/33 CARBINE:** During the early 1930s, the Salvadoran army contracted with Czech authorities to purchase an unknown quantity of Czech Model VZ 12/33 Carbines. Whether or not these arrived in the country in time to be used in "La Matanza," which was the revolt of 1932, cannot be determined. In any event, these weapons were continually in use by the Salvadoran armed forces until



Ceskoslovenska Zbrojovka Brno (CZB) manufactured a small lightweight carbine in 7mm that was targeted for sale in Central and South America. Known in Czech sales literature as the "Model 12/33," this rifle was sold only to El Salvador and Brazil. El Salvador purchased 5,600 carbines in 7mm. Brazil purchased 100,500 carbines, all of which are marked "Model 1908/34", also in 7mm. The El Salvadoran carbines (above, left) bear the text crest "Gobierno de El Salvador" surrounding the phrase "P de H." The Brazilian carbines use the standard Brazilian star crest found on Model 1908 rifles and carbines. Except for markings, the El Salvadoran and Brazilian carbines are exactly the same.

the end of the second world war, when the Salvadoran army was reequipped with U.S. weapons.

Specific information relative to this carbine may be found in the section on Czechoslovakia.



The side rail of the Czech VZ 12/33 Carbine showing the manufacturer's markings in Spanish.



VZ 12/33 action. (Jan Gardiner collection)

In the early part of the 20th century, Sweden, in an attempt to create a foreign market for their locally produced weapons, sent a selection of Swedish Mauser carbines, Model 94/17 in 7mm for troop testing by the Salvadorans; results were not encouraging, and orders were never placed. Prior to the rearming of the Salvadoran army with surplus U.S. equipment, several thousand Model K98k carbines converted to 7.62 NATO were purchased overseas. Whether the conversion was done prior to acquisition, or after, is unknown at this time.

#### **ESTONIA**

Ethnic "cousins" of the Finns, it was not until the twentieth century that the Estonians acquired their own country. Throughout recorded history, the country had been ruled in turn by the Danes, who first colonized the area, the Teutonic Knights, and the Swedes, with the German element predominant during this entire period of time. "Baltic Barons" ruled the towns, while the Ests were regarded as little more than serfs.

In the 1800s, serfdom was abolished, and a cultural revival began. This revival became politicized with the treaty of Brest-Litovsk in 1918 when the independence of the new state of Estonia was recognized by the Soviet Union. In 1939 independence was terminated, with Russian forces occupying the country and amalgamating the Estonian armed forces in the Soviet army. During World War II, the Estonians suffered terrible losses, not only in battle, but in deportations, murders, and flights to safety.

Independence returned to Estonia on 30 March 1990, with a freely elected government notifying the Soviet Union of its intent to secede and form a separate country. Russia recognized the independence of Estonia in September 1991, with free elections being held in 1992. As with other eastern nations, Estonia has been plagued with economic and political problems since independence.

**ESTONIAN CZECH MODEL "L" SHORT RIFLE:** Purchased from the Czechs in the early 1920s, the Estonian Model "L" Short Rifle was chambered for the British caliber .303 cartridge, which required the magazine well and floor plate to slightly project at an angle from the bottom of the stock in order to accept the rimmed cartridges. This rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard runs from in front of the receiver ring to the upper barrel band. The upper band is fitted with a bayonet lug on the bottom to accept the Model 1895 Austrian bayonet. A sling swivel is attached to the bottom of the buttstock, with an integral swivel on the left side of the lower barrel band. The bolt handle is bent, but the stock is not recessed to accept the bolt knob. There are protecting sideguards on the front sight. There is little in the way of data on this short rifle, and there

is no way at the present time to determine if, and exactly how, the weapons were marked, other than Czech export markings. These short rifles would have been used during World War II, presumably by support troops because of ammunition problems, but with capture by German forces, and recapture by the Russians, there is no way of knowing where these weapons finally came to rest, unless on the junk piles of war.

## **ETHIOPIA**

Ethiopian history begins in the mists of early time, founded, according to legend, by Menelik I, son of King Solomon and the Queen of Sheba. After successfully repulsing two Italian attempts at invasion in the 1880s, Ethiopia began to enter the modern world under the tutelage of Menelik II (r. 1889-1913). Following his death, the country went through a period of instability until the accession to the throne in 1930 of Haile Selassie.

Haile Selassie was burdened with the task of trying to bring into the twentieth century a country that was living in the middle ages. He attempted to formalize the system of levies that had previously supplied the manpower to resist invaders. Hiring a Belgian military mission to train his soldiers, Haile Selassie built the basis of a new Ethiopian army, albeit an army that refused to wear shoes! At the same time, contracts were concluded with both Mauser and FN for the supply of short rifles and carbines, as well as other vital military equipment with which to arm and equip his troops.

In 1936, Italy invaded on several fronts, and the Ethiopians resisted with everything in their arsenal (one arms expert of the day was totally incapable of cataloging the variety of weapons that were recovered at the end of the Italian occupation!); however, the Italian armies prevailed, overrunning the country. The Italians were driven out during World War II by the British and Ethiopians, with Haile Selassie being returned to the throne.

Unrest erupted in 1974, and Haile Selassie was deposed on 13 September 1974. He was replaced by a coalition of elitists and the army, with the monarchy abolished in 1975. From that time, Ethiopia has been wracked by internal and external strife, including civil war, which has left the country desolated and in a political shambles. What the future of this ill-fated country will be is anyone's guess.

**ETHIOPIAN FN MODEL 24 CARBINE:** Ethiopia ordered both short rifles and carbines from FN during the period 1933-1935; the total quantity of both models is given as 25,000. Both the short rifle and the carbine have a pistol grip stock, and the upper hand guard runs from in front of the receiver to the upper band. The nose cap is fitted with the longer style German "H" bayonet lug. The lower band has a swivel on the bottom, with another swivel at the bottom of the buttstock. On the



*Ethiopian army officers on review. Note the lion mane fringe around the tops of their hats, testimony to their bravery.* 



*Ethiopian Imperial Guard on review prior to the invasion of Ethiopia by Italy.* 

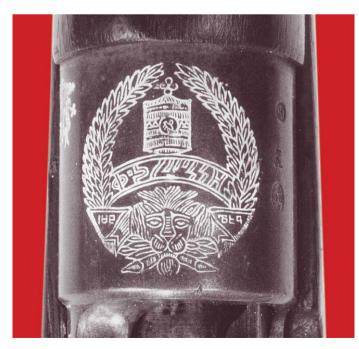


Full-length view of the Ethiopian FN Model 1924 Carbine. (Springfield Armory Museum)

carbine model, the bolt handle is bent down, but the stock is not recessed for the bolt knob. Note the comparatively short distance between the lower and the upper barrel bands.



Side rail of the Ethiopian FN Model 1924 Carbine, showing the Lion of Judah acceptance mark on the left of the receiver ring, and the manufacturer's markings on the side rail. (Springfield Armory Museum)



Ethiopian national crest on the receiver ring of the FN Model 1924 Carbine. This crest incorporates the stylized head of a lion at the bottom of the crest. (Springfield Armory Museum)

Length: 43.25"; Weight: 10.0 lbs.; Barrel: 22.50"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters (carbine). Remarks: The Ethiopian national crest on the receiver ring (Note that this crest by FN is different than that used on the Mauser Standard Modell Short Rifle), the Lion of Judah acceptance mark on the left side of the receiver ring, and the manufacturer's markings on the side rail.



FN Model 30 Short Rifle, serial number 1. (Jan Gardiner collection)



One of the few organized formations in the Ethiopian army at the time of the Italian invasion, the Imperial cavalry was held in reserve until near the end of the war.



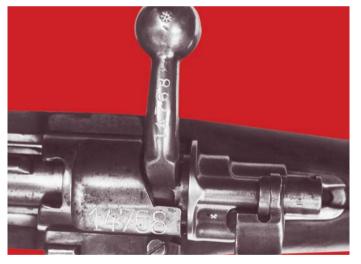
Full-length view of the Ethiopian FN Model 24 Rifle with turned down bolt handle. (Robert Jensen collection)



Close-up view of the stock cartouche on the side of the Ethiopian FN Model 24 Rifle. (Robert Jensen collection)



Side rail of the Ethiopian Model 1933 Mauser Standard Modell Short Rifle. Note the Lion of Judah acceptance marking on the left side of the barrel, as well as the 5-digit serial number preceded by a "B"-prefix. It is interesting to note that the year following the Standard Modell designation is "1924." (Bob Bennett collection)



Close-up view of the receiver bridge and bolt handle of the Ethiopian FN 24 Rifle; note the matching number, a novelty for weapons from this country and this era! (Robert Jensen collection)



Mounted Ethiopian soldier with shield, seen at the beginning of the Italian invasion of Ethiopia, C. 1935.



Full-length view of the Ethiopian Model 1933 Mauser Standard Modell Short Rifle. (Bob Bennett collection)

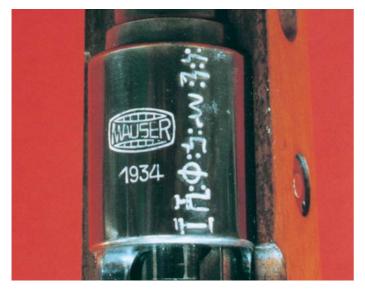


Ethiopia issued at least two versions of the Mauser Oberndorf-made 7.92 Standard Modell Short Rifle. Differing only in their markings, one version is marked "Standard-Modell 1924" on its side rail, has the Mauser Banner on its receiver ring, and frequently has Chinese text (translation: "Made In Germany") on the front of its magazine assembly. The other version, as shown here, is also a Standard Modell, but has "MOD. 1933" marked on its side rail, and the Mauser Banner on its receiver bridge. Both rifles feature the mark of the Lion of Judah on the left side of the barrel near the receiver. Ethiopian Standard-Modells of both types

originally had a large oval Ethiopian cartouche stamped on the left side of their buttstocks, but this mark has been worn or sanded off all Ethiopian short rifles observed so far. (John Wall collection)



An interesting point to consider is that this Ethiopian Model 1933 Mauser Standard Modell Short Rifle was part of the commercial series being produced at that time, which included different contract rifles. Observe that while the serial number matches all of the others on this short rifle, there are Chinese characters marked just in front of the floorplate! (Bob Bennett collection)



Receiver ring markings on the Ethiopian Model 1933 Mauser Standard Modell Short Rifle. This short rifle is unusual, not only for its fine condition, but for the markings on the receiver ring that indicate that this particular weapon was used by the Emperor's guard. (Bob Bennett collection)

ETHIOPIAN M1933 MAUSER STANDARD MODELL SHORT

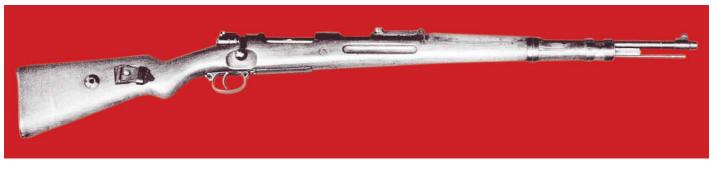
**RIFLE**: Three different contracts for approximately twenty-five thousand short rifles and carbines were placed with Mauser Werkes in 1933, 1934, and 1935. Some of the early models were identified by an "A" prefix and full receiver crest. The numbers for the 1934 order are unknown; however the 1935 order is from the "B"-prefix series, with five serial numbers and the "Mauser Banner" logo with date on



The left side of the Ethiopian MOD. 1933 Standard Modell Contract Rifle. Note the side rail's "MOD. 1933" text, commercial proofing and the Lion of Judah barrel mark. (John Wall collection)



The right side of the Ethiopian "MOD. 1933" Standard Modell receiver. Of the few surviving rifles, all have had an "A" prefix serial number. (John Wall collection)



Full-length view of the Ethiopian Model 1933 Mauser Standard Modell Carbine.

the receiver ring. The short rifle is fitted with a pistol grip stock with grasping grooves, and the short-style upper hand guard runs from in front of the sight base to the lower band. The lower band is fitted with a swivel on the bottom, with a further swivel on the bottom of the buttstock, just behind the wrist of the stock. The upper band is equipped with a parade hook for shortening of the sling, while the nose cap incorporates a longer version of the German "H"-style bayonet lug.

Length: 43.60"; Weight: 8.8 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "Mauser Banner" logo on the receiver ring over the date of manufacture. Serial numbers and manufacturer's markings on the side rail.



Members of the Ethiopian Imperial Guard in an overrun position. The rifle on the right appears to be an Ethiopian Standard Modell Short Rifle.

**ETHIOPIAN MODEL 1933 MAUSER STANDARD MODELL CARBINE:** Almost identical to the K98k, the 1933 carbine is fitted with a pistol grip style stock with grasping grooves, the bolt handle is bent down, and the stock is recessed to accommodate the bolt knob. The upper hand guard is the typical short version running from in front of the sight base to the lower barrel band. The lower barrel band is held by a spring, while the upper barrel band is pinned to the stock. This carbine was the predecessor of the Wehrmacht's K98k, the standard German weapon of World War II.

Length: 43.60; Weight: 8.60 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "Mauser Banner" trademark over the date on receiver ring, "Standard Modell" on the side rail, and the "Mauser Banner" logo on the receiver bridge. The Lion of Judah acceptance mark is on the left side of the barrel between the front of the receiver and the rear sight base.

#### FRANCE

During the period July through December, 1939, 6,500 Belgian 24/30 Short Rifles in caliber 8mm were purchased from FN by the French. In the French Occupation Zone of Germany, production of a slightly modified version of the German K98k continued for a short period after the war. It is possible that some wartime carbines were also altered and reconditioned at the same time. These carbines were used to arm some French units, especially units of the French Foreign Legion, who carried them in French Indo-China for a brief period. West German border guards were also equipped with these modified Mauser carbines.

Basically, the carbine is almost identical to the wartime German K98k, with the exception that the carbine does not have a bayonet lug; in its place is a threaded hexagonal base that is screwed into the stock, with a thinner, rod-like, upper segment used for stacking arms. Both barrel bands, which are the late-war welded style, are held by a screw



Full-length view of the French-used German 98k Carbine, with the large "winter" trigger guard. Note that this particular rifle does not have the hexagonal stacking rod found in most other French Model 98k Rifles.



Full-length view the French-modified, post-World War II version of the German 98k Carbine. (Bob Bennett collection)



Upper barrel bands, and hexagonal stacking rod on the French-modified German 98k Carbine. (Bob Bennett collection)



The left side of the receiver ring with serial number and "star" French proof mark for an arm of foreign origin of the French-modified German 98k Carbine. (Bob Bennett collection)

through the stock. The lower barrel band has an integral swivel on the left side, while a crude sling attaching bar is held on the lower left side of the stock by two screws. The stock is also cut for the German-style sling. The cupped buttplate has the late-war hole for the disassembly of the firing mechanism.

All other data relative to this modified French version of the German 98k Carbine will be found under the section on Germany.



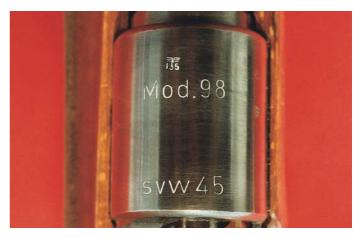
Receiver ring of a French Model 98k Carbine, illustrating another version of the markings to be found on the receiver of those rifles issued to French forces.



The left side of the buttstock of the French Model 98k Carbine, showing the crude bar-and-screws sling attachment. Note the hole in the buttplate for dismounting of the firing pin.



The left side of the receiver ring with serial number of the Frenchmodified German 98k Carbine. (Bob Bennett collection)



The receiver ring markings of the French-used Model 98k Carbine.



At the conclusion of WWII, a number of German service rifles were taken into service by the French Government. Among these were a number of 7.92mm Karabiner 98b Service Rifles, originally produced by Simson in Suhlfor the Reichswehr during the Weimar Republic era. Shown here is one such rifle. Note the typical features of the Karab 98b; the turned down bolt handle, the flat tangent rear sight, the absence of the sling hook on the upper barrel band, the side mounted sling, bolt dismount tube and unit marking plate, as well as the 29-inch barrel. In his book, "Das System Adalbert Der 98k," the German writer Albrecht Wacker tells how, during the German Rifle Trials of 1929, Spandau Armory in Berlin modified several Karabiner 98bs by removing 5 inches of barrel from between the upper and lower barrel bands, and won the competition. This configuration was adopted as is by the Reichswehr. Five years later, the shortened 98b finally went into production with its new name, the "Karabiner 98k." The configuration of the French 98b is completely German, except for the recess cut into the left side of the buttstock to accommodate a MAS36 sling and sling bar. (John Wall collection)



The Karabiner 98b Service Rifle taken into service by France after WWII. (John Wall collection)



The buttstock of a German Kar. 98b modified post WWII by the French with a stock recess to accept the MAS36 sling and sling bar. The unit marking plate is stamped "5/R.R. 12.35," for the Fifth Reserve Infantry Regiment, 12th Company, rifle number 35. (John Wall collection)



The left side of the receiver of the German Karabiner 98b as used in France after WWII. Note that all German marks remain intact, including the squared images of the German Imperial eagle, the "Reichsadler" that served as the Reichswehr firing proof. (John Wall collection)

## GERMANY

This addenda to the third edition of "Mauser Military Rifles of the World" has been excerpted from the book "Black Powder Mauser Rifles," a study of the development of black powder Mauser rifles by the late Mauser collector and author David Stefanye, Ph. D. Dave's extensive research and analysis has provided invaluable knowledge as well as a clearer understanding of the beginnings of the "System Mauser."

Dave departed from the format of other authors in describing weapons of certain types of manufacture, which usually consisted of sequential descriptions of models by year. Instead, his approach was one of comparative technological history. It is important for the reader to appreciate the sensitivity of the Mauser Company toward the efforts of its competitors, and it was undoubtedly these activities that stimulated developmental programs exploring the viability of new Mauser products, thus enabling the company to survive and prosper.

Therefore, the comparative approach to follow places these Mauser developments in perspective but, as Dave stated, makes no claim that this work constitutes a comparative history of technology of the bolt action rifle firing black powder, as used in Europe during the last half of the 19th century.

With many thanks to Dave's wife Marilyn for her kind permission and encouragement, what follows is from Dr. Stefanye's book, as edited to conform to the format of this edition of "*Mauser Military Rifles of the World*" by its author Robert Ball.

## Precursors of the Mauser System

The development of the Mauser System begins with the Dreyse Needle rifle and the Chassepot rifle. Originating about 1832, Prussia adopted the last military "Zundnadel Gewehr" in 1869. This rifle, a turnbolt action, in .63 caliber (16mm) fires a combustible cartridge using a needle-shaped firing pin. No obturation exists, so a considerable amount of gas escapes past the bolt head. After the Franco-Prussian War, many of these rifles had obturating washers installed (Beck Conversion). The Needle rifle requires manual cocking.

The French Army adopted the Chassepot in 1866. This arm, designated the M1866 rifle, copies but represents a considerable improvement over the Dreyse. The Chassepot also is a bolt action



Figure 1.3 Details of the Chassepot Rifle bolt. The cocking piece has been retracted and rotated off-center to expose the three grooves on the bolt that retain it in a specific configuration (safe, half-cock, or fire).

rifle firing a combustible cartridge. Figures 1.1 and 1.2 show a M1866 Chassepot and a M1862 Needle rifle respectively.

## The Chassepot-Mauser Rifle

Following the Franco-Prussian War, Germany converted large quantities of captured Chassepot rifles and carbines to fire the Mauser 11 x 60R service cartridge. This conversion was accomplished by shortening the barrel and reworking the action to accommodate the bolt of the Mauser M1871 rifle or carbine. The conversion proposed in the Mauser patent of 1868 was never used in any retrofit. The State of Saxony issued these shortened rifles to cavalry units as an interim weapon pending availability of M1871 Mauser carbines as standard arms. Bavaria also converted others into a dropping block action to handle the German service cartridge.

The unique features of the Chassepot Mauser can be summed up as follows:

- (1) Fires metallic center fire ammunition.
- (2) Contains a self-cocking feature actuated upon bolt operation.

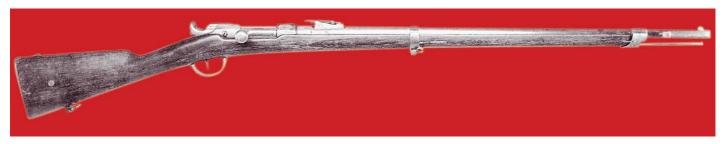


Figure 1.1 French Chassepot Rifle M1866 produced by the St. Etienne Arsenal and dated to denote year of manufacture.



Figure 1.2 Dreyse Needle Rifle M1862 produced by the Danzig Arsenal. Double dated 1862 and 1871 indicating modification to provide obturation using the Beck System.



Figure 2.1 Mauser conversion of the Chassepot Rifle to fire metallic cartridges.

- (3) Firing pin propulsion depends upon a flat mainspring integral with the bolt handle.
- (4) Contains an extractor to remove cartridge cases.

To fire the rifle, open the action by rotating the bolt one quarter of a turn and draw it rearwards. Insert a cartridge into the breech and seat it by pushing the bolt forward. Rotate the bolt one quarter of a turn to the right to complete the cocking action, which causes the flat mainspring in the bolt handle to separate. This spring pivots at the bolt handle knob. The piece is now cocked and ready to fire. The bolt handle and bolt retention lug position in two separate planes along the long axis of the bolt by about one eighth of the circumference. The bolt does not have a separate head. The head is integral with the bolt body and rotates upon turning the bolt. An extractor positioned on the lower front of the bolt is flush with the side. A recess in the receiver wall allows initial override of the cartridge rim during chambering. Cocking depends upon a sear in the bottom of the receiver. Retracting the bolt causes the sear to ride in a groove cut in the direction of the bolt axis. Closing the bolt and moving it to the right causes the sear to engage a cam on the rear half of the bolt handle or flat mainspring to cock the piece. A lug is also present forward of the sear. It and the sear prevent sliding of the bolt out of the receiver. The screw on the side of the receiver is a vestige left over from the Chassepot and serves no purpose. The forward lug performs this function only when the bolt is fully retracted.

This rifle has no safety but unlocks in the presence of a live round in the chamber if one partially retracts the bolt, and then while keeping the trigger depressed, pulls the trigger and recloses the action. Under these conditions the sear cannot contact the cam to cock the rifle. The Mauser-Norris patent of 1868, which describes the Chassepot conversion using the new bolt includes the option of altering the bottom of the receiver to accommodate an ejector. The illustrated rifle does not contain this feature. The bolt removes easily by depressing the trigger and opening the action. Disassemble the bolt by loosening the screw in the bolt knob that also retains the flat mainspring. The mainspring dovetails into the bolt knob and drifts out when struck with a hammer and wooden peg. Upon removal of the spring, the firing pin falls out of the bolt. Assemble by reversing these operations.

The Chassepot Mauser does not appear to be designed to fire a specific cartridge. Breech castings indicate an unshouldered chamber 3.75 inches long from bolt face to the beginning of the rifling.

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- 4. Seel, W., Deutches Waffen Journal, (1980), pp. 500-503; 634-639; 842-847; 954-956.
- Korn, R.H., Mauser Gewehre und Mauser Patente. Akademiseche Druck und Verlagsanstalt, Graz, Austria, 1971, p.11; Walter, J., The German Rifle, Arms and Armour Press, London, 1979, p.49.; Smith,



Figure 2.2 Detailed view of the Mauser conversion of the Chassepot Rifle to fire metallic cartridges.



Figure 2.4 Close-up view of the Kynoch Musket.

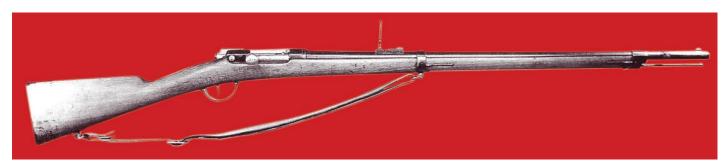


Figure 2.3 The Kynoch Musket 43-77-380 (M1873), competitor of the Chassepot Mauser.



Figure 2.5 Winners and losers. The original Chassepot bolt; the new bolt for use with the Mauser conversion (a loser); and the original bolt modified for use with the Kynoch conversion (a winner).

J.E., Small Arms of the World. Eighth Edition, Stackpole Books, Harrisburg, PA, 1966, p.71; Olson, L., Mauser Bolt Rifles. F. Brownell & Son, Publ. Inc., Montezuma, IA. Third Edition, 1976, pp. 28-30. The relationship between Norris and the Mauser brothers is well documented and need not be dwelt upon in detail in the present work.

- 6. Swenson, G.W.P., Pictorial History of the Rifle. Bonanza Books, NY, NY, 1972, p. 122; Schroeder, J.J., Jr. editor., Gun Collector's Digest. Follett Publishing Co., Chicago, IL, 1974, p. 94. Swenson uses the M1873 designation, but Hicks (ref. 2 above) does not list a M1873 conversion. Capitaine (ref. 3 above) and Boudoin (Chapter VI, ref. 3 below) are silent on the Kynoch Conversion. The Schroeder reference states that arms submitted for conversion bear markings "Mle 1866-74." The Kynoch conversion, however, bears no French Army Model designations as to the year.
- 7. Schroeder, J.J. Jr., loc. cit., p.94.
- 8. Walter, J. loc. cit., pp. 58-62, describes these conversions in detail.

## The Mauser-Norris Model 67/69

The Norris and Mauser patent of 1868 described a new rifle action in addition to the conversion of the Chassepot to fire metallic cartridges. The main features of this have been described previously. The rifle that incorporated this action has been designated the Mauser-Norris M1867/69 to distinguish it from later prototypes. Improvements incorporated into this model beyond those already described under the Chassepot Mauser are minor refinements. These include an ejector fitted into the bottom of the receiver and a rotating bolt head to lessen possible damage to the paper patch cartridges in use at the time. Figures 3.1 and 3.2 show views of a specimen of this rifle. A specimen in the

Smithsonian Institution Washington, D.C. collection differs somewhat in that the triggerguard extends to form a pistol grip as illustrated in the patent literature, and minor differences exist in the rear sight. Another specimen examined by the U.S. Board of Ordnance Officers in 1872 lacked this feature. The stock of the depicted variation strongly resembles the Dreyse stock with its flat sides. This variation also features an unusual key-set rear sight. The U.S. Ordnance Board variation had no flat sided stock and a Chassepot rear sight.

The barrel is not a reworked Chassepot component, as indicated by its length and twist characteristics. The bolt handle and bolt retention lug position in the same plane along the bolt axis. The extractor positioned on the lower left front of the bolt is not flush with the bolt surface as in the Chassepot. A groove along the entire length of the receiver wall accommodates this component and serves the additional function of preventing the rotation at the head of the bolt. The sear and bolt retaining mechanisms resemble the Chassepot, but the bolts do not interchange.

Accomplish bolt removal as in the case of the Chassepot Mauser. Start bolt disassembly by turning the bolt head and removing it from the body. The firing spring and retaining pin drop out. This pin does not interchange with, and is longer than that of the Chassepot Mauser. The Norris-Mauser does not chamber a specific cartridge. Breech castings depict a shouldered chamber without throat reaming. It would be impossible to fit a cartridge to this chamber. The length from rim to beginning of the rifling is 2 inches. The length of the open action is 2.25 inches. In order to use the existing chamber dimensions, the cartridge would require necking down and addition of a bullet to make the final length longer than the open action 4 inches length. This rifle also must be regarded as an experimental prototype for demonstration purposes and was never intended to be fired.

# Experimental Mauser with a Hook Cocking Piece

While the Chassepot Mauser incorporated features designed to make it a more reliable and effective weapon, it lacked two features that are present in the unaltered Chassepot: the manual cocking piece and the



Figure 3.2 Detailed view of the Norris-Mauser Rifle M1867/69.



Figure 3.1 Norris-Mauser Rifle M1867/69.

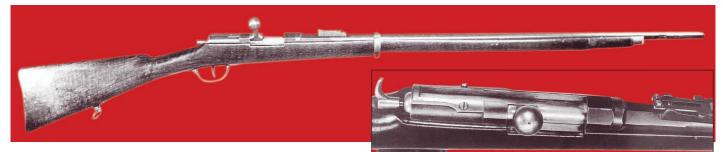


Figure 4.1 Experimental Mauser Rifle with a hook cocking piece.



Figure 4.2 Experimental Mauser Rifle with a hook cocking piece. Details of the firing pin and sear.

safety. The cocking piece, independent of bolt closure for functioning, affords the rifleman a second chance to fire without having to reopen the bolt. This concept is very important in pieces like the Chassepot where no extractor is provided.

Mauser fabricated this experimental piece from a standard Chassepot receiver and barrel, removing much of the rear of the receiver and attaching a yoke across the gap to retain the bolt. This rifle does not incorporate a separate non-rotating bolt head. The bolt handle attaches onto the bolt-retaining lug. An extractor fits to the lower left front of the bolt flush with the bolt surface. A discontinuous groove on the left side of the receiver wall allows cartridge rim override when a round is chambered. No ejector is present.

This rifle cocks on closing. The firing pin extends rearward through the bolt and turns up to form a hook. A catch on the cocking piece engages the sear and compresses the firing pin impelling spring. A halfcock safety can be set from the fully cocked position by applying a rearward pull on the hook, pulling the trigger, and then carefully lowering the hook. At half cock, pulling the trigger impels the firing pin forward, but without sufficient force to ignite the cartridge primer.

Bolt removal and disassembly is somewhat complicated. Remove the two retaining screws fastening the yoke to the receiver. Remove the yoke to reveal a trapazoidal wedge across the split in the receiver. A small projection on this wedge prevents free rotation of the bolt. Retract the bolt over a depressed trigger and sear. The bolt has a rectangular opening on the bottom along the length of the axis. This serves to expose the coil impelling spring and firing pin. By loosening the firing pin retaining screw to release the firing pin, all parts can then be removed through the rectangular opening.

Similar to the Mauser rifles described previously, this rifle also does not chamber a specific cartridge. Breech castings depict a shouldered chamber without throat reaming. The length of the cast from cartridge

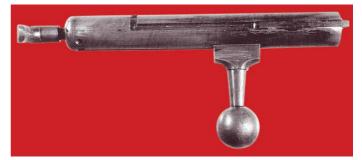


Figure 4.3 Experimental Mauser Rifle with a hook cocking piece. Details of the bolt.

rim to shoulder is 2.25 inches and also the dimension of the open action from bolt face to chamber rim. Consequently, a cartridge of this dimension could not be loaded into the piece. We speculate that this rifle was designed as an alternate to the Chassepot Mauser in the event the French did not favor a design lacking the manual cocking feature and safety.

## Mauser Interim Models 1869/70

The Model 67/69 Mauser had several negative design features that were critical with respect to its utility for military purposes. The split bolt handle construction jams very easily if dirt or snow lodges between the spring and the body of the bolt handle. This spring could break during firing because it serves as a hammer. It is a large, specially tempered part with close tolerances that would present problems in mass production. This rifle also has no safety. In order to eliminate these problems, Mauser investigated a new bolt design. This consisted of using a coil spring impelled firing pin retained on the bolt by means of a nut and bolt arrangement. In addition, a safety introduced on the right upper rear of the receiver could be slid into grooves cut to receive it on the locking lug of the bolt. In these intrerim models, the locking lug bore the bolt handle. Figures 5.1 and 5.2 show two variations. These have the following in common:

- a. Bolt head separate from bolt body, designed to be non-rotating.
- b. A four section bolt; a head, a body, a cocking piece, and a cocking piece nut screwed onto the firing pin. The loose cocking piece has 2mm free play along the firing pin of a cocked weapon.
- c. Disassemble the bolt by rotating the bolt head and separating it from the bolt body. Push the exposed firing pin tip into a soft material such as a wood surface, causing the cocking piece nut to be forced away from the nut. Unscrew and remove the nut. Remove the cocking piece, firing pin and coil spring. This procedure follows that for bolt disassembly of Model 98 type Mausers.
- d. The rifle accommodates the Chassepot bayonet.
- e. The receiver base contains a cam-operated ejector.

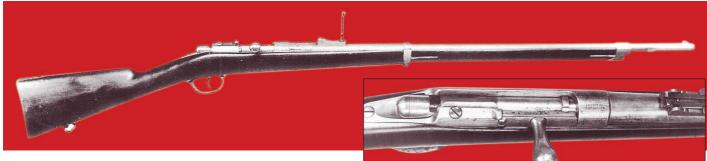


Figure 5.1 Mauser Rifle, Interim Model 1869/70 First Model.



Figure 5.2 Mauser Rifle, Interim Model 1869/70 Second Model.

The two specimens examined had the following differences:

Model #1, marked (W. & P Mauser Brevet) contains an unblued barrel with rifling that spirals to the left (1 turn in 30 1/2 inches). The bolt has an extractor on the left hand side, which slides in a groove in the receiver wall. The safety slide is flush with the upper right receiver wall. This piece cocks on closing, and once fired, must be re-cocked by turning the bolt. Model #2 (unmarked on the receiver ) contains a barrel whose rifling spirals to the right (one turn in 21 3/4 inches). The extractor is on the right side of the bolt and flush with the bolt body. In models previously described, the extractor prevents bolt head rotation via a groove cut in the receiver wall. In this variation, a projection at the bottom of the receiver fits into a slot at the bottom of the bolt head when the bolt is closed. The receiver requires less machining. The safety slide fits in a recessed groove on the outside upper rear receiver wall for smoother functioning. The external appearance of the cocking piece on Model #2 is also noteworthy. It is longer than on the M1871, apparently designed to allow the rifleman to recock the rifle without opening the breech. When tried, this operation is quite difficult to perform but can be mastered with a little practice. Model #1 does not recock in this fashion because no purchase can be made upon the cocking nut. Model #2 has a one-piece cam of simple configuration and cocks upon opening (figure 5.2). Mauser considered both types of cocking (upon opening, or upon closing) very early in the development of the M1871, and adopted the cock-upon-opening option, a feature not to appear again in Mauser rifles until the advent of the M1898 Mauser. Rifle #2 has a polished and blued receiver and barrel with no distinguishing markings. The barrrel bands on this piece appear to be replacements taken from a U.S. M1863 musket since the characteristic "U" stamp is found on each. This leads to speculation that the barreled action might have been restocked in America at some later date.

The difference in the cocking action among Models #1, #2, and the M1871 Mauser deserves some comparison. In the M1871, a lug on the left side of the cocking piece rigidly holds it in place to prevent rotation. This lug projects into a groove on the receiver wall. Only back and forth movement is possible. The "schlosschen" or finger aligned along the bolt in the M1871 serves only as a receptacle for the axis of the flip safety. In Model #1, a lug protruding from the receiver floor prevents the cocking piece from rotating. This cocking cam or lug is integral with the ejector and a part of the trigger assembly (figure 5.3). Turning the bolt causes no cocking action. This occurs only upon closing when the

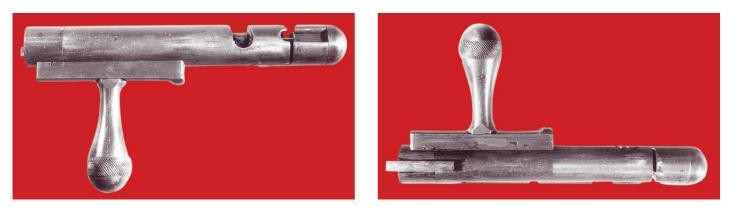


Figure 5.3 Mauser Rifle, Interim Model 1869/70 First Model. Details of the bolt.

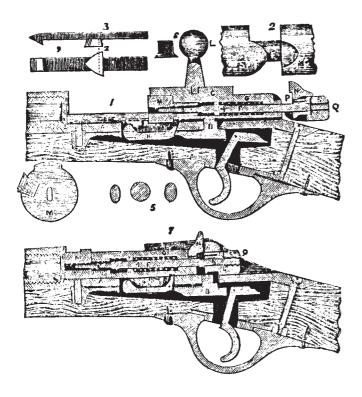


Figure 5.4 Mauser Rifle, Interim Model 1869/70. Illustration from Greener "The Rifle and its Development."

cocking piece bears upon the cocking lug. Interim Model #2 has a "schlosschen" on the bolt, held in place by the split in the top of the receiver to prevent rotation. A circular lug on the inside of the "schlosschen" bears against a cam surface on the rear of the bolt causing the cocking piece to move rearward when the bolt is opened.

Olson discusses the Interim Model, pointing out its extreme rarity; that no patent records exist describing it; and that the Prussian authorities tested it as a candidate small arms system. He goes on to state that some deficiencies were discovered, especially in the safety lock, which the Mausers remedied by developing the well known flip safety. There are, however, published descriptions of precursors of the M1871. Figure 5.4 shows Greener's description and figure 5.5 shows the description in Farrow's compilation. Note in figure 5.4 that the safety catch fits on the cocking piece, rotating on an axis normal to the barrel and working on a spring like an "L-type" flip sight of a rifle. When on safe, it forces between the cocking piece nut and the cocking piece, preventing striking action upon trigger pull. A comparison of the cross section of the models described in the literature with those of Models #1 and #2 shows that Model #1 is practically identical with the described pieces. Both of these have the four-piece bolt, and the same cocking cams, trigger and ejector. Indeed, the only significant distinction noted in the Greener model is in the safety on the cocking

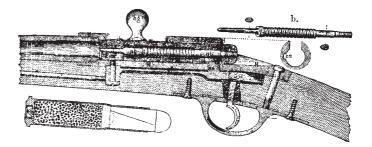


Figure 5.5 Mauser Rifle, Interim Model 1869/70. Illustration from Farrow's "Military Encyclopedia, Vol. II."

nut. Because of the lack of resemblance to the Model 1871, the claim by Greener that his piece was accepted by the Prussian Army is erroneous. Farrow, who published his compilation in 1885, over a decade after the appearance of the M1871 Mauser, states that "an improvement has lately been introduced into the arm for locking the firing pin in case it is not to be fired immediately."

Knowledge of the operation of the various safety devices enables us to reconstruct the events that transpired during the testing of the Interim Models. The slide-type safety is difficult to seat properly; the bolt must position precisely to accomplish this. The L-type safety appears easier to set, but protrudes excessively and easily snags out of position. Evidently both of these safetys had deficiencies, but the L-type offered a more positive feature if it could be made foolproof. The invention of the flip safety rotating perpendicular to the bolt axis, interspersing a semicircle of steel between the cocking piece and the bolt body when in the "safe" position, refined its L-type precursor sufficiently to ensure reliable functioning.

We have no description of the cartridges Mauser used. An old crosssectional drawing of the Norris-Mauser M67/69 shows a short, rimmed, tapered cartridge in the chamber. When scaled to full size, the dimensions are 11 x 42.6, making this an 11 x 43 cartridge. This cannot be verified by fitting trials because cartridges of this type are not available. Norris, however, received Austro-Hungarian privelegiums on 1 November 1867 to improve metallic cartridges for breechloaders, and on 24 December 1867 to improve the Norris-Mauser rifle. One of these experimental cartridges might possibly have fit.

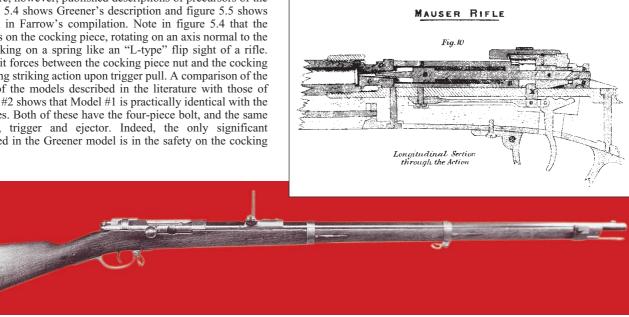


Figure 5.7 Mauser Rifle, M1871.

# Technical Data on the Interim Mauser 69/70

Weapon Designation: First Model, Interim Mauser Rifle M69/70 Origin: Experimental Prototype produced by W. and P. Mauser in 1869-1870. Manufacture: Liege, Belgium Use and Distribution: To demonstrate feasibility Caliber: 0.434 inches (11mm) Cartridge: None specified Weight: 9.4 lbs. without bayonet **Overall Length:** 51.0 inches Barrel Length: 32.375 inches Type of Rifling: 1 twist in 30.5 inches Number of Grooves: 4 Direction of Twist: Left **Operation:** Self cocking upon closing Safety: By left rotation of bolt 1/8 turn from cocked position and locking in place with a slide safety catch on receiver. Sights: Chassepot type sights without optical extensions; ungraduated. Manufacturer's Works: "BREVET DE WP MAUSER" Liege (ELG in a circle) proofs on the barrel.

In any event, the changes introduced after testing the Interim Models show up in the M1871 Mauser. These consist of (1) an increase in the length of the opened action to 3.25 inches (80mm) to accommodate the 11 x 60 cartridge; (2) adoption of the cocking action wherein the receiver wall holds the lug on the left side of the bolt (in the M1871 this portion of the receiver is reinforced); (3) introduction of a screw and washer on the bolt locking lug to prevent bolt removal; (4) introduction of the sideways articulating bolt safety; (5) replacement of the Chassepot sights with a more legible and rugged folding leaf sight; (6) retention of the extractor on the lower left of the bolt body; (7) retention of the right handed rifling with one turn in 21.7 inches; and (8) the adaption of the bayonet lug for a new bayonet shorter than that of the Chassepot. Note that the Chassepot bayonet fits the interim models but not the M1871. Bayonets for the M1871 were manufactured at Oberndorf for a few years in the 1870s.

As the M1871 continued to be produced, it underwent a series of minor product improvements. By 1879, the flat bolt face of the earlier model had been altered to case over the cartridge head, and in the 1880s the extractor was relocated over the top of the bolt. No improvements were patented for the M1871 in the decade after its adoption. Improvement patents begin to appear in 1880 and terminated just prior to the introduction of the M1888 Commission rifle. During this decade, the development of revolvers and repeating mechanisms occupied Mauser's interests.

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Finish: Unblued metal

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- Seel, W., Die Ungestaltung der k.k. Armeegewhre in Hinterlader. Deutsches Waffen-Journal, May 1980, p. 634-639. These privelegiums (17/563-XIX/6 and 17/684-XIX/9, respectively) lasted 1 year. Seel

# Technical Data on the Interim Mauser M69/70

Weapon Designation: Second Model, Interim Mauser Rifle M69/70 Origin: Experimental Prototype produced by W. & P. Mauser in 1869-1870 Manufacture: Liege, Belgium Use and Distribution: To demonstrate feasibility. Caliber: 0.434 inches (11mm) Cartridge: None specified Weight: 9.4 lbs. without bayonet Overall length: 50.375 inches Barrel Length: 31.875 inches Type of Rifling: 1 twist in 21.75 inches Number of Grooves: 4 Direction of Twist: Right **Operation:** Self cocking on closing Safety: By left rotation of bolt 1/8 turn from cocked position and locking in place with a slide safety catch on the receiver.

also tabulates the dimensions of various (at that time) new cartridges but none of these conform to the 11x43R.

 Olson, L. Mauser Bolt Rifles. F. Brownell & Son, Publ., Inc., Montezuma, IA, 3rd Edition, 1976, p.28-30. Olson describes other Mausers derived from the M1871 (e.g., the Serbian M78/80) that are not considered in the present work.

# **Attempts to Develop Repeaters**

It is necessary to set in proper perspective the development of Mauser repeating rifles based on the M1871 action. The state-of-the-art in tubular magazine repeaters of the Winchester and Spencer types was well in hand at the time that the M1871 action appeared. Why then, after reviewing the use of repeating rifles during the Civil War in the U.S., did not the European as well as the U.S. military establishments generate requirements for this type of equipment? Combat developers of the 1870s were well aware of the American experiences as well as those resulting from the Danish-Prussian War and Austro-Prussian War of 1866 and the Franco-Prussian War of 1870-71. Repeaters were considered underpowered weapons incapable of effective long-range fire. For example, the Winchester-Henry rifle fired a bullet propelled by 26 grains, and the Spencer carbine, one propelled by 38 grains of powder. In contrast, the standard service rifles of most nations used 70-90 grains of propellant, an amount more than double that of any cartridge used in repeating rifles.

As of 1871, only two European powers had adopted repeating rifles. The Swiss Army adapted the Vetterli M1869, firing a 315 grain bullet propelled by a 59 grain charge, somewhat lower than the charges used in other military arms. In 1871, Austria-Hungary issued the Fruwirth Carbine, cal. 10.15mm to the National Police (Gendarmerie) and to Tyrolene Sharpshooter Regiments. This weapon fired an underloaded Werndl service cartridge with 23 grains of propellant. The single shot Werndl Rifle M1868 firing a 370 grain bullet propelled by 77 grains of blackpowder was still retained as the Standard A rifle. Use of the Fruwirth was extended to Engineer and other combat support troops in the late 1870's by conversion enabling use of a Kropatschek action that featured a Mauser type safety.

The attitude towards requirements for magazine rifles during the late 1860s is also reflected in the conclusions of the British Committee on Small Arms: "The Committee was aware that occasions might arise when a magazine rifle would be useful, but considering . . . the great rapidity of the Martini-Henry and other single loaders, they were not prepared to recommend a magazine arm for general adoption."

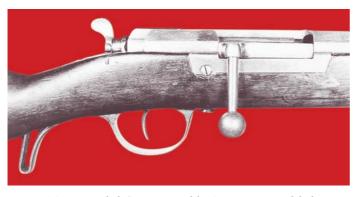


Figure 6.1 Kropatschek Conversion of the Austrian Früwirth bolt action Carbine.

Let us now turn our attention to the Battle of Plevna between Russian and Turkish Armies that occurred from July-December 1877. Two authors have claimed that the lessons learned from this engagement stimulated the development of repeating rifles. In planning, it became obvious to the Turkish forces that an assault must be sustained and that no one rifle system then on hand would meet the requirement to inflict casualties at long ranges and still break up assaulting formations at close-in ranges. Consequently, they opted for a force structure where soldiers used two rifles. As an alternative, the Turks could have attempted to repulse the assault at close range by using repeaters, but without long-range rifle fire inflicting sufficient casualties, they would have then been forced to repulse the final assault with bayonets. Smith points out that the Turkish forces inflicted some 30,000 Russian casualties and implies that a significant number of these resulted from the fire of Winchester-Henry repeating rifles at less than 200 meters.

From a tactical viewpoint, the large number of casualties sustained during this and two subsequent assaults forced the Russians to change their mode of attack and place Plevna under siege. Subsequently, however, the Turkish forces surrendered, so the use of the repeating rifle was not a decisive factor on the outcome of the battle. From a logistics viewpoint, Plevna was a nightmare. Two ammunition systems were required, and the Winchester action was delicate and required good maintenance. From a doctrinal standpoint, the Turks had little faith that they could fire their single shot rifles rapidly enough to break up an assault, a philosophy in contrast to that advocated by the British Army at that time. If the Battle of Plevna taught Combat Developers anything, it was that armies needed a fast firing, powerful, reliable rifle useful at both long and short ranges. In practice, that meant a rifle had to be built around a substantial cartridge, and not vice versa.

The British Army in March 1883 appointed a Committee to reexamine the issue of introducing a magazine rifle, and after having weighed carefully the advantages and disadvantages, concluded that the balance was in favor of a magazine arm. Subsequently, they recommended adoption of the improved Lee System.

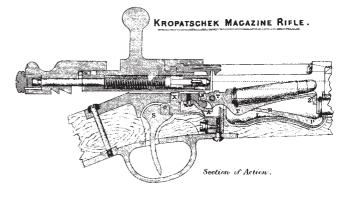


Figure 6.2 Kropatschek Rifle M1878.

By 1878 the OEWG had developed a repeating rifle by fitting a tubular magazine feed under the barrel of a M1871. In addition, a selector or cut-off was incorporated that enabled the shooter to fire either single cartridges or in a repeater firing mode. In 1879, the French Navy adopted this kind of selector system in the M1878 Kropatschek rifle (Figure 6.2). Four years later Mauser introduced its tubular repeater (D.R.P. 15202 dated 16 March 1881). The underslung tubular magazine, with a cartridge lifter that provided the mechanism for repeated loading, constitutes the common feature in both of these repeaters.

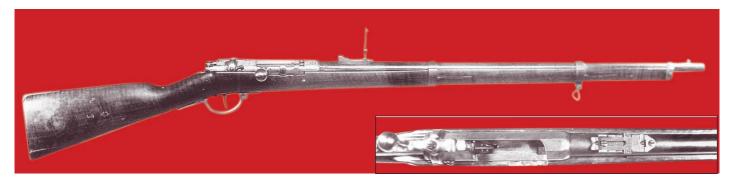
D.R.P. 20738 (7 May 1882) and D.R.P. 30035 (30 March 1884) further elaborated this concept, both of which contributed to the evolution of the Mauser M71/84 rifle. In this series of experimental models, a selector (cut-off) on the left side of the receiver provided an option of single or repeated firing to the user.

Most significant in the development of Mauser repeaters, much effort was devoted to fitting the M1871 with external magazines. This type of retrofit offered the following advantages: (1) easily fabricated, cheap sheet metal magazines instead of large quantities of M1871 rifles reworked into tubular repeaters; (2) when using repeaters, the rifleman was never certain as to how many rounds he had expended, so the external magazine with cut-away walls gave a ready count of the reserve, a feature that was expected to appeal to the user.

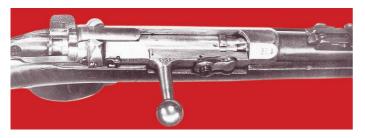
A second significant fact is that external magazine development commenced after completion of development of the M71/84. D.R.P. 41375 (1 May, 1887) describes the first external magazine for use with the M1871 rifle.

A third significant fact is that the external magazine represents an evolutionary step from the tubular magazine to the internal magazine or charger system. This latter system trades off the capability of the rifleman to count his unexpended rounds for improved reliability in weapon function and decreased bulk about the receiver.

Mauser focused on three types of external magazines. The first type aligns the cartridges one on top of another and feeds down into the receiver by gravity. Patents 41375 and 43073 (18 October 1887)



Figures 6.3 and 6.4 Experimental Mauser Repeating Rifle with buttstock magazine.



This prototype of the Mauser M71/84 is described in detail.

exemplify this. D.R.P. 45561 (18 April 1888) exemplified a second type in which a magazine containing a column of cartridges fits into the rifle from below. In this case the bottom of the receiver is cut to receive the magazine, requiring much machine work. A third type, not patented, is a wrap-around or semi-circular magazine that fits under the receiver.

Mauser's first approach to internal magazines adapted the tubular Winchester type to the M1871 rifle. The first type, described in D.R.P. 15202 (16 March 1881) has been mentioned previously. The second and most successful type is the straight column charger. Chronologically, Mauser patented this innovation in Austria-Hungary (Patent 39/609- 8 October 1888). This innovation was so important that patents were taken in seven European countries and in the USA. Internal magazines based on the Mannlicher rotating system also were investigated, but never patented. A fourth known type is based on feed from a tube in the buttstock, as in the Spencer carbine.

Figures 6.3 and 6.4 show a specimen of this type. The piece was made by rebarreling a M1871 Mauser action with a cal. 43 barrel, which was not chambered to accommodate the 11mm Mauser cartridge that had five grooves. A cast of the chamber indicated oversize rifling for the 11mm cartridge, and in addition shows rough tool marks along the lands and grooves as if someone had intended to enlarge the bore. The chamber has straight sides and is about 7mm shorter than the case length of the 11mm cartridge. No throat reaming is evident.

The bottom of the receiver is cut through at an angle leading down into the buttstock. A tube is fitted in the buttstock containing a linked cartridge lifter or conveyer. This runs under the barrel into the portion of the stock between the receiver and the muzzle, which is kept under spring tension. Manipulation of the bolt causes the links to move forward, feeding the cartridges into the receiver. Once in contact with the bolthead, they are seated in the chamber as usual.

This model has other features of considerable interest. The bolt stop washer has been replaced with one of longer dimension, and the bridge has been cut back further to allow this special bolt stop to be accommodated. In this way the bolt can be retracted further back, in contrast to the M1871 or the M71/84, to facilitate feed from the receiver floor. In addition, a small lug fits at the side of the bolt head to provide an extra locking lug in addition to the main one. The large amount of handwork in the receiver and throughout the stock indicates that this is an experimental piece, probably a breadboard, prepared to investigate

the possibility of converting the M1871 to a repeater without infringing on the 1882 patents for the Mauser M71/84. This piece cannot unequivocally be attributed to Mauser/Oberndorf, but is of interest because it shows that, at that time, someone had considered the possibility of buttstock magazines for the M1871 Mauser.

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#### The Kropatschek Mauser M1886

Just as the 1870s saw the introduction of single shot and repeating bolt action rifles, the mid-1880s saw the introduction of small caliber smokeless powder cartridges and metal-jacketed bullets. Portugal adopted the M1885 Guedes rifle and France the M1886 Lebel. Germany did not adopt smokeless cartridges until 1888 in the Commission rifle, and Austria-Hungary adopted the 8 x 50R smokeless cartridge in 1890. Earlier Austrian rifles firing the 11mm cartridge were rebarreled to handle the new 8 x 50R cartridge.

Mauser began experimenting to adopt his action to handle these smaller cartridges during 1886-1888. The M1888 Mauser resulted and chambered a caliber 7.65 smokeless cartridge. Olson states that "this (M1888) rifle represented a significant development because it was the first Mauser of relatively small caliber, and the first to handle smokeless powder ammunition." Actually it was not the first Mauser. It brought the Mauser Werke out of the blackpowder into the smokeless powder age, enabling it to compete with firms that already had transitioned. In 1886 the OEWG introduced a product-improved version of the M71/84 rifle (Figure 7.1). Chambered for the 8 x 59.9R cartridge in Portuguese service (originally blackpowder but subsequently loaded with smokeless), it incorporated the Kropatschek fire-selection mechanism, which functions more smoothly and reliably than that of the M71/84. The rifle, designated the M1886, was adopted by Portugal as a replacement for the single shot Guedes M1885. The external differences between the M71/84 and the M1886 Kropatschek are in the poitioning of the fire-selection or cut-off levers and the cleaning rod. In the former, the cut-off is on the left side of the receiver. In the M1886 it is on the right side. The tubular magazines in each rifle preclude positioning a cleaning rod in the usual place under the barrel. In the M1886 the cleaning rod is positioned on the left side of the stock.

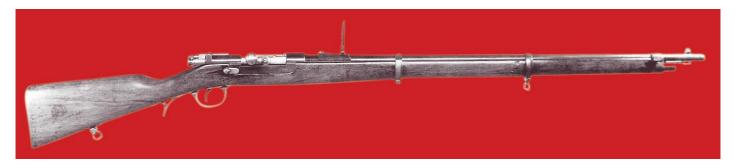


Figure 7.1 The Kropatschek Rifle M1886 produced by the Austrian Arms Co., for Portugal. This rifle featured a handguard on the barrel and a ramrod fitted on the side which the Mauser M71/84 lacked.

The cut-off of the Kropatschek functions more smoothly and reliably than that of the M71/84. In the M71/84, once the bolt is withdrawn, depressing the cartridge lifter forces the selector lever towards the butt. In this position it is impossible to replace the bolt into the receiver. This difficulty is remedied only by disassembling the piece and pushing the lifter upwards from the bottom of the receiver. Additional differences exist in the cam action of the bolts. The M71/84 uses the lug positioned on the left rear of the bolt to bear upon a recess in the receiver wall for cocking. The Kropatschek M1886 utilizes the projection of the cartridge lifter hinge from the receiver floor, which contacts a cam recess on the underside of the bolt, for cocking. In its cocking action, the Kropatschek mimics the cocking of the M1869 Interim Mauser.

It is noteworthy that the upper barrel handguard came into being about 1889-1890. Some Kropatschek Mausers with this feature are designated as the M1886/89. Oberndorf Mausers did not exhibit a handguard until the advent of the M1890 Turkish rifle, and this feature was not on the service rifles of the major powers of that time (e.g., the Lee-Metford; the French M1886; the Austrian M1888; the German Commission rifle, etc.). The feature of the side-positioned ramrod of the Kropatschek also was incorporated in the Turkish Mauser M1887. In any event, the handguard was a sufficiently desirable feature of repeating rifles to warrant inclusion in most military arms developed during the 1890 time-frame.

Portugal also issued the Kropatschek M1886 as a short rifle and as a cavalry carbine. Table 7.1 shows data on this series.

To say that the impact of the Kropatschek rifles on the small arms market jarred the Mauser Company is an understatement. The Kropatschek M1878 pre-dated the M1882 by four years; and the Kropatschek M1886 pre-dated the M1888 Mauser by two years.

It can thus be concluded that the OEWG more aggressively initiated innovations in small arms during those times.

### M1871 Short Action Rifle

The well known success that the Mauser Firm enjoyed as a consequence of introducing the M1871 action rifle resulted in the firm expanding its manufacturing capabilities in the last two decades of the 19th century to handle large military contracts for firearms. The period between 1880-1886, when the huge Turkish contracts for repeaters were being negotiated, found the factory in a slack time. Mention has already been made of the activities then in progress to develop repeaters, magazines, and revolvers. Another concurrent development adapted the M1871 action for sporting use. The 11mm Mauser cartridge is quite long, and with the advent of the smaller smokeless cartridges, its appeal to civilian users would be minimal. The availability of powerful smokeless cartridges to sportsmen preceded the availability of strong actions to handle them. This led to the development of weaker cartridges (as exemplified by the 8.15 x 46R) that the M1871 action

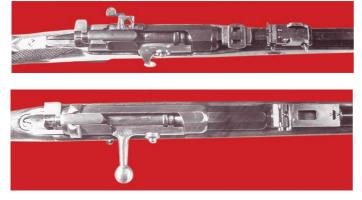


Figure 8.1 A typical Mauser M71 Rifle Short Action compared with an M1871 Rifle Standard Action.

could handle. The smaller size of these cartridges did not require the large M1871 action, so Mauser developed a small-size M1871 action. Figure 8.1 shows a rifle with such an action. This piece is a *schutzen* weapon chambered in 8.15 x 46R for target shooting. The components, unequivocally of Oberndorf origin, bear the markings "Gebruder Mauser & Co." on the barrel. Note that Wilhelm Mauser died in 1882, and in 1884 the factory changed its name to Waffenfabrik Mauser A.G. Because the 8.15 x 46R cartridge appeared after 1890, the illustrated weapon was fabricated around that time using older barrels manufactured during 1880-1884. The action manufacture date cannot be fixed with any exactitude; the factory might have made these short actions well into the 1890's to satisfy civilian shooters. The only other clue to the date of manufacture may be derived from the crown B and U proofs on the action. This would date the piece after 1891 when the use of these marks was required by law.

Model 1871 short actions are comparatively rare due to the availability of M1888 (commission) military actions sold as surplus after adoption of the M1898 Mauser and the introduction of the Mauser M1898 action into commerce in the first decade of the 20th century. The M1888 (commission), M1898 and Austrian Mannlicher actions, all repeaters, and all able to handle the powerful smokeless cartridges, displaced the M1871 action from the commercial market.

### The End of the M1871 Rifle

It is characteristic of all major weapons systems that they undergo a history of development, evolution, and death much in the manner of living things, which is known as the Life Cycle. The M1871 rifle was no exception to this rule. Those rifles that preceded and followed it, but still possessed essentially the same action, all represented some modification of the basic M1871 action. We can, for sake of illustration, divide the Life Cycle of the M1871 rifle into the following periods of time:

1862-1863	concept formulation
1863-1867 🔍	
1867-1869 >	three well-defined development stages
1869-1871	
1872-1887	product improvement stage
1890-1910	conversion stage
after 1910	phase out stage

We have pointed out in previous chapters that both the Dreys and Chassepot rifles strongly influenced the development of the M1871 action. The last Dreyse pattern was adopted in 1869, and sometime during the 1862-1863 timeframe Mauser made an analysis of its faults and devised a concept to correct them. From 1863 to 1867, the development of prototypes such as the Chassepot Mauser, the Norris Mauser, and the Mauser with the hooked cocking feature were undertaken. The concept was being explored. Crystallization of the idea took place in 1867-1869 during development of the interim models. The M1871 rifle could then be considered as in an advanced stage of development.

The engineering development phase from 1869 to 1871 ended with the adoption of the rifle as a standard by the German Army. Those rifles developed during 1872 to 1887 offered no innovative features that could not have been foreseen as a natural consequence of the state-of-the-art, and represent a series of product improvements. These improvements sought to offer some advantage to the producer or the user. The user got improvements in capability and safety as follows:

- a. Exterior magazines provided the user with increased firepower, but the method by which this was achieved was not fully satisfactory.
- b. Tubular magazine the development of the M71/84 gave the user increased firepower with more reliability.



Figure 9.1 Mauser Rifle Dodateau Conversion for Uruguay.

- c. Caliber reductions the introduction of smokeless powder in the Austrian M1886 Mauser doubtlessly provided an augmented capability in that the caliber of the cartridge, and consequently its weight, could be diminished. Perhaps an increase in accuracy at longer ranges resulted (i.e., above 500 meters), but this proved an insignificant improvement in tactical capability after the introduction of the machine gun. The military Mausers developed at Oberndorf employing the M1871 action were all black powder rifles, yet their caliber was optimized only at the twilight of their utility, ending with the 9.5mm Turkish Mauser M1887. No significant savings in weight over the 11mm cartridge resulted. This improvement only offered better accuracy through improved bullet trajectory.
- d. Improved bullet lifting mechanism selector in the Austrian Kropatschek M1886, this feature worked more smoothly and offered reliability in cartridge feed, but this was not a Mauser company development.

Product improvements also were advantageous to the manufacturer. Minor design changes enabled Mauser to cut manufacturing costs, and continued changes in calibers and reliability provided opportunity to compete more successfully with commercial rivals.

The product improvement stage for the M1871 type action ended around 1889 due to newer inventions that were just beginning their Life Cycles. The attitudes of governments now changed with regard to rifles based on the M1871 action. They were, however, in possession of large quantities of these in their inventories. As newer models were adopted, the German government sold off their older rifles. Other foreign powers purchased these, converting them to other calibers by rebarreling. The Dodateau-Mauser conversion (Figure 9.1) is one example. This item, designated as the Uruguay, is unique in that it fired a special bottleneck cartridge with the following characteristics:

Charge:	2 grams smokeless powder
Length:	75mm
Muzzle velocity:	715 m/sec
Caliber:	6.5mm
Case length:	6.5 x 53-1/2

Another example is seen in the conversion of the Turkish M1887 Mauser at Steyr by rebarreling to handle 8 x 50R Austrian Service ammunition. This piece is of interest because it represents a regression in which a repeater was converted to single shot by plugging the tube under the barrel with a dowel. (Figure 9.2)

Historically, the Mauser M71 never saw substantial battlefield action. It was adopted after the Franco-Prussian War (1870) when Germany enjoyed a relatively long period of peace. M71 Mausers made on contract for other nations were more widely used. The Chinese used contract M71 rifles in the Sino-Japanese War in 1894, again in the Boxer Rebellion in 1902, and in the subsequent revolution in 1911. Serbia and Turkey used Mausers based on the M71 action in the Balkan Wars of 1911 and 1913 and during World War I. German troops utilized the M71/84 while participating in quelling the Boxer Rebellion in China in 1902. German home-guard units in World War I used M71/84 rifles. In Ireland, some Model M71 rifles appeared in the hands of Irish nationalists during the Rebellion of 1916, and were designated as Howth rifles from their port of entry into Ireland. Perhaps the last German combat use of the M71/84 occurred in the latter days of World War II when occasional Volksturm units offered the advancing Allied armies ineffective resistance when using this arm. The fate of the majority of the M71 and M71/84 rifles resulted in conversion to other calibers or sale as military surplus.

In retrospect, the self-cocking feature and the flip safety of the M1871 Mauser are the only ones of technological significance. The Mauser concept was not selected by the French in adapting the Chassepot to fire metallic cartridges, and was never used in any conversion of captured Chassepots by the German Army. Mauser was also preempted in tubular repeater development by the OEWG in 1878, and in adapting the M1871 action to fire smokeless propellant cartridges again by the OEWG in 1886. We attribute the success of Mauser to the two technological improvements cited above, which he promoted persistently and that the German Army finally adopted in the M1871. Even considering the appearance of the Gras, for several years Mauser experienced no serious competition against the M1871. The M1871 had a three-year lead over the Gras and was of better quality. When repeaters becoming increasingly important, the Mauser firm slid into trouble around 1880. However, the development of the M71/84 and subsequent adoption by the German Army, along with the large contract



Figure 9.2 Turkish Mauser M1877 Rifle Conversion to Single Shot.

for M1887 rifles by Turkey, kept the firm prosperous during that decade.

The capability provided by the M1871 and M71/84 rifles was negated upon introduction of the M1886 Lebel and its smokeless ammunition. The impact of the appearance of the M1886 resulted in the recommendations of the Spandau Commission for Germany to adopt a new rifle containing the features of the Mauser bolt but utilizing von Mannlicher's magazine system developed to fire a rimless smokeless cartridge. The Mauser Company did not benefit from this decision, but survived economically because of newer designs that generated large contracts from foreign governments.

Beginning with the Mauser-Norris Model 67/69 Rifle, followed by the interim forerunner of the Mauser Model 71 Rifle, the Mauser rifle made its impact upon the world—an impact that only became greater with time. The strongest, most successful bolt action rifle ever developed, it could hardly be improved upon today.

The Model 71 Rifle became the standard rifle of Prussia, and was subsequently adopted by the other German states, thus holding the honor of being the first rifle used by the new German Empire. In 1876, foreign orders for the Model 71 opened up the export market, helping to make the Mauser rifle the most important weapon in the world.

Magazine rifles were the way of the future, with many inventions vying for the easiest method of providing additional cartridge capacity. The Model 71/84, with its tubular, under barrel magazine, was Mauser's answer. However, this was developed as the black powder era was coming to an end, and when France developed and adopted a rifle in 1886 using a small caliber, metal-jacketed bullet, propelled by smokeless powder, it caused other nations to follow in this direction.

Recognizing the superiority of this French development, Germany hurriedly devised a rifle designed by a commission, incorporating Mauser and Mannlicher design features, as well as some of the commission's own misguided ideas. Known as the Commission Rifle Model 1888, it was a victim of the old adage, "Too many cooks spoil the soup," and was fraught with design weaknesses and shortcomings. This was adopted in 7.92 x 57mm on 12 November 1888, which later led to the Model 1889 rifle, adopted by Belgium as standard for its armed forces. This was followed by the Turkish Model 1890 Rifle. The start of trade with South America in 1891 introduced the Model 1891 rifle, which ultimately saw usage throughout the South American continent. In 1892, Mauser made many improvements to the Model 1891 design, and a major step in the development of the Mauser rifle occurred with the introduction of the Spanish Model 1893 Rifle one year later. Slight variations of this basic model were created over the years for individual nations wishing to incorporate their own ideas into the design.

Swedish Mauser rifles were developed in 1894, with the weapons being produced under contract in Sweden. In 1896, Mauser began experimenting with various designs meant to replace the Model 1888 Rifle system. One experimental weapon manufactured for troop testing was the Model 1896 Rifle in 6 x 58mm. After variations of many designs were tested, the German Rifle Testing Commission decided to adopt a new, improved Mauser rifle in caliber 7.92 x 57mm. This was the historic Model 98 Rifle. The Model 98 Rifle was officially adopted by Germany on 5 April 1898. This rifle was to become the most widely used and one of the most famous rifles in the world. The Model 98 Rifle was subjected to many and varied design alterations over the years, while still retaining the basic system that is integral to the rifle. The first Model 98 Carbines were introduced at about the same time as the Model 98 Rifle; they were used to some extent in the Herero rebellion in German South-West Africa, and to a lesser extent in World War I, but due to the shortness of the carbine barrel and its inherent violent muzzle blast, the weapon never gained favor with the troops. In 1908, a carbine with a 23.62-inch barrel was introduced as the Carbine 98AZ, but it was redesignated the Carbine 98a (Kar98a) following World War I. This also helped to differentiate it from the Model 98b Carbine introduced during the time of the Weimar Republic.

Experiences gained from use of the Gew 98 during the first world War were later incorporated in design changes during the years leading up to World War II. One of these changes was the use of a tangent leaf rear sight, graduated to 2000 meters, to replace the old-style "Lange Vizier" sight of the Model 98. Many of the original Model 98 Rifles were remodeled into the Model 98b. This was done by bending the bolt handle and cutting a recess in the stock to accommodate the bolt knob, removing the parade hook on the upper band, adding the tangent leaf rear sight, and cutting a sling slot in the buttstock to receive a side mounted sling. Many Kar 98b Carbines were also manufactured from new parts, and are so stamped on the side rail. Another improved version was the Model 98k, a short rifle that was the standard weapon for the German armed forces during the second world war. Development commenced in 1924; however, full production was started in 1935 when Hitler ignored the Armistice Commission and put German industries on a path to war.

The 98k proved a rugged weapon for war, sustaining the German soldier through many a battle. In the hands of the Yugoslavs, Czechs, Israelis, Norwegians, Danes, and Chinese, the 98k soldiered on after the defeat of Germany. To this day, 98k carbines are to be found in many small brush wars and skirmishes as second line weapons. Many different Mauser rifles have been based on the Model 98 Rifle, and these are covered under the sections on the various countries in this book.

**MAUSER-NORRIS MODEL 67/69:** While employed at the Wuerttemberg Royal Armory, Paul Mauser developed a rifle based upon the principles of the Dreyse needle gun. With his improvements incorporating a self-cocking mechanism that included primary extraction, and eventually a firing pin instead of a firing needle. This turn-bolt operation became the key-stone of all future Mauser boltaction rifles. Tested by the Austrian War Ministry, the rifle was favorably received, but not accepted as the Austrians had just adopted the Waenzl system of conversion of muzzleloaders to breechloaders.

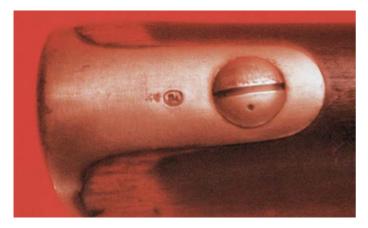
Shown to Samuel Norris, the European agent for Remington Firearms, Norris felt that the turn-bolt action of the rifle would be ideal for the conversion of the French Chassepot needle gun to a metallic cartridge rifle. He immediately went to Oberndorf and formed a partnership with the Mauser brothers, wherein he, Norris, would provide the financing and the Mauser brothers would provide the



Full-length view of the Model 67/69 Mauser-Norris Rifle. This is the original Patent Model. (Sprinfield Armory Museum)



Top view of the receiver area of the Model 67/69 Mauser-Norris Rifle; note the mainspring incorporated as part of the bolt handle. (Springfield Armory Museum)



Belgian proof marks os the tang of the buttplate of the Mauser-Norris Rifle. (Springfield Armory Museum)

technical know-how. In 1867, the partnership moved to Liege, Belgium, where the brothers continued to develop their rifle, while Norris failed in his attempts to convince the French that this was the perfect system to convert their Chassepots to a metallic-cartridge rifle, whereupon, Norris broke his contract with Mauser brothers, causing them much financial distress. The brothers returned to Oberndorf, Paul in 1869 and Wilhelm in 1870, where they continued developmental work on their rifle.

Although only experimental, this rifle used a non-rotary bolt head, which protected the heads of paper cartridges from friction and damage while locking the bolt, and also allowed for a non-rotary seat for the extractor when metallic cartridges were introduced.

After much work, and another interim model, the design evolved into the Model 71 Rifle which was officially adopted by Prussia.

**GERMAN MODEL 71 RIFLE:** Officially adopted by Prussia on 14 February 1872, the Model 71 Rifle was also accepted by the other German states, making the Model 71 the standard rifle for the German Empire. Bavaria clung to the Werder rifle until 1877, at which time



Close-up view of the markings "BREVET DE W. & P. MAUSER" on the extractor of the Model 67/69 Mauser-Norris Rifle. (Springfield Armory Museum)

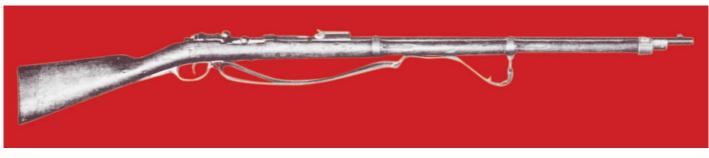
standardization became complete. The Model 71 had a long and illustrious history, serving as a robust and dependable rifle for the German soldier. In the German army, first world war service of the Model 71 Rifle was limited to reserve troop use on the continent.

China purchased large quantities of the Model 71 Rifle, which, along with the Chinese version of the German Model 1888 Rifle, was the rifle of choice by the fanatical Chinese "Boxers" during the Boxer Rebellion in 1900. Sold to the Transvaal State in South Africa, the Model 71 Rifle was in the hands of the Boers at the time of the Jameson raid. The poet Erskine Childers, with his wife and others, secretly transported fifteen hundred Model 71 Rifles and forty-nine thousand cartridges from Germany to Ireland aboard his yacht, The "Asgard." This cargo was landed at Howth Harbor, Ireland, 26 July 1914, and from that time on, the weapons, which were used in the Easter Rebellion of 1916, were called "Howth Mausers" by the Irish.

The Model 71 also saw service with Honduras, Japan (used for troop testing), and Uruguay. After the Model 71 Rifle was declared obsolete, large quantities were sold to surplus military equipment dealers, such



Proof markings on the right side of the chamber of the German Model 71 Rifle.



Full-length view of the German Model 71 Rifle.



Left full-length view of the German Model 71 Rifle.

as Adolph Frank Export Gesellschaft of Hamburg, Germany and Francis Bannerman & Co., 505 Broadway, New York.

Stocked almost to the muzzle with a straight-wristed stock, the Model 71 Rifle does not have an upper hand guard. The barrel is held to the stock with three barrel bands, the lower two secured by springs, while the upper band, held by a screw, incorporates a bayonet lug on the right side for the Model 71 bayonet. The middle barrel band has a swivel at the bottom, with another mounted on the front of the trigger



Marking of the royal arsenal at Amberg on the top flat of the chamber, with the serial numbers on the left flats of the chamber and the receiver of the German Model 71 Rifle.

guard. The Model 71 Rifle is profusely proofed, with practically every small component being serially numbered to the weapon.

Length: 52.90"; Weight: 10.1 lbs.; Barrel: 33.56"; Caliber: 11 x 60mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: Single shot; Sights: V-notch rear sight adjustable to 1600 meters on large leaf, 350 meters on the small leaf, and 250 meters on standard. Remarks: Name of manufacturer over the chamber, serial numbers, as well as the model designation, on the left flat of the chamber and the receiver. Proof marks will be found on the right rear of the receiver.



Script "A" on the rear of the brass trigger guard of the German Model 71 Rifle.



Left rear flat of the receiver showing the model designation of the German Model 71 Rifle.



Year of manufacture on the right rear receiver flat of the German Model 71 Rifle.



The upper barrel flat of a Mauser Model 1871 Infantry Rifle made on contract for the German Government at "Oesterr.Wafffb.Ges.," the Oesterreichische Waffenfabrik Gesellschaft, or Austrian Arms Company of Steyr, Austria.



