

# Mod.918 & Mod.918/30

a historical overview of an early automatic carbine

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## Conceptual precursors

The development of the Revelli-Beretta automatic carbine was not without precedent, nor was it an entirely original concept. Interest in self-loading rifles and carbines was already taking root in Italy by the turn of the century. The first to begin this trend was the invention of an officer of the Bersaglieri, Captain Amerigo Cei-Rigotti, who in 1895 demonstrated in Rome an early automatic rifle.

The Cei-Rigotti rifle was gas-operated, using an external piston rod that ran along the side of the receiver and directly engaged the bolt. It had an internal magazine of 10 rounds, fed by a stripper-clip, and could fire automatically or semi-automatically at about 300rpm. It had the dimensions of a carbine, at only 39 inches in length, and weighed about 9.6lb. It was certainly unlike any other rifle of the 19<sup>th</sup> century.



[1.] The Cei-Rigotti gas-operated automatic carbine, 6.5mm Carcano. This was one of the earliest automatic rifles ever made and kickstarted the Italian studies into self-loading rifles.

While the Cei-Rigotti was a technical accomplishment for its time, it was not a practical military rifle. It was tested various times, including in Britain, but exhibited poor accuracy and was prone to jamming. Development lasted from about 1895 to 1911, with various different prototypes constructed at Glisenti-Bettoni, but it never managed to elicit serious consideration.

In 1905, a patent was taken out by Filippo Genovesi covering the design of a new self-loading rifle. This rifle was subsequently developed at the Terni rifle factory with the assistance of Abiel Revelli. It operated on a short-recoil action with six locking lugs on the bolt face. The Carcano M.91 service rifle was used as a base onto which the Genovesi action was applied, and it fed from the standard 6-round internal magazine.

The Genovesi-Revelli was trialed by the Bersaglieri in 1910, and was actually taken into service, making it one of the first self-loading rifles to see military adoption (after the Mexican Mondragon). The Bersaglieri ordered some 6,000 of these rifles to be produced at the Terni arsenal, but by the time of the Italo-Turkish War of 1911 – 1912, only about 150 Genovesi-Revellis had actually been delivered. They performed so poorly in the harsh conditions of the Libyan desert that the order was prematurely cancelled.

The failure of the Genovesi-Revelli represented a temporary decline of interest in the self-loading rifle. Although others were developed in Italy around this time, including the Freddi and Bertoldo designs, the Bersaglieri instead expressed interest in a new breed of automatic weapon: the Villar Perosa.

## Starting point: the Villar Perosa



[2.] The twin-barreled FIAT/Revelli Mod.915 – better known as the "Villar Perosa" – was the first submachine gun to be adopted by any military.

The development of the Revelli-Beretta technically began in 1914 with the invention of the twin-barrelled, 9mm "Villar Perosa" machine gun. This weapon, designed by the Italian officer Abiel Bethel Revelli, was developed for use as a lightweight machine gun by mobile infantry units, such as the *Bersaglieri*, *Alpini*, and other roles for which a conventional machine gun was not suited, including on early military aircraft. Initially the weapon was manufactured by the small firm of Roberto Incerti & C., Villar Perosa S.A. (R.I.V.), located in the town of Villar Perosa located on the outskirts of Turin. Predictably, this is the place from which the weapon derived its now-ubiquitous nickname.

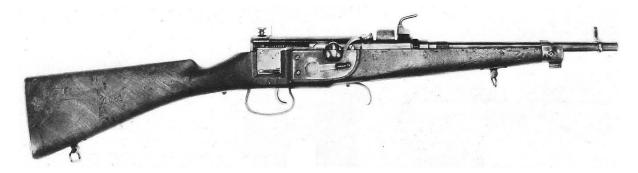
Prior to World War I, R.I.V., a subsidiary of the larger and more well-known FIAT factory in Turin, were contracted to supply the Bersaglieri with bicycles. When Italy entered the war against Austria-Hungary in May 1915, R.I.V. began manufacturing the Villar Perosa and the Italian Army, desperately short of machine-guns, hastily accepted this specialized weapon into general service. It was subsequently manufactured at FIAT, with additional components being produced at Beretta and Ansaldo.

