

A SIDE BY SIDE BUILT BY ANCIENT HANDS



To the Masters

It is not true that dinosaurs are completely extinct. Lovers of fine guns know where to find the few remaining. Not to knock them down, but to admire their work, performed as the best ones used to do once upon a time. These few pages are sign of admiration and gratitude.

by Paolo Tebaldi



To the Masters

*The action of a side by side is a mechanism
that holds together two tubes, two locks and
a piece of wood.*

Anonymous.

I find this pearl of wisdom offensive, disguised as an ironic joke.

It brings insult to those who built unmatched guns while spending a life over the vise. People who started by youth to learn the knowledge needed to evolve, edit, delete faults, do better what is already good. Everything was made with difficulty, at the forge, at the rudimentary machines, in unimaginable environments.

There was no electric light when on the anvil they created sumptuous damask barrels and magnificent locks with long springs. The action body was molded with the fire and the mace, then it was carved with a chisel, milled, drilled, filed down, refined. The gunsmith in the 19th century was a blacksmith and a gunner, he knew how to weld and how to use tools, and he tempered and burnished. Many also performed the stock, someone the engraving too.

The second industrial revolution also changed this way of working. The stubborn went in hunger. An industry was necessary for the modern steel barrels, action bodies and other parts were produced by specialized firms. Even famous gun makers mounted locks made by others.

The gunsmith who held his reputation ordered the best and assembled it carefully, he took care of adjustment and treatments. He looked after appearance and finish of his guns to have them distinguished. He assumed the best workers, very talented in their specialization. For many aspects at that time shotguns were still handmade. Sometimes the hands were too many.

A world was rapidly sinking, the guns manufacturer was preparing to meet much greater need.

Some manufacturers continued to produce highly refined guns, only partially adapting to the new times. They were few in England and many less in continental Europe. From the beginning of the 20th century in Italy some artist-craftsman persists in some tribulations in a world increasingly thankless. The old men left evidence of their ability and the very few remaining continue to amaze us.

The joke insults even the enthusiasts, which collect and preserve these old guns. It reduces them to weird beings, not sane, to look to with suspicion.

“Weapons are loaded by the devil”.

Sure, a side by side is a simple machine. If compared to a ship' engine, or a six meters CNC, it seems a toothpick near an oak. But it is like to say that there inevitably is less art in a small painting than in a large canvas.





A friend phones me.

"I've got here a strange side by side, do you want to see it?"

"Strange?"

"It could be a serpentine sidelever by Zanotti"

"Is it beautiful?"

"Wonderful, as new. There also are pieces ... spare parts"

"Pieces?"

"Yes, hammers, springs ... screws ... pieces!"

"I'll be there in an hour."

Some thoughts on the way: there are no serpentine sidelever by Zanotti made after the early years of the 20th century, how can it be as new? My friend is an expert and he knows what he says. In so many years I've never seen a side by side with spare parts ... I understand the springs, but screws and hammers? ... On the phone he seemed like a cat trapping a big rat.

The cat let me enter in his playroom, the rat is on the table. Shiny steel, (not too much) black barrels, curvy stock. I lift the side by side. It is quite heavy and it comes to my shoulder like a violin. The stock' grip fill the right hand and the fore-end wood lies on the left palm. The wood has already found my cheek and is stable in the shoulder.

I put my thumb on the serpentine's head, the checkering does not allow slides, but does not offend the fingertip. The lever softly sinks into nothingness and the barrels open with light friction.

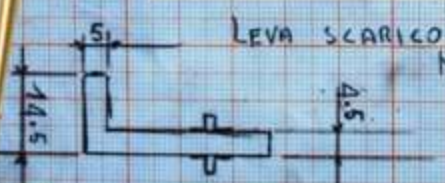
Further investigation will reveal a well-kept adjustment between the action and the fore-end iron and between this one and its lump, that is among the barrels. The shotgun closes with that slight muffled sound that you expect when everything is made with wisdom and without minding the time needed. The apices of the hammers' thumbpieces, knurled with fine pitch, are slightly rotated inwards and lie parallel to the barrels. A slight initial resistance and the hammer is already cocked.

Incredulous, I unload it while accompanying; the spring strength is clearly perceived. I cock it again and the miracle is repeated (the stroke will be 0,51 inches). Cocking these hammers is for me a complete novelty. The sear noise is light and net.

With the old Zanotti' side by side guns you must use strength with the hammer to win the initial resistance of the spring. Then everything becomes oiled and the spring goes into the resting position.