The chamber and receiver flats of the Model 71 Jaeger Rifle. This specimen is unusual in that, while the German markings are still visible, it appears to have been refurbished in Belgium (post WW I?) and Belgian proof marks applied. (Henry Wichmann collection)



Full-length view of the Model 71 Jaeger Rifle. (Henry Wichmann collection)

**GERMAN MODEL 71 JAEGER RIFLE:** The Model 71 Jaeger intended for use by Light Infantry Troops (Jaegers), who were picked for their superior marksmanship abilities; the rifle was designed to meet the specifications of the Jaegers, and was also issued to Engineers, Fortress Troops and the Navy. Serving long and well with the troops, these rifles were eventually declared obsolete and consigned to arsenal storage for second-line use. Eventually, they were withdrawn from storage, and, in a slightly modified form, were issued to Schutztruppen in the German colonies.

The Model 71 Jaeger Rifle was the standard weapon of the German Askari Troops in German East Africa, Togo, the Cameroons, and New Guinea. Eight of the fourteen field companies of German Askaris in German East Africa were armed with the Jaeger Model 71 Rifle, which had been found to be quite adequate for use in controlling restless natives. With the advent of World War I, the black smoke thrown out by the Model 71 Rifle was a dead giveaway in the jungles. In 1915, the German blockade runner "Rubens," renamed "Kronberg," was sunk close to the East African shore by the British. German troops were successful in salvaging eighteen hundred Model 98 Rifles and three million 7.92 x 57mm cartridges. Later, ammunition shortages forced the Model 71 Jaeger Rifle into service once again. It wasn't until July 1918 that the Model 71 Jaeger Rifle was completely replaced.

It is an interesting note that during World War I, the German Model 71 Jaeger Rifle was bored out to accept incendiary ammunition, carried aboard aircraft, and fired at observation balloons on the Western front.

The Model 71 Jaeger Rifle differs from the Model 71 Rifle in that it is shorter, making it handier to use, as well as resulting in the need for only a lower and upper barrel band. A swivel is attached to the bottom of the lower barrel band, and there is another swivel at the bottom of the buttstock. The trigger guard is extended at the rear and so shaped as to provide a pistol-style grip. The Jaeger Model 71 is also 1.10 pounds lighter than the Model 71 Rifle. The muzzle is stepped in order to accept the wide variety of bayonets available.

Length: 48.70"; Weight: 9.0 lbs.; Barrel: 29.44"; Caliber: 11 x 60mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: Single shot; Sights: V-notch rear sight adjustable to 1600 meters on large leaf, 300 meters on small leaf, 200 meters on standard. Remarks: Name of manufacturer over the chamber, serial numbers, as well as the model designation, on the left flat of the



German East African askaris on parade with German Model 71 Jaeger Rifles, C. 1914.



Full-length view of the German Model 71 Carbine.



Left full-length view of the German Model 71 Carbine.

chamber and the receiver. Proof marks are on the right flats, with the year of manufacture on the right rear flat of the receiver.

**GERMAN MODEL 71 CARBINE:** The Model 71 Carbine, adopted on 31 August 1876, was developed for issue to dragoons, hussars, and lancers to replace the captured and converted French Chassepot Carbines with which they had been armed. Specialized troops, such as line-of-communication and supply troops, were also equipped with the Model 71 Carbine. Fully stocked to the muzzle and lacking an attachment for bayonet, the carbine has a bolt handle that is bent down almost flat to the stock. The stock is straight wristed as in the Model 71 Rifle. The barrel is retained by a single spring-retained barrel band with a swivel attached at the bottom. Another swivel is at the foot of the buttstock. The upper end of the barrel is held by a nose cap with front sight protectors. Those carbines produced for Prussia were made by Spangenberg and Sons, Suhl, and at Steyr, Austria. Mauser Works manufactured the carbines for the state of Wurttemburg.

Length: 39.30"; Weight: 7.30 lbs.; Barrel: 20.0"; Caliber: 11 x 60mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action;



Model designation on the left receiver side rail of the German Model 71 Carbine.



Chamber and receiver markings on the German Model 71 Carbine. Note that this carbine was produced for Prussia by the firm of Spangenberg and Son, Suhl.



German East African askaris firing from behind a post shelter, C. 1914. Note the relatively complete field equipment for each man. (Die Deutschen Kolonien)

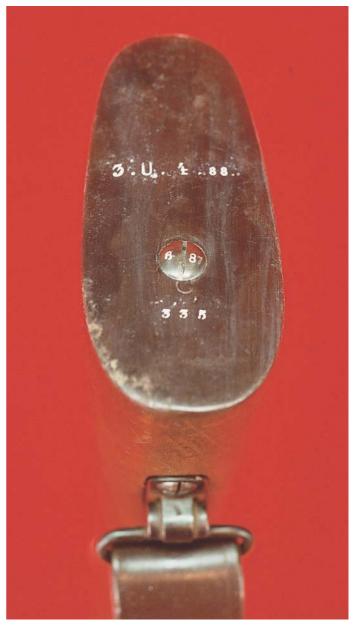


German East African askari from the 11th Field Company on parade, equipped with the Model 71 Jaeger Rifle. (Die Deutschen Kolonien)

**Feed:** Single shot; **Sights:** V-notch rear sight adjustable to 1300 meters on the large leaf, 300 meters on the small leaf, 200 meters on standard. **Remarks:** Model designation on the left rear receiver wall, proofing, caliber designation, serial number, and manufacturer's markings on the receiver and chamber flats.

**GERMAN MODEL 71 SHORT RIFLE:** The German Model 71 Short Rifle is somewhat of a minor mystery. It is believed that the rifle was never manufactured to this configuration, but was arsenal refurbished as a short rifle. There are no special markings signifying that this is a special model weapon. The bolt handle, as with the Model 71 Carbine, is turned down. The short rifle is fitted with a lower and upper band, with a bayonet lug on the right side of the upper band.

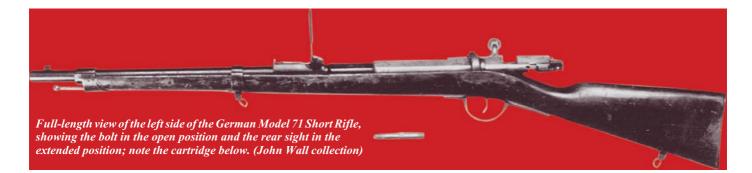
**GERMAN MODEL 79 GRENZ-AUFSICHTS-GEWEHR** (G.A.G.) **RIFLE:** This weapon is longer than the Model 71 Short Rifle and somewhat shorter than the J 71 Jaeger Rifle. Manufactured by Haenel, Suhl, the rifle is marked "G.A.G." and "Mod: 79" on the left receiver side wall. These rifles were issued to the Customs Service, who



Buttplate markings on the German Model 71 Carbine.



Full-length view of the German Model 71 Short Rifle.





*Regular G 71 markings on the left receiver side wall of the German Model 71 Short Rifle.* 

acted as Border Guards. Full stocked almost to the muzzle, there is a short stud on the upper band that extends to the end of the muzzle. The upper swivel is fitted midway between the rear and front sights through the stock in the manner of Dreyse stock fittings, with the lower swivel approximately six inches from the toe of the butt.

Length: 44.635"; Weight: 7.0 lbs.; Barrel: 24.75"; Caliber: 11x37.5mm, about half the length of the regular issue 11x60mm

cartridge; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** Single shot; **Sights:** Double folding leaf rear sight. **Remarks:** Prussian line eagle over the initials "C.G.H./SUHL" over the chamber, with the initials "G.A.G. Mod:79." on the left side rail, with the date of manufacture on the right side rail.



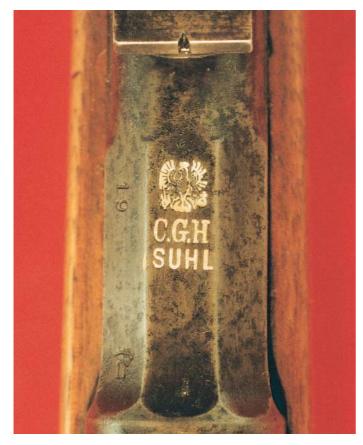
Right side wall stamping indicating date of manufacture of the German Model 79 Rifle. Note the serial number 19.



Full-length view of the German Model 79 Rifle.



Left side wall stampings on the German Model 79 Rifle, indicating "G.A.G." and "Mod:79."



The chamber markings on the German Model 79 Rifle, showing the Prussian line Eagle over the initials of C.G. Haenel, Suhl.

**GERMAN MODEL 71/84 RIFLE:** With many nations adopting magazine rifles in the 1880s, the Germans were catapulted into the race. Paul Mauser had been working on the development of a magazine-fed rifle since 1880, arriving at two different versions of a tubular feed magazine rifle that were demonstrated for the Kaiser at Stuttgart, with one of the models being chosen for troop testing. The tests were highly successful, and the rifle was officially adopted on 31 January 1884, with the designation of Infantry Rifle Model 71/84.

While of completely new construction, the Model 71/84 Rifle was basically similar to the Model 71 Rifle with the addition of an 8-round tubular magazine. The bolt is similar to that of the Model 71, but also



Markings on the chamber flats of the German Model 71/84 Rifle. This rifle was produced at Erfurt.



Full-length view of the German Model 71/84 Rifle.



Mauser Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)



Right side view of Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)



ABOVE: Left side view of Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)

RIGHT: Barreled action of the Model 71/84 late production model 11mm, SN 17666, with second locking lug. Note the additional locking lug slot in the receiver. (Private collection of Robert I. Landies)

BELOW: Bottom action view of Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)

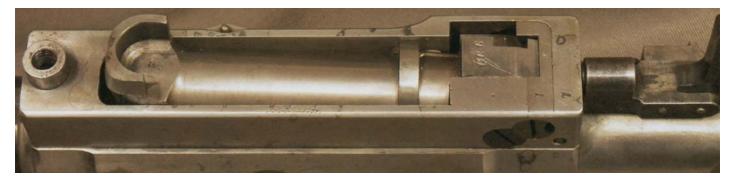


BOTTOM: Top view of barreled action of Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)





Close-up of top view of barreled action of Model 71/84 late production model 11mm, SN 17666, with second locking lug. (Private collection of Robert I. Landies)





*LEFT:* Bottom view of the receiver area of the late production 71/84 rifle showing the feed system. Note SN 17666. (Private collection of Robert I. Landies)

LOWER LEFT: Bottom view of the receiver area of the late production 71/84 rifle SN 17666. (Private collection of Robert I. Landies)

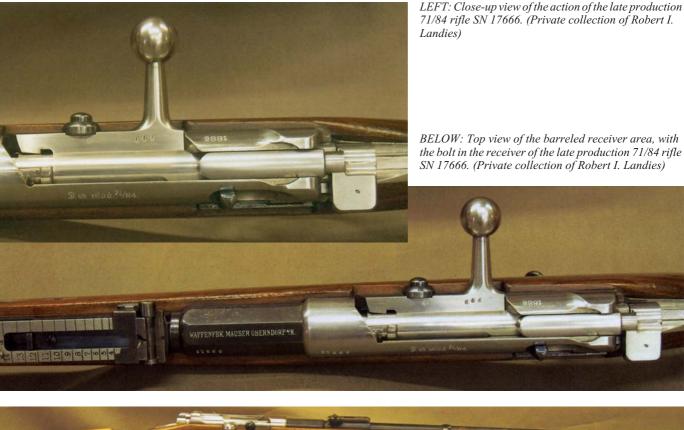
*BELOW:* Receiver left side close-up, with legends, of the late production 71/84 rifle SN 17666. (Private collection of Robert I. Landies)







Extended left side view of the barreled receiver of the late production 71/84 rifle SN 17666. (Private collection of Robert I. Landies)





Mauser Model 71/84 Jager rifle, SN 3018, manufactured at Mauser Oberndorf. Note absence of date and inspector proofs. (Private collection of Robert I. Landies)





*LEFT: Barrel band and spring on late production 71/84 rifle SN 17666.* (*Private collection of Robert I. Landies*)

LOWER LEFT: : Barrel band and swivel on late production 71/84 rifle SN 17666. (Private collection of Robert I. Landies)

*BELOW: Muzzle area showing magazine cap and stacking rod of the late production 71/84 rifle SN 17666. (Private collection of Robert I. Landies)* 





Left side view of Model 71/84 Jager rifle SN 3018.



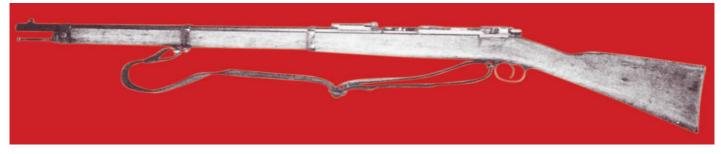
Comparison of the 71/84 standard rifle to the 71/84 Jager rifle. (Private collection of Robert I. Landies)



*Close-up comparison of the 71/84 standard rifle to the 71/84 Jager rifle. (Private collection of Robert I. Landies)* 

*Close-up comparison of the 71/84 standard rifle to the 71/84 Jager rifle, with rear sight raised. (Private collection of Robert I. Landies)* 





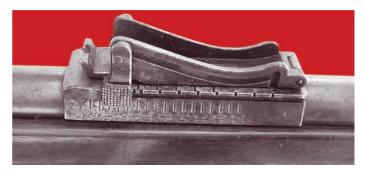
Left full-length view of the German Model 71/84 Rifle.



Model designation, "I. G.Mod 71/84" on the left side rail of the German Model 71/84 Rifle.



Regimental markings on the buttplate tang of the German Model 71/84 Rifle.



M1895 Trial (88/97) Rifle rear sight, 300-2000M. (Jack Carnahan collection)





M1895 (88/97) Trials Rifle (left and right full view). 2000 made for German trial in 1895, serial number 722. Adopted in 1897 as the M1888/97, but no production rifles were produced as Paul Mauser made changes that became the Gew98. Note the fully developed small ring "98" action, early-style lange rear sight, and barrel jacket of the 88. (Please note this rifle had been sporterized, and the unique double-band nosecap with socket bayonet lug is missing. The owner has installed a M1888 Commission rifle forearm/nosecap for display until a correct restoration can be done.) Owner at present can only confirm this single example in the U.S. and only a couple of other examples in Germany. (Jack Carnahan collection)



Receiver marking on M1895 Trial (88/97) Rifle. (Jack Carnahan collection)



A right side view of six extremely rare Mauser rifles. Note band placement on each. These six rifles were all manufactured at Mauser Oberndorf. Model 71 - Standard infantry rifle Model 71/78 - First tube magazine feed prototype SN 14 Model 71/82 Test trials rifle for Prussian contract SN 1510 Model 78/80 Serbian pattern rifle SN 6 Model 71/84 Late production with second locking lug SN 17666 Model 71/84 Jager rifle SN 3018 (Private collection of Robert I. Landies)



Close-up of band placement on rare rifles. Note missing blade on front sight, second from bottom. (Private collection of Robert I. Landies)



*Right side view from butt to muzzle. (Private collection of Robert I. Landies)* 



View of six bolts showing the progression from the Model 71 bolt to the late production Model 71/84 bolt. (Private collection of Robert I. Landies)



Rear-end views of cocking pieces and front views of bolt heads and faces. (Private collection of Robert I. Landies)



Two-thirds view of the Model 71/84 First Model bolt, SN 1 compared to 71/84 Late Model bolt showing no splines on firing pin retainer. (Private collection of Robert I. Landies)





*Left side view of 71/78 SN 14 prototype tube magazine fed 11mm rifle.* (*Private collection of Robert I. Landies*)



Close-up left side view of 71/78 SN 14 prototype tube magazine fed 11mm rifle. (Private collection of Robert I. Landies)

*LEFT: Top left side view of receiver and rear sight of 71/78 SN 14 prototype tube magazine fed 11mm rifle. (Private collection of Robert I. Landies)* 



ABOVE: Mauser prototype Model 71/84 SN 14 tube magazine fed 11mm rifle. Right side full length view. (Private collection of Robert I. Landies) BELOW: Left side view of the prototype Model 71/78 SN 14 tube magazine fed 11mm rifle. (Private collection of Robert I. Landies)





Left rear side view of bolt of 71/78 SN 14 prototype tube magazine fed 11mm rifle. (Private collection of Robert I. Landies)



Front view of the bolt head and bolt for the 71/78. Note relief cut on bolt head face. (Private collection of Robert I. Landies)



Bottom right side view of the 71/78 bolt. (Private collection of Robert I. Landies)



Comparison of the 71/78 bolt components to the 71/84 bolt, SN 1. (Private collection of Robert I. Landies)



Close-up right side view of 71/78 barreled receiver, bolt removed. (Private collection of Robert I. Landies)



Full-length view of barreled 71/78 action. (Private collection of Robert I. Landies)





ABOVE: View of the top receiver flat of the 71/78 rifle showing Mauser legend. (Private collection of Robert I. Landies)

*LEFT:* Bottom view with bolt removed of the barreled receiver of the 71/78 rifle. Note #14 on both receiver and barrel. (Private collection of Robert I. Landies)

BELOW: Model 71/78 stock, tube feed spring and cap, and barreled action. (Private collection of Robert I. Landies)





Standard Model 71 stock modified for tube feed. (Private collection of Robert I. Landies)



1871 stock modified from single shot to tube magazine feed. (Private collection of Robert I. Landies)



Model 71/78 SN 1510 11mm rifle manufactured for field trials for Prussian infantry as part of 2000 piece order to Mauser Oberndorf. (Ref. Ludwig Olson, Mauser Bolt Rifles, 1957, page 12) (Private collection of Robert I. Landies)



Compare Model 71/82 SN 1510 to production 71/84. Both by Mauser Oberndorf. (Private collection of Robert I. Landies)



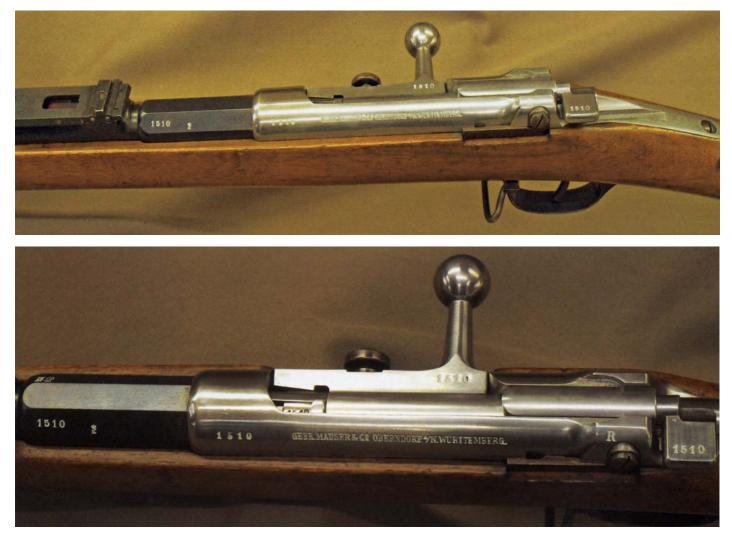
Right side view from the rear of Model 71/82 SN 1510 (left) and production 71/84 (right). (Private collection of Robert I. Landies)



Right side view of Model 71/82 SN 1510 (left) and production 71/84 (right), with ladder-type sights raised on both models. (Private collection of Robert I. Landies)



*Muzzle comparison from 71/82 to 71/84. (Private collection of Robert I. Landies)* 



*MIDDLE:* Left-hand side view of the receiver area, including legend, of the 71/82. (Private collection of Robert I. Landies) BOTTOM: Left side close-up of the receiver shows the legend on the 71/82. (Private collection of Robert I. Landies)







Stamped cartouches on the right side of the stock of the 71/82. (Private collection of Robert I. Landies)



ABOVE: Left rear close-up of the 71/82 bolt showing bolt root, cocking piece and rear of extractor. (Private collection of Robert I. Landies)

*LEFT: Right side close-up view of the open breech of 71/82 showing the feed shuttle in the raised position. (Private collection of Robert I. Landies)* 





MIDDLE LEFT: Left side stripped view of the new 71/82 design feed tube and locking key for bayonet lug. (Private collection of Robert I. Landies)

MIDDLE RIGHT: Left side view of the muzzle area of the 71/82 rifle showing front sight, bayonet lug, and end of locking key for bayonet lug. (Private collection of Robert I. Landies)

BOTTOM: Left side close-up view of the barreled receiver of the 71/82. (Private collection of Robert I. Landies)

Modification of the 71/82 stock in order to receive the new metal feed tube. (Private collection of Robert I. Landies)



Further modification to the 71/82 stock to allow for the metal feed tube. (Private collection of Robert I. Landies)



Left side view of the barreled action. Note broken bolt release/feed selector. (Private collection of Robert I. Landies)





ABOVE: Close-up view of the upper barrel band, the end of the metal feed tube with cap and the locking key partially inserted. (Private collection of Robert I. Landies)

RIGHT: Muzzle-end view of the 71/82 stock modified to accept the new metal feed tube. Note also the cuts made for the locking key. (Private collection of Robert I. Landies)



ABOVE: Muzzle area with feed tube cap, and locking key partially inserted. Note bayonet lug on upper barrel band. (Private collection of Robert I. Landies)



Never defeated! German East African askaris after several years of fighting the British in East Africa under Von Lettow-Vorbeck. (Die Deutschen Kolonien)

incorporates an ejector as well as an extractor. A carrier pivoted in the receiver accepts cartridges from the tubular magazine, moving them to the proper level for feeding into the chamber. A cutoff is built into the left side of the receiver wall in order that the rifle may be used as a single shot, holding the contents of the magazine in reserve. The stock of the rifle is straight wristed, as in the basic Model 71 Rifle, with the barrel retained by three bands. Identical to the Model 71 Rifle, the upper band has a bayonet lug on the right side for attachment of the Model 71 bayonet. The middle band has a swivel attached at the bottom, while a second swivel is attached to the front of the trigger guard. The German Jaeger Model 71/84 Rifle was the same as the regular issue Model 71/84, but with the swivel on the trigger guard relocated to the butt of the rifle.

Length: 50.90"; Weight: 10.2 lbs.; Barrel: 31.56"; Caliber: 11 x 60mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 8-round tubular magazine in forestock; Sights: V-notch rear sight adjustable to 1600 meters on the large leaf, 350 meters on the small leaf, and 250 meters on standard. Remarks: Arsenal markings on the top chamber flat, serial number and proof marks on the left chamber flat, proofs on the right chamber flat. Model designation on the left rear receiver side rail.

In August 2009, Bob Landies, owner of Ohio Ordnance Works, Inc., accompanied by his good friend Mark Herrick, took advantage



German "Schutztruppen" in German Southwest Africa mounted on camels for ease of movement through the desert. Note the special boot for the butt of the G 98 Rifle.

of a break in his schedule to fly to Germany to visit with Jon Speed and his wife in Heilbronn. They were able to view some of the rarest Mauser rifles they had ever seen!

Jon, along with his friend Gerd Schon, took Bob and Mark to visit Herr Lockhovan. That is, Hans Bert Lockhovan of the "Inner Arms" two-volume set (Johnson & Lockhovan). Throughout Herr Lockhovan's personal and professional history, he had acquired many rare and exotic examples of Mauser's finest works. Herr Lockhovan had been able to repatriate many of the original Oberndorf Museum firearms which had been confiscated by the French in 1946. With the help of Jon and Mark, Bob was able to purchase ten of these exceptional rifles for his personal collection. These rifles are now presented for your edification, as it is believed that these rifles have never been photographed before.

**GERMAN MODEL 98 RIFLE:** The German Rifle Testing Commission adopted the Model 98 Rifle on 5 April 1898. This rifle was the result of much experimentation on the part of the Mauser Company, and the action was in great part derived from the experimental Model 1896 Rifle. The Model 98 incorporates a third (safety) lug, shrouded bolt face, guide rib, under-cut extractor, full-depth thumb cut in the left receiver side rail, extra large gas escape holes in the bolt, and a gas shield on the bolt sleeve. The bolt sleeve lock was introduced for the first time, the firing pin travel was reduced to accelerate lock time, and the receiver ring was a larger diameter, greatly increasing strength. The action cocks on opening, and when the bolt is fully drawn to the rear,



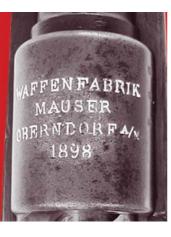
Full-length view of the German Model 98 Rifle.



*Full-length view of the right side of an experimental version of the German Model 98 Rifle with a fluted cooling jacket and shortened forestock. (John Wall collection)* 

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Receiver marking on Gew 98 Trials Rifle. (Jack Carnahan collection)





1898-date Oberndorf Gew 98 Trials Rifle, serial number 3174. The first 10,000 Gew98s were made by Mauser Oberndorf in 1898 for German test trials. Few survive. They seem to have been rebuilt for reissue after the trials in about 1902, when a new bolt with "safety lugged" firing pin was installed. This example also received a field repair (salvaged renumbered stock and trigger guard assembly) in WWI. (Jack Carnahan collection)



As early as 1892, the German Army's Military Gunnery School at Spandau began experimenting with high velocity, small bore cartridges as small as 5m/m. This experimentation was carried on for a period of about 10 years. Hans Dieter Gotz (German Military Rifles and Machine Pistols) reports that the most successful of these rounds was the Mauser-designed 6x59mm cartridge, which was Mauser's entry in a five year (1897-1902) ballistic trial of small caliber munitions. The toe of the buttstock is deeply indented on both sides where the stock was gripped and screw-tightened in a shooting vice. The Model 1898 Rifle pictured here has no military markings or proofs whatsoever, so its exact intent is still the subject of research. Its only significant markings are its text crest that reads "Waffenfabrik Mauser Oberdorf 1901." However, the facts point to this rifle being one of the small caliber test rifles. Under its barrel are the markings "5,88.6,18.170." The first figure is land-to-land barrel diameter, the second is the groove-to-groove diameter, and the third figure, "170" is the length in millimeters for one full twist of rifling. Although the Mauser Company collection catalogs refer to these rifles as 5.97mm, one can readily see how the term "6mm" easily evolved. (John Wall collection)



Another view of the Mauser Model 1898 5.97mm ballistics Test Rifle. (John Wall collection)



A close-up of the Mauser Model 1898 5.97mm Test Rifle. Note the use of the Mauser patented Model 1896 rear sight assembly which persisted on military bolt action rifles well into the 1960s. Note that this rifle has no visible proof marks, neither commercial nor military, and is serial number 13. (John Wall collection)



The receiver ring and sight leaf of the Model 1898 Mauser Test Rifle in 5.97mm (6mm) made at Oberndorf in 1901. (John Wall collection)



The action and rear sight assembly of the Mauser Oberndorf ballistic Trials Rifle ("versuchsgewehr") used to test the 5.97mm cartridge. (John Wall collection)



The Mauser patented Model 1896 rear sight assembly, reportedly (Gotz) used by Mauser on its test rifles as a preferred alternative to the Lange rear sight used on the German Model 88/97 test rifles. (John Wall collection)



The tang of the buttplate of the 5.97 Test Rifle is the long type seen so often on the German Kar98 Carbine where it served as the location for the unit mark. Here the tang shows just the test rifle's serial number "13." (John Wall collection)



The rear sight leaf of the Mauser patented Model 1896 tangent rear sight assembly with sight gradations from 300 to 2,000 meters. (John Wall collection)

considerable sidewards bolt action is noticeable. This is due to generous clearance between the bolt and the receiver, as well as the short bolt bearing when the bolt is fully retracted.

The rifle is fitted with a pistol grip stock, incorporating a recoil bolt across the full width of the rifle to help absorb shock. The upper hand guard extends from in front of the rear sight base to just beyond the lower barrel band. The upper barrel band is fitted with a parade hook for sling shortening, and the nose cap has the long "H" style bayonet lug. The lower barrel band has a swivel on the bottom, and there is another swivel to the rear of the pistol grip stock wrist. An inset, screw-mounted marking disk is on the right side of the lower stock.

In 1901, the first troop issues of the Model 98 Rifles were made to the East Asian Expeditionary Force, the Navy, and the three premier Prussian army corps. In 1904, contracts were placed with Waffenfabrik Mauser for 290,000 rifles and DWM for 210,000 rifles. In 1905, the change to the S-Patrone bullet required modification of the sights, with the modified "Lange Vizier" much taller than its predecessor. All rifles converted at this time were marked with a small (2.5mm) "s" above the chamber and on the barrel at the back of the rear sight base. During the first world war, slight changes were made to the Model 98 Rifle: the marking disk on the right side was replaced by two domed washers connected by a short, hollow metal tube, used for dismounting the firing pin, and grasping grooves were incorporated on the forestock. The Model 98 Rifle received its baptism in battle during the Boxer Rebellion, as well as during the long-running (1904-1907) war against the Hereros in German Southwest Africa. Total production of the Model 98 Rifle, the standard German rifle of World War I, is estimated at more than five million weapons.



The underside of the small of the 5.97mm Test Rifle's stock is also devoid of markings. Note the pointed pistol grip, a feature rarely seen on Oberndorf military rifles, and the base for a quick detachable sling swivel. (John Wall collection)



A close-up of the left side of the Model 1898 5.97mm Oberndorf "versuchsgewehr." Note the absence of any proof and inspection marks, and the bare side rail. (John Wall collection)



The magazine assembly and floor plate of the Mauser Model 1898 5.97mm Test Rifle. Note the absence of all proof and inspection marks, except for the serial number "13." (John Wall collection)



The receiver ring and text crest on the Model 1898 Mauser small bore test rifle made in 1901. A rifle of this exact configuration and caliber exists in the collection of the Oberndorf City Museum in Germany, and was featured in the magazine "Deutsche Waffen-Journal's" 1998 fourpart historical series commemorating the 100th anniversary of the Model 1898 Mauser Rifle. (John Wall collection)



All components on the bolt shroud and firing pin assembly of the 5.97mm Test Rifle are finished in the white and are serial numbered "13." (John Wall collection)

Length: 49.20"; Weight: 9.0 lbs.; Barrel: 29.13"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch rear sight graduated to 2000 meters. Post war production models, as well as renovated Model 98 Rifles have a tangent leaf rear sight graduated to 2000 meters. Remarks: Marked over the chamber with a crown/place of manufacture/date. The side rail is marked with the model designation. The serial number will be found on the left side of the receiver ring.



Under the stock on the bottom of the barrel, the diameter (land-to-land and groove-to-groove) is stamped, as well as the length in millimeters for one full turn of rifling, 170mm, about 6.9. (John Wall collection)



German "Schutztruppen" in German Southwest Africa armed with G 98 Rifles are seen blowing up the rail lines to Windhuk, the capitol. (Die Deutschen Kolonien)



Spike-top helmeted infantrymen firing their G 98 Rifles in the forests of eastern Poland.



The cavalier on horseback is the traditional trademark of the Pieper firm of Liege, Belgium. This particular stamp was found under the receiver of a German Gewehr 98 bearing a Crown-over-Spandau, 1916 crest. It is believed that the Imperial German national armory at Spandau subcontracted the manufacture of a number of Gew 98 receivers to both Pieper and the German industrial firm of Siemens and Halske. A firm noted for its industrial dynamos, Siemens and Halske made receivers that were stamped with their stylized overlaid "S and H" trademark (right). This particular receiver is a 1917 Spandau Sterngewehr. (John Wall collection)

Rare G 98 Saxon-marked rifle buttplate.



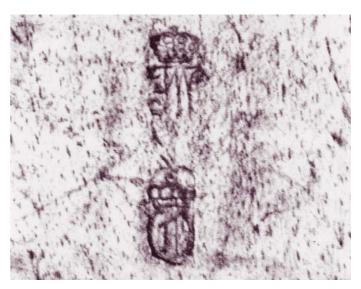
Two German servicemen, early in the 20th century, the one on the left in tropical field order, while the one on the right is in Naval Infantry dress, both carrying Gew 98s.



Receiver markings on the German Model 98 Rifle, indicating manufacture at the royal arsenal at Danzig in 1905.



Markings on the G 98 Rifle receiver ring on a naval-issued weapon, dated 1903.



G 98 buttstock markings.



The left side of a naval issue G 98 Rifle, showing the naval acceptance mark on the side of the receiver.



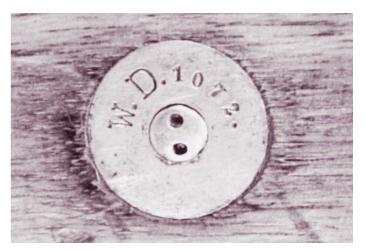
Naval acceptance stamping in the bolt root underside. This is the only sign of naval acceptance on this weapon, other than the marking disk.



View of the crest of the 1917 Spandau Gew 98, showing the various markings, including a new variant "Star" for small firm contracted parts. 1917 date, with "1920" re-issue date. (R. K. Smith collection)



*View of the left hand side of the Gew 98 receiver and side rail. Note the unusual re-serial numbered receiver. (R. K. Smith collection)* 



Marking disk in the right side of the buttstock of the naval-issue G 98 Rifle, showing Danzig.



Photo of the bottom of the receiver and barrel of the 1917 double-dated Gew 98. Note the S&Hmarkonthe receiver and the "Pillars (Gates) of Gediminas," indicating Lithuanian ownership at some point after WWI. (R. K. Smith collection)



Close-up of re-issue date "1920" stamped on butt of Gew 98 stock. (R. K. Smith collection)



Side view of the receiver ring of the star-marked G 98 Rifle shown left. Another interesting fact is that these rifles had a numeral suffix, as opposed to alpha suffix. Note how the former serial number is canceled.



German Jaeger troops moving through a rear area in France. German troops would often sling their rifles across the front of the body.



This receiver ring shows the alternate variation of the star marking on the receiver ring of a "Stern" marked G 98 Rifle.



Possibly posed propaganda shot of German troops fighting from a ruined farmhouse in Belgium.



Receiver of a naval-issue G 98, showing date of manufacture as 1899, by DWM...a real early one!

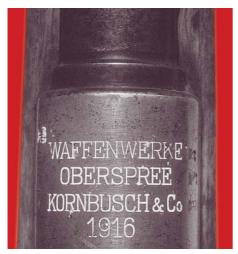


German "G 98," produced in 1898, top view of one of the earliest examples made. (Jan Gardiner collection)

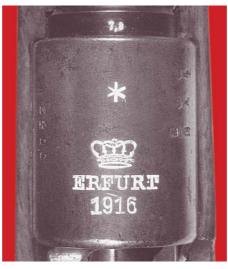


The receiver of this DWM-made G 98 Rifle is marked with a star. Note the dating at the bottom of the receiver, 1915/16.

## Various representative World War I and Weimar Republic German Manufacturer's receiver markings (Robert Jensen collection)



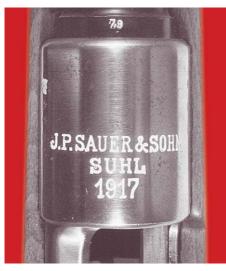
*WAFFENWERKE/OBERSPREE/KORNBUSC H & Co./1916* 



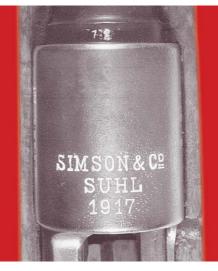
CROWN/ERFURT/1916



DWM/BERLIN/190-



J.P.SAUER & SOHN/SUHL/1917



29 2

AMBERG

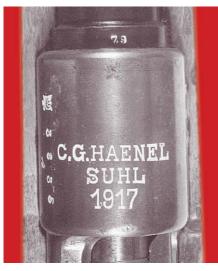
1915

SIMSON & Co./SUHL/1917



V.CHR.SCHILLING/SUHL/1916

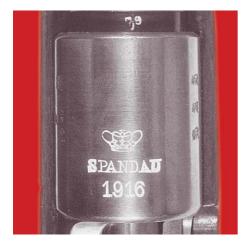




C.G.HAENEL/SUHL/1917

CROWN/AMBERG/1915

DANZIG 1915/CROWN/SPANDAU/1900



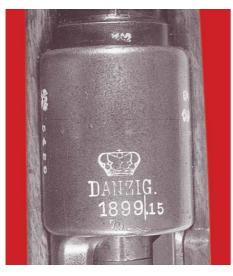
CROWN/SPANDAU/1916



WAFFENBRIK/MAUSERA.-G./OBERNDORF A/N./1916



CROWN/DANZIG/1916



CROWN/DANZIG/1899/15



BS/WAFFENWERKE/OBERSPREE/1918



DANZIG 1915/CROWN/SPANDAU/1900



This close-up shows the attachment of the nonadjustable aircraft rear sight on the German Model G 98 Rifle.



*This close-up shows the attachment of the adjustable aircraft rear sight on the German Model G 98 Rifle.* 



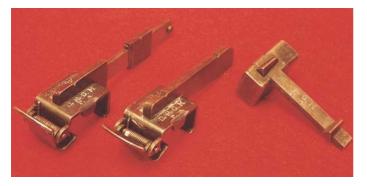
Right side view of a German Model G 98 Rifle with a most unusual pressed steel action cover, held in place by a buckle and strap arrangement at the front of the cover.



Right side view of the German Model G 98 Rifle action cover, showing the slot for the bolt handle and the cloth strap and buckle.



Left side view of the German Model G 98 Rifle action cover. This piece represents the prewar workmanship that went into designing and producing an accessory such as this.



Aircraft sights were produced for attachment to the regular sights of the German Model G 98 Rifle, both front and rear. These sights were manufactured so that they could also be used on the G 88 Rifle. The picture shows the two types of rear sights produced, adjustable on the left and nonadjustable to the right. To the right of the rear sights is the front sight, which has two sets of notches in the base; the upper set of notches fit the G 98 Rifle, while the lower set fit the G 88 Rifle.

**Stern, or "Star" marked G 98 Rifles:** These rifles were marked with a star on the upper front portion of the receiver ring to indicate that one or more parts used in the manufacture of the rifle were manufactured by small firms other than state armories and the large private rifle factories that were not up to handling the demand for the millions of rifles required. There were two different types of star markings used according to sources.

**GERMAN MODEL 98 CARBINE (KAR 98), FIRST AND SECOND PATTERN:** Produced in 1898 for troop testing, the official Model Kar.98 Carbine was manufactured in Erfurt from 1903 to 1905.



German infantryman with G 98 Rifle in action in France, C. 1917.

Close-up view of the "K.S." marked washer in the right side of the buttstock of the modified German Model 98 Rifle used in German Southwest Africa.

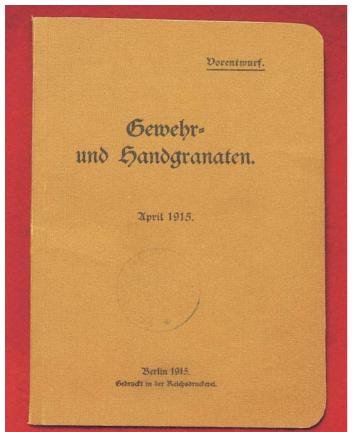




Full-length view of the German Model 98 Rifle, marked for Colonial Service, and believed to have been modified locally in German Southwest Africa. The bolt handle has been bent down, and the stock recessed for handling, while the "Lange Vizier" sight is registering on 200 meters. This lower sight setting is presumably due to close-in fighting in the bush country. The Colonial authorities utilized the same washer twice; the side marked "FK" was reversed, marked "KS" and re-inserted in the stock.

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The cover of the German field manual for rifles and hand grenades, April 1915.

These World War I rifle grenades are for use with the G 98 Rifle, the rod being inserted down the muzzle of the rifle, and, by use of a special propellant cartridge, fired at the enemy. The serrated body is of cast iron, weighing approximately 2 lbs., with a 2-3/4 oz. charge contained in a thin cardboard cylinder. The nose is screw threaded to take the percussion fuse, and the base to take a nipple for a tin disk and tail rod with gas check. Until fused, the grenade is protected by a plug and leather washer. From the left, the Model 1914 Rifle grenade, with plug; next, the Model 1914 Rifle grenade, with fuse, and on the right, the Model 1913 Rifle grenade, fused.



This picture shows two German rifle grenade variant launchers available for use with the German Model Gew 98 Rifle; after being fitted to the muzzle of the rifle; these launchers are then locked in place. In front is the rifle grenade; derived from the French V-B grenade.



Left full-length view of the Colonial Service marked, modified German Model 98 Rifle. The Colonial authorities utilized the same washer twice; the side marked 'FK' was reversed, marked 'KS' and re-inserted in the stock.



The receiver ring of the Colonial Service marked, modified German Model 98 Rifle, marked "S" on the barrel, and "Crown/SPANDAU/ 1900" on the ring.



Left side view of the action of the German Model 98 Rifle with extended magazine and sliding bolt cover (see next page, top). This picture clearly shows the clip and rod that allows the bolt cover to slide back and forth with the action of the bolt, as well as rotating into position with the closing of the bolt. Also shown is the chain and key attachment used to hold the spring and follower in position during installation and removal of the extended magazine.



*Close-up view of the professionally bent bolt handle and recessed stock of the Colonial Service marked, modified German Model 98 Rifle.* 



Rear sight of the Colonial Service marked, modified German Model 98 Rifle, showing it registering on 200 meters. This was probably a necessity due to the brush war nature of engagement with the Hereros during the uprisings.



German Model 98 Rifle equipped with a sliding bolt cover designed to keep mud and debris out of the action of the rifle. The rifle is also fitted with a non-detachable large-capacity magazine, which increased the rifle capacity to 25 cartridges.



The German Model 98 Rifle with bolt cover and large capacity magazine, showing the action open, illustrating how the sliding bolt cover is attached to the bolt handle.



*WWI Spandau 1915-dated Gew 98 Sniper Rifle, with unique double claw, in-line mounting system, where the rings held in line, but the scope is completely offset to the left side of the rifle. (Rock Island Auction Co.)* 



The German Model 98 Sniper Rifle as viewed from above, showing the location of the claw mounts. (Springfield Armory Museum)



The left side of the German Model 98 Sniper Rifle, showing the model designation on the side rail, and the proof marks and serial number on the left of the receiver ring. (Springfield Armory Museum)



The German Model 98 Rifle modified in 1915 for use as a sniper rifle. The receiver and the receiver bridge have claw mounts for a 4 x Goerz or Zeiss telescopic sight. The scope mount would be offset to the left in order that the rifle could be used as a clip loader. The bolt handle is bent down, and there is a recess cut in the stock to accommodate the bolt knob. The rifle is otherwise identical to the standard issue Model 98 Rifle. (Springfield Armory Museum)

The first pattern carbine, in caliber  $7.92 \times 57$ mm, of which approximately three thousand were produced, was a miniature of the standard infantry Model 98, with a pistol grip stock that ran to the muzzle, and a nose cap from which only the crown of the muzzle appeared. The upper hand guard ran from the front of the rear sight to the muzzle. The bolt handle was spoon-shaped and turned down; there was no provision for a bayonet. This model was soon abandoned, and the second pattern Model 98 Carbine, or Model 1898A, was adopted in 1902 to replace the first pattern.

The second pattern, or Model 1898A, was almost identical to the first pattern carbine, but provision was made for mounting a bayonet, with a short lug set well back from the muzzle. The front sight has sight protectors. The bolt handle is spatulate. Spatulate bolt handles normally match the serial number of the weapon, while the round-head bolts do not match. There were seven variations of sights that are to be found on the Kar.98. One official model was accepted on 16 June 1902, by Kaiser Wilhelm. This official model (Einheitskarabiner) was made at the Erfurt Arsenal from 1903 to 1905. All other Kar.98 Carbines must be considered as troop-test weapons.



The receiver of the German Model 98 Rifle with sliding bolt cover (shown on previous page), showing how the forend of the bolt cover fits snugly up against the face of the receiver. This also illustrates how the bolt cover rides on a rod that is attached by a steel clip fitting just in front of the receiver.



A sniper from the 9th Bavarian Infantry Regiment; this soldier managed to survive World War I, and with this same rifle, fought in the ranks of the Freikorps Wurzburg during the postwar revolutionary period. The rifle was confiscated by American Occupation troops, however the sniper scope and other memorabilia were retained and are in the collection of a German collector at this time.



Full-length view of the German Model 98 Marksman Rifle fitted with a sliding bolt cover and a low light optics, bifocal marksman scope and front sight.



Left side view of the German Model 98 Marksman Rifle fitted with the low light bifocal marksman scope and front sight, as well as with a sliding bolt cover.

The Kar. 98 was designed to use the same cartridge as the Kar.88, the Patrone 88. In 1903, the new "S" cartridge was introduced, which meant that all the Gew. 98 and Kar. 98s had to be modified to accept the new cartridge, with the letter "S" stamped on the top of the receiver to show that the change had been made. The new S-Patrone caused excessive recoil, as well as a foot-long muzzle blast, proving much too strong for the short carbine. Production was terminated in 1905, with those weapons produced limited to using the Patrone 88. It is believed that total production was approximately twenty thousand pieces. Most of the production went to the Schutztruppe in Africa and to the Deutches Ostasiatische Expeditionskorps. Interestingly enough, pictures exist showing small numbers of Mexican troops in the early days of the Mexican revolution equipped with Kar.98s!

Length: 37.40"; Weight: 7.7 lbs.; Barrel: 17.32"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush box magazine; Sights: Miniature "Lange Vizier" style rear sight graduated to 1800 meters. Remarks: Crown/Arsenal (Erfurt)/date on the receiver ring, model designation on the side rail.



Close-up view of the auxiliary front sight used in conjunction with the low light bifocal marksman scope. This auxiliary sight with white diamond aiming point fits over the regular front sight and appears in the sight picture in the lower portion of the bifocal sight, with the target aligned with the top point of the triangle.



Right side view of the low light bifocal marksman scope mounted on the "Lange Vizier" rear sight. Note how the base of the scope conforms to the curvature of the rear sight ramp, while the spring-loaded mounting arms lock into the recessed bottom portion of the rear sight ramp. The eyepiece is molded leather.



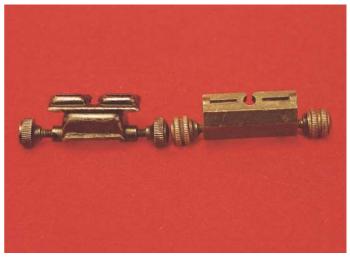
Complete low light bifocal marksman scope, with carrying case, white cotton bag secured to the lid, and instructions for use of the scope. A complete set like this is rarely seen.



Top view of the low light bifocal marksman scope, showing manufacturer's markings and specifications.



The chamber area of the German Model 98 .22 caliber Training Rifle. This view shows to advantage the spring-loaded chamber that extends into the magazine well area when the bolt is opened, allowing the single .22 caliber round to be loaded by hand. The only markings on the rifle are those seen on the top of the left side rail, in this case, "V.C.S." for Schilling, and "D.R.G.M."



A comparison of the pressed steel auxiliary night sights on the left, as opposed to the machined steel auxiliary night sights at the right. Both sights were phosphorous coated in the two inset to either side of the sight notch.



Full-length view of a German Model 98 .22 caliber Purpose-built Rifle.

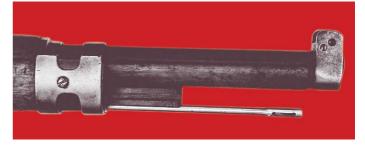
		Serial	Bolt	Bolt	Sight Range		Barrel/Unit	Caliber		Bayonet	
Mfgr.	Year	Number	No.	Handle	Orig.	Mod.	Marking	Marking	Cart.	Attach.	Source
Spandau	1898	0002	0002	Flat	2-12	2-12	C.7,9 Z.0.15. D. 24	7,9	88	Yes	M.F.D.G., Berlin
Erfurt	1900	0032	0032	Flat	2-12	2-12	Kav.Kar.98		88	Yes	M.F.D.G., Berlin
Erfurt	1900	0158	0158	Flat	2-12	2-12	Art.Kar.98	7,91	88	No	Private Collection
Erfurt	1900	0202	5639	Flat	2-12	2-12	Art.Kar.98 ''A''	7,91	88	Yes	Private Collection
Erfurt	1900	0933	0933	Flat	2-12	2-12	Art.Kar.98 O.F.A. 1.21		88	No	Private Collection
Erfurt	1901	1645		Flat	2-12	2-12	Kav.Kar.98 F.P.3.72	ļ	88	Yes	South Africa, Private
Erfurt	1901	1668	1668	Flat	2-12	2-12	Kav.Kar.98	7,91	88	Yes	B. Musgrave, So. Africa
Erfurt	1901	2170	2170	Flat	2-12	2-12	Art.Kar.98		88	No	B.A.M., Ingolstadt
Erfurt	1903	0794	0794	Flat	2-18	2-12	98	7.92	S	Yes	Enfield Lock, Pattern Rm.
Erfurt	1903	0819	0819	Flat	2-18	2-12	98 M.G.A.10.41.	7,92	S	Yes	Imperial War Mus., London
Erfurt	1903	0862	0862	Flat	2-18	2-12	98 M.G.A.12.14.		S	Yes	Imperial War Mus., London
Erfurt	1903	0905	0905	Flat	2-18	2-12	98 M.G.A.13.44.		S	Yes	Private Collection
Erfurt	1903	1095	1095	Flat	2-18	2-12	Kar.98 M.G.A.12.35.	7,91	S	Yes	Imperial War Mus., London
Erfurt	1903	1106	1106	Flat	2-18	2-12	Kar.98 E.J. IV.8.		S	Yes	Private Collection
Erfurt	1903	1145	1145	Flat	2-18	2-12	Kar.98		S	Yes	School of Infantry,
											Warminster, England
Erfurt	1903	1221	1221	Flat	2-18	2-12	Kar.98	7,9	S	Yes	Imperial War Mus., London
Erfurt	1903	1498	1498	Flat	2-18	2-12	98		S	Yes	Private Collection
Erfurt	1903	0001	0001	Flat	3-18	3-18	98		S	Yes	M.F.D.G., Berlin
Erfurt	1904	0554	0554	Flat	3-18		Kar.98		S	Yes	M.F.D.G., Berlin
Erfurt	1904	0555	5179	Rnd.	3-18		Kar.98		S	Yes	M.F.D.G., Berlin
Erfurt	1904	1834	1834	Flat	3-18	3-18	Kar.98		S	Yes	B.A.M., Ingolstadt
Erfurt	1904	1941	1941	Flat	3-18		Kar.98		S	Yes	M.F.D.G., Berlin
Erfurt	1904	3794	0577	Flat	3-18	2-12	Kar.98		S	Yes	Private Collection
Erfurt	1904	4010	4010	Flat	3-18	2-12	Kar.98		S	Yes	Private Collection
Erfurt	1904	4507	4507	Flat	3-18	2-12	Kar.98 J2	7,91	S	Yes	Private Collection
Erfurt	1904	5550	5772	Flat	3-18	2-12	Kar.98		S	Yes	Private Collection
Erfurt	1904	6311	7577	Rnd.	3-18	2-12	Kar.98		S	Yes	Springfield Armory Mus.
Erfurt	1904	6535	6535	Flat	3-18	2-12	Kar.98		S	Yes	Schloss Rastatt
Erfurt	1904	6573	6573	Flat	3-18	2-12	Kar.98		S	Yes	John Walter's Book
Erfurt	1904	6913	5421	Rnd.	3-18	2-12	Kar.98 K.G.P.47.	7,9	S	Yes	Author's Collection
-			1244	Flat					ł		Author's Collection
Erfurt	1904	7141	7141	Flat	3-18	2-12	Kar.98 K.G.P.202.		S	Yes	Private Collection
Erfurt	1905	3030	3030	Flat	3-18	2-12	Kar.98		S	Yes	Swakopmund Arms Mus.
Erfurt	1905	8993	3686	Rnd.	3-18	2-12	Kar.98		S	Yes	Musée d'Armes, Liège

## **KNOWN EXAMPLES OF THE KAR. 98**

## GERMAN MODEL 1898AZ AND MODEL 1898a CARBINES:

Germany adopted the Model 98AZ Carbine in 1908 after extensive testing for a replacement for the Model 1898 (98a) Carbine. It was found that a longer-barreled version of the Model 98a Carbine reduced recoil and muzzle blast to an acceptable level. The Model 98AZ Carbine, while labeled thus by the Germans, is actually a short rifle. The action of the new carbine is similar to the Model 98 Rifle, but the external diameter of the receiver ring is considerably smaller. When war broke out in 1914, the Model 98AZ Carbine was carried by the cavalry, the foot artillery, bicyclists, riflemen, sharpshooters, pioneers, telegraphists, telephonists, and air, ship and motor transport units.

The stock is the familiar pistol grip style, with the upper hand guard running from the front of the receiver ring to the upper barrel band. The upper band is also a combination nose cap, employing a unique hinged



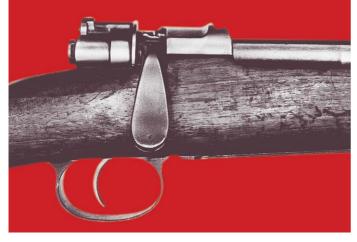
Close-up view of the muzzle area of the Model 98 Carbine, Second Pattern, showing the bayonet lug and cleaning rod. (Robert Jensen collection)



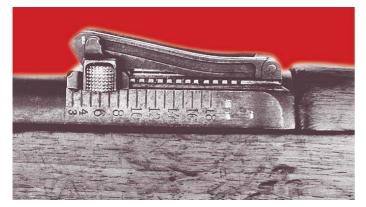
Full-length view of the First Pattern Model 98 Carbine, (Kar 98), fully stocked to the muzzle and without a bayonet lug. Note the end cap, with only the muzzle appearing, and note as well the placement of the marking disc. (Ben Musgrave collection)



Full-length view of the German Model 98 Carbine, Second Pattern; note the bayonet lug and cleaning rod, as well as the lack of a marking disc. (Robert Jensen collection)



Close-up view of the spoon-shaped bolt handle of the Model 98 Carbine, Second Pattern. (Robert Jensen collection)



Close-up view of the rear sight of the Model 98 Carbine, Second Pattern, marked from 300 to 1800 meters. (Robert Jensen collection)



A pre-war photo of three Bavarian policemen standing, with another policeman kneeling, with the rare pre-1907 Kar 98 Carbine.

action that opens from left to right. There is a bayonet lug under the extremely short muzzle and prominent front sight protectors. A stacking hook protrudes from the bottom of the forestock, the lower barrel band incorporates an integral swivel on the left side, and a slot is cut through the buttstock to accommodate the German-style sling with keeper. The



A scene of revolution in post-World War I Berlin. Note the old-timer atop the armored car with a G 71 Rifle, while the first soldier on the ground uses a captured Belgian 89/16 Carbine. The rest of the soldiers are using G 98 Rifles and 98AZ Carbines. (Anon.)



Crown/ERFURT/1904 markings on the receiver ring of the Model 98 Carbine, Second Pattern. (Robert Jensen collection)



The receiver ring of the German Model 1898 Carbine (Kar 98A), showing the crown, the Erfurt arsenal marking, and the date "1904." (Springfield Armory Museum)



World War I German Mountain Troops armed with Model 98AZ Carbines engaging the enemy.



World War I German troops in spike-top helmets armed with Model 98AZ Carbines are seen firing across a river, C. 1914.



Left side of the police-issue Kar 98a Carbine, showing the side mounted sniper scope. (Robert Jensen collection)



German East African askaris armed with Model 98AZ Carbines in firing positions on the side of a brush-covered hillside. (Die Deutschen Kolonien)



Full-length view of the German Model 98AZ (98a) Carbine. Note that this specimen was produced prior to the date in 1915 when grasping grooves were cut in the forestock.



The receiver ring of the German Model 98AZ (98a) Carbine, showing the crown/"Erfurt"/1915.

bolt handle is turned down, the back of the bolt knob is flattened and checkered, and the stock is cut out at this point to allow the bolt knob to be more easily grasped.

German Model 98AZ Carbines made prior to 1915 did not have grasping grooves, while those produced after 1915 were made with them. After the first world war, the stocks of German Model 98AZ



The left side rail of the German Model 98AZ Carbine, showing the model designation.



Full-length view of the post-1915 German Model 98AZ (98a) Carbine, with grasping grooves.



Weimar Republic German M1898AZ (98a) Carbine, manufactured at Danzig in 1918, double-dated 1920 when re-issued. Marked "RFV 537?" on top of buttplate, indicating "Reich Finance Ministry." (Rock Island Auction Co.)



Weimar Republic German M1898AZ (98a) Carbine, manufactured at Erfurt in 1918, double-dated 1920 when re-issued. Marked "PWB," early designation for the Freikorps. (Rock Island Auction Co.)



Interesting picture of World War I German troops in Macedonia, going through inspection of their Model 98AZ Carbines. Note the Macedonianissue spike top helmets.



*Close-up view of the flash hider attached to the muzzle of the German Model 98a Carbine.* 



German troops in a shallow trench, armed with Model 98AZ Carbines, awaiting the order to advance.



The receiver ring of the German Model 98AZ (98a) Carbine, showing post-1915 production. Note the true caliber stamped at the front of the receiver ring, in this case "7.93."



A youthful German soldier armed with a Model 98AZ Carbine hears of Germany's surrender during World War I.



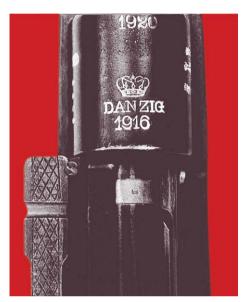
Full-length view of the right side of a German Model 98a Carbine fitted with an extended 20-round magazine, also showing a clip of cartridges and the customary bayonet. (John Wall collection)



Comparison of the 13mm Anti-tank Rifle bolt to that of the standard 8mm Gew 98. (Robert Jensen collection)



Close-up view of the right side of the purpose-made bipod of the German 13mm Anti-tank Rifle. Note that there is no supporting horizontal bracing bar between the legs as is found on the German 08/15 bipod.



Top view of a Kar 98A Carbine, double-dated, with a side rail scope mount; note the date "1920" at the front of the receiver ring, while at the rear of the receiver ring is "CROWN/DANZIG/ 1916." This is probably post-WWI Police issue. (Robert Jensen collection)



Mauser banner logo over date on the receiver ring of the German 13mm Anti-tank Rifle. (Robert Jensen collection)



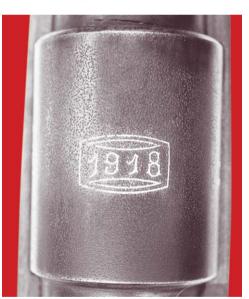
Full-length view of the German 13mm T-Gewehr, bolt action, single shot, Anti-tank Rifle.

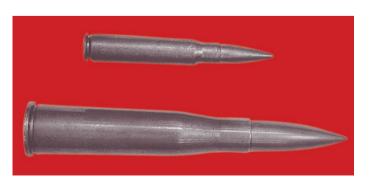
Carbines were renamed the "Model 98a." This also differentiated them from the "Model 98b" carbines then being produced. Length: 66.60"; Weight: 37.0 lbs.; Barrel: 38.75"; Caliber: 13mm; Rifling: 8-groove, r/hand; Operation: Turnbolt action; Feed: Single shot (while never used during the war, a few specimens were made with a magazine); **Sights:** V-notch adjustable rear sight graduated from 100 to 500 meters. **Remarks:** Mauser Banner trademark stamped on the upper receiver over the date, 1918.



Close-up view of the massive action open, with a round ready to be fed into the chamber.

Close-up view of the date-only on the receiver ring of the M1918 13mm Anti-tank Rifle.

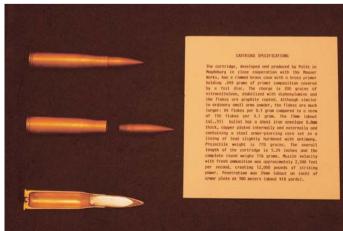




Comparison of the 13mm Anti-tank Rifle bullet to the standard 8mm rifle bullet. (Robert Jensen collection)



*Right close-up view of the action of the German 13mm Anti-tank Rifle. Note the three holes near the front of the bolt for gas bleed-off.* 



Display and specifications of the 13mm German Anti-tank Rifle cartridge.



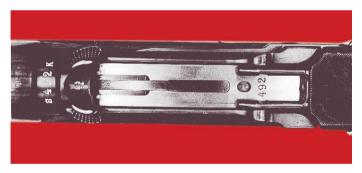
Right side full-length view of the Flier's Rifle. (Robert Jensen collection)



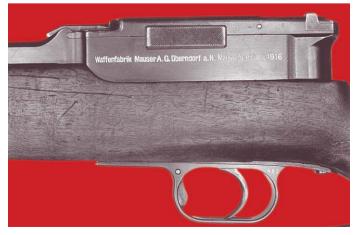
Left side full-length view of the Flier's Rifle. (Robert Jensen collection)



*Left side view of the rear sight of the Flier's Rifle. (Robert Jensen collection)* 



*Top view of the Flier's Rifle's action area; note serial number on receiver. (Robert Jensen collection)* 



Left side view of the receiver area, showing the Mauser markings.



Reichswehr soldiers armed with Transition Model Rifles during maneuvers, C. 1920s.



Full-length view of the German Model 98 Transitional Model Rifle. (Weimar Republic)



Nazi rework of Gew 98 Rifle. This transitional rifle is Imperial proofed and branded "EWB" which stands for "Einwohmer-Vehr-Bayern," which stands for Bavarian Citizen's Defense, a Freikorps unit from the 1920s. (Rock Island Auction Co.)



*Close-up view of the narrow lower barrel band on the German G 98 Transitional Model Rifle.* 



*Close-up view of the broad lower band found on many of the G 98 Transitional Model Rifles.* 



Full-length view of the German G 98 Transitional Model Rifle with the narrow lower barrel band.



Left full-length view of the German G 98 Transitional Model Rifle with narrow lower barrel band.



Most "Zn" marked weapons were subcontracted by Reper or S&H; photo shows crest of "Zn" marked Spandau 1917/24. (R. K. Smith collection)



Right side view of Zn 1917/26 Rifle showing Waffen Amt with unit 12 and 13 marking. (R. K. Smith collection)



Normal left side view of receiver and barrel, showing down-winged eagle. (R. K. Smith collection)



Right side view of "Zn" Spandau 1917/24 receiver showing proof marks; these are early Waffen Amt, with unit marks 9 and 10. (R. K. Smith collection)



Top view of "Zn" 1917/26 receiver showing "Zn/Crown/1917/26." (R. K. Smith collection)



Full-length view of the Radfahrer Gewehr, or Bicycle Troops Rifle, after which the Kar 98b is patterned. These rifles were issued to the Bicycle Troop companies that were active at the beginning of the first world war. The main differences between the Radfahrer Gewehr and the Kar 98b are the use of the Lange Vizier rear sight, the marking disc in the stock of the Radfahrer Gewehr, and that the lower band is held with a screw in the case of the Radfahrer and by a spring in the Kar 98b.



Left full-length view of the Bicycle Troops Rifle.



The lower barrel band on the Radfahrer Gewehr is held on by a screw through the bottom.

**GERMAN MODEL 98 TRANSITIONAL MODEL RIFLE** (WEIMAR REPUBLIC): Those Model 98 Rifles retained in 1920 by the Reichswehr, the postwar army allowed under the terms of the armistice, in most cases were modified by the replacement of the "Lange Vizier" sight with a simple tangent rear sight. The markings on the receiver ring of many of these rifles were ground off and the weapons were arsenal refinished. Other than the sights, the rifles are identical to the German Model 98 Rifle.



Close-up view of the rear sight of the Bicycle Troops Rifle with the auxiliary pressed steel night sights attached.

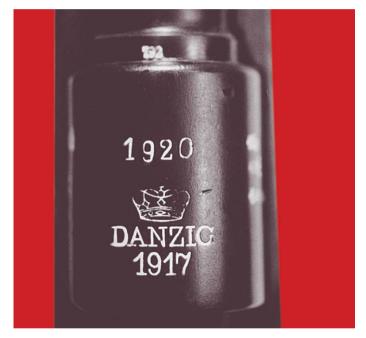
**GERMAN MODEL KAR 98b RIFLE:** Included in the armory allowed the Reichswehr by the terms of the armistice were the Model 98 Rifles altered or manufactured to Model Kar 98b specifications. According to German nomenclature, this prefix "Kar" indicates a "Carbine," but in actuality, the weapon is a rifle. While retaining the overall dimensions of the Model 98 Rifle, the rear sight was replaced by a flat tangent leaf sight graduated to 2000 meters, the parade hook was removed from the upper band, the lower barrel band with attached



Full-length view of the German Model Kar 98b Rifle, as originally manufactured.



Weimar Eagle inspector's markings on the bottom of the stock of the DANZIG 1920/1917 reissued Gew 98 Rifle. (Robert Jensen collection)



1920/Crown/DANZIG/1917 markings on the receiver of a Gew 98 Rifle, re-issued by the Reichswehr after WWI. (Robert Jensen collection)



Right side view of receiver ring wall, showing early down-winged Waffen Amt, Unit 12 and 13. Note diameter marking ahead of the receiver, showing that barrel has been rotated 90 degrees. (R. K. Smith collection)



Date "1920" stamped into the left side of the stock of the Gew 98 Rifle re-issued after WWI. (Robert Jensen collection)



Top view of "Zn"-marked Spandau 1917 Rifle. The "Zn" proof was applied in 1936 (1917/36). This rifle was shipped to Spain as a 7mm; the buttstock "7mm entubado" marked on both sides. (R. K. Smith collection)



*Left side of receiver showing the re-serial numbering of the rifle – bolt numbered N657. (R. K. Smith collection)* 



Rear sight on the "Zn"-marked Spandau 1917/36 Rifle, showing the German S/42 secret code. Question: Was the sight installed in Germany or in Spain? Sight is set up for 7mm. (R. K. Smith collection)

swivel was replaced by a barrel band with integral swivel on the left side, and a slot was cut for the sling in the buttstock. The quick-release attachment on the bottom of the buttstock was removed.

Many of the Kar 98b specimens found are converted Model 98 Rifles, with the original markings. Recently, some manufactured Kar 98b Rifles have appeared on the market, and these are marked on the side rail with the model designation. Aside from the minor differences noted, the Kar 98b is identical to the Model 98 Rifle, and much resembles the rifle produced for the bicycle troops (Radfahrer-Gewehr 98) of the first world war.



*Rare SIMSON & Co/SUHL/1926 dated receiver ring. (Robert Jensen collection)* 



Side rail of the German Model Kar 98b Rifle, showing the model designation.



An early mid-1930s German military inspection mark for Waffen Amt No. 1 (WaA1) on the lower bolt root of a Karabiner 98b. WaA1 was located in the Suhl area of Thuringia at that time. (John Wall collection)



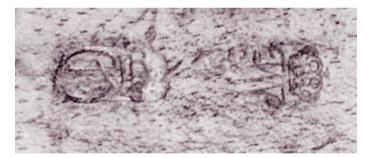
Receiver ring markings on the converted German Model Kar 98b Rifle shown below.



Full-length view of the German Model 98 Rifle as converted to Kar 98b configuration.



The unit marking disc on a Simson and Son-made Karabiner 98b. The marking indicates that the rifle was issued to an Infantry Regiment's Mortar (Minen Werfer-"MW") company. (John Wall collection)



Acceptance markings on the stock of the converted German Model Kar 98b Rifle.



German sniper armed with the scope-mounted Kar 98b in action on the Russian front during World War II. (Signal)



The side rail markings on the converted German Model Kar 98b Rifle. Note that this is marked "Gew. 98."

**GERMAN STANDARD MODELL MODEL 1933 SHORT RIFLE:** The Standard Modell Short Rifle was conceived and developed in 1924. However, production did not commence until 1933, at which time an alternate model with turned-down bolt and side mounted sling was also offered. The alternate carbine was identical to, and the precursor of the Kar 98k, with the exception that the upper band was retained by a pin and the lower barrel band was held by a short band retaining spring holding only the lower band.

The Standard Modell is a handy size short rifle, allowing it to be standard for infantry and cavalry. This short rifle was offered commercially for police and security guard duty, as well as being sold worldwide. The men of the German Condor Legion that fought in Spain during the Spanish Civil War (1936-1939) were armed with the Standard Modell Short Rifle. At the same time, it was being used by both sides in the Chaco War between Bolivia and Paraguay (1932-1935), as well as in China by the Chinese Nationalist army.



Side rail model designation on the German Standard Modell Short Rifle.

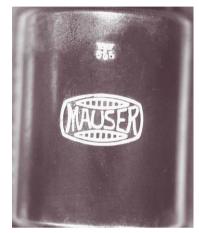


Full-length view of the German Standard Modell Short Rifle.

"Mauser Banner" logo on the receiver ring of the German Standard Modell Short Rifle.



Rare "Mauser Banner" Rifle with military acceptance stamp "Eagle/655." (Robert Jensen collection)





SS recruits armed with Standard Modell Short Rifles at training. Note that each rifle has a muzzle cover. (Bundesarchiv)



*Early picture of SS troops wearing World War I-style helmets while on parade with Standard Modell Short Rifles. (Bundesarchiv)* 



Full-length view of the German Mauser Standard Modell Carbine.

The short rifle is fitted with a pistol grip stock with grasping grooves, with the short style upper handguard running from in front of the rear sight base to the lower band; the lower band is fitted with a swivel on the bottom, with another on the bottom of the buttstock just behind the wrist of the stock. The upper band is equipped with a parade hook for shortening the sling, while the nose cap incorporates the long German "H" style bayonet lug.



Manufacturer's address marking on the side rail of the German Mauser Standard Modell Carbine.



"Mauser Banner" logo over date of manufacture on the receiver ring of the German Mauser Standard Modell Carbine.

Length: 43.60"; Weight: 8.8 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "Mauser Banner" logo on the receiver ring over the date of manufacture. Serial numbers and manufacturer's markings on the side rail.

**GERMAN MODEL 1933 MAUSER STANDARD MODELL CARBINE**: Almost identical to the Kar 98k, the Standard Modell Carbine is fitted with a pistol grip stock with grasping grooves, the bolt handle is bent down, and the stock is recessed to accommodate the bolt knob. The upper hand guard runs from in front of the rear sight base to



*German soldier of the "Grossdeutschland" regiment in parade tunic at the "present." (Brian L. Davis)* 



Full-length view of the German Model 98k Carbine.



Right and left side views of K98k Mauser Rifle with experimental resin stock and handguard. Numbered "22" out of only several hundred produced for testing. The stock is made of red resin, composed of a hollow fabric base, laminated with plastic resin strips molded to the shape of the stock, with a lacquer finish. To strengthen the stock, an aluminum liner has been inserted in the sling slot and a flat buttplate screwed to the molded-in cupped butt. (Rock Island Auction Co.)

the lower barrel band, which is held by a spring, while the upper band is pinned to the stock. The sling is side mounted, with the stock slotted for the typical German-style sling and keeper.

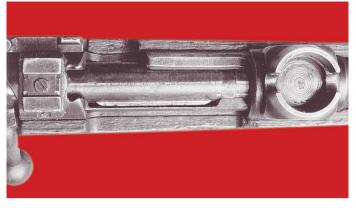
Length: 43.60; Weight: 8.60 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; also available in 7 x 57mm and 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "Mauser Banner" logo on the receiver ring over the date of manufacture, with the manufacturer's address on the side rail.

**GERMAN MODEL 98k CARBINE**: This carbine, in actuality a short rifle, was the standard shoulder arm of the German armed forces in World War II, and, with approximately 11.5 million carbines made, was the most produced of all of the Mauser rifles. It was manufactured at the following locations:

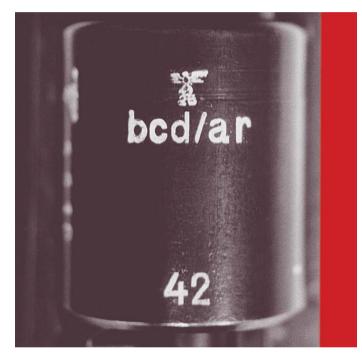
- Mauser-Werke AG, Oberndorf am Neckar, Wurttemberg (code "S/42K," "S/42G," "S/42," "42," "BYF," or "SVW")
- Mauser-Werke AG, Berlin-Borsigwalde (code "S/243G," "S/243," "243," or "ar")
- Sauer & Sohn, Suhl (code "S/147," "S/147K," "S/147G," "147," or "ce")
- Berlin-Lubecker Maschinenfabrik, Lubeck (code "S/237," or "237")
- Waffenfabrik Brunn AG, Brno (code "945," "dot," "dou," and "swp")



*View of the receiver of the Mauser K98k with experimental resin stock. (Rock Island Auction Co.)* 



Close-up view of the turret mount on the German Model 98k Carbine. (Century International Arms, Inc.)



A good illustration of the markings on a Kar 98k Carbine receiver when work was done on one weapon by two different manufacturers, in this case Eagle/bcd/ar over "42." (Robert Jensen collection)



Review of the Bosnian-Croatian Moslem troops of the Waffen-SS Legion "Handschar," equipped with the Model 98k Carbine. (Bundesarchiv)



An example of a Navy marked washer in the stock of a Kar 98k Carbine. (Robert Jensen collection)



An example of the markings of a WWI DWM/BERLIN/1918 receiver reworked into a Kar 98k Carbine configuration; in this case BNZ ', marked with a single Rune, indicating work done by Steyr at a concentration camp under SS supervision. (Robert Jensen collection)



Side view of the German Model 98k Carbine, showing the Russian crossed rifle marking over the serial number, and the model designation on the left side rail.

Feinmechanische Werke GmbH, Erfurt (code "S/27," "27," and "ax")

Gustloff-Werke, Weimar (code "bcd," or "337")

Steyr-Daimler-Puch, Steyr/Oberdonau (code "660," or "bnz")

Berlin-Suhler Waffenwerke (code "bsw")

A direct descendant of the Model 98 Rifle, which it superficially resembles except for size, the Kar 98k incorporates those changes that were deemed necessary after the lessons learned during the first world war. The intervening years also played a hand in the development of the K98k, with quantity production going into full operation in 1935 when Hitler undertook the complete rearmament of Germany.

Made under strict quality control, the K98k has a stepped barrel like the Model 98 Rifle, a side positioned sling, a compact turneddown bolt handle, a wide lower barrel band, and a tangent leaf rear sight. As the war progressed, manufacturing standards were modified and simplified to save production time and material, but quality control never declined, with the "Kreigsmodell" introduced in 1942. This rifle was distinguished from early production models by a stamped nose cap, barrel bands, and buttplates. Trigger guards were crudely finished, and most of the stocks used were of laminated woods, which had been shown to withstand warping much better than the conventional walnut one-piece stocks used initially. As the war ground on to its inexorable end, production methods declined rapidly, with shortcuts taken in many of the manufacturing steps. By 1945, bayonet lugs were done away with and barrel bands were held on the stocks by means of wooden screws!

Length: 43.60"; Weight: 8.6 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Letter or number code of manufacture over the date manufactured on the receiver ring, with various proof marks on the left and right side of the receiver ring. The model designation is on the left side rail.

A rare piece of equipment for the German Model 98k Carbine that is seldom found today is the canvas webbing and leather action cover. This was an important item, especially when the carbine was transported in an area where dirt and debris could foul the action.