The Villar Perosa operated on a delayed-blowback action in which the twin bolts, riding on spring-loaded guide rods, came forward into a 45° angled lug in the bolt guide which forced a small rotation. This was a bolt delay in principle only – in practice, it did nothing to hinder the blistering fire rate of 1,200 rounds per minute (per barrel), which expended the small 25-round magazines in a matter of about two or three seconds. In order to remedy this, several precautions were taken, including training troops to fire in disciplined bursts to avoid ammo wastage, and even the invention of a pneumatic fire-rate reducer called the Pavesi device.

While the Villar Perosa was used to some success on the Italian Front (with the Austro-Hungarians even developing their own copies in 9x23mm), it was intended to be fired from a mount – be it a twin-legged shield, a bipod, or a tripod – and attempting to fire it from the shoulder or the hip was impractical. Although impromptu solutions were devised, including a flat tray-like mount that the user would hang around their neck via a strap, none of them were particularly successful. As it happens, however, the possibility of transforming the weapon into a more practical automatic carbine was on the cards since as early as 1916.

## The FIAT submachine gun

1916 was the year the Italian Test Commission observed the demonstration of a new weapon known as the *Moschetto Automatico FIAT*, or Revelli. It was developed jointly between the FIAT factory in Turin and their subsidiary R.I.V. The designer, again, was Abiel Revelli, who seems to have realized earlier than most the potential of the submachine gun concept.



[3.] The FIAT of 1916 - Italy's first "practical" submachine gun. Adapted directly from the Villar Perosa.

The FIAT submachine gun was not really a new design, so much as it was basically a single Villar Perosa receiver mounted to a wooden stock, with some modifications owing to the trigger mechanism. The trigger group was redesigned to incorporate a fire selector switch, giving automatic fire and single shots. The unusual cocking lever of the Villar Perosa, which lifted the bolt handle from its angled lug, was retained in the FIAT, complete with a rounded cup into which the bolt handle sat when the bolt was closed.

All other elements of the FIAT submachine gun operated identically to the Villar Perosa, including the overhead magazine feed – taking the standard 25-round magazines – and the downward ejection, although a rudimentary case deflector was added to the underside of the receiver in an attempt to redirect the spent brass forward.

The Test Commission were impressed with this innovative new concept and soon afterward the Italian High Command raised the possibility of arranging trials to compare several different submachine guns. This was happening concurrently with German's submachine gun programme, completely independent of each other, but whereas the Germans were basically working from scratch, the Italians seem to have focused their efforts entirely on adapting the Villar Perosa into a viable carbine in the style of the FIAT submachine gun.

Three companies are known to have been commissioned to submit entries into the aforementioned trials. These were FIAT/R.I.V., Ansaldo, and Beretta. All three were likely

chosen due to their involvement in the production of the Villar Perosa; the guns themselves were made at FIAT and RIV, but the shields and mounts were made at Ansaldo, and the barrels were manufactured at Beretta. Thus, these companies were already familiar with the design of the "pistola mitragliatrice" and this gave them a head-start in conceptualizing ideas that could be applied to improve the design.

# Development and design

Beretta placed the responsibility of designing their submission in the hands of Tullio Marengoni, one of the firm's younger employees. Marengoni had no formal qualifications in engineering and was entirely self-taught; he only landed a position at the company because he was a childhood friend of Pietro Beretta's nephew. Despite this, he proved himself to be an exceptionally talented engineer, and during his career, he was responsible for designing a range of excellent submachine guns, handguns, and rifles. It is not hyperbole to suggest that he was probably the finest arms designer to come out of Italy in the 20<sup>th</sup> century.

In designing Beretta's entrant, Marengoni came up with an efficient and simplistic solution. He took the single receiver from a Villar Perosa and mounted it onto a shortened wooden stock taken from an obsolete Vetterli rifle – as evidenced by the distinctive trigger guard. A new trigger was fitted, of the conventional type; however the sear was fitted with a disconnector that only permitted single shots per pull.



[4.] The standard *Moschetto Automatico Revelli-Beretta* – single-trigger, semi-automatic, and most certainly not a submachine gun as is ubiquitously claimed. *(Photo: firearms.96.lt)* 

Other than the change to the trigger sear, the action was unchanged from the Villar Perosa. The 45° cam in the bolt guide was retained but unlike the Villar Perosa and the FIAT, Beretta chose to eliminate the cocking lever. The bolt, which rode on a spring-loaded guide, was forced into a small rotation through engagement of the angled incline which created, in theory, a friction-type delay. However, in practice the effects were barely appreciable.

