

The U.S. Rifle, caliber .30, M1917 ©2003

By Dick Culver



The U.S. Rifle, caliber .30 M1917 (often called the Enfield or P-17) is one of the most misunderstood and neglected of United States Service Rifles. For many years the M1917 has been basically ignored by collectors and shooters in favor of its more popular cousin, the M1903, usually called the “Ought Three” or Springfield (even though produced by both Springfield Armory and Rock Island Arsenal). Here I will attempt to give you some insight into the thinking and usage of one our most prolific and combat used battle rifles of WWI. First, we should know the intricacies and the growing pains of our main (or at least most used) service rifle of *The Great War*, and why in the final analysis it was not adopted as our principle service arm. Let’s start with the rifle itself and its attributes.

Nomenclature of The M1917 Rifle:

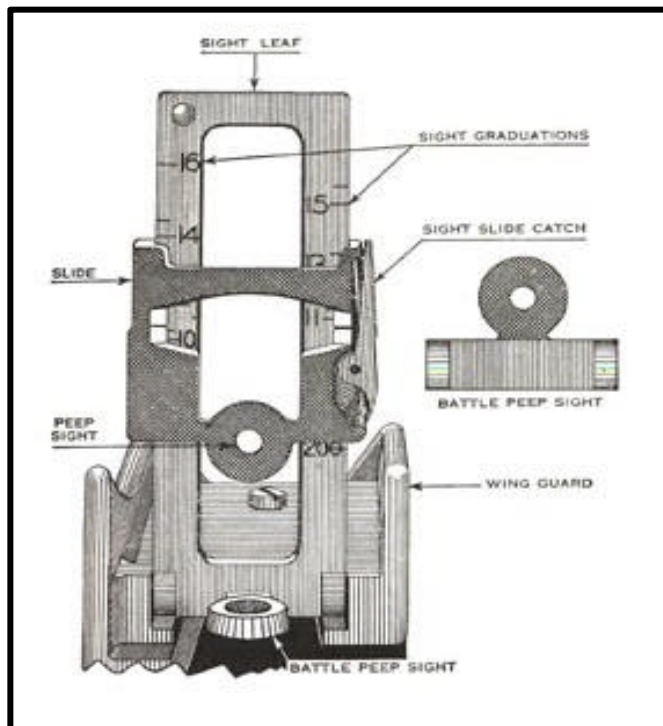
The U.S. Rifle has been often called the Enfield, or the P-17. While both of these conjure up a vision of the same rifle, technically neither is correct in military terms. Officially, the .30-'06 version of the British design is known as:

The United States Rifle, caliber .30, M1917 and is described as a breech loading rifle of the bolt type. It is sometimes called the Enfield rifle (extracted from the War Department Basic Field Manual 23-6), since it was developed at the Royal Small Arms Factory located at Enfield Lock, in Middlesex and located approximately 11 miles north of London Bridge on the outskirts of London.

M1917 Principal Dimensions, Weights and Miscellaneous Data are:

Weight, without bayonet	9.187 lbs.
Weight with bayonet	10.312 lbs.
Length without bayonet	46.3 inches
Length with bayonet	62.3 inches
Diameter of bore	.30 inches
Trigger Pull, minimum	3.0 pounds
Rifling:	
Number of grooves	5
Twist (uniform)	1 turn in 10 inches (left hand twist)
Sight Radius	31.76 inches (31.69 inches using battle sight)
Battle Sight	Set at 400 yards
Magazine Capacity	6 rounds (compliments of using a rimless cartridge in a magazine designed for the rimmed .303 British round)

Sights:



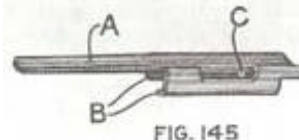
Rear Sight is of the “leaf” design graduated from 200 – 1600 yards. Graduations are in multiples of 100-yards from 200 – 900-yards, and in multiples of 50-yards from 900 – to 1600-yards. When folded forward so that the leaf is laying flat, the battle sight aperture is automatically raised to expose the battle sight peep. While the M1917 rear sight places the shooter’s eye closer to the rear sight aperture, there are no provisions to adjust the sight for windage. Any compensation must be accommodated by “holding off” to compensate for windage variations. The front sight may be adjusted laterally using a punch and a hammer if necessaryⁱ. The front sights were adjusted at the arsenal or manufacturer and locked into position by upsetting part of the metal sight base of the front sight with a punch.

Magazine Cut Off:

The M1917 Rifle is designed without a magazine cut off (the British decided that it was not necessary in combat). This complicates the manual of arms, however this was often compensated for in use by inserting a dime over the top of the follower to allow the bolt to be closed after executing “Inspection Arms.” Bruce Canfield’s book, *“U.S. Infantry Weapons of the First World War”* mentions that Winchester manufactured about 215,512 “magazine platform depressors”ⁱⁱ to perform the function of depressing the magazine follower to allow a normal “inspection arms” maneuver and to facilitate rapid fire practice without using dummy ammunition. While Bruce makes no mention of either Remington or Eddystone producing such an item, such “depressors” do exist and are marked appropriately by each manufacturer. Scott Duff has carried all three varieties, but his supply at this time is unknown. The Doughboy of the time made do in the absence of such high-tech devices, by inserting a dime or a penny in the magazine over the follower (and under the magazine lips) allowing the bolt to ride over the follower to prevent the blunt edge of the rear of the follower from holding the bolt to the rear on an empty magazine. Either the use of the Magazine Follower Depressor or the field expedient use of a coin allowed the execution of the manual of arms in a manner similar to that utilized with the M1903 and would allow simulated rapid fire practice in garrison using a rifle lacking a magazine cut-off. My personal experimentation with the coin expedient has

The M1917 Magazine Follower Depressor

The Follower Depressor is shown in perspective in Figure 145. It is used to hold the follower down, clear of the bolt so that the rifle may be used for drill purposes and in simulating rapid fire. It comprises the top plate (A); wings (B); and finger notch (C).