One other item of equipment for the German Model 98k Carbine that is considered a rarity is the leather rear sight cover, used to protect the rear sight when the weapon is being transported.



Close-up view of the receiver ring of dual-coded rifle, showing "bcd/bnz." (Rock Island Auction Co.)



Right side view of rare dual-code, "bcd/bnz" manufactured K98k Short Rifle. (Rock Island Auction Co.)



Left side view of dual coded "bcd/bnz" K98k Short Rifle. (Rock Island Auction Co.)



A representative WWII Mauser Low Turret Sniper Rifle. This particular rifle was manufactured around 1942-1943, coded "byf 43," The scope is a Hensoldt-Wetzlar, coded "bmj." (Rock Island Auction Co.)



Close-up view of the scope and mounts of the K98k Sniper Rifle. (Rock Island Auction Co.)



Close-up of scope case as used with representative Mauser Low Turret Sniper Rifle. (Rock Island Auction Co.)



Right full-length view of an "SS" proofed K98k Short Rifle. This was a Gew 98 converted during the 1920s or 1930s. This is a late WWI production original issue 'SS' rifle. (Rock Island Auction Co.)



Markings on the "SS" proofed Mauser rifle, showing the "Crown/Danzig/1917" on the receiver ring, the eagle / SS' on the right side of the barrel, while the middle picture shows the serial number and the left side rail Gew 98 markings. (Rock Island Auction Co.)







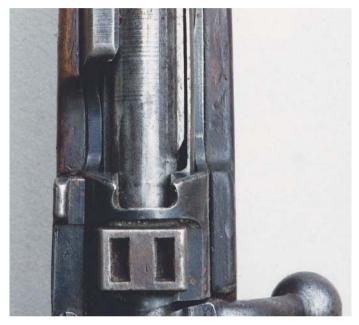
Right side view of an early WWII Mauser K98k Kriegsmarine Naval-issue Rifle. Marked "243/1940" for Mauser-werke, Borsigwalde. (Rock Island Auction Co.)



Top view showing receiver ring markings on Kriegsmarine K98k Short Rifle, "243/1940." (Rock Island Auction Co.)



Right side view of the ZF-41 scope mounted on the German Model 98k Carbine.



Top view of the claw mounts on the sniper model German Model 98k Carbine (bottom of page). Note the markings on the receiver both in front of and behind the front mount. (Century International Arms, Inc.)



Full-length view of a late-war turret mount sniper model of the German Model 98k Carbine. (Century International Arms, Inc.)



Full-length view of the claw mount sniper model of the German Model 98k Carbine. (Century International Arms, Inc.)



Full-length view of the marksman model German Model 98k Carbine with side rail mount and ZF-41 scope.



Left full-length view of the German Model 98k Carbine with side rail mount and ZF-41 scope.



Early WWII Short Side Rail Sniper Rifle, presumably a modified piece. Scope is an early pre-war SS issue, marked "AJACKS." (Rock Island Auction Co.)



Close-up of markings on Mauser Side Rail Sniper Rifle. (Rock Island Auction Co.)







Early German Zeiss Zielvier Low Turret scope and leather covered aluminum case. Scope is marked "Norinab Stockholm system Carl Zeiss, Jena," over Zielvier serial number. Earliest recorded version used for the Mauser Low Turret Sniper Rifle. (Rock Island Auction Co.)

Close-up of family crest on floor plate of Von-Hofe Express Sniper Rifle. (Rock Island Auction Co.)





German sniper with scope-mounted Model 98k Carbine, somewhere on the Russian front. (Signal magazine)



Left side view of Experimental Von-Hofe Express K98k Military Sniper Rifle in cal. 5.6x61mm. One-of-a-kind rifle manufactured in the late 1930s or early 1940s. Note the lack of a thumb cut in the left receiver wall. Floor plate boasts a family crest of medieval knight's helmet and shield. Scope is by Carl Zeiss, Jena, marked to "9/J R.1 157." (Rock Island Auction Co.)



Right-hand view of Experimental Von-Hofe Express Mauser Sniper Rifle, showing commercial leather scope carrying case. (Rock Island Auction Co.)



Full-length view of a German Model 98k Carbine equipped with an integral box magazine giving a 25-round capacity to the weapon. This carbine was captured on the Russian front, arsenal refinished, put into arsenal storage, and later shipped to Vietnam where it was used by the Viet Cong. This was its condition when captured, so one assumption is that the magazine, which is permanently attached to the trigger guard, was affixed experimentally by the Germans. It is also possible that this was done post WWII by the Czechs.



Full-length view of a late-war German Model 98k Carbine, FN manufacture. Note the laminated stock, the crude bands, and cupped buttplate.



Receiver markings on the sniper model German 98k Carbine, produced at Brno, Czechoslovakia in 1944.



Side view of the German Model 98k Carbine with extended integral magazine, showing the crossed Russian rifles signifying Russian capture and reissue.



*Close-up view of the left side of the mount and ZF-41 scope on the German Model 98k Carbine.* 



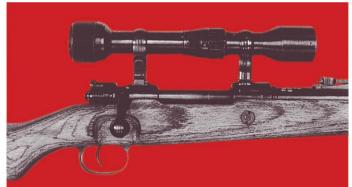
J.P. Sauer Long Side Rail Sniper Rifle. Last major variation of sniper rifle produced during WWII, considered the best and most durable of designs. (Rock Island Auction Co.)



Left side view of J.P. Sauer Long Side Rail Sniper Rifle. (Rock Island Auction Co.)



*Right side view of a Kar 98k Carbine with a side rail mount with 4x scope. (Robert Jensen collection)* 



Right side view of a Kar 98k Carbine, showing the action and a high claw mounted sniper scope. (Robert Jensen collection)



Left side view of the rear claw mount engaging. (Robert Jensen collection)



Left side view of the same Kar 98k Carbine illustrating the method of attachment of the front claw of the sniper scope. (Robert Jensen collection)



Side view of the receiver area of the FN-made German Model 98k Carbine, showing the original FN markings on the side rail and the Belgian proofing on the side of the receiver ring.



View of the FN-produced German Model 98k Carbine receiver ring, showing the FN logo. This most likely resulted from using receivers and other parts from the old stocks on hand at the FN factory.



Left side view of Mauser "byf" High Turret Sniper Rifle. (Rock Island Auction Co.)



Mauser "byf/44" K98k Sniper Rifle, showing the stock marked with Waffenamt acceptance. (Rock Island Auction Co.)



Barrel markings on "byf"/44 High Turret Sniper Rifle. (Rock Island Auction Co.)



Right side view of "byf" Mauser K98k Sniper Rifle, mid- to late-war production. (Rock Island Auction Co.)

## A visual record of the production and simplification of the Kar 98k Carbine, from the pre-war period to late-war manufacture:



Full-length view of the right side of a pre-war manufacture Kar 98k Carbine. (Robert Jensen collection)



Full-length view of the right side of a mid-war production Kar 98k Carbine. (Robert Jensen collection)



Right side view of the full-length of a late-war production Kar 98k Carbine, illustrating the gradual simplification and short cuts, i.e. lack of bayonet lug, take-down hole in the buttplate, omission of the stock washer, poorly finished laminated stock, etc. taken at the end of WWII in order to keep production as high as possible.



Full-length view of a late-war German Model 98k Carbine, FN manufacture. Note the laminated stock, the crude bands, and cupped buttplate.



A Waffen-SS sniper team, armed with a turret-mounted scope on a Model 98k Carbine in action on the Russian front. (Signal magazine)



Right side view of a Kar 98k Carbine with a variant side rail mount incorporating a 4x scope. (Robert Jensen collection)



Right side view of a Kar 98k Carbine Sniper with high turret mounts and a 4x scope. (Robert Jensen collection)



Close-up view of the action and receiver markings on the "PAAST/SPORTSMODELL".22 caliber Training Rifle. Note the shape of the bolt handle.



Full-length view of a German "PAAST/SPORTSMODELL" single shot .22 caliber Training Rifle.



Prewar Mauser single shot "Deutsches Sportmodell" .22 LR caliber Training Rifle. (Rock Island Auction Co.)



Full-length view of the German Model 98k Carbine with an ERMA Model EL .22 caliber insert for training purposes. These ERMA models were produced in either a single-shot version, or a five-round magazine version. Shown is the five-round magazine version with detachable clip. The insert barrel in this version goes to the muzzle.



Purpose-made German Model 98k-style KK Wehrsportsgewehr single shot, .22 caliber Training Rifle. All specifications are the same as for the Model 98k Carbine. At some time, this particular specimen was arsenal restocked.



Right side view of ZF41 marksman's scope mounted KKW.22 LR Training Rifle. Marked Gothic "G/Gustloff WERKE/WAFFEN/Suhl." (Rock Island Auction Co.)





Left side view of KKW Training Rifle, with ZF41 scope, marked "CXN/serial number/ZF 41." (Rock Island Auction Co.)

Marking on the receiver ring of a German Model 98k Carbine, indicating that this particular weapon was made under the auspices of Steyr-Daimler-Puch at a concentration camp under SS supervision. This is indicated by the single rune between the "BNZ" marking and the date below. (Century International Arms, Inc.)



Mauser Banner DSM-34 Training Rifle in .22 LR caliber. Pre-WWII as used by all branches of the German Services. (Rock Island Auction Co.)



The action of the German Model 98k Carbine with the ERMA Model EL .22 caliber insert. Note the collar with holes for locking the insert into place with the aid of a short rod. Note also the port for ejection of the spent cartridge casing.



Another view of the German Model 98k Carbine with ERMA Model EL .22 caliber insert, giving a better impression of the bolt and the action itself. This was an inexpensive, as well as practical, method of training unskilled recruits in the handling of military weapons. The ERMA unit would normally be kept in a lidded wooden chest that had been machined to accept the various components of the insert.



The receiver ring area of the KK Wehrsportsgewehr .22 caliber Training Rifle, showing the manufacturer's logo, name and address. This training rifle was produced by Gustloff-werke of Suhl.



Close-up view of SAd.NSDAP markings on the stock of the KKW Training Rifle. (Rock Island Auction Co.)



KKW Training Rifle with SAd.NSDAP markings on the left side of the stock. (Rock Island Auction Co.)



MOD 625 pre-war Training Rifle, factory fitted for a scope. Marked MOD W 625/circled "S" in a triangle. (Rock Island Auction Co.)



MOD 625b pre-war Training Rifle, manufactured by BSW. Receiver is marked "MOD 625b/BSW/Suhl." (Rock Island Auction Co.)



*Close-up view of the receiver markings on the MOD 625b Training Rifle. (Rock Island Auction Co.)* 



Barrel and receiver markings on a German Model 98k Carbine, showing an SS "Death's Head" on the barrel, indicating issuance to an SS unit. Note that the left side of the receiver ring bears commercial nitro proofs under the serial number. (Century International Arms, Inc.)



*The right side of the receiver of the KK Wehrsportsgewehr .22 caliber Training Rifle, showing the model designation.* 



*"SS" Runes in the side of the Kar 98k Carbine stock. (Robert Jensen collection)* 



Rare ERMA DSM 34 Training Rifle, with NSKK markings. Right side of stock stamped w/a large "NSKK/eagle/Swastika," flanked by the letters "M" and "U." (Rock Island Auction Co.)



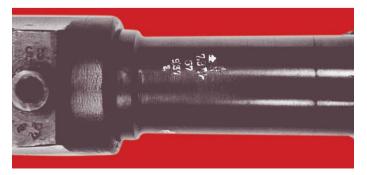
View of the ERMA DSM 34 Training Rifle cotton carrying case with NSKK markings. (Rock Island Auction Co.)



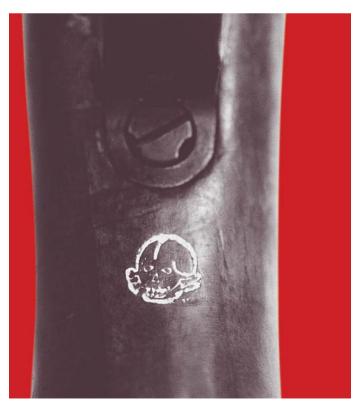
*Close-up view of the NSKK markings on the ERMA DSM 34 .22 LR caliber Training Rifle. (Rock Island Auction Co.)* 



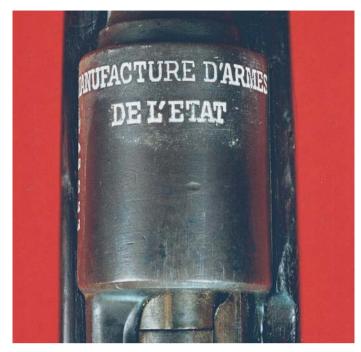
Left side view of an "SS" marked barrel and receiver group of a Kar 98k Carbine. (Robert Jensen collection)



Markings on the bottom side of the Kar 98k Carbine barrel. (Robert Jensen collection)



"SS" death's head cartouche on the underside of the Kar 98k Carbine. (Robert Jensen collection)



Markings on the receiver ring of the FN Model 30 Short Rifle issued to the German Postal Service. (Cliff Baumann collection)



Waffen SS soldier, eating with his German Model 98k Carbine slung across the front of his body. (Signal)



Stock marking on an FN-made Model 30 Short Rifle, indicating issue to a unit of the German Postal Service. Guards on mail trains, as well as at main post offices were equipped with rifles, usually German-made weapons. This case is an exception. (Cliff Baumann collection)



Receiver ring of the German Model 98k Carbine, showing the code "S/42" over the barely-discernible date "1938." What is interesting is that this carbine bears the crossed Russian rifle mark on the left rear of the receiver ring, indicating capture and later reissue by the Russians. This particular specimen was captured from the Viet Cong in 1968!



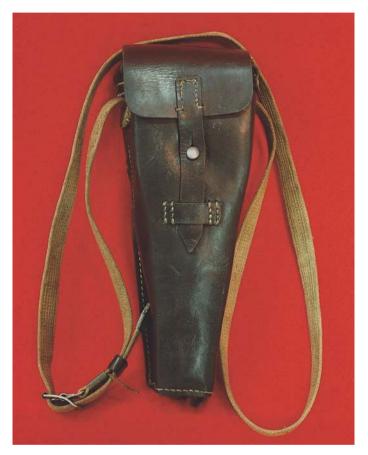
Grenade launcher and equipment used by the Germans with German Model 98k Carbine. From left to right: the launcher wrench, used to tighten or loosen the removable barrel; the inclinometer that attaches to the rifle to provide the proper level; two different style high explosive rifle grenades; lastly, an armor-piercing, shaped charge rifle grenade. (Henry Wichmann collection)



German soldier with German Model 98k Carbine with grenade launcher attached. The soldier is shown matching the grooves of the rifle grenade to the lands of the grenade launcher. (Signal)



The grenade launcher for use with the German Model 98k Carbine, shown here with two propelling cartridges of differing strength, as well as the shaped-charge, armor piercing rifle grenade shown mated to the barrel of the launcher. (Henry Wichmann collection)



Model 98k Carbine grenade launcher case with carrying straps.



Right side view of the leather rear sight cover for the German Model 98k Carbine. Note that the cover is held in place by a strap attachment that goes between the front of the receiver ring and the rear of the sight base. The rounded portion of the cover is held by a simple strap and metal closure. (Henry Wichmann collection)



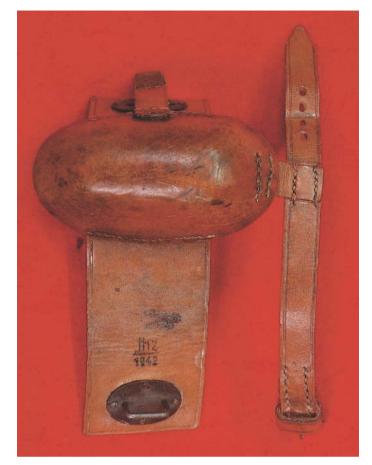
Markings on the heavy strap portion of the leather rear sight cover for the German Model 98k Carbine. (Henry Wichmann collection)



Inside view of the German World War II canvas webbing and leather Model 98k action cover. (Henry Wichmann collection)



*Outer view of the German World War II canvas webbing and leather Model 98k action cover. (Henry Wichmann collection)* 



Top view of the opened leather rear sight cover for the German Model 98k Carbine. (Henry Wichmann collection)



Markings on the German Model 98k action cover. (Henry Wichmann collection)



One of the rarest and most famous German rifles of WWII is the special short 7.92mm carbine produced at Mauser Oberndorf and marked with its code "byf" over "41," and marked "G40k" on its side rail. From buttplate to receiver ring, the rifle appears to be a normal Kar 98k. However, the upper half of the rifle differs significantly in its rear sight assembly, barrel length, upper sling swivel and barrel band, fore stock, and hand guard. The only known, correct G40k in the U.S. with history dating back to WWII is this rifle in the collection of the U.S. Army's Ordnance Museum and School at Aberdeen Proving Grounds, Maryland, where these pictures were recently taken. Two more are reported to be in collections in Europe. One of these, in France, had reportedly been converted to sporting caliber to comply with French firearms laws. (U.S. Army Ordnance Museum)



The forend of the G40k features an upper barrel band which wraps around the fore end clam shell-fashion, and is secured with a screw on the reverse side. A similar upper band system can be found on the German Kar 98, the Polish K98, and the Belgian Models 1935 and 89/36 service rifles. The side-mounted sling swivel is mounted on a base on the reverse side of this band. (U.S. Army Ordnance Museum)



The receiver ring and rear sight assembly of the G40k. Note the "byf" marking (Mauser Oberndorf's code used in 1941) on the receiver ring, and the unique rear sight leaf that is graduated in 100-meter increments up to only 1,000 meters. (U.S. Army Ordnance Museum)



The muzzle and front sight of the German G40k Experimental Rifle. Note that the rifle's front sight base is slotted for the standard Kar98k clampon sight hood. (U.S. Army Ordnance Museum)



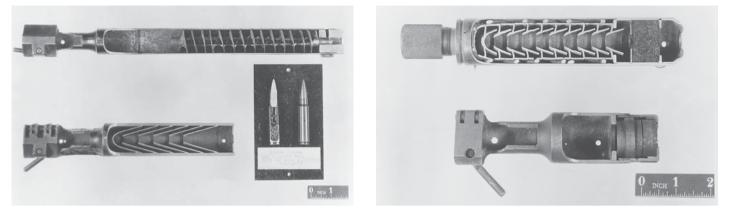
The upper sling swivel on the German G40k Experimental Rifle features a moving metal swivel which rotates forward and backward and is mounted on a base welded to the side of the clam-shell upper barrel band. (U.S. Army Ordnance Museum)



The left side of the G40k features the German eagle firing proof on the receiver next to the serial number "V81." This number is believed to be unique to experimental or trials rifles, and likely stands for "Versuchs," the German word for trial or test, thus a trial or test rifle, or "versuchsgewehr" in German. Mauser company arms invemtories from the turn of the century until World War II refer to test rifles as "versuchgewehr" and often use the letter "v" as an identifier. (U.S. Army Ordnance Museum)



The spine of the buttstock of the G40k features the rifle's serial number, "81," in the usual German Army fashion, across the grain of the wood. (U.S. Army Ordnance Museum)



Sectionalized views of four different silencers utilized by the Germans during WWII; note the low velocity cartridges developed for use with the silencers.

**GERMAN MODEL G33/40 CARBINE:** After the conquest of Czechoslovakia, German industry assumed control of the arms industry at Brno. In 1940, after testing and evaluating the Czech Model VZ 33, the German Model G33/40 Carbine was introduced. The prefix to the model number would indicate that, in German nomenclature, this is a rifle, while actually it is a carbine. The German Model 33/40 Carbine differed from the Model VZ 33 Carbine by having a laminated stock and hand guard, as well as a sheet steel protector plate on the left side of the buttstock, curving to the bottom. The German 33/40 Carbine does not have grasping grooves, and the front sight protectors of the VZ 33 are replaced by a steel sight hood, or cover. An extremely rare variant of the German Model 33/40, in a single prototype form only, was the



The left side of the German Model 33/40 buttstock, showing the sheet steel protecting plate adjoining the cupped buttplate.



*The side rail of the German Model 33/40 Carbine, showing the model designation.* 



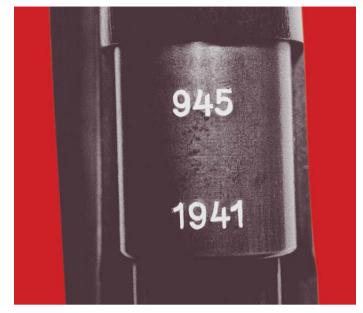
The receiver ring of the German Model 33/40 as marked by the Czechs prior to the changeover to the German coding. (Robert Jensen collection)



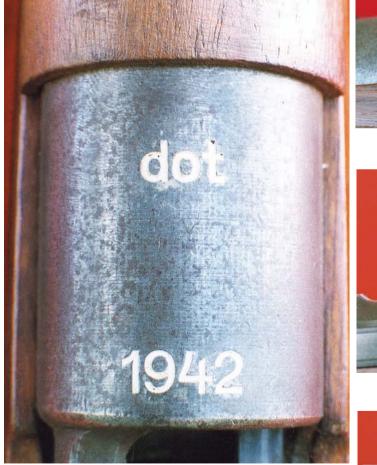
Full-length view of the German Model 33/40 Carbine.



The receiver ring of the German Model 33/40 Carbine, showing the manufacturer's code over the date of manufacture.



The receiver ring of the German Model 33/40 Carbine, illustrating the "945" code that was used only in 1940. (Henry Wichmann collection)



A virtually brand new G33/40 Mountain Carbine! A vet bring-back, this carbine was assembled from un-numbered parts at the factory when Americans pulled back to allow Russians to come in. Note that the front sight is not silver soldered on, nor is the bolt or receiver numbered! (R. K. Smith collection)





folding stock version for paratroop use. Many of the Model 33/40 Carbines were issued to the German "Gebirgstruppen," or Mountain Infantry, where the buttstock protecting plate helped keep the stock from harm when it was used for assistance in climbing. The German Model 33/40 Carbine has always been a highly prized addition to any Mauser collection.

Length: 39.10"; Weight: 7.9 lbs.; Barrel: 19.29"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush box magazine; Sights: Tangent leaf rear sight graduated to 1000 meters. Remarks: All German Model 33/40 Carbines produced after 1940 are marked on the receiver ring with the same code, "dot" for Brno, or Brunn as it was called in German. Code "945" was used for the first production pieces made in 1940 with a walnut stock, rather than a laminate stock. This was the only manufacturer of Model 33/40 Carbines. This code will be found over the date of manufacture. The side rail is marked with the model designation.

**GERMAN MODEL 29/40 RIFLE:** There are two explanations for the origin of this short rifle, neither of which has been conclusively proven. What is clear about these rifles is that they were all made by Steyr (receiver code 660) in 1938 and 1939, that they were all made for the Luftwaffe (stock marked "L") and that there was no known official German designation for these rifles. German collectors call them



Steyr code "660" over "1939" on the receiver ring of the German Model 29/40 Rifle. Note the German waffenamt proofing on both sides of the receiver ring.



Full-length view of the unaltered Colombian Model 29 Rifle, redesignated the Model 29/40 as issued to the Luftwaffe. Note the sharp point to the pistol grip, the Austrian-style lower and upper bands held by screws, and the deeply cupped ends of the recoil crossbolt. This specimen has unfortunately lost a piece of the stock at the right side of the receiver ring. (Century International Arms, Inc.)



Full-length view of a specimen Model 29/40 Rifle. (Gibbs Rifle Company)



Full-length view of the later version of the German Model 29/40 Rifle, fully comparable to the German K98k Carbine except for the markings.



Luftwaffe-proofed Steyr G29/40 Short Rifle produced for only three years; top of the action is marked "660"/"1940." (Rock Island Auction Co.)



Left-hand view of the receiver area of the Luftwaffe "660"/"1940" G29/40 Short Rifle. (Rock Island Auction Co.)

"Luftwaffe Karabiner," while other collectors refer to them as G290, or "Gewehr 29 Osterreich," (Rifle 29 Austrian). To simplify things, they will be referred to as G290.

There is general agreement that the G290 derives from an export M98 short rifle made by Steyr prior to the Austrian Anschluss with Germany in 1938, but what is unresolved is the question of what version of export rifle it is derived. Two possibilities are the Steyr M29 short rifle made for Columbia which has similar stock fittings, a straight bolt and a 30mm bayonet stud, while the other option is the Steyr M31a short rifle , of which no specimens are currently known; it is similar to the M29, but is in caliber 8mm, and has a sliding bolt cover.

Whatever the origin of the G290, the rifle made for the Luftwaffe has a bent bolt, but no clearance cut for the bolt knob, a 50mm German bayonet stud, is in caliber 8mm and has a walnut stock with grasping grooves. The G290 uses a sling similar to that for the German Gew98 which can be attached to the underside of the stock, or to the left side of the stock, or a combination of the two. The G290 and the G29/40 are frequently confused by collectors as well as writers; the G290 is always marked 660 over 1938 or 1939 on the receiver, and there are no markings on the left side rail. The Austrian-style pointed pistol grip and four-point sling arrangement are quite distinctive. It is reported the Luftwaffe only



The side rail of the German Model 29/40 Rifle, showing the model designation.

used the G290 for training purposes. It may be that the production of the G290 was terminated in favor of the G29/40. No G290 is known dated after 1939, while no G29/40 is known dated prior to 1939.

When the Germans invaded Poland in 1939 and took the Fabryka Broni works in Radom, they found numbers of Polish wz 29 Short Rifles in the process of manufacture. Receivers were shipped to Steyr where the rifles were completed in K98k configuration, using German barrels, stocks and other components, as well as Polish bolt stops, trigger guards, etc. The original Polish wz 29 is stamped with the Polish Eagle over "F.B." over "RADOM" over the year of manufacture on top of the receiver, while the left side rail is marked "wz 29." The German rebuilds are found in two forms: with the Stevr code 660 over the Polish eagle on the receiver ring, and the wz struck out and the letter "G" added ahead of the wz and the "/40" added after the "29." The other style found is with the normal German-style receiver markings of "660" over the year, and "G29/40 on the left side rail. German sources indicate procurement of 54,500 G29/40s 1940-1942, but this figure may be too low. Most G29/40s went to the Navy ("M" stamp on stock) or the Luftwaffe ("L" stamp on stock). It is known that one (!) Polish K98 has been found converted into a G29/40.



The receiver ring of the German Model 29/40 Rifle, showing the "660" code for the Steyr-Daimler-Puch factory over the date "1940."

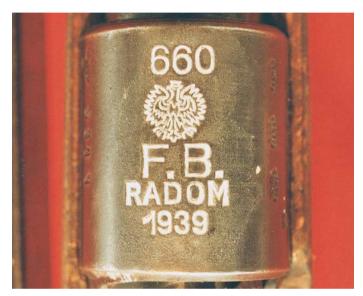


Full-length view of a Polish Wz 29 Short Rifle converted by Steyr to 29/40 configuration.



Side rail of the converted Polish Wz 29 Short Rifle. Note the crossed-out model number "wz," and the addition of the "/40" behind the "29."

**GERMAN MODEL 24(t) RIFLE:** After the takeover of Czechoslovakia in 1938, Germany continued the production of the Czech VZ 24 Rifle, but in conformity to prevailing German standards. Some of the rifles encountered have the original Czech-style flat buttplate, while those of a later date, usually beginning sometime in 1941, were fitted with the German-designed cupped buttplate. The stocks were fitted with the domed washers and hollow rod for disassembly of the firing mecha-



The receiver ring of the converted Polish Wz 29 Short Rifle, illustrating the "660" code stamped above the Polish eagle crest.

nism, and a slot was cut in the stock for the side mounted German-style sling and keeper. Later examples are found with laminated stocks and hand guards.



Full-length view of the German Model 24(t) Rifle. Note that this particular rifle is fitted with bottom swivels on the lower band and center of the buttstock, in addition to the side mounted sling arrangement. The stock is walnut.



Full-length view of a German Model 24(t) Rifle fitted with a laminated stock.

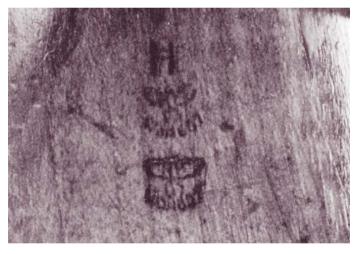
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All data relative to the German Model 24(t) Rifle will be found under the section on Czechoslovakia, with the exception of the details mentioned above.

GERMAN "VOLKSGEWEHR," OR "PEOPLE'S RIFLE": A lastditch effort to arm the German populace ushered in the VK-98 (Volkss-



The side rail of the German Model 24(t) Rifle, showing the model designation. Note the typical deep-dished recoil crossbolt.



Acceptance marks on the stock of the German Model 24(t) Rifle.



Left side view of the receiver markings on a Portuguese Model 1940 Kar 98k, which was never shipped to the Portuguese, but was remarked and issued to the Luftwaffe. Notice the Portuguese crest. (Robert Jensen collection)



Property number on the left side of the buttstock of the German Model G 24(t) Rifle.



The receiver ring of the German Model 24(t) Rifle, showing the code "dou," for Waffenwerke Brunn, A-G, Bystrica, over the date of manufacture.



German Waffen SS troops of the SS "Polizei" Division armed with Czech-made German G 24(t) Rifles, operating in a marshy area on the Eastern Front. (Signal)



Full-length view of the German VK-98 Rifle. This particular rifle has an integral 5-shot, staggered column, flush, box-style magazine. The trigger guard is a simple piece of bent steel, held in place by two wood screws. Note the use of a machine gun barrel. Note the absence of a buttplate and lack of provision for a sling.

turmkarabiner-98) or the "People's Rifle." Many were produced, but only infrequently put to the purpose for which they were intended. There are several single- shot and five-shot models.

Crudely made at best, there is almost a complete lack of any refined machining; the stock is only roughly contoured to a sporter-style shape, and the trigger guard is often simply a piece of bent strap steel screwed into position.

Length: 40.50"; Weight: 6.90 lbs.; Barrel: 21.0"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand, surprisingly well done!; Operation: Turnbolt action; Feed: 10-round, detachable, box magazine; Sights: Elementary fixed V-notch rear sight. Remarks: Model designation, date, and manufacturer's code are found on the front of the left side of the receiver.



Camouflaged Waffen SS trooper on the Russian Front. (Signal)



Bottom view of the stock and trigger guard of the German VK-98 Rifle showing the simple attachment of the trigger guard.



Top view of the German VK-98, showing the action and the receiver ring markings "BNZ 45."



*Close-up view of the straight handled bolt of the German VK-98, showing the lack of a stop on the bolt sleeve.* 



Left full-length view of the German VK-98 Rifle. All versions were counterbored smooth to a depth of 10mm to 25mm for the most part.



Full-length view of the German VK-98 Rifle. Note the fixed rear sight, the 5-shot internal magazine, and the machine gun barrel. This rifle is fitted with a buttplate and provision for a sling, with a swivel on the left front of the stock and a cut through the stock for a sling.



Left full-length view of the preceding German VK-98 Rifle, showing the sling swivel on the front of the stock.



*Full-length view of a variation of the German VK-98 Rifle. This weapon has a straight bolt handle, a machine gun barrel, a buttplate, and an internal magazine with floorplate, as well as provision for a sling. The bolt of this rifle was produced without a stop on the bolt sleeve.* 



Left full-length view of the German VK-98 Rifle with straight bolt handle. Again, note the provision for attachment of a sling.



Full-length view of another variation of the German VK-98 Rifle. This rifle has a machine gun barrel, cupped buttplate, recessed stock for the bolt handle and knob, domed washer and tube for bolt disassembly, and magazine floorplate, as well as provision for a sling.



Left full-length view of the previous German VK-98 Rifle.



Full-length view of another German VK-98 Rifle. This rifle is fitted with a cupped buttplate with a hole in the side for bolt disassembly, a K98k barrel, a magazine floorplate, and provision for a sling.



Left full-length view of the German VK-98 Rifle with the K98k barrel, etc.



"VK 98 Last Ditch," "BNZ 45" marked single shot Mauser Rifle, with simple "V" notch rear sight set in a dovetail. Stock is a slab of wood, 1-5/8inches thick, slightly rounded, top and bottom. (Rock Island Auction Co.)



Full-length view of a "Last Ditch" VK 98 People's Rifle. Manufactured at Steyr. Note the 'EC' and 'BNZ' in a shield on the barrel, as shown in the next picture. (Rock Island Auction Co.)

**GERMAN VK-98 CARBINE:** As the end of the war with Germany approached, the need to turn out weapons that were cheap, easy to produce, and capable of arming the populace was of paramount importance. This rifle is the result of that desperation. Crudely made, with the stock only roughly outlined, machine gun barrels were often adapted to a Mauser receiver. Many of these weapons were single shot, with a fixed rear sight set for one hundred meters.



Close-up of the barrel markings on the VK 98 "People's Rifle.""EC" next to Shield "BNZ/1." (Rock Island Auction Co.)



Barrel stampings on the Mauser-style rifle produced by F.W. Heym. Note that this particular rifle is marked "Made in Germany."



Top view of the receiver area and operating bolt of the G 41M Semi-Automatic Rifle. (Robert Jensen collection)



Full-length view of the Mauser-style rifle produced by F.W. Heym.



Right side view of the Gew 41M Semi-Automatic Rifle; note the bolt handle knob, as well as the awkward distance from the trigger guard to the fixed magazine. (Robert Jensen collection)

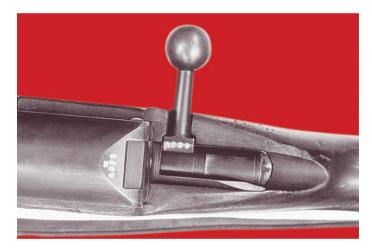


Left side view of the Gew 41M Semi-Automatic Rife; note the muzzle cone by which the gas is trapped to operate the system. (Robert Jensen collection)

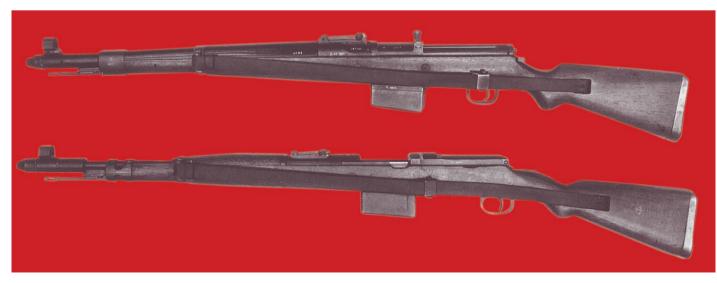
**WEST GERMAN POLICE/BORDER GUARDS HEYM MAUSER RIFLE:** F.W. Heym Arms Factory, of Muennerstadt, West Germany commenced production of a modified Model 98 action design rifle in the early 1950s. Some of these rifles were also imported into the U.S. by Imperial Arms, a firm operated by Ed Hoffschmidt during the 1950s. While superficially resembling the K98k, this rifle has a fixed rear sight, no upper hand guard, nose cap, upper band, or bayonet lug. The front sight is a sporter-style sight.

This rifle was known as "The Widowmaker," as the receiver walls are notoriously weak and prone to bursting. It has been recommended that they not be fired.

THE 7.92MM MODEL 41M (GEW41(M)) SEMI-AUTOMATIC RIFLE: As developed by Mauser, the 41M was an unsuccessful design that was abandoned in 1943, with very few rifles being actually produced beyond prototypes and troop test rifles, making them a collector's dream. The 41M operates from the gas at the muzzle rebounding from a muzzle cone and striking the piston under the barrel, which in turn forces back the operating rod which is connected to the rear portion of the two-piece bolt. The rear section of the bolt pulls back the forward



*Operating bolt on the G 41M Semi-Automatic Rifle. (Robert Jensen collection)* 



Left side view comparison of the G 41M Semi-Automatic Rifle to the G 41W Semi-Automatic Rifle. (Robert Jensen collection)

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section, causing the front-mounted locking lugs to be cammed out of their recesses in the receiver. The 41M has a manually-operated, non-reciprocating bolt handle which has the same appearance as a bolt handle on a manually-operated bolt-action rifle, and which is operated in the same manner. When the weapon is fired, the bolt does not reciprocate with the action. The weapon has a fixed magazine which is loaded with two five-round clips.

**Length:** 46.25"; **Weight:** 11.25 lbs; **Barrel:** 21.75"; **Caliber:** 7.92X57mm; **Operation:** Gas semi-automatic only; **Feed:** Fixed 10-round staggered-row box magazine; **Sights:** Tangent leaf w/U notch; **Remarks:** Well-marked on the receiver of the action.



*Receiver markings on the G 41M Semi-Automatic Rifle. (Robert Jensen collection)* 



Top view of the G 41M Semi-Automatic Rifle with the cover removed to show the recoil spring and firing pin. (Robert Jensen collection)



The spread wing eagle and the crown-over-N are definitive smokeless powder proofs used in the German Democratic Republic after 1950.

# Production Data for Export Contract Mauser Military Rifles produced at Waffenfabrik Mauser Oberndorf between 1887 and 1914 with selected post WWI additions

Note: This data below is drawn only from published sources that use factory production records. Mauser rifle production figures for Ludwig Loewe and Son, and Deutsche Waffen-und Munitionsfabriken, Berlin (DWM) are not available and are reported to have been lost. Production figures for Mauser Oberndorf-produced export rifles made between 1930 and 1945 exist, but have not been published as of January 2003.

### **Principal Sources:**

- 1 Mauser: Von der Waffenschmiede zum Weltunternehmen by Wolfgang Seel, published by Verlag Stocker-Schmid AG Motorbuch Verlag, 2<sup>nd</sup> edition, Zurich, 1988.
- 2 *Backbone of the Wehrmacht*, by Richard Law, 2<sup>nd</sup> edition, Collector Grade Publications, Cobourg, Ontario, Canada, 1993, for data on the Japanese Kar98k sale.

Date	Country	Number Produced	Model/Caliber	Type/Comments
1870s	China	26,000	M.1871	Long rifles
1881	Serbia	120,000	M.1878/80	Long rifles
1881	Serbia	5,000	M.1878/80?	Repeating carbine
1881	Serbia	3,000	M.78	Artillerie-Repetierkarabiner
1887	Turkey	270,000	M.1887, 9.5mm	Long rifles

Date	Country	Number Produced	Model/Caliber	Type/Comments
1887	Turkey	4,000	M.1887, 9.5mm	Cavalry carbine
1890	Turkey	280,000	M.1890, 7.65mm	Long rifle
1893	Turkey	201,000	M.1893, 7.65mm	Long rifle
1895 (approx.)	Turkey	5	M.1893, 7.65mm	Prototype half-stock cavalry carbine w/10-round magazine
1899	Sweden	1,400	M.1896, 6.5.mm	Long rifle
1900	Sweden	43,600	M.1896, 6.5mm	Long rifle
1900	Luxembourg	500	M.1896, 6.5mm	Long rifle
1903- 1905	Turkey	200,000	M.1903, 7.65mm	Long rifle
1904	Turkey	406	M.1903, 7.65mm	"Marine-gewehre" (Navy rifles)
1905	China	1,000	M.1904, 7.9mm	
1905	China	1,000		
1905	Paraguay	7,600	Model unknown, 7.9mm	Believed to be Gew 98-type long rifles
1907	Turkey	7,617	M.1903, 7.65mm	Macedonian Gendarmerie long rifle
1907	Brazil	2,000	M1907?	Carbines
1907	China	1,500	M.1904, caliber unstated	
1908	China	3,000	M.1907, 6.8mm	Rifles w/bayonets
1908	China	3,300	M.1907, 6.8mm	Rifles w/o bayonets
1908	China	450	M.1907, 6.8mm	Cavalry carbines
1908	Turkey	15,000	M.1908	Carbine
1909	Turkey	15,000	M.1908	Cavalry carbine
1909	Peru	5,000	M.1909, 7.65mm	Infantry rifles
1909	Persia	1,500	M1904/07, 7mm	Infantry rifles
1909	China	1,050	Model unstated, 6.8mm	Cavalry carbine
1910	Peru	26,800	M.1909, 7.65mm	Infantry rifles
1910	China	3,000	M.1907, 6.8mm	Rifles w/bayonets
1910	Serbia	32,000	Model not stated	Rifles
1911	Turkey	1,100	M1910, 7.65mm	Rifles
1911	"South America"	200	No model, country or caliber stated	Carbines
1911	"South America"	6,500	No model, country or caliber stated	Rifles
1911	Costa Rica	5,000	M.1910, 7mm?	Rifles
1910	Venezuela	1,200	M.1910, 7mm?	Rifles
1910	Bolivia	6,000	M.1911, 7.65mm	Infantry rifles
1913	Brazil	100,000	M.1908, 7mm	Believed to be long rifles with the side rail marking "DWM Oberndorf"
1913	Venezuela	2,100	No data. M1910?	Rifles
1913	China	12,000	No data	Rifles
1914	Paraguay	10,100	No data	Rifles
1938	Japan	20,000	Kar 98k, 7.9mm	Short rifle (Source: 2)

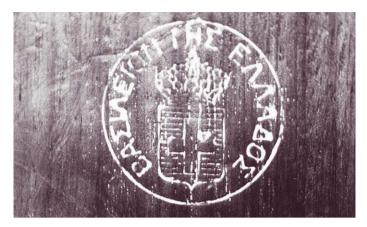
### GREECE

From the beginning of the twentieth century, the Greek armed forces had relied heavily on the Model 1903 Mannlicher-Schoenauer Rifle and Carbine to equip their troops. Due to the Greek participation in numerous small Balkan wars preceding World War I, the unavoidable loss of weapons and material left the Greek forces in a weakened position at the beginning of the first world war.

With the opening of the Salonika front, French, British, Russian, Serbian, as well as troops from other nations, were shipped to the Macedonian front to probe and attack the soft underbelly of Europe. The Greek army was the recipient of French war material, including French Gras Mle 74 Rifles, Model 1907 3-shot Mannlicher Rifles,



The receiver ring of the Greek Model 1930 Short Rifle, showing the Greek crest of a crowned shield with short-armed cross over the model date.



Stock cartouche on the side of the buttstock of the Greek FN 30 Short Rifle. (Robert Jensen collection)



Cartouche of Saint George and the Dragon on the underside of the small of the stock of the Greek FN 30 Short Rifle. (Robert Jensen collection)



Full-length view of the Greek Model 1930 Short Rifle.



Full-length view of the Greek FN Model 1930 Carbine.

Model 1892 3-shot Carbines, French Model 86/93 Rifles, French 07/15 Rifles, and captured Austrian Model 1895 Straight-Pull Rifles and Carbines.

As a result of Greek participation in the first world war, Greece was granted by the treaty of Sevres (1920) the territory of Smyrna (Izmir) in Turkey as spoils of war. Expansionist policies led to Greek attempts to annex as much of Anatolia and Thrace as they could control, waging a protracted, bound-to-fail war against the Turkish forces of Kemal Ataturk. Finally repulsed at the battle of the Sakarya River after a threeweek struggle, the Greek army was forced into an agonizing 250-mile retreat to Smyrna, which was captured in September 1921. Thousands upon thousands of Greeks were slain by the Turks, with the Treaty of Lausanne ending the war and forcing the Greeks out of Asia Minor.

Material losses as a result of the Anatolian debacle were enormous, with the Greeks contracting for more of the Model 1903 Mannlichler-Schoenauer Rifles, albeit an updated version made by the Italians at Breda. To supplement these weapons, the Greek authorities also contracted with FN for an unknown quantity of the FN Model 30 Short Rifle, known as the Greek Model 1930. These rifles were used by the Greek armed forces in resisting the Italian and German invasions during the second world war.

This is a typical FN export model short rifle, fitted with a pistol grip stock, with the upper hand guard running from in front of the receiver ring to approximately one inch in front of the lower barrel band. There are no grasping grooves, the lower barrel band has a bottom swivel, with another on the bottom of the buttstock, and the bolt handle is straight. Both upper and lower barrel bands are held by separate bandretaining springs.

Length: 43.25"; Weight: 9.0 lbs.; Barrel: 22.50"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Greek crest over the model date on the receiver ring, manufacturer's markings on the side rail.

# **GUATEMALA**

Colonized by the Spanish in 1524, Guatemala became the military authority for all of Central America under the captaincy general of Guatemala. Gaining independence from Spain in 1821, and later from Mexico in 1823, Guatemala, despite its lack of economic and social progress, became the center for the United Provinces of Central America. Upon the collapse of the United Provinces of Central America, Guatemala became an independent country in 1832.

In power from 1851 to 1944, the Liberal party under Cabrera (1898-1920) and Ubico (1931-1944) promoted economic prosperity and development, despite the repressive nature of their regimes. Arevalo was elected president in 1945, followed in turn by Jacobo Arbenz, a leftist elected with strong Communist support. Plagued by rumors of an impending coup, Arbenz made arrangements for the importation of a shipment of rifles and munitions from Czechoslovakia. The shipment included Czech VZ 24 Short Rifles and VZ 33 Carbines. As these weapons were entering port in 1954, a U.S.-backed coup led by Colonel Carlos Castillo Armas overthrew the government of Arbenz.

Either directly or indirectly, the military has ruled Guatemala since that time, although democracy officially returned to Guatemala in 1986. Beginning in the early 1960s and intensifying in the 1980s, guerrilla activity has plagued the country, resulting in the deaths of at least one hundred thousand people, mostly civilians, at the hands of the Guatemalan right-wing death squads, the Guatemalan National Revolutionary Union (URNG), and the army.

In May of 1993, President Jorge Serrano Elias attempted to suppress student protesters and the unions but, faced with overwhelming opposition from the population, the business community, and the free world, the military replaced Elias with Ramiro de Leon Carpo. In March, 1994, the government and the URNG reached agreement on a treaty that paves the way toward resolving the thirty-year struggle that has rent this poor nation.

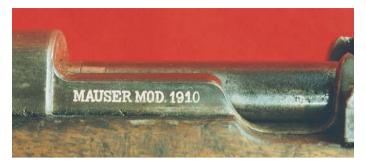
**MODEL 1910 RIFLE:** An undetermined number of ex-Serbian Model 1910 Rifles were purchased by Guatemala, presumably after the first world war. These rifles were marked with the standard Waffenfabrik Mauser export markings on the receiver ring, and did not incorporate any Guatemalan markings. This export Model 1910 Rifle is quite similar to the Gew. 98, fitted with a pistol grip stock, with the upper hand guard extending from in front of the receiver ring to just beyond the lower barrel band. The upper barrel band has the bayonet lug fitted



Receiver ring markings on the Model 1910 Rifle as used by Guatemala.



Full-length view of the Model 1910 Rifle as used by Guatemala.



Model designation on the side rail of the Model 1910 Rifle used by Guatemala.

to the bottom for use with the Model 1895 bayonet. The lower barrel band is fitted with a swivel, as is the bottom of the buttstock.

**Length:** 48.80"; **Weight:** 8.80 lbs; **Barrel:** 29.13"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** This rifle will be marked on the receiver ring with the Waffenfabrik Mauser Oberndorf a/m stamping, typical of the export model. The model designation will be on the side rail.



Guatemalan crest on the receiver ring of the Guatemalan Czech VZ 24 Short Rifle. The bird at the top is the famous Guatemalan quetzal bird.

**GUATEMALAN CZECH VZ 24 SHORT RIFLE:** This is your typical Czech export model rifle, fashioned after the VZ 24 Short Rifle. The pistol grip stock is fitted with grasping grooves, and the upper hand guard runs from in front of the receiver ring to the upper barrel band. The upper barrel band is retained by a single band-retaining spring, while the lower band is held by the typical screw fitting through the stock. The front sight is protected by a set of screw-on sight protectors. There is an integral swivel on the left side of the lower band, as well as one on the bottom. A swivel is positioned on the left side of the stock at the pistol grip, and on the bottom of the buttstock at the midway point. There is also a screw-held, inset washer on the right side of the buttstock. The bolt handle is straight.

Length: 43.0"; Weight: 9.90 lbs.; Barrel: 22.50"; Caliber: 7 x 57mm; also available in 7.65 x 53mm, and 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Guatemalan crest on the receiver ring, manufacturer's markings on the side rail.

**GUATEMALAN CZECH VZ 33 CARBINE:** The exact quantity of Czech VZ 33 Carbines purchased from Czechoslovakia is not known, but they were the standard export model of the VZ 33, fitted with a pistol grip stock without grasping grooves. The upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The upper band is secured by a band-retaining spring. The lower band, which has an integral swivel on the left side, as well as a bottom mounted swivel, is held on by a screw clamp at the bottom. There is a quick-release mount midway on the bottom of the buttstock. Note the inset, screw-retained washer in the center of the buttstock.

**Length:** 39.25"; **Weight:** 9.0 lbs.; **Barrel:** 18.75"; **Caliber:** 7 x 57mm; also available in 7.65 x 53mm, and 7.92 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round, staggered



The side rail of the Guatemalan VZ 24 Short Rifle showing the manufacturer's markings—in this case, in Czechoslovakian. The number on the side of the receiver ring is not the date produced, but the serial number.



Full-length view of the Guatemalan Czech Model VZ 24 Short Rifle.



Full-length view of the Guatemalan Czech VZ 33 Carbine.

column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 1000 meters. **Remarks:** Guatemalan crest on the receiver ring, manufacturer's markings on the side rail.

### HAITI

Discovered by Christopher Columbus in 1492, he renamed the island of Haiti "Hispaniola." The indigenous population were brutally overworked by the Spanish and decimated by disease over the next one hundred years, resulting in the importation of African slaves to labor in the fields as their unfortunate predecessors had. Harassed by French pirates and freebooters, the western third of the island was ceded to France in 1697. This French colony of Haiti, with its slave-based economy, accounted for two-thirds of France's return on their overseas investments.

A slave revolt in 1791 brought about abolition in 1794, with the whole island, including San Domingo (The Dominican Republic), coming under the control of the French in the same year. An ex-slave, Toussaint L'Overture, became the governor-general of Haiti, but was



Rifle serial number on the right side of the receiver ring of the Haitian FN Model 24/30 Short Rifle.

deposed by the French, who sent vast armies to reconquer and reclaim the island in the name of France. Haiti proved to be the graveyard for some of France's finest veterans, with fever and guerrilla warfare cutting the troops down like weeds. Jean-Jacque Dessalines (Emperor Jacques I, 1804-1806) and Henri Christophe (Henry I, 1806-1820) forged a black army that defeated the French forces in 1803, with independence declared in 1804.

The next 150 years have proven to be the worst that this poor nation could have experienced, marked by complete political and social instability and ever-growing U.S. interference in the financial and political affairs of the country. The U.S. had a military presence in Haiti from 1915 to 1934, and once again in 1994 under the guise of UN leadership. Haiti today is the poorest and most illiterate nation in the Western Hemisphere.

In 1986, the military, such as it was, removed the then president from power, an interim president was named, and in 1990, the first free democratic elections ever in the Republic of Haiti were held. The Rev. Jean-Bertrand Aristide was the victor of the election, but after seven months of rule, he was overthrown by the army. UN sponsored intervention, with the U.S. filling the primary role of policeman, returned Aristide to power in 1994, ousting the military leaders and redefining the role of the Haitian military into that of an internal security force with extremely limited military potential.



Top view of the action of the Haitian FN Model 24/30 Short Rifle showing the cut in the receiver face to accommodate the longer .30-06 caliber cartridge.



Full-length view of the Haitian FN Model 24/30 Short Rifle.



Haitian army markings on the side of the receiver ring of the Haitian FN Model 24/30 Short Rifle, also showing the manufacturer's markings on the side rail.



The "corrugated"-style buttplate used on the Haitian FN Model 24/30 Short Rifle.

**HAITIAN FN MODEL 24/30 SHORT RIFLE:** Due to the presence of the U.S. military from 1915 to 1934, the Haitian army, originally named Gendermerie D'Haiti, was initially equipped with Krag-Jorgensen rifles and Colt machine guns. By 1945, the Garde d'Haiti, as the military had been renamed, was taking on the characteristics of a national army. Re-armed with surplus U.S. weapons, the Garde still remained basically a paramilitary constabulary, with a total force fluctuating between 4500 and 6000 effectives.

During the 1930s, as a means of expanding the military's potential, the government contracted for the delivery of an unknown quantity of the standard export FN Model 24/30 Short Rifles in caliber .30-06. These rifles were held in reserve for use by the 15,000-man Volontaires de la Securite National, a partisan militia loyal only to the then president, "Papa Doc" Duvalier. These Model 24/30 Short Rifles are still being confiscated even as this book is written.

The FN Model 24/30 Short Rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard runs from in front of the receiver ring to the upper barrel band. The lower band has a swivel affixed to the bottom, with another swivel at the midpoint of the bottom of the buttstock. The bolt handle is straight.



One of the few pictures in existence to show the Haitian army soldiers in parade uniforms. Note the rather casual attitude of the enlisted men. (H.P. Davis)

Length: 43.0"; Weight: 8.20 lbs.; Barrel: 23.375"; Caliber: .30-06; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight, the slide fitted with peep sight, graduated to 1900 meters. Remarks: Serial number on the right hand side of the receiver ring, with "Armee d'Haiti" on the left side of the receiver ring, manufacturer's markings on the left side rail.

#### HONDURAS

The early history of Honduras parallels that of the remainder of Central America. Honduran General Francisco Morazan was the last president of the United Provinces of Central America, serving from 1830 to its dissolution in 1838. He then became president of El Salvador, but was forced to flee when the remaining Central American states ousted him. Not to be deterred, Morazan returned to Central America in 1842, and became president of Costa Rica, where he attempted to reestablish the Federation of Central American States. This time a bullet stopped him! Disregarded by his own country during his lifetime, Morazan has since become the originator of Central American union and is now considered a great Honduran hero!

Honduran history, for most of the nineteenth century, has been overwhelmed by the confusion of civil strife, rebellions, coups and countercoups, with economic and social progress suffering terribly as a result. From the beginning of the twentieth century, the United Fruit Company has played a large role in the domestic progress of Honduras, both economically and politically. The company operated under the policy of "What is good for the company is good for Honduras!"

Under the iron-fisted reign of General Tiburcio Carias, the most stable period of this century for Honduras was from 1933 to 1949. Since that time, the country has been ruled by a succession of military dictatorships, punctuated by brief periods of civilian control, which in turn were overthrown by the military. There was a short, but disastrous war



Full-length view of the German Model G 71 Rifle as used by Honduras.



Full-length view of the Model 1895 Rifle (Chilean type), as used by Honduras.



Full-length view of the German Standard Modell Export Model Short Rifle, as used by the Honduran military.

with El Salvador in 1969—the so-called "Football War"—which ended in favour of the Salvadorans.

The troop level of the Honduran army has remained at approximately ten thousand effectives. In the past, Honduras has shopped the world for military equipment, with purchases from the Germans, Danes, Italians, French, British, and the U.S. The U.S. supplied Honduras with ten thousand Remington Model 30 Rifles in the 1930s, in caliber 7 x 57mm.

**HONDURAN GERMAN MODEL G 71 RIFLE:** In the late 1880s, Honduras contracted with Germany for an unknown quantity of German Model G 71 Rifles, identical to those issued to the German armed forces; whether these rifles were marked with the Honduran national crest is unknown. Honduran-marked specimens of this rifle have, to the author's knowledge, never been seen on the surplus market. All relative data on this rifle will be found under the section on Germany.

**HONDURAN CHILEAN-STYLE MODEL 1895 RIFLE:** Prior to 1914, Honduras purchased an unknown quantity of Model 1895 (Chilean style) Rifles in caliber 7 x 57mm. The firm from which these rifles were obtained is not known, however the weapons served as the standard rifle in the Honduran forces until the introduction of the Standard Modell Mauser Short Rifle in the 1930s, along with the purchase of Remington Model 30 Rifles, both in caliber 7 x 57mm. The

specifications relating to this Chilean-style Model 1895 Rifle will be found under the section on Chile.

**HONDURAN STANDARD MODELL MODEL 1933 MAUSER SHORT RIFLE:** As a supplement to their arms acquisitions in the 1930s, the Honduran government contracted for the purchase of an unspecified number of German Standard Modell Mauser Short Rifles in caliber 7 x 57mm. These short rifles are the standard export model of the Standard Modell, and it is unknown as to whether or not they were marked with the Honduran crest. All relative data pertaining to the Honduran Standard Modell Short Rifle will be found in the section on Germany.

### IRAQ

Iraq, the site of the world's oldest civilization, has had a dizzying history, especially in the years since World War I, when Great Britain was given a mandate over the country. Independence was gained in 1932, but close ties were maintained with Great Britain, mainly in the area of petroleum production and regional defense. Britain was called upon several times to put down attempted anti-British coups prior to World War II, and in April 1941, was forced to land troops and take over the country when a coup was attempted with German and Italian aid.

In 1948, Iraq allied with the Arab League and joined in the war against the Jews. While British military equipment predominated in the



Full-length view of the Iraqi Model 98k Carbine.



Close-up view of the Republican Guard stamping on the Iraqi Model 98k Carbine.



The three line receiver text crest of a VZ.24 accepted by the Czechoslovak Army in 1927, which was acquired by Iraq, no doubt after WWII, when it was stamped with the Arabic letter "jeem," the Iraqi Government's property mark. (Ed Parada collection)

Iraqi armed forces, refurbished German Model 98k Carbines were purchased for the Republican Guard. These rifles are standard in all respects, and specific data will be found under the section on Germany.

#### IRELAND

Some may find it strange to see Ireland listed as a country that used Mauser rifles, but in the early years of this century the Irish Republican Brotherhood and the Irish Volunteers were making plans for an armed uprising against the British, who had controlled Ireland for centuries. A



An ex-Wehrmacht, ex-Russian, ex-East German ex-Iraqi Kar 98k. BNZ 41 indicates manufacturer at OEWG Steyr, Austria in 1941. The "X" (crossed rifles) is the Red Army capture mark, the sunburst and crown over "n" are East German proof marks, and the Arabic letter in the triangle is an Iraqi Government property mark.



Receiver markings showing the Royal Iraqi crest on the receiver ring of the 1948 98k Carbine. (Robert Jensen collection)

Citizen Army, viewed by the British as little more than men involved in play-acting, was formed, with an embryonic General Staff, tables of Organization and Equipment, and a nucleus of enthusiastic, patriotic men.

With virtually no material to speak of, the Irish were forced to look abroad—to the continent for the arms necessary to carry out a rebellion, and to America for the money to pay for them. Sailing to Germany on his yacht, the "Asgard," for an ostensible yachting vacation among the Frisian Islands, Erskine Childers, a well-known British author of Ang-



Full-length view of the German Model G 71 Rifle, as used by members of the Irish Citizen Army during the Easter Uprising. All data relative to this rifle will be found under the section on Germany.



Left full-length view of the G 71 Rifle as used by the Irish.

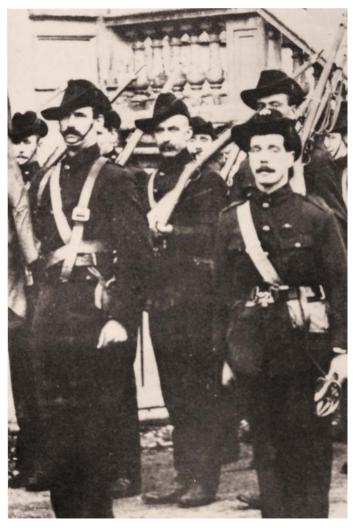
lo-Irish descent, was accompanied by his wife and the Hon. Mary Spring Rice. In Hamburg, the yacht was loaded with fifteen hundred German Model G 71 Rifles and forty-nine thousand 11mm cartridges. This cargo was safely returned to Ireland, being landed at Howth Harbor on 26 July 1914. Volunteers, including many Boy Scouts, were on hand to convey the rifles and ammunition openly to Dublin. Irish police, unsuccessfully, attempted to seize the weapons. From that time forward, in Ireland, these rifles have been called "Howth Mausers."

On Easter Monday, 1916, the Irish Rebellion started in Dublin with the seizure of the General Post Office and other strong points scattered



Irish Volunteers drilling with German Model G 71 (Howth) Mauser Rifles, C. 1914. (George Morrison collection)

throughout the city. Due to political misgivings, counterorders were received prior to the general mobilization, as a result of which only 1,250 men mustered to start the struggle known as the Easter Week Rising. The German Model G 71 Rifles were used to good effect, potting away from behind the chimney-pots and holding down British troops at the strategic strong points throughout the city of Dublin. At the end of the struggle, the British checked the shoulders of men on the street to see if they were black-and-blue from using the Mauser rifle. Upon examining a captured Model G 71 Mauser Rifle, one British officer was heard to refer to it as "a bally elephant gun!"



Irish Citizen Army on parade with G 71 Mauser (Howth) Rifles. (George Morrison)

# ISRAEL

Prior to the founding of the State of Israel, the Jews had formed clandestine skeleton army formations upon which to build an army when, and if, they should achieve nationhood. This shadow army required weapons, and the Jews used every means at their disposal to begin stockpiling weapons, ammunition, and military material of all kinds, both in Palestine and abroad.

The last British troops left Palestine on 14 May 1948, and the State of Israel was declared. The overseas purchasing network of arms agents had been in action since the end of World War II, with former German



Close-up view of an FN-made Israeli K98k Mauser Carbine, utilizing the receiver from an early Czech weapon, showing the rampant lion crest.



Haganah soldiers fighting on the outskirts of Jerusalem, 1948. Note the American helmets, the mixture of British and American web equipment, and the Model K98k Carbines. (Robert Capa, Magnum)

army weapons purchased from Czechoslovakia (one of the few nations willing to deal with the Jews on a cash-only basis). These became one of the standard weapons of the Haganah, as the Jewish defense force was named. Most of these weapons had been arsenal refinished by the Czechs, with many still bearing German markings. In the meanwhile, anything that could shoot, and for which ammunition was available, was in the Israeli arsenal, from British SMLE Mo 1 Mk IIIs, to every model of French service rifle, along with German and Turkish battle-field relics from the first world war.

With the first flights of the Israeli Air Transport Command, weapons were arriving from Czechoslovakia on a daily basis into former RAF bases in Israel, where they were immediately cleaned and issued to the



Haganah troops in the battle for Jerusalem, 1948. Note the British helmets and the K98k Carbines. (Robert Capa, Magnum)



Close-up view of an FN-made Israeli K98k Mauser Carbine, manufactured using an early receiver with an Ethiopian crest.



Full-length view of the Czech-manufactured German Model 98k Carbine.



Full-length view of the Israeli Model 98k Short Rifle.



The Israeli crest and the caliber designation on the receiver ring of the Israeli Model 98k Short Rifle. FN proof marks are on the left side of the receiver ring.

raw troops going into the lines. Often, immigrants ("D.P.s", i.e., displaced persons) right off the boats were given as little as five hours of basic training before being sent into battle. Aside from the automatic weapons, the basic infantry rifle was the Czech winter version of the German Model 98k Carbine, with the oversize trigger guard for use with gloves. Early in 1949, Jewish authorities purchased a complete Kar 98k factory production line. Due to the availability of effective semi-automatic weapons, work on completely new rifles terminated after the manufacture of only a few. The plant was then used to rebarrel and refurbish German actions and FN-purchased weapons to the 7.62 x 51mm cartridge.

**ISRAELI CZECH MODEL 98k CARBINE:** With the exception of the oversize trigger guard developed from the German experience on the Russian front, this rifle is identical in every other respect to the German Model K98k Carbine produced for the German armed forces during World War II. This rifle is in caliber 7.92 x 57mm, (unless converted to 7.62 x 51mm (NATO) and so marked on the receiver ring), and all relative data on the rifle will be found in the section on Germany.

**ISRAELI FN SHORT RIFLE:** During the early 1950s, the Israelis supplemented their stocks of weapons with purchases of FN short rifles from Belgium. These rifles are identical to the German Model 98k Carbine; however the short rifles bear Israeli markings on the receiver ring and are in caliber 7.62 x 51mm (NATO), which is prominently marked on the receiver ring. Specifications and data on this rifle will be found in the section on Germany.

### JAPAN

During the 1880s, Japan was undergoing the transformation from a feudal system, in effect for centuries, to a country awakening to the wonders of the modern world. Sealed off for centuries from outside influences, in the space of a few short decades Japan went from a country of warriors in ancient armor to an army uniformed and equipped to European standards, although still imbued with the spirit of the Samurai.

A French military mission was active in Japan on a small scale until the results of the Franco-Prussian War caused the Japanese to consider the Prussian military caste in the light of their own warrior traditions. A small German military mission was invited to Japan, bringing with it the Prussian love of discipline and order, in which it steeped the fledgling Japanese national army. Uniforms adopted by the Japanese combined French and Prussian characteristics, with the Japanese experimenting with various weapons systems while, at the same time, working on the development and production of an indigenous Japanese rifle, the Murata.

As a result of this trial and experimentation period, the Japanese imported a modest quantity of the German Model G 71 Rifle for troop



Full-length view of the German Model G 71 Rifle, as used for Japanese troop testing. All specific data on this rifle will be found in the section on Germany.



Left full-length view of the Model G 71 Rifle as used in Japan for troop testing.



Full-length view of the Czech VZ 24 Short Rifle as used by Latvian forces.

testing. While never used to a great extent, the German G 71 Rifle did provide a basis for comparison, and was closely examined for any design features that could be incorporated in the Murata rifle.

The Japanese Navy is said to have used a number of Standard Model 1933 Short Rifles that were possibly captured in China; the Navy was also issued a number of VZ24 Short Rifles, all dated "1937" with a "P" prefix to the serial number.

### LATVIA

Latvia's history parallels that of Estonia. German incursions of knights, merchant princes, and religious missionaries all contributed to making Latvia seem a German quasi-religious colony in the thirteenth century. Absorbed first by Sweden in the sixteenth century, Latvia later came under the rule of Lithuania, and became part of the Great Russian Empire under Peter the Great in the eighteenth century. The treaty of Brest-Litovsk between the Soviet Union and Germany in 1918 granted independence to Latvia for the first time in its history.

The Hitler-Stalin pact called for the country of Latvia to come under the control of Russia, and Latvia was incorporated into the USSR as a new union republic in 1940. Fifty years of harsh Russian rule followed, until, following the lead of Lithuania, Latvia declared its intention to secede from the Soviet Union. Since cutting all ties with the former Soviet Union, times have been difficult for the Latvians, politically, economically and socially, as it is with all of the Baltic countries.

**LATVIAN CZECH VZ 24 SHORT RIFLE:** During the Latvian period of independence between 1918 and 1939, the Latvians formed a small, but highly trained national army, based upon the two divisions that had been fighting alongside the Germans against the Russians in Courland and Livonia during the first world war.

In 1935, Latvia ordered and took delivery of fifteen thousand Czech VZ 24 Short Rifles; whether these rifles were marked with the Latvian crest is unknown. Apparently, these rifles were used to good effect in the partisan war that raged against the Germans during World War II. All data relative to this rifle will be found under the section on Czechoslovakia.

### LIBERIA

A West African nation initially explored by the Portuguese in 1461, Liberia remained virtually unexplored and sparsely populated until the nineteenth century. In 1816, the U.S. Congress granted a charter to the American Colonization Society (ACS), a private society dedicated to the resettlement of freed slaves. In 1822, the first settlers arrived at what was to become Monrovia, the capital of the Liberian



Full-length view of the FN Model 24 Short Rifle as used by the Liberian army.

nation. In 1847, adopting a constitution modeled on that of the United States, Liberia became the first independent republic in Africa.

Backed by the United States, Liberia spent the next one hundred years opposing encroachment by French and British interests trying to wrest territory from the Liberians. In 1980, the then president, William R. Tolbert, was deposed by M/Sgt. Samuel K. Doe in a military takeover of the country. Elections were held in 1986, and Doe was elected president. In 1989, National Patriotic Front of Liberia (NPFL) rebels crossed the border into the country from the Ivory Coast. In September 1990, Doe was captured and killed, and a cease fire was signed in November 1990. In 1992, the West African States helped establish a new government under the leadership of Amos Sawyer. An interim government composed of the three primary factions assumed uneasy power in 1994. Estimates are that 150,000 people perished during the civil war.

The Liberian army has been a self defense force from the time of its inception, without the ability to initiate action other than as a paramilitary constabulary. During the early 1930s, in an effort to update the weapons in the Liberian arsenal, an undetermined number of FN Model 24 Mauser Short Rifles were purchased from Belgium. These rifles were the standard infantry rifle for the Liberian forces until after World War II, when the army was equipped with surplus U.S. weapons.

**LIBERIAN FN MODEL 24 SHORT RIFLE:** The Liberian FN Model 24 Short Rifle is fitted with a pistol grip stock with grasping grooves, and the upper hand guard runs from in front of the receiver ring to the upper barrel band. The nose cap incorporates a German-style "H" bayonet lug, and the front sight does not have sight protectors. There is a swivel on the bottom of the lower barrel band, and another behind the pistol grip on the buttstock. An inset, screw-retained, flat washer is on the right side of the stock.

Length: 43.25"; Weight: 8.54 lbs.; Barrel: 22.50"; Caliber: Believed to be 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: It is believed that the receiver ring of the Liberian FN Model 24 Short Rifle is marked with the Liberian crest, which is a shield bearing a star above eleven vertical bars.

# LITHUANIA

The peoples of Lithuania and Latvia are closely related, for their languages—the only two in the Baltic group of languages—are quite similar. Until 1795, however, the individual histories of the two countries were radically different. The Lithuanians were a fierce, warlike race who defended their lands against the German tide that threatened to envelope them. They retained their own language and religion against tremendous odds. During their epic history, the Lithuanians extended their rule from the Baltic to within miles of the Black Sea.

With the third breakup of Poland in 1795, Lithuania was deeded to Russia, but the upper class and educated people of Lithuania fought to



Lithuanian army unit armed with the Lithuanian Model VZ 24 Short Rifle on parade just prior to World War II. (UPI)



Receiver marking on the Model 24L Short Rifle, showing the variant markings of "GINKLU FONDAS/1937/CREST/24L." (Robert Jensen collection)



Full-length view of the Lithuanian VZ 24 Short Rifle. (Robert Jensen collection)



Receiver marking on the Model 24L Short Rifle, showing the gate motif over the model designation. (Robert Jensen collection)

keep alive a national awareness and identity based upon ethnic, religious, and linguistic grounds. In January 1921, the Allies recognized the independence of Lithuania that had come into being with the signing of the Treaty of Brest-Litovsk. A French garrison remained in Lithuania for another two years, where they were helpful in the formation of the new Lithuanian army.

Due to political upheaval from both the left and the right, the Lithuanian army suspended Parliament in December 1926. An authoritarian regime followed, but was doomed by the secret Hitler-Stalin pact of 1939. In 1940, phony elections were held, with only pro-Soviet choices permitted to run. Thousands fled to the West, or disappeared into Sibe-



Chinese markings on the right side of the Lithuanian FN Model 30 Short Rifle, as previously described. (Bob Bennett collection)

ria. For those remaining, a high birth rate helped the Lithuanians prevent Russianization of their country.

In the late 1980s, a strong underground nationalist movement began to be heard and felt, culminating in the Lithuanian declaration of independence on 11 March 1990; Soviet reaction included armed attacks on public institutions, but the last Russian troops eventually departed Lithuania on 31 August 1993. Elections held since have seen the former Communist leaders winning election to the presidential and premier's positions. Both members have vowed to pursue a slow path to a freer national economy, as well as promoting better relations with Russia and other former Soviet states.

In the mid-1920s, the Lithuanian army purchased Czech Model VZ 24 Short Rifles from Czechoslovakia in caliber 7.92 x 57mm. During the period 1935-1938, FN Model 30 Short Rifles were purchased from FN. All of these rifles were used in the Lithuanian arsenal under the designation "Model 24 L."



*Full-length view of the Lithuanian FN Model 30 Short Rifle. Note that this version has the bent bolt handle. For some unknown reason, this specimen has a quick-release sling attachment on the right side of the stock, instead of on the left, as is usual. (Steve Kehaya collection)* 



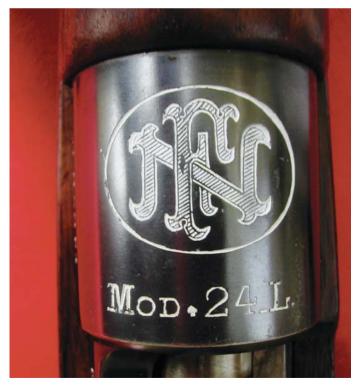
Full-length view of the Lithuanian FN Model 30 Short Rifle. Note the Chinese markings on the right side of the stock. Apparently this rifle had a welltraveled history, presumably captured from the Lithuanians by either the Germans, or the Russians. If captured by the Germans, it was later taken by the Russians, who then supplied it, and others, to the Chinese following World War II. This rifle could possibly have turned up in Korea, as many were in the hands of Chinese troops during that war. Note that this specimen has the straight bolt handle. (Bob Bennett collection)





One of the strangest of the many military Mauser rifles made by Fabrique Nationale (FN) is the series of Mauser Short Rifles made for Lithuania. Those observed to date all appear to have been manufactured in the style of the Czechoslovak (Brno) VZ.24, FN's biggest competitor. The rifle shown above is completely made by FN in Herstal-Liege, Belgium. To-date, no short barrel carbines have been seen. The nomenclature of this rifle in Lithuania is clearly the Model 1924L. There is no record of what FN called this rifle, although with its standard length receiver, "Model 1930" would have been appropriate. (John Wall collection)

**LITHUANIAN FN MODEL 30 SHORT RIFLE:** The Lithuanian FN Model 30 Short Rifle apparently came in a straight-handled bolt version, as well as with a bent bolt handle. The rifle is fitted with a pistol



The crest of the Lithuanian VZ 24-style Short Rifle made by FN contains the FN trademark logo over the phrase "Mod. 24L." This crest is one of three confirmed crests used on Lithuanian Mauser rifles made by FN. Generally speaking, rifles with the FN trademark logo on their receiver rings were made for only one other country, China. (John Wall collection)

grip stock with grasping grooves, the upper hand guard running from in front of the receiver ring to the upper barrel band. The nose cap incorporates a German-style "H" bayonet lug. There is a swivel on the bottom of the lower barrel band and another on the bottom of the buttstock, halfway between the end of the pistol grip and the toe of the butt. There is a recoil crossbolt under the receiver ring and another at the pistol grip. There is also an inset, screw fastened, washer in the right side of the stock.

Length: 43.25"; Weight: 10.0 lbs.; Barrel: 22,50"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-shot, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Stylized Lithuanian crown over the model designation on the receiver ring, manufacturer's markings on the side rail.



The left side of the receiver of the Lithuanian Model 24L. Note that the serial number should be stamped deeply in the stock just below the same number on the receiver ring. (John Wall collection)

### LUXEMBOURG

During the days of the Holy Roman Empire, Luxembourg was one of hundreds of small principalities of that era. When the Holy Roman Empire was abolished, Luxembourg joined the German League, sharing a monarchy with the Netherlands, but with the two countries separate entities. In 1867, Luxembourg was granted sovereignty by the treaty of London; when King William III passed away in 1890, the dual monarchy was severed, and Whilhelmina became Queen of the Netherlands, while Adolph of Nassau became the Grand Duke of Luxembourg. The independence of Luxembourg dates from that period.

