FIREARMS

By Oliver Cameron
with Ole Wik

I used to carry a .44 magnum revolver with a 10" barrel, and I could do pretty good with that. But I figured that if I ever had to shoot that thing without having a chance to protect my ears, I was going to damage my hearing, so I got rid of it.

Where I am now, I have a rifle. It's an old .65 Carcano Italian military carbine[1,2] with a Mannlicher type action. I carry it mostly for self-protection, mainly against bears.

I've whittled the barrel and stock down to where it's practically a skeleton, but it has a strong action, and the barrel is quite sturdy by the chamber. When it has a full magazine —six shells, plus one in the chamber if I want to—it weighs under five pounds.

The overall length of the barrel is 18". I think that's the legal length for a rifle. The stock is long enough that I can keep the action away from my eye.

The hexagon barrel was fairly good size. I filed it down—not next to where the cartridge chamber is, but on down toward the muzzle, where it tapers more and more.

That rifle goes with me regardless. It's the lightest and handiest rifle that I have. The .65 cartridge is remarkably effective. It has a very well designed cartridge case.

It has rifling[3] that starts out slow and increases in twist toward the end of the barrel. These guns were obviously designed for simplicity of manufacture, and were designed with one particular cartridge. They were made in Italy, a small country that was not exceedingly wealthy.

The only drawback is that the twist in the rifling is not enough to stabilize a long bullet, even though I didn't shorten the barrel much. In the old black powder guns that shot a round ball, or eventually slugs, the rifling might have had one twist in two feet or even in 30". That amount of twist will give a ball enough spin to stabilize it. But if you try to put longer slugs in that barrel, they won't stabilize—they'll cut keyholes in your target and so forth.

When I first got the gun, I bought a box of cartridges with 160 grain[4] loads. Sometimes I carry them in the gun. At real close quarters, if I've got a bear standing 15' away looking at me, those would be fine. But if I'm just out generally hunting where I might be shooting anything from a squirrel to a beaver or something bigger, I use hand loads.[5]

I didn't know what the original factory loads were. You can buy 160-grain bullets to fit that rifle, but they don't work. They don't punch round holes in my target. I think that some of the guns that the Italians had, the ones that weren't carbines, must have had a little more twist to them. They must have spun the bullets with a little more rotational velocity than the carbines did.

Anyway, I'd cut the base off of those 160 grain bullets and make them shorter and shorter. I just kept cutting until I got down to 139 grains. I'd found that at 140 grains, performance was just marginal. Some shot well, some wobbled a little bit.

To do that, I mounted a breast drill horizontally on my workbench.

Breast drill.
Image: http://plancearvin333.wordpress.com/

I took the side handle off of it. Then I put the bolt from the handle up through the bottom of the bench and through a shim, and bolted it on good and solid. The side crank was up on top.

I've got two chucks for that drill, one for square shank bits and one for round. I'd stick the rounded edge of the bullet into the round chuck, and saw off the flat base with a hack saw. I had various gauges so that I could leave the same amount of the bullet sticking out of the base of the cartridge each time.

I'd leave the bullet just a little bit long, and true it up by turning the drill. It was like having it in a lathe. I used a very coarse file while the bullet was spinning, and file it off so that it was true on the back end. Finally I'd chamfer[5] it just a little bit to make it sink into the case when I went to reload.

It's important that you have the back end of the bullet true. If it's not, when it leaves the rifle, the gas will scoot out of the side that clears the barrel first. That upsets the bullet. With less bullet in the cartridge, that would be a problem if I cut any more off, but there is still enough with the sides parallel back at the end of the bullet so that the rifling grips it well and no gas escapes around it.

I don't carry that rifle in a holster. It just drops into a bracket of wire about six or eight inches long on a wide belt. I can get that rifle out and put into action quicker than I could a holstered revolver.

Did you ever shoot a bear in an emergency?

Yes and no. I was being charged—well, not charged yet.

The trail out of the timber is not very far from my high cache, and a bear had gotten into my cache while I was away.

