

# A Newly Discovered Vetterli Variant

## The “Versione MB”



The following paper is based on a previous article of mine titled;

### A Newly Discovered Vetterli Variant The ‘Versione X’

which appeared in Mowbray Publishing’s *‘Man at Arms for the Gun and Sword Collector’* Magazine, Vol 41 no.5, published in October 2019.

Since then, evidence has come to light of letters from Pietro Beretta to the Italian Undersecretary for Armaments and Munitions in the Ministry of War, dated 1917, that clearly point to the Beretta factory providing plans and samples of the first Vetterli-Vitali mod.1870/87 rifle conversion to 6.5 mm in May 1915.

For this reason, the unofficial title of ‘Versione X’ that I gave to this variant, to differentiate it from the well-known ‘Standard’ mod.1870/87/15 conversion, has now been changed to ‘Versione MB’ or ‘Metodo Beretta’ in recognition of Beretta’s valuable early work 110 years ago.

The article has also been updated with a few minor technical details that have come to light as research continues.

My thanks to fellow researcher John Ceruti in Italy and to Stuart Mowbray for allowing me to use his original layout.

*Robert Wilsey*

July 2025

# A Newly Discovered Vetterli Variant

## The “Versione MB”



*by Robert Wilsey*

(above) A Vetterli Model 1870/87/15 “Versione MB” by Torre Annunziata and dated 1878. (John Ceruti)

In Italy, during the First World War, a shortage of Model 1891 Carcano longarms and the hasty formation of new units resulted in at least 700,000 examples of the older Vetterli-Vitali system being converted to 6.5x52.3mm in order to accept the same ammunition used by the Carcano. This conversion was applied mostly to Vetterli rifles (*fucili*) but also to some Vetterli carbines like the *Moschetti da Truppe Speciali mod.1870/87* and a small number of single-shot Vetterli *Moschetti da Carabinieri mod.1870s*. This was very much an emergency wartime measure, and the conversions became known as the Vetterli Model 1870/87/15. It appears that the design for this conversion was completed in 1915, and that conversions started that same year and continued until 1918. Today, the 6.5mm Vetterli rifle is widely collected in the USA. However, it turns out that there is a different version of the usual 6.5mm conversion. This was discovered when I was corresponding with two collectors who asked why their 6.5mm Vetterlis were fitted with spring-loaded cartridge stops.

The Model 1870 single-shot Vetterli had been fitted with spring-loaded cartridge stops as part of the 10.35mm Vitali magazine conversion to hold the top, next-to-be-used round in the Vitali magazine until the bolt fed it into the chamber. When the rifles were converted to 6.5mm for the First World War, these cartridge stops were removed. The empty stop-locating screw holes and slots remained on each side of the lower receiver. The bottom of the receiver was then cleverly “pinched” on both sides, making indentations below the slots, which held the new Mannlicher-style clip in the magazine. However, the two rifles that were brought to my attention (one in Norway and the other in Turin) had modified spring-loaded cartridge stops shaped to hold the Mannlicher-style clip, but were otherwise identical to the usual Vetterli Model 1870/87/15 conversion. These cartridge stops interfered with, and completely jammed, the magazine feed. Once the stops were removed, the rifles fed normally. What was going on here and why had these stops been fitted?

It turns out that these two Vetterli rifles had been incorrectly equipped with cartridge stops, perhaps by a well-meaning collector or dealer who had stripped them down and discovered the two empty stop screw holes and the slots in the bottom of the receiver, and might have erroneously thought that cartridge stops were needed to “complete” the rifle. However, further research led to a major surprise. A small but significant number of Vetterli Model 1870/87/15



Three variants of the Vetterli infantry rifle. Note the minor external differences between the “Versione MB” and the “Standard” version: longer bolt support rail, key locking ring moved over the key, and the magazine moved fractionally rearwards. (John Ceruti)

rifles were also fitted with these same cartridge stops, but (and this was a big “but”) they also had a number of other important mechanical characteristics that separated them from the usual version and enabled the cartridge stops to grip the Mannlicher-style clip and feed the 6.5mm rounds satisfactorily. A new version of the Vetterli had been discovered.