Traditionally neutral, Luxembourg was instantly overrun by Germany during both world wars, reestablishing itself at the end of each war. Luxembourg was a founding member of the United Nations, and has been a member of NATO since 1949.

With less than 400,000 citizens, and a total land area of less than 1000 square miles, there has never been a large military establishment in the country. The small Luxembourg national army was equipped with a special Model 1900 Mauser Rifle that resembled the Chilean Model 1895 Rifle, as well as the Swedish Model 1896 Rifle. During the 1930s, a small quantity of FN Model 24/30 Short Rifles were obtained to upgrade the weapons available to the small army of Luxembourg.

**LUXEMBOURG MODEL 1900 RIFLE:** The Luxembourg Model 1900 Rifle is rarely seen, as there were very few produced. Exact numbers have proven impossible to determine, but the figure is presumed to be less than five thousand in total. The rifle is fitted with a straight wrist stock with grasping grooves, with the upper hand guard running from in front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel on the bottom, with another at the bottom of the buttstock. The nose cap, which is almost identical to the Spanish Model 1893, has a bayonet lug on the bottom for use with the Model 1895 knife-style bayonet.

Length: 48.50"; Weight: 9.4 lbs.; Barrel: 28.0"; Caliber: 6.5 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt model 1893 action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Manufacturer's markings stamped on the top of the receiver ring, with the serial number on the left side.



The action of the Luxembourg Model 1900 Rifle. (Noel P. Schott collection)



Close-up view of the manufacturer's markings on the receiver ring of the Luxembourg Model 1900 Rifle. (Noel P. Schott collection)



Full-length view of the Luxembourg Model 1900 Rifle. (Noel P. Schott collection)



Full-length view of the FN Model 24/30 Short Rifle as used by Luxembourg.

**LUXEMBOURG FN MODEL 24/30 SHORT RIFLE:** In order to modernize the arms available to the small army of Luxembourg, a modest number of FN Model 24/30 Short Rifles were obtained during the early 1930s. When overrun by Germany during the second world war, these arms were no doubt absorbed into the German army reserves. Whether or not these short rifles were marked for Luxembourg is unknown. The rifle is fitted with a pistol grip stock without grasping grooves, with the upper hand guard running from the front of the receiver ring to just beyond the lower barrel band. There is a swivel on the bottom of the lower barrel band, with another on the bottom of the buttstock. The nose cap incorporates a German-style "H" bayonet lug. The bolt handle is straight.

Length: 43.25"; Weight: 8.54 lbs.; Barrel: 22.50"; Caliber: Believed to be 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Markings, if any, are unknown.

# MANCHURIA

During the era of the Japanese-inspired puppet state of Manchukuo (1932-1945), which consisted in great part of the province of Manchuria in the northeast region of China, there was a large arsenal in the city of Mukden. This arsenal was under Japanese management, and during the period 1933-1939, an unusual rifle was produced embodying



The receiver ring markings on the Manchurian Mauser Rifle, showing what is believed to be the symbol for the Mukden Arsenal.



Full-length view of the Manchurian Mauser Rifle as manufactured at the Mukden Arsenal.



Left full-length view of the Manchurian Mauser Rifle. Note the streamlined appearance when the bolt cover is in place.



Full-length view of the Manchurian Mauser Rifle incorporating the sliding bolt cover that is rarely found with the rifle. Note the difference in the upper barrel band.



Overhead view of the Mukden Arsenal Mauser Rifle, showing the Japanese-style ovoid bolt knob. Note the safety is slightly bent on this specimen.

both Mauser and Arisaka characteristics. This rifle was made for the Manchukuo army; however, it was also used by the Japanese, and later, by the Chinese.

The rifle incorporates many design features of the Arisaka rifle, including the Japanese-style two-part stock, the ovoid knob on the bolt handle, and the double gas escape ports in the top of the receiver. There is a removable sliding bolt cover that could be attached to the bolt. Like the Arisaka, the bolt was bored out from the rear to accept the mainspring, with a large housing resembling a cocking piece that acts as a fixed guide for the mainspring. The safety is like that of the Model 98, but instead of being threaded, the bolt sleeve is held to the bolt by lugs.

The rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard runs from the front of the receiver ring to just beyond the lower band. Both the upper and lower bands are thinner than are usually found on Mauser rifles, and the upper band includes a parade hook. The nose cap has the short German-style "H" bayonet lug,



Top view of the Manchurian Mauser Rifle, showing the crest of the Mukden Arsenal and the close fit of the bolt cover.



Upper barrel band, nose cap, cleaning rod, and muzzle of the Manchurian Mauser Rifle.



Serial number and prefix on the left side of the receiver ring of the Manchurian Mauser Rifle made in the Mukden Arsenal.

requiring a bayonet with a muzzle ring. The lower barrel band has a swivel, while there is a quick release sling fitting just behind the pistol grip of the stock.

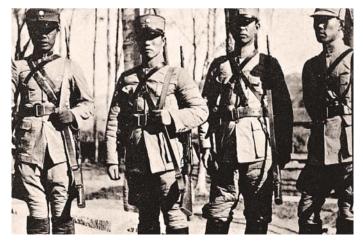
These rifles, when found, are liable to be in any condition from excellent to extremely poor. They are normally quite scarce on the U.S. collector's market.

Length: 48.82"; Weight: 9.40 lbs.; Barrel: 29.13"; Caliber: 7.92 x 57mm (some specimens will be found modified for the Japanese 6.5mm semi-rimless cartridge); Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Marked on the top of the receiver ring with what is believed to be the symbol of the Mukden Arsenal. Serial number on the left side of the receiver ring

## MEXICO

Led by Hernan Cortez, the first Spaniards arrived in Mexico in 1519 and during the next three centuries extended Spanish rule to the south, over Central America, and north into what eventually became the southwestern United States and Texas.

In 1810, a rural priest named Father Miguel Hidalgo led an unsuccessful uprising against the Spanish American empire. With Hidalgo defeated and executed, another priest, José Maria Morelos, managed to



Manchurian troops, among the best equipped in Asia, are shown here armed with the Mukden Arsenal Mauser Rifle. (Edgar Snow collection)

establish an independent republic in the southern portion of Mexico. Morelos was captured and executed in 1815, and the short-lived republic came to an end.

The liberal uprising in Spain in 1820 triggered fears among the conservative elements of a similar liberal insurrection in Mexico. The conservatives made a preemptive strike by staging an uprising of their own, and quickly overcame Spanish resistance. In 1822, unable to agree on a European monarch to sit on the newly-established Mexican throne, Augustín Iturbide, the leader of the revolution, declared himself Emperor Augustín I. This empire lasted less than a year, with Iturbide forced to abdicate in March 1823. The Federation of Central American States declared their independence, and in 1824 Mexico adopted a federal republican constitution.

A Spanish invasion in 1828 was easily repulsed, but the country was sliding into anarchy. The government abolished slavery in 1829, infuriating the American settlers in Texas, and causing a rebellion in 1836. An independent Republic of Texas was declared, with the republic being annexed by the United States in 1845. This annexation provoked the disastrous war between Mexico and the United States, resulting in the complete and utter defeat of Mexican forces and the loss of forty percent of Mexican national territory for the meager sum of fifteen million dollars.

Antonio López de Santa Anna, the general responsible for the defeats suffered by Mexico, was installed as president in name, but a monarch in truth. Economic disintegration resulted in Santa Anna's flight in 1855, precipitating a civil war—1858 to 1860—between conservatives and liberals. The end of the war brought about the installation of Benito Juárez as president. Economic problems continued to plague Mexico, with the country defaulting on its foreign debt payments. This resulted in Britain, France, and Spain landing troops in Vera Cruz during 1861 and 1862. Due to the civil war in the United States, they were able to do so without interference from the enforcement of the Monroe Doctrine by the United States government.

This foreign intervention ushered in the period of the French occupation of Mexico, with the installation of a puppet monarch, Archduke Maximilian of Austria as Emperor Maximilian I, kept in power only by the French bayonets of Emperor Napolean III. Juárez was left with only a small segment of the country until the end of the American Civil War, at which time support for the Mexican republicans, both political and material, eventually resulted in the withdrawal of French forces and the defeat and execution of Maximilian in 1867. Juárez resumed the presidency, but died in office in 1872.

A rebellion against the next president gave General Porfirio Díaz the chance to take over the presidency, ruling Mexico with an iron hand from 1876 to 1911, with only a short four-year period when a hand-picked general served as president in order for Díaz to keep the promise that he would not succeed himself. The thirty-four years of the Díaz reign were the most stable in the history of Mexico, but resulted in the worsening of the miserable condition of the working classes.

During the 1910 election, Díaz was challenged by Francisco Madero, who later fled to the United States where he helped to organize a rebellion against Díaz in conjunction with the revolts of Emiliano Zapata in the south and Doroteo Arango, otherwise known as Pancho Villa, in the north. The successes of the rebellion set off a series of army revolts, causing Díaz to flee the country on 25 May 1911. Madero was elected president, but proved inept; he was denounced by Zapata and faced with a revolt by Orozco in the north.

The revolt of Orozco was put down by General Victoriano Huerta, who also overthrew Madero, having him shot on 22 February 1913. Huerta assumed the presidency, but was forced to flee in 1914, plunging the country into total anarchy, with four revolutionary factions attempting to form a government. Carranza and Obregon gained the upper hand, rejecting the proposed candidates of Zapata and Villa. Villa then sought to implicate the United States in the ongoing struggles by organizing and conducting raids into United States territory, resulting in the Mexican Border expedition of General "Black Jack" Pershing in 1916. U.S. forces were withdrawn on the eve of America's entry into World War I. Carranza was then president, followed by Obregon, who finally pacified the country. Obregon was followed by Calles, who ruthlessly persecuted the Catholic church, causing a revolt by the fanatical Catholic "Cristeros." Calles was succeeded by Obregon, who was assassinated by a religious fanatic. During the 1920s and the 1930s, the succeeding presidents consolidated the gains of the revolution.

Mexico joined the Allies in 1942 in the war against the Axis, providing naval patrols and an air force fighter squadron that served in the Pacific theatre. Since World War II, the size of the Mexican armed forces has been inconsistent with the size of the country, with the services reduced by spending cutbacks. It would appear the future of the Mexican armed forces will most probably be limited to the internal security of the country.



Full-length view of the Mexican Model 1895 Rifle, as made under contract in Oviedo, Spain.



Left full-length view of the Mexican Model 1895 Rifle.



Federal troops firing on rebels from a rooftop with Model 1895 Rifles. Note the sandals on the soldier nearest the camera.

**MEXICAN MODEL 1895 RIFLE:** The Mexican government has had extensive experience and involvement with not only arms procurement, but also the manufacture of weapons for their armed forces. In the late 1800s, after careful testing and consideration by their arms commission, the Mexican government accepted the Mauser Model 1895 Rifle. This was the standard rifle of the Mexican army under Porfirio Díaz and is almost identical to the Spanish Model 1893. Along with other model Mauser rifles, it served throughout the long period of rebellion and unrest that began with the revolution of 1910.

The Mexican Model 1895 Rifle is fitted with a straight-wristed stock without grasping grooves, the upper hand guard running from the sheet steel ring on the front of the receiver ring to just beyond the lower barrel band. The upper barrel band has a bayonet lug on the bottom for use with the Model 1895 knife bayonet. The lower barrel band has a swivel on the bottom, and there is another approximately six inches from the toe of the buttstock.

Length: 48.50"; Weight: 8.75 lbs.; Barrel: 29.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Adjustable leaf rear graduated to 2000 meters. Remarks: Rifles were produced either by DWM or Oviedo. Those made by DWM are stamped with



Mexican rebels in northern Chihuahua armed with Model 1895 Rifles and Winchester lever-action rifles, C. 1913-1914. (I. Thord-Gray)

the manufacturer's marks on the left side rail, while those manufactured under contract by Oviedo have the Spanish crest on the receiver ring and the manufacturer's markings stamped on the left side rail.



The side rail of the Mexican Model 1893 made by DWM in 1897. Specimens of this rare long rifle when found, are often very battered and poorly preserved. (John Wall collection)



This 7mm Mexican Mauser Long Rifle has a confusing history and nomenclature. The mechanism is the action patented by Paul Mauser as his "Model 1893." Mauser literature from the early part of the 20th century (R. K.Korn's "Mauser-Gewehre und Mauser-Patente") calls this rifle the Model 1895, yet the rifle was made several years later by DWM, with 1897 stamped on the receiver ring. (John Wall collection)



Full-length view of the Mexican Model 1895 Carbine.

**MEXICAN MODEL 1895 CARBINE:** The Mexican army also received large numbers of Model 1895 Carbines from both DWM and Oviedo, Spain. The Model 1895 Carbine is identical to the Model 1895 Rifle with the following exceptions: total length, barrel length, weight, bent bolt handle, side-mounted sling, and graduations on the rear sight. Note that there is no provision for a bayonet, and both the upper and lower band are retained by a flat spring on the bottom of the forestock.

Length: 37.25"; Weight: 7.50 lbs.; Barrel: 17.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Adjustable leaf rear sight graduated to 1400 meters. Remarks: Carbines were initially marked with the Republic of Mexico crest on the top of the receiver ring; however, many of these crests have been removed during arsenal renovation at some time in the past. The top of the barrel is usually marked by a stylized cross between the upper and lower band.

**MEXICAN MODEL 1902 RIFLE:** In 1902, Mexico adopted the Model 1902 Rifle, which resembled the Model 1895 Rifle, but was fitted with the improved Model 98 action; these improvements included a



Manufacturer's markings, in this case DWM, stamped on the side rail of the Mexican Model 1902 Rifle.



The execution of Capt. Samano of the Mexican Federal Army. (Sr. Y.C. de Casolas)



The Mexican national crest on the receiver ring of the Mexican Model 1902 Rifle.



Full-length view of the Mexican Model 1902 Rifle. Note the close similarity to the Model 1895 Rifle.



Mexican M1903 7x57mm Rifle, left side view. (Jan Gardiner collection)



Mexican M1903 7x57mm Rifle. Overhead view of the action. (Jan Gardiner collection)

third locking lug and a gas shield on the bolt. Due to the great stocks of Model 1895 bayonets on hand, the bayonet lug is on the bottom of the upper band. The straight wrist stock, similar to the Model 1895, was also retained, with the upper hand guard running from in front of the receiver ring to just beyond the lower barrel band. These rifles were produced by both DWM, Berlin, and the Austrian Arms Company (Steyr). By 1903, Mexico had accepted delivery of approximately thirty-eight thousand rifles manufactured by Steyr were also delivered.

Length: 48.50"; Weight: 8.75 lbs.; Barrel: 29.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Adjustable leaf rear sight graduated to 2000 meters. Remarks: Arched "REPUBLICA MEXICANA" over Mexican eagle, over date of manufacture. Manufacturer's markings on side rail.



Mexican M1903 7x57mm Rifle stock markings. (Jan Gardiner collection)



Mexican M1903 Carbine, overhead view of the action and the markings. (Jan Gardiner collection)



Mexican M1903 Carbine, full-length view of left side, showing the Carbine ring. (Jan Gardiner collection)



Full-length view of the Mexican Model 1907 (Steyr) Rifle. (Springfield Armory Museum)

**MEXICAN MODEL 1907 STEYR RIFLE:** The Mexican Model 1907 Rifle was the first rifle produced for Mexico that incorporated the pistol grip stock and also accepted the Model 98-style bayonet. The upper hand guard extends from the front of the receiver ring to approximately .50 inches beyond the lower barrel band. The upper band has a parade hook, while the lower barrel band has a swivel on the bottom. Just behind the pistol grip portion of the stock, there is a quick release sling attachment.

This rifle was produced for the Mexican government by the Austrian Arms Company (Steyr) between 1907 and 1910, and is one in a series of Model 98-style Mauser rifles used by the Mexican army. The quantity of rifles delivered is unknown.

Length: 48.50"; Weight: 8.75 lbs.; Barrel: 29.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters; these were replaced by the 1800 meter pattern in 1924. Remarks: The receiver ring is marked STEYR/Model 1907/date of manufacture.

MEXICAN MODEL 1910 RIFLE: This was the first Mexican Mauser rifle produced in Mexico. During the presidency of Porfirio



The receiver ring of the Mexican Model 1910 Rifle.



Full-length view of the Mexican Model 1910 Rifle.



Full-length view of the Mexican Model 1910 Carbine.



The national crest and date of manufacture on the receiver ring of the Mexican Model 1910 Carbine.

Díaz, many members of the Mexican armed forces were sent abroad to study firearms manufacture with the intention of providing Mexico with the means to equip themselves. The first small arms ammunition factory, the Fabrica Nacional de Cartuchos, was started in 1906; the national arms factory, Fabrica Nacional de Armas, commenced operation in Mexico City just before the start of the 1910 revolution.

The Model 1910 Mauser Rifle is based upon the Model 1902 Rifle. These rifles are well-made and dependable, and approximately forty thousand weapons were produced prior to the Model 1910 being phased out of production in 1934. The rifle is fitted with a straight-wristed stock, and the upper hand guard extends from in front of the receiver ring to just beyond the lower barrel band. The lower barrel band is fitted with a swivel on the bottom, and another is fitted to the bottom of the buttstock. The upper barrel band has a bayonet stud on the bottom for use with the Model 1895 bayonet.

**Length:** 48.50"; **Weight:** 8.75 lbs.; **Barrel:** 29.0"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Adjustable leaf rear sight graduated to 1800 meters. **Remarks:** On the receiver ring, "FABRICA NACIONAL DE ARMAS-MEXICO D.F." in an oval around the Mexican eagle, over the date of manufacture. Serial number on the left side of the receiver ring.

**MEXICAN MODEL 1910 CARBINE:** The Mexican Model 1910 Carbine is almost identical to the Model 1895 Carbine, with the exception of the improved Model 98-style action and protecting "ears" for the front sight. There is no provision for a bayonet, and the sling is side mounted.

Length: 37.50"; Weight: 8.0 lbs.; Barrel: 17.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Adjustable leaf rear sight graduated to 1400 meters. Remarks: Mexican national crest over date of manufacture on the receiver ring, serial number on the left side.

**MEXICAN MODEL 1912 STEYR RIFLE:** Due to difficulties in manufacture of the Mexican Model 1910, the Mexican government was forced to purchase Model 1912 Rifles from Steyr. As deliveries began, the first world war started, with the balance of the Mexican order being taken over by the Austrian government. After World War I, some of the undelivered Model 1912 Rifles were converted to 7.92 x 57mm and sold to Yugoslavia, where they were used as the Model 24B.

The Mexican Model 1912 Rifle has a large diameter receiver ring, a pistol grip stock similar to the Model 1907, an upper hand guard that runs from in front of the receiver ring to just beyond the lower barrel band, a tangent leaf rear sight, and a German-style "H" bayonet lug. There is a swivel on the bottom of the lower barrel band and a quick



Full-length view of the Model 1912 Steyr Rifle as used by Mexico.



Left full-length view of the Mexican Model 1912 Rifle.



Full-length view of the Mexican Model 1912 Short Rifle.



Mexican M1912 Rifle crest and markings. (Jan Gardiner collection)



The receiver ring of the Mexican FN Model 1924 Short Rifle, showing the national crest and date of manufacture.



The left side rail of the Mexican FN Model 1924 Short Rifle, showing manufacturer's markings.



Property number tag on the bottom of the stock of the Mexican FN Model 1924 Short Rifle.



Full-length view of the Mexican FN Model 1924 Short Rifle.



Mexican Model 1910 7mm Cut-away Rifle, showing left side, full-length view with the bolt open. (R. K. Smith collection)



Mexican Model 1910 7mm Cut-away Rifle training aide. Top view of the action with the bolt closed. (R. K. Smith collection)



Close-up view of the lower left side of the action showing the cut-away chamber and stock of the Mexican Model 1910 training aide rifle. (R. K. Smith collection)





Close-up view of the left side of the Mexican Model 1910 Cut-away Rifle training aide, with the bolt open. (R. K. Smith collection)

Mexican Model 1910 7mm Cut-away Rifle training aide. Close-up top right-hand view of the action. (R. K. Smith collection)



*Close-up view of the lower left side of the Mexican Model 1910 Cut-away Rifle training aide, with the bolt closed. (R. K. Smith collection)* 



Full-length view of the Mexican FN Model 1924 Carbine. (Steve Kehaya collection)

release sling attachment behind the pistol grip of the stock. The upper barrel band incorporates a parade hook.

Length: 49.0"; Weight: 8.75 lbs.; Barrel: 29.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1800 meters. Remarks: The receiver ring is marked "Model 1912" over "STEYR," over the date of manufacture.

**MEXICAN MODEL 1912 STEYR SHORT RIFLE:** The Mexican Model 1912 Short Rifle is identical to the Model 1912 Rifle, but for length and weight, and a turned down bolt handle. All specific data relative to the short rifle may be found under the section on Chile.

**MEXICAN FN MODEL 1924 SHORT RIFLE:** During 1926 and 1927, Mexico purchased approximately twenty-five thousand FN-produced short rifles and carbines; this was to be the last Mauser rifle produced on a foreign contract for Mexico.

This is the standard export version of the FN Model 1924 Short Rifle. The short rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard extends from in front of the receiver ring to the upper barrel band. The lower barrel band has a swivel on the bottom, with another at the rear of the pistol grip of the stock. The nose cap incorporates a German-style "H" bayonet lug.

Length: 43.0"; Weight: 8.50 lbs.; Barrel: 23.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "REPUBLICA MEXICANA" in a curve around the Mexican eagle, over the date of manufacture. Manufacturer's marking on the left side rail. Usually found with a metal tag bearing the property number tacked to the bottom of the buttstock, near the toe.

**MEXICAN FN MODEL 1924 CARBINE:** This is the export version of the standard FN Model 1924 Carbine, as made for Mexico. The pistol grip stock is without grasping grooves, and the upper hand guard extends from in front of the receiver ring to beyond the lower barrel band. The upper and lower barrel band are quite close together, with

each held by a separate retaining spring. The carbine is not fitted to accept a bayonet. There is a swivel on the bottom of the lower barrel band, and another on the bottom of the buttstock; also note the carbine attachment on the right side of the stock midway between the wrist and the butt.

Length: 35.75"; Weight: 7.50 lbs.; Barrel: 15.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Mexican national crest over the date of manufacture on the receiver ring, manufacture's markings on the left side rail.

**MEXICAN CZECH VZ 12/33 CARBINE:** During the early 1930s, Mexico acquired a small number of Czech VZ 12/33 Carbines. This is the standard Czech export Model 12/33 Carbine, from which the later VZ 16/33 Carbine and the German G33/40 Carbine were developed. This carbine has a pistol grip stock, with the upper hand guard extending from the front of the receiver ring to beyond the lower barrel band. The lower barrel band is fitted with a bottom swivel, while there is a quick release sling attachment just behind the pistol grip of the stock. The upper barrel band is fitted with a parade hook. Note that the



Side rail of the Mexican Czech Model VZ 12/33 Carbine, showing the manufacturer's markings in Spanish.



Full-length view of the Mexican Czech Model VZ 12/33 Carbine.



Full-length view of the Mexican Model 1936 Short Rifle.



Close-up of the Mexican national crest over the date of manufacture on the receiver ring of the Mexican Model 1936 Short Rifle.

lower band is secured to the stock by a retaining spring, while the upper band is held in place by a screw.

Length: 41.97"; Weight: 8.49 lbs.; Barrel: 21.89"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight. Remarks: The national crest of Mexico is on the receiver ring, with the manufacturer's markings on the left side rail in Spanish.

**MEXICAN MODEL 1936 SHORT RIFLE:** This was the last Mauser rifle adopted in caliber 7 x 57mm. These short rifles were produced by the Government Arms Factory in Mexico City, beginning in 1936 and continuing into the late 1940s. Built on the Mauser 1898 action, the Model 1936 Short Rifle also combines certain features of the United States Model 1903 Springfield Rifle, including a Springfield-type

cocking knob, barrel bands and swivels, stacking swivel, and front sight band and mounting.

The rifle is fitted with a pistol grip stock with grasping grooves, and the upper band incorporates a bottom mounted stud for use with the Model 1895 bayonet. The upper hand guard extends from in front of the receiver ring to the upper band.

**MEXICAN MODEL 1954 SHORT RIFLE:** After World War II, a huge influx of war-surplus weapons, including M-1 Garands, influenced the Mexican authorities to upgrade the Model 1936 Short Rifle. The new Model 1954 Short Rifle was adapted to chamber .30-06 ammunition, and allowances were made for ease of manufacture. The Model 1954 utilized Model 1936 actions, with the trigger guards and magazine floorplates made from a continuous stamping. The pistol grip stock with grasping grooves is laminated, the upper band is fitted with a bayonet lug on the bottom to accept the ever-present Model 1895 bayonet. The lower band has a swivel on the bottom, with another on the bottom of the stock behind the pistol grip.

Many of these Model 1954 Short Rifles were fitted with rear sights on the receiver bridge similar to those on the Springfield Model 03-A3; others still retained the tangent leaf rear sight of the Model 1936 Short Rifle. Due to the availability on the worldwide market of semiautomatic weapons, production of the Model 1954 Short Rifle was discontinued in 1955.



Left side view of the receiver ring of the Mexican Model 1954 Short Rifle, showing caliber and model designation.



Full-length view of the Mexican Model 1954 Short Rifle.



Close-up view of the Mexican national crest on the receiver ring of the Mexican Model 1954 Short Rifle.

Length: 44.02"; Weight: 9.6 lbs.; Barrel: 24.0"; Caliber: .30-06; Rifling: 4-groove, r/hand; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent-ramp rear sight graduated to 1000 meters. Remarks: Mexican national crest on the receiver ring over the date of manufacture (of the action), "Cal. 7.62mm" over "Mod. 54" on the left side of the receiver ring.

# MOROCCO

Following the establishment of Phoenician and Carthaginian settlements along the Mediterranean coast, Morocco came under the Roman rule around 40 A.D.; later, in the 5th century, Morocco was



Left side rail markings on the Moroccan FN-made .30-06 Carbine. There is nothing unusual in these markings to indicate Moroccan ownership.



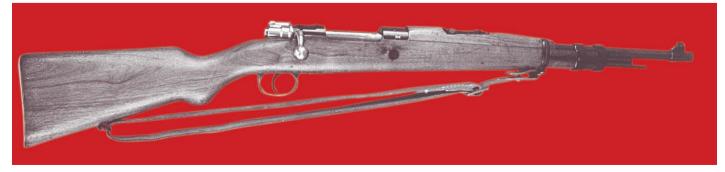
Top view of the receiver area of the Moroccan FN-made Carbine in caliber .30-06; note that the face of the receiver has been notched to accommodate the over-long .30-06 cartridge. Also note the lack of a national crest on the top of the receiver.



Top view of the FN made Moroccan .308 Carbine; the only difference between this and the carbine in .30-06 is the fact that the face of the receiver has not been notched.



*View of the left side rail of the FN-made Moroccan .308 Carbine; please note the difference in the marking of the carbine in .30-06.* 



Full-length view of post-WWII FN-manufactured Carbine, possibly M1950. This carbine was produced in both .30-06 and .308 caliber, with all dimensions identical. It is believed, from what little information the author has been able to glean, that these carbines were used to arm the Moroccan gendarmerie. Information relative to these weapons is almost non-existant.



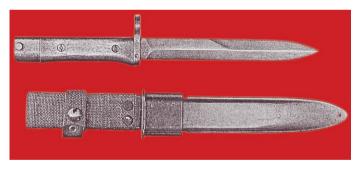
FN M1950 Carbine, incorporating a short combination grenade launcher/flash hider. These carbines are rapidly becoming valued collector items. (Rock Island Auction Co.)

invaded by Germanic Vandals via Spain. During the 7th century, Islamic invaders swept over the country, with Arab rule and the conversion of most of the indigenous population to Islam a result. Ever since, ethnic tension in politics and society has existed between Berber and Arab.

In the 11th century, the Almoravid dynasty from Mauretania conquered Morocco, western Algeria and Spain; they were ousted by another Muslim sect, the Almohads. After approximately 1200, the tide turned and the Moorish expansion was repulsed, with Ferdinand and Isabella expelling the last Moors from Spain in 1492.

In the mid-17th century, Morocco was reunited under the present Alawid dynasty. In the 19th century, American and British forces fought Moroccan piracy in the Mediterranean, while at the same time, Spain established colonies in Tangier in the north, as well as along the Atlantic coast between Morocco and Mauretania. By the early 20th century, France, securely established in Algeria, began to exert influence, pressure and control in Morocco. A special conference confirmed Moroccan independence, but upheld the special rights claimed by both Spain and France. In 1912, the treaty of Fez ended Moroccan independence by granting the country to France and reaffirming a Spanish sphere of influence in the southwest.

During the entire period of French administration, nationalist unrest and tribal uprisings disrupted all efforts of the French. During



An example of the specially manufactured bayonet and scabbard that was only used with this carbine; these are quite rare and seldom seen.

World War II, Morocco became a battleground, and the Istiqlal (Independence) party was formed to fight for independence from foreign rule during the post-war era. In 1947, open warfare began against the French, while the Sultan Mohammad V was allowed to return to Morocco, and the French promised independence by 1955. Morocco became independent on 2 March 1956.

### THE NETHERLANDS

The Dutch armed forces replaced their 1871/88 Beaumont Vitali Rifles in 1895 with Model 1895 Mannlicher Rifles. These Mannlicher rifles served the Dutch forces throughout the First and into the second world war, being replaced by Allied weapons and equipment as the Netherlands' forces-in-exile were formed.

After World War II, the Dutch adopted the FN Model 1948 Carbine for gendarmerie and police units. This short-barreled weapon is quite handy, though the muzzle blast can tend to be excessive. The carbine is fitted with a pistol grip stock without grasping grooves, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The upper band is almost immediately in front of the lower barrel band, and the nose cap incorporates a German-style "H" bayonet lug. There is a swivel on the bottom of the lower band and hother about four inches from the toe of the stock.

Length: 37.13"; Weight: 7.5 lbs.; Barrel: 17.32"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Crown over initial "W" or "J", manufacturer's markings on the side rail.



Same bayonet shown attached to the carbine.



Full-length view of the Dutch FN Model 1948 Carbine. (Cliff Baumann collection)



Manufacturer's markings on the side rail of the Dutch FN Model 1948 Carbine. (Cliff Baumann collection)



Dutch policeman, circa. 1948 with the Model 1948 Dutch Carbine at left shoulder arms; note the uniform, highly reminiscent of the German SS, which was despised by the Dutch citizenry and replaced shortly thereafter.



The receiver ring of the Dutch FN Model 1948 Carbine, showing the crest "J" for "Juliana." (Cliff Baumann collection)



An FN-made post-WWII Mauser 98 Carbine used in the former Dutch East Indies colonies, now Indonesia. The "IOB" crest indicates ownership by the "Indische Ondernemersbond," the Federation of East Indies Entrepreneurs. The star mark at the top of the receiver ring is not found on Dutch IOB carbines. The star mark, however, was widely used on Dutch mannlicher carbines rebuilt in Indonesia in the early to mid 1950s. Therefore, it is likely that this IOB carbine has seen Indonesia police or military service.

## NICARAGUA

The early history of Nicaragua is similar to that of the rest of Central America until 1838, when the United Provinces of Central America disintegrated. The rest of the nineteenth century is a history of the incessant fighting between liberals and conservatives, with the exception of a period between 1855 and 1857 when the country was under the control of William Walker, a North American filibuster, or soldier of fortune, who succeeded in having himself made president. Infuriated, American business interests were successful in having a joint U.S.-British naval force intervene, forcing his expulsion. Walker tried once more to regain the presidency of Nicaragua, but was captured by the British, turned over to the Hondurans, and shot at dawn.



Full-length view of the Czech VZ 23 Short Rifle as used by the armed forces of Nicaragua. (Bob Bennett collection)

The United States continued to intervene in Nicaraguan politics, helping to remove President Zelaya in 1909 and establishing the conservatives to power. Internal strife caused the U.S. to land marines in 1912, where a legation guard remained until 1925. With the removal of the marine guard, the country lapsed into anarchy, and a recall of the marines was considered necessary, remaining in effect until 1933. Augusto Sandino led the resistance to the U.S. Marines during this intervention, and with the withdrawal of U.S. forces, Anastasio Somoza, Commander of the U.S.-trained National Guard, seized power. Sandino was assassinated in 1934, and Somoza remained in power until he was killed in 1956. The presidency of Nicaragua was passed down through the Somoza family as though by right until the regime collapsed in 1979, after a year of brutal civil war.

The Sandinista clique succeeded to power after the revolution, backed by Soviet weapons and advisors. Struggles with the "Contras," supported by the United States, continued until elections, long postponed, were held in 1990. The elections were a stunning defeat for the Sandinistas. The transition of power has been peaceful, but the social and economic recovery of this impoverished country will be slow in coming.



Czech manufacturer's markings in Spanish on the side rail of the Czech Model VZ 12/33 Carbine as used by Nicaragua.

NICARAGUAN CZECH VZ 23 SHORT RIFLE: Nicaragua ordered a small number of VZ 23 Short Rifles from Czechoslovakia during the early 1930s. This rifle proved to be long-lived, serving well into the Sandinista rebellion against the Somoza regime. All pertinent information relative to this short rifle will be found under the section on Czechoslovakia.

NICARAGUAN CZECH VZ 12/33 CARBINE: In conjunction with the order of Czech Model VZ 23 Short Rifles, the Czech Model VZ 12/33 Carbine was also ordered at the same time. It is said that some of these carbines bear Czech markings on the receiver ring and side rail,



Circle within a circle receiver marking on the Nicaraguan VZ 24 Short Rifle.



Side rail markings on the Nicaraguan VZ 24 Short Rifle.

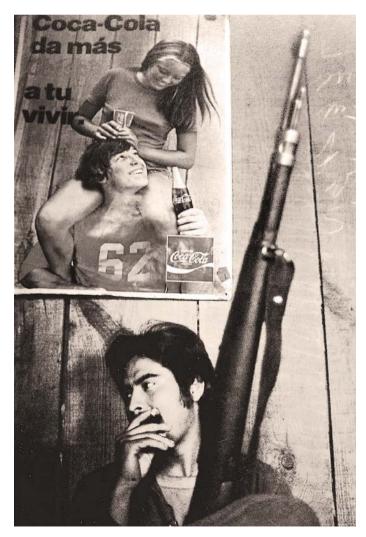


Full-length view of the Czech VZ 12/33 Carbine as used by Nicaragua.



Nicaraguan cartouche on the left side of the buttstock of the Nicaraguan VZ 24 Short Rifle.

while others were apparently delivered with the manufacturer's markings stamped in Spanish on the side rail, with the coat of arms of Nicaragua on the receiver ring. This crest consists of a background of five volcanoes, with a liberty cap on a staff arising from a seascape beneath a sunrise and a rainbow. All pertinent data on the Czech Model VZ 12/33 Carbine will be found under the section on Czechoslovakia.



Sandinista rebel armed with an FN Model 24 Short Rifle relaxing for a moment in Esteli. (Susan Meiselas)



Sandinista rebels in the streets of Esteli, carrying FN Model 24 Short Rifles. (Susan Meiselas)

# NORWAY

At the end of hostilities in World War II, Norway found it necessary to equip its army with the vast stocks of German weapons surrendered by the German occupation army. Previously armed with the Krag-Jorgensen system of rifles, the German weapons were a stopgap until such time as the Norwegian army was able to reequip with the semiautomatic weapons available in the postwar years.



Receiver markings on the Norwegian Reissue Model K98k Carbine. Note how the face of the receiver has been milled to accept a different size cartridge. (Bob Bennett collection)



Full-length view of the Norwegian Reissue German Model K98k Carbine. (Bob Bennett collection)



Full-length view of the Norwegian Army Target Rifle, built around the Mauser K98k action.



The receiver ring stampings on the Norwegian Army Target Rifle as modified from the Mauser K98k action.

**NORWEGIAN REISSUED GERMAN MODEL K98k CARBINE:** As the only difference between this and standard German-issue weapons is the markings, pertinent data relative to the weapon will be found under the section on Germany. These rifles were later modified to accept caliber 7.62mm NATO ammunition.

**NORWEGIAN ARMY MAUSER TARGET RIFLE:** For marksmanship purposes, specially selected Mauser actions were used to build target rifles for the Norwegian Army. These special rifles are not commonly encountered.



Stampings on the side of the barrel, receiver ring, and side rail of the Norwegian Reissue Model K98k Carbine. (Bob Bennett collection)

# ORANGE FREE STATE ORANJE VRIJ STAAT (OVS)

A short-lived republic in South Africa, the Orange Free State (Oranje Vrij Staat) began to arm itself in earnest after the abortive Jameson raid into the neighboring Transvaal in 1896. Contacts were made and contracts drawn with DWM (Deutsche Waffen und Muntionfabrik) in 1897 for the purchase of Model 1893 Spanish-pattern Mauser rifles, short rifles, and carbines, made with the cylindrical bolt head as opposed to the Spanish flat-bottom bolt. Records indicate that approximately eighteen thousand weapons were delivered before shipments were abruptly terminated by the advent of war.

Of particular interest is that there were several variations in the weapons delivered, with the majority of the rifles made by DWM, showing the DWM markings and "MOD. MAUSER" on the receiver ring, as well as "OVS" on the side of the receiver and stock. A small number of rifles were manufactured by Ludwig Loewe and Co. of Berlin, and were marked "MOD. MAUSER 1896" on the side rail and incorporated the Loewe crest on the receiver ring. The left side of the receiver ring is marked "OVS," as is the stock immediately below. Several thousands of rifles were in the process of completion when delivery was halted by the onset of the Boer War; these rifles were



Full-length view of the "OVS" Model 1895 Mauser Rifle as overstamped for the Republic of Chile. Note that the bolt handle is bent down. These rifles will be found with both a straight and bent bolt handle.

then overstamped with the crest of Chile and used to complete a contract with that country. Of those "OVS" Mauser rifles to be found, some will have bent bolt handles, while others will have a straight bolt handle. It is of interest to note that a number of the Model G 71 Mauser Rifles purchased by the Transvaal were also used during the Boer War.

The Boers acquitted themselves admirably with their Mauser rifles during the course of the ill-fated Boer War, treating the British to an astonishing show of marksmanship, coupled with introducing the



Boer town-dwelling burghers with their newly issued Model 1895 Short Rifles and ammunition belts. In their town clothing, they hardly look ready for the veldt; clothing, however, did not make a soldier!

British to flat-trajectory, clip loading rifles. Losses of equipment and weapons during the course of the war forced the Boers to rely upon the capture of British weapons for resupply, resulting in very few "OVS" Mauser rifles being found at the end of the war.

MODEL 1895 MAUSER RIFLE: Model 1895, 1896, and 1897 rifles and carbines used by the Boers are different from the Spanish Modelo 1893 in that minor modifications were made to the weapon, mainly a cylindrical-head bolt and a thumb recess in the left receiver wall to aid in stripping the cartridges from the clip. This rifle was equipped with a tangent leaf sight, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The upper barrel band incorporates a bayonet lug for the Model 1895 bayonet. Interestingly, while rarely seen on the battlefield, the Boers had purchased a number of Model 1871-style bayonets with a reversed "S" guard for use with some of these weapons. These are to be found in collections, and advertisements for the complete belt, buckle, frog, and bayonet plus scabbard can be seen in old Francis Bannerman catalogs as relics of the Boer War. Often, the stocks of the rifles were quite artistically carved with the owner's initials, the seal of the Orange Free State, or something equally of interest to the individual. The following data will apply to the rifles that are shown.

Length: 48.5"; Weight: 8.75 lbs.; Barrel: 29.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Manufacturer's



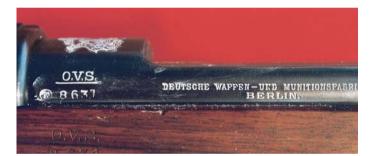
A posed group of Boers with both Model 1895 Rifles and Short Rifles, early in the Boer War. Note the interesting variations in how they carried their ammunition, especially the seated figure in the center.



The checkered wrist of a rare DWM-made Model 1893 7mm Sporting Rifle. South African arms historians believe that all DWM sporting Mausers of this model, including the famous "Plezier Geweer," were produced for the South African market. As such, most are presumed to have been used during the Anglo-Boer War of 1899-1902. No other sporting Mauser can be said to have been widely used as a military rifle. (John Wall collection)

markings on the receiver ring and side rail, "OVS" marked on the left of the receiver ring and immediately below in the stock. Other German markings will be found on these weapons, as well as the Chilean crest.

#### "OVS" CHILEAN-MARKED MODEL 1895 MAUSER RIFLE:



The side rail of the "OVS" Model 1895 Mauser Rifle as sold to Chile. This picture clearly shows the location of the "OVS" markings over the serial number of the individual weapon, both on the receiver ring and the stock immediately below.



The receiver ring of the "OVS" Model 1895 Mauser Rifle showing the Chilean crest. Note the "OVS" stamping to the left.



The receiver and action of a Model 1893 Mauser built as a Sporting Rifle by DWM for the South African market. note the turned-down bolt, the extra wood around the receiver, the straight-grip stock (many "Plezier" or sporting Mausers had pistol-grip stocks) and the typical action normally found on military M1893 carbines. (John Wall collection)

#### "OVS" MARKED MODEL 1896 MAUSER RIFLE BY LOEWE:

"Along with the large number of 1895 and 1896 rifles which were purchased by the Boers (the OVS and the ZAR), there were small numbers of the Model 1895 Carbines, and fewer yet of the model 1896 Carbine. This particular Carbine has no official or distinguishing markings on it, however, it does have the original owner's name, along with "OVS" carved into the right side of the buttstock; a common practice of the Boers.

Length: 37.50"; Weight: 7.0 lbs.; Barrel: 18.0'; Caliber: 7x57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters.; Remarks: Sling configuration consists of a left-side mounted swivel on the bottom band, with a left-side mounted swivel on the left buttstock with a saddle ring. "Model 1896/Ludw. Loewe & Co. Berlin" on the left side rail. No markings present on the receiver ring.



The Ludwig Loewe & Co. crest on the receiver ring of the Model 1896 "OVS" marked Mauser Rifle. The finish on this weapon is peppery due to exposure to the elements.



Full-length view of the Ludwig Loewe and Co. Model 1896 "OVS" marked Mauser Rifle.



*Side rail and receiver markings of the Ludwig Loewe & Co. Model 1896 Mauser Rifle.* 



Posed picture of Boer burghers in the act of loading their rifles for the camera.



Right side view of the Model 1896 OVS Mauser Carbine; notice the carvings in the stock are not as one would expect! (John Wall collection)



Left side view of the Model 1896 OVS Mauser Carbine, with the bolt handle in the upward position; note the saddle ring on the left side of the small of the stock. (John Wall collection)

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### "OVS" MARKED MODEL 1897 MAUSER RIFLE BY DWM:



Receiver and side rail markings on the "OVS" marked Model 1897 Mauser Rifle.



"DWM" script crest on the "OVS" marked Model 1897 Mauser Rifle.



Full-length view of the "OVS" marked Model 1897 Mauser Rifle manufactured by DWM.



Boer "Plezier" (Sporting) Rifle, DWM serial number 553. Both Boer Republics, OVS and ZAR, purchased these sporting rifles for sale at the magazines to burghers. Many were also "Private Purchase." Serial numbers noted up to about 1000. Many were presented to officers and officials, but common Burghers used others. Note the military-style rear sight. (Jack Carnahan collection)



Boer "Plezier" rail marking. (Jack Carnahan collection)



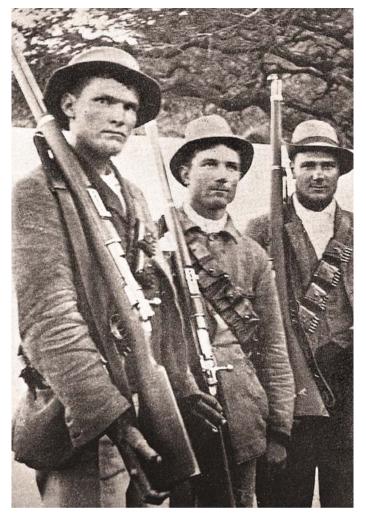
Boer "Plezier" buttstock plaque. (Jack Carnahan collection)



Boer "Plezier" rear sight, 400-1100m ladder. (Jack Carnahan collection)



Boer "Plezier" hooded, windage-adjustable front sight. (Jack Carnahan collection)



Youthful Boers with their new Model 1896 Mauser Rifles and ammunition. Many of the Boers went to war in their Sunday best clothes, even wearing top hats!

## PARAGUAY

Colonized by the Spaniards in the sixteenth century and largely influenced by the Jesuits, both politically and economically, Paraguay was an isolated outpost of the Spanish Empire. The political elite of Asunción, the capitol city, overthrew Spanish authority in 1811 and declared the independence of Paraguay. From the time of independence until 1862, there was relatively stable rule, but with the assumption of the presidency in 1862 by Francisco Solano López, stability was a thing of the past. From 1865 to 1870, Paraguay was the central figure in the War of the Triple Alliance, fighting against Brazil, Argentina, and Uruguay. Paraguay had attempted to intervene between Brazil and its attempt to control Uruguay, fomenting the war. This was one of the most disastrous wars recorded in the history of South America, with Paraguay losing three-quarters of its population and ninety-five percent of its males, as well as sixty thousand square miles of Paraguayan territory. Brazil also levied a war debt of two hundred million dollars, which was later excused.

Slowly struggling back to normalcy over the next four decades, Paraguayan politics developed into struggles between the Colorados and the Liberals, with power passing back and forth over the years. Problems with Bolivia began to heat up in the 1920s over the ownership of the Chaco Boreal, a one hundred thousand square mile area to the west of the Paraguay River and north of the Rio Pilcomayo. Clashes occurred between troops of both nations, with the Paraguayans launching an assault on Bolivian outpost incursions of Paraguayan territory in 1932. This precipitated the Gran Chaco War, the largest war of modern forces in South American history, with the Paraguayans, under the brilliant command of Marshal José Felix Estigarribia, victorious in 1935.

Paraguay has a long and proud history of military accomplishment, and is one of the few Latin American armies with a fighting tradition.

During the late 1890s, Paraguay purchased small quantities of Chilean-style Model 1895 Rifles from DWM (Deutsche Waffen-und Munitionfabriken). From 1907 to 1912, the Paraguayan Model 1907 Rifle (Fusil Modelo 1907 Paraguayo) was produced in caliber 7.65 x 53mm for Paraguay by DWM. These rifles are quite similar to the Gew. 98, with the exception of the heavy 1904-style cocking piece and the nose cap that accepts an export style Model 1907 bayonet with muzzle ring. Sling swivels are suspended from the underside of the lower barrel band and the bottom of the stock. The Paraguayan Model 1907 Carbine (Carabina Mauser Paraguayan Model 1907) is similar to the rifle, but is shorter, has a turned down bolt handle and a tangent leaf rear sight, and is fully stocked to the muzzle. The nose cap provides front sight protectors, and the sling is side mounted.

Ordered from the Fabrica Nacional de Armas, Oviedo, Spain, the Model 1927 Rifle (Fusil Modelo 1927), made from 1927 to 1932, was manufactured in long rifle, short rifle, and carbine configurations, all chambered for the 7.65 x 53mm round. The long rifle differs from the Model 1907 in having a bolt stop/charger guide, and requiring a bayonet with the muzzle ring set flush with the handle. In order to make use of existing stocks of Model 1895 bayonets, an auxiliary lug attachment is used. The rifle is fitted with a pistol grip stock, while the Model 1927 Short Rifle (Mosqueton Modelo 1927) has a straightwristed stock, with the bolt handle either bent down or straight. The Model 1927 Carbine (Carabina Modelo 1927) is full stocked to the muzzle, with a turned down bolt handle and side-mounted sling. Records show that approximately 10,363 rifles were purchased at this time. Further purchases in 1930 include 7,000 Belgian Mauser Model 1889 Rifles in caliber 7.65 x 53mm.

The foregoing weapons served the Paraguayan forces for many years, being converted to caliber 7.62mm during the 1950s.



Full-length view of the Paraguayan Chilean-style Model 1895 Rifle.





TOP: Paraguayan Model 1907 7.65mm rifle SN 8902, full length view of right side. Manufactured for Paraguayan contract. Note that all small parts are inspector marked with a five-point start. This weapon system saw great use in the Gran Chaco War.

MIDDLE: Close-up view of the right side of the crest and legend on the receiver of the Paraguayan Model 1907 rifle.

RIGHT: British proof marks and legend on barrel as well as caliber designation on Paraguayan Model 1907 7.65mm rifle.

(All Private collection of Robert I. Landies)





Close-up of the legend and serial number, plus part of the crest on the left side wall of the Paraguayan Model 1907 7.65mm rifle. (Private collection of Robert I. Landies)



*Persian marked bayonet lug on Paraguayan Model 1907 7.65mm rifle.* (*Private collection of Robert I. Landies*)



Full-length view of the Paraguayan Model 1907 Rifle.



Paraguayan M1907 action. (Jan Gardiner collection)

According to reports from the Chaco War, Paraguayan soldiers ("pilas") cordially loathed the Spanish-made weapons, labeled "Mata Paraguayo" or "Paraguayan Killer." As soon as possible, these rifles were replaced on the field of battle with captured Czech-made 7.65mm VZ 24 Short Rifles, and/or VZ 08/33 Short Rifles.

Standard Modell Mauser Rifles and FN-made Mle. 24 "Mod. 1935" Short Rifles were acquired in the late 1930s. During the war with Bolivia, Paraguay captured enormous quantities of equipment from the enemy, including 39,000 usable rifles, 900 submachine guns, 700 heavy and 2,100 light machine guns, about 100 mortars, 50 pieces of artillery, and 3 tanks.

**CHILEAN-STYLE MODEL 1895 RIFLE:** DWM supplied the Paraguayan army with Chilean-style Model 1895 Rifles during the late 1890s. These rifles were kept in use and reserve from the time of acquisition through the period of the Chaco War. All specific data regarding this rifle will be found under the section on Chile.



Paraguayan sentry post on the Pilcomayo River during the Chaco War. The sentry is armed with a Model 1895 Rifle. (Benjamin Banks collection)



Paraguayan M1907 stock cartouche. (Jan Gardiner collection)

**PARAGUAYAN MODEL 1907 RIFLE:** The Paraguayan Model 1907 Rifle is quite similar to the Gew. 98, with a straight bolt handle, a pistol grip stock, and the upper hand guard running from in front of the "Lange Vizier" rear sight to just beyond the lower barrel band. The action includes safety lugs and nonrotating extractor, with the heavy 1904-style cocking piece. Swivels are found on the bottom of the lower barrel band and the bottom of the buttstock. The German "H"-style bayonet lug is used, and this rifle also will be found fitted with an auxiliary bayonet lug in order that the Model 1895 bayonet can be utilized.

Length: 49.09"; Weight: 9.06 lbs.; Barrel: 28.13"; Caliber: 7.65 x 53mm, later converted to 7.62mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: "Lange Vizier" rear sight graduated to 2000 meters. Remarks: Paraguayan crest on the top of the receiver ring, with manufacturer's markings stamped on the left side rail.

**PARAGUAYAN MODEL 1907 CARBINE:** The Paraguayan Model 1907 Carbine (Carabina Mauser Paraguayana Mo. 1907) has an action identical to the Model 1907 Rifle, but with a turned down bolt handle. The carbine is fitted with a pistol grip style stock that extends to the muzzle. The simple nose cap has protecting ears for the front sight, and there is no provision for a bayonet. The buttstock is cut with a sling slot, and the lower barrel band has a side-mounted sling slot. A tangent leaf rear sight replaced the Lange Vizier rear sight of the Model 1907 Rifle.

Length: 41.25"; Weight: 8.1 lbs.; Barrel: 21.75"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Crest of Paraguay on top of the receiver ring, with proofs and serial number on the left side of the receiver ring, and further proofing



Full-length view of the Paraguayan Model 1907 Carbine. (Noel P. Schott collection)



Crest of the Republic of Paraguay on the receiver ring of the Paraguayan Model 1907 Carbine. (Noel P. Schott collection)

on the right side of the receiver ring. Manufacturer's markings on the left side rail.

**PARAGUAYAN MODEL 1927 RIFLE:** Made in Oviedo, Spain at the Fabrica Nacional de Armas, the Model 1927 Rifle (Fusil Modelo 1927) is very similar to the Gew. 98, with the exception of the tangent rear sight and a curved extension on the bolt stop to hold the clip in position while loading the magazine (this allowed use of both old and new



*Right side of the receiver ring of the Paraguayan Model 1907 Carbine, showing proof marks. (Noel P. Schott collection)* 



The left side rail with manufacturer's markings on the Paraguayan Model 1907 Carbine. (Noel P. Schott collection)



Overview of the complete action of the Paraguayan Model 1907 Carbine. (Noel P. Schott collection)



Full-length view of the Paraguayan Model 1927 Rifle.



The left side of the receiver ring with model designation, and left side rail with manufacturer's markings of the Paraguayan Model 1927 Rifle.

style clips). The rifle version of this weapon also has an auxiliary bayonet lug attached over the original flush lug, allowing the use of the Model 1895 bayonet. The rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard extends to .75 inches beyond the lower barrel band. There is a magazine floorplate release in the front of the trigger guard on the example shown; however the author is unable to state with certainty that this is the case on all rifles produced.

Length: 49.0"; Weight: 9.0 lbs.; Barrel: 28.63"; Caliber: 7.65 x53mm, later converted to 7.62mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine ; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Paraguayan national crest on the top of the receiver ring, manufacturer's markings on the left side rail.

**PARAGUAYAN MODEL 1927 SHORT RIFLE:** The Paraguayan Model 1927 Short Rifle is similar to the Model 1927 Rifle with the exception of having a straight wrist stock, either a straight, or a bent bolt handle, and Spanish-style front sight protectors. The upper hand guard extends from the front of the receiver ring to approximately .75 inches beyond the lower barrel band. The lower barrel band has a swivel on the bottom, and there is another on the bottom of the buttstock.



The Paraguayan crest on the receiver ring of the Paraguayan Model 1927 Rifle.



The left side of the action of the Paraguayan Model 1927 Short Rifle, showing the model designation and the manufacturer's markings.



Full-length view of the Paraguayan Model 1927 Short Rifle.



Scene of Paraguayan soldiers ("pilas") in a shallow trench during the Chaco War. The first soldier appears to be using a long-barreled version of the ERMA submachine gun, while the other troops are using Czech VZ 12/33 and Paraguayan Model 1927 Short Rifles. (Benjamin Banks collection)



*The "FN" logo on the receiver ring of the Paraguayan FN Model 24/30 Short Rifle.* 



Full-length view of the Paraguayan FN Model 24/30 Short Rifle.



Paraguayan troops charging through arid underbrush during the Chaco War. (Benjamin Banks collection)



The side rail of the FN Model 1930 Short Rifle made for Paraguay. Note the use of a text font with serifs, typical of FN receiver side rail markings in the 1920s and 1930s.

Length: 42.25"; Weight: 8.50 lbs.; Barrel: 22.50"; Caliber: 7.65 x 53mm, later converted to 7.62mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Paraguayan national crest on the top of the receiver ring, with model designation on the left side of the receiver ring; manufacturer's markings stamped on the left side rail.

**PARAGUAYAN FN MODEL 24/30 SHORT RIFLE:** This the standard export Model 24/30 Short Rifle produced by FN. The short rifle is fitted with a pistol grip stock, and the upper hand guard runs from the front of the receiver ring to the upper barrel band. Note the grasping grooves. There is a swivel on the bottom of the lower barrel band and another on the bottom of the stock behind the pistol grip.



"Modelo Paraguayo 1930" is marked on the left side of this rare FN Mauser. It is not known if any police carbines with 16- to 18-inch barrels were made.



Full-length view of the Paraguayan Standard Modell Short Rifle.



Full-length view of the Paraguayan Standard Modell Carbine.

Length: 43.25"; Weight: 10.0 lbs.; Barrel: 22.50"; Caliber: 7.65 x 53mm; later converted to 7.62mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: "FN" logo on the receiver ring, with manufacturer's markings on the left side rail.

**PARAGUAYAN STANDARD MODELL MODEL 1933 SHORT RIFLE:** During the 1930s, Paraguay purchased small numbers of Standard Modell Short Rifles from Germany. All specific data on these rifles is to be found under the section on Germany.

**PARAGUAYAN STANDARD MODELL MODEL 1933 CARBINE:** Standard Modell Carbines were among the purchases made from Germany during the 1930s. The data for this carbine will be found in the section on Germany.



A period of rest during the Chaco War for some Paraguayan troops. Note the covered and uncovered Vickers heavy machine guns, with the Czech VZ 23 Short Rifle leaning against the tree. (Benjamin Banks collection)

## **PERSIA / IRAN**

Established by Cyrus the Great in 549 B.C., this troubled country has been rent by internal and external forces for centuries. Brought kicking and screaming into the twentieth century by the Shah, this nation has since attempted to turn back the clock under the Ayatollahs, while attempting to maintain military superiority in the region.

During the late nineteenth century, internal affairs in Persia became increasingly controlled by the British and the Russians, with the country divided into spheres of influence. Following World War I, Persia was recognized as an independent nation, but was virtually under a British protectorate. Reza Khan established a military dictatorship in 1921 and declared himself an hereditary monarch, Reza Shah Pahlavi, in 1925. Persia officially became Iran in 1935.

During World War II, Britain became alarmed over pro-Axis activity in Iran and occupied the country, forcing Reza Shah to abdicate in favor of his son, Mohamed Reza Shah Pahlavi. The Shah pursued a pro-Western policy of anticommunism and social and economic modernization. While popular with the business sector, the efforts of the Shah were deeply resented by the poor, as well as the rural population. The Shah was forced into exile on 16 January 1979, and after some internal struggles, the country came under the control of the Ayatollah Khomeini. The Ayatollahs and religious extremists continue to have the final say in the affairs of this unsettled country.

Persian military leaders actively and aggressively rearmed the nation during the reigns of the Reza Shah and his son. Contracts were signed with Brno for the production of the Persian Model 98/29 Rifle in caliber 8mm Mauser, which became the standard infantry weapon of the Persian army. Later, purchases were made of the VZ 24 Short Rifle and the Model 30 Carbine. The Iranians were so impressed with the Model 30 Carbine that a Czech-supervised factory was established to produce an Iranian-made version called the Model 49 Carbine. These weapons were used at various times in action against the Kurds in the northwestern regions of the country, as well as in the internal struggles that resulted in the overthrow of the Shah. Before the exit of the Shah, the army was reequipped with semiautomatic weapons.



Left full-length view of the Model 1895 Rifle as used by Persia.



Full-length view of the Persian Model 1895 Rifle. (Springfield Armory Museum)

**PERSIAN MODEL 1895 RIFLE:** At the beginning of the twentieth century, Persia equipped the rather meager, poorly trained Persian army with the Model 1895 Chilean-style Mauser Rifle. This rifle was the standard issue for the infantry until purchases were made of the Czech Model 98/29 Rifle in the mid-1920s. Specific data on this rifle can be found in the section on Chile.

**PERSIAN FN MODEL 24/30 SHORT RIFLE:** During the late 1920s, the Persian armed forces supplemented their equipment with minor purchases of the FN Export Model 24/30 Short Rifle. Full data regarding this short rifle will be found in the section on Paraguay.

**PERSIAN MODEL 98/29 LONG RIFLE:** Persia ordered approximately 180,000 Model 98/29 (Persian Model 1310) Long Rifles



Full-length view of the FN Model 24/30 as used by Persia. (Cliff Baumann collection)



Close-up view of the crest of a German WWI 98a as used by Persia. (Jan Gardiner collection)



Left full-length view of the Persian Model 98/29 Long Rifle.



Full-length view of the Persian Model 98/29 Long Rifle (Persian Model 1310).



Kurdish rebels are seen here in northwestern Iran, using Iranian Model 98/29 Rifles, and, in at least one case, a Soviet-made SKS semi-automatic carbine. (David Adamson)



Serial number stamped into the right side of the buttstock of the Persian Model 98/29 Long Rifle.



Kurdish rebels, armed with Czech Model 98/29 Iranian Rifles, crossing a river in northwestern Iran, in the 1960s. (David Adamson)



Receiver ring of the Persian Model 98/29 Long Rifle showing the Persian national crest.



The translation of the Farsi text on the receiver side rail indicates that this rare Model 1309 (Model 98/29) was made at the Teheran, Iran rifle factory as Iranian "Model 1309" Model 1930. (Darryl Beck collection)



The right side of the receiver of the Teheran-manufactured Model 1309 (Model 98/29) Long Rifle. (Darryl Beck collection)



The bolt shroud and handle of the Teheran-made Model 98/29 (Iranian Model 1309) Long Rifle, showing the serial number 25147. (Darryl Beck collection)



Rear sight with gradations marked in Farsi on the Persian Model 98/29 Long Rifle.



Rear sight graduated in Farsi of the Persian Czech Model VZ 24 Short Rifle.



This Iranian Model 1309 (also known as the Model 98/29 Long Rifle) 7.92mm Long Rifle was recently discovered in an auction. It is distinctive because its side rail text indicates that it was manufactured in Teheran rather than Czechoslovakia. Heretofore, it was believed that only the Model 49 carbine had been made in the plant in Teheran. The rifle is a recent import, and has its serial stamped (incorrectly, too!) on the left side of the receiver. All stock markings correspond to those seen on the Model 49 Carbine. (Darryl Beck collection)



The right side of the buttstock of the Iranian Model 1309 Long Rifle reveals the same type of numerals and inspection marks as those found on the Teheranmanufactured Model 1949 Carbine. (Darryl Beck collection)

from Czechoslovakia; however, this order, which was filled from 1931 through 1938, was not completed before the takeover of Czechoslovakia by Germany. The order also included some VZ 24 Model Short Rifles, but the quantity is indeterminate.

This rifle is fitted with a pistol grip stock with grasping grooves, and the upper hand guard extends from in front of the receiver ring to just beyond the lower barrel band. There is a sling swivel on the lower barrel band and another on the buttstock, while the upper barrel band has a split type stacking swivel pivoted on the bottom. The nose cap incorporates a German-style "H" bayonet lug. The front sight has fixed sight protectors.

Length: 49.20"; Weight: 9.10 lbs.; Barrel: 29.13"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Persian national crest on the receiver ring, with manufacturer's markings in Farsi on the left side rail.

**PERSIAN CZECH MODEL VZ 24 SHORT RIFLE:** Czech Model VZ 24 Short Rifles were part of the last order placed with Brno before the fall of Czechoslovakia. While some of these short rifles were received, the total number is not known. Specific data relative to this short rifle will be found under the section on Czechoslovakia.



Manufacturer's markings stamped in Farsi on the side rail of the Persian Czech Model VZ 24 Short Rifle.



Full-length view of the Persian Czech Model VZ 24 Short Rifle.



The Iranian contract Mauser Short Rifle made by Fabrique Nationale d'Armes de Guerre of Herstal, Liege, Belgium is one of the rarest Mauser contract rifles of the post-WWI era. The rifle has several distinctive features that enable its easy identification, primarily its shiny steel unit marking disc and the third sling swivel mounted on the trigger guard bow, just like the Model 98/29 Long Rifle. (John Wall collection)



Another view of the Iranian contract Mauser Short Rifle made by FN. (John Wall collection)



The left side of the receiver of the Model 1924 Mauser Rifle made for Iran. A unique characteristic of the Model 1924 series is the fact that they were all made with "intermediate length" receivers, and thus are an eighth of an inch shorter than the rest of the Mauser rifles of the day which used a receiver that was 8.75 inches long, called a "standard length receiver." Model 1924 rifles and carbines are also heavily serialized, and were seemingly not made under a system of manufacture that provided interchangeable components with a high degree of reliability. Because most of the components on this Iranian Short Rifle are not serial numbered, this likely dates this rifle to the post-1930 era, when the FN Model 1930 went into production, a rifle with a standard length receiver and whose manufacturing technology produced highly interchangeable parts without hand-finishing and fitting. Note the early side rail address written in a font with serifs, and the Liege proofing. (John Wall collection)



The straight bolt handle on the Iranian Model 1924. Note that the serial number is inscribed on the part of the handle facing the shooter's eyes. (John Wall collection)



Liege proof marks were stamped at the bolt root of the FN Iranian M1924 Contract Rifle. (John Wall collection)



The serial number of the FN Model 1924 made for Iran was stamped on the right side of the receiver. (John Wall collection)



The Farsi numerals on the leaf sight of the M1924 FN Contract Rifle for Iran are graduated in 100-meter increments, from 200 to 2,000 meters. (John Wall collection)



The front sight of the Iranian M1924 FN Contract Rifle is mounted on a barrel band, and features a full-length handguard. (John Wall collection)



The trigger guard and magazine assembly of the FN-made M1924 Iranian Mauser Short Rifle features a permanently installed third sling swivel. (John Wall collection)



The receiver crest of the Iranian M1924 Short Rifle from FN is virtually the same as the one used on similar Mausers produced in Czechoslovakia. (John Wall collection)



Full-length view of the Persian Czech Model 30 Carbine.



Left full-length view of the Czech Model 30 Carbine.

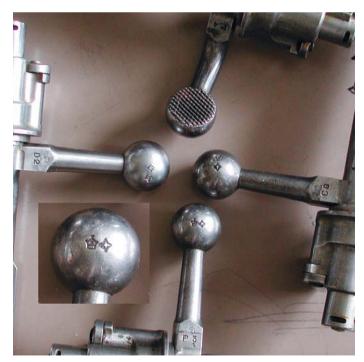
**PERSIAN CZECH MODEL 30 CARBINE:** The Persian Czech Model 30 (Persian Model 1317) Carbine is a handy, chunky weapon, fitted with a pistol grip stock with grasping grooves. The upper hand guard runs from the front of the receiver ring to the upper barrel band. The upper and lower barrel bands are quite close together, with the upper one retained by a spring on the right side. The nose cap features a short German-style "H" bayonet lug. There is a swivel on the bottom of the lower barrel band; another swivel is at the bottom of the buttstock. The bolt handle is bent down, and the stock has been cut out in order to facilitate operation of the buttstock.

Length: 37.99"; Weight: 8.33 lbs.; Barrel: 17.91"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action;



The right side of the Model 1312 Iranian VZ 24. Note that the lower number is also "12," matching the model number "1312." 1312 equates approximately to the year 1933-1934 on western calendars. (John Wall collection)

**Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** Persian national crest on the receiver ring, with manufacturer's markings in Farsi on the left side rail.



The undersides of all original Iranian contract Czechoslovak Mauser bolts are marked with two images; the Persian crown and a four-pointed star. The only exception is the Cavalry Carbine, the Model 98/29 musketoon, which has a turned down bolt with a knurled surface on its underside. (Robert Lukes collection)



The last purchase of VZ 24s by Iran was in their Iranian year 1317, which is approximately 1938-1939 in the West. Rifles purchased at this time had slightly different Farsi inscriptions on their side rail. This text translates as "Intermediate Rifle Model 1317, Brno Arms factory." The reference to "intermediate length" no doubt refers to the fact that Iran had, by this time, acquired many very short carbines for cavalry use, as well as very long (29-inch barrel) rifles for infantry use. The VZ 24 thus was the "intermediate" length rifles of the three models. (John Wall collection)



The right side of the Model 1317 Iranian VZ 24. Note that the lower number is also "17," matching the model number "1317." (John Wall collection)

**IRANIAN MODEL 49 CARBINE:** Manufactured by the Iranians in the state rifle factory set up by the Czechs in Mosalsalsasi, this is a modification of the Czech-made Model 30 Carbine. The lower and upper barrel bands are stamped from sheet steel and retained by a single spring on the right hand side. The lower barrel band incorporates a fixed sling bar on the left side, while a German-style sling slot is cut through



The first VZ 24s purchased by Iran were provided by Brno from Czechoslovak Army reserves. Surviving examples have Czechoslovak acceptance markings and no Farsi, but are stamped with a small Persian crown on their receiver rings. Subsequent VZ 24 deliveries were all rifles custom-made for Iran with the Sun, Lion and Sword crest and Farsi text on the side rail, receiver and buttstock. This rifle, dated 1312 has a Farsi inscription on its rail which translates as "Carbine Model 1312, Brno Arms Factory." (John Wall collection)



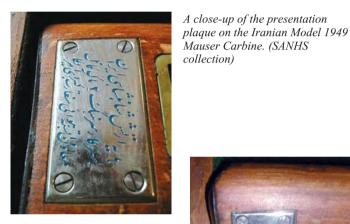
Serial number in Farsi on the butt of the Iranian Model 49 Carbine.



Full-length view of the Iranian Model 49 Carbine.



Left side view of the receiver ring and side rail of the Iranian Model 49 Carbine, with the manufacturer's markings stamped in Farsi.



Shown above the carbine's presentation plaque is the distinctive metal frame that fits over the sling slot in the butt of the Iranian Model 1949 Carbine. The metal fitting has a sling bar across the middle of the opening around which the sling is threaded. (SANHS collection)



Mauser Carbine. (SANHS

*collection*)

the buttstock. The stock is made from an indigenous wood, lighter and less dense than walnut.

Length: 38.18"; Weight: 8.60 lbs.; Barrel: 18.11"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Iranian national crest on the receiver ring, with the manufacturer's markings stamped on the left side rail.

## PERU

Peru, the site of the great Incan empire, was conquered by Francisco Pizarro of Spain in 1571. Due to its great wealth of precious metals and a compliant indigenous population, Peru quickly became a jewel in the crown of Spanish conquest. Lima, the capital city, was founded in 1535, and became the political and administrative center for the Spanish conquest of all South America. Peru achieved liberty in 1821 with the defeat of royalist forces by the armies of Bolívar and San Martín at the battles of Junin and Ayachuco.



An Iranian Model 1949 Carbine in its original presentation case, with original sling, bayonet and scabbard. This carbine was presented to a U.S. Air Force officer who served as an Air Attache with the U.S. Embassy in Teheran. The green felt-lined case and all accoutrements are original. The recipient recently donated this prize rifle to the Springfield Armory Historic Site (SANHS) and Museum in Springfield, Massachusetts. (SANHS collection)

Political growth was stormy for the new republic, and an attempt at confederation with Bolivia collapsed with the Chilean invasion of 1839. Chile defeated Peru in the War of the Pacific (1879 - 1883) and occupied Lima and Callao for two years, saddling the Peruvian nation with a crushing war debt. This debt resulted in the loss of much of the Peruvian infrastructure to foreigners.

Civilian leadership prevailed from 1895 to 1930, then there was a period of military rule until 1939, when Manuel Prado was elected president, serving until 1945. It was during Prado's presidency that Peru conducted a victorious war with Ecuador, gaining a great deal of Ecuadoran territory. This war with Ecuador was militarily outstanding due to the close cooperation between the Peruvian army, naval, and air arms. It represented the first time paratroops were actively employed in battle in South America, with close-in air support of army personnel by the Peruvian air force. The Peruvian navy, in conjunction with the drives by the army, provided close naval support.

The Peruvian military took control of the country in 1968. instituting reforms that included the nationalization of Standard Oil's International Petroleum Company holdings, as well as restructuring the economic and political power within the infrastructure. Political power was returned to civilian control in 1980. In 1985, under the leadership of president Alan García Pérez, the country started reduction of its foreign debt; however this period ushered in the brutal period of insurgency by the Shining Path ("El Sendero Luminoso"), a dedicated group of Communist-inspired rebels.

With the election of president Alberto Fujimori in 1990, martial law was imposed throughout Peru, resulting in the suppression of the excesses of the Shining Path. The movement has now been reduced to ineffectualness, and the Peruvian economy is growing. Tensions have once again flared with Ecuador over the common border area, but after several skirmishes, the situation presently lies dormant.

PERUVIAN MODEL 1891 RIFLE: Between 1892 and 1895, Peru purchased a total of thirty thousand Model 1891 Rifles from Ludwig Loewe & Co. This rifle is identical to the Argentinian Model 1891 Rifle, with the exception of the markings. These rifles were originally fitted with a standard leaf rear sight, however a modernization program was instituted in 1912 to enable the weapons to handle the 7.65 x 53mm spitzer, or improved pointed-bullet ammunition. These rifles will be found with the "Lange Vizier" rear sight, similar to that of the Gew. 98.

The rifle is fitted with a straight-wristed stock, with the typical short upper hand guard extending from in front of the rear sight to the lower barrel band. The lower barrel band is fitted with a swivel on the bottom, and there is another on the bottom of the buttstock. The nose cap has a bayonet lug on the bottom for use with the Model 1895 bayonet.



Full-length view of the Peruvian Model 1891 Rifle.



Side rail of the Peruvian Model 1891 Rifle, showing the "MAUSER MODELO ARGENTINO 1891," and the "DWM" logo.

Length: 48.62"; Weight: 9.04 lbs.; Barrel: 29.09"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical column, box magazine; Sights: Lange Vizier rear sight graduated to 2000 meters. Remarks: Peruvian national crest on the receiver ring, with the manufacturer's markings stamped on the left side rail.

**PERUVIAN MODEL 1891 CARBINE:** Information obtained indicates that a number of Peruvian Model 1891 Rifles were arsenal converted to carbine configuration by the Peruvian authorities.



*The left side rail, showing the manufacturer's markings, on the Peruvian Model 1891 Carbine.* 



The Peruvian national crest on the receiver ring of the Peruvian Model 1891 Rifle.

Aside from length and weight, these carbines are identical to the Peruvian Model 1891 Rifle, including the "Lange Vizier" rear sight.

Length: 37.25"; Weight: 7.0 lbs.; Barrel: 19.75"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical column, box magazine; Sights: Lange Vizier rear sight graduated to 2000 meters. Remarks: Peruvian national crest on the receiver ring, with the model designation on the left side rail.



Full-length view of the Model 1891 Rifle converted to carbine configuration. This was originally an Argentinian Model 1891 Rifle converted to Carbine configuration and sold to Peru with the Peruvian crest added.



The Peruvian national crest on the receiver ring of the Peruvian Model 1891 Carbine.

**PERUVIAN MODEL 1895 RIFLE:** Peru acquired an unknown quantity of Chilean-style Model 1895 Rifles; these rifles are standard for this period, and all relevant data concerning the rifle may be found in the section on Chile.



Manufacturer's markings stamped on the left side rail of the Peruvian Model 1909 Rifle. (Lothar Frank collection)

**PERUVIAN MODEL 1909 RIFLE:** Between 1910 and 1914, Peru purchased approximately fifty thousand Model 1909 Rifles from Waffenfabrik Mauser. The rifle is basically the export version of the Gew. 98 Rifle, including the "Lange Vizier" rear sight. The rifle is fitted with a pistol grip stock without grasping grooves, with the short style upper hand guard running from in front of the rear sight to the lower barrel band. The lower barrel band has a swivel on the bottom, and the bottom of the buttstock is fitted for a quick-release sling attachment. The upper barrel band incorporates a parade hook on the bottom for the shortening of the sling for parade use. The nose cap utilizes a German-



Full-length view of the Model 1895 Rifle as used by Peru.



