BAYONETS By Mike Popernack

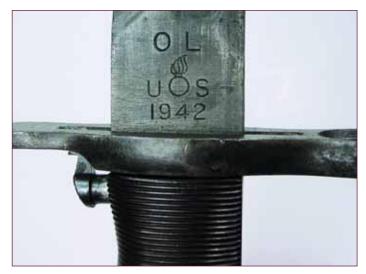
During the M1 Garand's long service life, a wide variety of bayonets were issued. A martial arms collector could limit his or her collection to just the many manufacturing variants and still have dozens of examples. What follows is a brief survey of the most representative types of bayonets and scabbards used with the M1 Rifle.

The M1905 Bayonet

When the Garand was adopted as our new infantry rifle in 1936, the standard bayonet was the M1905. It was originally designed for the M1903 rifle and was produced by Springfield Armory and Rock Island Arsenal from 1906 to 1922. The M1905 bayonet had a blued handle and a 16" bright, bare metal blade until 1918. Briefly in 1918, the M1905 was completely blued, and was later completely Parkerized from 1918 until the end of production. The grips were black walnut. Many early M1905's were rebuilt and refinished after WWI. According to the War Department's 1933 Mobilization Plan, 581,000 M1905 bayonets were stored in serviceable condition. Given the small size of the Depression era military, these were adequate for the first few years of the Garand's service.

By early 1939, war clouds were gathering over Europe, and the War Department devised a "Protective Mobilization Plan." The stockpile of leftover WWI era bayonets was to be supplemented with perhaps 100,000 to 300,000 new production bayonets, and contracts were being negotiated by late 1941. The December attack on Pearl Harbor showed how fortuitous that planning was. The new, second production period M1905 bayonet is sometimes erroneously called the "M1942" bayonet by collectors. It has a 16" Parkerized blade similar to the 1918-1922 production bayonets. Instead of walnut, the grips are usually black or sometimes brown plastic. Six civilian firms produced 1,540,578 M1905 bayonets from April 1942 to May 1943:

Wilde Drop Forge & Tool (WT) Utica Cutlery (UC) Union Fork & Hoe (UFH) Pal Blade & Tool (PAL) Oneida (OL) American Fork & Hoe (AFH)



Scabbards for the M1905 Bayonet

When the Garand was adopted, the standard scabbard was the M1910. It was made of wood covered with canvas and had a leather tip. The 1933 Plan lists only 180,660 of these scabbards in serviceable condition. To help make up for the shortfall, the War Department listed the M1917 and M1905 Modified scabbards as substitute standard.

The M1917 was originally designed for the M1917 bayonet used on the M1917 rifle and various trench shotguns. It was also found to be suitable for the M1905 bayonet and was considered an acceptable substitute if a M1910 scabbard was not available. The 1933 Plan lists 1,691,048 M1917's on hand, but deterioration of the leather bodies made many unserviceable.

Before 1910, the M1905 bayonet was issued with the M1905 scabbard. It had a wood body covered with leather and a hanger designed to fit the M1903 cartridge belt. When the M1910 cartridge belt was adopted, many M1905 scabbards were converted with a new style belt hanger and were re-designated M1905 Modified. The 1933 plan lists 6,848 M1905 and 99,030 M1905 Modified scabbards available. Like the M1917 scabbards, many were unserviceable due to leather deterioration.



When the second production period for M1905 bayonets began, a new M3 scabbard was introduced to replace the complex and fragile earlier types. It had a resin-impregnated, cotton duck fabric body painted green and had a metal throat. Two contractors, Beckwith Manufacturing and Detroit Gasket & Manufacturing produced 3,030,223 M3 scabbards between January 1942 and February 1943.



1942 Production M1905 with M3 scabbard.

The M3 was the most widely issued scabbard for the M1905 bayonet during WWII, but period photographs show the M1910 scabbards continued to see service throughout the war. Even the substitute standard scabbards like the M1917 were widely used in stateside training and early combat in the Pacific and North Africa.



M3 scabbard markings: Beckwith Mfg, (Left) Detroit Gasket (Right).



Beckwith scabbard mark.