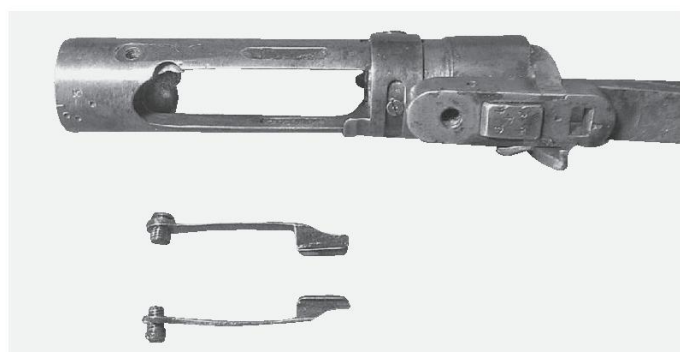
### The “Versione MB” Conversion

This new variant, which collectors appear to have been unaware of, does not seem to have an official name, so after some consultation in Italy, I have unofficially named it the “Versione MB” (Version MB) in order to differentiate it from the more usually found version of the 6.5mm Vetterli rifle, which we will call the “Standard” type. “Versione MB” stands for Version Metodo Beretta or the Beretta Method of conversion, since it has now come to light that the initial 6.5 mm conversions were carried out largely in accordance with Beretta’s plans. The “Versione MB” is not rare, or even unusual, and over the last 14 months, I have so far seen 20 of them in private collections or for sale. A very rough estimate is that they might account for somewhere between 5–8% of all 6.5mm Vetterli rifle conversions.

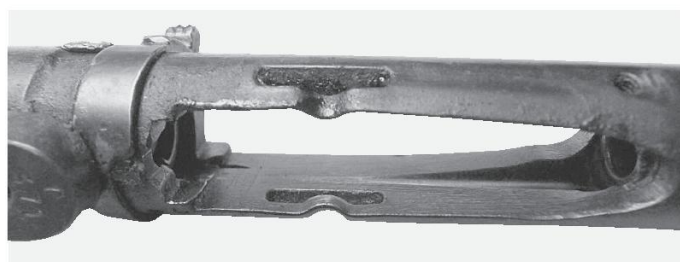
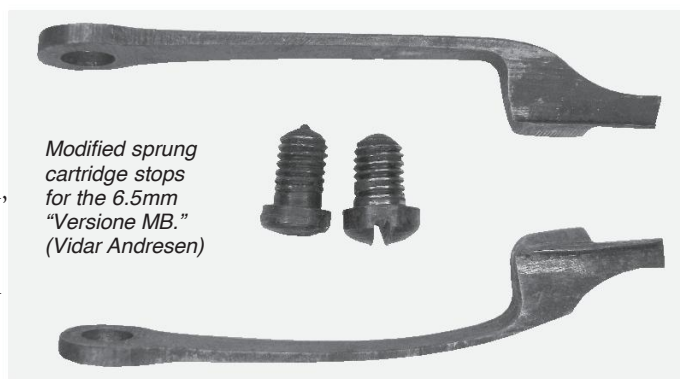
The “Versione MB” is quite different from the well-known “Standard” Model 1870/87/15 rifle conversion in a number of respects. The conversion makes use of the same 10.35mm barrel converted to parabolic 6.5mm rifling using the Salerno sleeving process with the modified firing pin and extractor incorporated. However, from this point, the conversion differs from the “Standard” type in a large number of subtle ways. The rear of the receiver was cut rearwards at the top and bottom by 9mm without changing the forward profile of the original 10.35 Vetterli loading slot. The front tang of the triggerguard was shortened by 6mm to allow the Mannlicher-style magazine to be positioned perpendicularly in line with the rear receiver cut-away. The shortened front tang of the triggerguard was also keyed with a rectangular lug. This was designed to securely mate with the rear tang of the magazine (which was 8mm longer than that of the “Standard” magazine’s rear tang), which had a rectangular female joint cut-out to fit with the triggerguard tang.

The existing magazine cut-off ring with a knurled knob (with the Vitali magazine cut-off flange removed) was moved rearwards to cover the flat key that holds the bolt in, and was slotted to accommodate its removal. This modification resembled an amateur botch job. The small dumbbell-shaped leaf spring that lies under the cut-off ring in a milled recess on the left rear of the receiver was removed because it no longer acted under the full width of the newly located key-locking ring.