Also with expensive guns it happens to find hammers with "stringy" springs that are hard to cock, both at the beginning and the end.

scarico + 2.3
 + 3.5 (PIASTRA)
 + 1.8 (SUPPORTO)
 x FISSAGGIO PIASTRA
 Foro Fil. #225
 x molla scarico
 Foro + 3.5
 Foro Fil. #225
 Fori Fil. #225 x Castello
 Fori molla + 2.2
 Foro + 2.3 x Perno LEVA SCARICO



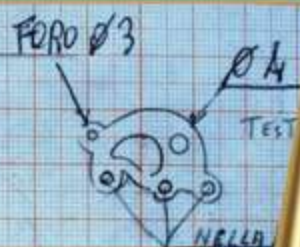
LEVA SCARICO

N.B. NELLA ZONA CIRCOLARE ATTORNO AL PERNO
 x UN + 5 ≠ 4.5 LE ALTRE ZONE + 6



CASTELLO

PARTE SUPERIORE
 PARTE INFERIORE





Demibloc barrels length 27,72
 Right 0,728 in choke: modified
 Left 0,728 in choke: light full
 Barrels weight 2,98 lb
 Concave top rib, hand chequered, tin welded.

Action: action flats length 2,20 in
 action bottom length 3,39 in
 face width 2,28 in
 bar thickness 0,87 in

Hammer cocking strength 5,51 lb
 Right release strength 2,87 lb
 Left release strength 3,53 lb
 Hinged right trigger.
 Sidelever.

Pull-release fore-end wood.

Walnut stock, length 14,57 in
 Drop at comb 1,18 in
 Drop at heel 1,97 in
 Gain at heel 0,24 in
 Gain at toe 0,39 in
 Overall length 44,49 in
 Overall weight 7,05 lb



Hammer, carved fence, lever, triggers and their guard have great design, mutual proportions and execution.

I lean the gun on the table, I sit down.

The eyes go from the top of the action with the large top strap, to the carved fences, carved out just enough to make them soft and very present. The hammer is beautiful, the finishing leaves a light line that points out the shape, a snake full of energy that arranging horizontally becomes the rib which accompanies and supports the head. The lever reflects on the mirror-finished lockplate, which length has a very good ratio with the size of the other parts.

The long action bottom tends to flat, the triggers' guard is well dimensioned and curved in a workmanlike, the triggers are the ones of a shotgun made for strong men. The serpentine sidelever, perhaps because it is no longer used, remains the fascinating element together with the hammers.

The engraving, a nice little border and few curls, invokes the Zanotti manner of the 30s and underlines this refined game of volumes chasing each other, roundness and flats joined by a frame, by a ribbing, by a gorge.

The full bodied stock is made of normal walnut, the grains in wood stand out on the yellow and orange dark background, it is moderately polished.

I remove the forend wood and dismount the barrels. The tubes are straight, inside and outside, demibloc joined. The top rib is slightly concave, chequered by hand, tin welded. While hanging up the barrels they sound like a bell. The ejector is hand-removable, the lumps are as they should be. On the barrels the writing:

SERPENTINA AL MODO DI

G. ZANOTTI – BOLOGNA

(Serpentine in the manner of G. Zanotti – Bologna)

On the barrels flats and on the action flats there is no writing, only the punches of the National Proof House, the serial number, a BB and a CA.



"In the box there are the parts to make its twin. Look and then you'll come by my side, a fool made it."

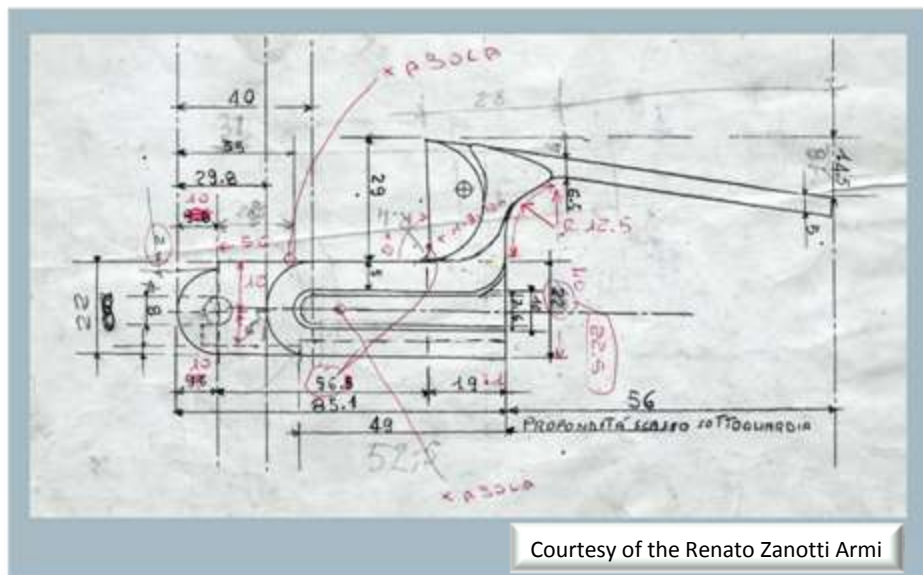
The box, which has the size of a shoebox, contains the pieces needed to build a side by side. The action body is still without the striker' holes, the forend iron and the lockplates are a little bit more than simple iron pieces. The small parts, sorted in sachets, will prove to be ready for drill and rasp.