M1 Bayonet

In order to produce a more practical weapon and conserve steel, a new bayonet was adopted in 1943. The M1 bayonet was basically a shorter M1905 with a 10" rather than 16" blade. Five of the original six civilian manufacturers producing M1905 bayonets converted to M1 bayonet production. Wilde Drop Forge & Tool Co. discontinued its production. From April 1943 through August 1945, some 2,948,649 M1 bayonets were produced.



M1 bayonet with M7 scabbard.



Typical makers mark on M1 bayonets.

The M7 scabbard, essentially a shorter version of the M3, was adopted for the M1 bayonet. Beckwith Manufacturing Co. produced 2,112,672 from April 1943 to August 1945. Detroit Gasket & Mfg. Co. did not produce M7's.

M1 Bayonet (Converted)

With the decision to adopt the M1 bayonet, Ordnance developed a program to convert the older 16" M1905 bayonets to the new 10" standard. Springfield Armory and the five civilian manufacturers converted M1905 bayonets returned from stateside and overseas units. The 16" blades were cut down and the points reground. The point was usually a "spear" style like the original bayonet, but a "knife" style was occasionally used. The knife point was an attempt to compensate for the thin, fragile steel left in the deep, square fuller of early production M1905's.



Converted point types: knife (top), spear (center), original M1 (right).

Most "cut down" bayonets were marked by the company that did the modification, and no special effort was made to segregate the bayonets by original manufacturer. Any manufacturer's M1905 bayonet, including Rock Island or Springfield, could be converted by any other manufacturer. Frequently, the company doing the modification marked the bayonet. A total of 1,007,671 M1905 bayonets were converted to M1's during WWII. Ordnance made no distinction in basis of issue or nomenclature between an original production M1 bayonet and one converted from a M1905.



1942 Utica M1905 converted to M1 by Pal.



1943 AFH M1905 converted to M1 by AFH.



"February 3, 1944 ad: Some months ago, when the Army reduced the length of the U.S. bayonet from 16 to 10 inches we had thousands of completed bayonets which we were instructed to shorten. Because of the great demand for tools among home victory gardeners, permission was given us to mate those 6-inch bayonet points into much needed hoes."

Shortened bayonet blades were not wasted! Photo from Clint Simpson.

M7 Scabbard (Converted)



M1 Converted bayonet with M7 Converted scabbard.

Similar to the conversion of M1905 to M1 bayonets, there was a wartime program to shorten M3 scabbards to M7 length. The scabbards were disassembled, the body shortened and the metal throat reattached. These converted scabbards can be identified by the different style of crimp attachment where the body joins the throat. There were 1,846,768 M3 scabbards converted to M7's in WWII, and Ordnance made no distinction in nomenclature between original and converted scabbards.



M7 (left) and converted M7 (right).
Note the configuration of the metal where it joins the body.

M1905 and M1 Bayonet Production by Manufacturer

The U.S. government facilities at Springfield Armory and Rock Island Arsenal kept fairly accurate production records, but exact production data is not available for the WWII civilian manufacturers. Most of these companies are no longer in existence, and it is impossible to determine exact production quantities. We have estimated second production period M1905 and M1 bayonet production based on known government acceptances and the relative monthly production capacities of the manufacturers. For M1 bayonets produced by converting M1905's, the collector can assume that the surviving original manufacturers' markings are roughly proportional to the relative quantities of the original M1905 manufacturers, except for a large number of SA and RIA bayonets lost during WWI and the early WWII defeats in the Philippines and Wake Island.

Springfield Armory (SA) Springfield, MA.

Springfield Armory produced 1,196,000 M1905 bayonets between 1906 and 1922. They never produced M1 bayonets but did modify M1905's to M1's during WWII.



Rock Island Arsenal (RIA) Rock Island, IL.

This arsenal has a long history of US equipment production ranging from mess kits to artillery. It produced a total of approximately 430,000 M1905 bayonets from 1906 to 1914 and 1916 to 1920. It also produced M1905 and M1910 scabbards and converted M1905 scabbards to M1910 Modified types. Although the arsenal did not produce new bayonets during the Garand's period of service, many RIA M1905 bayonets were converted to M1 bayonets by other manufacturers.

Wilde Drop Forge & Tool (WT), Kansas City, MO.