The follower is forced down and the depressor is slipped into the magazine edgewise above the follower and is then turned so its edges engage under the sides of the magazine opening in the receiver. Since the top plate is “troughed,” full clearance for the movement of the bolt is given.

To remove the depressor, it is pushed down and tipped laterally by inserting the point of a bullet in notch (C). When so tipped, it will be lifted out of the magazine by the follower.

not been successful – either dimes were thinner in those days, or the troops may have filed the edges down. Rifles (both M1917s and M1903s) converted to sporter configuration often had the square (rear) shoulder of the follower filled to a smooth ramp configuration to accomplish the same result.

Why would the magazine of the M1917 Rifle be designed to hold six rounds when all G.I. Ammunition was issued in 5-shot stripper clips? This is an interesting question, but easily answered in light of the design parameters of the P-14 Rifles. You must remember that the P-14 was designed to feed five (5) rimmed .303 British Cartridges, not 5 rimless .30-'06 Cartridges. Although not immediately apparent, the rimmed cartridges take up considerably more room in a magazine than 5 rimless cartridges of more or less the same length and case diameter. The lack of a rimless case allowed for an extra .30-'06 cartridge to be inserted in the magazine, although this feature was rarely taken advantage of due to the standard issue 5 shot stripper clip and the exigencies of war.

Taking Advantage of the 6-Round Magazine Capacity With a 5-shot Stripper Clip:

All (full calibered – not considering the Pedersen Cartridge of course) rifle small arms ammunition during WWI was issued in 5-shot stripper clips. The M1917 Rifle is loaded much like the M1903 Springfield/Rock Island Rifles using the clip slot in the top of the receiver. One individual round can be inserted in the magazine on top of the 5 “stripped” rounds giving the shooter an additional round to repel borders. Working in a less than highly stressed situation, the extra round can be loaded first and then topped-off using the normal stripper clip. In extremis, or lacking ammunition furnished in strippers, six rounds can be individually inserted in the magazine by hand. Had the M1917 rifle ever become our standard battle rifle, it is not inconceivable that future stripper clips would have been designed to hold 6-rounds.

Confusion in Rifle Nomenclature:

Modern collectors and purists are quick to point out that referring to the M1917 Rifle as a P-17 or an Enfield is incorrect. British .303s were referred to as P-14s, but they then point out that this is “British-Speak” not U.S. nomenclature. To this I must answer, “Well, yeah, but...” How the confusion and intermixing of terms came about is perfectly understandable if you know how the rifles came by their names.

Prior to the Great War, England had been experimenting with a new rifle design, and in fact a new caliber. The experimental rifles were furnished in .276 calibre (British spelling of course), and were designated the P-13 (“P” standing for “pattern;” “13” indicating the year of design). In theory at any rate, this rifle was to eventually replace the British Lee Enfield Mark III calibre .303, then the standard British issue service rifle. As a bit of interesting side trivia, the Lee Enfield Rifle had been designed by an American, James Paris Lee, a sometimes employee of the Remington Arms Company who also designed the 6mm Lee Navy Rifleⁱⁱⁱ used by the Navy and Marines in the Spanish American War. The British rifles (as noted under “*nomenclature*” above) were manufactured by Royal Small Arms Factory located at Enfield Lock, thus giving the rifle its common name. The “great .276 rifle experiment” was overtaken by the assassination of the Arch Duke of Austria in August of 1914, thus putting into motion a series of events that would be almost comical if it were not for the great loss of life that followed. Millions of men sprang to arms from the necktie counters and farms, creating an immediate necessity for additional small arms.

The P-13 was redesigned to handle the .303 cartridge, and re-designated the P-14 or the Pattern 14 Enfield Rifle. Rather than tool up to produce the new rifle themselves, England contracted with Remington and Winchester to build the P-14 for them in the United States.

Remington even formed another corporation, “*Remington of Delaware*”, to speed up the process. The plant to produce these rifles for Remington’s subsidiary was located in Eddystone, Pennsylvania (and owned strangely enough by the Baldwin Locomotive Works). Eddystone, Remington and Winchester called these rifles (using British nomenclature) the P-14 Rifles. The equipment to produce the rifles was purchased by the prominent financier and banker, J.P. Morgan from Vickers in England^{iv} who apparently was unable to fulfill their original contract with the British Government. Morgan brokered the arms production deal with the United States Government, and had the rifle producing machinery delivered to the United States. J.P. Morgan had always had a reputation of being a war profiteer, and manufacturing millions of rifles for England fit in nicely with his plans to make a mint from the Kaiser’s efforts against the Allies^v.

When the United States entered the Great War in April of 1917, the British had just caught up with their own production (or at least decided that they had enough SMLEs to issue to their regular military) and were phasing out their contracts with Remington, Eddystone, and Winchester.