A couple of almost finished hammers comes out from an envelope, there are two more hammers which are just sketched. In another envelope there are two finished tumblers and two more still imprisoned into the steel plates machined on the lathe. From a third bag two mirror-polished springs, two more which are still raw and some straight bars. They are the rods from which the springs are produced. It will be necessary to heat, to fold, to file to the right size, to temper and to finish them.

All the parts show the marks left by the tools.

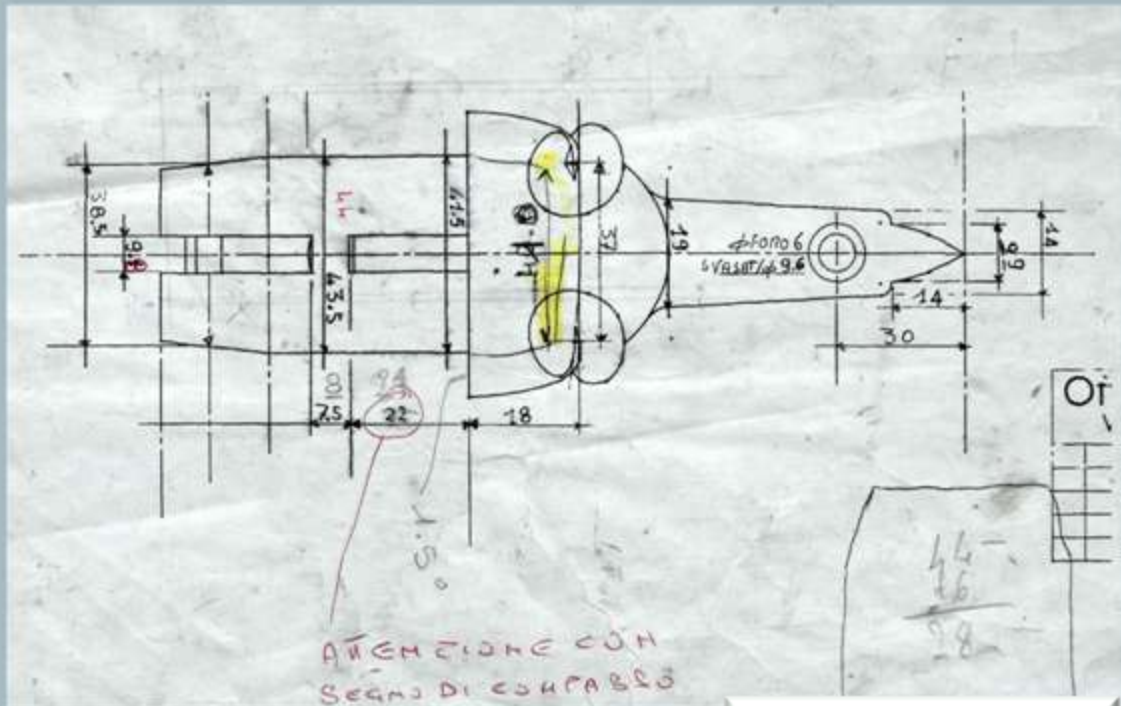
Even the small screws are not commercial; some, made for the bridles, still have not the thread and the slot. They have been made and threaded one by one. At this moment my mind boggles. We are no longer two. Invisible but perceptible there is the presence of the one who wanted to extract from iron and wood all the parts needed to build his own creature, not minding if in Gardone it is possible to find screws with a few cents. He is saying:

"We have been able to do This and we wanted to do it as in the days of our older."

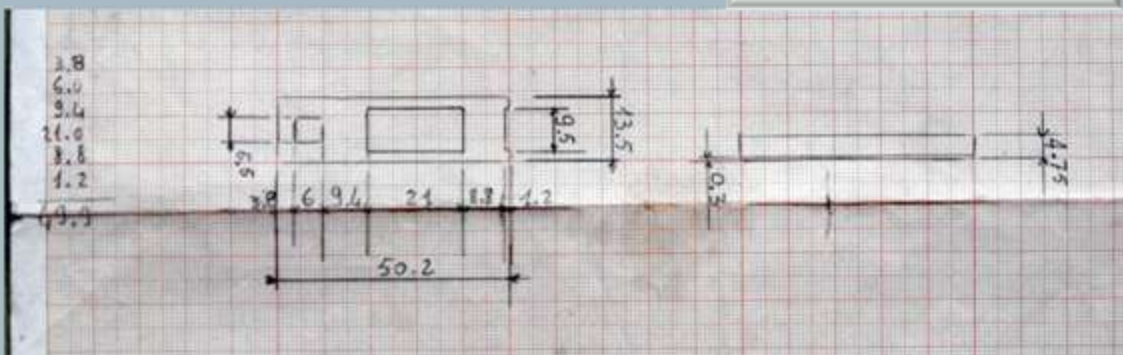


Courtesy of the Renato Zanotti Armistice

The action, the lever, the triggers' plate.