Mounted to the end of the barrel of the Marengoni's carbine was a folding spike bayonet, of the type used by the Carcano M.91 cavalry carbine. When folded, the bayonet lay comfortably in a groove lining the underside of the fore-end. Interestingly, the bayonet swivel was built with a lock switch, to prevent accidental unfolding of the bayonet.



[5.] The cocking slot of the Revelli-Beretta carbine, showing the 45° angled cam slot. This was a carry-over from the Villar Perosa which was intended to create a bolt delay but had little appreciable effect. (Photo: firearms.96.lt)



[6.] The overhead magazine feed of the Revelli-Beretta carbine, with visible bolt. (Photo: firearms.96.lt)

Due to the placement of the magazine, an offset sighting unit was used in this weapon. However, unlike the FIAT and later 0.V.P. submachine guns, the sights of the Beretta carbine were mounted to the *right*, rather than the left. While this may sound awkward on paper, considering that the majority of shooters would be aiming the gun from their right shoulder, it arguably gives greater comfort than a left-mounted sight as it requires the user to properly rest their cheek against the stock for a tighter aim – imperative in a semi-automatic weapon, where accurate follow-up shots are a necessity.

The magazine release catch of the Beretta carbine differed among prototypes, but the version that was used in the final model was a spring-loaded hinged catch placed forward of the magazine, which released the magazine when pulled upward. The ejection port, as with the Villar Perosa, was placed directly underneath the magazine feed – however, Marengoni built onto it a rectangular chute which would ideally prevent the user from accidently placing their hand over the ejection.



[7.] The "bigrillo" (twin-trigger) variant of the Revelli-Beretta, with automatic fire capability. This model was made in small quantities only, apparently by M.I.D.A. of Brescia.

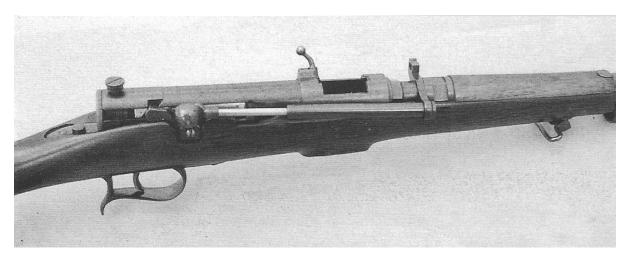


[8.] The inverted-receiver Revelli-Beretta carbine, made on an experimental basis only. The cocking lever is on the left side of the receiver.

Various different configurations of the Beretta system were tried. It is known that a twintrigger model was made, allowing both automatic fire and single shots, although this model was made with a different type of stock and did not feature the folding bayonet, instead using a bayonet catch modelled after that seen on the Carcano M91 TS carbine. There were also other deviations in the design, so much so that it can scarcely be considered the same gun – these include a different style of receiver incorporating the original Villar Perosa

magazine catch rather than the Beretta type; a retracting cocking lever; and an oddly curved ejection chute. These "bigrillo" models were reportedly not made at Beretta, but Manifattura Italiana d'Armi (M.I.D.A.) in Brescia, which probably accounts for the lack of shared components with the original Revelli-Beretta.

A single-trigger model with a mechanical selective-fire function, operated by a button on the right side of the receiver, was also conceived. This model was fitted with a piston-type shock absorber connected from the forward receiver to the bolt handle, acting as a fire rate reducer. This apparatus may have been related to the Pavesi device, a pneumatic moderator originally designed for the Villar Perosa. The select-fire Revelli-Beretta was built with a full stock, and a TS-type bayonet catch. The ejection chute of this version was integral with the wooden furniture, not a separate component, and the magazine catch was of the type used in early Villar Perosas.



[9.] Experimental selective-fire Revelli-Beretta submachine gun with a piston-type moderator.

Also tried by Beretta was a prototype of the standard Revelli-Beretta carbine with the receiver mounted in an inverted position on the stock, taking magazines from the bottom and ejecting from the top. This layout allowed for the sights to be mounted in-line with the barrel rather than offset to the right, although the straight-upward ejection probably gave some trouble, and there may have been some feeding issues associated with making the Villar Perosa magazine feed up instead of downward.