U.S. Ordnance also found itself in a position of needing a quick infusion of more battle rifles. Initially, they had planned on contracting with Winchester and Remington to tool up to produce the M1903, but this would be a somewhat time consuming process. It was decided early on, since the P-14 contract was being phased out, to simply redesign the P-14 to shoot the .30-’06 round, a faster method of getting a proven rifle in the hands of the troops. During their production of the new American version of the Enfield, Remington, Eddystone, and Winchester employees used (quite understandably) the “*P-17*” designation to differentiate from the .303 British version they had been producing (here I’m talking about “*in plant*” usage, **not** official U.S. Ordnance Nomenclature! – actually it falls more properly under the heading of “*slang*” as opposed terminology, but it was “handy slang” considering the circumstances). This was obviously more efficient than sitting all of their employees down and drilling them in a new rifle nomenclature so that future rifle collectors wouldn’t be confused!

Obviously some of this “incorrect nomenclature” leaked out to the American public, and of course it would have been extremely practical to use the designation “**P-17**” in the trenches to differentiate between the British and American Rifles of very similar appearances often in use on the same front, albeit by different units of different services. A similar *highly* irregular term for our rifles was used in the 1950s when I was a youngster in the Marines. We often referred to our M1 Rifles as our “M1 Guns” (a term that would have caused us to sleep with our assigned piece for a month if it had been overheard by our Drill Instructors, but call it the “M1 Gun” we did, whether the brass liked it or not – I mention this as the sort of example often used by the troops as an expedient, even though it was patently wrong in terms of correct nomenclature). I do, however, apologize to the purists and serious collectors for my deliberate, if incorrect, terminology!

If you will research Sergeant Alvin York’s personal diary (it can be found on the Web at <http://acacia.pair.com/Acacia.Vignettes/The.Diary.of.Alvin.York.html>), you will find that he bemoans having to turn in his Springfield rifle in France (I must assume that he was referring to his beloved M1903) for the “*British Rifle*” (which his diary indicates that he did not much care for). While it has long been assumed that Alvin York used a M1917 during his exploits that gained him the Medal of Honor, he was apparently not amused in having to use the Enfield. Don’t forget that York was a relatively uneducated Tennessee Mountain Boy, and his exact differentiation between a M1903, and a Rifle said to have been designed by the British would have been a natural miscalculation. It is highly unlikely York would have been issued a P-14 Enfield. Apparently there was still some confusion among

the uneducated lads in the trenches – the differentiation of a P-14 versus a P-17 would have been quite natural on the battlefield using both (and very similar) rifles of different calibers.

Excerpt from Alvin York's Diary (York was a member of the All American Division, later to become the 82nd Airborne Division During WWII – In WWI it was composed mainly of National Guard Troops from varying locations throughout the United States):

MAY 21, 1918

***LeHavre, France:** So we got to France at Le Havre. There we turned in our guns (**most probably M1903s**) and got British guns. Well, we went out from Le Havre to a little inland camp. I had taken a liking to my gun by this time. I had taken it apart and cleaned it enough to learn every piece and I could almost put it back together with my eyes shut. The Greeks and Italians (**American residents of diverse ethnic backgrounds assigned to York's unit at Camp Gordon, Georgia**) were improving. They had stayed continuously on the rifle range for a month or two and got so they could shoot well. They were fairly good pals, too. But I missed the Tennesseans. I was the only mountaineer in the platoon. I didn't like the British guns so well. I don't think they were as accurate as our American rifles. Ho ho.*

Purists will tell you that calling the M1917 Rifle an Enfield or a P-17 is patently wrong, but common usage and habits die hard. As a result, some 86-years later, we are still calling the U.S. Rifle M1917 by its street name, "the Enfield" or (quite incorrectly) "the P-17." Is this truly incorrect? When I was a kid, and the DCM was purveying them for a paltry sum (between \$7.50 and \$14.50), to the unwashed members of the NRA (you had to be a member of the NRA in those days to buy one!), the term P-17 was commonly used by the local rifle buffs, although it makes current day collectors cringe. Does such nomenclature constitute sacrilege? Well maybe, but *I* certainly know what they are talking about, don't you?

The M1917 Rifle versus the M1903 Usage in WWI:

I have often been asked about our service rifle usage during the Great War, and the question occasionally makes mention of a rumor that there were actually more M1917 Rifles used than M1903s. Although we like to think of our armed forces meeting the Bosche using our tried and true "*Ought Three Springfields*," the truth is somewhat different. While our "official" service rifle remained the M1903, usage data from the era will tell you that approximately 2/3rds (some say 3/4ths, although the 3/4ths number[s] would not be correct until the end of hostilities) of the American Divisions in France were equipped with the M1917 Enfield.

Why? Well, it boiled down to available quantities of weapons. The United States went into WWI with approximately 600,000 Springfield and RIA '03s on hand, and were capable of producing approximately 1000 rifles per day when in a full production mode. Assuming they went to a 7 day a week work mode (which they didn't), they would only be capable of producing 365,000 rifles per year. Rock Island Arsenal was also producing M1903s but Rock Island is a small facility, and their production capacity was a mere 400 rifles per day. If you add them all up, your total government arsenal production capacity would have only been 511,000 rifles per year assuming they didn't do a tremendous expansion at Springfield Armory^{vi}. Solving the Heat Treatment problem earlier would have quite probably upped our production to nearly 1,000,000 rifles per year, but initially we are talking April of 1917.

Since Woodrow Wilson had promised not to get the United States into a war (he was even elected on such a platform), apparently everyone took him seriously, and no such expansion had been planned at Springfield or Rock Island. Now assuming the war had

lasted long enough, the Government production facilities could and probably would have been expanded to take up the slack, but we needed more rifles *NOW*, not next year. Don't forget, we went to war with Germany on the 6th of April, 1917 and the Armistice was signed on the 10th of November, 1918... a total of only 20 months! Now I grant you that we didn't *KNOW* it was going to be a relatively short war, but the problem was getting trained and well armed fighting men to the front as soon as possible. The initial divisions that went were armed with M1903s, but not everyone in the existing armed forces went to France. Since the soldiers staying home or engaged elsewhere in the world (the Banana Wars, etc.) also had to remain armed, the necessary number of rifles had to come from somewhere and as soon as possible!

