

MAKING A COLT CAP AND BALL REVOLVER WORK

By Utah, SASS #11601

Does your Colt cap and ball revolver eat spent caps, jam up, and cause you to wonder why you bought this gun? You were warned, you know. But you said, "If *they* could shoot them, *I* can shoot them." It seems even the best shooters at Winter Range were having Colt cap jamming problems based on what I heard from one of the top shooters. How many times have you seen a shooter shaking his Colt upside down or using a small tool to pry the cap from under the hammer? Their stage times could be measured with a sundial, and the look on their face isn't pretty. Some shooters say the cap problem is all part of the dark side, so live with it. I say it's about time we figured out how to fix the problem.

I don't know why, but no one to my knowledge has come up with an easy, cheap way to reliably keep the fired caps from jamming up the works. When I say an easy, cheap way, I mean one the average handyman can do with the simple tools most have in our homes. If you can take your Colt all apart and clean it or replace a part, you can certainly fix the cap problem.

I have heard of two solutions. The first was to buy nipples that are supposed to have optimum sized holes that restrict blow back. This is supposed to reduce the number of caps that blow off and jam up the works. Some say it works 90 to 95% of the time. I heard they sold a big bunch of them at Winter Range. That's one jammed gun once or twice in a match. They may help, but that sure don't bring smiles to anyone's face.

The second solution required machining and reshaping parts and/or installing wedges or springs, regular machine shop work. This machine work seems to me to be more than this cowboy could do cheaply with a few simple tools.

Last month I bought a Colt 1862 police revolver. The unfired caps stayed on, but the fired caps came back and jammed up the gun. Neither of the above solutions seemed to be the complete answer to the problem. But, being a belt and suspender person when it comes to my guns, I got on the computer and ordered some of those special nipples. But, I was not really happy. I want my guns to operate reliably *every* time.

So, after cleaning the gun, I sat at my workbench, and holding the gun in both hands pointing it away from me, I pulled the hammer back slowly to see exactly what happens. The hammer came back about inch and rose up in a slight arc that opened a rather large space curving down into the works before the cylinder began to turn. This meant that during the time the hammer was coming back before the cylinder turned, any cap coming off the nipple would fall in the hammer space and either stay to be jammed under the hammer on the next shot, or fall down the curved surface into the works, locking up the hammer. There was the cause of one problem, but not the whole problem with fired caps coming off the nipples.

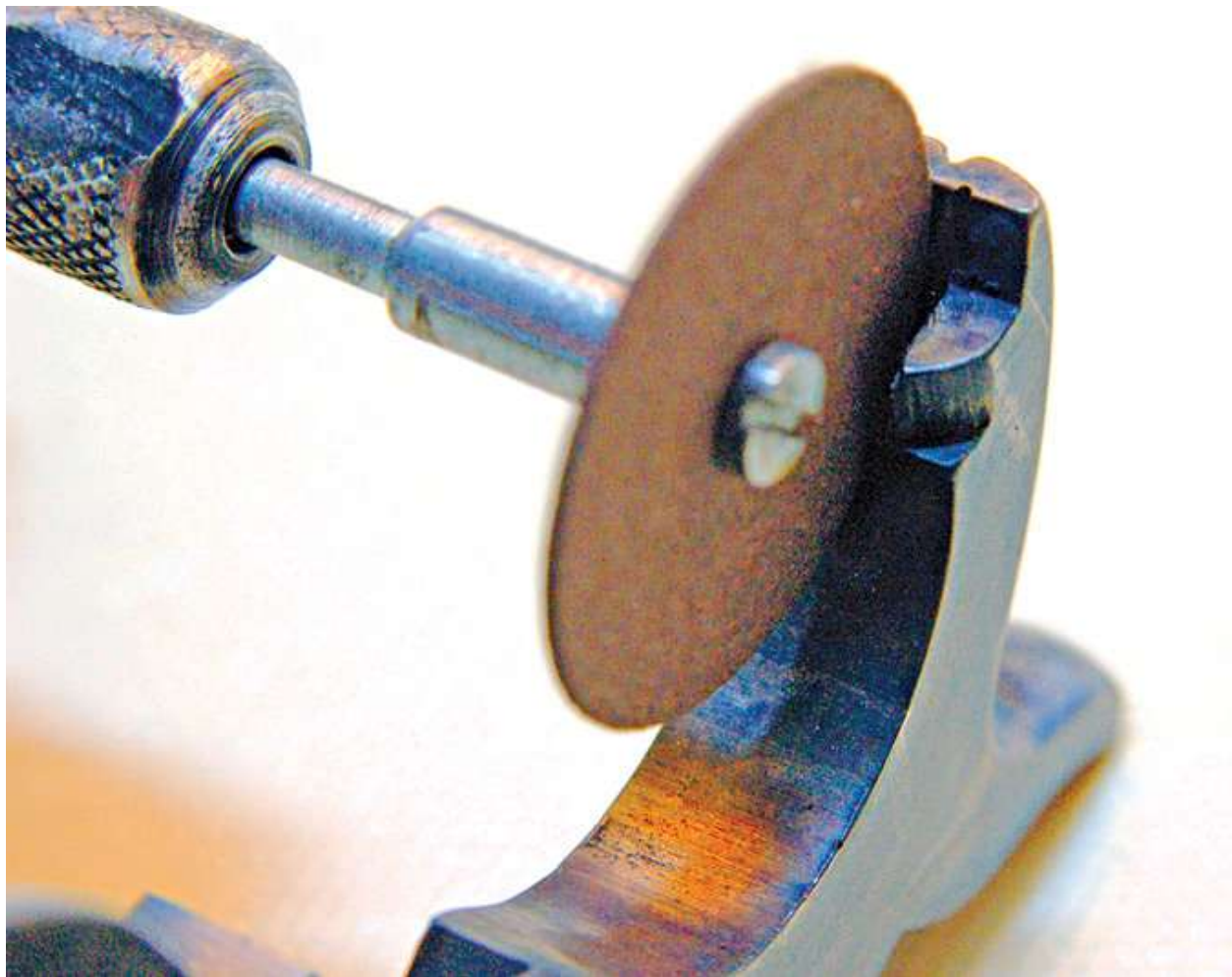
I put a cap loosely on a nipple, continued to turn the cylinder, gently pushed the cap off, and watched it jam between the nipple or the cylinder proper and the back plate in several places. Yes I know, there is a curved groove on the right side. The manufacturers put that there just like the originals. But, it is more ornamentation than functional, and is not big enough or shaped correctly. Because little attention is paid to this area, caps will stick and cause the cylinder to bind, causing the black cloud around the gun to turn blue. This problem is really rather easy to fix. It just takes a little time and patience.