A grizzly bear can reach up over nine feet, and mine was just nine feet high. It's lined with dog feed bags. I have a brace on the legs, and the end of the brace is right under the door, which is in the end of the cache. The cache is made with upright poles, and the sides slope a little bit. The slope might make it harder for a bear to climb in, and the weather sheds better.

Since the door is in the side rather than the bottom, I had to have a way to hold the door shut. I ran a wire from the door down through the floor to the brace. But the bear stepped on the brace and broke it, turning the door loose, and it swung open. By stepping on the stub of the brace, the bear was able to get his claws up over the sill of the cache.

The rodent guards were not long enough—the bear was able to reach above them. He was able to claw himself up by hooking his hind feet into that post. He got in there and—well, enough said. You can guess what happened then.

Anyway, I had two dogs at that time. They were chasing a bear, maybe that one, and it had come around the cache. A grizzly bear quite often doesn't want to run from one dog, but two dogs—or one dog and me—was a little too much. He didn't want to leave "his" cache, but he took off and ran back down the trail.

There are two trails along the lake, one close to the water and another one made by a snowmobile trapper that's a little higher, away from the swampy lake edge. That bear took off and followed one of those trails, probably the lake trail. While he was running, the dogs wouldn't be "talking" about him, but when he'd stop and turn on them, they'd make a commotion. That happened every little way, so I could tell what was going on.

I was standing in front of the house and heard the commotion coming closer. I started walking toward the cache, and was forty feet from it when the bear came out of the woods, running toward the cache with the two dogs behind it.

Just before the bear got to the cache, it saw me. It turned sideways and started to take off in a different direction—or that's what was in its mind, anyway. It was on the other side of the cache leg.

I had my sight on it and was tracking it, but before I could get the shot off, it was too close to the post. In my hurry, I didn't realize that. The round went through the post and hit the bear, and then the bear really took off.

If a bear makes up his mind, he can move, especially those big bears. I think that was the nearest I ever came to being charged. I don't know what the bear would have done if the dogs hadn't been there chasing it. I would have shot it before it had a chance to do much.

Another time, after Dennis and Jill had moved to Minchumina, I'd go by their place to check on it. I tried to walk every day.

One day in the forenoon I went there and found that a bear had gotten into a cache. Their caches were only about 7' above the ground. With tin on the posts, that's OK for black bears, but the grizzly bear was able to reach up.

The floor poles were small, 2-1/2 to 3" in diameter. He chewed through two of them. He couldn't climb in that hole, but he pulled everything that he was able to reach out onto the ground.

The dog I had then was young, about a year old. I didn't want it taking off chasing a bear, so I had it tied to a cache leg while I was gathering up what I could salvage. My rifle was leaning against another leg.

I'd made a shelf in the cache that was over 9' above the ground. I had the ladder up through the hole and was putting the salvaged stuff back into the cache and then setting it up on the shelf. The dog started raising cane and I surmised that we might have a visitor. I stepped down a couple of steps on the ladder and took a look.

It was a full grown black bear, a boar. When a bear stands on its hind legs, only ten or twelve feet from you, it can be impressive. I turned around and started giving it a good cussing, and with the dog and me carrying on, I backed up to where I could get my rifle.

By that time the bear was just too close. It had gotten down on all fours and was looking at me, then at the dog. I didn't know what he was going to do, and if I waited for him, I wouldn't have a lot of time to react. I had to take the initiative, so I shot it with that .65.

The bear decided it was outgunned, and it ran into the brush. I was tired and not in the best of health. I didn't want to follow the bear into the brush with that little gun and just a puppy, so I went home, almost half a mile.

I started to go back, but that gun was heavy, and I was tired. I figured it was just foolishness. I didn't invite that bear, and while I didn't want to leave it wounded, I decided to give up. I went back home. I was too tired and too shaky.