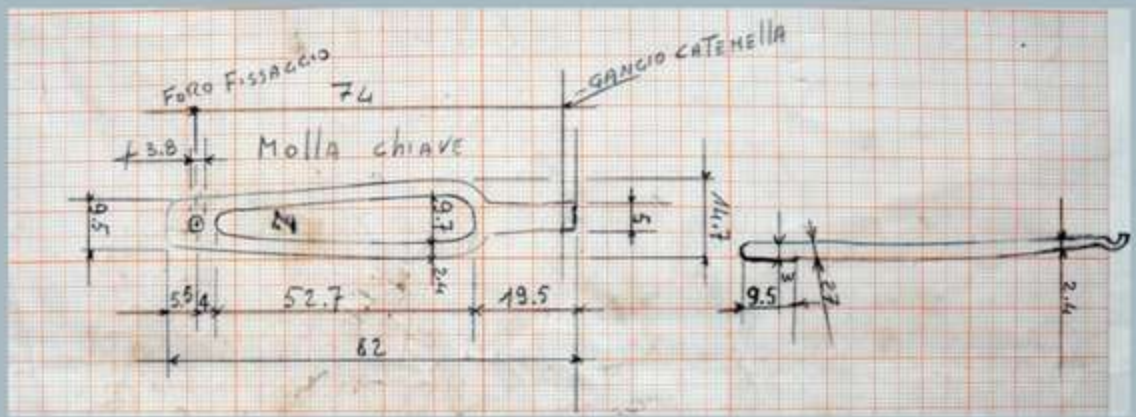
Courtesy of the Renato Zanotti Armi



Courtesy of Mr. Jorio Farolfi.



- 1) The action body, half-processed.
- 2) Striker and nipple, after the lathe.
- 3) The bolt

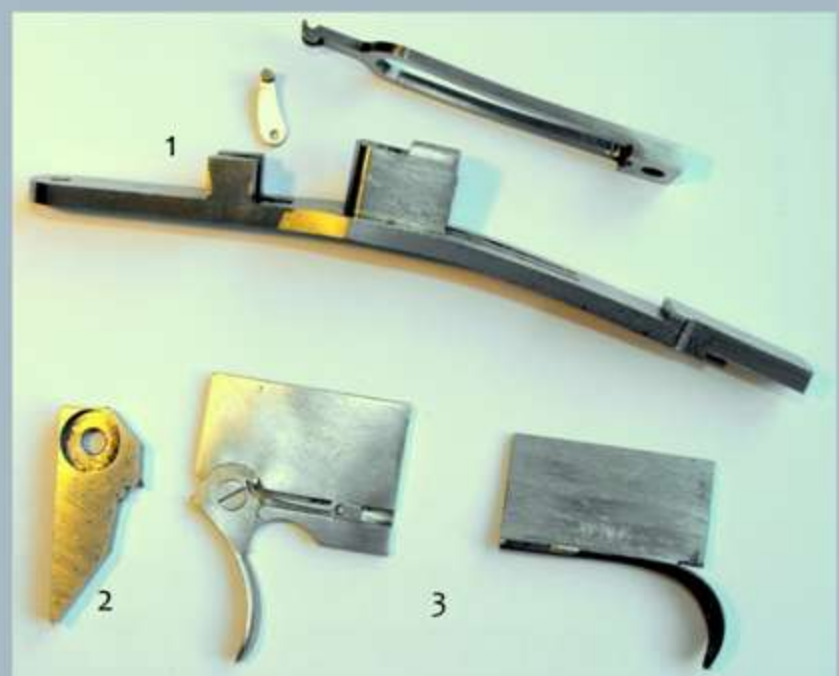


Courtesy of Mr. Jorio Farolfi.

- 1) The lever, out of the burr.
- 2) Templates.
- 3) The lever' spring.



- 1) The triggers' plate.
- 2) From this the rasp will gain the first trigger, jointed.
- 3) The triggers, unfinished.



The locks.