Wilde was a small hand tool manufacturer that received a government contract for M1905 bayonets. It had tremendous difficulties meeting their production quotas and was dropped from the bayonet program in February 1943, before M1 production began. Wilde Drop Forge and Tool produced an estimated 60,000 M1905 bayonets from 1942 to 1943. Low production numbers make them difficult to find and expensive today.



Imperial M5 maker mark and Defense Acceptance Stamp.

Utica Cutlery (UC), Utica, NY.

Utica, a major utensil and cookware manufacturer, was awarded one of the original three contracts for M1905 bayonets. The company produced 200,000 M1905 bayonets and 880,000 M1 bayonets from 1942 to 1945. During the Korean War, it produced an additional 75,000 M1 bayonets. Because of its relatively large volume of WWII production and the 1950's contract, Utica M1 bayonets are often found in good condition.

Union Fork and Hoe (UFH), Columbus, OH.

This tool and farm implement manufacturer produced from 1942 until 1944 and delivered 430,000 M1905 and 460,000 M1 bayonets.

American Fork and Hoe (AFH), Geneva, OH.

This conglomerate of many small hand tool and farm implement companies was the most prolific bayonet manufacturer, producing 400,000 M1905 and 1,015,000 M1 bayonets from 1942 to 1945.

Oneida, Limited (OL), Oneida, NY.

This silverware company produced 150,000 M1905 and 250,000 M1 bayonets in 1942 to 1943 before converting to subcontractor work on M1 Carbine parts. Oneida produced a finely finished and well-made bayonet that is prized by collectors.

Pal Blade and Tool (PAL), Plattsburg, NY.

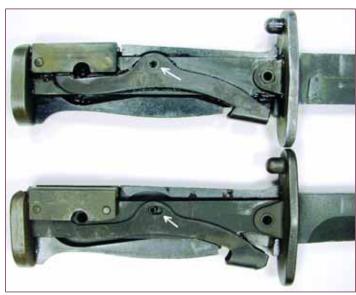
This kitchen cutlery manufacturer had substantial quality control problems early on, but overcame them to produce 210,000 M1905 and 340,000 M1 bayonets from 1942 to 1944.



M5 with early M8A1 scabbard.

M5 Bayonet

Near the end of the Korean War, a new bayonet was designed for the Garand that was a complete departure from earlier bayonets. Just as the M4 bayonet was essentially a WWII M3 Trench Knife modified into an M1 Carbine bayonet, the M5 bayonet was an M3-style knife blade adapted to fit the Garand. The M5 bayonet guard had a stud that fit into the gas cylinder screw, similar to the M7 series of grenade launchers, rather than the traditional barrel ring. It soon became apparent there were difficulties mounting and dismounting the M5 bayonet from the rifle while wearing gloves. The M5A1 bayonet was quickly adopted, which had minor improvements to the catch design and was easier to use.



M5 and M5A1 latch configurations. Note the oval shape of the pivot pin hole and the larger finger piece on the M5A1

Utica Cutlery, Aerial Cutlery, Imperial Knife, J & D Tool, and Columbus Milpar manufactured an unknown quantity of M5 and M5A1 bayonets beginning in the mid-1950s. Most M5A1 bayonets are actually marked M5-1, a technically incorrect Ordnance nomenclature that was commonly used. Utica, Aerial and J & D Tool M5's are relatively rare; Milpars and Imperials are more common. The M5 series of bayonets was copied by many U.S. allies who used Garands. These foreign variants are an interesting field of collecting in their own right, but beyond the scope of this article.



J&D Tool M5A1 markings.

M8A1 Scabbard



M5A1 bayonet with late, long throat M8A1 scabbard.



1950's production M8A1 by Victory Plastics.

The M5 series of bayonets was issued with the M8A1 scabbard originally designed for the M3 trench knife and M4 bayonet. This scabbard was produced from 1944 until the 1980s and also used for the M14's M6 bayonet and the M16's M7 bayonet. During WWII, Beckwith Manufacturing (B.M. CO.) produced over 3 million M8A1's and its subsidiary, Victory Plastics (V.P.