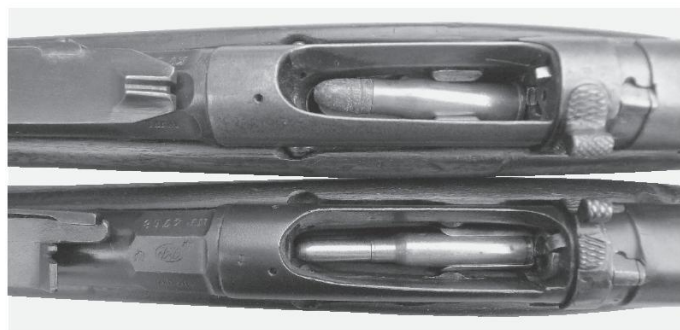
The profiles of the existing 10.35mm spring-loaded cartridge stops were modified to fit the 6.5mm cartridge clip shape, and no crimped indentations were punched into the receiver. A 21mm extension to the bolt support rail was brazed onto the rear of the existing rail to give more support to the bolt, especially during rapid fire. This extension incorporated an internal, machined channel with a ridge on each side, unlike the “U”-shaped channel of the Vetterli-Vitali and the “Standard” rifle. The bottom of the bolt striker was flattened and widened in order to provide a snug fit in the



10.35mm sprung cartridge stops from a Vetterli-Vitali Model 1870/87.



Indentations punched into the bottom of the receiver to hold the Mannlicher-style clip in the “Standard” 6.5mm conversion. Above the indentations are the empty slots used by the former 10.35mm sprung cartridge stops. (Vidar Andresen)

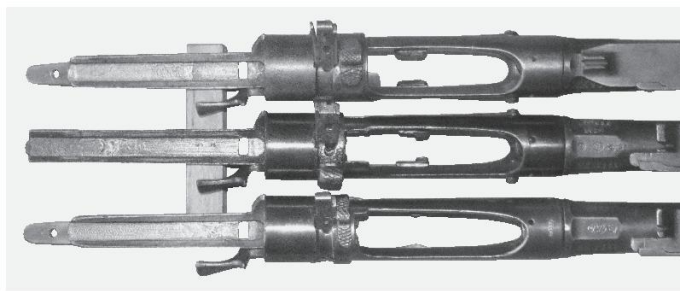


A 10.35mm round in a Model 1870/87 rifle at top, and a 6.5mm round in a Model 1870/87/15 “Standard” conversion at bottom. Note the 10.35mm sprung cartridge stops in the upper rifle and the indentations supporting the Mannlicher-style clip below. The indentations can often appear at a casual glance to resemble sprung cartridge clips. (Reinolf Reisinger)

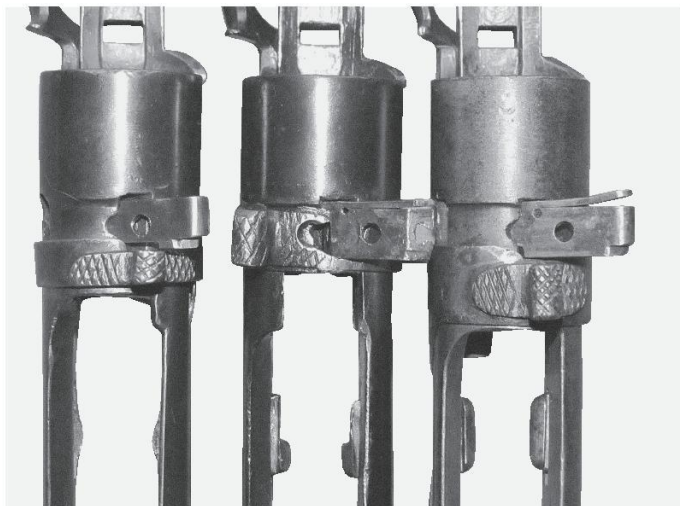
bolt extension channel, which now supported and guided the bolt both vertically and laterally.

The “Standard” bolt will fit in the “Versione MB” rifle but wobbles about on the bolt support rail, while the “Versione MB” bolt will not fit in a “Standard” conversion rifle because the bottom striker shoe is too wide. All these changes naturally accounted for a number of minor differences of dimensions.

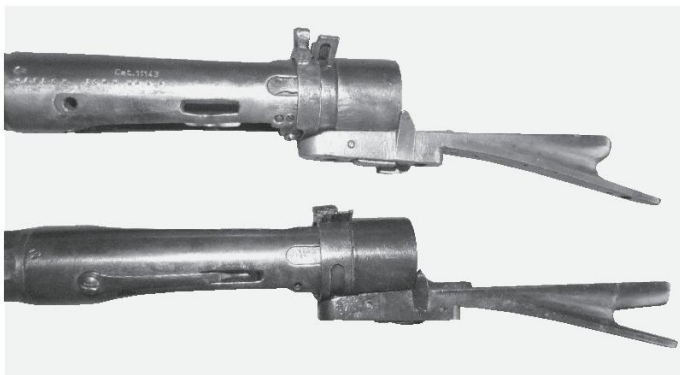




Receivers from above: (top) 10.35mm Vetterli-Vitali Model 1870/87 rifle, (middle) 6.5mm Vetterli Model 1870/87/15 "Versione MB", (bottom) 6.5mm Vetterli Model 1870/87/15 rifle, "Standard" conversion. Note that the "Versione MB" receiver is severely cut away to the rear, causing the former key locking ring to be positioned over the key. The front of the loading slot is unaltered from the 10.35mm rifle. The "Standard" version, however, has an elongated and streamlined front to the loading slot and less of a cut-away to the rear, allowing a narrowed key cut-off ring to rotate alongside the key. The photo also clearly illustrates both types of cartridge stops and the "Standard" indentations. (John Ceruti)