The solution to problem number one is to keep the caps from entering the frame's hammer opening when the hammer comes back. I arrived at my simple, cheap solution in the following manner. I removed the barrel and cylinder. I then turned the gun in my hand and looked at the hammer opening in the frame and the hammer face. The hammer face has a slot in it. Damn, I got it! I remembered Bad Hombre showing me how he put a small pin in the shortened barrel of his 1860 Colt for a front sight. If I could put a pin in the center of the opening in the frame, let's say 1/64th of an inch inside the opening that would fit (width and height) in the hammer slot, as the hammer came forward and hit the cap, it would block the cap coming off the nipple from entering the hammer opening as the hammer moved back.

The slot in the hammer is not deep enough, so the slot has to be cut back into the hammer so when it comes forward, the pin has clearance. Now when the hammer comes back, it clears the pin, and any cap coming off the nipple is blocked from entering the hammer opening. It falls and is wiped by the cylinder into the open slot in the back plate. Wow, it sounds like it would work. So, get the tools out and get to work.

Okay, maybe drilling a tiny hole in the hammer opening won't hurt the gun too much, but what about the hammer? Could ruin it. My answer is simple--call Dixie Gun Works and for \$12.50 get a new hammer to work on. I did, and then I worked on the one that came with the gun. I now have a spare that works if I need it.

All you need are some hand tools, a drill, and a dremel tool. Disassemble the gun. Select a small diameter drill bit that fits easily in the slot in the hammer face. Chuck up the hammer in a vise, and using a small cut off disk on your dremel, extend the slot back about an inch or so using your drill bit as a guide, making sure it moves easily in the slot. If you don't have a small drill bit or the cut off disks, you may have to invest five or six dollars. If you don't have a dremel, buy one. You will need it for the rest of your life once you use one.