The United States Government had planned to contract with major U.S. arms manufacturers to produce M1903s in the event of war, but fate stepped in. *Eddystone* (a subsidiary of *Remington*), *Remington*, and *Winchester* had been producing the Pattern 14 Enfield for the British (who never seem to have enough weapons, and never seem to learn from past mistakes) since 1914. Circumstances however, were about to take a hand...

As set forth above, in 1914 England had contracted with *Remington* and *Winchester* to build rifles for them. To fulfill this contract, Remington formed another corporation, *Remington of Delaware*, and located their new plant at Eddystone, Pennsylvania. This installation was capable of producing 6000 rifles per day! *Remington Arms Company* at Ilion, New York, themselves started turning out P-14s at the rate of 3000 per day. By April of 1917, *Winchester* was turning out 2000 P-14s per day in their New Haven, Connecticut plant.

By April 1917, British home production caught up with their demand just about the time that the United States went to war with Germany. Remington was stuck with two plants full of P-14 rifle machinery and a number of cancelled contracts. Winchester, of course, was in the same boat. The United States allowed as how they'd like Remington (and their subsidiary, Eddystone) and Winchester to start producing M1903s, but someone had a thought that would save them all sorts of money and time ...and get rifles in the hands of our troops in a much more expeditious manner! Remington pointed out that by changing the P-14 barrels and changing the bolt face, along with minor work on the magazine well, it would be no problem to convert the Pattern 14 Enfield to .30-'06 and start production almost immediately. Winchester also was up to producing .30-'06 Enfields, without having to retool to make M1903s. Thus was born the U.S. M1917 (Enfield) Rifle. Undeniably, the M1917 was an extremely strong action, and the sights were (in many ways) superior to the Springfield as a combat sight. A deal was cut and a serious quantity of M1917s started rolling off the production lines at Winchester by the middle of August of 1917. Production was continued by Remington until December of 1918. Eddystone continued to build M1917s until January of 1919, and Winchester finally ceased production in April of 1919. J.P. Morgan no doubt breathed a sigh of relief!

The first Divisions to head for France were armed with the M1903 Rifle, including the Marine Brigade, but (as mentioned above) before hostilities ended between 2/3rds and 3/4ths of our troops were armed with the M1917. Many of the Army Divisions were re-armed with the M1917 in France, but the Marines retained their prized M1903s throughout the war.

By the end of the war, the United States had purchased a total of over 1,202,429 M1917s (a figure that is obviously much too low) Rifles, although some estimates go over 2,250,000. The M1917 Rifle had cost the United States Government a total of \$26 apiece.

Not all Enfields went to France and many were used for training in the United States. My Dad enlisted in the Marines in 1918 at 15 years old. He told me that they were issued Enfields at Parris Island for drill until they went to the Rifle Range when they turned in the M1917s and drew M1903s... He never saw an M1917 in the Marines thereafter.

Since the United States wound up with a huge number of Enfields following WWI, serious consideration was given to making the M1917 Enfield our service rifle since in fact we had almost twice as many M1917s as M1903s, although some consideration must be given to the fact that we also had in excess of 101,000 Mark I M1903s waiting in the wings for the big Spring Offensive planned for 1919.

The Demise of the M1917 as the U.S. Service Rifle:

In 1918, the National Trophy Rifle Matches were directed to be fired with the M1917, not the tried and true M1903, quite probably to test the waters/mood of the American Shooter. Why didn't we ultimately change over? That's another story in itself, but the primary reason was that as good a rifle as the M1917 was, it was not well liked by the troops. And perhaps most of all, the trusty '03 was truly an American, not a British design (albeit a copy of the German Mauser as was the M1917).

In my opinion the decision to make the M1917 Rifle the required rifle for competition in the 1918 National Trophy Matches may have doomed the possibility of adoption of the M1917 as our principal service rifle. Many of those who had been on the fence on the question got extremely negative comments from those participating in the matches. A board was convened in 1919 to make the choice between the M1917 and the M1903. After everyone had given his input, it was decided to keep the M1903, assuming that a maximum effort be expended to come up with an acceptable receiver rear sight for the Springfield. While efforts were made along those lines, Springfield had already hired John C. Garand, and their main thrust was towards developing a semi-automatic rifle, as opposed to improving an already existing one. The entire project was simply overcome by events.

By the Summer of 1918 the war was winding down, and the participants in the Nationals were primarily target shooters, not participants in trench warfare. While some of the participants may well have been veterans of the fighting in France, the problems with using a rifle that had an non-adjustable rear sight for windage made the M1917 no points among the "heavies" who would be on the board (or having the ear of the board) picking *THE* service rifle following the end of hostilities. Don't forget, the NBPRP (National Board for the Promotion of Rifle Practice – a government sanctioned body packing a great amount of influence in the National Trophy Matches and military target practice) had the ear of U.S. Army Ordnance in those days. Granted the 400-yard battle sight built into the M1917 Enfield rear sight was considerably more practical than the 547-yard battle sight on the Springfield (resulting from the debacle in the change-over from the .30-'03 cartridge to the .30-'06 sight in 1906). Prior to 1917 match rules (and rules for rifle requalification) had required that all rapid fire strings (from 200 to 500-yards) be fired using the small "v-notch" on the M1903 with the rear leaf sight slide in a horizontal position. The rules were changed in 1917 allowing the use of the vertical leaf (peep) sight in rapid fire. The requirement to use the "battle sight" notch on the rear leaf of the M1903 often required the shooter to "hold-off" several feet (a "SWAG^{viii}" at best) below the target. The requirement to use the "fixed elevation" battle sight notch on the M1903 in rapid fire was as onerous to a seasoned shooter, as was the fixed windage with the Enfield leaving the Enfield operating at a distinct disadvantage when compared to the M1903 at Perry in 1918.