Key rings: (left) 6.5mm Vetterli Model 1870/87/15 rifle, "Standard" conversion. Note the former Vitali magazine cut-off ring has been narrowed due to the cut-away of the rear of the receiver and now performs the function of a key locking ring. Note also the indentations in the bottom of the receiver to hold the clip. (center) 6.5mm Vetterli Model 1870/87/15, "Versione MB". Note the former magazine cut-off ring has been moved over the key and a slot crudely cut into it to allow the key to be removed. Note also the modified 6.5mm sprung cartridge stops in the bottom of the receiver. (right) Vetterli-Vitali Model 1870/87 rifle with the 10.35mm magazine cut-off ring, which also acted as a key locking ring. (John Ceruti)

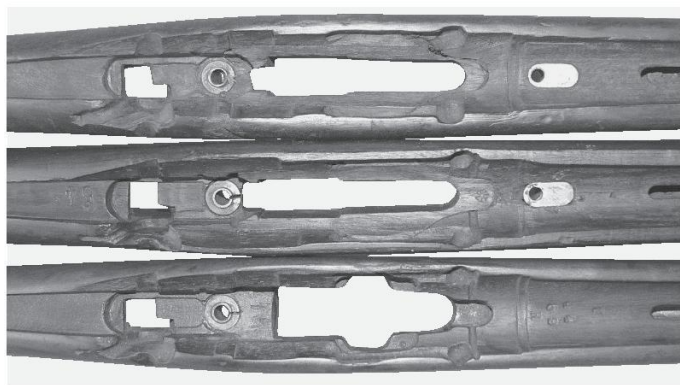


6.5mm receivers. The top shows a "Standard" rifle with a small dumbbell-shaped leaf spring providing tension against the key locking ring. Below, the "Versione MB" showing the spring missing, the full width key locking ring moved over the key, and the modified sprung cartridge stops. (John Ceruti)

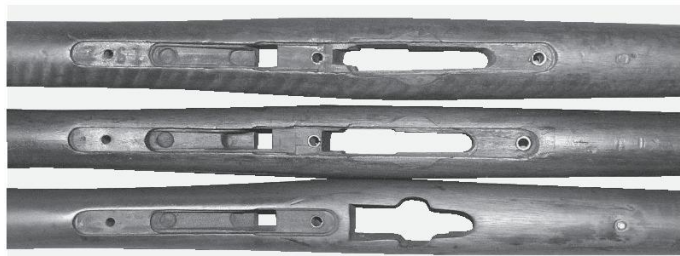
Compared to the "Standard" model, the inlets in the stock for the Mannlicher-style magazine came dangerously close to the important action support bolt bushing that accepted the front trigger tang bolt. The stocks, receivers, magazines, trigger groups and bolts were not interchangeable between the "Versione MB" and "Standard" conversions.

### The "Standard" Conversion

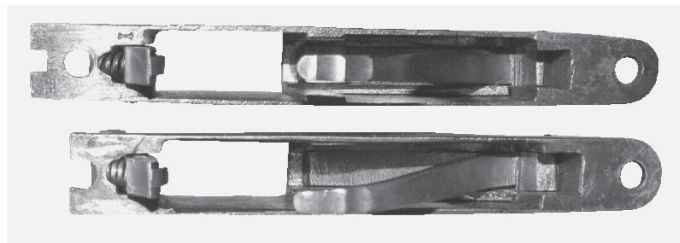
Since the examples of "Versione MB" that I have seen so far have the early "FABBA D'ARMI DI ROMA 1916" conversion stamp on the left side of the butt, it is logical to assume that the first 6.5mm Vetterli conversions in production were perhaps the "Versione MB" variants. So far, only rifles (as opposed to carbines) have been found converted to "Versione MB", and they include some of the former Vetterli-Vitali "Tipo P" rifles that had been equipped with Vitali magazine reinforcing bolts instead of