CO.), produced tens of thousands more in the mid-1950's. These scabbards used a resin-impregnated cotton duck body with a metal throat attached to a cotton web hanger. In 1955 a metal reinforcing tip was added to the scabbard without a change in designation. Over time, additional manufacturers were awarded contracts, and millions with many minor variations have been produced over the decades. Much research remains to be done on this long-serving piece of U.S. equipment.

Editor's note: GCA Director Dave Kaczmarek wrote an excellent article on bayonets for the Garand way back in 1989 (Vol.4, No.1 Winter). That article was extremely well researched and thorough, but did not include photos. In those early days, the GCA Newsletter was not as photograph-oriented as today's GCA Journal.

Transitional M1 Bayonets



Transitional UFH M1s with standard fuller (left), and long irregular fuller (center); PAL M1 with hand-ground fuller (right).

An interesting sub-field of bayonet collecting is identifying early M1 bayonets produced in the transition from M1905 production. The earliest M1 bayonets were marked with the 1943 date of production, similar to M1905 bayonets. The vast majority of M1 bayonets, however, were not marked with the year of production. Additionally, collectors have identified M1 bayonets with irregularly shaped fuller grooves at the point end. Sometimes these show hand grinding marks, and sometimes there are irregular dimensions that some collectors hypothesize resulted from partially finished 16" blades being re-forged to the new 10" length. There is still a lot of work to be done in this field.

Special thanks to Scott Duff and Harlan Reinfeld for their assistance with this article. To learn more about Garand bayonets, see *American Bayonets of the 20th Century* by Gary M. Cunningham. I also welcome any information from the membership on production contracts or original bayonet packaging contract numbers, especially for M5 series bayonets and M8A1 scabbards, so we can better understand the history of these important weapons. I can be contacted via my website at www.popernack.com.

Bayonet Model	Collector's Conventions	Characteristics	Manufacturers	Years Produced	Quantities and Remarks
M1905	Type I First production period M1905	Walnut grips Bright blade Blue handle	SA, RIA	1906-1917	950,000
M1905	Type II First production period M1905	Walnut grips Blue blade and handle	SA, RIA	1917-1918	150,000
M1905	Type III First production period M1905	Walnut grips Parkerized blade and handle 1*	SA, RIA	1918-1922	525,000
M1905	Type IV Second production period M1905 "M1942"	Plastic grips Parkerized blade and handle 1*, 2*	UFC, AFH, WT, OL, AFH, UC	1942-1943	1,540,578
M1		Plastic grips Parkerized blade and handle 1*	UFC, AFH, OL, AFH, UC	1943-1953	2,948,649 in WWII and at least 75,000 for Korean War
M1	• M1 (Converted) • M1905E1 • "Cut down"	Usually plastic, occasionally wood grips Parkerized metal 1*	ANY	1943-1945	1,007,671 Converted from M1905s
M5		Plastic grips Parkerized metal	UC, Aerial, Imperial, J & D Tool,	1954-195?	Unknown
M5A1		Plastic grips Parkerized metal	Aerial, Imperial, J & D Tool, Milpar	195?-19??	Unknown

^{1*} Some small parts continued to be blued 2* Many OL bayonets were originally completely blued.

Scabbard Model	For Bayonet Model	Characteristics	Manufacturers	Years Produced	Quantities
M1905	M1905	Leather covered wood body Hanger for M1903 series Cartridge Belts	RIA	1906-1911	750,000 Estimated
M1905 Modified	M1905	M1905 scabbard modified with M1910 belt hanger	RIA	Converted 1910-1920s	Unknown quantity converted
M1910	M1905	Canvas covered wood body	RIA	1910-19??	At least 900,000
M1917	M1905 M1917	Leather body	RIA Jewell G & K	1917-1918	3,483,256
M3	M1905	Resin impregnated cotton duck body	Beckwith Mfg. Detroit Gasket	1942-1943	3,030,223
M7	M1 M1 (Converted)	Resin impregnated cotton duck body	Beckwith Mfg.	1943-1953	2,112,672
M7 (Converted)	M1 M1 (Converted)	Converted by shortening M3 Scabbards	Beckwith Mfg. Detroit Gasket	1943-1945	1,846,768
M8A1	M5 M5A1	Resin impregnated cotton duck body Web hanger	B.M. Co., V.P. Co. Many others	1944-1980s	Unknown