The next morning Dennis and Jill came with a visitor, and they were going to spend the night there. They came to my place and …well to go back, it's a heck of a job to come around that lake on either end, inlet or outlet, so they fired a couple of shots and I went down and saw them on the other side. I took the canoe and went over and got them.

I told them there might be a wounded bear hanging around not too far from that cache, so Dennis, first thing, went looking around. That bear was dead. It had only gone about 40 feet, where I couldn't see it.

The point is that, up close, that rifle did a real good job. That was the first big game I had tried to shoot with that gun. A bear sometimes takes several shots, unless you can break the backbone—well, you understand those things.

On those bears there is a little patch of the front leg, kind of behind it. When I shot, the bear was beginning to move, so that's what I aimed for, and that's what I hit. That bullet, the velocity and being so close, made quite a lot of concussion and hydraulic pressure around the bullet wound. The bullet was still in the carcass. It did strike the heart.

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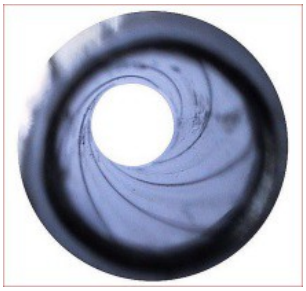
1) This essay stems from a series of telephone conversations that Ole Wik had with Oliver between December 2007 and February 2008. Highlighted text indicates remarks made by Ole.

2) Condensed from Wikipedia:

> **Carcano** is the frequently used name for a series of Italian bolt-action military rifles and carbines. It was developed by the chief technician Salvatore Carcano at the Turin Army Arsenal in 1890 and called the Model 91 (M91). The M91 was used in both rifle and carbine form by most Italian troops during the First World War and by Italian and some German forces during the Second World War. (http://en.wikipedia.org/wiki/Carcano)

3) Condensed from Wikipedia: "Rifling is the process of making helical grooves in the barrel of a gun or firearm, which imparts a spin to a projectile around its long axis. This spin serves to gyroscopically stabilize the projectile, improving its aerodynamic stability and accuracy."



Example of rifling in a handgun. A rifle would have more total twist.
Text and image: http://en.wikipedia.org/wiki/Rifling

4) Condensed from Wikipedia: The grain is commonly used to measure the mass of bullets and gun propellants. When calculating how much powder is needed for reloading, 7000 grains = 1 pound. [http://en.wikipedia.org/wiki/Grain_(unit)]

5) Brass cartridge cases can be recharged and re-used a number of times, as shown in the diagram below. The round bottom of the new bullet is filed at the bottom edges so that it slips easily into the neck of the case (a process known as chamfering).

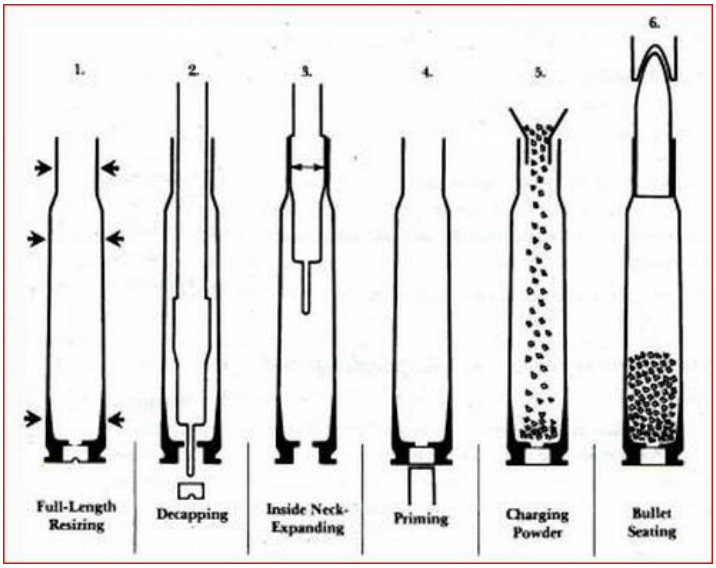


Image: http://www.gun-club.net/wiki/doku.php?id=page58