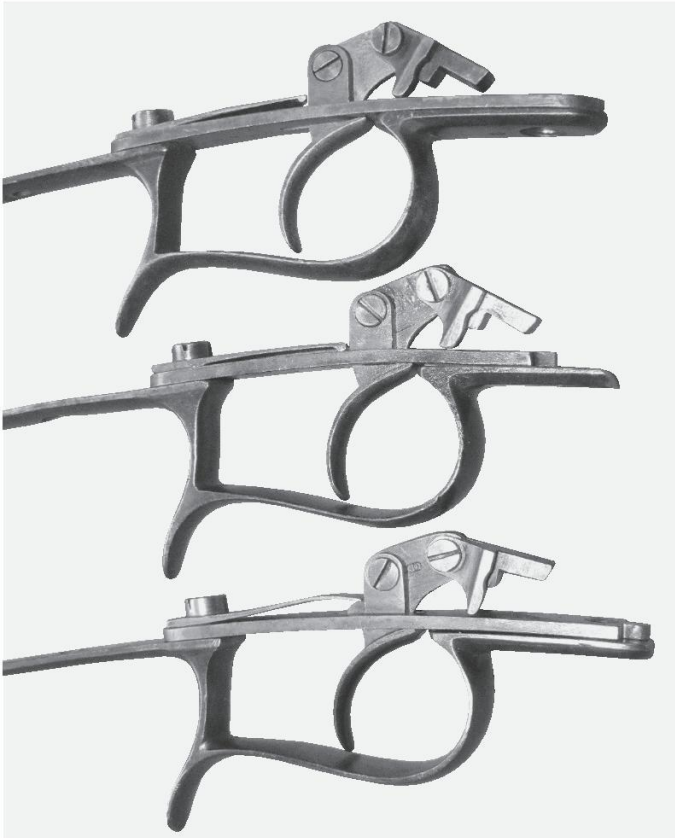
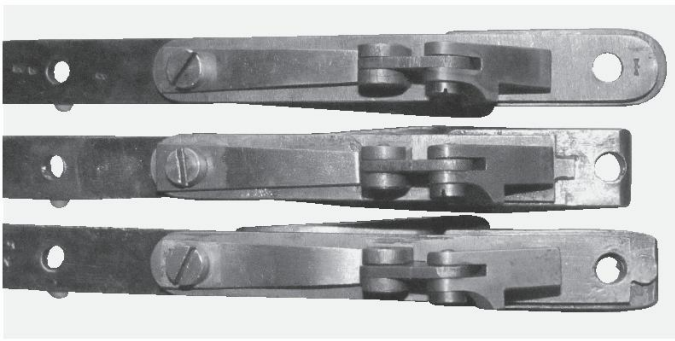
Vetterli stocks: (top) 6.5mm Vetterli Model 1870/87/15 rifle, "Standard" conversion, (middle) 6.5mm Vetterli Model 1870/87/15 rifle, "Versione MB" (bottom) 10.35mm Vetterli-Vitali Model 1870/87. Note that the magazine void of the "Versione MB" is perilously close to the crucial front triggerguard bolt bushing. (John Ceruti)



Underside view of the same Vetterli stocks. Note again how close the "Versione MB" magazine inlet is to the crucial front triggerguard bolt bushing. (John Ceruti)



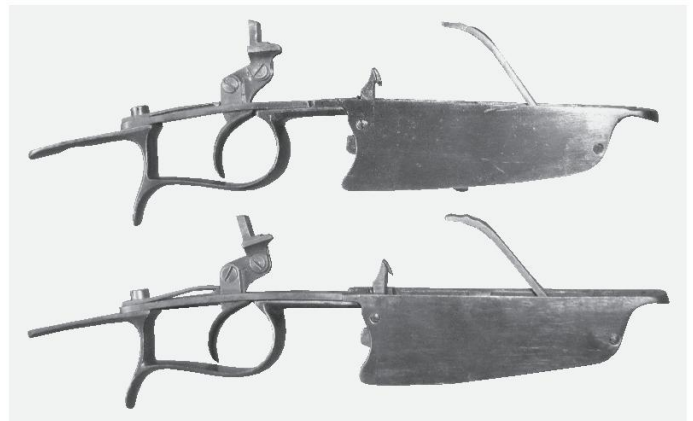
Overhead view of Vetterli Mannlicher-style magazines. The "Versione MB" is shown above the "Standard" version. Note that the rear tang of the "Standard" is cut away by 8mm with a rounded notch to interface with the rounded tab at the triggerguard front tang, while the "Versione MB" has a longer tang with a rectangular key to interface with a shortened front trigger tang. (John Ceruti)