All of these experimental and variant models were only made in very limited numbers, and it is not known that they were ever issued.

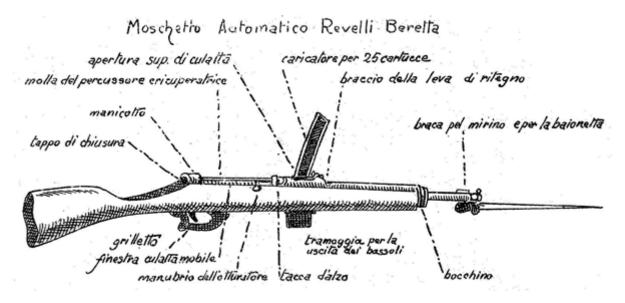
# The Revelli-Beretta in service

By 1918, the three contracted companies had all submitted prototypes to the Test Commission and comparative trials took place. FIAT appears to have resubmitted their aforementioned prototype, but unfortunately little is known of Ansaldo's entry, other than it was designed by Enrico Crocetti. Around this time, another submachine gun – also adapted from the Villar Perosa – was developed privately by Amerigo Cei-Rigotti, the inventor of the early automatic rifle bearing his name, but it is not known whether his SMG was submitted to military trials. Mention of two additional automatic carbines, the "Savoia" and "A.N."

models, has also been reported, although there seems to be no information available regarding these apparent prototypes. They were probably made by the S.I.A.I. company (which traded under the "Savoia" brand) and the Aviazione Navale respectively.

Beretta submitted their Marengoni-designed carbine to the Army; whether they submitted various configurations, or only the semi-automatic model, is not known. In any case, it was that variant that was deemed to be the best of the designs offered and it was taken into service the same year as the *Moschetto Automatico Revelli-Beretta*, with Abiel Revelli presumably receiving a shared credit on the basis that the gun was adapted from the Villar Perosa. It was sometimes also referred to as the Beretta-Revelli. The names "Beretta Model 1918" and "MAB 18" are commonly used today, but do not appear in contemporary descriptions of the weapon.

Production of the Revelli-Beretta did not get underway until the last months of the war. In September 1918, Pietro Beretta received confirmation from the Army that they would supply 5,000 Villar Perosa machine-guns to be converted into 10,000 Revelli-Beretta carbines. Additional components would be supplied by the ordnance officer (and future arms designer himself) Alfredo Scotti-Douglas. By the end of November, however, the order was prematurely cancelled, owing to the signing of the armistice with Austria-Hungary. The demand for this new weapon suddenly evaporated; it is estimated that probably just under half of the requested order was completed and delivered to the Army, totalling at around 4,000 – 5,000 units. A 1942 report, though not exactly contemptuous, quotes the price of an individual Revelli-Beretta carbine at 250 Lira.



[10.] A rather crude sketch of the Revelli-Beretta, taken from a 1928 manual of arms.

The new Revelli-Beretta carbines that were delivered to the Army were distributed at a rate of 18 guns per battalion, specifically issued to the best shots of a given company. Whether it ever actually saw any combat is a point of contention. Some may have arrived in time to be used at the climactic Italian offensive at Vittorio Veneto at the end of October 1918, but it is impossible to know for sure. It has long been asserted by some experts that it

actually reached the front *before* the Germans fielded the famous Bergmann M.P.18,I submachine gun, although this is almost certainly not true.

The Revelli-Beretta remained in issue throughout the 1920s, although basically considered obsolescent. It served alongside another Villar Perosa derivative – the O.V.P. submachine gun – which was probably never used by infantry and only issued to aerial observers. Feeling they had no place in service after World War I, the Italian Army sold quantities of both weapons as surplus to other countries in the 1930s, as will be detailed in Addendum I.

#### Post-war evolution

Almost as soon as the war ended, the tactical effectiveness of the Revelli-Beretta was already under scrutiny by the Italian military authorities; it is perhaps not surprising that it was the cartridge, 9mm Glisenti, was the focal point of this criticism. This cartridge was already considered underpowered even when used in the pistol it was designed for, so its lack of stopping power was doubly glaring when fired from an automatic rifle. In 1920, after only about 5,000 Revelli-Berettas had been delivered, the Italian Army decided to cancel the 25,000-unit order – the factors driving this decision were probably both the end of the war and thus the lack of immediate requirement for the weapon, and the underwhelming performance of the weapon in the role of a self-loading rifle.