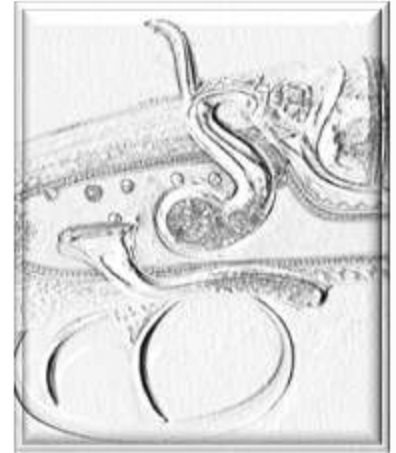
The bar action hammer lock, was led to perfection by the English gunsmiths around 1880. It was a so well designed and realized mechanism that failures and misfires disappeared.

One hundred years ago the ignitions required a strong percussion, so a strong spring. This strength, even if wisely distributed, stresses a lot the tumbler and the swivel. So that: tumbler well caged by a bridle with at least three pillars, best with four, and a strong swivel. Unfortunately this component, which can't be too big, remains fragile and it may break at one end.

Our gunsmith is thinking about it and he finds out a solution to these problems, so he creates his own lock. The system remains the one tested for decades, the forces involved are reviewed. He believes, rightly, that 5,5 lb is enough to ignite and he calibrates the springs with this weight. Furthermore he, self-confident, regulates the hammers with a short stroke. The swivel upper stirrup, the one which fits into the tumbler, is substituted by a strong pin. The possibility of breakage is reduced by an half, and still more if we consider the lower thrust of the spring. Not satisfied, he creates a strong bridle and secures it with four screws, one of these is the pivot of the sear. The pivot is also a pillar because it doesn't screw more than the others, thanks to the accurate calibration of the thread. This configuration benefits also the sear rotation, that occurs on an increased pin.

I learn all this from the creator of the mechanism, which did not have immediate success. The cocking of the hammer is so unusual and seems weak. The virile thumb of the old hunters was used to higher resistance. The pin that linked the swivel and the tumbler seemed a cheap solution. The spring was different from those forged at the Bruciata. The idea of a cadet was seen as an impious attempt to modify the work of illustrious names which persists from more than a hundred years.

Today, returned the interest about the side by side hammer gun, R. Zanotti mounts this lock, built as it was designed fifty years ago. The rite, cocking the hammers, gives a unique feeling and the swivels are safe.



The lock we are talking about. The strong bridle, the lightened spring, the swivel with the lower stirrup only, the pins wisely placed, the hardened components, they grant excellent and long-lasting functioning.