The Small Arms Firing School was conducted for the first time at the National Matches at Camp Perry in 1918, and the score books issued for the event were obviously tailored for the M1917 Rifle. Around the periphery of each page were small bullseyes simulating the M1917 front sight and the suggested "windage hold-off" for various wind velocities (i.e. 5-mph, 10-mph, etc.). Such a Rube Goldberg solution was not designed to give the match shooter great confidence in the "nail-driving accuracy of his match rifle! The participants in the National Matches of 1918, still had a bad taste in their mouths when the war ended a mere 3-months later. Many of those who would have the ear of the Ordnance Board that would decide the fate of our standard battle rifle, were making no bones about their dislike of the M1917 as a precision instrument.

As an adjunct to the battle sight controversy, In 1919 the Marines adopted their own version of the M1903 rear sight (with a much higher and thicker front sight to match) that changed the Marine's battle sight to 200-yards with the M1903, an eminently more practical distance for a combat battle sight.

As a recap to the events, the rather poor showing of the M1917 Rifle at Perry in 1918, coupled with a rear sight, that while rugged, was not well suited for precision shooting, tended to sour the participants in the matches. The prejudice of the old time rifle shooters and soldiers for an American designed fowling piece (even if the patents were of German origin), and Springfield Armory's promise to produce a more "soldier-friendly" rear sight for the M1903 essentially doomed the M1917 rifle's chances of becoming our primary service rifle. By 1919 Springfield Armory had already started their initial research to come up with a semi-automatic service rifle and the M1917 vs. the M1903 became a moot point in 1936 with the adoption of the M1 Rifle.

Ergonomics and Prejudice:

For those of you who have ever handled one, the M1917 just doesn't feel as slick or as handy as the '03, and horror of horrors, the dad-gummed thing cocked on the closing stroke instead of the opening stroke of the bolt (actually, the Enfield "half-cocks" the bolt upon opening, finishing the job on the forward stroke of the bolt). To an American used to the extremely slick old Springfield, it just didn't feel right. The British swore by the design, but even today, some of the larger gun parts suppliers sell a "conversion package" to allow the Enfield Bolt to cock on opening.

The rationale for the "cock on closing" feature was the brainchild of the British Ordnance Department based on the assumption that, in combat, ammunition would become dirty and extreme rifle cleanliness would be difficult. The combat grime coupled with the heat generated by rapid fire (in the opinion of the British) would materially hamper the working of a rifle bolt in battle. The idea was that using the American/German turnbolt design, a dirty round in a dirty, hot, rifle would put an undue strain on the manipulation of the bolt under combat conditions. Splitting the sequence of extraction, ejection, feeding, cocking, and locking would in theory make the manipulation of the rifle with a hot dirty chamber, using dirty ammunition, an easier task. In actual usage on the battle fields of France, this assumption proved to be an excellent solution to a non-existent problem.

The action was actually stronger than the M1903 and made of nickel steel. The barrels were fully as accurate as the Springfield, and in fact got greater wear before being shot out. Even with all that going for the Enfield, the old time riflemen didn't like the inability to adjust the rear sights for windage. Score books of the day even gave little pictures of where to hold the front sight on the target to compensate for varying wind direction and velocities. If different lots of ammunition gave different points of impact in terms of lateral

deflection, you were on your own. On the other hand, the Enfield rear sight was located much closer to the rifleman's eye and gave a longer sight radius, but ya' just couldn't do decent target work with the thing...

The Ordnance Board's Decision:

A board was convened in the Spring of 1919 to decide the fate of the M1903 Rifle. As pointed out above, they decided that the M1903 would be retained as the standard service rifle pending the development of a more serviceable set of receiver mounted sights. The M1917 was to remain a limited standard item and placed in War Reserve. Twenty years later the Enfields were again taken out of Cosmoline and furnished as lend-lease rifles to our Allies in WWII and used for training in the United States... It indeed had a long service life.

End Notes and Trivia on the M1917:

It is most unfortunate that the M1917 became the ugly step-sister to the more popular and undeniably sleeker M1903. Soldiers are almost always traditionalists and are definitely creatures who prefer beauty and ease of handling to stark utility (Gawd, it must be hard to develop an enduring love for an M16!). The M1917 must have felt like the unloved daughter who was perhaps more adept at cooking, keeping house and comforting her helpmate, but in the long haul couldn't compete in a beauty contest. Only now are the M1917s beginning to come into their own as desirable collector's items.

Original Finish of the M1917 Rifles:

The condition of the average surplus M1917 Rifle currently found unfortunately does not do justice to the old fowling piece. When first produced, all three rifle manufacturers finished their rifles in a quality rust blue that would do justice to any modern commercial rifle. Original Winchesters that did not go back through the arsenal overhaul process following WWI are all blued, and quite attractive. While both Remington and Eddystone initially produced blued rifles, it would seem that at least Eddystone (and perhaps Remington) started using the Parker Metal Finishing Process on their rifles late in the War (somewhere around September to October 1918). You must remember however, that this Parker Process was applied over a non-sand/bead-blasted (polished?) finish and is easily mistaken for blue, much as the late WWI M1903s.