Full-length view of the Peruvian Model 1909 Rifle. Note the original Peruvian muzzle cover. (Lothar Frank collection)



Full-length view of an unusual Peruvian Model 1909 Rifle. Note the tangent leaf rear sight rather than the usual "Lange Vizier" rear sight.



Peruvian national crest on the receiver ring of the Peruvian Model 1909 Rifle. (Lothar Frank collection)

style "H" bayonet lug that accepts the specially made Peruvian Model S 98 bayonet. The action incorporates an auxiliary locking lug, a nonrotating extractor, and the early, heavy, 1904-style cocking piece. The Peruvian Model 1909 Rifle is unusual in that the receiver ring is longer than normal, with several other dimensions deviating from that of the standard Gew. 98 Rifle.

Length: 49.2"; Weight: 9.0 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: "Lange Vizier" rear sight graduated to 2000 meters. Remarks: Peruvian national crest on the receiver ring, with manufacturer's markings stamped on the left side rail. Mauser Banner logo and proofs stamped into the right side of the stock.

**PERUVIAN CZECH MODEL VZ 24 SHORT RIFLE:** During 1930, Peru purchased a small number of VZ 24 Short Rifles, estimated



Caliber markings in electric pencil on the right side of the receiver ring of the above Peruvian Model 1909 Rifle.

at less than one thousand, from Czechoslovakia. These short rifles are the standard export model, and it is not known if the Peruvian crest appears on the receiver ring. All specific data relative to this short rifle can be found in the section on Czechoslovakia.

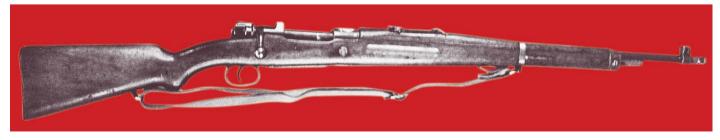
Peru placed orders with Brno for a modest number of Peruvian VZ32 Short Rifles, loosely based upon the Czech VZ 16/33, but subject to Peruvian needs and desires.



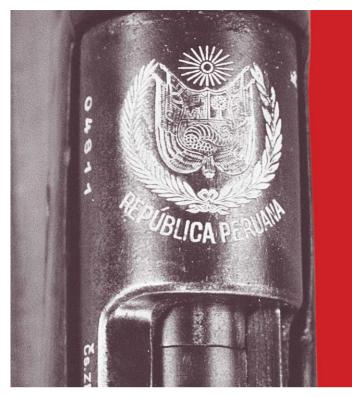
View of the side rail of the Peruvian VZ 32 Short Rifle showing the markings in Czech, but plainly showing the Model 32.



Full-length view of the Czech VZ 24 Short Rifle as used by Peru.



Full-length view of the right side of the Peruvian VZ 32 Short Rifle; note the turned down bolt handle and the finger groove stock.



Top view of the receiver area of the Peruvian VZ 32 Short Rifle, showing the Peruvian crest.



Peruvian national crest on the receiver ring of the Peruvian Model 1935 Short Rifle.



Full-length view of the Peruvian Model 1935 Short Rifle.



The side rail with manufacturer's markings on the Peruvian Model 1935 Short Rifle.

**PERUVIAN MODEL 1935 SHORT RIFLE:** During the late 1930s, Peru purchased an indeterminate number of short rifles from FN that were designated the Peruvian Model 1935. This is a standard export model short rifle as produced for a number of countries, with one exception—the Peruvian Model 1935 has a reversed safety, with the safety being on when turned to the left.

The short rifle is fitted with a pistol grip stock with grasping grooves, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel on the bottom, and there is another on the bottom of the buttstock. The nose cap incorporates a German-style "H" bayonet lug.

Length: 43.10"; Weight: 8.9 lbs.; Barrel: 23.19"; Caliber: 7.65 x53mm (Many later converted to .30-06 and so marked); Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Peruvian national crest on the receiver ring, with manufacturer's markings stamped on the left side rail.

## POLAND

Poland, a once strong and united kingdom, was partitioned and dismembered as a nation by Sweden, Prussia, Russia, and Austria in 1795. Long used as a pawn in territorial chess by stronger nations, Poland did not rise as a country once again until after the fall of Russia in 1917. Reconstituted by the efforts of Joséf Pilsudski, Poland wrested victory and a new nation from the Bolshevik regime of Russia.

As part of war booty from Germany and Austria following the end of the first world war, Poland received large numbers of German weapons, both Gew. 98 Rifles and Model 98AZ Carbines, in reality short rifles. Production facilities from the Danzig arsenal were established in Warsaw shortly after the end of the war, with a move made to Radom in the 1920s. The Gew. 98-style rifle produced for Poland, of which few were made, is almost indistinguishable from the German model. The Model 98AZ-style short rifle, however, differs in having a sling bar on the left side of the stock, in addition to swivels suspended under the lower barrel band and the bottom of the stock. The familiar stacking rod has a squared elbow extending from the nose cap, which also helps identify the Polish version of this weapon. These rifles were all used in the Russo-Polish War that ended in 1921.

In 1929, Poland decided that the Czech VZ 24 and the FN Mle 24 Short Rifle designs had much to recommend them, and a new Polish short rifle, the Wz 29, was patterned on the basic design of these two weapons. This was the standard service weapon at the start of World War II, when Poland was invaded on 1 September 1939. All Wz 29 Short Rifle stocks are cut for a bent bolt handle; however, the short rifle was produced with a straight bolt handle for infantry use, while the weapon issued to the cavalry has a bent bolt handle.

When Germany overran Poland, many of the short rifles were converted to G29/40 specifications by Austrian arms plants. The use of Polish bayonets was quite widespread, helping to alleviate the chronic shortages felt by the Wehrmacht.

**POLISH MODEL 98 RIFLE:** Produced on machinery from the Danzig arsenal, the Polish 98 differs from the Gewehr 98 in having a tangent rear sight instead of the "Lange Vizier" rear sight of the



Side rail markings on the Polish-produced Model 98AZ Carbine. The only designation is "K 98." (Century International Arms, Inc.)

Germans, although the first pieces off the production line were equipped with the original "Lange" rear sight. The pistol grip stock has grasping grooves, and the typical German short upper hand guard extends from the front of the rear sight to just beyond the lower barrel band. In all other respects, the rifle is identical to the Gew. 98, and specific data on the rifle can be found under the section on Germany.

**POLISH MODEL 98AZ CARBINE:** With some minor changes, this Polish version of the German Model 98AZ Carbine is identical to that produced by the Germans in World War I. The major difference is a change in design of the stacking rod found under the nose cap; the elbow of the stacking rod is square, rather than rounded as in the German version. The other difference is the attachment of a sling bar on the left side of the stock, while still providing a swivel on the bottom of the lower barrel band and the bottom of the stock. The wood used for the stock is not usually walnut but a less dense native wood. All specific data relative to this weapon will be found in the section on Germany.



Full-length view of the Polish version of the Model 98 Rifle.



Full-length view of the Polish version of the Model 98AZ Carbine. (Century International Arms, Inc.)





The serial numbering and side rail marking conventions used on the Polish W.98s (Gewehr 98) made at Warzawa in the mid-1920s. (John Wall collection)



The Polish eagle stamp found on the knob of a W.98/Gew.98 bolt. (John Wall collection)



The right side of the receiver of a Polish Army "W.98" (Gewehr 98) Service Rifle made at "P.F.K. Warzawa" in 1924. Note the oval inspection marks. (John Wall collection)



The receiver crest of a mid-1920s "W.98," the Polish version of the Imperial German Army's Gewehr 98. "P.F.K. Warzawa" stands for "Panstwowa Fabryka Karabinov Warzawa" or National Rifle Factory at Warsaw. A total of 22,000 W.98 rifles were made at the Warsaw plant in 1923 and 1924. (John Wall collection)



The scrubbed receiver of an ex-Bavarian Gewehr 98, originally made at Amberg Arsenal, where it was stamped with the Bavarian "standing lion with scepter" firing proof, just to the right of the Polish eagle. The letter combinations "K" and "Kb" (standing for the Polish word "Karabinov" or rifle) will usually be found as a suffix to most Polish Mauser long rifle serial numbers. (John Wall collection)



1924 production of the Polish Wz 24 (Gew 98, "W98" Rifle). Note the Lange Vizier rear sight. (Jan Gardiner collection)



Polish Wz 24 (W98) left side view. (Jan Gardiner collection)



Polish Wz 24 (W98) overhead view of the action and markings. (Jan Gardiner collection)



The rear sight leaf and handguard of a Polish Wz 29. Note the distinctive Polish practice of strengthening the front and rear sections of the handguard with horizontal dowels. (John Wall collection)



Unique style of Polish inspection marks on the small of a Wz 29 stock. (John Wall collection)

The unique Polish marking conventions used on K29/Wz 29 rifle stocks, featuring the horizontally stamped five-digit number followed by a single-letter suffix on the lower comb of the buttstock. A total of only 264.300 Wz 29s were made, all at P.F.B. Radom. (John Wall collection)



The receiver of a Germanmade Polish Gewehr 98, the Wz 98. The letter "Z" in the triangle stands for "Zbrojovnia," the Polish word for a small armory or perhaps ordnance depot. An unknown number of Mauser rifles bearing this receiver stamp were originally W.98s that were converted to the Wz 98a configuration with flat



tangent sights at "Zbrojovnia" facilities. This work often appears to have been done crudely and in great haste. Note the Polish eagle on the new barrel. (John Wall collection)

**POLISH Wz 29 SHORT RIFLE:** Manufactured in the Radom plant, and based upon the best of the designs of the Czech VZ 24 Short Rifle and the FN Model 24 Short Rifle, the Polish Wz 29 Short Rifle is reminiscent of both weapons. The pistol grip stock is fitted with grasping grooves and an upper hand guard that normally runs from the front of the receiver ring to the upper barrel band. In the Czechoslovakian manner, the lower barrel band is held in place by means of a transverse screw, with a swivel suspended from the bottom; another swivel was attached to the left side of the buttstock. Additionally, a sling bar is attached to the left side of the buttstock. The front sight is protected by sight ears. A hollow washer is set into the stock to facilitate disassembly of the firing mechanism.

Length: 43.40"; Weight: 9.0 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Polish crest/maker's name/date on the receiver ring, with the model designation on the side rail.



Polish markings on the receiver ring of the Polish version of the Model 98AZ Carbine. Note the lack of a date on this specimen. (Century International Arms, Inc.)



The side rail of a W.98 converted to Wz 98 configuration, remarked "98a." New barrels with flat tangent sights were added during this rebuild. (John Wall collection)



Seldom found is this Polish Model Wz 98a Rifle, which was produced in the middle to late 1930s.





The renumbered bolt of an ex-Imperial German, ex-Polish, ex-Republican Spanish Kar98 Short Rifle. This carbine was taken in to Polish service, and proofed with the Polish eagle (far left of receiver), and later sold to the Republican side in the Spanish Civil War. This carbine was refurbished in Spain where its bolt (top) and stock (bottom) were renumbered in the Spanish style.



Polish cavalry troops on maneuvers prior to the outbreak of World War II. Note the cavalry-style Model 98A Short Rifles, and the use of the French "Adrian" steel helmet.



The right side of the receiver of a Danziz Arsenal-made Gewehr 98, hastily converted to Wz 98a configuration with a new barrel and flat tangent sight, showing the Polish eagle stamped above the German Reischsadler firing proof. (John Wall collection)





Side rail markings on the Polish Model Wz 98a Rifle.



Receiver markings on the Polish Model Wz 98a Rifle, indicating production in 1937.



Full-length view of a Radom-marked Wz 29 Short Rifle made from World War I reparation parts. (Century International Arms, Inc.)



Twenty-two caliber designation burned into the upper hand guard of the Polish Model Wz 29 Training Short Rifle.

Close-up view of the markings "PFK WARSZAWA/1929" on the receiver ring of the Model Wz 29 Short Rifle. (Robert Jensen collection)

Receiver markings on the Polish Model Wz 29 Short Rifle. (Springfield Armory Museum)



Full-length view of the Polish Wz 29 Short Rifle as issued for infantry. Note the straight bolt handle.



The bolt-marking conventions used on the Polish Army Short Rifle, the Wz 29 Short Rifle. Note the five-digit serial number followed by a single letter of the alphabet, and the Polish eagle stamped on the bolt knob. (John Wall collection)



Side rail markings on the Wz 29 Short Rifle made from World War I reparation parts. (Century International Arms, Inc.)



Markings on the receiver of the Wz 29 Short Rifle made from World War I reparation parts. Note the diamond-shape Radom symbol above the C.G. Haenel markings. (Century International Arms, Inc.)



A posed group of Polish soldiers, circa 1919-1925; note the stacked Polish 98 Rifles with the "Lange Vizier" rear sight, indicating that not all had the tangent rear sight.



Full-length view of the Polish Model Wz 29 Short Rifle. (Springfield Armory Museum)



Full-length view of the Polish Wz 29 Short Rifle as issued for cavalry. Note the bent bolt handle.



Markings on top of the receiver ring of the Polish Model Wz 29 Training Short Rifle.



*The action and the receiver markings on the .22 caliber Radom Training Rifle.* 



Full-length view of the Polish Model Wz 29 Training Short Rifle in .22 caliber. In all other respects, this is identical to the standard short rifle.



*Full-length view of a purpose-built, Radom-made .22 caliber Training Rifle, built on the configuration of the Polish Wz 29 Short Rifle. This the Model Kbk. 8 Wz31.* 

## PORTUGAL

A fundamentally poor nation, Portugal has been independent since it won recognition as a kingdom in 1143. A seafaring nation since before Columbus, it was this expertise that gave them the status of a world empire in the fifteenth and sixteenth centuries. Portugal controlled the coast of West Africa, the countries bordering the Indian Ocean, many lands in southern Asia, as well as Brazil. However, with the rise of Spain and the Netherlands as empire builders, Portugal quickly sank to second or third rate status.

During the nineteenth century, civil wars weakened the nation, resulting in British control of their foreign policy. In 1910, Portugal became the first kingdom in the twentieth century to become a republic; however, chaos reigned, forcing the military to intervene and create a military dictatorship. In 1928, the military installed a civilian dictator, Antonio Salazar. With the backing of the military, he ruled through civilian governments, controlling the economy and the political scene for generations. In spite of the stability provided by the Salazar regime, the country was the most impoverished in Europe.

After World War II, Portugal was caught up in the storm of decolonialization. Nevertheless, it refused to consider its overseas possessions as colonies, but rather "overseas provinces." This led to tragic colonial wars, with terrible strains on the Portuguese economy and devastating military losses. The colonies won independence in spite of every means used to retain them. Following this, Portugal went through many political upheavals, until 1987 when the Social Democrats won an absolute majority. Under the principle of free enterprise, this turned the country around and it is no longer the poorest in the European Community.

In 1904, the Mauser-Vergueiro Rifle in 6.5 x 58Pmm was adopted by the Portuguese military; these weapons were all produced by DWM, and are of very high quality. Prior to this, the military had been equipped with the Kropatschek tubular magazine rifle, and before that by the Portuguese Guedes lever action rifle. The Portuguese army was well served by the Mauser-Vergueiro Rifle, but in 1937 contracted with Germany for deliveries of the Model 937-A, a short rifle in caliber 7.92 x 57mm, quite similar to the Model K98k Carbine. With the adoption of the Model 937-A, it was found desirable to convert the stocks of the 1904 Mauser-Verguerio Rifles to more closely conform to the Model 937-A configuration. These converted weapons were designated Model 904/M39. During the second world war, arrangements were made for the purchase of Model 1941 Carbines, which are identical to the German Model K98k Carbine, except for the markings. These shipments continued until 1943.

All of these weapons were used at one time or another in the Portuguese overseas possessions, as well as in Portugal itself. They were carried by the Portuguese "volunteers" who fought on the Nationalist side during the Spanish Civil War; others were captured by Colonel von Lettow-Vorbeck from Portuguese forces in East Africa during the first world war, and then turned against the British. No doubt some were used or held in reserve for the colonial wars fought in the 1960s.

**PORTUGUESE MODEL 1904 MAUSER-VERGUEIRO RIFLE:** This rifle in 6.5 x 58Pmm was designed by Vergueiro, a Portuguese officer, in conjunction with the designers at DWM. This rifle is easily recognized by the split-bridge receiver, with the bolt handle turned down in front of the bridge so that the bridge acts as a safety lug in the event of failure of the front lugs. The rifle actually combines the best features of the Gew. 98 Rifle with a split-bridge receiver and a modified Mannlicher-Schoenauer bolt.



The crown and initial of King Carlos I on the receiver ring of the Portuguese Model 1904 Mauser-Vergueiro Rifle.



Full-length view of the Portuguese Model 1904 Mauser-Vergueiro Rifle.



This Model 1904 Portuguese Mauser-Vergueiro saw service during WWI in the hands of Portuguese Colonial troops fighting against German forces commanded by von Lettow-Vorbeck. (John Sheehan collection)



The left side rail of the Portuguese Model 1904 Mauser-Vergueiro Rifle, showing the model designation and caliber in Portuguese and the manufacturer in German.

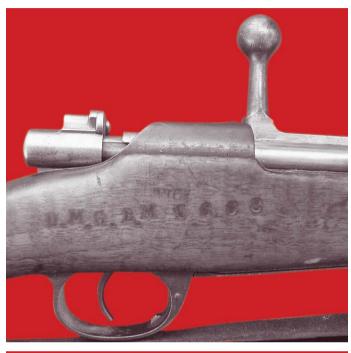
The rifle is fitted with a shallow pistol grip stock, and the upper hand guard runs from the front of the receiver ring to the lower barrel band. The upper band is quite simple, and the nose cap incorporates a short, German-style "H" bayonet lug. There is a swivel on the bottom of the lower barrel band and another on the bottom of the stock. The rifle cocks partially on the opening and partially on the closing of the bolt. There is a magazine floor plate release in the front of the trigger guard similar to that in the Argentine Model 1909 Rifle.

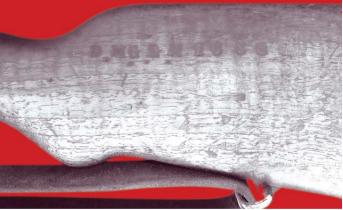
Length: 48.20"; Weight: 8.4 lbs.; Barrel: 29.13"; Caliber: 6.5 x 58Pmm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: The crest of King Carlos I on the receiver ring, with the model designation in Portuguese on the side rail, and the manufacturer's markings also on the side rail.



Note that the markings on the receiver ring of the Portuguese Model 937/M39 are the same as on the Model 1904 Mauser-Vergueiro Rifle.

**PORTUGUESE MODEL 904/M39 RIFLE:** In order to conform with the .792 x 57mm Portuguese Model 937-A Short Rifle purchased in the 1930s, the Portuguese Model 1904 Mauser-Vergueiro Rifle was converted to more closely conform with the configuration of the Model 937-A Short Rifle. This consisted of reboring and rechambering the rifle to 7.92 x 57mm, shortening the barrel and the forend, and modifying the front sight by the addition of sight protectors. Markings were not changed.





Both sides of the stock of this Mauser-Vergueiro are marked "D.M.G.L.M. 1668." This is an inventory mark that translates as "Directorao Generale Militare Lorenco Marquis – weapon 1668." Lorenco Marquis was the capitol of Portuese East Africa and is now Maputo Mozambique. (John Sheehan collection)



Full-length view of the Portuguese Model 937/M39 Rifle.



Full-length view of the Standard Modell Short Rifle as used by Portugal.



Full-length view of the Standard Modell Carbine as used by Portugal.

Length: 42.80"; Weight: 8.1 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: All markings are the same as on the Model 1904 Mauser-Vergueiro Rifle.

**PORTUGUESE STANDARD MODELL MODEL 1933 MAUSER SHORT RIFLE:** In order to alleviate the pressing need for more modern weapons, the Portuguese purchased an undetermined number of Standard Modell Short Rifles from Germany, especially at the time of the Spanish Civil War. These weapons are the standard export models, and do not differ in any way from other Standard Modell Short Rifles. All specific data on this rifle will be found in the section on Germany.

**PORTUGUESE STANDARD MODELL MODEL 1933 MAUSER CARBINE:** Portugal also ordered a number of the 1933 Standard Modell Carbines at the same time as the Standard Modell Short Rifles, but the quantity is unknown. This is the standard export model and does not differ in any manner from other Standard Modell Carbines. All information relative to this carbine will be found in the section on Germany.

**PORTUGUESE MODEL 937-A SHORT RIFLE:** In 1937, Portugal adopted the Model 937-A Short Rifle as the replacement for the Model 1904 Mauser-Vergueiro Rifle. This rifle is very similar to the German K98k Carbine, with only minor differences. Chief among these is a swivel on the bottom of the lower barrel band, with a sling attachment



The receiver ring of the Portuguese Model 937-A Short Rifle, showing the Portuguese national crest over the date of manufacture.



Full-length view of the Portuguese Model 937-A Short Rifle.

Manufacturer's markings stamped on the stock of the Portuguese Model 41 Short

Rifle.



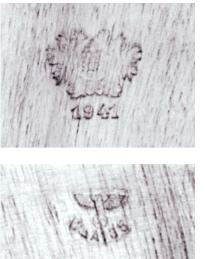
The left side of the buttstock of the Portuguese Model 937-A Short Rifle, showing the quick-release sling attachment and deeply cut out section of stock.



Manufacturer's markings stamped on the side rail of the Portuguese Model 41 Short Rifle.



Receiver ring with Portuguese crest over the date on the Portuguese Model 41 Short Rifle.



German Waffenamt stamp on the right side of the buttstock of the Portuguese Model 41 Short Rifle.

both on the bottom of the stock and on the left side of the buttstock. The front sight is also protected by sight ears.

Length: 41.43"; Weight: 8.73 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Portuguese national crest on the receiver ring, manufacturer's markings on the left side rail.

**PORTUGUESE MODEL 1941 SHORT RIFLE:** As production continued on the Portuguese Model 937-A, the weapon was subjected to minor changes that brought it more into conformity with the standard K98k Carbine. While referred to as the Model 41 Short Rifle, it is not clear whether this is official nomenclature. Changes in design consist of a cupped buttplate, a side bar on the lower barrel band, and a slotted stock for the typical German-style sling. The front sight retains the sight protectors that help identify this model. Stocks held in Germany in 1944 were released to the Wehrmacht.

# ROMANIA

Romania, for centuries one of the poorest countries in Europe, has had a turbulent and chaotic political and social history. Switching sides three times in World War I, Romania ended the war on the side of the Allies and, by the terms of the peace treaty, doubled the size of the country at the expense of its neighbors. The years between the wars were a turbulent period for Romania; in 1940, Russia took back Bessarabia and Northern Bukovina under the terms of the Hitler-Stalin pact, while Hitler forced Romania to return half of Transylvania to Hungary, her ancient enemy.

During this time, Romania was ruled by King Carol, who twice entered exile, leaving his son, Prince Michael, on the throne. At the start of the second world war, the pro-Hitler dictator Marshal Ion



Full-length view of the Portuguese Model 41 Short Rifle.



Full-length view of the Czech VZ 24 Short Rifle as used by Romania.

Antonescu assumed power with the backing of the Romanian "Iron Guard." When the Guard attempted a coup, it was crushed by the military. Romania, though pro-Allied, was forced into the position of helping Germany invade Russia, mainly in an attempt to regain their lost provinces. Romania, under then King Michael, had the third largest Axis army, and when the country switched sides in 1944, they formed the fourth largest Allied army.

During the first world war, and into the postwar years, the arms situation of the Romanian army was a supply officer's nightmare.



The receiver markings on a Romanian Army VZ 24 with a "1940" date crest, showing the unique style of Romanian serial numbering where two-letter prefixes are used, and the second letter is always an "R." The mark above the serial number consisted of the letters "C" and "M" with rounded legs inside a circle. The "CM" is believed to stand for "Copsa Mica," the Romanian arms production facility in the city of Cugir. Owned and established by Ceskoslovenska Zbrojovka Brno in the mid-1930s, Copsa Mica-Cugir manufactured ZB-30 light machine guns during WWII, but is not believed to have made the VZ 24. Variations of the CM mark appear on the bolt knobs and the right side of Romanian VZ 24 receivers as well. (John Wall collection)

Originally equipped with 6.5mm Model 1892 and 1893 Romanian Mannlicher Rifles and Carbines, by the end of World War I, various military formations were armed with a huge variety of weapons, including Steyr 8mm Model 1895 Rifles and Carbines, French 8mm Model 1907 Mannlicher Berthier Rifles and Carbines, Russian Model 1891 Rifles, and at a later date, FN Model 1924 Short Rifles.

In the late 1920s and the early 1930s, Romania decided in favor of standardizing on the Czech Model VZ 24 Short Rifle in caliber  $7.92 \times 57$ mm; unfortunately, the services were not fully equipped with the new weapons at the start of the second world war, necessitating the continued use of the other weapons held in reserve, mainly the Romanian Model 1892 and 1893 Rifles.

**ROMANIAN CZECH MODEL VZ 24 SHORT RIFLE:** This short rifle as used by Romania is the standard Czech VZ 24 Short Rifle of Czechoslovakia, differing only in the crests of King Carol and King Michael on the receiver ring. All relative information on this weapon can be found in the section on Czechoslovakia.



The receiver ring of the Romanian Model VZ 24 Short Rifle, showing the crest of King Carol.



Full-length view of a later Romanian Model VZ 24 Short Rifle, as used during the reign of King Michael.



Manufacturer's markings stamped on the left side rail of the Romanian Model VZ 24 Short Rifle.



Two stock cartouches found on a VZ 24 Rifle. The mark on the left is the "CM"-in-a-circle stamp used before and during WW II by the Romanian arms facility at Copsa Mica in the city of Cugir in Transylvania. The mark on the right is the national icon of the Slovak Republic, and is commonly found on the receivers and bolt handle knobs of the rare Slovak VZ 24. (Lonnie Maurer collection)



Romanian sentries armed with Romanian VZ 24 Short Rifles standing guard near the Russian border, C. 1940. (Photoworld)



Of the total Romanian production of up to 750,000 VZ 24s, the great majority were made with the crest of King Carol II. However, for reasons not yet understood, a few thousand were made with the date crests of 1939 and 1940, shown above. This rifle has a typical Romanian serial number, RR656. All Romanian-marked VZ 24s have a double letter prefixed serial number, the second letter of which is always an "R." Each known serial number block, for example "RR," consisted of 25,000 VZ 24s. Regardless of its crest, Romanian VZ 24 stocks were numbered across the butt just above and horizontal with the buttplate.



The receiver ring of the Romanian Model VZ 24 Short Rifle, showing the crest of King Michael.

All Romanian VZ 24s have a unique Romanian marking, likely used to indicate inspection approvals and successful proof testing. The receiver mark, left, consists of the letters "M" with legs bowed outward, inside a letter "C." The "CM" is then surrounded by a circle. "CM" is believed to stand for "Copsa Mica," the location of the CZ-owned arms plant in the city of Cugir, Romania. A second rendition of the "CM" mark, an "M" inside a squared off "C, appears on bolt knobs and other small parts.







Full-length view of the FN Model 30 Short Rifle as used by Saudi Arabia. (Cliff Baumann collection)

## SAUDI ARABIA

In ancient times, various cultures flourished independently in certain areas of the Arabian Peninsula, especially along the coastal sections of the western rim. There was little or no cohesion amongst the peoples until the rise of Mohammed, the holy prophet of Islam. Mohammed fled from Mecca to Medina, a nearby city, in 622 A.D., which dates the start of the Islamic era. In 1517, Mecca came under the power of the Ottoman Empire, but the Turks never fully controlled Arabia.

In 1902, Ibn Saud and his family controlled Riyadh, and led a Wahabi revolt against Turkish rule in 1912 and 1913; unsuccessful at the time, the Saudis were aided by the British during the first world war. In 1915, Britain established a protectorate over the region, and consolidated her position after the war ended. Ibn Saud extended his control over the country, with his kingdom officially recognized by Great Britain in 1927. In 1932, the country was renamed Saudi Arabia.

The discovery of oil in the peninsula transformed the country from an impoverished nation to one of great mineral wealth. While paying huge subsidies to other Arab nations, the Saudis have not contributed greatly to the past anti-Israel campaigns, other than token forces to show solidarity with their Arab brothers.

In the 1930s, following the renaming of the country, an effort was made to provide a paramilitary force capable of acting in a quasipolice manner to control the population. It was at this time that purchases of FN Model 30 Short Rifles were made by the Saudi authorities. How many were received, or how they were marked, if at all, can only be assumed.

**SAUDI ARABIAN FN MODEL 30 SHORT RIFLE:** This is the standard FN Model 30 export short rifle as used by many other nations. The rifle is fitted with a pistol grip stock with grasping grooves, with the upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel at the bottom, with another at the bottom of the buttstock. The nose cap incorporates a German-style "H" bayonet lug, though whether or not a bayonet was used by the Saudi forces is open to question. The bolt handle is straight.

Length: 43.10"; Weight: 8.9 lbs.; Barrel: 23.19"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Believed to have the FN logo on the receiver ring, with the manufacturer's markings on the side rail.

#### **SERBIA / YUGOSLAVIA**

The nucleus of the lands that composed the Roman Empire province of Illyricum in the first century A.D. was Serbia. Basically settled by South Slav migrants, the Serbian empire hit its zenith during the reign of Stephen Dushan (1331-1335) when Albania, Macedonia, Thessaly, Epirus, and Bulgaria came under Serbian control. Within thirty years of

the death of Dushan, the Ottoman Empire had absorbed the territory of Serbia into its vast holdings, and Serbia was not to be independent again until 1878.

Serbia was involved in the Balkan Wars of 1912 and 1913, which led directly to the first world war. Serbia fought a brilliant campaign against the Austrians and the Germans, as well as repulsing the Bulgarians in the southeast. Eventually overwhelmed by superior forces, and unable to be supported by the Allies due to distance and logistics, the Serbian forces undertook a valiant fighting retreat through the mountains of Albania, from where they were transported by Allied naval vessels to the Greek Dodecanese islands. Here, the Serbs were eventually reequipped by the Allies and continued to fight in the Salonika campaign. Serbs were even to be found in the Allied Expedition in North Russia after the armistice was signed.

During 1918 and 1919, the Kingdom of Yugoslavia was cobbled together from the former Austrian lands of Croatia and Slovenia, Bosnia and Herzegovina, Macedonia, Montenegro, and Kossovo; together they formed the multicultural and multiethnic nation known as the Kingdom of the Serbs, Croats and Slovenes. Coexisting in a state of mutual hostility, a dictatorship was proclaimed by King Alexander in 1929, which continued after his assassination in France in 1934. With the German invasion of Yugoslavia in 1941, the Croats welcomed the German troops with open arms as their liberators from the hated Serbs. During the war, the Croats and Slovenes formed their own military forces in divisional strength that fought in conjunction



Serbian troops are seen firing from a temporary trench, C. 1914. (Underwood and Underwood)



Serbia's most youthful soldier! Only 12 years old, armed with a Model 1908 Carbine, and serving in the fighting around Belgrad in the first months of World War I. (Underwood and Underwood)

with the Germans, mainly in Yugoslavia. Unfortunately, this bloody legacy has carried over to the present day, thanks in large part to long memories.

When the Serbs gained their independence from the Turks they immediately made plans to equip their fledgling army with the Model G 71 Rifle, modified to their own specifications. Approximately 120,000 were purchased. This was the Serbian Model 78/80 Rifle, also known as the Mauser-Koka or Mauser Milanovic, the name of the Serbian officer who was responsible for the modifications. This rifle, converted to handle the 7 x 57mm round, was even utilized in the first world war, and it is conceivable that it was also used by guerrillas during World War II. Four thousand weapons were produced in carbine configuration as the Model 1880. The carbine was equipped with a tubular magazine and was full stocked to the muzzle.

In 1899, Serbia contracted with DWM and Steyr for the delivery of Chilean-style Model 1895 Rifles; these rifles were delivered between 1899 and 1906, with modifications made during this time. The model designations were the M1899, M1899/07, and the Model 1899/08. Differences between the models were minor—possibly improved actions or simply designation numbers. The M1899/08 was also made in small numbers as a carbine, really a shortened version of the Steyr made rifle, for cavalry and artillery use.

A further updated rifle, the Model 1910, a typical German exportstyle rifle patterned after the Costa Rican Model 1910, was ordered in time for the first Balkan War. Every weapon in the Serbian arsenal was in use during the Balkan Wars and the World War I, with many serving well into World War II.

In the 1920s, the Yugoslavs acquired a number of M24B Rifles (ex-Mexican rifles) from Steyr, and the arsenal at Kragujevac converted a large number of captured Turkish Model 1890 Rifles into a short rifle configuration in caliber 7.92 x 57mm. The Serbs also purchased approximately fifty thousand FN Model 22 Short Rifles,



This Serbian Model 1878/80 Infantry Rifle is in mint, unfired condition. The Model 78/80 bayonet that accompanies the rifle is the original-issue bayonet and is numbered to the rifle. The phenomenal condition of this rifle is rarely encountered today in any of the blackpowder-era Mausers. (John Sheehan collection)

forty thousand FN Model 24 Short Rifles, as well as FN Model 30 Short Rifles and Carbines, and approximately forty thousand Czech VZ 24 Short Rifles. The FN Model VZ 24 Short Rifle and Carbine were also produced at the arsenal of Kragujevac on machinery purchased from FN.

In 1948, Yugoslavian arsenals produced a variation of the German K98k and also converted many of the FN Model 24 Short Rifles to M24/47 configuration. The many Czech VZ 24 Short Rifles on hand were converted to VZ 24/52 configuration.

**SERBIAN MODEL 78/80 RIFLE:** The Serbian Model 78/80 Rifle is a modified German G 71 Rifle. Typical of the era, the rifle is long and clumsy. The rifle is fitted with a straight-wristed stock, with two screwclamped barrel bands and a nose cap incorporating a bayonet lug on the right side. There is a swivel on the lower barrel band and another on the bottom of the buttstock. The easiest means of identification of the Serbian Model 78/80 Rifle is the long receiver tang that projects above the stock, providing support to the bolt when it is pulled to the rear. There is a groove in the tang that guides the cocking piece, preventing it from rotating. The extractor also serves as an ejector in this model, while there is also a spring surrounding the safety lock spindle. Another interesting feature of this rifle is the rifling, which is wider at the breech than at the muzzle.



The siderail markings of this rifle are set against the backdrop of the original color case-hardening of the receiver. The markings are in Cyrillic and translated read as, "Mauser Oberndorf a/n Wurttemburg Model 1880." (John Sheehan collection)



Model 78/80 manufactured pattern rifle for Serbian contract 10.15mm. Note third barrel band. (Private collection of Robert I. Landies)



Mauser Model 78/80 SN 6 10.15mm manufactured pattern rifle for the Serbian contract. Note all nomenclature in Roman, not Cyrillic. (Private collection of Robert I. Landies)



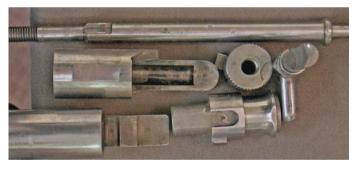
Model 78/80 Serbian contract pattern rifle bolt assembly, SN 6. (Private collection of Robert I. Landies)



Barrel bands from the Serbian contract Model 78/80 SN 6 rifle. (Private collection of Robert I. Landies)



Mauser 78/80 small parts all marked SN 6. (Private collection of Robert I. Landies)



*Further view of Model 78/80 showing additional small parts all marked with SN 6. (Private collection of Robert I. Landies)* 



Model 78/80 Serbian contract pattern manufactured rifle showing left side view of company legends on the receiver flats. (Private collection of Robert I. Landies)

Receiver legends on the 78/80 Serbian contract pattern manufactured rifle. (Private collection of Robert I. Landies)









TOP: Under barrel and receiver view of the Model 78/80 Serbian contract pattern manufactured rifle showing proof and acceptance markings, as well as SN 6. (Private collection of Robert I. Landies)

MIDDLE: "PH36" added to barrel markings of Model 78/80 Serbian contract pattern manufactured rifle at some time after original manufacture. The meaning is unknown. (Private collection of Robert I. Landies)

LEFT: Model 78/80 Serbian contract pattern manufactured rifle showing rear sight ladder in the vertical position. Note SN 6 on rear of sight frame. (Private collection of Robert I. Landies)



Model 78/80 Serbian contract pattern SN 6 manufactured rifle trigger and trigger bar. (Private collection of Robert I. Landies)



View of butt plate on SN 6 Model 78/80 Serbian contract pattern manufactured rifle. (Private collection of Robert I. Landies)



Stripped stock of the Model 78/80 Serbian contract pattern manufactured rifle. Following the common practice of Mauser, the stock is marked with both a penciled and a stamped number. (Private collection of Robert I. Landies)



Inventory numbers were applied by French authorities after the Model 78/80 Serbian contract pattern manufactured rifle was confiscated at the end of WWII. (Private collection of Robert I. Landies)



Right side view of the action of the Serbian Model 1878/80 Infantry Rifle, showing to good effect the long receiver tang projecting above the stock providing support to the bolt when it is operated. (John Sheehan collection)

**Length:** 50.80"; **Weight:** 9.90 lbs.; **Barrel:** 30.70"; **Caliber:** 10.15 x 62.8mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** Single-shot; **Sights:** V-notch rear sight adjustable to 2025 meters. **Remarks:** Manufacturer's markings either in Cyrillic or German on the left side rail.

**SERBIAN MODEL 1884 MAUSER "KOKA" CARBINE:** This 10.15mm black powder carbine is one of only 4,000 produced in 1884 for the Serbian cavalry by Mauser at the Oberndorf plant. It was based on the 71/84 action and has a five-round tubular magazine under the forestock, and is fitted with the typical 71/84 cartridge lifting mechanism.

It could be used with a standard carbine sling, or use a cavalry saddle ring clip attachment. For use with the standard sling, the top swivel is mounted to the left side of the bottom barrel band. Underneath and behind the wrist of the stock is a rectangular fitting which functions as an attachment point for a side-mounted standard sling, or as a sling hook attachment for an old-style cavalry saddle ring crossbelt. The carbine has front sight protective wings, and there is no provision for a bayonet.



The Serbian Model 78/80 and Model 84 were the only Mausers designed with a bolt guide extension extending from the rear of the action into the stock wrist. (John Sheehan collection)



Serbian troops advancing during the first Balkan War. (Foto-Tanjug)



Right side view of the Model 1884 Serbian Mauser "Koka" Carbine. (John Sheehan collection)



Left side view of the Serbian Mauser "Koka" Carbine with the bolt withdrawn; this shows the support to the bolt of the receiver extension. (John Sheehan collection)



Three views of the Mauser M1884 Cavalry Carbine and the Artillery Short Rifle. (Courtesy of Branko Bogdanovic)

Four thousand Short Rifles were also produced for the Serbian artillery forces; slightly longer, it has a six-round tubular magazine, and accepts the same bayonet as the Model 1878/80 Mauser-Milanovich Rifle. Due to the constant attrition to weapons used by the Serbian military, these carbines and Short Rifles were used extensively in the first and second Balkan wars, as well as throughout World War I.

Length: 37.75"; Weight: 8.00 lbs.; Barrel: 18.375"; Caliber: 10/15x63mmR; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Magazine: Five round tubular feed, with each cartridge loaded individually; Sling configuration: Left side swivel and rectangular bottom sling bar at small of stock; Remarks: Original finish was in the white, with the left side rail marked in Cyrillic "MauserOberndorf" and "Model 1884." "Crown H" cartouche on right side of the butt, while all parts are numbered as per the practice of the period.

**SERBIAN MODEL 1899 RIFLE:** The Serbian Model 1899 Rifle made by DWM is very similar to the Chilean Model 1895 Rifle; however the entire Serbian M1899 series have the thumb cut in the left side rail to facilitate loading. All of the Model 1899 series, as well as the



The Serbian Model 1884 Artillery Carbine shown is one of only 4,000 made by Waffenfabrik Mauser in 1884-85. This repeating carbine was fed from a six-round tubular magazine of the same style used in Mauser's Model 71/84 rifle for German infantry. The artillery carbine has a 21inch barrel, almost 3 inches longer than the M1884 cavalry carbine, and is chambered for the Serbian 10.15mm blackpowder service cartridge. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



The extra long steel plate in front of the M1884 Serbian Artillery Carbine's trigger guard. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



The right side of the action of the Serbia Model 1884 Artillery Carbine, which along with the Serbian M1884 cavalry carbine, is the only Oberndorf-made carbine version of the Model 1871/84 action. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



The right side of the receiver ring and rear sight of the Serbian Model 1884 Artillery Carbine. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



Another view of the right side of the Serbian Model 1884 Artillery Carbine, showing the barrel inspection marks next to the rear sight leaf. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



The left side of the receiver of the Serbian Model 1884 Artillery Carbine. Note the Cyrillic text which translates as Waffenfabrik Mauser (Mauser Arms Factory), Oberdorf on the Neckar (River), Wurtemberg. (From the former Pattern Room Collection now in the Royal Armouries Museum, Leeds, England)



M1884 Serbian carbines converted in the late 1930s to 11mm Gras were marked "11mm/IIP" on the right side of the buttstock. According to Bagdonovic, the letters are a Cvrillic abbreviation for "converted". (John Wall collection)



In the mid-1880's, Serbia purchased 4,000 Mauser 10.15mm M1884 tubular magazine Cavalry Carbines. According to the Serbian military historian Branko Bagdonovic, by 1914, the Serb Army had only 126 of these cavalry carbines left in its inventory. Starting in 1937, all remaining M1884 carbines were refurbished and converted to the old pre-1890 French service cartridge, 11mm Gras, a cartridge in good supply in Yugoslav Army depots. Shown above is one such converted carbine. Note that it is built up from many different serial numbered parts, and that the bolt and buttstock have been renumbered with "2907" to match the original number of the carbine's barrel and receiver. The right side of the stock has been restamped in large, deep and obvious letters to indicate the caliber of the new cartridge. (John Wall collection)

During the 1937 conversion to 11mm Gras, the *left side of the* buttstock of the M1884 Serb Cavalry Carbine converted was renumbered "2907" to match the number of the barrel and receiver. Note that the mechanism is the same as the German Armv's Mauser M.71/84 Infantry Rifle. Since the German Army did not adopt a 71/84 type carbine, the tubefed Serbian



M1884 cavalry and artillery carbines are the only Mauser tube fed carbines adopted by a national army. (John Wall collection)

The left side of the M1884 Serb Cavalry Carbine converted to 11mm Gras retains the original Slavic Cyrillic text which translates as Mauser Arms factory, Oberndorf on the Neckar (river) Wurttemberg (province). (John Wall collection)



The action of the M1884 Serbian Cavalry Carbine converted by the Yugoslavs in 1937 to 11mm Gras utilizes a bolt from another '84 carbine which has been renumbered by being lined out with chisel strikes. The new number, 2907, has been stamped to its left. (John Wall collection)





Right side view of the Serbian Mauser Djurich Rifle, M1880/07, 10.15mm blackpowder rifle converted to 7x57mm. (Jan Gardiner collection)



Overhead view of the action and the markings of the Serbian Mauser Djurich M1880/07 Rifle in 10.15 black powder converted to 7x57mm. (Jan Gardiner collection)



Full-length view of the Serbian Model 1899 Rifle. (Springfield Armory Museum)



Serbian crest on the receiver ring of the Serbian Model 1899 Rifle. (Springfield Armory Museum)

Model 1908 Carbine, have the enclosed bolt head feature of the Costa Rican Model 1910 Rifle, with the exception of the Model 1899 Rifle. The rifle is fitted with a straight-wristed stock, with the upper hand guard running from in front of the receiver ring to just beyond the lower barrel band. The nose cap is simple, with a bayonet lug on the bottom to accommodate the Model 1899 bayonet. There is a swivel on the bottom of the lower barrel band, and another on the bottom of the stock.

Length: 48.50"; Weight: 8.9 lbs.; Barrel: 29.13"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: V-notch rear sight adjustable to 2000 meters. Remarks: Serbian crest on the receiver ring, with the manufacturer's markings stamped in Cyrillic on the left side rail.

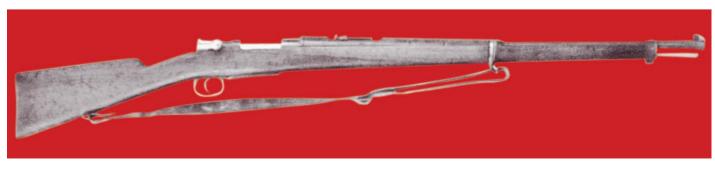
**SERBIAN MODEL 1899C SHORT RIFLE:** The Serbian Model 1899C has been configured at some time by the Yugoslavians to more closely conform to the Model 24 Short Rifle pattern as produced at the arsenal of Kragujevac. The resultant short rifle was rechambered and rebored for the 7.92 x 57mm cartridge. The rifle is fitted with a pistol



Manufacturer's markings in Cyrillic on the left side rail of the Serbian Model 1899 Rifle. (Springfield Armory Museum)



*Crest, showing model designation, on the receiver ring of the Serbian Model 99/07 Rifle. (Noel P. Schott collection)* 



Full-length view of the Serbian Model 99/07 Rifle. (Noel P. Schott collection)



The receiver crest of one of the 30,000 Model 1899/07 Serbian Infantry Rifles made in 7mm Mauser by the Austrian Arms Company (OEWG) of Steyr, Austria. (John Wall collection)



The address of the OEWG, Oesterreichisch Waffenfabriken Gesellschaft, (Austrian Arms Company) of Steyr, Austria, appears in Cyrillic text on the side rail of the Serbian Model 99/07. (John Wall collection)



The top of the rear sight of the Serbian Model 99/07 Long Rifle has a unique sight slide which features two large screws securing the sight's range slide to the sight ladder. (John Wall collection)



The Serbian Model 1899 receiver crest, one of 90,000 7mm Long Rifles made by DWM using the Mauser patented Model 1895 action, a variation of the Model 1893 updated to feature a round-bottom bolt face and a wide receiver tang which supports a third locking surface behind the bolt handle. The carbine version of this rifle was not made until 1908 when Steyr produced 10,000 M.1908 cavalry carbines. (U.S. Army Ordnance Museum Collection, Aberdeen Proving Ground, Md.)



The underside of the Serbian Model 99/07 Long Rifle sight slider has a unique arrangement wherein the slider is secured by two screws. (John Wall collection)

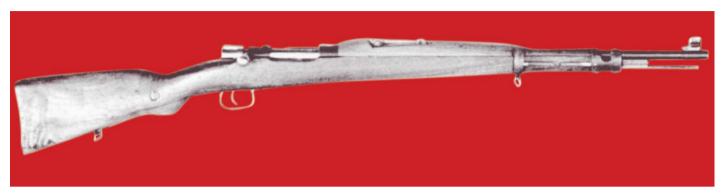
grip stock without grasping grooves, and the upper hand guard runs from in front of the receiver ring to the upper band. The lower barrel band has a swivel on the side as well as the bottom. There is another swivel at the bottom of the buttstock and a pivoted swivel at the swell of the wrist. The bolt handle is straight and the action is similar to the Spanish Model 1893.



Side rail with manufacturer's markings in Cyrillic of the Serbian Model 99/07 Rifle. (Noel P. Schott collection)

**Length:** 42.63"; **Weight:** 8.4 lbs.; **Barrel:** 23.25"; **Caliber:** 7.92 x 57mm, originally 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** Serbian crest over the model designation on the receiver ring.

**SERBIAN MODEL 1908 CARBINE:** While purchased in small quantities, the Serbian Model 1908 Carbine is really a shortened version of the Steyr-made rifle. The carbine is fitted with a full, muzzle-length, pistol grip stock with grasping grooves, with the simplified nose cap secured with a side screw, providing front sight protectors. The upper hand guard extends from the front of the receiver ring to just beyond the



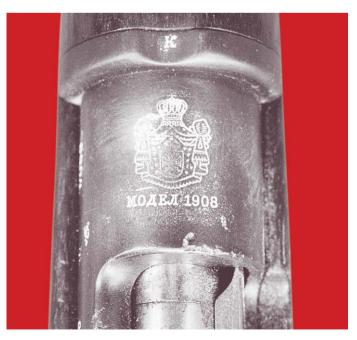
Full-length view of the Serbian Model 1899C Short Rifle.



Full-length view of the Serbian Model 1908 Carbine. (Noel P. Schott collection)



The receiver ring of the Serbian Model 1899C Short Rifle, showing the Serbian crest over the model designation.



Receiver ring of the Serbian Model 1908 Carbine, showing the Serbian crest over the model designation. (Noel P. Schott collection)



Left side rail of the Serbian Model 1908 Carbine, showing the stamped manufacturer's markings in Cyrillic, proof marks, and rifle serial number. (Noel P. Schott collection)



Manufacturer's markings stamped in Cyrillic on the left side rail of the Serbian Model 1910 Rifle. (Springfield Armory collection)



The coming together of the Serbian and the Montenegrin armies in southern Serbia during the first Balkan war, 1912. (Foto-Tanjug)

lower barrel band, which is secured with a lateral screw. The action is similar to the Chilean Model 1895 action, with the bolt handle bent down. The carbine will not accept a bayonet. There is a sling bar on the left side of the lower barrel band, with a pivoted swivel mounted on the left side of the buttstock.

Length: 37.50"; Weight: 6.80 lbs.; Barrel: 17.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Adjustable leaf rear sight graduated to 1500 meters. Remarks: Serbian crest over the model designation on the receiver ring, with the manufacturer's markings stamped in Cyrillic on the left side rail.

**SERBIAN MODEL 1910 RIFLE:** The Serbian Model 1910 Rifle is the standard export German Model 1910. The action is the same as the G 98 action but has the enclosed cartridge head feature of the Costa Rican Model 1910 Rifle. The rifle is fitted with a pistol grip stock without grasping grooves, a narrow lower band with swivel attached on the bottom, and another swivel on the bottom of the buttstock. The upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The nose cap incorporates a simple bayonet lug on the bottom.



Full-length view of the Serbian Model 1910 Rifle (marked in Cyrillic). (Springfield Armory collection)



Full-length view of the German export Model 1910 Rifle.



The receiver bridge and bolt handle of the Mauser Oberndorf-made Serbian Model 1910 Short Rifle. German commercial "B" and "U" proof marks, as well as the serial number, K417, appear to be period markings. This rifle was previously undocumented, so we do not know for sure if it is a purpose-made weapon or a factory conversion of an original M1910 Long Rifle. (David Jonas collection)



The left side of the receiver ring and side rail of the Serbian Model 1910 Short Rifle. Note the Mauser Oberndorf address in Cyrillic on the side rail and "B" and "U" proof marks. (David Jonas collection)



The underside of the barrel at the breech of the Serbian Model 1910 Short Rifle reveals the German commercial "B" and "U" definitive proof marks for shoulder-fired weapons. Many instances are known where a purchasing country acquired Mauser rifles in Germany and allowed the factory to proof test their arms using the German commercial proof standards established in the German proof laws of 1891 and 1911. (David Jonas collection)



The Serbian royal coat of arms appears as the receiver crest of the 7mm Serbian Model 1910 Short Rifle. (David Jonas collection)



This Serbian-crested Model 1910 7mm Short Rifle was recently discovered. Previously, no short rifle or carbine variations of Model 1910 were known, and this rifle may be unique. A record of this variety being an official Serbian pattern has not yet been discovered. Although the history of this particular rifle is uncertain, the rifle features carbine sights, a front sight mounted on a barrel band, a turned down bolt handle, and German commercial proof marks on the top of the handle, receiver ring and the underside of the barrel. The Cyrillic text on the side rail indicates that the rifle was made at Mauser Oberndorf. No other information on this rifle is known. The work appears to be of factory quality. (David Jonas collection)



Receiver ring of the Serbian Model 1910 Rifle, showing the Serbian crest over the model designation. (Springfield Armory collection)

Length: 48.80"; Weight: 8.8 lbs.; Barrel: 29.13"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: The rifle may be marked in one of two ways—on the receiver ring with the Serbian crest over the model designation, with the manufacturer's markings



Left side rail of the Yugoslavian Model 90(T) Short Rifle, showing the original manufacturer's markings in Turkish. (Noel P. Schott collection)



Left side rail of the German export version of the Serbian Model 1910 Rifle, showing the model designation.



Receiver ring of the German export version of the Serbian Model 1910 Rifle, with manufacturer's markings stamped in German.

on the side rail in Cyrillic; or export marked in German with "WAFFENFABRIK/MAUSER A-G/OBERNDORF a/n" on the receiver ring, with the model designation, "MAUSER MODEL 1910" on the left side rail.

**YUGOSLAVIAN MODEL 90(T) AND MODEL 03(T) SHORT RIFLES:** Following the end of World War I, the Yugoslavs received many Turkish weapons as war reparations; these weapons were rebarreled and cut down to short rifle configuration, while all other earlier characteristics remained. The Model 90 (T) is as follows:



Full-length view of the Yugoslavian Model 90(T) Short Rifle. (Noel P. Schott collection)



Receiver ring of the Yugoslavian Model 90(T) Short Rifle, showing the original Turkish Toghra marking. (Noel P. Schott collection)

Length: 43.13"; Weight: 8.6 lbs.; Barrel: 23.25"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical column, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: All original markings are untouched.

The Yugoslavian Model 03(T) Short Rifle specifications are as follows:

Length: 42.75"; Weight: 9.0 lbs.; Barrel: 23.0"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action;



Left side view of the Yugoslavian Model 03(T) Short Rifle, showing the new serial number on the side of the receiver ring. (Noel P. Schott collection)



Right side of the receiver ring of the Yugoslavian Model 90(T) Short Rifle, showing the original serial number. (Noel P. Schott collection)

Feed: 5-round, vertical column, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: All original markings are untouched.

**YUGOSLAVIAN MODEL 24 SHORT RIFLE:** The Yugoslavs adopted both the FN Model 24 Short Rifle and Carbine, purchasing many from FN and producing many more at the arms factory of Kragujevac. The Yugoslav Model 24 features the enclosed cartridge head of the Costa Rican Model 1910 Rifle. The short rifle is fitted with a pistol grip stock, with the upper hand guard running from the front of the



Receiver ring of the Serbian Model 1910, showing the Serbian crest over the model designation. (Springfield Armory collection)



Full-length view of the Yugoslavian Model 03(T) Short Rifle. (Noel P. Schott collection)



Full-length view of the Yugoslavian Model 24 Short Rifle.

receiver ring to the upper barrel band. The upper and lower barrel bands are situated in close proximity to one another, with each secured by a separate spring. The nose cap incorporates the German-style "H" bayonet lug; the lower barrel band is fitted with a swivel at the bottom and a sling bar on the left side, while another pivoted swivel is found on the left side of the buttstock. The bolt handle is straight.

Length: 42.90"; Weight: 8.4 lbs.; Barrel: 23.25"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Yugoslav crest over the model designation, with manufacturer's markings on the left receiver and side wall.



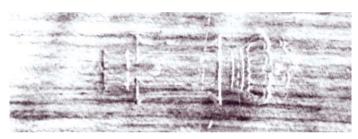
Manufacturer's markings stamped into the left side of the receiver and the left side rail of the Yugoslavian Model 24 Short Rifle.



Yugoslavian partisans serving a captured anti-tank gun during action in Yugoslavia, C. 1944. Note the Yugoslav Model 24 Short Rifles carried by the men.



Close-up view of the variant butt\stock cartouche on the Yugoslavian Model 24 Short Rifle. (Robert Jensen collection)



Dual monarchy buttstock markings on the Yugoslavian Model 24 Short Rifle.



Yugoslavian crest over the model designation on the receiver ring of the Yugoslavian Model 24 Short Rifle.



Kragujevic Armory in Yugoslavia produced their M1924 Service Rifle in a number of variations. The type shown above is the cavalry carbine with a 60cm 23.5-inch barrel. This rifle features a turned down bolt handle and four sling swivels, a pair mounted on both the side and bottom of the stock in the fashion of the Austro-Hungarian M.95 Repetier-Karabinerstutzen, and the Czechoslovak Vz 24. The bolt has an unusual shape since its upper end fit not on the stock, but into it, in a deeply cut groove. Only the lower end protrudes for grasping, which is enabled by a flattened surface on the underside which is deeply knurled. Note that the same receiver and bolt configuration were used on the 8,000 Kragujevic-made M1924CK assault carbines with 18-inch barrels. (The "C" stands for the Slavic work "Chetnik", and the "K" stands for Slav word which translates as "carbine".) (John Wall collection)







Just before the start of WW II, the Yugoslav Government decided to convert its stock of former WW I era Imperial German Gewehr 98 service rifles to its M1924 Short Rifle configuration. Receivers of these conversions were marked "Model 1924b" as shown above. (Ed Parada collection)





Since 1990, a small number of post-WW II Yugoslav Mauser rifles have been observed which were rebuilt on former Czechoslovak Army VZ 23 stock sets. Shown above is one such rifle. The metal parts however are mostly former German Kar98k components. Indeed, when held in direct sunlight, the old markings on the receiver, "byf 44" can be seen. Note the use of a German barrel with its K98k sight and hood. The few rifles of this type observed have all had low serial numbers, prefixed with the letter "W". The significance of this, if any, is unknown. The caliber remains as 7.92mm. (John Wall collection)



The breech area of the M1924 Rifle stock has been notched so that the stock could be issued with the uniquely configured turned down bolt commonly used on Kragujevic M.1924 cavalry rifles and the M.1924CK Assault Carbine. The left side of the receiver has the standard Yugoslav post-1931 mark: "VOJ. TEH ZAVOD KRAGUJEVAC", which Bogdanovic translates as the "Military Technical Institute, Kragujevac". (John Wall collection)



The serial numbers on Yugoslav M1924 Short Rifles made at Kragujevic Armory were always applied to the right side of the receiver ring just above the wood line, such as on number: "1756-II" shown above. Interestingly, Branko Bogdanovic's reported Kragujevac serial number ranges for the M1924 do not include any with letter suffixes. The meaning of the "-II" is not presently known. (John Wall collection)



The buttstocks of Yugoslav M1924 Rifles made at Kragujevac Armory were numbered on the left side of the stock flat, about two inches above the buttplate. (John Wall collection)



The bolt of the M1924 Yugoslav Short Rifle, showing the unusual serial number "1756-II", and the smokeless powder proofmark, crown over "T" on the bolt knob. (John Wall collection)



The lower edge of the stocks of Yugoslav M1924's was the site of several arms inspectors' marks. Note the mark just below the trigger guard, without a crown, and the crown over "M" just below it. Note that the exact same two inspector's marks also have been noted on the Czechoslovak VZ 24 rifles purchased by Yugoslavia in the late 1920's. Similar inspector's marks and letters can be found on M1924b and M1924CK rifles, as well as the Yugoslav 7.92mm conversions of M.1895 Mannlicher straight pull short rifles. (John Wall collection)



Chetnik guards relaxing; the man to the right holds a Yugoslav Mauser M24B Carbine, while the other two men have M95 Mannlicher straight-pull carbines.







The action of the postwar Vz 23-type Yugoslav Mauser is almost totally unmarked: no receiver crest, no side rail markings, no proof mark. The sole exception is the application of a new serial number, in this case W46, to the bolt and receiver ring. (John Wall collection)

The magazine floor plate and bolt handle root of the postwar Vz 23-type Yugoslav Mauser showing the new serial number, W46, applied after the rebuilding of the new rifle. None of the metal components in the barreled action are obviously Czechoslovak or formerly Vz 23. (John Wall collection)





Branko Bagdonovic reports that between 1925 and 1929, Yugoslavia purchased a total of 92,000 Vz 24 Short Rifles from Ceskoslovenska Zbrojovka Brno, which the Czechoslovak Ministry of Defense provided from Czechoslovak Army

inventories. Recently, one such ex-Yugoslav Vz.24 in original condition was discovered in a collection in the U.S.A. The telltale marks which gave away its Yugoslav Army ownership at the two inspectors marks shown above: the Cyrillic letter "b" with a crossed top, that same as the English letter "B", and below it, the crown–over-"M" marks, both reported by Bogdanovic to be Yugoslav Government inspectors' marks. The same inspectors' marks appear on a Kragujevac Armory M1924 illustrated elsewhere in this section. (Private collection) **YUGOSLAVIAN MODEL 24 CARBINE:** The Yugoslavian Model 24 Carbine is rather unusual, rarely encountered, and quite collectible. The carbine is fitted with a pistol grip stock without grasping grooves, and the upper hand guard extends from the front of the receiver ring to the combination lower/upper band; the lower band is seated partially on top of the upper band. There is a swivel at the bottom of the lower band, and another on the bottom of the buttstock. The nose cap incorporates a most unusual, dual position, German-style bayonet lug, enabling bayonets with different length handle slots to be used with the carbine. The stock is not cut out to facilitate operation of the bent bolt handle, but there is a slight recurve to the handle itself to assist in ease of operation.

Length: 37.0"; Weight: 7.25 lbs.; Barrel: 16.75"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1500 meters. Remarks: Yugoslavian crest and model designation on the receiver ring, with the manufacturer's markings in Cyrillic on the left side of the receiver ring and the left side rail.



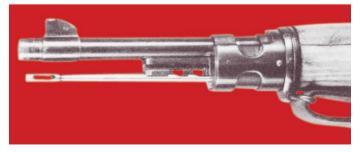
It is safe to say that when the German Army invaded Yugoslavia in 1941 that the majority of Yugoslav M1924s fell into German hands. Over the years, many of these rifles were re-issued to German units. Many of these rifles were brought back to North America as souvenirs after WW II by returning ETO troops. Shown above are three such rifles. The rifle on the left (with the cartouche of King Alexander I) and the rifle on the far right, with the cartouche of King Peter II, have both been modified to receive the German Kar 98k bolt dismount tube and unit marking disc. Each disc bears a small WaA 37 stamp, the mark of a German Ordnance Inspection Team that worked in the Suhl area. The rifle in the center, also bearing a King Alexander I cartouche, has been converted to use a German Kar 98k side-mounted rifle sling. Note that the butt has been cut in the K98k manner to accept the lower sling buckle. (John Wall collection)



Full-length view of the Yugoslavian Model 24 Carbine.



Yugoslavian crest and model designation in Cyrillic on the receiver ring of the Yugoslavian Model 24 Carbine.



The dual position bayonet lug and the overlapping lower barrel band are seen to good effect in this view of the Yugoslavian Model 24 Carbine.



Manufacturer's markings stamped into the side of the receiver ring and the left side rail of the Yugoslavian Model 24 Carbine.



The action and the slightly recurved bolt handle on the Yugoslavian Model 24 Carbine.



Picture of the extremely rare Yugoslavian Royal Guards (Chetniks) bayonet and scabbard. (Jan Gardiner collection)



The Royal Guard (Chetnik) bayonet. (Jan Gardiner collection)



"Partizanka" Rifle. This rifle was produced behind German lines in 1941, where all standards other than ballistics suffered. Note the barrel length, the Lange – Vizier rear sight and the woven sling. (Courtesy of Branko Bogdanovic)

**YUGOSLAVIAN FN MODEL 30 SHORT RIFLE:** In 1935, Yugoslavia purchased an unknown quantity of FN Model 30 Short Rifles and Carbines; these are the typical export models as produced by FN for many other countries. The Model 30 Short Rifle is fitted with a pistol grip stock, with the upper hand guard running from in front of the receiver ring to just beyond the lower barrel band. The lower barrel band is fitted with a swivel on the bottom, and there is another on the bottom of the buttstock. The bolt handle is straight. No information has been forthcoming on exactly how, or even if, these short rifles were marked. Additional details on the FN export Model 24 and Model 30 can be found in the section on China.



View of the action and the markings of Yugoslavian M1924 Carbine as used by Yugoslavian Royal Guards. (Jan Gardiner collection)



Full-length view of the FN Model 30 Short Rifle as used by Yugoslavia. (Cliff Baumann collection)



Carbine serial number on the right side of the receiver ring of the Yugoslavian FN Model 24 Carbine. (Noel P. Schott collection)

**YUGOSLAVIAN FN MODEL 24 CARBINE:** The FN Model 24 Carbine was not purchased in large quantities, and the one pictured in this section is somewhat different than the standard export model. This particular carbine was produced specifically for the gendarmerie of the city of Nish, a town of approximately twenty thousand inhabitants at the time.

The carbine is fitted with a pistol grip stock and an upper hand guard that runs from the front of the receiver ring to just beyond the lower barrel band, which is placed quite close to the upper band. There is a swivel on the bottom of the lower barrel band, and another on the bottom of the buttstock. There is no provision for a bayonet. On the right side of the buttstock is a carbine clip, attached by screws.

Length: 37.0"; Weight: 7.8 lbs.; Barrel: 17.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Yugoslavian crest over model designation over the Cyrillic wording for "Nish



*Overview of the complete action of the Yugoslavian FN Model 24 Carbine. (Noel P. Schott collection)* 



The Belgian proofs on the receiver ring and the manufacturer's markings on the left side rail of the Yugoslavian FN Model 24 Carbine. (Noel P. Schott collection)

Gendarmerie" on the top of the receiver ring. Belgian proof marks on the left upper side of the receiver ring, with manufacturer's markings on the left side rail. The serial number, # 16, is on the lower right side of the receiver ring.

**YUGOSLAVIAN MODEL 1948 98k SHORT RIFLE:** The last Mauser rifle produced by Yugoslavia at the Kragujevac arsenal is the Model 48 Short Rifle, quite similar to the German 98k Carbine. The short rifle is fitted with a pistol grip stock, with a typical German-style



The receiver ring of the Yugoslavian FN Model 24 Carbine, showing the Yugoslavian crest, the model designation, and the Cyrillic wording for the Nish gendarmerie. (Noel P. Schott collection)



Full-length view of the Yugoslavian FN Model 24 Carbine, marked for the city of Nish gendarmerie. (Noel P. Schott collection)



Full-length view of the Yugoslavian Model 48 Short Rifle.



Markings on the side of the receiver and the left side rail of the Yugoslavian Model 48 Short Rifle.



The Communist Yugoslavian crest on the receiver ring of the Yugoslavian Model 48 Short Rifle.



Close-up view of the variant Communist markings on the receiver ring of the Yugoslavian post-WWII Model 48 Short Rifle.



Variant side rail markings on the Yugoslavian Model 48 Short Rifle.

short upper hand guard extending from the front of the rear sight to the lower barrel band. The lower barrel band has a side bar sling slot, with a slot through the buttstock for attachment of the sling. The front sight has a German-style front sight cover, while the nose cap has an "H" style bayonet lug. The bolt handle is bent, with the stock cut for easier operation of the bolt.

Length: 43.50"; Weight: 10.0 lbs.; Barrel: 23.25"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Communist Yugoslavian crest on the receiver ring, with "PREDUZECE 44" on the left side of the receiver and the model designation on the left side rail.

**YUGOSLAVIAN MODEL 24/52C SHORT RIFLE:** Yugoslavian authorities reconditioned many of their prewar rifles during the late 1940s and 1950s. These weapons had minor changes made to their prior configuration, and were remarked with the Yugoslavian Communist crest. In all other respects, the short rifles are the same as the Model 24 Short Rifle, and the same data will apply.



The German Army re-issued many Yugoslav M1924 Rifles which had been modified to accept their own Kar 98k sling. After they cut the sling slot in the buttstock, they removed the original upper sling band (right, above) and replaced it with a wider Kar 98k band with its side-mounted sling loop. The right side of the 98k band was then notched (above, left) to permit it to be re-installed on the M1924 with its original Yugoslav band spring still able to do its work of holding the band in place. (John Wall collection)



Side rail arsenal markings on the Yugoslavian Model 24/52C Short Rifle. (Century International Arms, Inc.)



After WW II, the new Federated National Republic of Yugoslavia began a program of reworking and reissuing former Axis services rifles for their new army. The rifle shown above, originally built as a German Kar 98k, has had its original receiver ring markings removed, and has been reblued. First however, the crest of the new Communist Government and the Slavic phrase "Workshop 145" were applied to the receiver and the original German side rail marked "Mod. 98" was modified by having "/48" stamped next to it. 1948 was the year the refurbishing of the K98k's began. The location of Workshop 145 is unknown. (Ed Parada collection)



The Yugoslavian Communist crest over the model designation on the receiver ring of the Model 24/52C Short Rifle. (Century International Arms, Inc.)



Full-length view of the Yugoslavian Model 24/52C Short Rifle. (Century International Arms, Inc.)



The Yugoslav Communist crest on a Kragujevac Model 24/47 Short Rifle. These rifles are refurbished Model 1924 FN and Kragujevac-made Yugoslav Army short rifles. Because these (and all FN M1924s) utilized intermediate length receivers which were 1/4-of-an-inch shorter that all other military Mauser rifles, parts from M24/47 and M48 will not interchange with other post-war Yugoslav rifles including the Model 24/52c and the reworked German Kar 98ks.



The crest of the Model 1948A Yugoslav Mauser Short Rifle. The "A" designation is reported to indicate the use of stamped as opposed to milled components, especially for the trigger guard assembly.



Serbian soldiers in retreat to the Adriatic coast, C. 1915.

## **SLOVAK REPUBLIC**

In order to destroy Czechoslovakia after its annexation by Germany, the Slovak Republic was forced into being by Hitler during World War II. If the Slovaks had not acceded to Hitler's demands, much of their territory would have been given to Hungary. Left with no other options, a one-party state was established by Monsignor Jozef Tiso, a staunch fascist, whose Hlinka Guards were modeled on the storm troopers of Hitler's Germany. Allowed their own national army, the Slovaks inherited all of the former Czechoslovakian material within their borders and were able to field three divisions at the start of the war.



Chetnik officers and men in a posed picture. The soldiers appear to be armed with Yugoslav Model 24 Short Rifles.



Full-length view of the Slovak Republic VZ 24 Short Rifle.



Full-length view of the right side of the Slovak Republic VZ 24 Short Rifle with variant turned-down bolt handle and inletted stock. (Robert Jensen collection)



The bolt handle and knob on the Slovak VZ 24 Service Rifle also features the double-barred crucifix. On Czechoslovak VZ 24s, circa 1924-1939, this mark had been a small rampant lion stamp. (John Wall collection)



On Slovak VZ 24s, serial number 1317 shown here, the serial number on the stock is stamped across the lower comb in the same location and style as used by the German military on their Mauser rifles. (John Wall collection)

Highly professional, the Slovak army fought alongside the German armies during the attack on Poland and the attack against Russia.

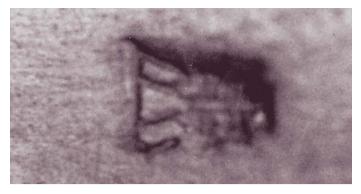
Some units also served in Hungary, Romania, and Italy. In 1944, a premature uprising was staged by partisans in central Slovakia, but they could only hold their ground until October of the same year. With the end of the war, the Czechoslovakian Republic was reestablished.

Among the equipment that was available to the new Slovak army were the large quantities of Czech VZ 24 Short Rifles. Many of the rifles used by troops of the Slovak Republic were inconspicuously marked with a very small Slovak crest on the right or left side of the receiver.

**SLOVAK REPUBLIC VZ 24 SHORT RIFLE:** In all respects, this short rifle is identical to the Czech VZ 24 Short Rifle. Specifications on this weapon will be found in the section on Czechoslovakia.



A small number of VZ 24 Mauser Rifles are believed to have been converted from rifles made earlier for the Republic of Czechoslovakia. The conversion consisted only in changes in marking of such rifles as the one shown here. A standard VZ 24 in all other respects, this rifle is clearly Slovak based on its receiver and bolt handle markings. The marking on the left side of the receiver ring shown here with the three mountain peaks and the double-barred crucifix, are traditional Slovak symbols which also appeared on the lion crests of Czechoslovak VZ 24s made between 1935 and 1938. Few of these conversions have been observed, and serial numbers have all been in four digits. Two rifles have been observed with their serial numbers stamped so low in their receiver rings as to be completely covered by the stock when fully assembled. (John Wall collection)



Stock cartouche impressed in the Slovak Republic VZ 24 Short Rifle. (Robert Jensen collection)



Close-up view of the right side of the receiver ring on the Slovak Republic variant Model VZ 24 Short Rifle, showing a different version of the Slovak Republic Tatra Mountain crest. (Robert Jensen collection)

## SOUTH AFRICAN REPUBLIC-Z.A.R. (ZUID-AFRICAANSCHE REPUBLICK)

Before the Boer War of 1899-1901, the South African Republic purchased a total of 47,000 Mauser Model 1895 7mm rifles and carbines from DWM and Ludwig Loewe. 10,000 rifles, serial number A1-10,000 marked on the side rail "Mod. Mauser 1896" over "Ludw. Loewe & Ce Berlin" with no marking on the receiver ring were shipped



Left side view of the receiver of a "C" series M1895/1896 illustrating the unusual circle mark found on many ZAR and OVS Mauser rifles. Its meaning is not known at this time. (John Wall collection, photo by John M. Leone)



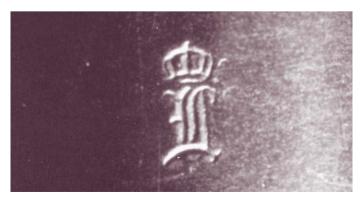
The Slovak Republic crest on the right side of the receiver ring of the Slovak Republic Short Rifle.

to the ZAR during July, August and September of 1896. These rifles had the 29-inch barrel, and were reported by Bester to have German military-style quality inspection marks (a crown over a faktur letter) on the left of the buttstock, on the left side of the receiver near the serial number, the top of the bolt handle, and on top of the barrel under the handguard. There was no circular cartouche stamp.

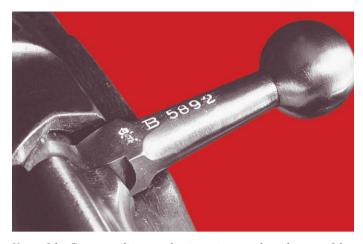
Ten thousand rifles, serial numbers B1-10,000, and 5,000 18-inch barreled carbines, serial numbers 1-5,000 without a prefix letter, were shipped from Germany in September of 1896. The carbines were marked "Mod. Mauser 1896" over "Ludwig Loewe & Ce Berlin" on



Left side view of the ZAR M1896 "B" series Mauser Rifle manufactured by Ludwig Loewe, showing the receiver without crest and the serial number on the receiver and stock. (John Wall collection, photo by John M. Leone)



The German military inspection mark of a crown over a fraktur letter on the barrel (under the handguard) of the M1896 ZAR Loewemanufactured Long Rifle. (John Wall collection, photo by John M. Leone)



View of the German military quality inspection mark on the root of the bolt handle, with the serial number on the bolt handle of the M1896 ZAR Mauser Rifle. (John Wall collection, photo by John M. Leone)



View of the wrist of a "C"-series Mauser Rifle, showing the unusual circle marking as found on the receivers of many ZAR and OVS Mauser rifles. (John Wall collection, photo by John M. Leone)

the left side rail, and were unmarked on the receiver ring. Inspection marks were as noted for the rifles, the bolt handle was bent and the carbines were fitted with the short carbine sight, graduated from 400 to 1,400 meters. Also shipped during this period was a shipment of 10,000 rifles with the 29-inch barrel, serial number 1-10,000 without a letter prefix; these rifles were marked "Deutsche Waffe-und-Munitionsfabriken" over "Berlin" on the left side rail. Inspection marks are found as for the first shipment of rifles. In March, 1897, 2,000 rifles, serial number 5,001-7,000 were shipped to the ZAR, while in May and June, 1897, 8,000 more rifles and 2,000 more carbines marked from DWM were received by the ZAR. No German military inspection marks are to be found on the carbines, while the circular cartouche is present stamped on the left buttstock, stock wrist, next to the serial number, on the bolt knob and on the barrel under the handguard.