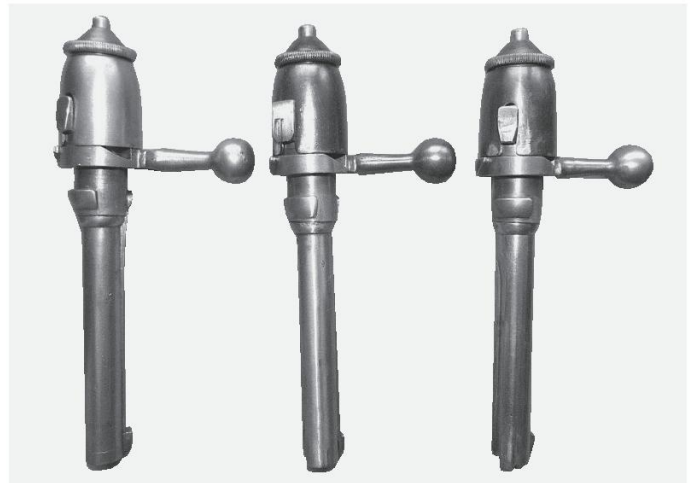
Top and side views of Vetterli trigger groups. (top) Vetterli-Vitali Model 1870/87 rifle. (middle) Vetterli Model 1870/87/15 "Versione MB" showing how the front of the tang has been shortened by 6mm to very close to the tang bolt drilling and machined with a rectangular key. (bottom) Vetterli Model 1870/87/15 "Standard" conversion with the front of the trigger tang fractionally truncated and with a rounded tab cut to fit inside the rear magazine tang. (John Ceruti)

the Vitali magazine shroud. Early in the 6.5mm conversion process (when probably less than 70,000 of the eventual 709,768 conversions had been completed by the Officina di Costruzione d'Artiglieria in Rome), it was probably recognised that there was a more efficient and cost-effective way of converting the action, and thus the "Standard" conversion was adopted, which is likely to have been easier to mass produce and used fewer parts.

Beretta reportedly conducted the studies for the Vetterli 6.5mm conversions, but so far none of their drawings have been located (per John Ceruti, Museo della Guerra Bianca). The rear of the receiver opening was cut away by 6.5mm at both top and bottom. The forward end of the top receiver loading slot was extended by 2.54mm and streamlined. The 10.35mm sprung cartridge stops could be completely



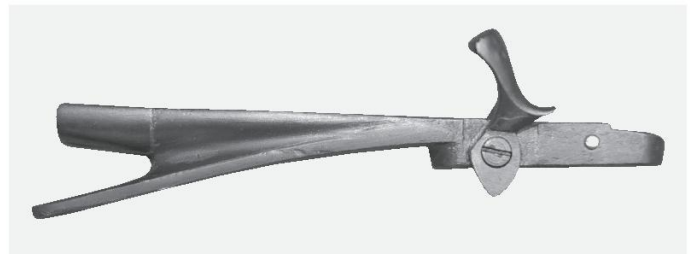
"Versione MB" magazine at top showing how the shortened triggerguard interfaced with the longer rear magazine tang. Below, a "Standard" version rifle magazine with a longer triggerguard fitting and a shortened rear magazine tang. (John Ceruti)



Vetterli bolts. From the left: 6.5mm Vetterli Model 1870/87/15 rifle, "Standard" version; 6.5mm Vetterli Model 1870/87/15 rifle, "Versione MB"; 10.35mm Vetterli-Vitali Model 1870/87 rifle. Note how the "Versione MB" striker has been widened and machined to fit securely inside the new bolt extension rail. (John Ceruti)



Detail of the "Versione MB" bolt showing how the modified striker shoe fits neatly in the extended bolt support rail. (Jim Dawson)



Detail showing how the "Versione MB" extension rail was brazed on to the existing Vetterli-Vitali bolt support rail. (Jim Dawson)