Unfortunately those M1917s that went through the arsenal overhaul process following WWI were actually sandblasted (or at least bead-blasted using *very* course abrasive) which removed many of the more subtle identification marks stamped on the metal. Individuals involved in parts replacement(s) at the arsenals apparently took little or no pains to match up replacement parts with the original rifles. I have one Winchester that has a part from virtually every M1917 manufacturer and has a finish that, while serviceable, is anything but attractive – it personifies the civilian conception of a sand-blasted and Parkerized refinish. “Ugly” covers it nicely.

Barrel replacement during the refurbishing of the M1917:

It seems that tests conducted following WWII at Springfield discerned that the 5-groove M1917 barrel will always outwear the M1903 Springfield barrel, and at one time Ordnance considered changing all of our small arms barrels to the 5-groove configuration. Measurements will show that the M1917 barrel is actually tighter than the M1903 barrel, although urban legend upon their initial issue had the story the other way around. The Enfield was plenty accurate, it just needed a good windage adjustment for the rear sight.

All that taken into account, it seems that when the M1917s were refurbished during WWII and needed a new barrel, Ordnance went with a more conventional rifling. The standard replacement barrels were made by High Standard Manufacturing with a 4-groove right hand twist as opposed to the original left hand twist, or by Johnson Automatics (manufacturer of the M1941 Johnson Rifle) with 2-groove barrel with a right hand twist. General Hatcher noted that subsequent accuracy tests utilizing all three barrel configurations indicated comparable accuracy with all three, but that the 2-groove barrel gave somewhat lower pressures with high powered hunting loads.

Re-zeroing the M1917:

As noted earlier, the producing facility “targeted” each rifle and adjusted the front sight by staking it in place. Unfortunately, when many of these rifles were refurbished at the U.S. Arsenals during WWII, the front sight was removed during the arsenal refinishing process and little or no care was taken to ensure that the rifle was properly “zeroed” when the front sight was replaced. This gave the M1917 an undeserved reputation for poor accuracy. By taking an arsenal refurbished M1917 and re-targeting the rifle, life can be made easier for current owners. You can re-drift and re-stake the front sight if necessary to get a much more reliable windage zero. Civilian conversions for sporting purposes were often performed by milling off the rear sight “ears” and attaching a fully adjustable rear sight.

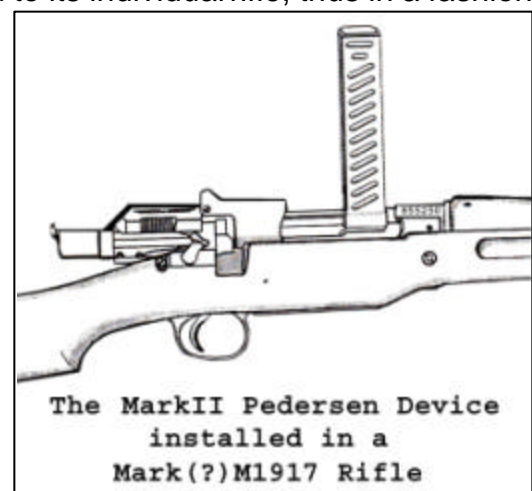
Interchangeability of Parts:

All three manufacturers were supposed to furnish serviceable rifles to Springfield Armory for testing and approval, but apparently the first batch of rifles (one or two of each) by all manufacturers were wanting in interchangeability of parts. Exasperated, Springfield started working on standardized production drawings. These were delivered on the 18th of August, but Winchester had already started production, having produced about 10,000 rifles by the time the drawings were finished. As might be imagined, the first 10,000 Winchesters did not have the interchangeability of parts that Springfield required, and many of the original parts are not interchangeable with Winchester’s own later production. Once a rumor gets started of course, it is extremely difficult to get stopped, and urban legend has it that General Pershing himself specified that no Winchesters should be delivered to France. True? Who knows, but a specimen of the original 10,000 Winchesters is an extremely valuable collector’s item. Remington, and of course their subsidiary, Eddystone, cleverly awaited the arrival of the new production drawing to commence production. The early bird may get the worm, but as some sage noted, the second mouse gets the cheese!

Other documents record that the British Enfield was designed much like many European Weapons of the era, with each piece serial numbered to its individual rifle, thus in a fashion cutting down on the necessity of absolute interchangeability of parts. The U.S. Ordnance Folks were not amused at such shenanigans and demanded absolute interchangeability of parts. Exigencies of war dictated that in the interest of production demands, Ordnance eventually accepted a 95% interchangeability factor as acceptable, and the basic ruggedness of the M1917 made this a usable compromise.

A M1917 Pedersen Device?

While everyone is aware of the Mark I Springfield designed to accommodate the elusive Pedersen



Device, a little known fact is that several Pedersen Devices were produced to fit the M1917. Whether a particular model number was envisioned for this extremely rare M1917 (U.S. Rifle M1917 Mark I or Mark II?) – actual rifle nomenclature is unknown, but undoubtedly, the prototype(s) was/were fitted to a Remington M1917 (circa August 1918), since Mr. Pedersen was a Remington employee. It must be assumed that the device designed for the M1917 would have been designated as the **Mark II** Device to prevent confusion in combat? I have not seen a picture of one of these M1917 Pedersen rifles in a “left profile,” (a photo [similar to the insert] of the right profile is displayed in a photo in Brophy’s Book of the Springfield), but it would have almost certainly had to have had an ejection port milled into the left side of the receiver.