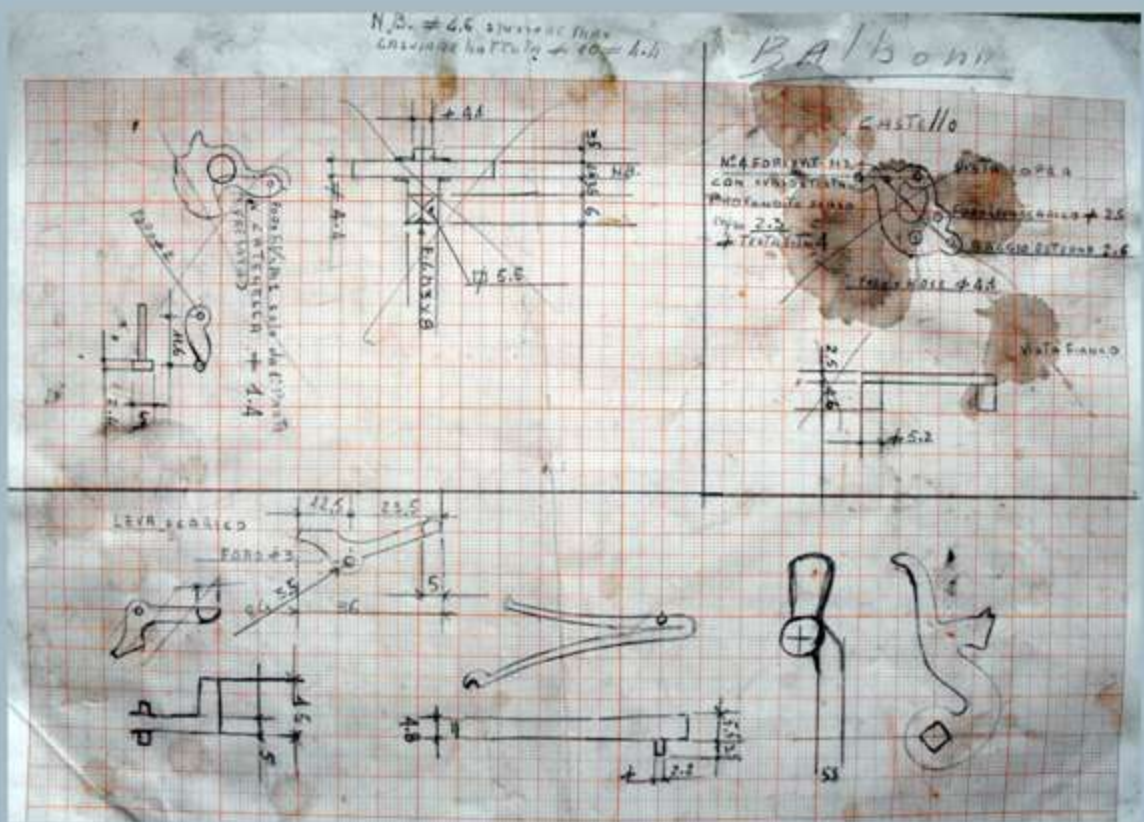


Cheap Belgian lock. These poor mechanisms, poorly designed and worse constructed, were extensively used for decades. Even upon weapons which boasted. Components are not hardened, the spring is abominable.

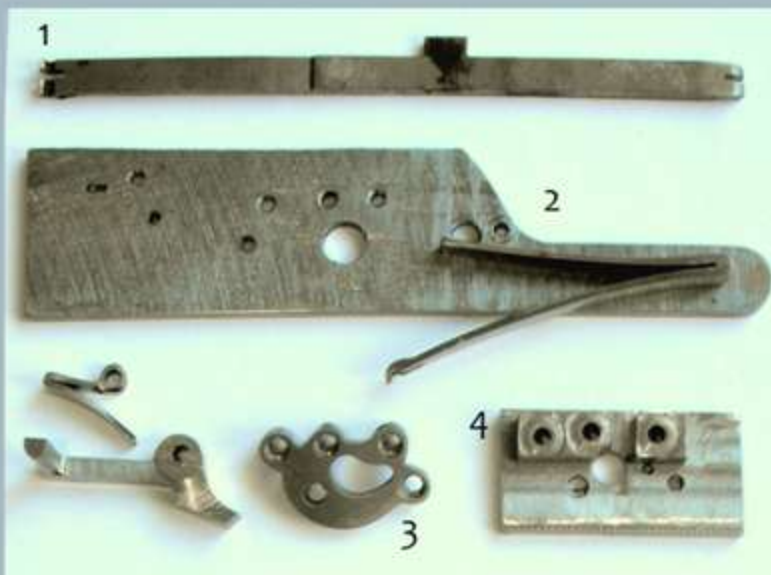


Lock by W. W. Greener, year 1889. Superb system, the parts are hardened, laudable finishing. The strong spring is constructed in a workmanlike. To cock the hammer it is necessary a moderate initial strength. This is the classical lock mounted on high quality side by side guns.

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Courtesy of Mr. Jorio Farolfi.



- 1) Steel bar used to build springs.
- 2) The template for the lockplate.
- 3) The bridle, to be finished.
- 4) The small block from which burrs, drill and rasp will obtain the bridle.