## The “Versione MB” Compared to the “Standard” Version

Characteristics	“Versione MB”	“Standard” Version
1. Receiver Cut-away	Rear of receiver opening cut-away was extended rearwards by an extra 2.5mm from Standard (total extra 9.0mm cut rearwards from mod.1870/87) at both top and bottom.	Rear of receiver opening was cut away by 6.5mm from mod.1870/87 at both top and bottom.
2. Front Loading Slot	Front of top receiver loading slot left untouched from the 10.35mm profile.	Front of top receiver loading slot extended forwards by 2.54mm and streamlined.
3. Magazine	Mannlicher-style magazine moved fractionally rearwards with intact long rear magazine tang of 8mm fitted with a rectangular key to mate with the front of the triggerguard tang.	Mannlicher-style magazine rear magazine tang shortened by 8mm and fitted with a rounded pattern cut-out to mate with the front of the triggerguard tang.
4. Trigger Tang	Front tang of triggerguard shortened by 6mm and keyed with a male rectangular lug to mate with the rear magazine tang.	Vetterli-Vitali trigger guard slightly truncated with front tang keyed with a rounded male lug to mate with the rear magazine tang.
5. Cartridge Stops	Modified and specially contoured 10.35mm spring-loaded cartridge stops fitted on each side of the lower receiver.	Cartridge stops removed. Instead, the sides at the bottom of the receiver were indented inwards.
6. Key Locking Ring	The former 10.35mm magazine cut-off, now the 6.5mm key locking ring, was narrowed to 11 mm and was moved rearwards to cover the key.	The former 10.35mm magazine cut-off, now the 6.5mm key locking ring, was narrowed to 8 mm width and remained parallel, alongside the key.
7. Key Leaf Spring	The small leaf spring that tensioned the former magazine cut-off ring, now the 6.5mm key locking ring, often found removed (or missing).	A small leaf spring that tensioned the former magazine cut-off ring, now the 6.5mm key locking ring, located underneath the ring.
8. Bolt Support Rail	A 21mm extension to the existing bolt support rail totalling 59mm, with an internal machined channel, soldered on.	Existing 38mm Vetterli-Vitali bolt support rail with U-shaped channel.
9. Striker Shoe	The shoe on the bottom of the bolt striker widened to 10.5mm and machined to fit into the rail channel of the bolt extension.	Existing Vetterli-Vitali bolt striker shoe of 8.2mm width.
10. Stock	Cut-away to the rear of the magazine very close to the bushing for the action support bushing. Magazine void approximately 83mm long and other voids in the wooden stock cut out to comply with the above measurements.	Magazine cut-out positioned further forward and void approximately 80.5mm long.

discarded, and the bottom of the receiver indented on both sides in a press to support the Mannlicher-style clip. The triggerguard tang was shortened less severely at the front, leaving more metal between the front end and the important front trigger tang bolt hole, and the rear of the tang was left as it was. However, the Carcano magazine rear tang had to be shortened by 8mm and fitted with a rounded notch to fit to the front trigger tang tab. No changes were required to the bolt striker and bolt support rail. True, the bolt oscillated about on the support rail and could bind during rapid fire if care was not taken, but this was acceptable for a “stop-gap” rifle introduced as an emergency measure. The existing Vetterli-Vitali cut-off ring (with the Vitali magazine cut-off flange removed) was narrowed to 13mm, and operated as a key locking ring parallel to the key, a neater solution than the “Versione MB” mutilation. Altogether, this made for a simpler, stronger conversion than the more complicated “Versione MB”.

The “Versione MB” was fractionally lighter than a “Standard” conversion, but the difference was so small as

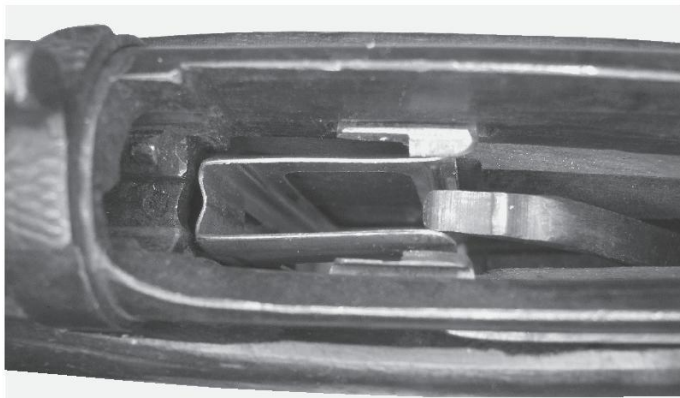
to be inconsequential. So far, no official records have been found concerning the “Versione MB” conversion. The twenty examples that the author is aware of include rifles originally made by all the manufacturers: Brescia, Terni, Torino and Torre Annunziata. Those that have a Rome conversion workshop stamp are, so far, all dated 1916.

### The Moschetto da Carabinieri Model 1870/87/15

In 1915, it was decided to adapt a number of Model 1870 Carabinieri carbines to 6.5mm caliber using the same Salerno re-tubing process as the rifle. There had never been a Vitali-magazine-equipped version of the carbine in military service, so the designers were starting with a clean slate. Logically, it should have been designated the Moschetto da Carabinieri Model 1870/15, but that was not the case. The conversion was completed in a similar way to the Vetterli rifle, and the standard alterations to the firing pin and extractor were incorporated.