Identification/Acceptance Markings on the M1917 Rifles:

Rifles as originally manufactured and issued were identified on most of the parts by the initials of the manufacturer (W for Winchester, R for Remington, and E for Eddystone). The ends of the stocks were stamped with a rather large W, R or E, with the Winchesters being also adorned with a number identifying the individual assembling the rifle(s). The stocks did not have the typical M1903 cartouches, but usually had the relatively small “eagle’s head acceptance stamp” common to late WWI M1911 Pistols. The top left of the receiver rail (as viewed looking down on a receiver), had this “eagle’s head” acceptance mark, and the U.S. Ordnance Bomb Stamp^{viii} adorned the left side of the receiver as well as the top of the bolt handle as proof marks, (much as the circle P proof stamped on M1903 and later on the M1 & M14 Rifle Stocks). The underside of the bolt was stamped with the initial of the manufacturer (W, R or E).

Inspector’s stock cartouches (in the manner of a M1903 or an M1) are found only on those rifles that have been through the arsenal rebuild program.

The receivers were stamped in normal U.S. Ordnance fashion identifying the Model, Manufacturer, and serial number:

**U.S.
Model of 1917
Winchester
1234567**

**Receiver Logo
giving Model,
Manufacturer,
and Serial No.
of rifle**

W



12 17

**Marking on
end of barrel
just aft of
rear sight
giving barrel
date, and
manufacturer**



**U.S. Ordnance
Bomb Proof
Firing Marks
stamped on the
outside of the
left receiver rail
(horizontally)
and the top of
bolt handle**



Rear view of stacking & sling swivels
Note offset to right (typical British)

**WWI Eagle’s Head Acceptance
Stamp. Found on the top of the
left receiver rail of the M1917
and many other smaller parts.**

The sling swivels, and stacking swivel are offset to the right in British fashion, and usually marked with a small identifying initial of the manufacturer.

The M1917’s Contribution to the M1903 Rifle:

Rock Island Arsenal had been studying Winchester’s use of nickel steel in making the M1917 Receivers and decided to produce some M1903s using Winchester’s formula. Rock Island started making Nickel Steel (NS) M1903 receivers on 1 August 1918 starting with serial # 319,921. The confusing factor here is that RIA had also started making Double Heat Treated (DHT) receivers on 11 May 1918, starting with serial # 285,507. When RIA

started making the NS receivers, they produced them simultaneously with the DHT receivers and made no serial number range distinction. If your M1903 Receiver is an RIA with a serial number higher than 319,921 you may have either a Double Heat Treated or a Nickel Steel receiver – without giving them the “file test,” there is no reasonable way of knowing (a sharp file will “cut” an NS receiver but tends to “skate” on Double Heat Treated steel – if you are going to do this, use an inconspicuous spot that is covered when the rifle is assembled).

The situation is further clouded by the fact that RIA had many unfinished NS receivers when they shut down rifle production in 1919. In March 1926, RIA shipped all of their semi-finished M1903 parts to Springfield along with 25,600 unfinished nickel steel receivers. Springfield started producing rifles utilizing the unstamped RIA receivers, stamping their own logo of them on 1 April 1927 with serial # 1,257,767. Springfield didn't field their own NS receivers until 1928 starting with serial # 1,301,000.

It would seem that in the end, the M1917 rifles had shown the way to a better receiver construction. Now if they could just have made a slicker bolt and a rear sight that would adjust for wind –

The M1917's Contribution to the Browning Automatic Rifle and bayonet fitted trench guns :

These are a bit more subtle, but if you will take careful notice, both the BAR's Rear Sight and butt plate are close if not exact copies of their M1917 cousin. The folks designing the rear sight of the BAR however, were clever enough to put a fully adjustable windage leaf in the BAR version. ...And even today into a new century, U.S. Trench Guns are still designed to use the M1917 pattern bayonet!

A Civilian Career for the old Warhorse:

The M1917 has been long recognized as one of the strongest military actions ever produced. Many of the M1917s sold by the DCM were used as the basis of some healthy magnum calibers. Remington Arms was so enamored with the design that they produced a commercial version of the M1917 called the Remington Model 30, a popular civilian rifle that was a direct competitor to the Model 70 Winchester.

The Fate of the British P-14 Rifles:

The British kept the P-14 Rifles in their inventory until the end of WWII, although re-designated as the Rifle No. 3 Mark I* in 1926. The asterisk indicates a 1916 modification to the P-14s slightly lengthening the left locking lug. The British utilized several models as Sniper Weapons throughout their service life due to their extreme accuracy compared to their SMLE Rifles.

And Finis...

One final bit of trivia. If you will check the entrance to the Officer's Club at Fort Benning Georgia, you will find a pair of brass-silhouetted rifles inlaid into the marble floor... they are undeniably U.S. M1917s – NOT the venerable M1903!

ROC



The following U.S. Rifle M1917 Production Chart is an approximation, and has been taken from several sources, none of which seem to agree in the total monthly and final production figures. They are published as a guide only, not as a definitive list of actual month by month production serial numbers.