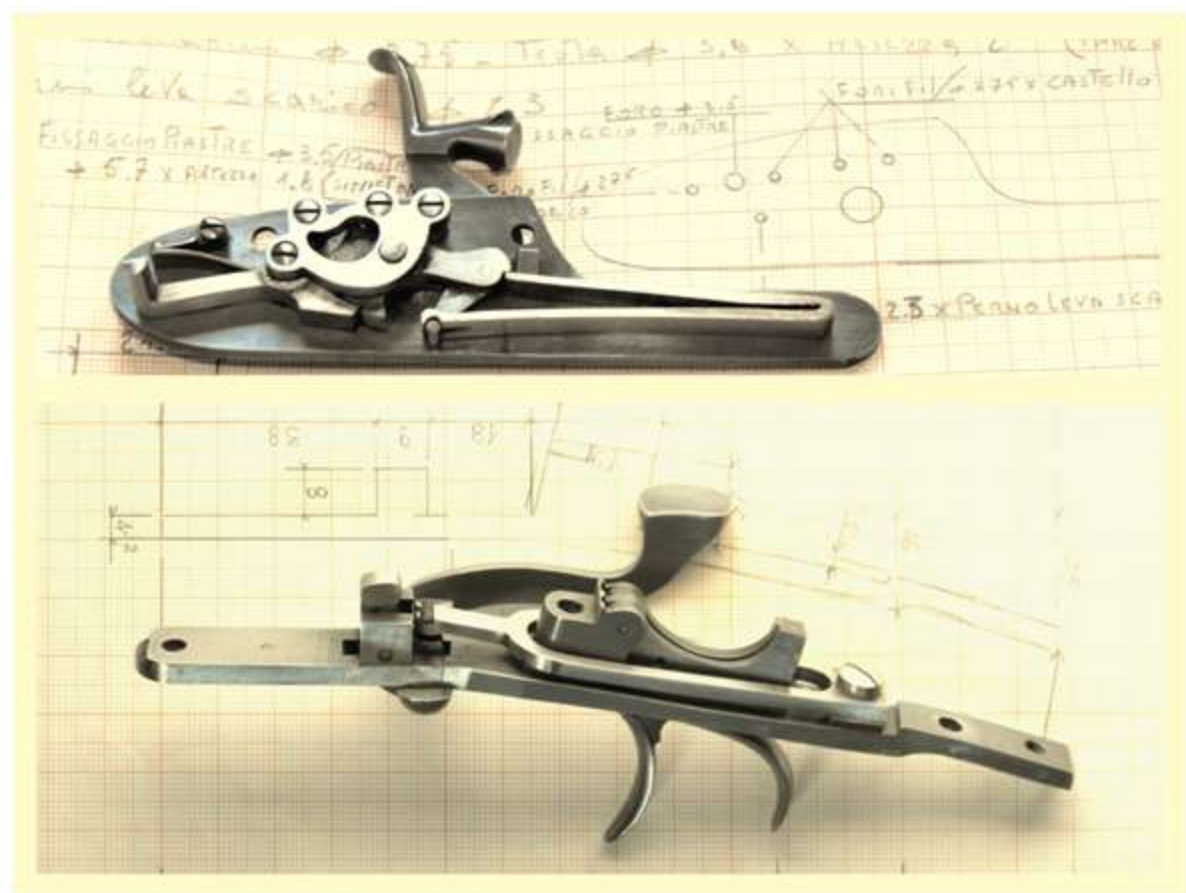


The processings to obtain the swivels.

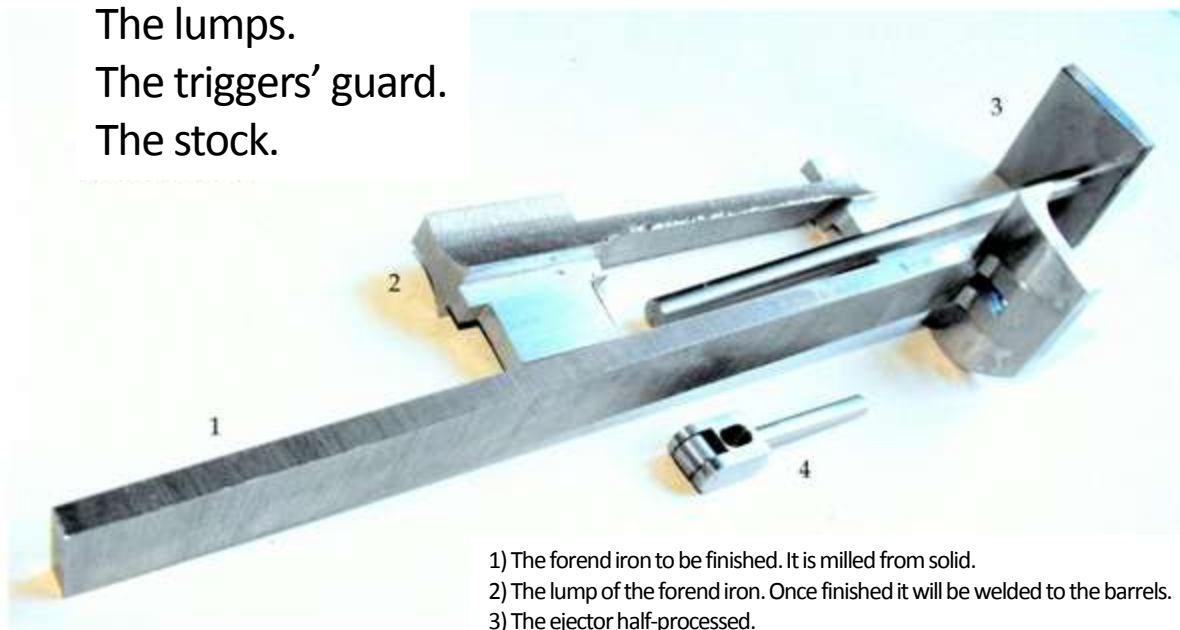


The mechanism reveals itself to the passionate. Unusual dimensioning of the components, highly accurate adjustment.

Everything is thought in a gunsmith' way, so that the machine can last for decades.



The forend iron.
The ejector.
The lumps.
The triggers' guard.
The stock.



- 1) The forend iron to be finished. It is milled from solid.
- 2) The lump of the forend iron. Once finished it will be welded to the barrels.
- 3) The ejector half-processed.
- 4) The retainer of the forend wood, with the anti-friction wheel.

Detail of the retainer. It engages into the lump, pushed by the spring when the forend wood is on. This self-adjusting mechanism is studied to recover the gaps of the parts when they are worn.



The ejector, finished.
It is made on the Emilia Romagna manner and
it slips off by hand.



To the Masters



While going back home I realize how much that gun impressed me.