In a remarkably forward-thinking move, the Italian Army decided that the use of the 9mm Glisenti cartridge in automatic carbines should be replaced with a light, intermediate rifle cartridge; a compromise between 9mm Glisenti and 6.5mm Carcano. What resulted from this was the conception of the new 7.65x32mm cartridge, which was dimensionally similar to the later German 7.92x33mm Kurz cartridge famously developed during World War II.



[11.] The *Moschetto Automatico Brescia*, an intermediate-caliber automatic rifle developed from the Revelli-Beretta in the early 1920s.

The Italian Army specified that it wanted a light automatic carbine to fire this new cartridge, lighter and shorter than a rifle and giving good accuracy at 400 metres. As with the earlier submachine gun trials, various firms were commissioned to develop a weapon to meet these specifications. This time, they were all state arsenals – presumably because the development of the 7.65x32mm cartridge was still kept secret from private companies at this point. The participating arsenals were those at Terni, Rome, and Brescia. The entries submitted by all three of these arsenals are very interesting weapons in their own right, but the focus here will be on the submission from Brescia, which was adapted directly from the Revelli-Beretta.

The Moschetto Automatico Brescia was built using the Revelli-Beretta as its base, retaining the same receiver, stock, and action. The chambering was changed to accommodate the new intermediate cartridge, and the barrel was changed for a longer type. The bolt was likely also modified, although the angle-delay in the bolt guide was retained, despite it having no real effect. The most notable change was the magazine feed. The top-loading system of the Villar Perosa and Revelli-Beretta guns was abandoned in favour of a multi-compartmented magazine similar to the type seen on the Fiat-Revelli machine gun, in which a square cage-like magazine consisting of 5 rows of 5-round strips, feeding one after the other. Fitted to the magazine was a fire selector switch, which gave automatic fire or single shots.

Ultimately, none of the entrants into this trial were able to live up to expectations, owing to concerns about their reliability and accuracy. Although the submission from Terni aroused some continued interest and remained in development until 1928, the Rome and Brescia designs were defunded and cancelled, and the adoption of the 7.65x32mm cartridge never went ahead. Thus, Italy's embryonic "assault rifle" programme was killed pretty dead before it had any chance to make a Sturmgewehr-type impact.

# The Moschetto Automatico Beretta Mod.918/30



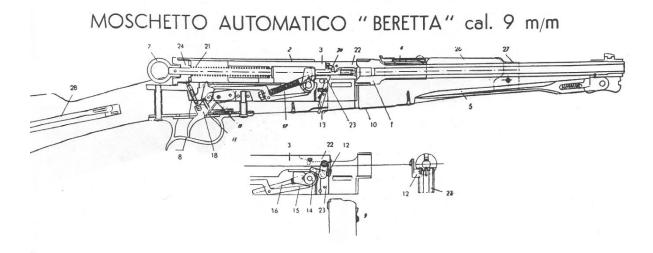
[12.] The Mod.918/30 automatic carbine, a redeveloped variant of the Revelli-Beretta. (Photo: firearms.96.lt)

In 1930, a new version of the Revelli-Beretta carbine appeared, commonly known as the Mod.918/30 but contemporarily known as simply the *Moschetto Automatico Beretta*. The removal of Revelli's credit from the nomenclature was probably due to the fact that he died in 1929, but it is also indicative of the fact that the gun had now moved away from the Villar Perosa's influence and was now almost entirely Marengoni's design in its own right.

The Mod.918/30 not an open-bolt design like the standard Revelli-Beretta, but instead fired from a closed bolt, with a separate spring-loaded firing pin. The receiver was completley reworked to accodomdate a new cocking method, with the cocking slot completely eliminated and replaced with a retractable ring-type piece fitted to the rear of the receiver. The ring was connected via the guide rod directly to the bolt, and would stay closed upon firing. The distinctive style of this ring-like cocking piece earned the gun the nickname of "Il Siringone" ("The Syringe").