Further weapons were shipped from Germany, but were turned back by the British blockade and later sold to Chile, having had the Chilean crest applied.

## SPAIN

Despite the loss of the Spanish Armada in the war with England, Spain reached the height of its prestige and power around the year 1600. At that time, the empire of Spain covered all of South America (with the exception of Brazil), along with Central America, Mexico, western North America, the Philippines, and smaller territories in Asia and Africa.

With installation of Napoleon's brother as king in 1808, the power of Spain went into a downward spiral. After the defeat of Napoleon at Waterloo, the 19th century witnessed the loss of the South American, Central American, and Mexican colonies, as well as the holdings in western North America. The crowning blow to Spanish colonialism was the defeat of Spain in the Spanish-American War, with the resultant loss of Cuba, Puerto Rico, and the Philippines.

During the first half of the twentieth century, Spain seesawed back and forth between right and left wing governments, and found itself deeply involved in a continuous brush war with the Rifs of Morocco, where Spain had territorial holdings. Political events of the early 1930s rapidly led to a situation where there was almost no alternative to the terrible, deadly, nation-crushing civil war that was fought from July of 1936 to the spring of 1939. This war was used by the Germans, Italians, and Russians as a wonderful testing ground for their military theories and their latest equipment. To many, this was the last pure test of good against evil, with thousands of men flocking to fight on the side of the Spanish Republic against the Fascist dictatorship of Francisco Franco. Unfortunately, in this war, Fascism triumphed, and the Republic was crushed.

Neutral during World War II, Franco allowed a volunteer Spanish "Blue Division" to fight in Russia alongside the Germans; Spanish air force units also fought on this grueling battlefront. Following the end of the war, Spain was slowly welcomed back into the European community, and with the death of Franco in 1975, Prince Juan Carlos ascended the Bourbon throne as King Carlos. Since then, Spain has been a full participant in European affairs, with all pluses and minuses that membership involves.

Spain has always been an arms producing nation, with a large national arsenal at Oviedo in northwestern Spain. The Spanish army has followed small arms development quite closely over the years, Mauser rifles having been submitted for trial almost continuously. Apparently, some Turkish Model 1887 models were submitted for troop trials; however they proved unsatisfactory. The Model 1891 Rifle in caliber 7.65 x 53mm was adopted for trial, as was the Model 1891 Carbine; these were almost identical to the Turkish models. In 1892, improvements and a change in caliber to 7 x 57mm brought a recommendation for adoption by the Spanish authorities. Few were made, however, due to the introduction of the world famous Model 1893 Rifle and Carbine.

The Model 1893 Rifle introduced a major improvement with the 5round, staggered column, flush box magazine, which gives the rifle a much neater and more compact appearance, as well as protecting the magazine box. The Spaniards were so pleased with the Model 1893 Rifle that Paul Mauser was awarded the Grand Cross of the Order of Military Merit. The initial order from the Spanish Army was for approximately 252,000 rifles and 25,000 carbines. These weapons saw service in all of the major campaigns fought by the Spanish Army, including the Spanish-American War, the Riffian Wars, the Spanish Civil War, and some were still employed into the 1950s. 1895 saw the advent of the Model 1895 Carbine, while the Model 1916 Short Rifle was in production from 1916 to 1951. In 1943, Spain adopted the Model 43, a modified German-style K98k Short Rifle. In the 1950s, Model 1916 Short Rifles and Model 43 Short Rifles were modified by Spanish arsenals into lightweight, compact weapons designated the FR-7 and FR-8.

With the advent and easy availability of semiautomatic weapons after World War II, Spain gradually found no further use for the Mauser rifle as a standard weapon.

**SPANISH MODEL 1891 RIFLE:** The Spanish Model 1891 Rifle is almost identical with the Turkish Model 1890 Rifle, and is also in caliber 7.65 x 53mm. The rifle is fitted with a straight wrist stock, with a short upper hand guard running from in front of the rear sight base to the lower barrel band. The lower barrel band has a swivel on the bottom, and there is another on the bottom of the buttstock. The simple nose cap incorporates a bayonet lug on the bottom. The Model 1891 Rifle introduced an action improvement that prevented double loading by



Full-length view of the Spanish Model 1891 Rifle.



The serial numbering format used on the Spanish contract Model 1891 Cavalry Carbine. The serial numbers on these carbines observed so far have been under 5,000. (Hans-Joerg Meyer collection)



The right side of the buttstock of the 7.65mm Spanish Model 1891 Cavalry Carbine, showing what could be Spanish military unit marks. (Hans-Joerg Meyer collection)



undercutting on the bolt face and placing a spring-loaded plunger in the right locking lug. Approximately 1,200 Model 1891 Rifles were made for Spain by Waffenfabrik Mauser A-G. The carbine was produced in much larger numbers, is marked with the Spanish crest on the receiver ring, and is identical to the Argentine Model 1891 Carbine.

Length: 48.60"; Weight: 8.8 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, vertical box magazine; Sights: V-notch adjustable rear sight graduated to 2000 meters. Remarks: It is believed that the Model 1891 Rifle was not marked on the receiver, and that the manufacturer's markings are stamped on the left side rail.

**SPANISH MODEL 1892 RIFLE:** The Spanish Model 1892 Rifle incorporates improvements made during the troop trials of the Model 1891 Rifle. These improvements were a non-rotating 1892-patent



The right side of the action of the 7.65mm Spanish Model 1891 Cavalry Carbine. (Hans-Joerg Meyer collection)



In the opening of 1893, an insurrection broke out in a Spanish-occupied area of Spanish Morocco known as Melilla. Desperately short of modern rifles, Spain approached the Argentine government, asking to be allowed to make an emergency purchase of Mauser rifles from the Argentine stocks then awaiting payment and shipment at Ludwig Loewe's factory in Berlin. Eventually, 10,000 Argentine Model 1891 Mauser 7.65mm Long Rifles were acquired by Spain. As well as long rifles, there exist a number of examples, as the carbine shown here, of Model 1891 Cavalry Carbines which bear the Spanish royal coat of arms crest. Produced in 1894, these carbines have no clear history in current arms literature. It is interesting to note however that Colin Webster states in "Argentine Mauser Rifles, 1871-1959" that Spain also acquired long arms during the Melilla insurrection, from Ottoman Turkey. Curiously, this particular Loewe carbine contains bolt parts which are marked with the Turkish crescent inspection mark. After the Melilla unrest was resolved, Spain, according to the Spanish author Bernardo Barcelo Rubi, sent all the new Mauser carbines, along with the 10,000 M1891 rifles, to Cuba. Many of these long rifles and carbines were captured by U.S. forces at Santiago de Cuba during the Spanish-American War in 1898, and were in the U.S. Army inventory of 12,000+ Spanish rifles and carbines auctioned off to the public at Springfield Armory on January 3 and 4, 1899. (Hans-Joerg Meyer collection)



The cavalryman's lanyard ring found on the underside of the stock wrist of the 7.65mm Spanish Model 1891 Carbine. (Hans-Joerg Meyer collection)



The bolt sleeve of the Spanish Model 1891 Cavalry Carbine dated "1894," showing the Turkish crescent inspection marks on the bolt sleeve and cocking piece. (Hans-Joerg Meyer collection)



The Spanish royal coat of arms as it appears on the receiver ring of the Model 1891 Cavalry Carbine. The "Berlin 1894" inscription indicates the place where the Ludwig Loewe factory was located, as well as the year in which the carbine was manufactured. Later that same year, Spanish carbines using the Mauser Model 1893 bolt-action were also manufactured at Loewe's Berlin plant, so the same crest, city and year may also be found on the first production run of these carbines as well. (Hans-Joerg Meyer collection)



The side rail of the Spanish Model 1891 Cavalry Carbine, marked "Manufactura Loewe Berlin." Note also the first use of the Saturn and stacked cannon ball Spanish inspection marks. (Hans-Joerg Meyer collection)



The rear sight assembly of the 7.65mm Spanish Model 1891 Cavalry Carbine purchased from Ludwig Loewe in 1893/94. (Hans-Joerg Meyer collection)



Full-length view of the Spanish Model 1892 Rifle.

extractor, a trigger system that was altered so that the striker would not be released unless the bolt was fully locked, a detachable floor plate and follower, a guide rib in the left side of the receiver, a cocking piece that was attached to the firing pin with interrupted lugs, and a safety catch that was fitted with a third position to assist in dismantling. The basic description of the rifle is the same as for the Model 1891.

**SPANISH MODEL 1892 CARBINE:** Approximately ten thousand Spanish Model 1892 Carbines were purchased from Ludwig Loewe &



The underside of the 7.65mm M1892 Rifle at the U.S. Army Ordnance Museum. The serial number shown above, number 599, is stamped on the underside of both the receiver and the barrel, but is not visible on the assembled rifle. (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



German manufacturer's markings on the left side rail of the Spanish Model 1892 Rifle.



The action and buttstock of the 7.65mm M1892 Test Rifle at the Ordnance Museum. (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



This is one of the few surviving Model 1892 Rifles in 7.65mm. The design and appearance of this rifle is the same as the published images of a Spanish M1892 in a Spanish military museum depicted in Bernardo Barcelo Rubi's book on Spanish military arms. This rifle, in the collection of the U.S. Army Ordnance Museum at Aberdeen Proving Ground, was acquired in Europe by the U.S. Army in 1945. Although it bears no Spanish markings, it likely would not, since the 400 7mm M1892 carbines purchased by the Spanish Navy were also without Spanish national marks. Spain adopted the M1892 rifle and carbine as their official arms on November 30, 1892, then quickly changed over to the Model 1893 a year later when Paul Mauser developed a Model 1892 with an internal five-round staggered box row magazine. This became the famous Model 1893 of San Juan Hill and Boer War renown. (U.S. Army Ordnance Museum, Aberdeen Proving Grounds, Md.)



A top view of the Spanish-type M1892 Long Rifle's action. Note the long non-rotating extractor on the lower side of the bolt body, and the bolt release with its curved arm that supports a charger clip during loading. (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



The left side of the buttstock of the M1892 Spanish-type Rifle. The inventory or property number is from an earlier owner before the rifle was captured during WW II. The stock is notable for its absence of national ownership marks, a characteristic of early Mauser test rifles. (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



Mauser prototype Spanish Model 1892, SN 2, 7mm 2-position magazine cutoff. (Private collection of Robert I. Landies)



Left side view of prototype Spanish Model 1892, SN 2, 7mm 2-position magazine cutoff. (Private collection of Robert I. Landies)



*Full-length top view of prototype Spanish Model 1892 Troop Trials 7mm rifle, SN 2. Note 2-position magazine cutoff. (Private collection of Robert I. Landies)* 



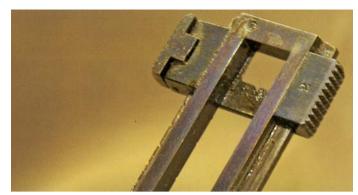
Bottom view of the barreled receiver of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle. Note SN 2 stamped in both barrel and receiver. (Private collection of Robert I. Landies)



ABOVE: Close-up view of the trigger area of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle showing the well-defined SN 2 on the shank of the trigger. (Private collection of Robert I. Landies) BELOW LEFT: Side view of the 2-position magazine cutoff on the Mauser prototype Spanish Model 1892 SN 2 Troop Trials 7m rifle, with the cutoff in the lowered position. (Private collection of Robert I. Landies)







ABOVE: Tangent rear sight of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle. Note prominent SN 2 on the sight slide. (Private collection of Robert I. Landies)

BELOW LEFT: Bottom exposed external magazine view, showing the SN 2 on the tang and magazine front wall of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle. (Private collection of Robert I. Landies)





ABOVE: Mauser prototype Spanish Model 1892 SN 2 Troop Trials 7mm rifle with cutoff in the raised position.

LEFT: Right side view of the receiver area of the Mauser prototype Spanish Model 1892 SN 2 Troop Trials 7mm rifle. The bolt is open and the magazine cutoff is in the lowered position. BELOW: Close-up top view of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle. Note the SN 2 on the bolt root.

(All private collection of Robert I. Landies)





Bolt components, all showing SN 2, of the Mauser prototype Spanish Model 1892 Troop Trials 7mm rifle. (Private collection of Robert I. Landies)

Co. between 1893 and 1895. The carbine is fitted with a straight wrist stock to the muzzle, with an upper hand guard running from the front of the receiver ring to the lower barrel band. There is a simple nose cap with no provision for a bayonet. The bolt handle is turned down for compactness, and there is a sling bar and ring under the wrist of the stock.

**Length:** 37.0"; **Weight:** 7.2 lbs.; **Barrel:** 17.63"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round vertical box magazine; **Sights:** Leaf rear sight graduated to 1200 meters. **Remarks:** Spanish crest on the receiver ring, with the manufacturer's markings stamped in the left side rail.

SPANISH MODEL 1893 RIFLE: Probably one of the best known Mauser rifles of all time, this veteran has seen service in the jungles



Manufacturer's markings on the left side rail of the Spanish Model 1892 Carbine. (Cliff Baumann collection)



Spanish crest on the receiver ring of the Spanish Model 1892 Carbine. (Cliff Baumann collection)



Full-length view of the Spanish Model 1892 Carbine. (Cliff Baumann collection)





In November of 1892, the Spanish Government announced the official adoption of the 7mm Mauser Model 1892 Rifle as their standard military long arm. However, before this rifle could go into large-scale production, an improved version that eliminated the exposed magazine was shown to the Spanish. This rifle, which used the Model 1892 bolt action in combination with a new, internal five-shot staggered-row box magazine, was ultimately adopted by Spain in December of 1893. As a result, very few Spanish Model 1892 rifles were manufactured. The largest known group is a batch of 400 Model 1892 Carbines made at Oberndorf in 7x57mm for the Spanish Navy. Although no clearly Spanish-marked carbines are known, it is believed that in keeping with Mauser company practice not to put national markings on test and trials rifles, (as with this carbine and the earlier lot of 1,200 M1891 7.65mm rifles), the 7mm carbine shown here is quite probably one of the 400 Spanish Navy carbines. While documentation exists on many other Model 1892 test rifles, in calibers such as .303 British, .30-40 Krag, and 8x58 Danish to name a few, the Spanish rifles are the only ones known so far in 7x57mm Mauser. (John Wall collection)



The receiver ring of the Spanish Model 1892 7mm Carbine, serial number 974. (John Wall collection)



A top view of the receiver and barrel of the Spanish Model 1892 Navy Test Carbine shows a receiver ring without an identifying crest, and a rear sight leaf without range numbers. (John Wall collection)



The left side of the Spanish Model 1892 Carbine, with the "Waffenfabrik Mauser a/N" address. The carbine must be disassembled in order to reveal the serial number "974," which is stamped on the receiver below the wood line. (John Wall collection)



The only stamp or cartouche appearing anywhere on the stock of the Spanish Model 1892 Carbine is this single fraktur letter on the lower edge of the buttstock. Its meaning is unknown. (John Wall collection)



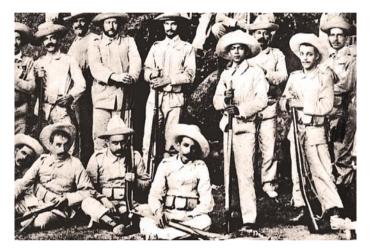
The Model 1892 mechanism is distinguished by the use of a single-piece five-round single-row, exposed box magazine. All other similar Mauser magazine systems used a two-piece assembly in which the magazine itself could be removed from the trigger guard assembly. On the Model 1892, Mauser incorporated a unique system for opening the magazine through the use of a cartridge rim to lever a spring loaded slide, shown here, to



release the magazine floor plate, shown at right. The magazine spring assembly thus released was not attached to the magazine itself. Perhaps as a consequence, this magazine release system did not survive in the Mauser inventory beyond 1892. (John Wall collection)

of Mindanao and Cuba, the mountains of Morocco, and the length and breadth of Spain. Adopted on 7 December 1893, it was the first Mauser rifle to have a clip-loaded magazine entirely within the stock. The lower portion of the bolt face was squared in order to insure improvement in feeding of cartridges (this feature was discarded in later Mauser rifles), clip guides were miled into the front of the receiver bridge, and the safety could be applied only when the action was cocked. The rifle is fitted with a straight wrist stock, and the upper hand guard extends from the front of the receiver to the lower barrel band. The upper band is simple, with a bayonet lug on the bottom for use with the Model 1893 sword bayonet. There is a swivel on the bottom of the lower barrel band, and another on the bottom of the buttstock. The bolt handle is straight.

Length: 48.60"; Weight: 8.80 lbs.; Barrel: 29.06"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch leaf rear sight graduated to 2000 meters. Remarks: Spanish crest on top of the receiver ring, with the manufacturer's markings stamped on the left side rail.



A group picture of Spanish soldiers in Manila, P. I. prior to the Spanish-American War. They are equipped with Model 1893 Rifles.



Full-length view of the standard issue Spanish Model 1893 Rifle.



Left full-length view of the Spanish Model 1893 Rifle.



The side rail of the Model 1896 Oviedo Long Rifle is blank. Unlike later Spanish M1893s, which are serial numbered on the side rail, this early rifle is serial numbered on the left side of the receiver ring. (John Wall collection)



The document shown here glued to the buttstock of a Spanish Model 1893 Long Rifle is the only known surviving Bannerman's capture certificate. Bannerman's, an internationally known military arms and accoutrements supplier with offices and sales rooms on lower Broadway in New York City, acquired most of the Spanish Army small arms surrendered at Santiago de Cuba in 1898 at public auction at Springfield Armory in 1899. For many years, Bannerman's advertised that their Spanish Mauser came with a document certifying that the rifle being purchased had been captured at Santiago de Cuba. This is the first such certificate which has come to light. The author well remembers seeing the weapons with the capture certificates when visiting Bannerman's in the 1930s. (Ross Lein collection)



Spain began production of their Modelo 1893 in 1896 at Oviedo Arsenal in Asturias province, the heartland of Spain's iron ore mining industry. The rifle shown is from the first year of Oviedo production. Note the small crest and text font. (John Wall collection)



The royal coat of arms crest of Spain was featured as the receiver crest on all Mauser rifles made in Germany, 1894-1897, with the exception of the few rifles made by DWM for the Spanish Navy, circa 1897. (John Wall collection)



Full-length view of another, slightly different issue Spanish Model 1893 Rifle. Note the reinforcing lug at the small of the wrist.



Model 1893 Long Rifle made by Ludwig Loewe, 1896. (John Wall collection)



The 7mm Spanish Model 1893 Infantry Rifle was adopted by Spain in December of 1893. The first quarter million rifles were produced on contract in Germany by Ludwig Loewe, at his plant in Berlin, and by Loewe's wholly owned subsidiaries, Waffenfabrik Mauser of Oberndorf and Fabrique Nationale of Herstal, Liege, Belgium. After Loewe integrated its German-based arms manufacturing divisions to form DWM in 1897, small numbers of Model 1893 rifles were made by DWM for the Spanish Navy. This rifle was made by Ludwig Loewe in 1896 at Loewe's Berlin facility. (John Wall collection)



The rear sight leaf of an original Loewe Model 1893 Spanish Army Long Rifle, graduated from 400 to 2,000 meters and using a distinctive sight slide which has a single catch located on the right side of the ladder. Later Oviedo rifles used a unique slide of heavier construction that was adjusted by a button instead of the slider shown here. (John Wall collection)



The receiver bridge and bolt root of a Model 1893 Spanish Infantry Rifle, showing the typical army-style bolt markings, consisting of a serial number with a capital letter preceding a four-digit number and a hexagram or six pointed star inspection mark. (John Wall collection)



The side rail of an H-series Ludwig Loewe-manufactured Spanish "Modelo 1893" Long Rifle. This side rail address remained the same throughout Loewe's Spanish rifle and carbine production run. (John Wall collection)



The trigger guard assemblies of original-condition German-made Spanish Model 1893 Mauser Rifles are fully serial numbered on the trigger guard tip, but have just the last two digits on the floor plate. Each screw is inspection stamped, but not numbered. (John Wall collection)



The stocks of German-made Spanish Mauser rifles and carbines were stamped with the full serial number and letter prefix just under the side rail. The emblem of what appears to be a small pine tree should appear under the number. (John Wall collection)



The cleaning rods on original Spanish Model 1893 Army Service Rifles should be numbered to the rifle itself, as shown here on this matching and virtually unissued Ludwig Loewe-made rifle. (John Wall collection)



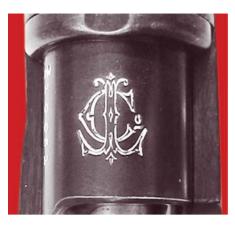
The Spanish royal coat of arms (stock cartouche) and the date "1896" found on the left side of Spanish Model 1893 Carbine and Rifle buttstocks. (John Wall collection)



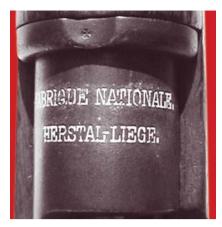
M1893 Spanish Mauser made by FN, serial number C6041. Several possible FN-made M1893 Spanish Mausers have surfaced in the none, A and C serial-number series, but all are unmarked except for FN address on ring. This example has a Spanish "R" (rebuild?) stamp on the left buttstock (matching), and the stock and handguard are also matched in pencil in the barrel channel, which is an Oviedo (Spanish Arsenal) practice. (Jack Carnahan collection)



M1893 Spanish Mauser made by DWM, serial number 8615. This is the only DWM M1893 Spanish the owner has confirmed. It has only the generic DWM address on the rail, no model. It has an 1896-dated Spanish Coat of Arms cartouche with an underlined "Ma." The "Ma" may be "Marina" or Navy issue. Other Loewe-made examples report "Ma"-prefixed serial numbers. Spanish sources (Rubi) suggest a 14,000 Naval infantry order. Other suspected Spanish DWM M93's have surfaced but the stocks are missing cartouche. (Jack Carnahan collection)



M1893 Spanish Mauser, Loewe monogrammed, MOD MAUSER 1895, serial number 10951, receiver ring marking. (Jack Carnahan collection)



M1893 Spanish FN receiver ring marking. (Jack Carnahan collection)



Spanish crest over "BERLIN 1896" on the receiver ring of the Spanish Model 1893 Rifle.



M1893 Spanish Mauser, Loewe monogrammed, MOD MAUSER 1895, serial number 10951, left buttstock 1894-dated Spanish cartouche. (Jack Carnahan collection)



M1893 Spanish DWM serial number 8516 buttstock cartouche, 1896 date. (Jack Carnahan collection)





M1893 Spanish Mauser, Loewe Trademark Monogram, MOD MAUSER 1895, serial # 10951. Until these Spanish examples began to be noticed by the owner a few years ago, it was thought that the only Loewemonogrammed MOD MAUSER 1895-marked rifles were OVS (Boer) Mausers. The owner purchased a very minty example, serial number 9459, from the Jim Hoffmann collection in 1999. This is outside the known Boer (OVS) serial number range. The only clue to origin was a Spanish "R" (rebuild?) mark on the left buttstock and provenance. This rifle (9459) had been imported by Bill Rogers (Interarms) and sold to Noel Schott, who sold it to Jim Hoffmann in the 1960s. Noel suspects that 9459 came from the Oviedo collection. A few months later, the owner obtained this example (number 10951), and it has a full Spanish Coat of Arms cartouche. About 15 examples from serial number 400 to 11952 have been noted to date. All with visible stock marks have a 1984dated cartouche. (Jack Carnahan collection)



M1893 Spanish Mauser, Loewe monogrammed, MOD MAUSER 1895, serial number 10951, left receiver rail marking. (Jack Carnahan collection)



Manufacturer's markings stamped in Spanish on the left side rail of the Spanish Model 1893 Rifle.



A Republican force on the skirmish line, armed with Model 1893 Rifles. (Cushing collection)



Typical Spanish outpost in Spanish Morocco during the Rif War of the 1920s. Troops are armed with Model 1893 Rifles. Note the Spanish Hotchkiss machine gun being served in the right side of the picture. (Agencia Efe)



The test fixtures belonging to an Oviedo Pressure Test Rifle, manufactured circa 1913. (John Litt collection)



Battle scene from Spanish Morocco, C. 1920. While armed with the Model 1893 Rifle, the troops use British web equipment bought as war surplus. (Agencia Efe)



A full-length view of a Model 1893 Spanish Infantry Rifle manufactured as a pressure test rifle at Oviedo in 1913. (John Litt collection)



The muzzle of a Spanish Model 1893 Pressure Test Rifle. (John Litt collection)



*The "Oviedo 1913" stock cartouche on a Spanish Model 1893 Pressure Test Rifle. (John Litt collection)* 



A close-up view of the test fixture on an Oviedo-made M1893 Pressure Test Rifle. (John Litt collection)



Full-length view of the Spanish Model 1893 Carbine. Note the manner in which the forend is formed. (Cliff Baumann collection)

**SPANISH MODEL 1893 "TRUE" CARBINE:** According to information received, this is the original configuration of a "true" Model 1893 Carbine that is not arsenal or gunsmith converted. The carbine is fitted with a straight wrist stock, with an upper hand guard

extending to slightly beyond the barrel band. There is no upper barrel band, nose cap, or provision for bayonet attachment. There is a sling bar and ring on the bottom of the stock at the wrist, and the bolt handle is bent.



As well as producing Model 1893 Long Rifles, FN also made Model 1893 Carbines for mounted police and troops. So far, the only documented users of the carbines are Spain and Brazil. The FN carbines made for Brazil are very clearly marked and crested as Brazilian. The 14,000 rifles and carbines ordered from FN by Spain in March of 1896 are believed to have been supplied from existing arms which bore no national markings other than the FN corporate name and address on the receiver ring. The number of carbines versus rifles purchased by Spain is unknown, but no FN M1893 rifle or carbine has been discovered with a Spanish crest on its stock and/or receiver ring. The carbine shown here, left and right sides, is the only non-Brazilian FN-made M1893 carbine known to date, and could therefore be either a commercial product, or one of the Spanish pattern. (John Wall collection)



The left side of the action of the FN Model 1893 Carbine, possibly made for Spain. Note the serial number in the 4,000 range, which appears on the side rail and just below it on the stock. (John Wall collection)



The action of an un-issued Model 1893 FN Cavalry Carbine, showing the rear sight ladder and slide, and the generic FN receiver marking: "Fabrique Nationale" over "Herstal, Liege." (John Wall collection)



Background picture of marksman from the Lincoln Battalion, Spanish Civil War, on the Teruel front.



The Spanish crest on top of the receiver of the Spanish Model 1893 Carbine. (Cliff Baumann collection)

Length: 37.0"; Weight: 6.50 lbs.; Barrel: 17.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: V-notch leaf rear sight graduated to 1400 meters. Remarks: Spanish crest on top of the receiver ring, with the manufacturer's markings stamped into the left side rail.

**SPANISH MODEL 1895 CARBINE:** Despite the fact that many specimens bear earlier dates, the carbine model of the Model 1893 Rifle was not approved until 1895, thus the Model 1895 designation. The carbine is full stocked to the muzzle, has a turned down bolt handle, and has a sling bar and ring on the bottom of the stock at the wrist. The simple nose cap has sight protectors for the front sight, and there is no



The action of 7mm FN-made M1893 Cavalry Carbine, possibly made for Spain. (John Wall collection)



The left side rail of the Spanish Model 1893 Carbine, showing the manufacturer's markings stamped in Spanish. (Cliff Baumann collection)



Close-up view of the crest and markings of an 1893 Mauser-made rifle, showing the 'Oberndorf 1896' marking. (R. K. Smith collection)



Full-length view of the Spanish Model 1895 Carbine.

provision for a bayonet. Weapons made after 1896 have a sling ring on the left side of the barrel band, and a sling bar attached to the left side of the buttstock, in addition to the sling bar and ring at the wrist. round, staggered column, flush, box magazine; **Sights:** V-notch adjustable leaf rear sight graduated to 1400 meters. **Remarks:** Spanish crest on the receiver ring, with manufacturer's markings stamped on the left side rail.

Length: 37.0"; Weight: 7.50 lbs.; Barrel: 17.56"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-



Shown here are the two known varieties of the Ludwig Loewe-produced 7mm Spanish Model 1895 Mauser Carbine for mounted troops. The carbine on the bottom, dated "1894" on its receiver ring, has no provision for sling swivels and only a large ring for a cavalryman's lanyard at its wrist. The carbine above is dated "1896 " on its receiver and stock, is the version officially adopted by Spain in 1895, and differs from the 1894 "pre-adoption" version by virtue of its two sling swivels. One is mounted on the barrel band and through a (missing) sling ring that is secured in the open slot in the buttstock. Note that the barrel band on the 1894-dated version can be tightened by a screw, while the 1896 band is solid. Spanish '93 carbines are confusing since some are dated "1894" on their receiver rings, "Modelo 1893" on their side rails, and are officially known in Spain as the "Modelo 1895." (John Wall collection)



A Ludwig Loewe "Berlin 1896" dated Spanish Model 1895 7mm Cavalry Carbine, showing the stock slot in which a metal sling loop "key" is inserted to secure the lower end of the side-mounted sling. (John Wall collection)



The right side of the Spanish Model 1895 7mm Cavalry Carbine. The receiver bears the standard Spanish royal coat of arms receiver crest over a "Berlin 1896" inscription. Loewe made Spanish Model 1895 carbines only in 1894 and 1896. Although Ludwig Loewe and later DWM both made rifles for the Spanish Navy, there are as yet no known carbines made by DWM or Loewe with Spanish Navy "Ma" acceptance marks. (John Wall collection)



A comparison of the two varieties of German-made Ludwig Loewe Spanish Mauser carbine barrel bands. The lower band, on an 1894dated Carbine can be adjusted by a screw and has no sling swivel, while the upper band, on an 1896-dated Carbine, is solid and has a sidemounted swivel attached. (John Wall collection)



Spanish Model 1895 Carbines have the same Spanish inspection marks on the left side of the receiver as do the Spanish Model 1893 Long Rifles, even down to the curious punch mark to the right of the hexagram. Note the stock serial numbering convention directly below the receiver number on this 1896-dated Ludwig Loewe carbine. (John Wall collection)



A comparison of the buttstocks of the two varieties of German-made Spanish Mauser carbines: the 1894 version, lower, without a slot for a sling loop, and the upper carbine, made in 1896, with the sling slot. Note that the sling loop "key" for this carbine has been lost. (John Wall collection)



*Full-length view of a presentation Spanish Model 1895 Carbine from the Spanish government to the government of the United States, 1906.* (Springfield Armory Museum)



Manufacturer's markings, arsenal, and date on the receiver ring of the presentation Spanish Model 1895 Carbine. (Springfield Armory Museum)



Spanish markings that have replaced the original German markings on the Spanish Modified G 98 Rifle. (Springfield Armory Museum)

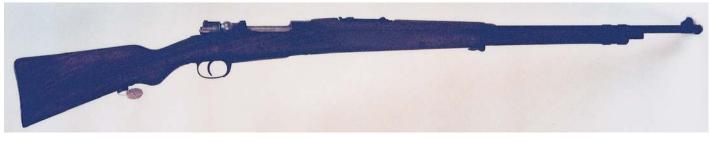


Spanish Militia troops preparing to depart from Aragon. Among them are some "regulares," or regular army troops. Note the Spanish Model 1926 helmets being worn and carried. (Cushing collection)

**SPANISH MODIFIED GEW. 98 RIFLE:** After the first world war, a number of ex-German G 98 Rifles were modified at Oviedo, Spain for use by the Spanish army. In all respects except for the tangent rear sight that replaced the "Lange Vizier" rear sight, the rechambering and reboring of the rifle to 7 x 57mm, and Spanish markings, the modified rifle was identical to the G 98 Rifle. Specific data on this rifle may be found in the section on Germany.

**SPANISH MODEL 1916 SHORT RIFLE:** Adopted to replace the Model 1895 Carbine, which was not suited to the ballistics of the improved Model 1913 ammunition, the Spanish Model 1916 Short Rifle was produced by Fabrica de Armas of Oviedo from 1916 to 1951, and by the Industrias de Guerra de Cataluna from 1936 to 1939.

The Spanish Model 1916 is basically a shortened version of the Model 1893 Rifle, fitted with a straight wrist stock and an upper hand guard that extends from the front of the receiver ring to approximately one inch beyond the lower barrel band. There is a pivoting swivel on the left side of the lower band and a sling bar on



Full-length view of the Spanish Modified G 98 Rifle. (Springfield Armory Museum)



Full-length view of the Spanish Model 1916 Short Rifle, First Pattern.

the left side of the buttstock. A full-depth cutout on the left side rail was employed to improve stripping cartridges from the clip, while additional gas escape holes have been incorporated in the bolt body and the chamber. On the first pattern Model 1916 Short Rifle, the "Lange Vizier" rear sight was employed; this was replaced during the Spanish Civil War by a more conventional tangent leaf rear sight. The nose cap, which incorporates a bayonet lug on the bottom, is retained by a flat spring on the bottom of the forend. The bolt handle is bent, without the stock being recessed to facilitate operation. In 1918, front sight protectors were adopted. During 1943, some surviving specimens were converted to caliber 7.92 x 57mm in order to conform more closely to the Model 1943 Rifle introduced at that time.

Length: 41.30"; Weight: 8.3 lbs.; Barrel: 21.75"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt 1893-style action; Feed: 5-round, staggered column, flush, box magazine; Sights: First pattern, "Lange Vizier" rear sight graduated to 2000 meters; second pattern, tangent leaf rear sight graduated to 2000 meters.



Full-length view of the Spanish Model 1916 Short Rifle, Second Pattern.



Full-length view of a Spanish Model 1916 Short Rifle converted for use as a Pressure Test Rifle. (Century International Arms, Inc.)



Full-length view of a Model 1916 Short Rifle modified during 1943 to more closely conform to the new Model 1943 Rifle. Note the pistol grip stock and grasping grooves, as well as the swivels on the bottom of the lower barrel band and the bottom of the stock. This short rifle has been rebored and rechambered for the 7.92 x 57mm cartridge.



Spanish crest over "LA CORUNA" on the receiver ring of the modified Spanish Model 1916 Short Rifle (previous page, bottom photo).



Caliber designation and "ESPECIAL" marking on the left side rail of the Spanish Modified Model 1916 Short Rifle. Note the low serial number 32.



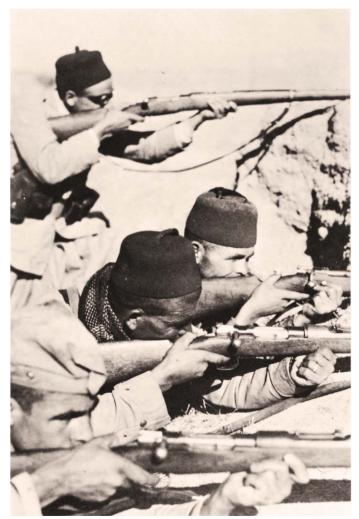
Markings on a Second Pattern M1916 Short Rifle, that has been converted to 8x57mm. built at La Coruna, the left side wall shows first "New Marking," followed by "PRUEBA," or "Test," followed by serial number x24. (R. K. Smith collection)



To further insure that the change in caliber is not missed, the barrel has been marked to show change from 7mm to 7.92mm. (R. K. Smith collection)



Spanish "Falangist" crest on the receiver of a Model 1916 Short Rifle.



Spanish Foreign Legion troops attacking on the outskirts of Madrid during the Spanish Civil War. They are armed with Model 1893 Rifles and Model 1916 Short Rifles. (Keystone)



Full-length view of a Spanish Republican-made Model 1916 Carbine with tangent rear sight. These, when found, almost always prove to have been hand-fitted from start to finish. They are quite rare, as few survived the Spanish Civil War.



Close-up view of the receiver ring of the Spanish Republican-made Model 1916 Carbine, showing the markings "INDUSTRIAS de GUERRA/de CATALUNIA/1937."



Spanish markings on the top of the receiver ring as well as those visible on the left side rail of the Spanish Model 1916 "True" Carbine. (Cliff Baumann collection)



Spanish Nationalist (Rebel) troops during a firefight on the outskirts of Madrid. (Cushing collection)

**SPANISH "TRUE" MODEL 1916 CARBINE:** This carbine was produced at Oviedo arsenal, and according to the information received, the configuration is original and not arsenal refinished in any manner. The carbine is fitted with a straight wrist stock, which is standard, with an upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. There is no upper band or nose cap, and the carbine is not made to accept a bayonet. There is a pivoted swivel on the left side of the lower barrel band, with a sling bar on the left side of the stock. The bolt handle is bent.

Length: 37.0"; Weight: 6.75 lbs.; Barrel: 17.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt 1893 style action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Spanish crest/OVIEDO/1923 on the receiver ring, "P.A.C." and the serial number on the left side rail.



Full-length view of the Spanish Model 1916 "True" Carbine. Note the configuration of the top of the upper hand guard, as well as the forend. (Cliff Baumann collection)



M1933 Standard Modell Short Rifle as used in Spain by the Condor Legion. This short rifle is in caliber 7.92 x 57mm.



Full-length view of the Standard Modell Short Rifle as used by Spain. Note the very short distance between the lower and upper barrel bands.



Markings on the receiver ring of the Standard Modell Short Rifle as used by Spain.



Marking on both sides of the buttstock of the Standard Modell Short Rifle used by Spain. This warns users that the rifle has been rebarreled for the  $7 \times 57$ mm cartridge.



M1933 Standard Modell Carbine, used in Spain by the Condor Legion and other military formations. The caliber is 7.92 x 57mm.



Full-length view of a variant of the Spanish Model 43 Short Rifle. In this case, the rifle was produced with a turned down bolt handle.

**STANDARD MODELL MODEL 1933 SHORT RIFLE USED BY SPAIN:** Small numbers of the German Standard Modell Short Rifle were purchased by Spain, both prior to, and during the Spanish Civil War. This Short Rifle has been fitted with a straight wrist stock, with an upper hand guard that extends from the front of the receiver ring to just beyond the lower barrel band, which is extremely close to the upper barrel band. The upper band is fitted with a parade hook, and the nose cap incorporates a typical "H"-style bayonet lug. There is a swivel on the bottom of the lower barrel band, and another on the bottom of the stock. The bolt handle is straight.

**Length:** 42.0"; **Weight:** 8.20 lbs.; **Barrel:** 22.0"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** Mauser banner logo over the date of manufacture on the receiver ring, "ENTUBADOS A 7m/m" in a rectangle on each side of the buttstock. Model 1916 Short Rifle, as well as those Model 1893 Rifles still in use. This is a conventional 98 style weapon, with dimensions and specifications quite close to the German K98k, other than the straight bolt handle and the grasping grooves in the forestock. Fitted with a pistol grip stock, the upper hand guard extends from the front of the receiver ring to approximately one inch beyond the lower barrel band. The lower barrel band has a swivel on the bottom and on the left side, while there is another swivel on the bottom of the stock, as well as a sling attachment bar on the left side of the buttstock. The nose cap is fitted with an "H" style bayonet lug; however this short rifle will be most often found with an auxiliary bayonet lug, similar to that on the Argentine Model 1909, for use with older bayonets.

SPANISH MODEL 1943 SHORT RIFLE: As a result of the infusion

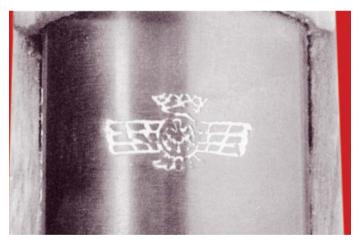
of German weapons, as well as other weapons chambering the 7.92 x

57mm cartridge, the Model 1943 Short Rifle was adopted to replace the



Markings stamped on the side of the receiver and left side rail of the Spanish Air Force Model 43 Short Rifle.

Length: 43.50"; Weight: 8.6 lbs.; Barrel: 23.62"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action;



Spanish Air Force crest on the receiver ring of the Spanish Air Force Model 43 Short Rifle.



Full-length view of the Spanish Model 43 Short Rifle as made for the Spanish Army.



Full-length view of a pressure test Spanish Model 43 Short Rifle. (Century International Arms, Inc.)



In addition to rifles made for the army, the M1943 Mauser Rifle was also manufactured at La Coruna for the Spanish Gendarmerie or National Police, an organization known in Spanish as the "Instituto de la Gyardia Civil," or Civil Guard. The image used as the crest on this rifle is the emblem of the Guardia Civil and dates to the founding of the national police by Queen Isabella II in 1844. Terrence Lapin, in his book "Mauser Military Rifles Markings" reports that the crest consists of two images; an axe with a bundle of sticks known as a "fasces," (an ancient Roman symbol associated with the powers of court officials); and a crossed sword. Mr. Lapin points out that the fasces crest has nothing to do with Fascism or the Phalange party. Indeed, the fasces also appears on the reverse of the U.S. Mercury dime. (Ed Parada collection)

**Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** Spanish crest within "FABRICA DE ARMAS" curved around the top/the arsenal/year of manufacture.

**SPANISH SPECIAL PURPOSE RIFLES, FR7 AND FR8:** During the 1950s, a limited number of Spanish Model 1916 and Model 43 Short Rifles were arsenal converted to transition training rifles for the CETME



The Spandau 1916 receiver used on this early M1943 Spanish Short Rifle has a new Spanish stock with side mounted sling bar and stock cartouche consisting of the capital letter "A" in a circle. The letter "A" with and without the circle can be found on many military rifles which survived the Spanish Civil War, including Mausers of many different models. Its meaning is presently unknown, but is unique to rifles that saw service in Spain. (Ed Parada collection)



This Spanish M1943 Rifle was built up around an Imperial German Gewehr 98 made at Spandau in 1916. The original German serial numbering and firing proof, as well as side rail marking ("Gew.98") have been kept unchanged. (Ed Parada collection)



The receiver crest of a Spandau 1916 Gewehr 98 rebuilt in Spain after the Spanish Civil War as a M.1943 Short Rifle. (Ed Parada collection)



Full-length view of the Spanish Model 1944 Short Rifle as made for the Spanish Air Force. Note that the air force model does not have the auxiliary bayonet lug.



*Full-length view of the FR8 Spanish Special Purpose Rifle. Please note the grasping grooves, straight bolt handle, and the pistol grip stock of the Spanish Model 43 Short Rifle. (Century International Arms, Inc.)* 



Spanish Loyalist troops in the trenches firing on the Rebel forces.

rifle. These SP rifles are handy, lightweight, and reliable, and apparently saw considerable troop use with Spanish Special Forces. Both rifles retained their stock configuration, but were shortened to 38.8 inches overall, with an 18.5-inch barrel; the weight was reduced to 7.5 lbs, and the barrel is fitted with a flash suppresser. The tube under the barrel holds the bayonet adapter and is also used to store cleaning equipment. The rifles have been converted to fire the .308 Winchester round.

## SWEDEN

Sweden, slightly larger than the state of California, has a long history of military involvement in northwestern Europe. In the seventeenth century, Sweden became the champion of Protestantism in Europe. The Swedes waged war against the Hapsburgs in the Thirty Years War, emerging as victors. Sweden also fought successful wars against Denmark and Poland, creating a great northern empire and virtually turning the Baltic into a Swedish lake.

During the eighteenth century, Sweden's kings became despotic and completely weakened the country, both economically and



The Swedish Model 1892 Trials Carbine, produced at Waffenfabrik Mauser in Oberndorf. Although very few of these rare carbines have been observed, it appears that the Swedish carbine can be easily recognized by the sling buckle recess cut into its buttstock and the lower band spring that is mounted on the right side of the stock. The one observed Spanish Model 1892 has no stock recess and its lower band spring is mounted at 6 o'clock on the underside of the stock. (Jorma Seppanen collection)



The right side of the action and rear sight assembly of the Swedish 8x58R Danish Model 1892 Trials Carbine. (Jorma Seppanen collection)



The receiver bridge of the Swedish M1892 Trials Carbine showing the serial numbering of the bolt sleeve and bolt release arm. (Jorma Seppanen collection)



The Swedish M1892 Trials Carbine's action, showing the absence of maker or user markings, typical of early Mauser test rifles. (Jorma Seppanen collection)



The action of the M1892 Swedish Trials Carbine, serial number 682, out of its stock. The safety is serialized, in addition to the bolt, bolt release lever and bolt sleeve. (Jorma Seppanen collection)



The distinctive sling recess in the butt of the Swedish M1892 Trials Carbine. (Jorma Seppanen collection)



The nose cap and sight guards on the Swedish M1892 Trials Carbines as originally issued. Two M1892 carbines have recently been observed with their sight guards filed off. Both had been in private hands for many years and may well have been

modified to improve the sight picture for hunting. The owner of one carbine found that the 1892 nose cap (above) is the same as the Argentine M1891 Cavalry Carbine. (Jorma Seppanen collection)



The spring and lower barrel band of the Swedish Model 1892 Trials Carbine are distinctive due to the location of the band spring on the side of the stock, in the Turkish fashion, as opposed to the Spanish M1892 carbine's which is located on the lower edge of the stock at 6 o'clock. (Jorma Seppanen collection)



The stock of the Swedish M1892 Trials Carbine, number 682, is serially numbered under the chamber area. (Jorma Seppanen collection)



Shown here is a comparative view of the magazine assemblies and barrel bands of the Swedish Model 1892 Mauser Trials Rifle (above) and Carbine (below). Note the cutouts in the magazine walls of the rifle. (Jorma Seppanen collection)

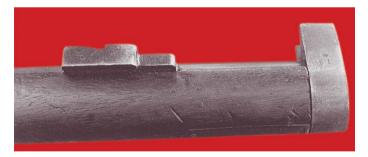


The buttplate of the Swedish M1892 Trials Carbine, like the Swedish rifle and the Spanish '92 carbine, is fully serialized on the buttplate tang. (Jorma Seppanen collection)

politically. During the Napoleonic Wars, Sweden joined with the other European powers against Napoleon, and, upon the victorious conclusion of the war, Sweden was awarded Norway. Norway finally regained its independence in 1906.

Sweden remained neutral during both the first and second world wars, and after the conclusion of World War II, became a charter member of the U.N., joining the European Union in 1944.

The Swedish Army has also had a keen interest in maintaining parity with other nations in regard to armaments, based upon the



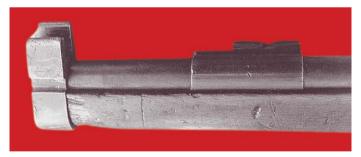
The right side view of the bayonet lug on the variant Model 1894 Swedish Navy Carbine. (Noel Schott collection)



A comparative view of the M1892 Swedish Trials Long Rifle (below) and Carbine (above) showing the un-numbered bottom of both magazine assemblies, and a drain hole. The one observed Spanish Model 1892 also has the drain hole, but does have a serial number stamped on the bottom of the magazine assembly. (Jorma Seppanen collection)

theory that the best way to keep peace is to be prepared for war. The Swedes adopted the Mauser system after strenuous testing of Mauser, Mannlicher, Krag-Jorgensen, Lee and many other pattern rifles. Fortunately for the Swedes, the weapons have never had to undergo trial by warfare.

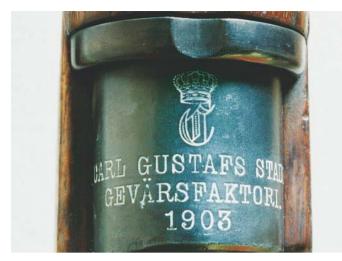
**SWEDISH MODEL 1894 CARBINE:** From 1894 to 1896, Waffenfabrik Mauser manufactured a total 12,185 carbines for Swedish use, while the Carl Gustafs Stads Gevarsfactori and the commercial firm Husqvarna Vapenfabriks. A.B. (Husqvarna Arms Factory, Inc.) produced many more of the carbine model. This is the first of the Swedish Mauser series, and is a very attractive and handy weapon. The action is very similar to the Spanish Model 1893 Rifle; however there is a notch on the cocking piece in order for the safety to be engaged while the firing pin is almost completely forward. There is a distinctive angular extension on the cocking piece. The carbine is fitted with a straight wrist stock to the muzzle, with an upper hand guard that extends



Left side view of the bayonet lug attachment on the Swedish Navy Model 1894 Carbine. (Noel Schott collection)



Full-length view of the Swedish Model 1894 Carbine as modified in 1917 by the addition of a bayonet lug. (Lothar Frank collection)



The markings on the receiver ring of the Swedish Model 1894 Carbine. (Lothar Frank collection)



Property plate on the bottom of the stock of the Swedish Navy Model 1894 Carbine. (Noel Schott collection)



Close-up view of the receiver of a Swedish Model 1894 Carbine imported during the 1950s by "INTERARMCO," and so marked, along with the model designation.

from the front of the receiver ring to just beyond the lower barrel band. The stock has grasping grooves, and there is a sling slot cut through the stock. The lower swivel has a sling slot on the left hand side, while the nose cap forms protective ears for the front sight. After the adoption of the Model 1896 Rifle, the carbine was revised by providing a cutout in the left side rail. In 1917, the nose cap was modified by the addition of a bayonet lug on the order of the British SMLE No. III, as well as a long extension under the forend with an attachment lug.

Length: 37.40"; Weight: 7.3 lbs.; Barrel: 17.38"; Caliber: 6.5 x 55mm; Rifling: 4-groove, r/hand; Operation: Turnbolt 1893-style action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch adjustable rear sight graduated to 1600 meters. Remarks: Swedish crest, name of manufacturer, and date of manufacture on the receiver ring, with the serial number on the left side rail.

**SWEDISH MODEL 1896 RIFLE:** In 1896, Sweden adopted as standard the Model 1896 Rifle. Fitted with a straight wrist stock with grasping grooves, the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. There is a simple nose cap with a bayonet lug on the bottom. The lower barrel band has a swivel on the bottom and another on the bottom of the stock. There is a full-depth rounded cut in the left side wall of the receiver, and the bolt has the right-angled cocking piece projection. Due to the depth of the cut in the left side wall, the guide rib is on the bolt instead of on the receiver. The rear sight differs from earlier Mauser sights in that the leaf is pivoted to the front of the sight base instead of the rear. There is a hole at the bottom of the upper barrel band for the attachment of a monopod, and the stock has a metal disc on the right side for marking purposes.



*Swedish M1896 Rifle with "shell catcher" attached. (Jan Gardiner collection)* 



Full-length view of the Swedish Model 1896 Rifle. (Lothar Frank collection)



Four photographs of the staff at the Swedish Ary's School of Musketry, circa 1902-1905, holding Model 1896 Rifles. (Don VandeBrink collection)

Length: 49.50"; Weight: 9.0 lbs.; Barrel: 29.10"; Caliber: 6.5 x 55mm; Rifling: 4-groove, r/hand; Operation: Turnbolt 1894-style action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch or U-notch leaf rear sight graduated to 2000 meters. Remarks: Swedish crest over name of manufacturer over date of manufacture on the receiver ring, with the serial number on the left side rail.



Swedish markings on the receiver ring of the Swedish Model 1896 Rifle. (Lothar Frank collection)



A civilian rear sight leaf for the Model 1896 Long Rifle, based on the Swedish military M55 type.



The crest of a first production year Swedish Model 1896 Mauser Long Rifle, one of the initial 40,000 rifles made on contract by Oberndorf in 1899. (Ed Parada collection)



"640" FN-produced M1896 Swedish Rifle. (Jan Gardiner collection)

Right side view of "640" FN-produced Rifle. (Jan Gardiner collection)





Full-length view of the Swedish Model 1896 Sniper Rifle fitted with the Model 41 AGA scope. Note the bent bolt for clearance.



Top view of the scope and action of the Swedish Model 1896 Sniper Rifle fitted with the Model 41 AGA scope.



Close-up view of the left side of the Swedish Model 1896 Sniper Rifle fitted with the Model 41 AGA scope.



*Top view of the Model 42 AGA scope, action, and rear sight of the Swedish Model 1896 Sniper Rifle.* 



*Close-up view of the left side of the Swedish Model 1896 Sniper Rifle fitted with the Model 42 AGA scope, which is 3 x 65mm.* 



Full-length view of the Swedish Model 1896 Sniper Rifle fitted with the Model 44 AGA scope, which is also 3 x 65mm.



Top view of the Model 44 AGA scope, action, and rear sight of the Swedish Model 1896 Sniper Rifle.

Close-up view of the left side of the Swedish Model 1896 Sniper Rifle fitted with the Model 44 AGA scope.





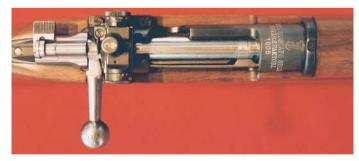
Full-length view of the Swedish Model 1896 Target Rifle fitted with micrometer sights and removable pistol grip.



Full-length view the Swedish heavy-barreled Model 1896 Target Rifle. Note the muzzle cover, which also covers the front sight.



Top view of the action and special target rear sight of the Swedish Model 1896 Military Target Rifle.





Markings on the receiver ring of the Swedish Model 1896 Military Target Rifle.

Top view of the action and rear sight of the heavy-barreled version of the Swedish Model 1896 Target Rifle.



Close-up view of the action and receiver bridge sight on the heavybarreled version of the Swedish Model 1896 Target Rifle.



The last Swedish Model 1896 6.5mm Long Rifles manufactured were a group of 20,000 rifles made in 1943 and 1944 (above) by Husqvarna. These rifles were all sold to members of the Swedish National Shooters Association, the "Frivilliga skytte rölsen." (Ed Parada collection)



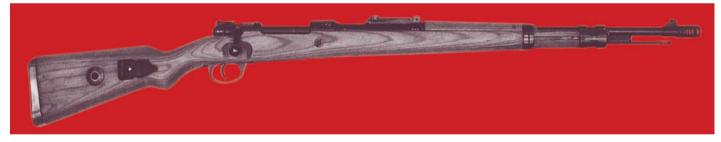
Close-up view of the M40 Swedish K98k Short Rifle muzzle brake.



The SM Sikte F-ram sight, an experimental variation of the target shooter's SM Sikte M/58 military rear sight, but adjustable to 800 meters as opposed to the 600-meter up limit on the M/58 sight.



Overhead view of Swedish M40 K98k-style Rifle, showing action and markings.



Full-length view of the Swedish Model 40 98k Carbine as used by Swedish machine gun troops; note the muzzle brake used to help control the heavy recoil. (Robert Jensen collection)

**SWEDISH MODEL 1938 SHORT RIFLE:** In 1938, the Swedes adopted a short rifle that was identical to the Model 1896 with the exception of smaller dimensions and a bent bolt handle. This is the Model 1938 Short Rifle.

Length: 44.10"; Weight: 9.1 lbs.; Barrel: 23.60"; Caliber: 6.5 x 55mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action;

**Feed:** 5-round, staggered column, flush, box magazine; **Sights:** U-notch adjustable rear sight graduated to 1600 meters. **Remarks:** Name of the manufacturer over the date of manufacture on the receiver ring.

The Swedes held the distinction of having the world's most powerful bolt action infantry rifle when they adopted the Swedish Model 40, a standard Model K98k carbine re-chambered for the



Full-length view of the Swedish Model 1938 Short Rifle. (Lothar Frank collection)



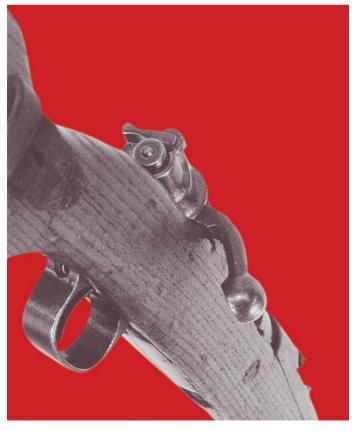
Manufacturer's name and date of manufacture on the receiver ring of the Swedish Model 1938 Short Rifle. (Lothar Frank collection)



The receiver ring showing the Syrian national crest on the Syrian Model 1948 Short Rifle. (Century International Arms, Inc.)



Full-length view of the Syrian Model 1948 Short Rifle. (Century International Arms, Inc.)



Close-up view of the Syrian Model 1948 bolt handle, showing the angle of the handle, aw well as the flattened bottom of the bolt knob; note also the laminations of the stock.

Swedish Model 32 8mm machinegun cartridge. This carbine was intended for use by the troops manning the machine guns, based on the theory that they would be utilizing the same cartridge as the machine guns. Due to the size of the cartridge, the magazine capacity was reduced to four rounds, and, due to the excessive recoil from the powerful Model 32 cartridge, it was necessary to equip the carbines with a muzzle brake...all in all, a handful for any soldier to fire!

## **SYRIA**

As the Ottoman Empire crumbled during the first world war, Syrian national ambitions began to be realized. Backed by the British, the Syrians were encouraged to rebel against the Turks. Unfortunately for the Syrians, France governed Syria after the war under a mandate from the League of Nations, splitting off Lebanon, which became independent in 1926. The Syrians rebelled against the French, but were completely unsuccessful in overthrowing them. In 1940, the French authorities in Syria declared for Vichy, prompting an invasion by British and Free French troops in 1941. As a result of this invasion, an independent Syrian Republic was declared in September, 1941.

Syria was a founding member of the Arab League, and was deeply involved in the Arab-Israeli War of 1948; an armistice was signed with Israel in 1949. There was a brief, abortive attempt at a union between Syria and Egypt, from which Syria seceded in 1961. In all of the succeeding wars with Israel, Syria has been an active leader. From the time of the Yom Kippur War (1973), Syria has defiantly rejected any attempts at reconciliation or peace in the region. In 1994, however, Syria did make serious efforts at normalizing relations in exchange for the return of the Golan Heights.

Syria's army, until the influx of Russian equipment and advisors after the first Arab-Israeli conflict, could best be described as woefully lacking in any homogeneous effort to field an effective force. Armaments were mainly French World War I and II leftovers, with supplies of war surplus German K98k Carbines coming off the





Prior to 1960, Yugoslavia exported Model 1948 Rifles to Iraq, Syria, Indonesia and Egypt. The rifle shown is known in Yugoslav literature as the Model 1948a since it uses a stamped trigger guard assembly and floor plate. The M1948s are built on intermediate length receivers and use a standard Mauser-type rear sight assembly, a 98k-type sight hood and lower barrel band; a coarse grained buttstock fabricated for side mounted German-style sling fixtures, and a full-length handguard. (John Wall collection)



The butt of the M1948 stock is serial numbered to the receiver number on the left side just above the cupped buttplate. Note that the number is missing the "S" prefix. (John Wall collection)



Syrian bolts are serialized to the receiver number, including the letter "S" along the shaft of the turned down bolt. The back of the bolt knob is flat, but not knurled. (John Wall collection)



Syrian M1948 receivers are serial numbered on the right side with alpha-numeric phrase beginning with the letter "S." (John Wall collection)



Syrian M1948 floor plates, (but not the trigger guard assemblies) are also serial numbered, but without the prefix letter "S." Note the letters "BK" on the far end of the trigger guard assembly near the action screws. "BK" is the inspection stamp on most Yugoslav rifles before 1970, which stands for the Slavic words meaning "military control." (John Wall collection)

The receiver crest of the Yugoslav M1948type contract Mauser made for Syria features the Syrian falcon. Terrance Lapin, in his book "Mauser Military Rifle Markings" translates the Arabic text to the right and left of the falcon as "The Syrian Police." Note the "BK" "Military Control" mark on the bolt body. (John Wall collection)



deserts of North Africa. In order to flesh out its fledgling forces, Syria turned to the Yugoslavs for equipment, purchasing the Model 1948 copy of the German K98k Carbine. These weapons became redundant with the commencement of the Russian arms deals.

**SYRIAN MODEL 1948 SHORT RIFLE:** The Model 48 is very similar to the German K98k, the rifle being fitted with a pistol grip stock without grasping grooves, and the upper hand guard extending from the front of the receiver ring to the upper barrel band (as in the Yugoslav Model 24). The lower barrel band has a sling bar on the left, with a sling slot cut through the buttstock.

Length: 42.90"; Weight: 8.62 lbs.; Barrel: 23.30"; Caliber: 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Syrian national crest on top of the receiver ring.

# **THAILAND (SIAM)**

The kingdom of Siam came into existence around 1000 A.D., with the unification of the petty states of the region in Southeast Asia. From 1511, European traders and missionaries were active in the kingdom. By skillful political manipulation, the Thai monarchy enabled the country to be the only country in Southeast Asia that did not come

under the political domination of, or be colonized by, a European power.

The absolute monarchy ended by military coup in 1932, and in December 1941, Siam was occupied by the Japanese forces. Under pressure, Siam concluded an alliance with Japan and declared war on Great Britain and the United States. At the same time, the monarchy supported a secret war of resistance against the Japanese. Since the end of World War II, Thai politics have been largely democratic, but closely tied to a military-civilian oligarchy.

The Thai army has always had a close interest in maintaining military equality with its neighbors, and the influence of the Mauser rifle has been felt since the 1870s. At the turn of the century, some specimen rifles of a variation on the G 98 design were produced by Waffenfabrik Mauser for troop trials. With the successful completion of field trials, production of the new rifle, specified as the Model 1903 (Type 45) Siamese Mauser Rifle, was undertaken at the Tokyo arsenal, Japan. In 1923, an artillery and cavalry model, the Model 1923 (type 66) Short Rifle, based upon the 1903 Rifle, was also produced in Japan. These weapons were used by the Thai resistance during World War II; however, most will be found in very good condition.

**GERMAN MODEL G 71 RIFLE:** This rifle represents the first efforts of the Siamese to arm themselves with modern weapons. These rifles



Model designation on the left side rail of the Siamese Model G 71 Rifle.



Full-length view of the Siamese Model G 71 Rifle.



Left full-length view of the German Model G 71 Rifle as used by Siam.



Siamese "Charkra" and manufacturer's markings and proofs on the receiver ring and barrel of the Siamese Model G 71 Rifle.

were purchased from Germany shortly after they were accepted by the German armed forces and were considered standard for many years. Other than being marked on top of the receiver with the Siamese "Charkra," or symbolic throwing weapon, all of the other markings are strictly according to German practice. Specific data on this rifle will be found in the section on Germany.

**SIAMESE MODEL 1903 (TYPE 45) RIFLE:** This rifle is most unusual; it is chambered for a rare size 8mm Siamese rimmed cartridge, and is equipped with a sliding bolt cover designed to keep dirt from the action. By lifting the cover latch, the cover can be slid forward to expose the action. The top and bottom tangs lend reinforcement to the stock, and the magazine is slanted in order that the rimmed cartridges can feed properly.

The rifle is fitted with a pistol grip stock with grasping grooves and an upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. The simple nose cap/upper barrel band is fitted with a short "H"-style bayonet lug. The lower barrel band has a swivel on the bottom and another at the bottom of the buttstock. All of the markings are in Siamese. Ammunition for these rifles is virtually unobtainable, and many in the U.S. have been professionally rechambered for the .45-70 cartridge.

Length: 49.10"; Weight: 8.50 lbs.; Barrel: 29.13"; Caliber: 8 x 50mm Siamese rimmed; Rifling: 4-groove, r/hand; Operation: Turnbolt 98-style action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: The receiver ring is marked with the Siamese "Charkra" over the Siamese markings for the model year, which translates into "R.S. 121," (Ratanakos 121), the year of adoption of the dynasty, or the Christian year 1903. All markings are in Siamese.





Full-length view of the Siamese Model 1903 Rifle. (Lothar Frank collection)



Full-length view of the Siamese Model 1904 Rifle. (Noel P. Schott collection)

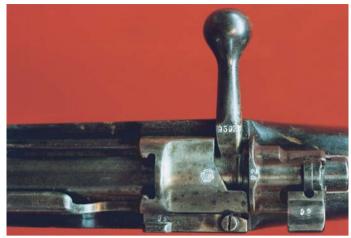


Overall view of the action of the Siamese Model 1904 Rifle, showing manufacturer's markings and the Siamese "Charkra" marking on the receiver bridge. (Noel P. Schott collection)



Left side of the receiver of the Siamese Model 1904 Rifle, showing the weapon serial number and the proof marks. (Noel P. Schott collection)

**SIAMESE MODEL 1904 RIFLE:** Prior to 1914, Siamese authorities purchased an undetermined number of export Model 1904 Rifles produced by Waffenfabrik Mauser. The rifles made for Siam appear to differ slightly in several areas, mainly in weighing almost a full pound more than the standard export model, and in having a slightly longer barrel.



Close-up view of the Siamese "Charkra" marking on the receiver bridge of the Siamese Model 1904 Rifle. (Noel P. Schott collection)

The Siamese Model 1904 Rifle is fitted with a pistol grip stock, with the upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band is fitted with a swivel on the bottom, with another at the bottom of the buttstock. There is a simple nose cap with a bayonet lug on the bottom.

Length: 48.78"; Weight: 9.8 lbs.; Barrel: 29.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Manufacturer's markings appear in German on top of the receiver ring over the model designation, with the serial number and proofs on the left side of the receiver ring. The Siamese "Charkra" marking is on the receiver bridge.

**SIAMESE MODEL 1923 (TYPE 66) SHORT RIFLE:** These short rifles were produced in Japan, and there is some conjecture that many of them were cut down from the Model 1903 Rifle. This short rifle is fitted with a pistol grip stock, with an upper hand guard extending from



Full-length view of the Siamese Model 1923 (Type 66) Short Rifle, with the bolt cover open.



Full-length view of the Siamese Model 1923 (Type 66) Short Rifle, with the bolt cover closed.



"Charkra" and model year in Siamese numerals on the receiver ring of the Siamese Model 1923 (Type 66) Short Rifle.

the front of the receiver ring to just beyond the lower barrel band. There is a sling slot on the left side of the lower barrel band, and a swivel on the left side of the buttstock. The simple nose cap incorporates a bayonet stud on the bottom. The action is identical to the Model 1903 Rifle.

Length: 41.92"; Weight: 8.05 lbs.; Barrel: 22.05"; Caliber: 8 x 52mm rimmed; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight believed to graduated to 1200 meters. Remarks: All model designations and manufacturer's markings are in Siamese.

**NOTE:** When the Model 1903 (Type 45) Rifle was adopted, the cartridge for which the rifle was chambered was an 8 x 50mm bottleneck rimmed case, with a round-nose, metal-jacketed bullet. With the advent of the Model 1923 Short Rifle (Type 66), the short rifles were chambered for the 8 x 52mm cartridge with a pointed bullet. These cartridges are not interchangeable.

THE TRANSVAAL



*Full view of the action with open bolt cover of the Siamese Model 1923* (*Type 66*) *Short Rifle.* 

The Cape of Good Hope was discovered by the Portuguese explorer Bartholomew Dias in 1488. The Dutch East India Company, always taking advantage of a good thing, established a large, permanent settlement for the furthering of trade with the East Indies in 1652. This settlement attracted Protestant settlers from around Europe, who found it necessary to do battle with the various tribal nations who were in possession of the lands prior to the white influx.

Control of the Cape of Good Hope became a matter of dissension between Great Britain and the Dutch settlers during the eighteenth century; to escape the intrusive British lion, the settlers embarked upon what became known as the Great Trek, moving the predominantly Dutch settlers to the north, away from the British encroachments. These pioneers later became known as the Boers (farmers), who had to do battle with the mighty Zulu tribes to establish themselves in the region. Two provinces were formed, the Orange Free State and the Transvaal.

When diamonds were discovered in the Orange Free State and gold in the Transvaal, the area was inundated by British interests and workers, provoking Boer rebellions. Seeking to arm themselves, the Boers secretly ordered quantities of the German G 71 Rifle, which were used in the first Anglo-Boer War of 1881-1882. During the later, better known Boer War of 1899-1902, these same weapons were to be found in the hands of some of the Boer commandos.

**GERMAN MODEL G 71 RIFLE:** This was the standard issue German infantry rifle, with typical German manufacturer's markings and proofs. As far as can be determined, there were no special markings of any kind, other than perhaps informal carvings in the stocks to



Full-length view of the German Model G 71 Rifle as used in the Transvaal.



Left full-length view of the German Model G 71 Rifle as used in the Transvaal.



Manufacturer's markings in Turkish over the serial number on the left side rail of the Turkish Model 1887 Rifle. (Cliff Baumann collection)

indicate usage in the Transvaal. All specific data on this rifle will be found in the section under Germany.

## TURKEY

Located partly in southeastern Europe and partly in western Asia, the nation of Turkey was a Hittite empire for thousands of years before the birth of Christ, controlling most of present-day Turkey. All of the provinces that comprised Turkey, including Galatia, Cappadocia, Cilicia and smaller provinces, were incorporated into the Roman Empire by the end of the first century A.D. Following the decline of the Roman Empire, the Eastern Roman (Byzantine) Empire controlled the entire area.

After the Mongol invasions of the thirteenth century, the Ottomans, a small tribe in central Anatolia, expanded from their base, and within the space of a century, had captured most of Turkey, Serbia, and Bulgaria. By the middle of the sixteenth century, the Ottoman Empire included most of Arabia, Egypt, the Middle East, Iran, and southeastern Europe into the Crimea.

The Ottoman Empire, at one time a commanding figure in the balance of power in Europe, gradually became known as the "Sick Old Man of Europe," adopting a liberal constitution in 1876, which was largely ignored by the sultan until a revolution of "Young Turks" in 1908 forced observance of the terms of the constitution. Angered by what they perceived as mistreatment of Greek citizens during an uprising in Crete in 1896, Greece forced Turkey into a war in 1897, one that proved disastrous for the Greeks. Fighting on two fronts, in Crete and Thessaly, the Turkish forces were consistently victorious, forcing the Greeks to accept an armistice in May 1897, which resulted in Greece losing part of Thessaly and paying a large indemnity.

Turkey found itself embroiled in a two-year war (1911-1912) with Italy after the Italian invasion of Libya, ending in a defeat for Turkey. Just days after concluding peace with Italy, Turkey was attacked by the Balkan League, consisting of Serbia, Bulgaria, and Greece, later joined by Montenegro. United in a common cause, the members of the League attempted to wrest away the balance of Turkey's Balkan possessions. Greece drove the Turks out of Salonika, while the Bulgarians were successful in defeating the Turks at Kirk Killisa and Lule Burgas. The Turks managed to hold onto Adrianople and Constantinople in Europe proper, due to Bulgarian supply problems. Enraged at the terms of the armistice, the Young Turks seized control of the government and resumed fighting. The Greeks forced the surrender of the Turks at Yannina. Three weeks later, a combined Serbian-Bulgarian army defeated the Turks at Adrianople, while Scutari fell to Montenegrin troops. This forced the Turks to accept the peace terms of the London conference, with Turkey losing Crete and its European possessions, not including the Chatalja and Gallipolis peninsulas.

Entering World War I on the side of the Central Powers, the loss of the war reduced the Turkish empire to a small part of northern Anatolia. Before the treaty concerning the peace terms could be ratified, Kemal Ataturk seized power and denounced the sultan and his acquiescence to the victorious Allies. In a masterful series of diplomatic and military moves, Ataturk, known later as the "Father of Modern Turkey," restored much of the lost territories, fixing the boundaries of modern-day Turkey. Turkey became a republic in October 1923.

Greece, under the terms of the Treaty of Sevres, was granted control of Smyrna (Izmir); Greece, however, wanted to control much more, and set about annexing as much of western Anatolia as possible, precipitating the Turkish War of Independence (1920-1922). Despite inadequate preparations, the Greeks forged eastward. Twice defeated in battles at Inonu, the Greeks were severely defeated in an epic three-week battle at the Sakarya River. Then began an agonizing, year-long retreat to Smyrna, from which the Greeks were forced by the armies of Ataturk. Thousands upon thousands of Greek civilians and military were killed by the Turks, in return for similar depredations by the Greeks. The Treaty of Lausanne (24 July 1923) ended the war, requiring the return of eastern Thrace by the Greeks, return of the Turkish islands, and the exchange of the Greeks inhabitants of the Turkish Republic for those Turkish inhabitants living in Greece.

Turkey remained neutral during World War II; however, as a member of the United Nations, Turkey fielded a contributory force to the United Nations troops fighting in Korea. Continuing problems with the Kurdish population of southeastern Turkey remain a problem even as this book is being written.

The Turkish army has been keenly concerned with maintaining an army with the most up-to-date weapons since the days of the first Mauser rifles. The Turks were the first to order a magazine rifle in sizable quantities; trials were held in 1886 to find a replacement for the single-shot Peabody-Martini Rifles with which the army had been armed. In 1887, the first magazine rifle was ordered from Waffenfabrik Mauser and Ludwig Loewe & Co. The Turks, not to be taken advantage of, included a clause in their contract that if a better rifle was developed, it would replace those yet to be filled under the terms of the contract. This clause was exercised in the case of the Model 1887 Rifle, which was replaced by the small-bore Model 1890 Rifle. These initial purchases were followed by the Model 1890 Rifle, the Model 1893 Rifle, the Model 1903 Rifle, the Model 1905 Carbine, the Model G 98 Rifle, as well as the Czech Model 98/22 Rifle. During the 1930s, many of these rifles were arsenal refinished to a short rifle configuration.

**TURKISH MODEL 1887 RIFLE:** Joined by Isidor Loewe, Paul Mauser went to Constantinople, Turkey to convince the Turkish authorities to purchase a variation of the German Model 71/84 Rifle. In February, 1887, they were successful in this venture, obtaining an initial contract for five hundred thousand Model 1887 Rifles, and fifty



Prototype Mauser Turkish 1887 9.5mm rifle. Note that stock is not completed for the tube magazine feed. Also note the sleeve over the barrel, which is the same as for the Commission 88 rifle. (Private collection of Robert I. Landies)



Left side view of prototype Mauser Turkish rifle, showing off the lines and features of this rare rifle. (Private collection of Robert I. Landies)



Intricacies of the inletting for inclusion of the tube magazine feed system in the Turkish Model 1887 prototype rifle. (Private collection of Robert I. Landies)



Another view of the inletting required to incorporate the tube magazine feed system in the prototype Mauser Turkish 1887 rifle. (Private collection of Robert I. Landies)



Close-up view of the left sidewall of the prototype Turkish Mauser 9.5mm rifle. Note lack of proofs, etc. (Private collection of Robert I. Landies)



Right side view of the prototype Turkish Mauser 9.5mm rifle. (Private collection of Robert I. Landies)



The open action of the prototype Turkish Mauser 9.5mm rifle. Note the position of the magazine elevator. (Private collection of Robert I. Landies)



Full-length view of the Turkish Model 1887 Rifle, marked in German.