Approximate Production Figures, Serial Numbers and Dates of Production of the M1917 Rifle by Manufacturer (Sources differ on exact numbers and dates, although the serial number listed for each month is generally accepted as the 1 st Serial # of that Month)			
1917	Winchester	Remington	Eddystone
August	1 (production sample)	1 (production sample)	1 (production sample)
September	10,001	500	10,000
October	25,000	3,000	30,000
November	45,000	10,000	60,000
December	70,000	45,000	90,000
1918			
January	102,363	26,364	174,160
February	142,563	58,817	256,006
March	175,223	98,399	354,351
April	217,423	147,937	422,755
May	261,023	184,314	510,263
June	302,651	238,791	595,192
July	336,900	291,786	699,302
August	372,600	352,199	834,382
September	392,630	417,343	940,977
October	424,180	475,370	1,076,057
November	465,980	545,541	1,181,908
Official Sources note the cancellation of the production contracts for the M1917 Enfield as of the cessation of hostilities on 11 November 1918, and the above production numbers reflect the serial numbers as of that date. Production however, continued as late as April 1919 (Winchester), no doubt in anticipation of the possibility of the M1917 being adopted as the new service rifle following the World War.			
December	485,980	600,000	1,181,908
1919			
January	515,000	? (Shop Cleanup)	1,354,701
February	545,000	N/A	N/A
March	575,000	N/A	N/A
April	580,000	N/A	N/A

You can see from the totals below that the experts disagree on exact production figures, due no doubt to the continued production following the Armistice with no specific contract existing with the U.S. Government – Who’s correct? The exact answer is probably lost in the mists of history and inconsequential unless you own one of the extremely high numbered guns.

Total Rifle Production (all manufacturers) = 2,422,529 (Production as of Nov 1918 = 2,202,429) Canfield
U.S. Infantry Weapons of the First World War

Total Rifle Production (all manufacturers) = 2,534,701 (Production as of Nov 1918 = 2,267,888) Harrison
The American Enfield

Total Rifle Production (all manufacturers) = 2,202,429 (Production as of Nov 1918 not mentioned)

Hatcher's Notebook

Total Rifle Production (all manufacturers) = 2,202,429 (Production as of Nov 1918 not mentioned) *Small*

Arms of the World, 1977 Edition (Stackpole Books) – figures probably taken from Hatcher's Notebook

Acknowledgements:

I am most indebted to Bob Seijas, John Beard and Nick Ferris for their efforts in editing and adding additional information and clarification in construction and contract details that I had either overlooked or missed in my original research. Without their efforts, this would be a much poorer effort. I did not mention every addition that they suggested or it would have rapidly become a book instead of an article, but I shamelessly used them anyway. The interesting additions are theirs, any misstatements and or misconceptions are mine and mine alone. Concerning the tongue-in-cheek conspiracy theory statements, I take full responsibility, but always remember there is often more truth than fiction when monetary concerns enter the equation – you are welcome to do your own research. The graphics were done by my long suffering Memsahib, Gloria (who in this case produced many of them while suffering from a case of the Chicken Pox) – I recommend therefore that you wash your hands after reading the article, and perhaps indulge in a bit of cognac and a fine cigar. These would of course serve the triple purpose of putting your mind at ease, aid in relaxation, and disinfect your throat, all done to protect your fellow man from a possible case of the Pox of course!

Endnotes:

ⁱ During WWI a device existed that fit over the front sight with a screw that could be used (from either side) that would move the front sight right or left for a more exact zero.

ⁱⁱ The insert on page 2 is an exact copy of the instruction included in "The Description and Rules for the Management of the United States Magazine Rifle caliber .30 Model of 1917" published October 1917 and revised January 16th of 1918, and can be found on page 37 of the booklet.

ⁱⁱⁱ While James Paris Lee was a Remington employee, he designed the rifle that became known as the 6mm Lee Navy Rifle. Although designed by Lee for Remington, it was actually manufactured by Winchester for the Naval Service. It seems that Winchester underbid Remington for the production of the new rifle, and Winchester got the nod to produce the Remington-designed rifle.

^{iv} Input from John Beard, and Nick Ferris noted U.S. Military Small Arms experts.

^v The Conspiracy Theorists, even today, swear that Winston Churchill and Franklin Roosevelt plotted mightily to get the United States into WWII to bail out J.P. Morgan's investments in England when it began to look like the British might break under an invasion by Hitler. Going back to the pre-WWI era, conjecture is that J.P. Morgan along with several of the Railroad Magnates of the day, were responsible for bringing about the Federal Reserve System in 1913 which is of course neither Federal nor does it have any reserves – it is simply a private consortium of banking interests, including (at the time of WWI at any rate) some of the old time Railroad Tycoons. The fact that the facility Eddystone used to produce M1917 Rifles was owned by the Baldwin Locomotive Works, gives some credence to the conjecture that the group at the top Winston Churchill called the "Grand Cabal" may well have had a hand in starting WWI and by inference, WWII. True? Who knows, but it makes for interesting speculation, eh what?

^{vi} Actually, these figures are technically incorrect as pointed out by John Beard. While the estimations would have been correct utilizing the pre-war production, by the latter part of 1918 after working through the problems with the single heated receivers, Springfield Armory was producing 1600 rifles per day while Rock Island was up to roughly 1000 rifles per day. Using these figures, and figuring on a 7-day work week, Springfield would have been producing 568,600 rifles per year (taking one day off for Christmas), and RIA would have been producing 364,000 taking the same Christmas break. This would have given us a total yearly production of 932,600 or not too short of 1,000,000 rifles per year.

^{vii} "SWAG" stands for Scientific Wild @\$ \$ guess.

^{viii} The "bursting bomb" proof mark(s) differ somewhat from the Ordnance Bomb on the Barrel. Supposedly the Ordnance Bomb on the side of the receiver and the bolt handle were applied at the same time with the same stamp so an original rifle should have matching "Proof Bombs"... That having been said, the Ordnance (proof) Bombs for Winchester, Remington and Eddystone differ somewhat, and a rifle that has been through an arsenal rebuild may well have two different styles of Ordnance Bomb. I have a rifle with a Winchester Barrel, Receiver and, Stock, but a Remington Bolt, and the Bombs on the receiver and the bolt are definitely NOT matching!