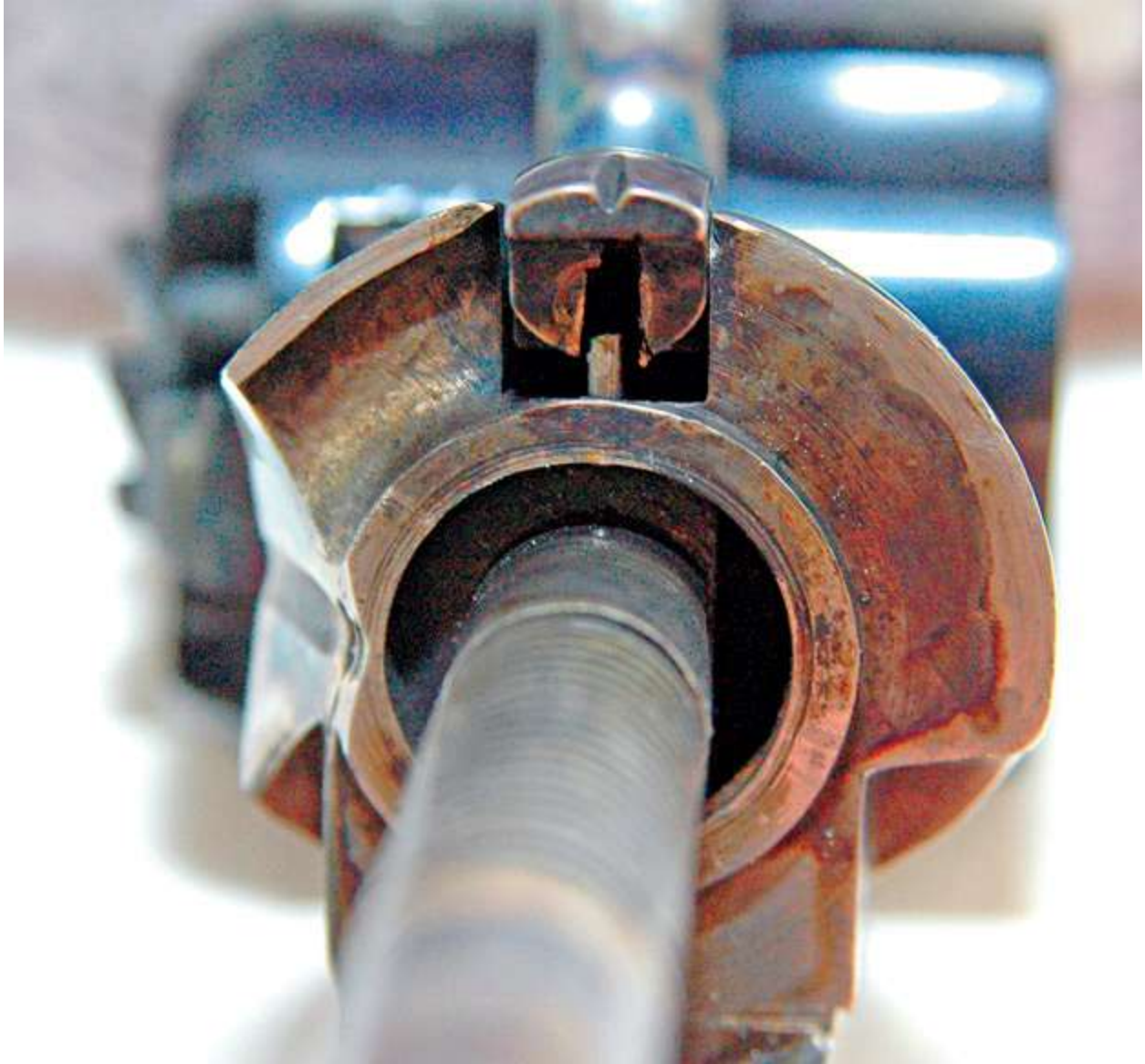


Now reinstall the hammer, bring it forward, and mark the frame opening in the center of the hammer slot. Flip the hammer back and put the frame in a vise. Use a center punch to mark where you want to drill, about 1/64th of an inch from the edge. Drill your hole. Take the drill bit out of the drill, reverse it, and put it in the hole. Put a cap on a nipple, install the cylinder, line it up with the

drill bit, mark the drill bit at a point just below the top of the cap. Cut off the base end of the drill bit as marked with your dremel, and reinstall the new pin in the hole, base end first.



Close the hammer down, and with a small grinding wheel on the dremel, bring the pin down, if necessary, so it clears the slot when the hammer is fully forward.



If necessary, cut the slot in the hammer back some more. If the pin is not a snug fit, pull the pin out, and using a small hammer, offset the pin and reinsert in the hole. Put a cap loosely on a nipple, line it up, and gently pull the cap off. It should come back against the new pin and fall in the groove on the right side. You have now blocked the hammer opening, and any cap coming off the nipple will fall off to the side as the cylinder rotates.



As caps fall or are moved to the groove on the right side, they may be wedged between the nipple or the cylinder and the base plate groove. Put a cap loosely on a nipple, shake it back off the nipple, rotate the cylinder, and if the cap looks like it touches both the cylinder or nipple and the back plate, use a tapered grinding wheel on your dremel to remove metal till the cap falls free. Don't be afraid to open up this space, starting with the right side of the hammer opening. Check through the rotation 'till the nipple gets to the bottom position. Don't be afraid to take off metal any time it appears a cap may become wedged. This is not a bearing surface, and you must make sure the groove is opened enough so a cap will fall freely down and out of the gun when you shake it off the nipple. When you are finished, blue the area.

What do we do now? We reassemble the gun, gather up the makings, and go to the range. Load up, making sure the caps are on securely. A prior article in **The Cowboy Chronicle** covered sizing caps so they don't fall off before being fired. Aim at the target, have faith, and fire five shots at a measured pace. Yes!! It works. Reload and now fire five shots as fast as you can. Yes!! It does indeed work! Do it again to your heart's content. Now, do the same thing to all of your Colt revolvers and go to the next match ready to lay a real cloud of smoke on them.