Left side rail of the Turkish Model 1887 Rifle, showing the manufacturer's markings in German.



Right side view of the Turkish M1887 9.5x60mm Carbine. (Jan Gardiner collection)



Left side view of the Turkish M1887 9.5x60mm Carbine. (Jan Gardiner collection)



*Left side rail markings on the Turkish M1887 9.5x60 Carbine. (Jan Gardiner collection)* 



Barrel flat markings in Turkish on the Turkish Model 1887 Rifle. (Cliff Baumann collection)

thousand carbines in caliber 9.5 x 60mm. Mauser and Loewe were to share the contract, but it turned out that Loewe's share of the contract eventually went to Mauser Waffenfabrik.

The Turkish Model 1887 Rifle is basically a reworked G 71/84, in the optimum black powder caliber of  $9.5 \ge 60$ mm. The trigger guard is smaller than on the G 71/84, and the double locking arrangement of the bolt handle, which locks against the receiver bridge, and also has a locking lug that engages a shoulder in the left lower side of the receiver, differs from the G 71/84. The comb of the buttstock is noticeably higher than that of the G 71/84.

Length: 49.30"; Weight: 9.3 lbs.; Barrel: 29.97"; Caliber: 9.5 x 60mm Turkish; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 8-round, tubular feed magazine; Sights: V-notch adjustable rear sight graduated to 1600 meters. Remarks: On Turkish marked specimens, the Turkish "Toughra" is on the upper flat of the barrel as it enters the receiver, with Turkish proof marks on the left and right flats. The manufacturer's markings in Turkish on the left side rail. Those pieces marked in German will have the manufacturer's markings on the left side rail number.

**TURKISH MODEL 1890 RIFLE:** In 1890, shortly after the Belgians adopted the Model 1889 Rifle, the Turkish authorities took advantage of the escape clause in their contract for the Model 1887 Rifle (now obsolete, due to smokeless powder), and required Mauser to complete the contract with the Model 1890 Rifle in caliber 7.65 x 53mm. The contract on the Model 1887 stopped at approximately 220,000 completed rifles, with the balance of the contract (280,000 pieces) filled with the new Model 1890 Rifle.

The Turkish Model 1890 incorporates several improvements over the Belgian Model 1889 Rifle. The rifle is fitted with a straightwristed stock without grasping grooves. The tubular metal hand guard of the Model 1889 was removed, and is replaced by a short wooden hand guard that extends forward from the front of the rear sight base approximately half way to the lower barrel band. The Model 1890 Rifle incorporates the first successful attempt at "stepping" the barrel and relieving the stock cuts to accommodate the expansion of the barrel during heavy firing.

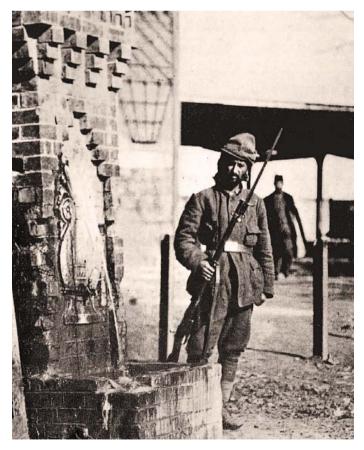
The rear sight incorporates improvements over the Model 1889 Rifle, and the bolt includes a one-piece sear. The magazine, while



Full-length view of the Turkish Model 1890 Rifle. (Noel P. Schott collection)



Receiver ring of the Turkish Model 1890 Rifle, showing to good effect the Turkish "Toughra" marking. (Noel P. Schott collection)



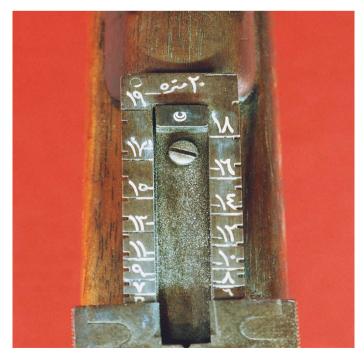
Turkish sentry armed with a Turkish Model 1890 Rifle keeping cholera victims away from an uncontaminated well and fountain during the First Balkan War.



The left side rail of the Turkish Model 1890 Rifle, showing the manufacturer's markings in Turkish. (Noel P. Schott collection)



*Right side of the receiver ring showing the serial number of the rifle in Turkish. (Noel P. Schott collection)* 



*Rear sight of the Turkish Model 1890 Rifle, illustrating the Turkish numbering. (Noel P. Schott collection)* 





Mauser made very few M1890 Carbines for Turkey, and no orders of any quantity were made. Few are known today. The carbine seen here is serial number 12, and does not appear to have been fully completed since it lacks numbers on its sight ladder and a lower sling swivel. The bolt is from another Turkish rifle, and is numbered in Turkish in reverse. Since these carbines were never delivered in any quantities, their history is clouded and uncertain. Prior to 1945, this carbine had been in the factory collection of Mauser Oberndorf until it fell into the hands of Allied occupation forces when it was claimed as a trophy of war. (John Wall collection)



The side rail of the rare Turkish M1890 Carbine is dated in Turkish "The Year 1309" (1892), to the right of text which translates as "Mauser Arms Factory, Oberndorf," a.k.a. Waffenfabrik Mauser Oberndorf. (John Wall collection)



The Turkish M1890 Carbine shown here has a mismatched bolt, which, in itself is unusual. It features a Turkish serial number "3," which is stamped in reverse, as well as German commercial proof marks. (John Wall collection)



The right side of the receiver of the Turkish M1890 Carbine shows its serial number, "12." The total number made is unknown. (John Wall collection)



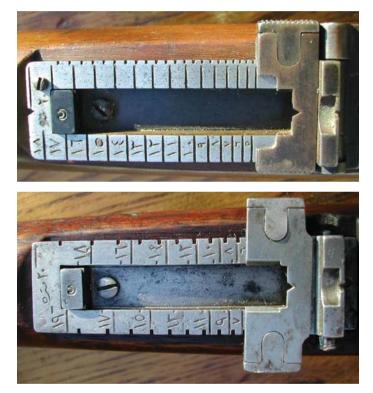
The receiver crest of the Turkish M1890 Carbine is the formal signature (Toughra) of the reigning Sultan, Abdulhamid II. (John Wall collection)



The bolt sleeve of the Turkish M1890 Carbine also is serial numbered with a Turkish number "3" which has been stamped in reverse. (John Wall collection)



*Turkish markings on the sight leaf of the rear sight of the Turkish Model 1893 Rifle.* 

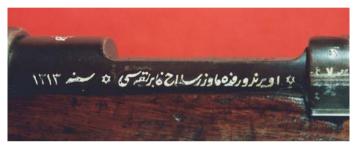


Shown here are the two sight ladders from Model 1893 Turkish Mausers that can be found on all three models of 7.65mm Turkish Mauser rifles. Rifles made in the late 19th century were chambered for round nose projectiles. Ballistic advances of the mid- to late-1890s proved the advantage of spitzer munitions. The result was that Mauser rifles made in the 1890s can often be found with two types of sight. One type seen here on the left with a single button-type slide, was made for round nose cartridges, while the other, on the right with a two-inch slide, was made for shooting spitzer rounds. (John Wall collection)

meant to remain in place, is removable by depression of the springloaded catch located in the trigger guard.

Length: 48.60"; Weight: 8.8 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch adjustable rear sight graduated to 2000 meters. Remarks: Turkish "Toughra" on the top of the receiver ring, serial number in Turkish on the right side of the receiver ring, manufacturer's markings in Turkish on the left side rail. The rear sight is marked in Turkish numerals.

**TURKISH MODEL 1893 RIFLE:** Ever conscious of new developments in the field of arms making, the Turks were to prove among the best of Mauser's customers. With the introduction of the Spanish Model 1893 Rifle with all of its innovations, the Turks were quick off the mark to order a total of 201,100 rifles. While very similar to the Spanish Model 1893 Rifle, this was the only rifle to be



Manufacturer's markings in Turkish on the left side rail of the Turkish Model 1893 Rifle. Note the extension on the bolt stop, which acts as a charger guide.



The soldiers shown in this picture are typical of the hard-fighting, seasoned Turkish infantry. They were to be encountered during the first and second Balkan wars, World War I, and the Turkish War of Independence. This picture is C. 1912, and the men appear to be armed with the Turkish Model 1893 Rifle.



Full-length view of the Turkish Model 1893 Rifle.



Mauser-manufactured Turkish Model 1893 7.65mm SN 111 rifle, nickel plated with magazine cutoff. This is one of 200 in the original contract for the Palace Guard of the Sultan of Turkey. (Private collection of Robert I. Landies)



Close-up of the bolt and receiver of the Mauser Turkish Model 1893 7.65mm nickel plated with cutoff rifle. Note the clear view of the magazine cutoff, and the Turkish Toghra crest on top of the receiver ring. (Private collection of Robert I. Landies)



Left side view of the Turkish legends on the sidewall of the Turkish Model 1893 nickeled rifle with cutoff. (Private collection of Robert I. Landies)



The Turkish "Toughra" on the receiver ring of the Turkish Model 1893 Rifle.

manufactured in quantity with a magazine cutoff; this allowed the contents of the magazine to be held in reserve, while the weapon was loaded with single rounds. This lever, located on the right side of the action, is spring loaded, and when engaged lowers the magazine follower so that the forward movement of the bolt will not pick up cartridges from the magazine well.

The rifle is fitted with a straight-wristed stock without grasping grooves, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel on the bottom, and there is another at the bottom of the buttstock. Like the Spanish model, the nose cap is a simple affair with a bayonet lug on the bottom.

Length: 48.60"; Weight: 8.8 lbs.; Barrel: 29.06"; Caliber: 7.65 x 53mm (later converted to 7.92 x 57mm); Rifling: 4-groove, r/hand; Operation: Turnbolt 1893-style action; Feed: 5-round, staggered column, flush, box magazine; Sights: V-notch rear sight graduated to 2000 meters. Remarks: Turkish "Toughra" on top of the receiver ring, manufacturer's markings in Turkish on the left side rail.

**TURKISH MODEL 1903 RIFLE:** Turkey paid strict attention to weapons development in Germany; this policy caused the Turks to purchase large quantities of the Model 1903 Rifle—a variation of the G 98 Rifle—from Germany prior to the first world war.

Fitted with a pistol grip stock, the rifle has an upper hand guard that extends from the front of the receiver to the lower barrel band. The nose cap is simple, with a bayonet lug on the bottom for the older model bayonets in the Turkish arsenal. There is a swivel on the bottom of the lower barrel band and another on the bottom of the buttstock. The rear sight is the improved tangent leaf sight rather than the "Lange Vizier"-style German sight.

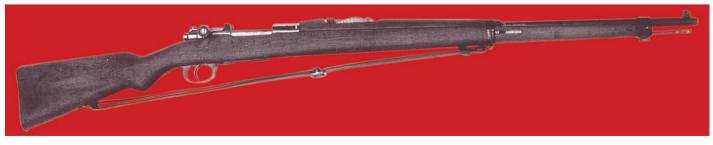
One of the main differences between the G 98 and the Turkish Model 1903 Rifle is the curved arm on the bolt stop that projects upward, putting pressure on the left side of the cartridge clip to keep it in position while the cartridges are stripped from the clip. The receiver is slightly larger than the G 98, and a longer cocking piece



Left full-length view of the Turkish Model 1903 Rifle.



Right full-length view of the Turkish Model 1903 Rifle.



A full-length view of the right side of a Turkish Model 1903 Rifle with a variant stock; note the lack of the stock disk. (Robert Jensen collection)



The Turkish Model 1903 Rifle, as produced in 1910 at Mauser Oberndorf. Wolfgang Seel reports that a total of 1,100 rifles were purchased by Turkey in 1911. This unissued rifle has Turkish crescents on some parts and is chambered for the new 7.65mm spitzer (pointed) cartridge. No Turkish writing was used in the marking of this rifle. (John Wall collection)



The Model 1903 Turkish Mauser was adopted by the Ottoman Turkish Army in 1903. Between 1903 and 1905, 200,000 Long Rifles were delivered. Soon after the final Army delivery took place, more 1903 Rifles were purchased by the Turkish Government, consisting of 406 M1903 Long Rifles for the Turkish Navy in 1904, 7,617 rifles for the Gendarmerie in the Turkish province of Macedonia in 1907, 30,000 Model 1908 cavalry and artillery Short Rifles in 1908 and 1909, and 1,100 Model 1903 Long Rifles for an unspecified Turkish group in 1910. Somewhere in the Macedonian police or the 1910 group were a small number of long rifles destined for the Ottoman Turkish Customs Administration. One such rifle, serial number 459 shown here, was completed as an M1903 Long Rifle and later converted into a factory test rifle. In the conversion process, both front and rear sights were removed. (John Wall collection)



The crest of the Turkish Customs Administration rifle number 459 interestingly has only the Turkish crescent moon and star national emblem instead of the Sultan's Toughra. The absence of this mark would seem to indicate that this rifle may have been made toward the end of the first decade of the 20th century, after the Sultan's power had been curtailed. (John Wall collection)

V D. 4

The buttplate of the Turkish Customs Administration Pressure Test Rifle, number 459, has a buttplate which connects the rifle to the Mauser factory collection. The letters "WFM" stand for "Waffenfabrik Mauser.' (John Wall collection)

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and firing pin are incorporated into the design. The Turkish Model 1903 Rifle is also without guard screws.



The side rail of the Turkish M1903 Customs Administration Rifle bears the familiar "Waffenfabrik Mauser Oberndorf" address in Turkish. (John Wall collection)



A top view of the Turkish "Customs Administration" Model 1903 Rifle. The top line of Turkish text translates as "Customs Administration" according to Terrence Lapin in his book "Mauser Military Rifle Markings." Below this is the serial number of the pressure test rifle, 459. (John Wall collection)



The crest of this Ottoman Turkish Model 1903, another M1903 Customs Administration Rifle, bears the serial number 971, and although in unissued condition, it is a standard service rifle. It is on display at the U.S. Army Ordnance Museum. Note the absence of the Toughra, the Sultan's signature, and the presence of the crescent and star, the symbols of the modern, post-Ottoman Turkish state. (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



The side rail of the Turkish Customs Administration M1903 Long Rifles translates as "Mauser Arms Factory, Oberndorf," or "Waffenfabrik Mauser Oberndorf." Note that both the side rail and crest are without a year date, present on all previous Mausers made for Ottoman Turkey. (John Wall collection)



The area beneath the stock's wrist of the M1903 Customs Administration Rifle was the site of many inspection marks and cartouches seen on most Ottoman Mausers. The upper stamp is the intertwined letters "W" and "M" of "Waffenfabrik Mauser." (U.S. Army Ordnance Museum, Aberdeen Proving Ground, Md.)



*Turkish Model 1903 Rifle, showing the markings on the receiver ring. (Robert Jensen collection)* 



A comparison of the receiver markings on the M1903 Turkish Service Rifle (serial number 199,992 of 200,000) made for the round-nosed 7.65mm cartridge, and one of the 1,100 Turkish M1903s made in 1910 for the ballistically improved 7.65mm spitzer round. (John Wall collection)

The Model 1903 Rifle has had a long and varied life with the Turkish army, having been used in the Italo-Turkish War of 1911-1912, the first and second Balkan wars, the first world war on all Turkish battlefronts, the Greco-Turkish War, better known as the Turkish War of Independence (1920-1922), and finally serving out the second world war as one of the many standard rifles in the Turkish army.

Length: 49.0"; Weight: 9.2 lbs.; Barrel: 29.13"; Caliber: 7.65 x 53mm, later rechambered for 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Turkish crescent and star, manufacturer's markings, arsenal, and date on the receiver ring. Turkish numbering.

TURKISH MODEL 1905 CARBINE: From 1903 to 1906, Waffenfabrik Mauser, Oberndorf, produced the Model 1905 Carbine



Turkish troops charging from trenches at Gallipolis. It appears that they are armed with Model 1903 Rifles.



The receiver ring with Turkish markings and "Toughra" on the Model 1905 Carbine. (Noel P. Schott collection)



Full-length view of the Turkish Model 1905 Carbine. Note how the wrist of the stock has been very artfully wrapped with wire to reinforce a presumed crack or break. (Noel P. Schott collection)



Full-length view of the Turkish Model 1905 Carbine, shown with a variant stock. (Robert Jensen collection)



*Full-length view of the Turkish Mauser Model 1905 Carbine, SN 5580, 7.65mm. Note the special dual caliber rear sight system, patented by Paul Mauser. (Private collection of Robert I. Landies)* 



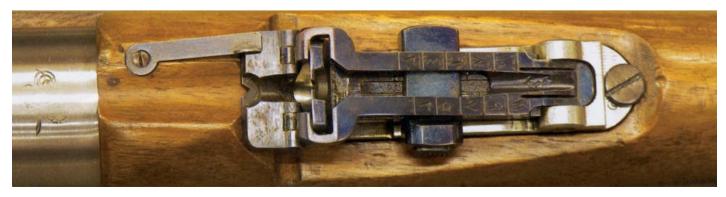
Receiver ring with legends on the Turkish Mauser Model 1905 7.65mm carbine. (Private collection of Robert I. Landies)



Top view of the Turkish Mauser Model 1905 Carbine SN 5580 7.65mm. Note the fluid lines of this rare weapon. (Private collection of Robert I. Landies)



Close-up top view of the Turkish Mauser Model 1905 Carbine SN 5580 7.65mm. Note Turkish legends on receiver ring. (Private collection of Robert I. Landies)



Close-up of the Turkish Model 1905 Carbine's special dual caliber rear sight system patented by Paul Mauser. (Private collection of Robert I. Landies)

(almost a short rifle!) for the Turkish cavalry and artillery. The total quantity manufactured is unknown, though estimates range in the area of twenty thousand. These weapons are rarely encountered today.

The carbine is fitted with a full-length pistol grip stock, with an upper hand guard extending from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel on



Close-up view of the action of the Czech Model 98/22 Rifle as used by Turkey. Note the Turkish markings on bolt knob, base of the bolt handle, and top of the bolt sleeve.



*Full view of the action of the Czech Model 98/22 Rifle as used by Turkey. Note the arched Czech receiver ring marking.* 



Close-up view of the left side of the receiver of the Czech Model 98/22 Rifle in Turkish service, showing Czech proof marks, as well as the rifle serial number.





Turkish numerals on the rear sight of the Czech Model 98/22 Rifle in Turkish service.

Rear sight leaf with Arabic numerals on the Czech Model 98/22 Rifle used by Turkey.



Full-length view of the Czech Model 98/22 Rifle as used by Turkey.



Full-length view of another Czech Model 98/22 Rifle used by Turkey, but with all markings in Czechoslovakian.

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the bottom, and there is another on the bottom of the buttstock. There is a simple nose cap with sight protectors, and no provision for the attachment of a bayonet.

Length: 41.40"; Weight: 8.26 lbs.; Barrel: 21.65"; Caliber: 7.65 x 53mm, later rechambered to 7.92 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight

graduated to 1600 meters. **Remarks:** Turkish "Toughra" and markings on the receiver ring.

**TURKISH MODEL 98/22 RIFLE:** Following the Turkish War of Independence (1920-1922), Turkey rearmed with Czechoslovakian Model 98/22 Rifles produced by Brno. These rifles can be found with either Turkish markings in addition to the Czech receiver markings, or with only the original Czech markings. All specific data on this rifle may be found in the section on Czechoslovakia.



Beginning in the 1920s, Turkey commenced rebuilding its stock of Mauser rifles purchased during the Ottoman era, as well as rifles captured during WWI. By the mid 1930s the re-building program was in full swing. The primary thrust of the program was to convert all Mauser rifles to 7.92mm and to rebuild and re-stock worn rifles. The program lasted into the mid 1950s, with work being done primarily in the Ankara area. The rifle shown here was originally a 7.65mm Model 1890 Ottoman Turkish Rifle. It was re-built at the Military Rifle factory (AFSA) in Ankara in 1938. The letters "TC" stand for the Turkish words which translate as "Republic of Turkey." The text surrounds the Turkish star and crescent emblem of the modern Turkish state. The same image appears on the crest of the M1903 rifles produced for the Turkish Customs Administration just before WWI. (John Wall collection)



The buttstock of the Ottoman Turkish M1890 as refurbished in 1938. Note the use of a pistol-grip stock with the round bolt dismount tube. (John Wall collection)



The crest of an Ottoman Turkish Model 1890 Mauser rifle refurbished and converted to 7.92mm in1938 at Ankara. (John Wall collection)



The rear sight of re-built rear sight leaf of this Ottoman Turkish M1890 appears to have its range numbers and marking line stamped or cut by hand and visually estimated. Note that the 50 meter mark at each setting is well off center. Note also the presence of the rifle's full serial number at the base of the sight. (John Wall collection)



The M1890 rifle, as well as many other Mauser models converted to 7.92mm at Ankara, has a totally new serial numbering system consisting of numerals only, and up to five digits. The location of the stamping is also new. As seen here, the full number was typically stamped, apparently by hand, across the receiver bridge. The bolt root was then filed flatter to receive a stamping consisting of the last three digits of the serial number. (John Wall collection)



Full-length view of the Turkish Model 38 Short Rifle.



Full-length view of a Turkish Model 38 Short Rifle fitted with an unusual and rarely seen folding bayonet.



*Close-up view of the Turkish markings on the receiver ring of the Turkish Model 38 Short Rifle.* 

**TURKISH MODEL 38 SHORT RIFLE:** In the late 1930s, in order to standardize in some fashion, the Turks took the many different varieties of weapons in their armories and had many of them arsenal reworked to a more convenient style, namely a short rifle configuration. Many different weapons, such as the G 98, Czech 98/22, Model 1903, and



*Close-up side view of the folding bayonet on the Turkish Model 38 Short Rifle.* 





Receiver markings on the Turkish Model 38 Short Rifle with folding bayonet.

Bottom view of the folding bayonet on the Turkish Model 38 Short Rifle. Note the fluting on the bayonet blade.



A lone Turkish infantryman in a trench before Lule Burgas during the first Balkan war.



Poorly-clad Turkish infantrymen in a shallow trench in front of Adrianople during the first Balkan war.

## URUGUAY

Uruguay, the smallest of the original independent states of South America, lies between Argentina to the west and Brazil to the north and northeast. From the late 1600s, there was continuous contention between the Spaniards moving to the east and the Brazilians pushing southward from Brazil. Eventually coming under the influence of the Argentinians, Uruguay proclaimed itself independent of Buenos Aires one year after Argentina separated itself from Spain. In 1811, Uruguay declared itself a republic; this was followed by the invasion of an army of Argentinian nationalists who were eventually driven from the country by the army of Uruguay. In 1815, the revolutionary government of Buenos Aires recognized the independence of Uruguay.

The early years of independence were filled with struggles to preserve that independence from the attempts of both the Brazilians and the Argentinians to wrest it away. Following recognition of the independence of Uruguay by both countries, internal struggles between conservatives and liberals fomented a costly civil war and political upheavals that continued for generations. In 1865, due to the aspirations of the Paraguayan dictator, Solano López, Uruguay found itself allied with Argentina and Brazil against Paraguay in the terribly costly War of the Triple Alliance. The political situation in Uruguay remained extremely unsettled until the presidency of José Battles y Ordonez in 1903. Following a civil war, the country started down the path to what is now modern Uruguay.

Uruguay, while not engaging in a military manner, supported the Allies in both the first and second world wars. With the advent of President Juan Peron to the presidency of Argentina, Uruguay, with the aid of the United States, successfully opposed the expansionist plans of Peron to create a "Greater Argentina" by annexing Uruguay. Due to the polarization of Uruguayan politics in the 1960s and 1970s, urban warfare broke out between the government and the leftist National Liberation Movement (MLN), or the "Tupamaros." Unable to control the violence, the government increasingly relinquished control to the army, which was effectively in control of the country by 1973, dissolving the Congress. After a brutally repressive period that tore at the very soul of the country, the violence was brought under



Turkish-made Mauser muzzle caps/protectors shown from the bottom. (Stewart Lockhart collection)

A pair of Mauser rifle brass muzzle caps/protectors made locally in Turkey and marked in Turkish: "Tufenk fabrikasi Istanbul 1326 sene," which translates into English as "Arms factory Istanbul, 1908 date." (Stewart Lockhart collection; translation from Turkish by Pier Giovanni Merlo)



Turkish-made Mauser muzzle caps/protectors shown from the side. (Stewart Lockhart collection)



control, but at a heavy cost. In 1980, the army held a plebiscite on a new constitution that would have amounted to full military control of the country; this was defeated, and the country continues to undergo the slow transition to civilian rule even at this date.

The Uruguayan army, which numbers approximately twenty-two thousand, was under the influence of French military missions following the first world war. With the advent of the second world war, American military influence replaced that of the French. Uruguay experimented with the Mauser rifle by purchasing an unknown quantity of G 71 Mauser Rifles in the late 1870s and 1880s. These purchases were later followed by the introduction of the Daudetau-Mauser Rifle, a French converted 1871 pattern Mauser rifle. Remington Rolling Block Rifles were also purchased in quantity. In the late 1890s, Uruguay purchased an unknown quantity of Model 1895 Mauser Rifles patterned after the Spanish Model 1893 Rifle.

Prior to the first world war, Uruguay contracted for, and took delivery of, a sizable quantity of Model 1908 Rifles and Short Rifles. These are patterned after the G 98 Rifle, but with modifications for export.

During the 1930s, approximately five thousand FN Model 24 Short Rifles were purchased from Belgium, but it is unknown as to exactly how, or if, these weapons were marked. At about the same time, approximately six thousand VZ 12-33 Model "937" Carbines and Model VZ 37 ("937") Short Rifles were purchased from Czechoslovakia. At the end of World War II, U.S. military equipment had replaced the Mauser rifles on hand, which were put in reserve and eventually sold. U.S. weapons have since been replaced by the FN FAL in 7.62mm.



Full-length view of the Mauser G 71 Rifle as used by Uruguay.



Full-length view of the Uruguayan Model 71/94 French-converted Model 1871 Mauser single shot Rifle to 6.5mm Daudeteau.

**URUGUAYAN MODEL G 71 RIFLE:** In the late 1870s and early 1880s, Uruguay contracted for a shipment of G 71 Rifles from Waffenfabrik Mauser. Indications are that these rifles were only marked with the standard German manufacturer's markings; however the possibility exists that the right side of the buttstock was marked with the "REPUBLICA ORIENTAL de URUGUAY" stamp sometimes used by Uruguayan authorities. All specific data relative to these rifles will be found in the section on Germany.

**URUGUAYAN MODEL 1895 RIFLE:** In the late 1890s, Uruguay purchased an unknown quantity of Model 1895 Rifles in caliber 7 x 57mm from FN. According to specimens observed, there are no markings on the receiver ring, and only manufacturer's markings on the side rail. The right side of the buttstock is stamped with an entwined "ROU" (Republic Oriental de Uruguay) with a property number above. All specific data relative to the Model 1895 Rifle may be found in the section on Chile.

**URUGUAYAN MODEL 1908 RIFLE:** Prior to 1914, Uruguay purchased Model 1908 Rifles and Short Rifles based on the design of the Brazilian Model 1908. The quantities obtained from DWM are unknown. These weapons served the Uruguayan armed forces through the 1940s and into the 1950s.

The rifle is fitted with a pistol grip stock, with the upper hand guard extending from the front of the receiver ring to about one inch beyond the lower barrel band. The lower barrel band has a swivel on the bottom, and there is another on the bottom of the buttstock. The upper band has a parade hook on the bottom, and the nose cap incorporates a German-style "H" bayonet lug. There is a marking disk in the right side of the buttstock.



Left-side view of the Uruguayan Model 71/94 Mauser Rifle, showing the German proofs and the address of "St. Denis, France" where the conversion was done.



Uruguayan stamping under the property number on the buttstock of the Uruguayan FN Model 1895 Rifle.



Full-length view of the Uruguayan FN Model 1895 Rifle.



Full-length view of the Uruguayan Model 1908 Rifle. (Noel P. Schott collection)



Left side of the action of the Uruguayan Model 1908 Rifle, showing the serial number and proofs on the receiver ring and the manufacturer's markings on the side rail. (Noel P. Schott collection)



Top of the receiver ring of the Uruguayan Model 1908 Rifle, showing the Uruguayan crest over the date of manufacture. (Noel P. Schott collection)



Right side of the receiver of the Uruguayan Model 1908 Short Rifle, showing the model designation. (Noel P. Schott collection)



Right side of the receiver ring of the Uruguayan Model 1908 Rifle, showing the model designation. (Noel P. Schott collection)



Overview of the receiver bridge and bolt handle of the Uruguayan Model 1908 Rifle, showing the serial number and proof mark. (Noel P. Schott collection)



The left side of the action of the Uruguayan Model 1908 Short Rifle, showing the proofs and serial number on the side of the receiver and the manufacturer's markings on the left side rail. (Noel P. Schott collection)



Full-length view of the Uruguayan Model 1908 Short Rifle. (Noel P. Schott collection)



Uruguayan crest on the top of the receiver ring of the Uruguayan Model 1908 Short Rifle. (Noel P. Schott collection)

Length: 49.25"; Weight: 10.0 lbs.; Barrel: 28.75"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: Uruguayan crest on top of the receiver ring, over the date of manufacture; model designation on the right side of the receiver ring, with weapon serial number and proofs on the left side of the receiver ring. Manufacturer's markings on the left side rail.

**URUGUAYAN MODEL 1908 SHORT RIFLE:** Purchased at the same time as the Model 1908 Rifle, the Model 1908 Short Rifle is a virtual copy of the Model 1908 Rifle except for size and a turned down bolt handle.

The Model 1908 Short Rifle is fitted with a pistol grip stock, and the upper hand guard extends from the front of the receiver ring to just beyond the lower barrel band. The lower barrel band has a swivel at the bottom, with another at the bottom of the buttstock. The upper barrel band incorporates a parade hook at the bottom rear, and the nose cap has a short, German-style "H" bayonet lug. There is a marking disk inset into the right side of the buttstock.

Length: 41.75"; Weight: 8.2 lbs.; Barrel: 23.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: Uruguayan crest on top of the receiver ring, over the date of manufacture, with the model designation on the right side of the receiver ring, the serial number and proofs on the left side. The manufacturer's markings will be found on the left side rail.

URUGUAYAN FN MODEL 24 SHORT RIFLE: As many countries did after the first world war, Uruguay supplemented its weapons needs



Right side of the buttstock of the Uruguayan Model 1908 Short Rifle, showing the rifle property mark next to the marking disk. (Noel P. Schott collection)

from the mail order list offered by FN. Quantities purchased have not been determined, nor has it been possible to ascertain if, and how, the weapons were marked. All specific data relative to the FN Model 24 Short Rifle can be found under the section on Mexico.

**URUGUAYAN MODEL VZ 37 ("937") SHORT RIFLE**: Just prior to the takeover of Czechoslovakia by Germany, the Uruguayan military establishment ordered both short rifles and carbines from the Czechs. This was in keeping with Uruguayan military planning in attempting to keep abreast of development in weaponry in spite of the small size of the military forces of the country.

The Uruguayan Model VZ 37 Short Rifle is fitted with a pistol grip stock with grasping grooves, with the upper hand guard extending from the front of the receiver ring to the upper barrel band. In the Czech fashion, the lower barrel band is held in place by a transverse screw and is fitted with a side swivel and a swivel located at the bottom of the band; another swivel is located on the left side of the buttstock, with yet another at the bottom. The nose cap incorporates a



*Rifle serial number of the Uruguayan Model VZ 37 ("937") Short Rifle stamped into the bottom of the buttstock behind the lower sling swivel. (Noel P. Schott collection)* 



Full-length view of the FN Model 24 Short Rifle as used by Uruguay. (Cliff Baumann collection)



Full-length view of the Uruguayan Model VZ 37 ("937") Short Rifle. (Noel P. Schott collection)



Left side of the action of the Uruguayan Model VZ 37 ("937") Short Rifle, showing the proof marks and the manufacturer's markings in Czech. (Noel P. Schott collection)

German-style "H" bayonet lug, while the front sight has a detachable sight protector held by a screw.

Length: 43.25"; Weight: 9.9 lbs.; Barrel: 23.25"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 2000 meters. Remarks: The crest of Uruguay is stamped on the top of the receiver ring, surrounded by "R.O.U. EJERCITO NACIONAL," which is over the model designation, over the serial number of the rifle. Proof marks are on the left side of the receiver ring, while the manufacturer's markings in Czech are on the left side rail.

**URUGUAYAN MODEL VZ 37 ("937") CARBINE:** Included with the purchase of weapons from the Czechs was an undetermined number of Model VZ 37 ("937") Carbines, very similar to the Czech VZ 12/33 Short Rifle. The carbine is fitted with a pistol grip stock with grasping grooves, and the upper hand guard extends from the front of the receiver ring to the upper barrel band. The upper band is secured by means of a transverse screw, and the nose cap incorporates a simple German-style "H" bayonet lug. The front sight is fitted with sight protectors. The lower barrel band is spring retained, with a sling slot on the left side and a swivel on the bottom. There is another swivel at the bottom of the buttstock. On the left side of the buttstock is a large carbine ring.



The top of the receiver ring of the Uruguayan Model VZ 37 ("937") Short Rifle, showing the national crest and other markings. (Noel P. Schott collection)



The left side of the action of the Uruguayan Model VZ 37 ("937") Carbine, showing the proof marks and the manufacturer's markings in Czech. (Noel P. Schott collection)



Full-length view of the Uruguayan Model VZ 37 ("937") Carbine. (Noel P. Schott collection)



Property mark stamped into the right side of the buttstock of the Uruguayan Model VZ 37 ("937") Carbine. (Noel P. Schott collection)

Length: 37.875"; Weight: 7.8 lbs.; Barrel: 18.0"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: On the top of the receiver ring is the Uruguayan crest, surrounded by "R.O.U. EJERCITO NACIONAL" over the model designation over the serial number of the weapon. Proofs are found on the left side of the receiver ring, with manufacturer's markings in Czech on the left side rail. A property mark is stamped into the right side of the buttstock.

### VENEZUELA

Permanently settled by the Spanish in 1520, Venezuela was a neglected backwater of the Spanish crown colonies for most of the colonial period. It was subject to the depredations of English pirates who roamed freely through the Caribbean, with Henry Morgan sacking the city of Maracaibo in 1669. This lack of colonial interest by the Spanish helped foster the desire for independence in Venezuelan society.

The battles for independence were particularly destructive for Venezuela; however, by 1821, the Spaniards had been defeated soundly at Carabobo, and independence was won for the region. With Simón Bolívar's liberation of Colombia from Spanish control, Colombia and Venezuela formed the Republic of Gran Colombia, later to be joined by Ecuador. In 1829, Venezuelans declared their independence from Gran Colombia, followed by Ecuador the next year.

Of a total of 800,000 inhabitants, Venezuela lost over 300,000 lives in the Wars of Independence, leaving the country broken and prostrate. For nearly a century, periods of near anarchy alternated with periods of repressive dictatorship. In 1902, Venezuela was blockaded by naval units of Britain, Germany, and Italy when the then president, Cipriano Castro, defaulted on the country's foreign debt. The bloodiest tyrant in South America, Juan Vicente Gomez ruled as president of Venezuela from 1908 to 1935. Nevertheless, while one of the most brutal dictators in the history of Latin America, he managed to begin the exploitation of the country's vast oil resources. This attracted foreign investment and laid the groundwork for Venezuela to become a modern state.



Uruguayan crest and markings on the top of the receiver of the Uruguayan Model VZ 37 ("937") Carbine. (Noel P. Schott collection)

Following the reign of Gomez, there have been many progressive, if not especially democratic leaders of the country, with free elections finally held in 1941. Leadership of the country has alternated between the Christian Democrats and Democratic Action, punctuated by several military coups, as well as attempted overthrows of the government. The present leader of Venezuela, Rafael Caldera, has been faced with severe economic problems, which have led to the suspension of constitutional guarantees, and the imposition of price and currency controls, thus sending Venezuela into another period of unsettled crisis.

The Venezuelan army became a more effective, efficient power base with the initial engagement of a German military mission, followed by a Chilean military mission, both of which took place during the early 1900s. When Gomez assumed the presidency, the army was a relatively proficient force of nearly six thousand men, armed with German G 71/84 Rifles. Under Gomez, training and improvement in the quality of equipment continued, with approximately six thousand Mauser Model 1910 Rifles being acquired from Germany. French military missions were active in Venezuela following World War I, remaining until 1923. In the early 1930s, indeterminate quantities of Czech VZ 24 Short Rifles were acquired from Czechoslovakia, while numbers of the FN Model 24/30 Short Rifle and Carbine were purchased from Belgium. World War II saw the start of U.S. influence with the Venezuelan army, with many American weapons acquired under lend-lease. The Mauser rifle was finally replaced by the Belgian SAFN M1949 in 7 x 57mm, which was, in turn, replaced by the Belgian FN FAL in 7.62mm. The present Venezuelan army stands at approximately twenty-five thousand plus men.

**GERMAN MODEL 71/84 RIFLE:** The German Mauser Model 71/84 Rifle was the standard German army issue weapon. Declared obsolete, it is virtually certain that the 27,000 pieces acquired by Venezuela were from German army surplus stores, and were not marked in any manner for the Venezuelans. All specific data on this rifle can be found in the section on Germany.



Full-length view of the G 71/84 Rifle as used by Venezuela.



*Chamber markings in German on the Model 1910 Rifle used by Venezuela.* 



Model designation on the left side rail of the Model 1910 Rifle used by Venezuela.



Venezuelan Military Academy cadets armed with Model 1910 Rifles during a passing out parade. (Venezuelan Army Review)



Full-length view of the Model 1910 Rifle as used by Venezuela.



Full-length view of the Czech Model VZ 24 Short Rifle used by Venezuela.



Full-length view of the Venezuelan FN Model 24/30 Short Rifle.

**VENEZUELAN MODEL 1910 RIFLE:** Prior to 1914, Venezuela purchased six thousand Model 1910 Mauser Rifles from Waffenfabrik Mauser. This rifle is the typical export model similar to the rifles used by Costa Rica and Serbia. Detailed data on this rifle can be found in the section on Serbia.

**CZECH VZ 24 SHORT RIFLE USED BY VENEZUELA:** During the 1930s, Venezuela augmented its supply of rifles with purchases of the Model VZ 24 Short Rifle in caliber 7 x 57mm from Czechoslovakia. This is the standard model as used by the Czech armed forces, and complete data on this short rifle can be found under the section on Czechoslovakia.

**VENEZUELAN FN MODEL 24/30 SHORT RIFLE:** The Venezuelan authorities negotiated with FN during the mid-1930s, and eventually purchased an initial order of 16,500 Short Rifles and Carbines during 1934-1935. Smaller orders to FN continued up to the second world war, with total quantities purchased unknown.

The Venezuelan FN Model 24/30 Short Rifle is fitted with a pistol grip stock without grasping grooves, and the upper hand guard extends from the front of the receiver ring to approximately one inch beyond the lower barrel band. There is a swivel on the bottom of the spring-retained lower barrel band, with another on the bottom of the buttstock. The nose cap incorporates the typical German-style "H" bayonet lug. These are sturdy, dependable weapons, once common to the U.S. surplus market, but becoming increasingly hard to find as the years go by—especially in decent condition!

**Length:** 43.20"; **Weight:** 9.0 lbs.; **Barrel:** 23.19"; **Caliber:** 7 x 57mm; **Rifling:** 4-groove, r/hand; **Operation:** Turnbolt action; **Feed:** 5-round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** The Venezuelan national crest on top of the receiver ring, with the manufacturer's markings stamped into the left side rail.



Manufacturer's markings stamped into the left side rail of the Venezuelan FN Model 24/30 Short Rifle.

**VENEZUELAN FN MODEL 24/30 CARBINE:** The Venezuelan FN Model 24/30 Carbine is a compact, handy weapon. Many of these were used by the Venezuelan rural police forces and did not receive the best of attention. The carbine is fitted with a pistol grip stock without grasping grooves and an upper hand guard that extends from the front of the receiver ring to just beyond the lower barrel band. There is a swivel on the bottom of the lower barrel band with a sling slot on the left hand side, a swivel on the bottom of the buttstock, and another swivel on the left side of the stock at the pistol grip. The lower and upper barrel bands are retained by a single spring, with the nose cap incorporating a German-style "H" bayonet lug. There is a recoil lug at the chamber and another at the pistol grip.



The Venezuelan national crest on the receiver ring of the Venezuelan FN Model 24/30 Short Rifle.



Side rail markings on the Venezuelan FN Model 24/30 Short Rifle. (Lothar Frank collection)



Full-length view of the Venezuelan FN Model 24/30 Short Rifle, but with slight variations. Note that the wrist of the stock is somewhat slimmer, with a less "chunky" look to it. Also note the location of the lower sling swivel in relation to the one shown previously. It is much closer to the wrist than normal. (Lothar Frank collection)



Full-length view of the Venezuelan FN Model 24/30 Carbine.



Left side of the action of the Venezuelan FN Model 24/30 Carbine, showing the markings of the Venezuelan army on the left side of the receiver, with the manufacturer's markings on the left side rail.



*Left side view of the integral dovetailed scope base on the Experimental FN 24/30 Sniper Rifle. (Rock Island Auction Co.)* 



Experimental Venezuelan FN M24/30 Sniper Rifle, 7x57mm. This is a standard M24/30 Short Rifle except for an integral dovetailed scope base, located on the left side of the receiver, and extending from the receiver ring along the sidewall. Trigger and trigger guard have been modified, and now have a trigger stop and set-trigger screw for a crisp trigger pull without overtravel. The front sight base is positioned directly on the end of muzzle to increase the sight radius. (Rock Island Auction Co.)



Crest on the receiver of the Experimental FN 24/30 Sniper Rifle. (Rock Island Auction Co.)



Full-length view of the Venezuelan FN Model 24/30 Target Rifle.



Venezuelan national crest on the receiver ring of the Venezuelan FN Model 24/30 Target Rifle.

Length: 37.50"; Weight: 8.50 lbs.; Barrel: 17.63"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, staggered column, flush, box magazine; Sights: Tangent leaf rear sight graduated to 1400 meters. Remarks: National crest of Venezuela on top of the receiver ring, with "FUERZAS ARMADAS de VENEZUELA" (Armed Forces of Venezuela) on the left side of the receiver ring and the manufacturer's markings stamped into the left side rail.

**VENEZUELAN FN MODEL 24/30 TARGET RIFLE:** A small number of specially-chosen Venezuelan FN Model 24/30 Short Rifles were arsenal converted to target rifles for training for the Olympics. The main difference is a barrel approximately six inches longer than usual, while the balance of the configuration remains the same.

## YEMEN

Known as Sheba or Saba in ancient times, Yemen is strategically located on the southwestern coast of the Arabian peninsula, right by the southern end of the Red Sea. Due to its location, Yemen has for centuries dominated the trade routes between India and Africa and the Middle East. Aden has been the most important port in Yemen for countless generations, and has been the central point of dissension between the Yemenis, the Portuguese, the Ottoman Turks, and the British. Aden became a British crown colony in 1839.

Under the control of the Ottoman Empire for several hundred years from the mid-sixteenth century, Yemen became an independent kingdom in 1918. The country's independence was threatened by a short-lived invasion from Saudi Arabia in 1934, and again in the 1954 dispute with Great Britain over the status of Aden. A struggle for independence in Aden was the cause of a civil war between two



Venezuelan army markings on the left side of the receiver, and the manufacturer's markings on the left side rail of the Venezuelan FN Model 24/30 Target Rifle.



Venezuelan national crest on the receiver ring of the Venezuelan FN Model 24/30 Target Rifle.

opposing factions, with the British withdrawing in 1967, and the country of South Yemen coming into being the same year. The rest of the country became North Yemen. Both countries underwent political upheaval and instability, with continuous incursions against one another. In 1990, the countries merged once again into the consolidated country of Yemen; this has not brought about peace, as full scale civil war commenced once again in 1994.

The military background of Yemen is indistinct, with little in the way of a national army in the early days before the second world War. It is known that the government purchased a substantial number of Model 30 Short Rifles from FN during the middle to late 1930s. It is not known if these purchases were marked in any manner, but they are believed to have been in caliber 7.92 x 57mm.

The Model 30 Short Rifle is the standard FN export model short rifle, and full data can be found under the section on Greece.



Full-length view of the FN Model 30 Short Rifle as used by Yemen.

# Mauser Curiosa

As every collector knows, there are times when we will encounter a particular weapon that cannot be assigned a comfortable niche perhaps an experimental or a trial piece, but one that has impacted upon development, or instigated the turn to a different direction, and, thus, is still a remote relative of the Mauser family. While there are undoubtedly many other specimens out there that deserve inclusion in this section, included here are but a few of the more interesting weapons and accessories that have been uncovered while compiling this book.

A very interesting attempt to increase the cartridge capacity of single-shot rifles is shown here in this experimental magazine that was incorporated into a Dreyse-made G 71 Rifle of the period. This magazine is hinged on the left side at the top, so that when released, it swings down in a quarter circle to the left, which allows it to be filled from the right side. While never adopted, this is an interesting attempt to solve the problem of increased cartridge capacity.

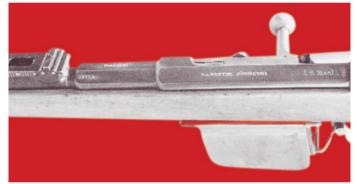
A seldom-encountered piece of history is this G 71/84 Cutaway Rifle, which differs in a number of details from the final production models. This specimen probably dates from 1884, since the magazine



Close-up view of the right side of the Dreyse-made Experimental Magazine Rifle, with the magazine in the open position, ready for loading. The follower appears to be in a reversed position.



Right side, close-up view of the magazine and action of the Dreyse-made Experimental Magazine Rifle. Note the modifications made to allow for extraction and ejection of the spent cartridge. It also appears that the lower sling swivel would be useless in its present location.



The action of the Dreyse-made Experimental Magazine Rifle from the left side, showing the markings to good effect.



Full-length view of the Dreyse-made G 71 Experimental Rifle with magazine.



Left side view of barreled receiver cut-away M1871 Rifle, the barrel marked "AMBERG." (R. K. Smith collection)



*Top side view of the M1871 Rifle barreled receiver cut-away. (R. K. Smith collection)* 



Top view of M1871 Rifle barreled receiver cut-away. (R. K. Smith collection)



Full-length view of the G 71/84 Cutaway Rifle, showing the visual aid cuts down the length of the fore stock.



Left full-length view of the G 71/84 Cutaway Rifle, showing the cuts in the action area of the rifle.



Top view of the Styer-made G 71/84 Short Rifle with the action open, showing the magazine ramp in the "up" position.



*Close-up view of the left side of the action, allowing the internal working of the cutoff to be easily seen.* 



Top view of the Styer-made G 71/84 Short Rifle with the action closed.



Full-length view of the Styer-made G 71/84 Short Rifle.



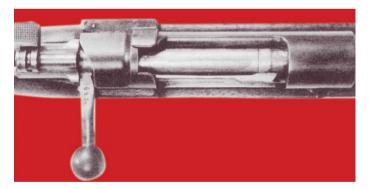
Full-length view of special test Model #3 1892 Mauser Rifle. Note that the rear sling swivel is missing from this rifle. (Springfield Armory Museum)



Top view of the action of the special test Model #3 1892 Mauser Rifle. (Springfield Armory Museum)

cutoff and ejector match the patents of that period. The cutoff on the production G 71/84 differs from the one on this model: On the production model, the magazine holds eight cartridges, and the magazine tube is flush with the end of the stock; the cutaway model illustrated has a capacity of nine cartridges, and the magazine tube extends beyond the end of the stock by almost a full inch. Interestingly, the barrel of a G 71 Rifle was used in assembling this cutaway.

The following piece is a Steyr-made G 71/84 Short Rifle; however, the magazine lifting arm has been permanently adjusted to remain in



Top view of the action of the special test Model #5 1892 Mauser Rifle. Note the serial number "641" on the base of the bolt handle. (Springfield Armory Museum)



Close-up view of the right side of the special test Model #3 1892 Mauser Rifle, showing the cutoff lever pivoted upwards. (Springfield Armory Museum)

the "up" position. The magazine cutoff has no effect upon the action whatsoever. Perhaps a training weapon?

Of compelling interest are the two special test model Mauser rifles in U.S. caliber 30-40 Krag submitted in the U.S. magazine rifle test of 1892. Model #3 had the magazine cutoff, the long non-rotary



Close-up view of the right side of the special test Model #5 1892 Mauser Rifle, showing the pivoted cutoff lever in the "up" position. Note the difference in the detents of the cutoff levers between the two models. (Springfield Armory Museum)



Full-length view of the special test Model #5 1892 Mauser Rifle. (Springfield Armory Museum)



Ammunition test barreled action; action is a 98k with receiver code "S/42/1937." Serial number on barrel and receiver is #8. Barrel is chambered for 8x57mm. Barrel is 51-3/8" long, 1-3/16" at the receiver, with no German proofs on the receiver. (R. K. Smith collection)



Receiver markings on Ammunition Test barreled action, showing "S/42/1937." (R. K. Smith collection)

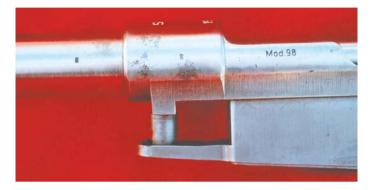
extractor, and the guide rib in the left wall of the receiver. The cutoff is a lever pivoted to the right forward portion of the trigger guard; when pivoted downward, the magazine is depressed enough that the bolt does not engage the top cartridge.

Model #5 incorporates the magazine cutoff and all of the other features; however, the cutoff on this model consists of an inner vertically moveable box magazine within a fixed outer box magazine. Pivoting the cutoff lever downward lowers the inner box magazine, thus preventing the bolt from picking up the top cartridge.

Model #3 experienced some difficulties in the test, while Model #5 did exceptionally well, calling for further testing by the test board. In the end, the Krag-Jorgensen rifle was chosen.

The rifles are extremely close in appearance to the Belgian Model 1889 Rifle and the Spanish Model 1891 Rifle. Each rifle is fitted with a straight-wristed stock, with an extremely short upper hand guard that extends approximately six inches from the front of the base of the rear sight. There is a single lower barrel band with a swivel on the bottom, and there is another swivel on the bottom of the buttstock. A simple nose cap with bayonet lug on the bottom is fitted to the forend.

Length: #3, 48.50"; #5, 48.25"; Weight: 8.80 lbs.; Barrel: 29.25"; Caliber: Experimental .30-40 Krag; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-round, fixed vertical box



View of left sidewall showing "Mod. 98" on the Ammunition Test barreled action. (R. K. Smith collection)

magazine, with cutoff; **Sights:** V-notch adjustable rear sight graduated to 2000 meters. **Remarks:** With the exception of the serial number "641" on Model #5, neither rifle is marked in any other fashion.

A very interesting weapon is this "salesman's sample" Model 1904 Export Rifle that incorporates features presumably ordered from stock. The rifle is fitted with a pistol grip stock without grasping grooves, with the upper hand guard extending from the front of the receiver ring to the very thin lower barrel band. Note the simple, short, upper band with parade hook and the "T" shaped bayonet lug.

Length: 49.0"; Weight: 8.75 lbs.; Barrel: 28.50"; Caliber: 7 x 57mm; Rifling: 4-groove, r/hand; Operation: Turnbolt action; Feed: 5-



The muzzle and forend of the German Model 1904 "Salesman's Sample" Export Rifle, showing the short, simple upper band and the "T" shaped bayonet lug.



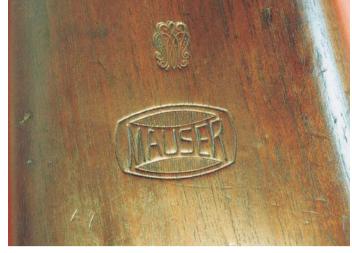
Full-length view of the German Model 1904 "Salesman's Sample" Export Rifle.



Top view of the action of the German Model 1904 "Salesman's Sample" Export Rifle, showing the caliber and manufacturer's markings on top of the receiver ring.

round, staggered column, flush, box magazine; **Sights:** Tangent leaf rear sight graduated to 2000 meters. **Remarks:** This special model is marked on top of the receiver ring with the caliber, and the manufacturer's markings immediately below. There are no other markings, other than proofs and Mauser Banner on the stock.

Developed as a means of firing a rifle from a trench without being exposed to return fire, the device below was used, to some extent, by both sides. This piece is a rare, German-developed firing device that uses a periscope as a means of aiming the rifle, while a remote firing attachment utilized a wire running from the auxiliary trigger to the trigger of the rifle. One would assume that, while not particularly accurate for generally letting off a few rounds in the direction of the enemy, zeroed in on a particular area of a trench—such as an observation slit, look-out point, or the like—it could nevertheless be deadly.



Proof and Mauser Banner logo stamped into the stock of the German Model 1904 "Salesman's Sample" Export Rifle.

Undoubtedly one of the most unusual uses of a Mauser rifle is this Torpedo Boat 5cm cannon subcaliber device developed around the action of a J 71 rifle. This was used for training practice and to conserve the larger caliber ammunition. This device is fitted into the barrel of the boat's cannon by means of the ring fittings on the front and rear of the barrel, as well as by the seating of the subcaliber device into the action of the cannon.



The side rail of the "Mystery" M1908-style Long Rifle is stamped "Deutsche Waffen-und Munitionsfabriken Berlin." (John Wall collection)



Right side view of an experimental Model rifle. This Mauser Model 1892-93 Experimental Rifle was manufactured in an unknown caliber 6.5mm, and has no markings whatsoever other than the serial number. The rifle has the standard fixed magazine, without a follower stop, and the action cocks on closing. The sights are adjustable from 500 to 2000 meters. The rifle weighs 8.11 lbs., with a barrel length of 29.125" and an overall length of 49.875". (John Wall collection)



Left side view of the Model 1892-93 Experimental Rifle, with the bolt in the open position, and the rear sight extended. (John Wall collection)

The markings on the rear sight ramp of a "Mystery Mauser" Rifle of the Model 1908-type, but made for the German Army's 7.9mm service cartridge. The receiver and bolt root of this rifle have been stamped with a hexagram or Star of David. The meaning of this mark and the intended customer for these rifles are unknown. (John Wall collection)



The hexagram/Star of Davidstyle mark on the bolt root of a Model 1908-style "Mystery Mauser." Serial number 4629 appears on the receiver, bolt, barrel and buttstock of this matching rifle. (John Wall collection)





Close-up view of the left sidewall markings on the Developmental K98k for the Kurz 33 cartridge. Note the markings on the receiver ring. (R. K. Smith collection)



Markings on the right side of the buttstock of the Kurz 33 Developmental Carbine. Note the highly unusual markings. (R. K. Smith collection)

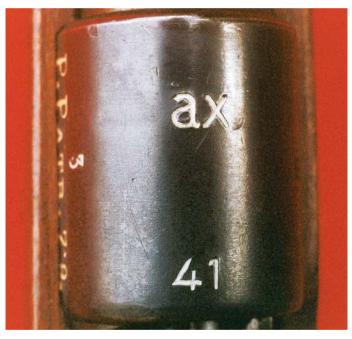
The receiver ring of the "Mystery" M1908-style Mauser Long Rifle, and its poorly struck "Star of David"-style hexagram. This mark only appears on the bolt root and top center of the receiver ring. It is approximately 3/8-inch, or 8mm to 9mm, wide. (John Wall collection)

The Arabic language stock cartouche appearing on the right sides of the buttstocks of Model 1908-style "Mystery Mauser" Long Rifles. This mark is 3/4-inch, or approximately 17mm, across. The Arabic word reads as "makhazin" which in English means "magazine" or





"arms storage room," or perhaps "arsenal." Three M1908-style rifles with the "Star of David" hexagram and the "makhazin" stock cartouche have been observed. (John Wall collection)



Close-up of receiver ring markings on Developmental Carbine, "AX/41." (R. K. Smith collection)



This rifle, marked #3, was one of five rifles used to develop the Kurz 33 cartridge. Apparently, five rifles were made, each of a different case length, which were 33mm through 52mm. This particular specimen is 8mm x 48mm, for which the barrel is chambered. It is the same length as the MP43. Three rifles were lost in a warehouse fire in California, with #1 still in California. (R. K. Smith collection)



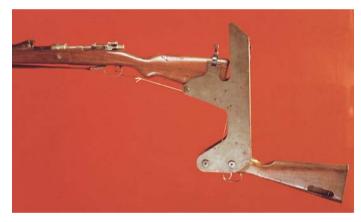
Generic M1904 Model T Salesman's Carbine.



Generic M1904 Model SE Salesman's Carbine.



The right side of the German Trench Rifle-firing Device as it would look when ready for use.



The left side of the German Trench Rifle-firing Device.



Left side view of the German Trench Rifle-firing Device in the folded, carrying position. Note how the rifle clamping attachment is housed in the cutout on the left side of the auxiliary stock.



The German Torpedo Boat 5cm cannon subcaliber device.



Right side view of the German Trench Rifle-firing Device in its folded, carrying position.



Left side view of the German Torpedo Boat 5cm subcaliber device.



Left: The eyepiece of the periscopic viewfinder of the German Trench Riflefiring Device.



Right: The storage trap in the butt of the auxiliary stock of the German Trench Riflefiring Device.



*Top view of the action and markings of the German Torpedo Boat 5cm cannon subcaliber firing device.* 



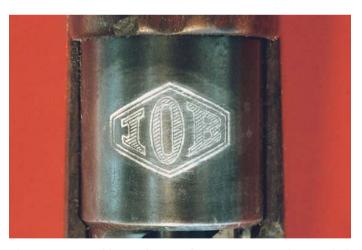
Top view of the action of the Hybrid Short Rifle built on the action of the Model 1917 Enfield.



*Close-up of the right side of the action and its markings on the German Torpedo Boat 5cm cannon subcaliber firing device.* 



Stampings on the front fitting of the German Torpedo Boat 5cm cannon subcaliber firing device.



The receiver ring of the Dutch East Indies private security force marked FN Model 1930 Carbine.



Full-length view of the Hybrid Short Rifle built on a Model 1917 Enfield action with a Steyr barrel.

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The unusual piece at the bottom of page 388 seems to have been assembled with a little bit of everything! This is basically a Model 1917 Enfield action, with a Steyr barrel, while the stock could be any one of a number of earlier-style German stocks. The weapon measures 40.75 inches overall, with a 20.0-inch long barrel, weighing in at 7.50 lbs.

A most unusual item is the below post-WW I shortened, cutaway training 98a carbine made for police use. As a training aid for new recruits, cutaway weapons that show the means of assembly and firing are invaluable.

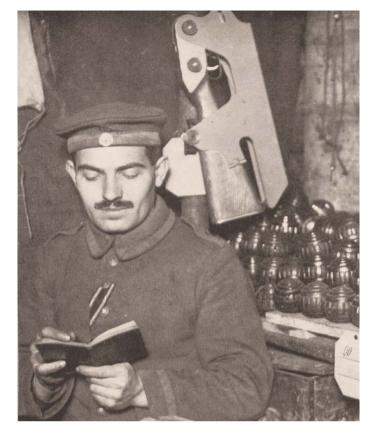
This FN Model 30 Short Rifle is considered unusual only in respect to the markings on top of the receiver ring—crossed cannons on a furled anchor, which would lead one to suspect that the weapon was issued and marked to a naval artillery unit—but what unit and what country?

One of the more unusual FN Model 30 Carbines uncovered is the one which has the "IOB" markings within an almost diamond outline. The marking 'I.O.B.' stands for "Indische Ondernemers Bond," or in English, "Indies Business Union," a planter's organization. About 2,700 of these carbines were procured after World War II, between the years 1946 to 1950, and were modified at the State Arsenal for the .308 cartridge, to be used in the then Netherlands East Indies. These carbines were fitted with a new and quite rare bayonet.

Developed for training recruits in the pre-WW II revived German Army, this cutaway 98k Carbine is built on a WW I double-dated action.

Not often seen is the "granddaddy" of cleaning kits, in this case, the RG-34 Lg. Anti-Tank Rifle cleaning kit. This one was originally for the Pz.B 35 (p) anti-tank rifle, but later was used for the Pz B 38 and 39, which became the Gr. B 41 (Grenade Rifle). Very few of these survived the war, so it is most unusual to find one in this condition.

This concludes my efforts to add to and consolidate information pertinent to the world of Mauser military rifles. Undoubtedly, as this book comes off the press, there will be other collectors out there who will have unearthed yet another example of a previously undiscovered, or forgotten, foreign contract Mauser rifle, or a bit of new lore concerning a German issue weapon. One of the most fascinating aspects of collecting is trying to determine where, and in what battles, a particular weapon might have been used. You are holding a piece of history in your hands and can only plaintively wish



World War I photo showing the trench device for firing the Gew 98 from within the trench using a periscope sighting device. Note the piles of grenades in the background.

that it could talk! That's what makes collecting in any field so enjoyable...you can never own— or even see—them all, but you continue the search and keep on hoping!



Left side view of the rare German Ammunition Test Rifle. (Rock Island Auction Co.)



Right side view of rare German Mauser K98k Ammunition Test Rifle, with high-turret scope bases and a special heavy barrel. Note the removable iron sights clamped to the underside of the barrel. (Rock Island Auction Co.)



Full-length view of the German post-WW I Police 98a Cutaway Training Carbine.



Left side view of the German post-WW I Police 98a Cutaway Training Carbine.



Top view of the German post-WW I Police 98a Cutaway Training Carbine.



Full-length view of the Dutch East Indies private security force marked FN Model 30 Carbine.



Full-length view of the German Cutaway 98k Carbine.

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Top view of the German Cutaway 98k Carbine, showing the illustrative cuts made from the muzzle to the receiver bridge.



Bottom view of the German Cutaway 98k Carbine, further showing the visual aid cuts to great effect.



German K98k Mauser Cutaway Rifle. Right side view of a German Army training aide. (Rock Island Auction Co.)



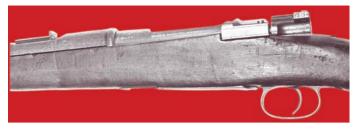
Left side view of German K98k Mauser Cutaway Rifle. (Rock Island Auction Co.)



Full-length view of the left side of the DWM Model 1895 Carbine in caliber 7.65mm. (John Wall collection)



Full-length view of the left side of the DWM Model 1895 Carbine in caliber 7.65mm. (John Wall collection)



*Full-length view of the left side of the DWM Model 1895 Carbine in caliber 7.65mm. (John Wall collection)* 



Top view of a DWM-made Model 1895 Carbine in 7.65mm as produced for some unknown Arabic nation. (John Wall collection)



Close-up markings discovered recently on the receiver of what appears to be a normal Model 1895 DWM Mauser Long Rifle. This rifle, however, was made with a blank, unmarked receiver, without any national markings or stock cartouches. The serial number in unusual in that it has a German fraktur letter "B" as its prefix. Even more notable is the small circular icon on the bolt knob, which under extreme magnification appears to be a word written in Arabic script. Another notable characteristic of this rifle is that it is a Model 1895 Mauser with the third locking surface behind the receiver bridge and a round bolt face. Until now, the only rifles known with these features were the Model 1895 Chilean and the Model 1899 Serbian rifles.



Highly unusual Gew 98 Training Rifle, showing the right-hand side view of the completely cast, with the exception of the stock, Gew 98 training rifle, with cleaning rod and issue sling. All measurements are the same as a fully operable rifle. (Jan Gardiner collection)



Close-up view of the simulated action of the Gew 98 Training Rifle. Note the simulated Lange-Vizier rear sight. (Jan Gardiner collection)



This is a winter trigger that clips on the trigger guard of any Mauser rifle to allow the use of a gloved hand to shoot the rifle. (R. K. Smith collection)



Pre-war .22 LR caliber conversion kit, manufactured by ERMA and used as a training tool with Mauser rifles. Marked ERMA, Erfurt, 1937. (Rock Island Auction Co.)



WWII German soldier wearing a belt with Czech ammunition pouches and carrying a Czech VZ 24 over his right shoulder.



The double-dated WW I G 98 receiver on the German Cutaway 98k Carbine.



*The carrying case with all components inside. (Henry Wichmann collection)* 



Mauser Banner Cleaning Rod. Made of .323 diameter brass, the overall length of the rod is 45.25 inches, while the rod length is 36.25"; the wooden handle is 9", and the saw tip blade is 4". The wood handle is long enough to allow use of both hands, and the spacer could be used to adjust for different length barrels. It is the owner's thought that this is a post-WWI item when Mauser was making everything except guns. The Mauser Banner Cleaning Rod shown here has a large wood handle with adjustable keeper. Note Mauser Banner in upper corner of handle. (R. K. Smith collection)



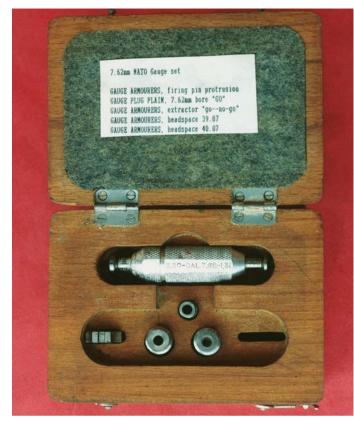
*Close-up of the Mauser Banner marking on the cleaning rod; note the metal end cap! (R. K. Smith collection)* 



Left: The carrying case and all of its components: from left to right, a handful of "tow" that is used as a cleaning patch; the beaded chain pull-through; oiler; carrying case; barrel brush; chamber tool; and lastly, the chamber brush. (Henry Wichmann collection)



Shot of the saw-tooth cut on the brass tip of the cleaning rod; note that the end of the rod was squared and then cut. The saw-tooth pattern is the same as the WWI sawtooth bayonet cuts. (R. K. Smith collection)



Israeli Armourer's Gauge Set, showing the open box with its tools. (R. K. Smith collection)



Mauser rifle wood cleaning rod guide to allow the more efficient use of a cleaning rod. Guide is notched to allow its use from either end. (R. K. Smith collection)



*Close-up view of the handle included in the bore reaming kit, with proof, GEW. 98 and 110E/RI. (R. K. Smith collection)* 



The reamer tip with pilot "7.89" in place. The black part to the right locks into locking lugs in the rifle receiver. (R. K. Smith collection)



This Israeli Armourer's Gauge Set is in a wooden box, 4.75" long x 3.25" wide x 2.75" high; while the box has room for six items, the index list on the felt pad only has five items listed. Front view of the Israeli Armourer's Gauge Set. (R. K. Smith collection)



Top view of the Israeli Armourer's Gauge Set. (R. K. Smith collection)



Full view of a German "J" to "S" Bore Reaming Kit; the box contains four pilots of different bore diameters. From left to right, 7.89, 7.90, 7.91 and 7.93. (R. K. Smith collection)



Left side view of Swedish M1896 barreled receiver cut-away, "CARL GUSTAFS" over 1901 crest. Despite age, this training aid is in excellent condition. (R. K. Smith collection)



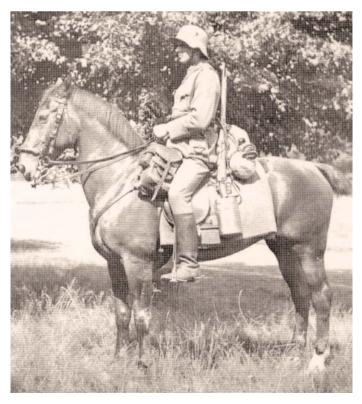
Right side, bolt closed view of the Swedish M1896 barreled receiver cutaway rifle. (R. K. Smith collection)



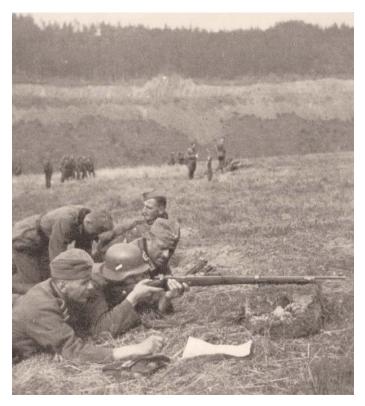
Left side, top view of Swedish M1896 barreled receiver cut-away. (R. K. Smith collection)



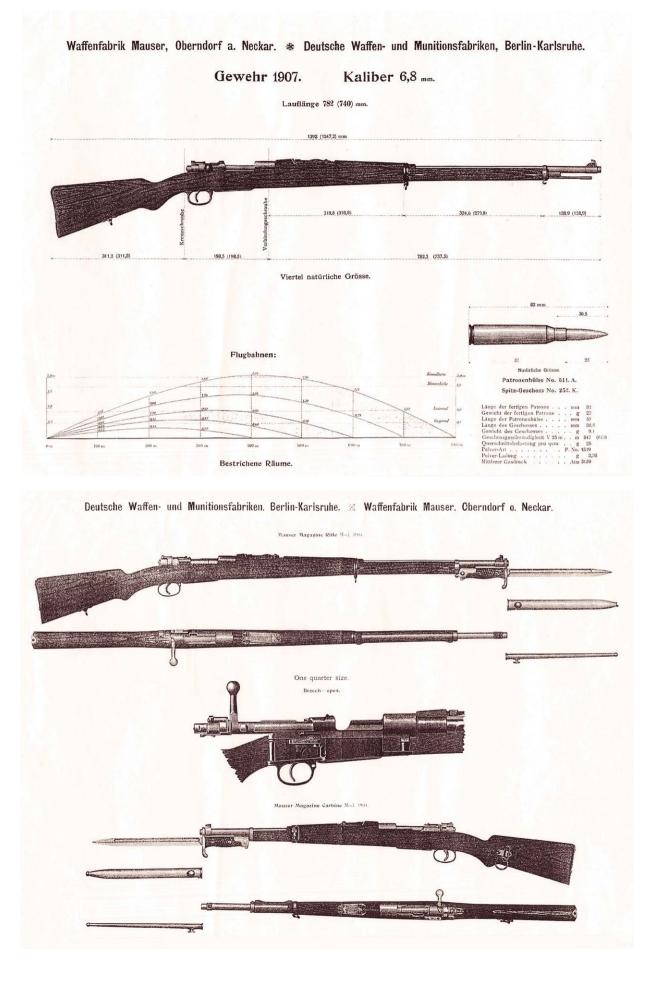
*Top view, bolt closed of the Swedish M1896 barreled receiver cut-away rifle. (R. K. Smith collection)* 

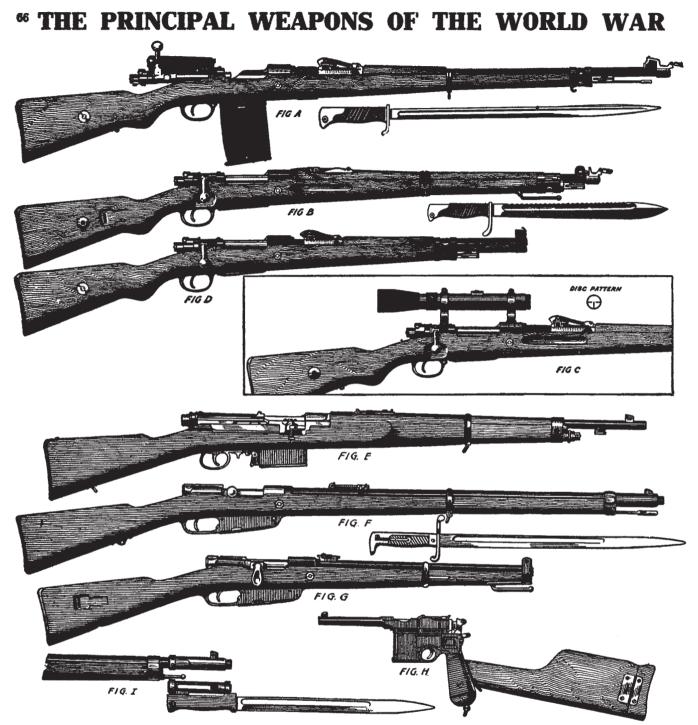


Reichswehr cavalry trooper (note the scalloped helmet!) on horseback, armed with a Kar 98b in a special shoe scabbard on the left rear of the horse.



Reichswehr soldier in training with two instructors; the soldier is firing a Transitional Gew 98 with the wide lower barrel band and the tangent rear sight.





FRG. A. (GERMANY) MAUSER RIFLE, the infantry arm of the German Army. Stamped on the left of the receiver "GEW 98" meaning Gewehr (weapon) of the year, 1898. The rifle is shown with the action open and bolt withdrawn to the rear, equipped with the breech-cover, designed to keep wind and dirt out of the mechanism while in use in the trenches. It will also be noticed that the extra magazine, made to hold 20 cartridges, is attached. A muzzle cover is in its proper place as well. The bayonet shown is the model brought out with the gun in '98, but during the War over forty different de signs were made; these are shown in a book we have on sale, see notice else-where. The calibre of GEW '98 is .31 and the magazine holds five shots.

FIG. B. CARBINE OR SHORT RIFLE, stamped KAR '98, the Germans use a K in spelling Carbine. This rife has the full wood protection for the barrel and takes a bayonet. The long hook shown at the muzzle-end is for use in stacking. The rear sight is of different design than that of the long rife and much simpler. The bolt handle is turned down, out of the way, similar to the U. S. Springfield. There are no sling swivels, the sling passes through a loop on the left of the lower band and is fastened on the right side of the butt-stock, after passing through the recess just back of the pistol-grip. Calibre is the same as the long rife.

Frs. C. THIS IS FAMOUS "SNIPER" MODEL of the long rifle, it will be noticed that the arm has a telescope with the bolt of the rifle turned down. Otherwise it is the same as Fig. A.

FIG. D. THIS IS THE REAL CARBINE OF MODEL, 1898. The barrel is but 18½ inches in length and the rear sight although similar in pattern to the rifle is smaller. The gun takes a bayonet. Same calibre and number of shots as the upper three.

FIG. E. MONDRAGON AUTOMATIC RIFLE. Calibre, 7 m/m.; 10 shots in the magazine which is the same general principle as the Mauser. This arm is gas operated. The trigger must be pulled for each shot. The inventor of this rifle is a Mexican Army officer, who first offered his inven-tion to France, but it was refused; he then went to Switzerland where he started making them. Germany later adopting the system and using them in aeroplanes in the early days of the War.

Fro. F. MANNLICHER MAGAZINE RIFLE OF THE MODEL OF 1888. The magazine of this differs from the Mauser in that it is necessary to insert both clip and cartridges to operate. When the last of the five shots are fired the empty clip falls out of the bottom of the magazine. Near the end of the War, however, they were altered to load with the Mauser clip and the aperture at the bottom was closed. This gun and the carbine (Fig. G.), have no wood protection for the barrel but instead a thin steel tube is used which leaves an air space all around the barrel. The muzzle end of the gun shows the tube very plainly. Calibre is .31, but the cartridges were round pointed. Five shots.