It had long been recognised that the Vetterli bolt could





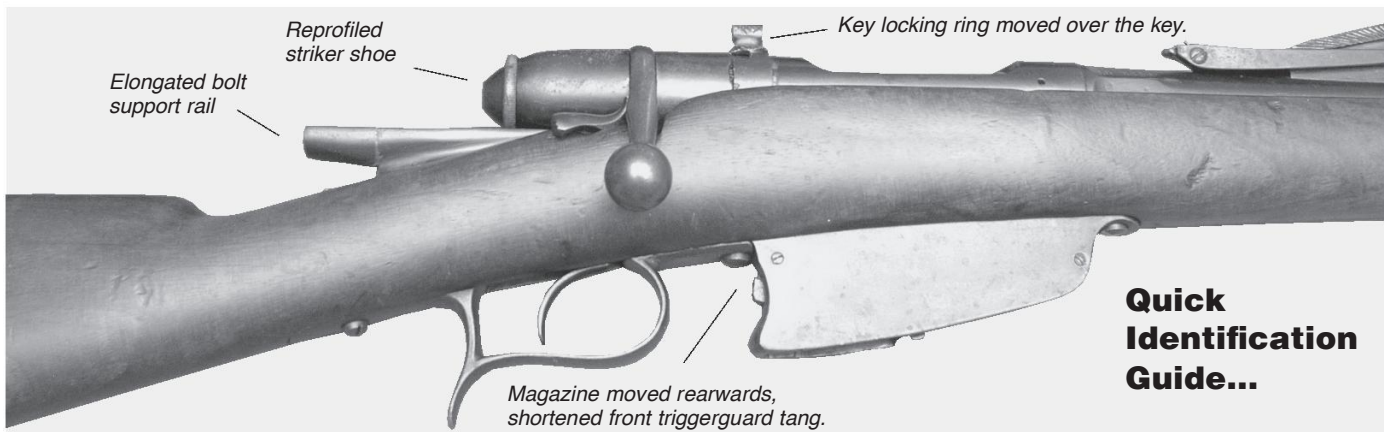
A "Standard" 6.5mm conversion erroneously fitted with "Versione MB" modified sprung cartridge stops, which shows how the 6.5mm clip is jammed by the stops. (Vidar Andresen)



Model 1870/87/15 Carabinieri carbine.



Detail of the bolt rail of a Model 1870/87/15 Carabinieri carbine showing how the modified striker shoe fits neatly in the machined bolt extension rail in a similar way to the "Versione MB". (Roberto Gobetti)



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bind during rapid fire, even with the bolt support fitted as part of the Vitali conversion. The carbine was therefore fitted with an elongated bolt support rail, 20mm longer than the Vitali variants, in order to give increased support to the bolt in the open position, together with a widened under-surface to the striker that was a sliding fit inside the bolt extension rail. The Mannlicher-style magazine could be a neater fit into the stock, as there was no need to install wooden fillets around a former Vitali magazine inlet. The front of the trigger tang was shortened and fitted with a rectangular key, which mated with a matching cut-out in the rear magazine tang. The rear of the receiver was cut away, but the front of the loading slot was untouched, retaining the original 10.35mm profile. The dust cover was removed completely, and thus there was no key locking ring. There were no 10.35mm Vitali cartridge stops to remove, and the bottom of each side of the receiver was indented in order to grip the Mannlicher-style clip.

Most of the characteristics of the "Versione MB" rifle conversion were present in these carbine conversions (except for key ring and cartridge stops). But because all Model 1870/87/15 Carabinieri carbines incorporate the features above, and were "clean-slate" conversions from single-shot, they should not be classified as "Versione MB".

### Summary

It is not often that a new version of a 20th-century rifle comes to light, and it is strange that this variant of 6.5mm Vetterli conversion has been sitting right under collectors' noses in significant numbers since 1918, yet was never formally recognised. It is my belief that over 5% of today's 6.5mm Vetterli rifle collectors may suddenly now discover that they are owners of a "Versione MB". □

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  - Riccio, Ralph, *Italian Small Arms of the First and Second World Wars*, Schiffer Publishing, Atglen, PA, 2014.
  - Wilsey, Robert, *The Italian Vetterli Rifle*, Mowbray Publishing, Woonsocket RI, 2016.
- My special thanks to John Ceruti for his photographs and measurements, and also to Vidar Andresen, Dr. Gianguido Castagno, Jim Dawson, Maresciallo Luogotenente Galletti, Mag Reinolf Reisinger and Ralph Riccio for their assistance in the preparation of this article.