The magazine feed was moved to the bottom, taking entirely new 10- or 25-round box magazines, and the ejection port was placed on top. Since the magazine was no longer in

the user's line-of-sight, a conventional set of iron sights were fitted, with an adjustable tangent rear sight unit.



[13.] A cross-section diagram of the *Moschetto Automatico Beretta*, or Mod.918/30.

As with the Revelli-Beretta, several variations in pattern can be observed in examples of the Mod.918/30. This mainly includes different styles of buttstock and handguard, ranging from pommel grips to straight-hand grips, Vetterli-type trigger guards to smooth circular trigger guards, and folding bayonets to TS-type bayonet mounts. This can probably be chalked up to the fact that construction of both guns was largely done by hand using components taken from other existing weapons (however in the case of the Mod.918/30, the receivers were machined components made in-house at Beretta). Special variants of the Mod.918/30 were also made, such as a scoped hunting version for commercial sale, and a collapsible paratrooper carbine for intended military use. Neither were successful.

The Mod.918/30 is known to have been purchased by the Italian Forestry Corps and the police forces of the city of Rome. It was also exported to Argentinia where it was adopted by their National Police. In fact, the Beretta left its mark on Argentinian submachine gun design, and its influence can be seen in some of the guns developed at Halcon and HAFDASA in the 1940s. Argentinian-contract Mod.918/30s were stamped with the country's national crest. The stated price of sale for the Mod.918/30 was 420 Lira, quite a bit more than the standard Revelli-Beretta.



[14.] A copy of the Beretta Mod.918/30 developed by Halcon of Argentina in the 1940s.



[15.] The Beretta Mod.918/30 hunting carbine, for civilian sale.

It would appear that the Mod.918/30 was, by standard, offered in 9mm Glisenti, but the Argentinian contract models were produced for the more widely-used 9mm Parabellum cartridge. The two cartridges were so dimensionally similar, however, that no real "converting" needs to be done to fire the Parabellum cartridge from the Mod.918/30. Any weapon that is chambered for 9mm Glisenti can theoretically chamber 9mm Parabellum, however it must be noted that in some cases, such as the Glisenti pistol, the weapons are not built to withstand the higher velocity of the Parabellum round and the results can be highly dangerous. In the case of the Revelli-Beretta and Mod.918/30, it has been reported that both weapons can fire, without issue, the Parabellum cartridge.

In 1935, Marengoni developed a variant of the Mod.918/30 carbine known as the Mod.35. This weapon was the direct precursor to the later Beretta Model 38A, the submachine gun which would ultimately succeed the Mod.918/30. The Mod.35 was functionally identicaly to the Mod.918/30, but was built with a long, ventilated barrel jacket and a dinstictive stock design – both features which were clearly replicated from the German-made Bergmann M.P.35/I submachine gun. Although the Mod.35 was a closed-bolt, semi-automatic weapon, it is evident that Marengoni was laying the groundwork for the Mod.38A SMG. Thus the long lineage from the Revelli-Beretta to the Mod.38A is made evident.



[16.] The Beretta Mod.35, the final iteration in the Revelli-Beretta family and the precursor to the Beretta Mod.38A submachine gun.

## Addendum I: the Revelli-Beretta in Ethiopia & WWII

Although the Revelli-Beretta's use in World War I is up for debate, it seems certain that the gun – and the updated Mod.918/30 variant – saw real combat use in North Africa during the 1930s and 40s. When Mussolini launched his aggressive invasion of Ethiopia in October 1935, the Revelli-Beretta was still in service, albeit now considered dated and obsolecent.

But the concrete photographic evidence that shows the Revelli-Beretta in use during this time depicts not Italian soldiers using the weapon, but their Ethiopian adversaries. A set of photos, dated to about March 1936, shows Emperor Haile Selassie's imperial guard, the *Kebur Zabagna*, drilling with unloaded Revelli-Beretta carbines. Every soldier visible in these photos is armed with one.

How is it that these Ethiopian troops were equipped with these rare carbines? The most tempting and obvious answer is to simply suppose that they captured them from the Italian invaders. While the Ethiopians did take an amount of Italian prisoners in the early stages of the war, and may have even intercepted some Italian ordnance, this does not satisfactorily explain why the Ethiopians are pictured with such a large quantity of these guns, and yet there are little to no photographs depicting Italian soldiers using it.