# Continued on page 366

Norz .- The weapons shown on this and the subsequent three pages, are all drawn to the same scale, enabling the reader to readily note the comparative states of the arms shown. On page \$88, will be found a table showing complete information of the principal weapons at the Powers, including the U.S.



FIG. A. (FRANCE) LEBEL MAGAZINE RIFLE, MODEL OF 1886. This weapon is distinguished by the fact that it was the first small-bore (8 m/m.) ever used and also, the first to use smokeless powder. The French were evidently satisfied with the two innovations for the arm remains unchanged today. The magazine, holding eight shells, lies in under the barrel, being simply a hole bored in the fore-end, the cartridges being fed into the magazine by the action of a long spiral spring. The Lebel is the standard arm of the French Army, it takes the bayonet shown between Figs. C and D.

FIG. B. MANNLICHER MAGAZINE CARBINE, Model of 1890. This rife has the well-known Mannlichers' type of magazine in which the clip and the cartridges are fed into the mechanism, the empty clip falling out when all the cartridges are fired. Before the war, the capacity was but three shots but during the conflict, the extra piece shown on Fig. C was added thus increasing the weapon to five shot capacity. These carbines were made in several styles, some with a hand-guard, some with stacking hooks and some with longer fore ends, this latter model did not take a bayonet. Takes same cartridge as the Lebel. FIG. C. MANNLICHER MAGAZINE RIFLE. Model of 1907.'15. This is simply the carbine mechanism with a longer barrel. Made in several styles, some were only three-cartridge capacity, other five. Also made with and without a hand guard. Some had the long turned-down bolt of the carbine. They took on some models, the carbine bayonet and on others, the Lebel bayonet. Many were made in this country in early part of the war. It is interesting to note that the rifle bayonet has also been found designed so as to fit the carbine, a fact not generally known.

FIG. D. THIS IS THE FAMOUS AUTOMATIC RIFLE, Model 1917. It uses the regulation cartridge in the magazine which lies directly under the receiver. The weapon is gas operated and resembles the Lebel very much except at the breech. Takes the same bayonet and has the same rear-sight. The cut shows the bolt drawn back and the mechanism open. It is said that the French are experimenting with this rile in shorter form with a view of adopting it as the regular weapon of all its forces.

# THE PRINCIPAL WEAPONS OF THE WORLD WAR—Continued 68 U D C FIG. B 0 5 0 FIG. C 0 0 FIG. D FIG. E 61 FIG. FIG. G 0 FIG. H 7 FIG. 1 $\mathbf{c}$

FIG. J

FIG. A. ENGLISH ENFIELD MAGAZINE RIFLE. Pattern 1914. Cal-iber, 303; five shots. The British government was experimenting with this rifle when the war broke out, it was however to be of a smaller calibre, i.e. 27. Thousands were made in this country for England in the early part of the War and as is well known, the U.S. adopted it in view of the fact that so many armories could produce it while but one could make the Springfield. This model differs from the U.S. in that it has a long range sight on the left side and the calibre being .303 instead of .30. Bayonets for both countries are the same. It will be noticed that there are 2 ribs cut into the wooden grips of the bayonet, this was done as a means of dis-tinguishing this model from the model that fitted the 1903 short Lee-Enfield, were the receiver and near the cyc of the soldier is a new idea. The Ross of Canada, Mark III copied it. (See Fig. D.) In all the photographs of war scenes, the writer has never seen one of these rifles in the hands of an English "Tommy."

FIG. B. ENGLISH SHORT LEE-ENFIELD MAGAZINE RIFLE. Model of 1903. Calibre, .303; ten shots. The cut illustrates the Mark III\*, issued in 1916 embodying all the improvements made on the rifle since its first introduction. There have been eight different patterns issued, some radical changes being made during the War as the elimination of the cut-off and the long range (auxiliary) sight. The peculiar hump over the receiver is the clip guide, a cumbersome feature but necessary as the body is open at the top all the way back on account of the bolk locking device. The bayonet shown is an earlier model, as the hooked cross-piece was abolished in 1913. The present pattern is the same but with a short straight cross-piece. in 19 piece.

9

J

FIG. C. ENGLISH LEE-ENFIELD MAGAZINE RIFLE. Officially known as "Charge-Loader." Converted from early models of the long rifles, dated from 1889 to 1903. These guns are all 10 shot magazine and 303. A front sight guard has been added and an improved rear sight. The old short hand guard and old type bayonet have been retained. The gun (Fig. C) is a Lee-Metford (1892) converted. There was also found among the captured arms, specimens of Lee-Metfords and Lee-Enfields, unchanged since their issue 1889-1899.)

#### THE PRINCIPAL WEAPONS OF THE WORLD WAR-Continued 366

## Continued from Page 66

FIG. G. IS THE CARBINE OF 1888, with the same sling arrangement and stacking hook of the Model of 1898. Attention is called to the front sight protector. This is peculiarly German as they used this device on the old "Needle"—Carbines of the early '70's.

FIG. H. THIS IS THE MAUSER AUTOMATIC PISTOL, with detach-able shoulder. Stock which forms a holster for the piece when not in use, the rear end being hinged forming an opening for the insertion of the arm. This pistol holds ten shots, clip-loaded, the magazine being in front of the trigger guard. It is equipped with an elevating rear sight, graduated to 1000 metres. Many thousands of these weapons were used in the War, it being a great favorite with the officers. Other German small arms were the Luger, well known in this country and the Mauser. 25 calibre or "Kamerad" pistols; both these are shown elsewhere in this volume.

FIG. I. During the war, the Germans captured so many French, Russian and Belgian rifles, that they made ammunition for them and used them; they were not very fond of the French needle bayonets, so they devised a scheme of using their own bayonets in the captured arms. In Fig. 1, we show how a sleeve just the length of a bayonet handle slipped over the muzzle-end of the gun, with a lug on the right side, enabled the Germans to use their knife bayonets. The lower illustration shows the top view with the bayonet on the sleeve, the upper one shows the sleeve on the French Lebel Rifle. This was also done to the Russian Rifles. That Germany was in sore straits at times for weapons is shown by the fact that rifles of by-gone days were found to have been used, for example, thousands of the first (single-loading) Mauser, Model of 1871, were included in the allotted share of captured arms to the U. S. These were .43 calibre, taking the old fashioned lead bullets. We also find the same rifle converted to the magazine gun (Model 1884) in-cluded, also calibre .43. Both these rifles are shown elsewhere in our cat-alogue.

### Continued from Page 67

FIG. E. REMINGTON, SINGLE SHOT RIFLE. Made at Ilion, N. Y., for the French in the early part of the War, and chambered to take the 8 m/m. Lebel cartridge. It will be noticed that the rife is equipped with a hand guard and a very long bayonet (16-inch blade), making it a more up-to-date weapon than our familiar Remington of thirty or forty years ago. There were several other types of rifles found to have been captured by the Germans from the French. For example, the Gras, an alteration of the Chassepot of 1870, designed to take an 11 m/m. cartridge, even the Chassepôt itself was found in large quantities. The principal revolver of the French Army was the Lebel, Model of 1892. The is shown elsewhere in our cat-alogue.

FIG. F. BELGIAN MAUSER MAGAZINE RIFLE. Model of 1889. Cal-ibre, 7.65 m/m. Five shots. This is the first of the Mausers to use the Lee type of magazine, familar to us as it was used in this country in the '80s. Soon discarded, however, for the '93 model, which had the magazine all within the stock. The rifle has a mantle or tube protection for the barrel instead of the usual hand guard. No improvements have been made on the piece since its introduction, 30 years ago. During the war the bayonet blade was made longer, 6 inches being added making it 16 inches long, both types are shown in the illustration.

FIG. G. BELGIAN MAUSER MAGAZINE CARBINE, same calibre and number of shots as the long rifle and taking the same bayonets. The barrel of this weapon is 18 inches long against 30 for the rifle. There was also used 2 types of "short" rifles, the barrels being about 20 and 23 inches in length, all being designed to take bayonets.

FIG. H. BELGIAN COMBLAIN RIFLE. Single shot and 11 m/m. or .43 calibre. This weapon was used in large numbers and dates back from 1870. It has the falling breech-block of the Feabody type, and was the official weapon of Belgium in the '70s. The bayonet is patterned after the famous Chassepto to F france, having a blade over 20 inches long and a brass handle. Like the other countries Belgium was forced to bring into use old time weapons even the ancient Alóini-Braendlin being found among the cap-tured arms.

FIG. I. TURKISH MAUSER MACAZINE RIFLE. Model of 1895. Five shots, calibre 7.65 or 3.01 inches. This arm is a variation of the Span-ish model of 1893, with the addition of a cut-off. The rifle is unique in this respect as it is the only Mauser that ever used a cut-off. The mechanism of this feature shows just forward of the bolt handle. The bayonet blade is 10 inches long; some however were found 16 inches in length. A few Model 1891 Mausers were found. This arm is similar to the Belgian rifle, except that it had a short hand guard between the rear sight and the middle band and as mantle to the barrel. Same calibre and number of shots.

FIG. J. TURKISH MAUSER MAGAZINE RIFLE. Model of 1903. Calibre, 7.65 m/m. or .301, and holding 5 cartridges in the magazine. This is the principal weapon of the Turkish Army, modeled after the '98 model of Germany, the principal difference being in the rear-sight and hand guard. The Mauser of 1910 used by Mexico is very much like this arm in general superance.

appearance. The bayonet of the Turkish rifle is designed principally from the original pattern, used on the '98 German model, with the exceptions of the handle and curved guard. Blade is 21 inches long.

### **Continued** from Page 68

FIG. D. CANADIAN ROSS MAGAZINE RIFLE, MARK III. Model of 1916, Calibre, .303; five shots. This rifle is an outcome of the War, as it is the first Ross to load with a clip, also the magazine of former models is discarded for the Lee type. The rear sight, while different in principle

from the Enfield pattern, 1914, is of the same type and position. The straight pull bolt is new and much stronger than previous models. It is said that but few of these guns actually found their way to the front, but photos of the Royal Navy and its activities show sailors and marines armed with them. The bayonet blade is 10 inches in length and quite broad. In the illustration the bolt is drawn back showing the receiver open ready to receive the cartridges. The Mark III is equipped with a cut-off and a safety lock. These weapons were made in Quebec where the Ross Rifle works were located.

FIG. E. SERBIAN MAUSER MAGAZINE RIFLE. Model of 1910. Calibre, 7 m/m., five shots. This rifle is very similar to the Spanish model of 1893 in appearance. It however has a bolt like the '98 German Mauser, with the receiver cut away at the left for the better manipulation of the cartridges in loading. The usual safety is provided but no cut-off. There were several patterns of bayonets used on this rifle, with blades varying from 10 to 16 inches. The specimen shown was made in this country dur-ing the War under contract, it has a 10-inch blade.

FIG. F. ROUMANIAN MANNLICHER MAGAZINE RIFLE. Model of 1893. Calibre, .256; five shots. The rifle, which is shown with the bolt drawn and the breech open, is of the usual Mannlicher pattern wherein the clip forms a part of the magazine mechanism. This rifle was a great favorite in England before the war on the shooting ranges, on account of its hand-iness and accuracy. The Dutch Mannlicher is identical with the exception of the rear sight and upper band. Bayonet blade is 10 inches in length.

FIG. G. ROUMANIAN MANNLICHER MAGAZINE CARBINE. Same calibre and number of shots as the long rifle. The rear sight is shorter and sighted only to 1800 metres. There is no hand guard and the arm does not take a bayonet. The sling is attached to two swivels, one on the lower band and the other on a plate on the butt stock. Both these rifles carry short cleaning rods.

FIG. H. PORTUGAL MAUSER-VERGUIERO MAGAZINE RIFLE. Calibre, .256 or 6.5 m/m., five shots. Model of 1904. This Mauser differs from the others at the breech as the bolt handle is placed farther forward so that it sets in front of the rear end of the body and directly over the magazine. (See cut.) The safety is also of a different pattern. The fore end is the same as the model 1907, the standard arm of China. The bay-onet blade is 10 inches in length and has a handle of a new design. The magazine is the same as the model '98. This is the smallest calibre yet used in a Mauser rifle.

FIG. J. GREEK MANNLICHER SCHOENAUER MAGAZINE RIFLE. Model of 1903. Calibre, .256; five shots. This rifle differs from all the other Mannlicher models as it has a rotating platform which is provided with 5 grooves to hold the cartridges. This platform is worked by a coiled spring which is compressed by the insertion of the shells. Like the Mauser the entire mechanism is within the stock. The bayonet has the usual 10-inch blade and is like the Austrian pattern of 1895, having the cutting edge on top when fixed on the rifle.

FIG. I. GREEK MANNLICHER MAGAZINE CARBINE. Same pat-tern and calibre as the long rifle. Also same mechanism and number of shots. Barrel is 20½ inches long and is equipped with a cleaning-rod. The bolt handle is turned down so as to be easily inserted in the saddle boot. The carbine takes the same bayonet as the rifle. The knob on the bolt handle is quite large and bored out for lightness.

## **Continued from Page 69**

FIG. F. RUSSIAN MOUZIN MAGAZINE RIFLE. Model of 1901, officially known as the "3 line rifle," also "Nagant." Calibre .31, five shots, magazine is of the Lee type. The bayonet is the old fashioned sleeve and lock pattern, with a four fluted blade, which is intended to be always carried fixed, no scabbards being provided. The U. S. purchased over 280,000 of these from manufacturers in this country for training purposes. No changes have been made in the weapon since its introduction twenty years ago. Also made without sling swivels, holes being bored in the stock for the purpose of carrying.

FIG. G. MOUZIN CARBINE, action is the same as the rifle, barrel being 11 inches shorter or 20 inches against the 31 inches of the rifle. The Russian rifle was also made with 28-inch barrel. The Germans made am-munition and adapted their own bayonets to these guns.

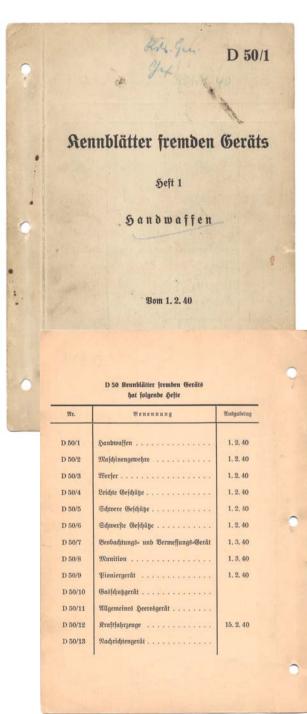
FIG. H. WINCHESTER, MODEL OF 1895 MAGAZINE RIFLE, cham-bered to take the Russian cartridge. Supplied by the Winchester Arms Ce., to the Russians in the early part of the war. This rifle has a barrel, 28 inches long and a bayonet with a 16-inch blade. It is also equipped with a cartridge clip guide at the top of the receiver. Otherwise the rifle is familar in this country. Other rifles used by the Russians, were the old single shot Berdan of 1886, Mark II and some single shot Remington of large calibre.

FIG. I. JAPAN ARISAKA MAGAZINE RIFLE. Model of 1907, offi-cially known as "38th year model." Calibre is 6.5 m/m. or .256 inches. The magazine is a copy of the Mauser with a few changes. A dust-cover easily attached is part of the equipment. The bayonet resembles the English bayonet of 1903. Thousands of these rifles were sold by Japan to Russia during the war and many found their way into German hands by capture. Magazine holds 5 cartridges.

FIG. J. JAPANESE ARISAKA CARBINE. Same mechanism as the "38th year" rifle. Barrel is 19 inches long. The dust cover is shown on the carbine in the illustration. Takes same bayonet as long rifle. An earlier model of this gun was without a hand guard. Many of these found in the hands of the Bolsheviki, in Eastern Russia.

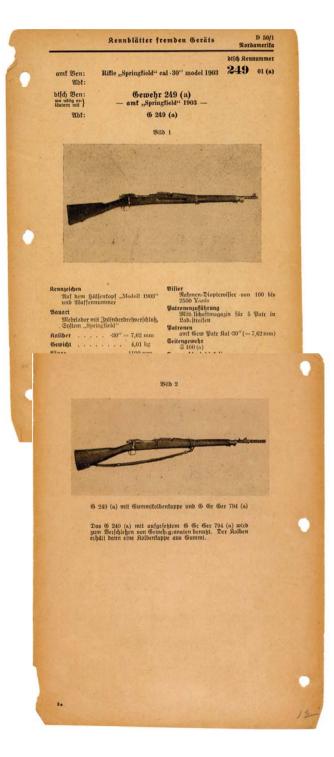
# Appendix

On the pages that follow are images from the German Army's "Kennblatter fremden Gerats" a manual providing information to German personnel about captured weapons, the majority of which happen to be Mauser-pattern rifles. As you can see on some of the pages, there are blank spaces left for the entry of new items German soldiers might pick up during battle. Each weapon is described at the top of the page by country and model and is also assigned a German identification number.



The document was captured by American troops during the Allied invasion of Sicily in 1943 and is extremely rare. The document itself would have an important place in any collector's library, but the information each page contains is also very valuable as the pages give accurate data about the rifles of the era, including the U.S. Springfield, a Mauser derivative.

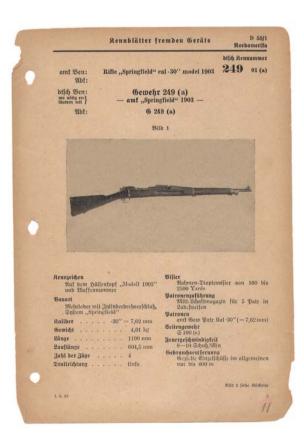
All images John Wall collection and used with permission.

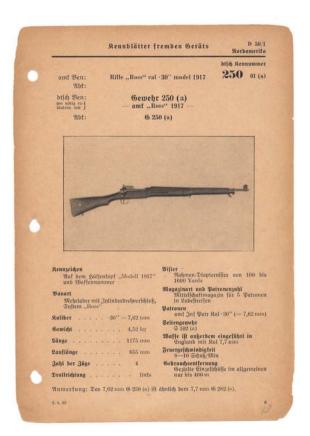


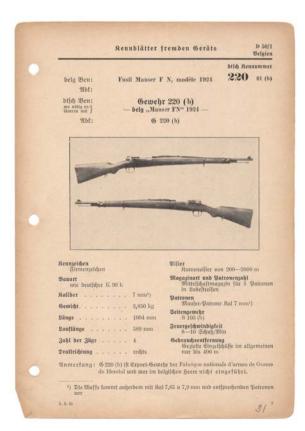


	D 50/1	Rennblätter fremden Geräts	Blatt
		Inhalt	(Blatt a-
	Ausgadetag	Benennung	Blatt Kr.
		Belgien	
1.9	4.2.40	Genehr 80	B 1
1.9	-1-2.40	Gemehr 35	B 2
1.9	4-9.40	Genehr 36	B 3
1.9	-1-2.40	Starabiner 80	B 4
11.1	4-9.40	Rarabiner 16	B 5
	1.9.40	K98(b)	36
			-
1.9	1-16-49 10-10-40	Piftole Browning Mod. 1900	B 11
20		Pistole Browning Mod. 1910	B 12
17	And the second sec	Biftole Browning (Colt) G. P	B 13
	1-9.40	P. , lolt " (b)	B 14
1.9	++++0	M. P. 35 (Mob. Schmeiger 2811)	B 16
		at 1.50 (and, edimenter 2011)	B 16
	1. 2. 40	Geitengemehr 89	B 21
	1.2.40	- Cellengewehr 35/30	B 22
			1
		Participation and and an end of the	

Nr.	Benennung	Ausgabetaj
D 50/1	Handwaffen	
D 50/2	Maschinengewehre	
D 50/3	Berfer	
D 50/4	Leichte Geschütze	
D 50/5	Schwere Geschütze	
D 50/6	Schwerfte Geschütze	
D 50/7	Beobachtungs- und Vermefjungs-Gerät .	
D 50/8a	Munition bis 3,6 cm	
D 50/8b	Munition ab 3,7 cm	
D 50/9	Nahkampfe, Sprenge und Jündmittel und Tarmnittel	
D 50/10	Gasjdyutzgerät	
D 50/11	Allgemeines Heeresgerät	
D 50/12	Rraftfahrzeuge	
D 50/13	Rachrichtengerät	
D 50/14	Pioniergerät	
D 50/15	Eijenbahnpioniergerät	



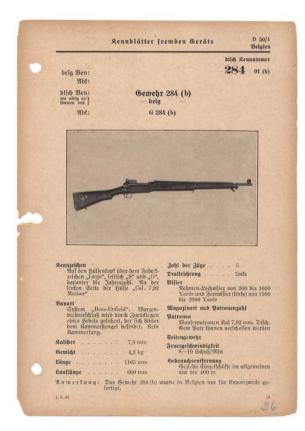


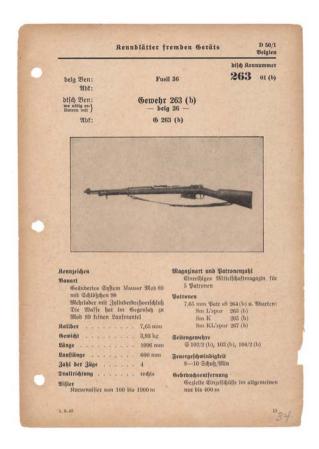


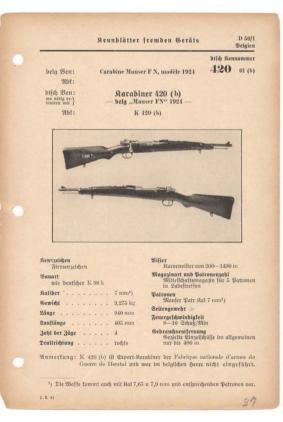


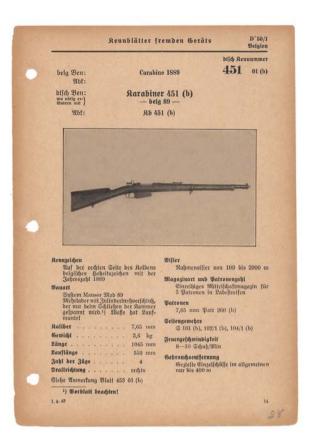


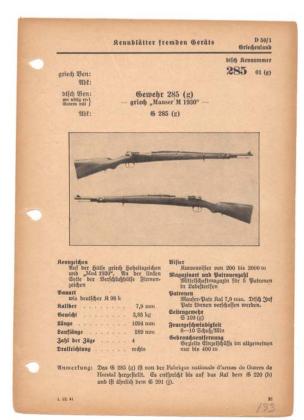


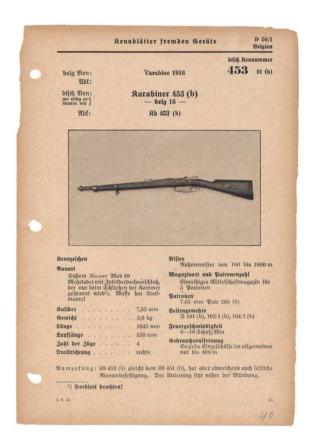




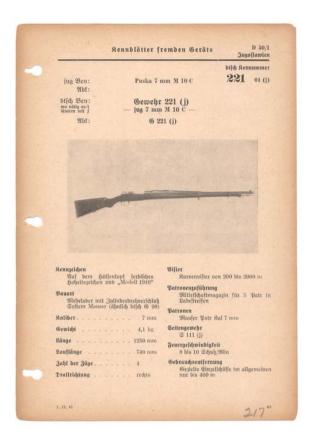


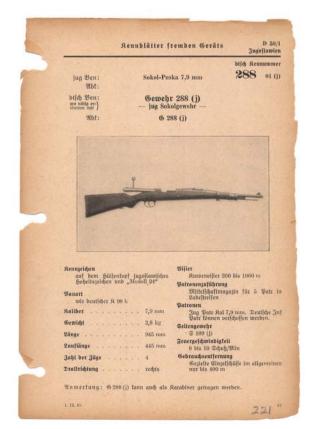


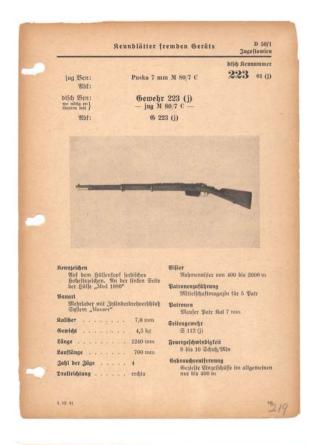




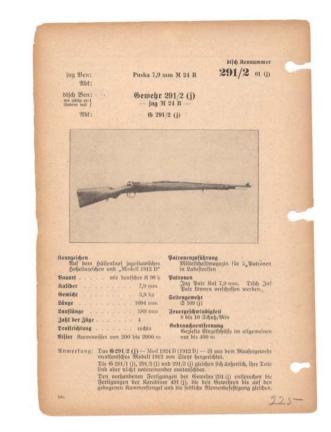


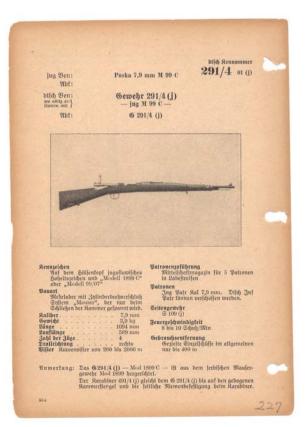


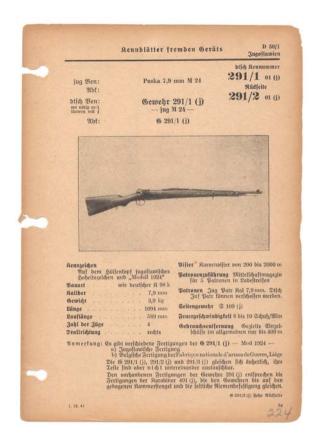


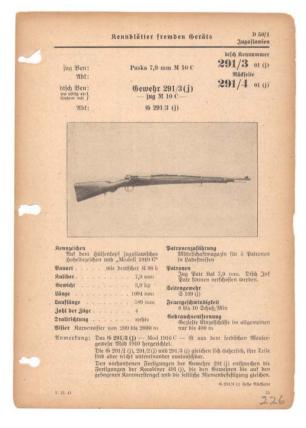




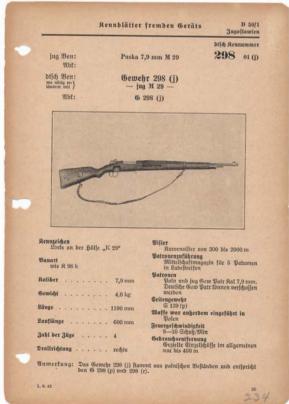


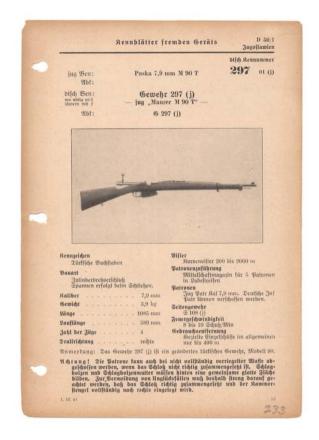


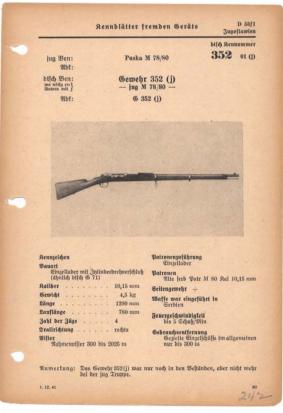




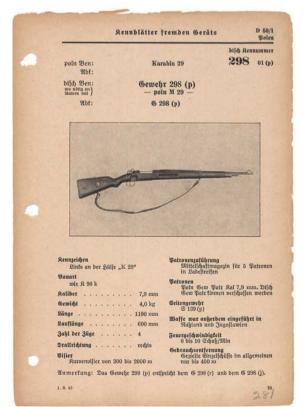


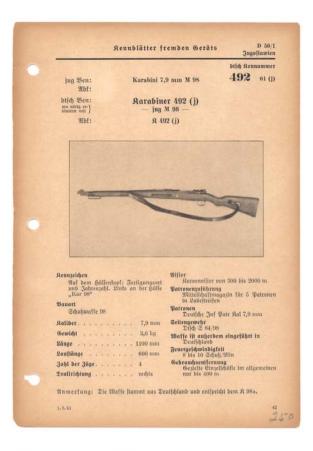


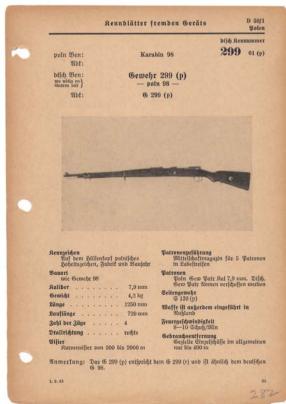




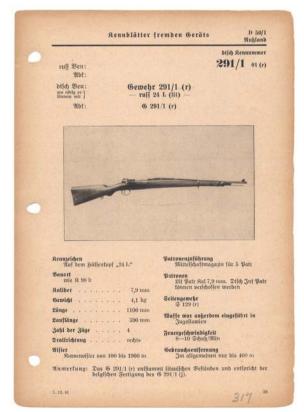


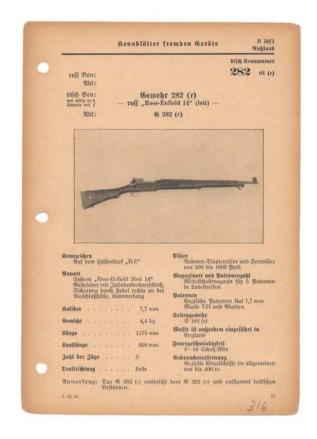


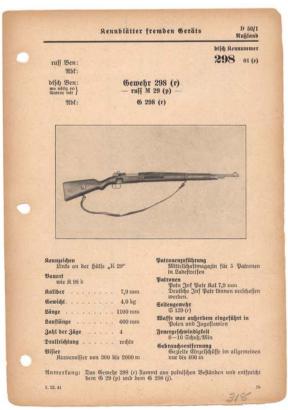


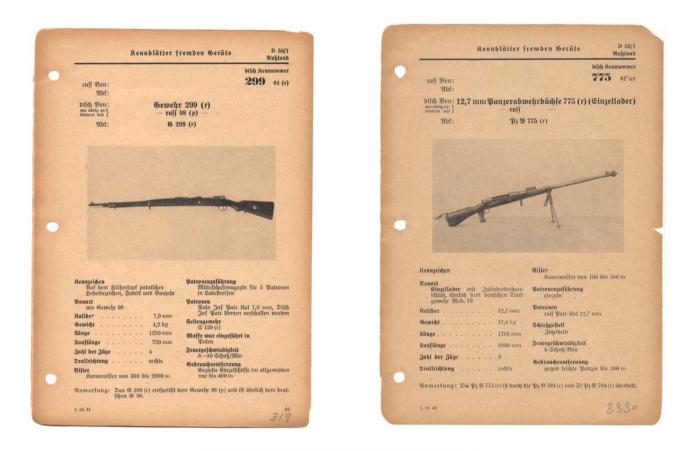














Summary Table describing the 7,900 Mauser Model 1895/96/97 7 m/m Rifles purchased by the Orange Free State or Oranje Vrijstaat (O.V.S) from Ludwig Loewe and DWM before the Boer War of 1899-1901

Serial # Range	Туре	Maker marking on Side Rail	Remarks and Observed Rifle Characteristics
1. <u>O.V.S</u> . 1 through <u>O.V.S.</u> 400	Long Rifle (29" barrel)	"Mod. Mauser <b>1895</b> " over "Ludw. Loewe & Co. Berlin"	<ol> <li>"LL Co" Ludwig Loewe "Fabrikzeichen" trademark crest, all OVS bolts are in-the-white, and straight handled.</li> <li>All rifles are reported by Bester (page 167) to have German military-style quality inspection marks (a crown over a fraktur letter) in four locations: on the left side of buttstock, on left side of receiver near the serial number, on top of bolt handle, and on top of barrel under handguard, instead of the later DWM circular cartouche inspection stamps.</li> <li>A unique 2-line serial number appears on stocks and receivers: an underlined "<u>O.V.S</u>." over the actual serial number.</li> <li>Order placed in South Africa in April 1896.</li> </ol>
2. <u>O.V.S</u> . 401 through <u>O.V.S.</u> 1900	Long Rifle (29" barrel)	"Mod. Mauser <b>1896</b> " over "Ludwig Loewe & Co. Berlin"	<ol> <li>"LL Co" Ludwig Loewe "Fabrikzeichen" trademark crest.</li> <li>All bolts are in-the-white and have straight handles.</li> <li>Observed rifles have the noted German military quality inspection marks (crown over a fraktur letter) as above.</li> <li>A unique 2-line serial number appears on stocks and receivers: an underlined "O.V.S." over the actual serial number.</li> <li>Order placed in the OVS in July 1896.</li> </ol>
3. <u>O.V.S</u> . 1901 through <u>O.V.S.</u> 2900	Long Rifle (29" barrel)	"Mod. Mauser <b>1897</b> " over "Deutsche Waffen-und Munitions-abriken"	<ol> <li>"D.W.M" logo or monogram used as the receiver crest.</li> <li>All bolts are in-the-white and have straight handles.</li> <li>Reported by Bester (page 144) to have the crown-over-fraktur- letter quality inspection marks, as noted in 1. above.</li> <li>Order placed in the OVS in November 1896.</li> <li>A unique 2-line serial number appears on stocks and receivers: an underlined "O.V.S." over the actual serial number.</li> </ol>
4. <u>O.V.S</u> . 2901 through <u>O.V.S.</u> 7900	Long Rifle (29" barrel)	"Deutsche Waffen-und Munitions-fabriken" over "Berlin"	<ol> <li>No receiver crest. The only manufacturer's markings on all rifles from # 2900 on, is the DWM side rail address.</li> <li>With this lot, "Mod. Mauser" markings disappear on all O.V.S. rifles.</li> <li>Most rifles have straight bolt handles; however Bester reports turned down bolt handles in "the last few batches", perhaps in the serial number range of 6401 through 7900. (No. 7237, in a New Zealand auction of 11/03) is a fully matching rifle with a bent handle.)</li> <li>German Government crown/fraktur letter quality/acceptance inspection stamps were not used on these rifles. Instead, DWM used a circular cartouche containing a fraktur letter. This was stamped on the stock, receiver, bolt and barrel. This is confirmed in observations of original rifles. The unique two-line serial number still appears on stocks and receivers.</li> <li>The following seven orders were placed: 1) May 1897 for 1000 rifles, 2) June 1897 for 500 rifles; Government import licenses for the remaining rifles were issued in 3) May 1898 for 1000 rifles, 4) October 1898 for 1000 rifles, 5) May 1899 for 500 rifles.</li> </ol>

## Summary Table describing the 7,900 Mauser Model 1895/96/97 7 m/m Rifles purchased by the Orange Free State or Oranje Vrijstaat (O.V.S) from Ludwig Loewe and DWM before the Boer War of 1899-1901

Serial # Range	Туре	Maker marking on Side Rail	Remarks and Observed Rifle Characteristics
5. O.V.S. Rifles sold <u>to Chile</u> <u>O.V.S.</u> 7901 through <u>O.V.S.</u> 8900	Long Rifle (29" barrel)	"Deutsche Waffen-und Munitionsfabriken" over "Berlin"	<ol> <li>This order was placed in Berlin in June and September 1899. Originally, these rifles were sold without receiver crests, serial numbered as above, and with polished in-the-white and <u>turned- down bolt handles</u>. An attempt to deliver was made in October 1899, after the outbreak of war, but was impossible due to the British blockade of the Port of Lourenco Marques (now Mabuto, Mozambique). All 1,000 rifles were returned to Germany, and resold to Chile with the Chilean crest applied.</li> <li>Some OVS Chilean rifles remain in original condition, others have been modified by the Chilean Government. Three variations exist: 1). Rifles in original Boer configuration and markings, with only the Chilean crest added to the receiver ring, and the original two-line OVS serial numbers on the stock and receiver; chambered for the 7 m/m round nose cartridge.</li> <li>The same rifle, but converted circa1910 or later, to fire the 7 m/m spitzer round, by adding a new sight leaf with spring loaded catches on both sides of the sight slider. (The original slider has only one spring-loaded catch.) Minimum setting on new sights is 400 meters vs 300 on old. The Chilean crossed- picks mark is stamped on the sight's barrel sleeve, and the barrel may be a replacement. Swiss SIG-initialed barrels have been observed on C-series ZAR and OVS rifles with spitzer sights. Paradoxically, OVS spitzer-converted rifles have been noted with new stocks marked with Chilean national cartouche and the date of "1895", and WITHOUT the "OVS" line in the stock's matching serial number. OVS Mausers, with the M1893, not M1895 receiver, were acquired in 1900 or later.</li> <li>The 1960s era conversion of a small number of OVS M1893s to 7.62 m/m NATO, advertised by Century Arms in the Shotgun News.issue of 10 March 1991. (None have been observed first-hand.)</li> <li>Original, unconverted rifle stocks should have the circular acceptance/inspection cartouches as other DWM rifles above.</li> </ol>

	The Model	1943 for tl	•	tifles: Navy and Pol e, 1944-1960	ice,	
Model and Branch of Service	Manufacturer, Production Data	Caliber	Receiver Crest	Side Rail Markings	Stock Markings	Sources
<b>1a. M1943</b> Short Rifle for Spanish Army and Navy	La Coruña 1944 thru 1958	7.92 mm	"Fabrica De Armas La Coruna" over Nationalist Eagle and Shield	Stylized Maltese Cross Cal. 7.92 "P" in box "R" in box	Army M43s appear to have been made without major stock cartouches	Obs., BIMAS; RS Coll.; Calvo; H&S
The highest num 360,000 rifles. A , believe to be a the Spanish arm turned down bol Army between th examples of "Leg 1944. All observe bayonet bar like	Q, U, Y, as well as the ober is 2J-283. Based t least one M43 has be Spanish rebuild or ma is researcher and auth t handles, all of which he 1920 to the 1940s. gion" rifles have been ed M43s have a pin he the Argentine M1909s ith Navy markings. Th	on these obse een observed intenance ma nor Juan L. Ca were issued t After this issu observed or re ole through th s, for bayonets	ervations, M43 with the flami rk, although th lvo, the initial to the Spanish e, all Army M4 eported. Calvo eir bayonet ba s using the M1	B production can ng bomb contair his has never bee production of M Legion, the ass 43s were made v reports that the ars permitting the 1893 bayonet has	be estimated at ing the phrase "I an documented." 43s consisted of ault troops of the with straight bolt first A-series rifle attachment of a ndle fixtures. No	around MP" over "8" According to rifles with Spanish handles. No es are dated an auxiliary rifles have
<b>1b. M1943</b> Short Rifle for the National Police	La Coruña 1944 thru 1958	7.92 mm		Same as above	The diamond cartouche of the Guardia Civil	Obs., H&S BIMAS; RS Coll.; Calvo
stocks bearing th Police or Genda A small number	umber of Army M43s ne unique diamond-sha rmerie. This mark cons of M43 were made wit rial numbers (on the s	aped cartouch sists of bundle th this mark e	ne of the 'Instit e of Roman Fa mployed as th	uto de la Guardia sces and a Swo le receiver crest.	a Civil", the Span rd crossed within	ish National a diamond.
<b>1c. M1943</b> M43s built up Gewehr 98 receivers	Refabricated in Spain at unknown location(s) Production dates unknown	7.92 mm	Orginal German Gewehr 98 receiver crests	"Gew. 98", The original Imperial German marking	Letter "A" in a circle the size of a U.S. nickel	Obs.; BIMAS; RS Coll.;
German Geweh are likely some of with the original	mall number of M43s r 98 service rifles, refa of the earliest conversi Gewehr 98 German s u 1917-1918 receivers	bricated in Sp ons. The few erial number	oain as M43s; observed exa	dates of product mples have bolts	tion are unknowr s which has beer	i, but they i restamped

	The Model	1943 for tl	•	tifles: Navy and Pol e, 1944-1960	ice,	
Model and Branch of Service	Manufacturer, Production Data	Caliber	Receiver Crest	Side Rail Markings	Stock Markings	Sources
1d. M1943 Short Rifle No branch of service marks	Uncertain, but most likely La Coruña	7.92 mm	No crest or markings of any type on receiver	Same as 1a. above		Obs., RS Coll; BIMAS
markings. Serial have been for co	ew M43 rifles have been numbers into the 6,00 pmmercial sale. Anothe een reported with a ma	0 range have er M43 rifle in	been observe the X1xxx se	ed. These rifles a rial number rang	are in new conditi	ion and may
<b>2a. M1944</b> The eagle crest is the Air Force branch of service mark	Refabricated in Spain using German, Polish and Spanish parts at unknown location(s) Production dates unknown	7.92 mm	Crown over Air Force Eagle with extended wings	Stylized Maltese Cross Cal. 7.92 "P" in box "R" in box	none	Obs., Private corres.; BIMAS; RS Coll.; Calvo; H&S
prefix "EA", which low number EA0 originally have b Civil War. After th in Spain for the " reported rifles ha M44s have been straight handle b turned down bol	Spanish Air Force's " h stands for "Ejercito of 1422 to the highest nu een Polish Wz.29s sol ne war, it seems likely Ejercito del Aire". Spa ave rear site assemblie reported with no marl polts. One reported rifle t. The M44 has only tw utt over a sling recess	del Aire", or "A imber in the E d by the Polis (but is not do nish Air Force es made in Ge kings on their e, <u>without</u> a cr o sling fixture	Air Force". M44 A33xxx range of Governmen cumented) that e M44s feature ermany, and a sight bases. A rest (below) in es, both locate	4 serial numbers e. Many "EA" M44 at to Republican at the Wz.29s we e low fixed front s are stamped "S/4 Il reported rifles the EA23XXX ra ed in the left side	have been repo rifles have beer Forces during the re refinished an sight guards. Ma 2G" on their bas with the Air Forc ange has been n . The lower fixtur	rted from a n reported to e Spanish d re-crested ny of e. Several e crest have loted with a e is a sling

Olson, Priv Corr.

#### Spanish Model 1891-1893 Mauser Rifles **Model Service** Manufacturer, Side Rail and Research Branch and Stock Markings **Receiver Crest Production date** Parts Markings Sources Caliber Waffenfabrik Mauser 1. M.1891 Long Rifle None. This rifle "Waffenfabrik Observed; Boado y None noted For Army Trials Mauser Oberndorf Castro. Barceló-Rubi: a/N. lacks even the Circa 1891-92 receiver and barrel Olsen in "Mauser Bolt 7.65 m/m a/N' serial numbers Rifles", "Catalogo general del Museo de Artilleria, Madrid, "The Springfield Republican" newspaper Comments: After nine years of testing repeating and small bore military rifles, Spain purchased 1,200 modified M1891 rifles from Waffenfabrik Mauser for large scale troop trials. Don Jose Boado y Castro (1857-1900), a major in the Spanish Army and the "comandante" at Oviedo Armory, who personally wrote the first M.1893 technical manuals, recorded the first decade of Spanish use of Mauser rifles. Boado y Castro reports that Spain issued the rifles to the Savov Infantry Regiment No. 6, and the "Battalon de Cazadores de Puerto Rico, No. 19", the Light Infantry Battalion of Puerto Rico No. 19. This rifle, for all intents and purposes, is the same as the Turkish Model 1890 infantry rifle, except for the addition of a spring-loaded plunger on the bolt face to improve extraction and ejection. Examples of this test rifle are believed to have been captured in 1898 during the Spanish-American War. At the public auction of captured Spanish weapons conducted by the U.S. Army at Springfield Armory (MA) in January of 1899, the Army's listing of rifles after the auction called out 104 "Turkish Pattern" rifles in 7.65 m/m being offered for mail order sale at \$8.25 each. The serial numbers on these rifles, as with most Oberndorf test rifles are found below the wood line. During the troop trials, continuing problems were noted with the extractor and ejection, which later resulted in the development of the Model 1892 Mauser rifle, the first Mauser ever to use the highly reliable non-rotating extractor. 2. M.1892 Carbine Waffenfabrik Mauser "Waffenfabrik A single German Observed, Boado y None fraktur script letter, Castro, Barcelo- Rubi, (Navy) a/N. Mauser Oberndorf 1892-93 a/N" obscured by wear. Catalogo general del Initially ordered in exists on the butt-Museo de Artilleria, 7.65 m/m but stock of the one Olson, changed to 7 m/m observed M.1892 Priv Corr after its adoption in Navy carbine 1893 Comments: After the incorporation of changes requested following the M.1891 trials, a new rifle/carbine combination, the M.1892, was adopted by Spain on November 30. 1892 in caliber 7.65 m/m. Paul Mauser however was improving his ballistics (the new 7 m/m cartridge) and mechanical designs (i.e. the non-rotating extractor, internal box magazine) so rapidly that within 13 months, the new advances had overtaken M.1892s improvements and had evolved into a completely new rifle, the Model 1893. This model was so impressive that the Spanish decided to adopt this version instead of the model officially adopted in 1892. Thus, the M.1892 was a very short lived design which has been completely overshadowed by the M.1893 which was delivered to Spain for trails and test in 1893, a few months later. As a consequence, the 400 M.1892 carbines purchased by the Spanish Navy for test purposes are likely the only significant order of this model ever filled for any country. Originally, these were to have been in 7.65x53 m/m, but after Spain adopted the 7 m/m cartridge, the order was changed and the 400 Navy ("Marina") carbines were manufactured by Waffenfabrik Mauser in 7 m/m. The M.1892 carbine has a number of distinctive features which aid in its identification: 1) its triggerguard assembly and magazine are manufactured as a single unit, 2) unlike the Argentine, Belgian and Turkish 89s, the Spanish Navy '92 carbine features the non-rotating extractor. 3) no handguard or barrel jacket. 4) its stock extends to the very muzzle of the rifle. 5) the one observed example, like the M., 1891 trials rifle above, has no Spanish markings anywhere, 6) it has no cavalry sling fittings, instead using the two side-mounted sling fittings found on Spanish M.1895 carbines made in 1896 and later, which use the sling loop mounting plate embedded into a slot in the left side of the buttstock, 7) the floor plate/magazine spring and follower can be easily removed by using a cartridge rim as a lever, and 8) the '92 carbine has no numbers on its rear sight leaf. 3. M.1892 Long Rifle Waffenfabrik Mauser Unknown Unknown, no rifle of Barceló-Rubi. Probably: (Army and Navy?) a/N "Waffenfabrik this type observed Catalogo general del 1892-93 Mauser Oberndorf Museo de Artilleria.

**Comments:** Adopted by the Spanish military on 30 November 1892 as yet, no Spanish M.1892 long rifles have been found outside of the one known to be in the Artillery Museum in Madrid which is illustrated in Rubi. The total number made is uncertain, and may well have been only a few. It is believed that the Spanish adoption of this rifle resulted in an immediate order which was quickly changed because Mauser Oberndorf almost immediately announced an improved version of the M.1892, the famous M.1893, which introduced the five round staggered box magazine. Within a few months in December of 1893, Spain officially adopted this newer rifle as their "Modelo 1893", canceling the M.1892 order before it could get into production. The M.1892 rifle depicted in Rubi is distinctive from other known 92s in that its handguard does not surround the rear sight, extending from the front of the sight base all the way up to and under the lower barrel band which secures it to the barrel, as on the M.1893.

a/N", as on the

M.1892 carbine

Ordered in 7.65 m/m,

but only known in 7

m/m

	Spanis	h Model 1891-	1893 Mauser F	Rifles	
Model Service Branch and Caliber	Manufacturer, Production date	Receiver Crest	Side Rail and Parts Markings	Stock Markings	Research Sources
4. M.1891 Long Rifle ex-Argentina (Army) 7.65 m/m	Ludwig Loewe & Co. October, 1893	Argentine national crest	"Mauser Modelo Argentina 1891, Manufactura Loewe Berlin"	Unknown, but presumably Argentine	Boado y Castro, Rubi, Webster, pp. 70-72 Catalogo general del Museo de Artilleria, Priv Corr
the Loewe factory in Be what was to later known were sent to Cuba in Ju Massachusetts where th were still unsold. These pre-1910 sights for roun magazine without the la	ster reports that in Octobe rlin. At that, Spain needed as the Riff region of the ne, 1894. In 1898, a num ney were auctioned off to were later acquired by Ba id nose munitions (same l rge locking screw. There is rrest, but this cannot be var	I to quickly arm troops d Spanish Protectorate of per were captured in the the public on January 5, annerman's of 501 Broa eaf slide as the Germar s one report that Spanis	leploying to North Africa Morocco. After the crisis surrender at Santiago d 1899. At the conclusion dway, New York City. Arge M.1888 Commission rifl	to put down a rebellion i was over in March, 189 e Cuba and returned to of the auction, 2,047 Ar entine M1891 rifles used le), the early extractor, s	n the Melilla district of 4, all Argentine rifles Springfield Armory, gentine pattern rifles I by Spain will have the hort handguard, and a
5. M.1891 Cavalry Carbine	Ludwig Loewe & Co. 1894	Spanish royal coat of arms, over "Berlin	MANUFAC-TURA LOEWE BERLIN	Left side: a cartouche (the size	Observed, Boado y Castro, Rubi, "The
<b>(Army)</b> 7.65 m/m		1894	with Army inspection marks	of a U.S. nickel coin) containing a crown over "BERLIN: in caps, over "1894". Right side: serial number between the receiver and barrel numbers	Springfield Republican" newspaper, Priv Corr, Webster
Argentine cavalry carbin the manufacturing cycle and acceptance marking Revolt. These carbines of post-1893 (Argentine) m later on all Spanish Arm Loewe firing proof. Obse letter. At the conclusion	ster reports that at the sames. From surviving example because each observed gs. These are therefore movere the first Mauser rifles hagazine lock. Significant hy-accepted M.1893 rifles erved serial numbers for th of the U.S. Army's Spring ned unsold and were offered.	bles of these carbines, v carbine, although it look ost likely the 5,000 carb s to feature the standard y, this carbine bears the The Saturn mark appea his carbine are all in the field Armory public auct	ve can surmise that these is exactly like the Argenti ines purchased from Arg Spanish coat of arms re- stacked cannon balls an ars on the top of the barr 3-4,000 range. The highe ion of Spanish-American	e were purchased from I ne carbine, has only Sp entina in 1893 during th ceiver crest. The carbine id Saturn-with-rings insp el, bolt knob and receive set confirmed number is War rifles from Cuba in	Ludwig Loewe early in anish military property e Melilla (Morocco) s are equipped with the pection stamps used er rail, and may be the 4972, no prefix or suffix
6. M.1893 Long Rifle (Army) 7 m/m	Ludwig Loewe & Co. 1894	Spanish royal coat of arms, over "Berlin 1894"	MAUSER ESPAÑOL MODELO 1893, MANUFAC-TURA LOEWE BERLIN."	Royal coat of arms over "1894" stamped on left side of butt stock	Observed, Boado y Castro, Rubi Catalogo general del Museo de Artilleria, "The Springfield Republican" newspaper, Priv Corr
5,000 carbines was place observed with serial nur carbine produced in the with nine block prefix left H. K, L, M, N, and R, for in the aforementioned U unsold and were later ar rifles in the Model 1893 the Bannerman's store a barrel, receiver, cleaning sleeve, safety, floor platt The funding for 20,000 needed to arm Spanish Spain in 1895-96, and th	1893 long rifle was officia ced with Ludwig Loewe by mber block prefix letter of 1894 lot.) Rifles dated "1 tters between the low/high r an approximate producti U.S. Army-conducted public cquired by Bannerman's, ad in the 1907 Bannerma at 501 Broadway in New N g rod, and stock, just belo e, sight leaf and slide, and M.1893 rifles ordered but troops deploying to deal the 1,900 LLCo rifles boug which the Spanish Army of	r the Spanish Army. How "A" thru "E", equating to 896" (see rifle # 10) con a serial numbers of "E17 on of at least 85,000 rifle c auction of the 20,000+ who later also acquired n's catalog.) In the late fork City. The full serial r w the receiver number. I both barrel bands. not acquired in 1894, w with the Melilla insurgen th by the Orange Free S	vever, rifles bearing the 1 an 1894 production of ap tinue serial production w 26" thru "R498X". The blo es dated 1896. Approxim - Spanish trophy rifles ca the rifles captured in the 1930s, these rifles were so umber appears on these The last 2 digits of the se as most likely used to pu cy. This presents the pos State in 1896 may well be	894 date made by Loew pproximately 50,000 rifle ithout a break, having be ock letter prefixes observately 9,000 of these rifle ptured at Santiago de C Philippines. (See the me still available retail, by ma e 6 parts: the bolt handle rial number appear on the rchase the 10,000 Argent subility that the 12,600+ e the Spanish rifles in the	re have only been es. (See rifle # 8 for a een observed stamped ved to date are: E, F, G, is were offered for sale uba in 1898. Most went ention of the Philippines ail order or in person, at e shaft, triggerguard, he cocking piece, bolt ntine M.1891 rifles LLCo rifles bought by e production pipeline in

Branch and Caliber	Manufacturer, Production date	Receiver Crest	Side Rail and Parts Markings	Stock Markings	Research Sources
7. M.1893 Long Rifle ( <b>Navy)</b> 7 m/m	Ludwig Loewe & Co. 1894	Spanish royal coast of arms crest over "Berlin 1894"	MAUSER ESPAÑOL MODELO 1893, MANUFAC-TURA LOEWE BERLIN	Royal coat of arms over "1894" stamped on left side of butt stock; <i>M</i> <sup>a</sup> and 4 digit serial stamped in wood below receiver serial number	Observed, Barcelo Rubi, Boado y Castro Priv Corr
Marine Corps. These rill clearly inspected by a close- coewe-made Navy rifle or Navy. Boado y Castri- eference to the Germa Spanish", especially si Naval Infantry (Marines vith "Mª" and end with " serial number on the lei- small "m" appears only	castro, states that 14,069 M fles are the same as the A different organization. Navy s are easily recognized by o (quoted by Rubi) states to in Navy is incorrect, and the nce his description fits Spi- t) requiring modern rifles. F "M", written in a cursive ita ft side of the receiver and j on the bolt knob. The large arrel bands. Small fittings 1893 Navy carbines	rmy M.1893 rifle, except rifles have components their unique serial numb hat all <u>"German"</u> Navy N e German reference is our battalions were serv- ics font. The highest ob- ust below it in the stock. <b>M</b> appears on the top a	t that they lack all Spanis s marked with an italic, co per format: " <i>M</i> <sup>a</sup> 1234 <i>M</i> ", Mausers were marked wi completely out of context s and NOT German Navy ving in Cuba in 1898. All I served 1894 Marina rifle on the bolt handle, barru and bottom of the stock w	h Army inspection and p ursive letter " <i>M</i> " "or a nor The <i>M</i> <sup>a</sup> and <i>M</i> are believ th "M" on the componen , it is assumed that Boa v rifles. Spain had a num .oewe-made "Marina" rif is number <i>M</i> <sup>a</sup> 3542 <i>M</i> . T el and in front of the trigg	proof marks and were n-italic lower-case "m". ed to stand for "Marina' ts. Because this do meant to write ber of battalions of le serial numbers begin he <i>M</i> <sup>a</sup> appears with the gerguard assembly. The
B. Model 1895	Ludwig Loewe & Co.	Spanish royal coast	MAUSER ESPAÑOL	Royal coat of arms	Observed, Barcelo
Cavalry carbine Army) 7 m/m	1894	of arms crest over "Berlin 1894"	MODELO 1893, MANUFAC-TURA LOEWE BERLIN	over 1896 stamped on left side of butt stock	Rubi; Boado y Castro "The Springfield Republican" newspaper, Priv Corr
	nly two of these early Arm comprised the initial order				
vhether dated 1894 or clamp on right side and he a lower sling bar wh	1896, are marked "Modelo I but no sling swivel, and n hich is secured via a screw	o provision for a bayone	cleaning rod, it is stocke t. The buttstock on the 18	d to the muzzle, its lowe 394 carbine does not ha	r band has a screw ve the large slot cut for
whether dated 1894 or clamp on right side and	I but no sling swivel, and n	o provision for a bayone	cleaning rod, it is stocke t. The buttstock on the 18	d to the muzzle, its lowe 394 carbine does not ha	r band has a screw ve the large slot cut for
whether dated 1894 or clamp on right side and he a lower sling bar wh vrist. 0. M.1893 Long Rifle <b>Branch of Service</b> <b>Iser unknown)</b> 7 m/m <b>Comments:</b> Over 12,00 bbserved. No LL Co rif fabrikzeichen) was use which are still in origina although the stocks are on bolts roots, barrels, s	I but no sling swivel, and n nich is secured via a screw Ludwig Loewe & Co.	LLCo, the stylized monogram & registered trademark of Ludwig Loewe & Cº. e purchased by Spain. S r prefixes have been ob industrial products, from erved with the Spanish i s are inscribed "Mod. Mi wn over a fraktur letter)	cleaning rod, it is stocke et. The buttstock on the 11 does have the cavalrym "Mod. Mauser 1895" over "Ludw. Loewe & Co. Berlin" Serial numbers from a do served. No carbines with n firearms to sewing mac royal coat of arms stamp auser 1895". Further, the	d to the muzzle, its lowe 394 carbine does not ha an's lanyard ring attache Royal coat of arms over 1894 stamped on left side of butt stock zen rifles ranging from 4 this crest are known. Th nines. All rifles in this se ed in the left side of thei se rifles bear German m	r band has a screw ve the large slot cut for d to steel bar under the Observed, Priv Corr 01 to 12,670 have beer he LL Co trademark rial range with this cres r butt stocks. Note that illitary inspection marks

Model Service					<b></b>
Branch and Caliber	Manufacturer, Production date	Receiver Crest	Side Rail and Parts Markings	Stock Markings	Research Sources
I1. M.1893 Long Rifle <b>Army)</b> 7 m/m	Waffenfabrik Mauser a/N <b>1896</b>	Spanish royal coat of arms, over "Oberndorf 1896"	MAUSER ESPAÑOL MODELO 1893, MANUFAC-TURA MAUSER OBERNDORF a/N	Royal coat of arms over "1896" stamped on left side of butt stock	Observed, Boado y Castro; Barceló-Rub Priv Corr
number block letter pref he planet Saturn with it	ber research indicates tha ixes of "A" thru "D". Interes s rings. On Oberndorf Spa ide Spanish 93s, the rings orted.	stingly, the serial numbe anish Mausers, the imag	rs on all Army-inspected e is rotated 90 degrees s	Spanish Mausers is pre that the rings are verti	ceded by an image of cal reaching from 12 to
2. M.1893 Long Rifle <b>Navy)</b> ′ m/m	Ludwig Loewe & Co. 1896	Spanish royal coast of arms crest over "Berlin 1896"	MAUSER ESPAÑOL MODELO 1893, MANUFAC-TURA LOEWE BERLIN	Royal coat of arms over <i>M</i> <sup>a</sup> stamped on left side of butt stock	Observed, Barceló-Rubi Boado y Castro, Priv Corr
<i>№</i> 2368 <i>M</i> , with a recei	st is <i>M</i> <sup>a</sup> 5157 <i>M</i> . A floorpla ver dated 1894 . Rifle num which is numbered 9792 Ludwig Loewe & Co. <b>1896</b>	iber <i>Mª</i> 9770 <i>M</i> was acq	uired by a collector who	purchased the rifle toget	her its original Germa
lighest serial number c nat a total of 22,500 ca najority, dated '1896". T arbines have been not		1896 edition of Boado y d at that point, including on yet as to how many c	Castro's book "El fusil M the small number of "A" arbines were produced i	auser español modelo 1 series carbines dated "1 n each year, although so	893", the author state 894" and the remainin far only "A" series
4. M.1893 Long Rifle No data on service oranch) ′m/m	Fabrique Nationale D' Armes De Guerre <b>1896</b>	"FABRIQUE NATIONALE" over "HERSTAL LIEGE"	Serial number only	No stock markings	Observed.; Francotto and Gaier's "FN 100' Priv Corr
esigned nearly enmass DWM) quickly acquired n Cuba intensified, FN ifles and carbines and	y, 1896, FN lost its court b s, and began selling off the the majority of FN stock a received an order (presun 4.5 million rounds of ammi r stock markings. Several viedo slide.	eir FN stock shares. Loe nd appointed its own Bo nably an in-house subco unition. The exact numbe	we (which the following y ard of Directors. In the fo ontract from Ludwig Loew er of carbines vs. rifles is	vear merged its armame llowing month, March, 1 ve) to provide Spain with unknown. To date, no FN	nt subsidiaries into 896, as the insurrectior 14,000 Model 1893 I rifles have been found
5. M.1893 Carbine Army cavalry 7 m/m	Fabrique Nationale D' Armes De Guerre, 1896	"FABRIQUE NATIONALE" over "HERSTAL LIEGE"	Serial number only	Serial # in side of stock below the number on the receiver side rail	Observed, Francotte and Gaier's "FN 100
	ed although unconfirmed, ng rifles (above). As with t	the long '93s mentioned	above, no FN-marked ca		eiver or stock marking

## Spanish Model 1891-1893 Mauser Rifles

Model Service Branch and Caliber	Manufacturer, Production date	Receiver Crest	Side Rail and Parts Markings	Stock Markings	Research Sources
16. M.1893 Long Rifle <b>(Navy)</b> 7 m/m	Deutsche Waffen- und Munitionsfabriken <b>1897 or later</b>	No crest or other markings on top of the receiver ring	Deutsche Waffen- und Munitionsfab- riken, Berlin	Royal coat of arms over "1896" over <b>Ma</b> on the left side of the butt stock	Observed' Boado y Castro, Barceló Rubi, Priv Corr

**Comments:** This rifle is the last known Spanish M.1893 Mauser made in Germany was produced by DWM, Deutsche Waffen-und Munitionsfabriken, one of the three principle subsidiaries of the firm of Ludwig Loewe & Co. AG, which by the 1930s eventually became the Gesellschaft für Elektrische Unternehmungen Ludwig Loewe & Co. AG. Approximately ten DWM M.1893 long rifles have been observed. Those retaining there original stocks have Spanish Navy cartouches. Serial numbers have been noted without letter prefixes, and in the A, B, and C-prefix blocks. Rifle number C9955 is the highest DWM Spanish Mauser reported. Of the rifles noted to date, most have seen extended service and now have replacement stocks. Thus, not every DWM rifle reported can be conclusively traced to the Spanish Navy / Marines since the *M*<sup>a</sup> cartouche was lost during the change-out of stocks. Rifle number A1951 is a typical DWM Spanish Navy rifle in original condition. It has no obvious Spanish markings except for the Spanish royal coat of arms stock cartouche, with "1896" and *M*<sup>a</sup> stamped below it. Since DWM was not established until 1897, the stocks would have been made and accepted well before the barreled action, and were likely a supply already on hand. Spanish DWM rifles use in-house DWM circular proof/acceptance marks containing a single fraktur letter, which were stamped on the left side of the receiver, bolt knob, barrel, and the lower comb of the buttstock. The same circular mark appears on DWM-made Boer Mausers.

#### 1. Markings on Spanish Army M.1893 Rifles and Carbines made by Ludwig Loewe and Co and Mauser Oberndorf

Proof and acceptance marks on Ludwig Loewe and Mauser Oberndorf rifles and Loewe carbines are almost the same: On the receiver, left side, an image of Saturn with rings to the left of the serial number; a hexagram (6-pointed star composed of overlaid triangles, the sign of quintessence or highest quality) with a prick punch "dot" <u>under</u> it (1894 rifles only), between number and side rail. Bolt makings include the planet Saturn on knob and hexagram at end of handle shaft below bolt knob; TG and small parts, a six pointed start or asterisk. On 1896 dated rifles, the marks are the same except that the prick punch "dot" is to the right of the hexagram. The receiver crest also appears on the left side of the buttstock. The hexagram image was stamped on the top of the wrist of the stock, and a small stack of cannon balls image was stamped on the top surface of each handguard.

#### 2. Serialization on Spanish-crested M1893 Rifles and Carbines

The full serial number appears on these 5 parts: the bolt handle shaft, triggerguard, barrel, receiver and stock just below the receiver number. The last 2 digits of the serial number appear on the cocking piece, bolt sleeve, safety, floor plate, sight leaf and slide, both barrel bands and cleaning rod. Observed rifles and carbines with original German wood did not have internally numbered stocks and hand guards, although Spanish replacement stocks have been noted with stocks with matching serial number internally marked in pencil. All parts, including the trigger components bear inspection and acceptance marks, but are unserialized, a testimony to the mechanical engineering skill and success Loewe engineers had in mastering American precision manufacturing methods in mass producing reliably interchangeable components without hand fitting. (See inscription on Ludwig Loewe and Co.'s 1890s letterhead "Fabrikations-und Werkzug-Maschinen nach Amerikanischen System")

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Model	Manufacturer, Production Date	Caliber	Receiver Ring Markings (Crest)	Side Rail Markings	Stock Markings	Sources
. M.1893 Long Rifle	Fabrica de Armas Oviedo 1896-1928	7 m/m	Crown with "Fabrica de Armas Oviedo" and year of manufacture	Serial number	Crown, "Oviedo" and year of manufacture all in a circle. Very few of these markings reported, so there is either a low survival rate, or not all were marked. Script "R" in place of crown on refurbished rifles	Observed, Carnahan, Boada y Castro Rubi, Calvo, Hoffman & Schott
digits (e.g. F1 letter, then for Model 1893 re	345). After the "Z" series ir digits (e.g. 2C3462). K eceivers lack the thumb	was finished nown serial r cut in the left	Serial number format is the t l in 1915, (270,000 rifles to this numbers range from just three receiver rail. Gas escape hole Model 1893 rifles have been o	s point) the sequence digits in 1896 to 2X s in the left side of t	ce started over with the n followed by four digits in the receiver appear in ab	umber 2, a 1928. All out 1920.
2. M.1895 Carbine	Fabrica de Armas Oviedo 1897-1927	7 m/m	Crown with "Fabrica de Armas Oviedo" and year of manufacture	Serial number	Crown, "Oviedo" and year of manufacture in a circle	Observed, Carnahan, Rub Calvo
stocked to the	end of the 17" barrel. S	ome carbine	nes. Known serial number rang s were apparently manufacture yout 3" past the front band.			
3. M.1916 Short Rifle	Fabrica de Armas Oviedo 1916-1936	7 m/m	Crown with "Fabrica de Armas Oviedo" and year of manufacture. Style of crown changed from rounded top to flat top in 1932 after Monarchy abolished. Some later examples do not have crown at all	Serial number	None observed	Observed, Rut Calvo
observed exa	mple) to 2B followed by	four digits in	t rifles with 22" barrels. Known 1936. All Model 1916s have th e vizier rear sights up to about	umb cut in left recei	iver rail and gas escape	hole on left
I. M.1893 Long Rifle Retubed	Fabrica de Armas Oviedo 1928-1933	7 m/m	Crown with "Fabrica de Armas Oviedo" and year of rebuild	Serial number	Script "R", "Oviedo" and year of manufacture in a circle	Observed, Sanchez
REB followed		RE stands fo	e over 20,000 rifles. Known ser "recompuesto entubado" or "r			
5. M.1916 Short Rifle, Republican production	One or more arsenals in and around Barcelona 1936-1939	7 m/m	"Industrias de Guerra Cataluna" or "Subsecretaria de Armamento" and year of manufacture	Serial number	None observed	Observed, Hoffman & Schott
			000 rifles. Possible that many v an A with four digits followed b			
000011041	Fabrica de Armas	7 m/m,	None	Serial number	None observed	Observed

Model	Manufacturer, Production Date	Caliber	Receiver Ring Markings (Crest)	Side Rail Markings	Stock Markings	Sources
7. M.1916 Carbine Rebuilt	Fabrica de Armas Oviedo ca1939-ca1960	7 m/m	None	Serial number	None observed	Observed
	otal rifles estimated cor numbers consist of four		pines is less than 10,000. Old (e.g. 2065).	markings removed, t	humb cut added as ne	cessary. All
8. M. 1893 & M. 1916 8m/m Conversions	Fabrica de Armas Oviedo ca1939-ca1945	8 m/m	7.92 on left side	Serial number, "Ëspecial" on one example	None observed	Observed, Olsen
Comments: (	Only a handful of examp	les observed,	rebarreled to 8m/m Mauser (	7.92 m/m).		
8. M. 1916 Short Rifle Guardia Civil Conversion	Fabrica de Armas Oviedo ca1960-ca1965	7.62 m/m CETME or NATO	Guardia Civil crest	Serial number	None observed	Observed, Reglamento para Instruccion
			ardia Civil configuration is 25,0 e a Z, 2Z, or 3Z prefix followed			to 7.62mm
9. M.1916 Short Rifle 7.62m/m Conversion	Fabrica de Armas Oviedo ca1960-ca1965	7.62 m/m CETME or NATO	None	Serial number	None observed	Observed, Reglamentopa la Instruccion

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#### **General Notes:**

- 1. There are no production records available from the Oviedo arsenal that we are aware of. On the basis of serial numbers versus years of manufacture, about 15000 each of the Model 1893 long rifles and Model 1916 short rifles were produced annually. Carbine serial numbers are too mixed up to estimate a production rate.
- 2. Many if not most Model 1893 rifles, 1895 carbines, and 1916 rifles were reworked at some time during their military careers, or even sporterized for sale to the public. Original condition, matching examples in fine or better condition with original stock cartouches are very scarce.
- 3. It is assumed that all the later Model 1916 rifles (categories 6 through 9 above) were converted from worn out Model 1893 variants. Old markings were removed, and traces of previous markings can be found on some of them. There is no way to positively verify that none of these 1916 rifles were new production.

## Summary Table describing the 37,000 Mauser Model 1895 7m/m Rifles and Carbines purchased by the Zuid-Africaansche Republiek (Z.A.R.) from Ludwig Loewe and DWM before the Boer War of 1899-1901

Serial # Range	Туре	Maker marking on Side Rail	Remarks and Observed Rifle Characteristics
1. A1 - A10000, All 10,000 Delivered	Long Rifle (29" barrel)	"Mod. Mauser 1896" over "Ludw. Loewe & Ce Berlin"	<ol> <li>No receiver crest, straight bolt handle. All ZAR bolts are finished in the white.</li> <li>All rifles are reported by Dr. Bester to have German military-style quality inspection/proof (?) marks (a crown over a fraktur letter) in four locations: on the left side of buttstock, on left side of receiver near the serial number, on top of bolt handle, and on top of barrel under handguard. Long rifle sights are graduated from a minimum of 300 meters (battle sight) to 2,000 meters.</li> <li>Loewe rifles do not have the circular cartouche inspection stamps found later on DWM-made rifles.</li> <li>Order placed in June, 1896; shipped from Hamburg to the ZAR in July, August and Septem- ber of 1896.</li> </ol>
2. B1 - B10000, As above	Long Rifle (29" barrel)	"Mod. Mauser 1896" over "Ludwig Loewe & Ce. Berlin"	<ol> <li>No receiver crest, straight bolt handle.</li> <li>Other characteristics are the same as above.</li> <li>Order placed in June, 1896; shipped from Hamburg to the ZAR in July, August and September of 1896.</li> </ol>
3. (No letter prefix) All 5000 delivered	Carbine (18" barrel)	"Mod. Mauser 1896" over "Ludw. Loewe & Ce Berlin"	<ol> <li>No receiver crest, turned down bolt handle.</li> <li>Reported by Bester to have the Crown-over-fraktur-letter quality inspection marks, as above on Loewe rifles.</li> <li>Short carbine sight, graduated from 400 to 1400 meters.</li> <li>Shipped from Germany in September 1896.</li> <li>Some ZAR rifles carbines were later sold to the Orange Free State, but were not officially "O.V.S."-marked.</li> </ol>
4. 1 - 10,000 (No letter prefix) All 10,000 delivered	Long Rifle (29" barrel)	"Deutsche Waffe-und- Munitionsfabriken" over "Berlin"	<ol> <li>No receiver crest, straight bolt handle.</li> <li>Bester reports use of the circular cartouche on DWM rifles.</li> <li>One observed DWM rifle (18XX) has no circular cartouches but does have German military quality inspection marks (a crown over a fraktur letter) in four locations: the left side of buttstock, left side of receiver near the serial number, top of bolt handle, and top of barrel under handguard.</li> <li>Shipped to ZAR in March, 1897 (2,000 rifles), and May - August, 1897 (8,000 rifles).</li> </ol>
5. 7,000 (No letter prefix) All 2,000 Delivered	Carbine (18" barrel)	"Deutsche Waffe-und- Munitionsfabriken" over "Berlin"	<ol> <li>No receiver crest, turned down bolt handle.</li> <li>No German military quality inspection marks (crown over fraktur letter).</li> <li>Observed carbines have the circular cartouche stamped on left of buttstock (large), stock wrist (small), next to serial number, on the bolt knob, and on top of barrel under the hand-guard.</li> <li>Short carbine sight, graduated from 400 to 1400 meters.</li> <li>Shipped from Germany in August of 1897.</li> </ol>
6. ZAR Rifles sold to <u>Chile</u> <b>C1-C4,000</b> : None of the 4,000 were delivered to the ZAR	Long Rifle (29" barrel)	"Deutsche Waffe-und- Munitionsfabriken" over "Berlin"	<ol> <li>The ZAR Government placed purchase orders with DWM-Berlin for 4,000 C-series rifles in June and September of 1899.</li> <li>Made originally without receiver crests and with turned-down bolt handles. All bolts are in the white.</li> <li>Delivery was attempted after the outbreak of the Boer War, but all rifles were turned back by British Royal Navy blockaders at the Portuguese Mozambique port of Lourenco Marques (now Mabuto, Mozambique) in the fall of 1899.</li> <li>All rifles, ZAR and OVS, were returned to Germany and resold to Chile after the Chilean receiver crest had been applied.</li> <li>Many C-series rifles have remained in original condition, but many have been modified by the Chilean Government. So far, three variations of ZAR-Chilean resale rifles have been observed: 1) In original Boer configuration and markings, with only the Chilean crest added to the receiver ring, no Chilean cartouche on stock; 2) Same as #1, but converted to fire the 7 m/m spitzer round with new sights featuring a new sight leaf with spring catches on both sides of the sight slider. (The original slider has only one spring catch.) Minimum setting on new sights is 400 meters vs 300 on the old. The Chilean crossed-picks mark is stamped on the sight sleeve, and the barrel may be a replacement. (Swiss SIG-initialed barrels have been noted on ZAR and OVS spitzer-converted rifles.) The Chilean coat of arms stock car- touche over the initials "M.E." may be stamped on buttstock; 3) The last variation is the 1960s era conversion to 7.62 m/m NATO. (As yet, none have been observed first hand.)</li> <li>Observed ZAR rifles in original condition should have the same four circular inspection marks as the DWM rifles above.</li> </ol>

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## **About the Author**

Robert W.D. Ball is an acknowledged authority on antique military rifles and memorabilia. He has authored a dozen books and travels the world in search of items to add to his collection.