Hands and shoulder remember the shouldering, the thumb would like to cock the hammers, the ears can't forget the (little) muffled noise of the closing. One eye is still dazzled, the other is looking to the road.

The idea that's buzzing in my head is daring: the finished gun has the parts marked by the number 2, the raw action brings, punched, the number 8. Is it a working sequence? Are there six more? The number 1?

I start searching. The number 2 comes by an heir, who knows nothing about guns.

I call Lino Cavallon. He tells me he has a serpentine sidelever by Zanotti, made by Simoni. He's leaving for the game, he has to wake up at 4 a.m..

Into the Reanato Zanotti's armory finally I find. The sister of the one I saw is in the inner showcase. By Giorgio Simoni, always kindly, I learn that he has built some of them. The one I hold is blank-finished, the buyer will choose the engraving. The stock is obtained by a beautiful walnut. Punches and serial number are by R. Zanotti – Bologna. Where it is possible to see there is the number 7. Some customers are waiting. I can't ask further questions, I thank and go out.

It begins to be clearer, the five remaining are no more an illusion.

When Lino comes back I find the number 5, it is in good company into the second strongbox. It is the same shotgun, it brings the R. Zanotti punches.

My longtime friend, connoisseur of the Zanotti's world, has seen only two more: one at the shooting range, the other by a gentleman that he attends for years.

So I've been presented to Jorio Farolfi. Concrete person, he carefully listens what I say about the three guns, sometimes he nods. He lets me to end, stands up and from a cabinet takes the fourth. It is the number 1. Founded in armory, in Brescia.

Then he starts to tell about the thirteen years he worked for Zanotti, about the Renato's widow who commissioned him to liquidate the company, about the surprise to find, in between so much material, some series of half-finished components usable to build this wonderful side by side. Committed for a long time in other activities he had forgotten that project. Some action bodies with their parts had already been left to others. The remaining series, unfinished, were recognized by the actual Zanotti, altogether with the equipment and the warehouse.

When I ask about the unusual locks, he stands up from the chair and comes back with a screwdriver and a folder, shiny blades and old handles. Page after page he talks, explains, makes me understand. He takes the locks out from the shotgun, with the skill of a nursemaid holding the baby. The mechanisms and the triggers plate are the realization of the project I have in front of me.

The name of Lorenzo Chiapponi comes out while remembering, highly skilled in milling and lathe, who had among his customers the demanding Renato Zanotti.

Chiapponi states his willingness, but doubts he can remember after forty years. He has not forgotten instead the Zanotti's terrible character.

He listen to the story, looks at the pages I borrowed, recognizes a few of his notes. Hard to remember after all that time and all that work. When he sees the notes about the screws, suddenly remembers. They were about two hundred, of various sizes, lathed and threaded one by one. The worst were those for the joint of the first trigger; they tightened too much or left it free to move. Once finished he went by feet to San Luca, to make up for a week of late work.

The mystery about the left series remains, it is not known neither to whom nor when. Probably the executive quoted drawings were supplied with the half-finished parts from which were obtained at least three shotguns, identical to those which undoubtedly were produced in Bologna.

Unfortunately, the only person able to answer is no longer with us, the lamented Giuliano Preda, who first took over the Zanotti business.



N° 1.



N° 1, 2.



N° 2.



N° 5.



N° 3.



N° 3.



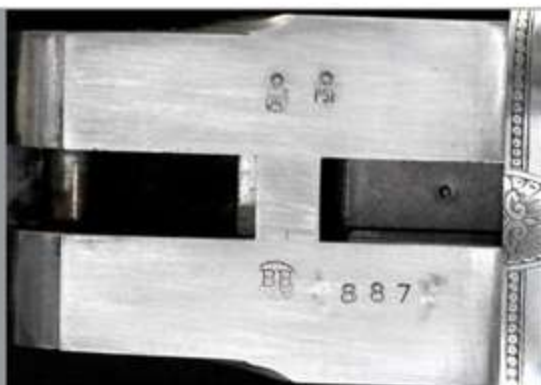
N° 4, 5, 6.



N° 4, 6.



N° 1, 2.



N° 1, 2.



N° 3.



N° 3.



N° 4, 5, 6.



N° 4, 5, 6.



N° 7.

The last of the seven copies, blank-finished. The buyer will choose the engraving, the burnishing and the polishing of the walnut.

Courtesy of the Renato Zanotti Armi – Bologna.

I ask forgiveness to the friends I have harassed with repeated requests, I have reciprocated them with such a poor realization. The charm of this side by side would have deserved a better cantor.

I thank for their patient help and availability:

Leano Carrara.

Lino Cavallon.

Lorenzo Chiapponi.

Jorio Farolfi.

Steni Ronchese.

R. Zanotti, armory in Bologna.