[17.] Ethiopian regulars march with Revelli-Beretta carbines over their shoulders, 1936.

An alternate explanation is that these guns were actually sold to Ethiopia as surplus at some point *before* the Italian invasion. According to an Italian intelligence report in 1938, there were arrangements being made to sell obsolete Revelli-Beretta and Mod.918/30 carbines to the Saudi government; so clearly the Army was open to selling these guns. And this raises the bizarre possibility that, with the defeat of the Ethiopian Army in 1937, the Italians may have actually *reclaimed* surplus Revelli-Berettas that they had previously willingly sold to Ethiopia.

It would appear that the Revelli-Beretta was also still in use by the time of World War II; it is reported that British troops encountered it, along with the antiquated O.V.P. submachine gun, in the hands of Italian troops in North Africa. This is probably the provenance for the examples that are kept in the Royal Armouries Collection today. However, by 1941, the Italian Army had adopted the *Moschetto Automatico Beretta Mod.38* – or MAB 38 – a highly reliable submachine gun that rendered the Revelli-Beretta totally obsolete.

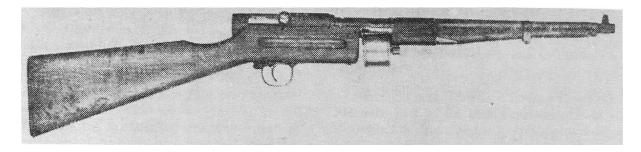


[18.] Italian soldiers of the Alpini regiment during a drilling exercise, in the typical style of the fascist era. They are holding Beretta Mod.918/30 carbines.

It is probable that the vast majority of Revelli-Berettas were either sold or lost in the North African campaign, as by July 1942, an Italian ordnance survey reported that there were only 60 Revelli-Berettas left in service. This would explain why, by the time of the Allied invasion of Italy in 1943, the Revelli-Beretta had all but evaporated from use. It is known that the Mod.918/30 was still in circulation, however; it was numerous enough to be used in quantity by R.S.I. blackshirts during Italy's civil war period (1943 – 1945), and for some examples to have been obtained by C.L.N. partisans. Ultimately, though, both variants were overshadowed in the later stages of the war by more plentiful submachine guns, such as the MAB 38, MP40, and Sten.

I conclude this section with an interesting recent development out of Ethiopia. In March 2020, the Italian arms company Nuova Jager reported on social media, with accompanying photographs, that they had purchased a large quantity of surplus Italian arms from Ethiopia and were preparing to import them back to Italy. The selection of exceptionally rare weapons shown in the photographs is quite incredible – 0.V.P. submachine guns, Swiss SIG MP46s, and even a Terni Mod.21 prototype rifle. But of relevance here is the stockpile of Revelli-Beretta and Beretta Mod.918/30s that were discovered among the haul. Although they are in poor condition, seemingly having not been maintained in many decades, it nonetheless serves as further proof of the Revelli-Beretta's presence in Ethiopia.

#### Addendum II: the Netsch automatic carbine



[19.] Slovakian Netsch automatic carbine, a rare derivative weapon of the Revelli-Beretta.

An interesting point supporting the notion that the Revelli-Beretta saw issue during the late stages of World War I is the fact that the design was copied in Czechoslovakia (part of the former Austro-Hungarian Empire) immedietly after the war. In 1919, Josef and Frantisek Netsch, a Slovakian father-and-son team, developed a 9x23mm carbine which they submitted to the Czech Army. Sources disagree as to whether the Netsch carbine was a full-automatic submachine gun or a semi-automatic weapon like the Revelli-Beretta, but regardless the inspiration taken from the Beretta is obvious. The weapon was blowback-operated, built from a tubular receiver mounted to a wooden rifle-type stock with a folding bayonet. The action of this gun was clearly copied from the Revelli-Beretta, incorporating a near-identical type of friction-based bolt delay consisting of a 45° cam in the bolt guide. Interestingly, the Netsch was built with a retractable cover to conceal the cocking slot from dirt, and appears to have used a wide diameter recoil spring rather than a spring-loaded guide like the Revelli-Beretta.



[20.] Detail view of the receiver of the Netsch automatic carbine. It can be seen that this gun uses the same bolt delay as the Villar Perosa and Revelli-Beretta. (Photo: Vojenský Historický Ústav)

One of the features that was not retained from the Revelli-Beretta in the Netsch design was, quite understandably, the top-loading magazine; Netsch & son instead opted for a small drum magazine feeding from the underside of the receiver. The ejection port was upper-rightward facing. The Netsch automatic carbine was reportedly tested by the Czech Army from 1919 – 1920, in various models. It was not accepted into service and only prototypes were made, probably hand-built at Netsch's workshop.

## Addendum III: the Revelli-Beretta in a video game

In 2016, the video game publisher Electronic Arts (EA) released *Battlefield 1*, a muchanticipated installment in the popular and long-running *Battlefield* series of first-person shooter games. *Battlefield 1* was set during World War I, a conflict scarcely covered in gaming, and saw many of the weapons, planes, and vehicles of the war "brought to life", albeit digitally. Among the equipment useable in the game is the Revelli-Beretta carbine, rendered in-game as the "Automatico 1918" (presumably to avoid the potential legal difficulty of using Beretta's name).

While this is probably the first notable depiction of the gun in popular culture, it is not an entirely accurate one. The most glaring error is the depiction of the gun as firing in full-auto only, with a blistering fire rate of about 900rpm. Of course, as has already been explained, the Revelli-Beretta was certainly *not* a submachine gun as is popuarly believed and fired in semi-automatic only.



[21.] The Revelli-Beretta - or "Automatico 1918" - as depicted in the video game Battlefield 1. Here, it is presented incorrectly as a submachine gun, rather than a self-loading carbine.

Additionally, there are errors in the digital modelling of the gun. The sights are mounted on the wrong side of the receiver; left instead of right. This was probably a simple oversight on the part of the developers, who likely assumed the sights would be mounted in a similar fashion to top-feeding machine guns like the Bren. Due to the vertically-fed nature of the gun, the magazine is within the player's sightline at all times, but unlike the real magazine it does not feature the distinctive cut-out window in the rear which would allow the firer to observe their remaining ammuntion.



[22.] A comparison of the Revelli-Beretta's sights in *Battlefield 1* (left) and in real life (right) – a close match, but on the wrong side of the receiver!

Another, less noticable issue in the game's model is the bolt and cocking handle. The bolt does not whatsoever move upon firing, which obviously would render the gun unusable in reality. On top of this, the 45° cam in the cocking slot is not present, giving the impression of a straight-blowback gun rather than a delayed-blowback. The cocking handle is depicted as a solid steel piece, whereas in reality the "knob" of the handle was made from two brass hemispheres.

Battlefield 1 also includes factual "Codex" entries to accompany each gun featured in the game, although the Revelli-Beretta's entry falls into the same mistakes that many sources before have made, including the claim that it was a submachine gun, that it predated the M.P.18,I, and that it was derived from the O.V.P. submachine gun – which in actual fact came much later than the Revelli-Beretta. The game also pinpoints the exact date of the Revelli-Beretta's issue to March 1918, but naturally does not provide a source for this.

Overall, *Battlefield 1*'s depiction of the Revelli-Beretta is not very true to the actual weapon, although this can hardly be blamed on the game's developers themselves. The gun has been the subject of repeatedly regurgitated myths, and has generally been so sidelined by other similar weapons, particularly the M.P.18,I, that it has never been the subject of much rigorous historical research. Hopefully this document will change that.

#### Tabulated technical data

#### Moschetto Automatico Revelli-Beretta Mod.918

Production years: 1918 - 1920

c.4,000 - 5,000 produced

Total	Barrel	Weight	Magazine	Muzzle	Effective	Caliber
Length	Length		Capacity	Velocity	Range	
33.5in	12.5in	7.2lb	25	1,200ft/s	330ft	9mm
(85cm)	(32cm)	(3.3kg)	rounds	(365m/s)	(100m)	Glisenti

#### Moschetto Automatico Beretta Mod.918/30

Production years: c.1930 - 1940

Production figures unknown; majority converted from Revelli-Beretta carbines

Total	Barrel	Weight	Magazine	Muzzle	Effective	Caliber
Length	Length		Capacity	Velocity	Range	
35in	12.6in	7.19lb	10 or 25	1,250ft/s	330ft	9mm
(89cm)	(32cm)	(3.26kg)	rounds	(380m/s)	(100m)	Glisenti

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