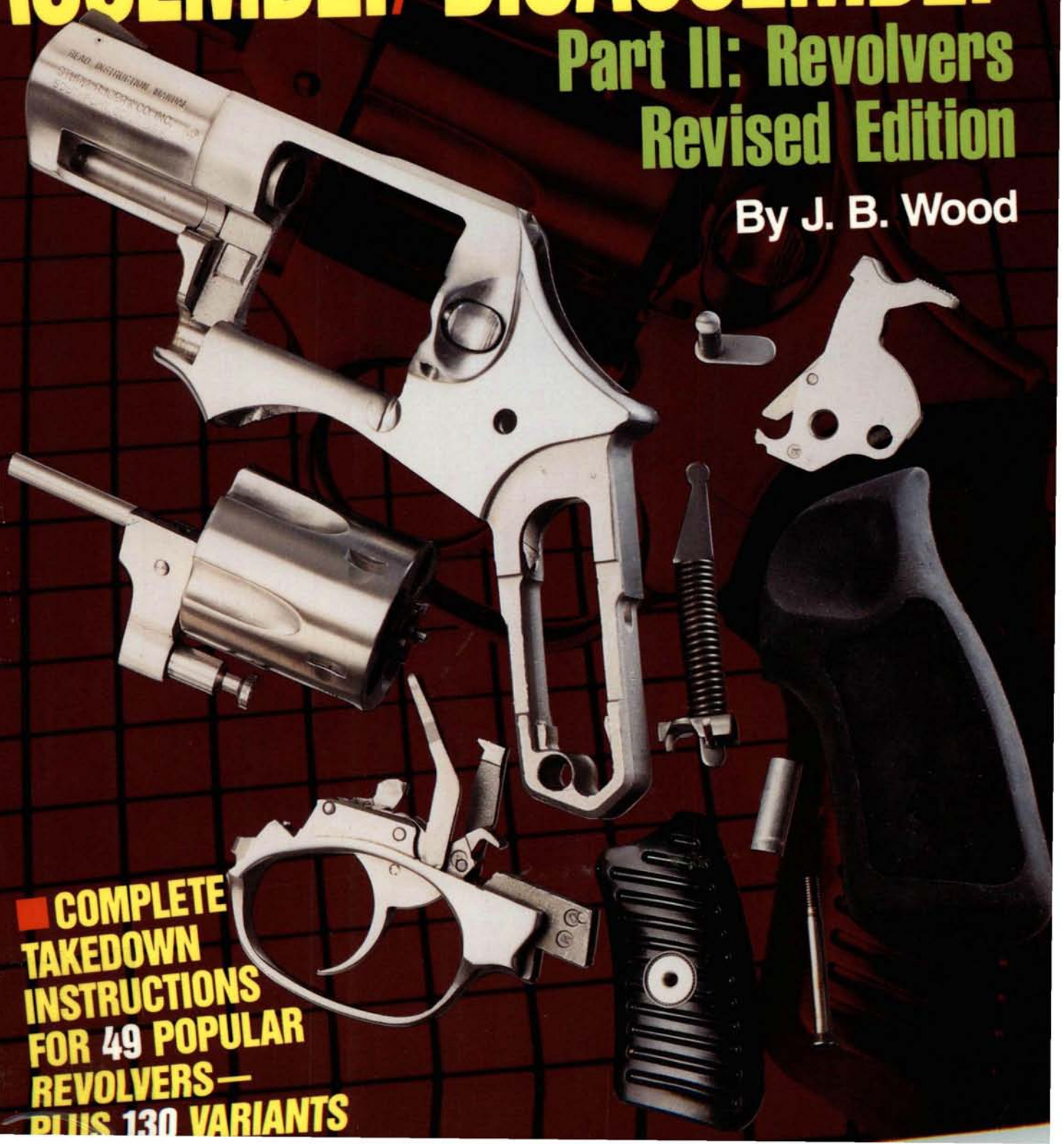
The Gun Digest Book of

FIREARMS ASSEMBLY/DISASSEMBLY

Part II: Revolvers Revised Edition

By J. B. Wood



- COMPLETE TAKEDOWN INSTRUCTIONS FOR 49 POPULAR REVOLVERS—PLUS 130 VARIANTS

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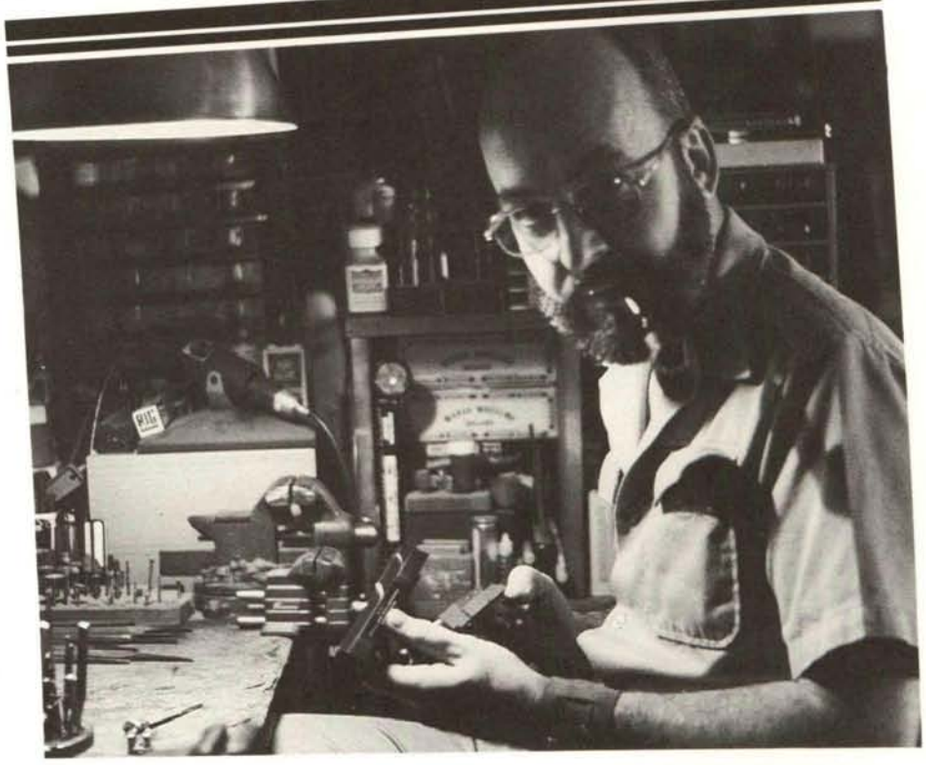
About the Author



Guns, especially automatic pistols, have always been a part of J.B. Wood's life, and it has now been more than 40 years since he began working as a gunsmith. Fortunately, Wood has been able to combine his mechanical talents with writing about them, which he's been doing since 1962. In that time he has had more than 800 articles published in *Gun Digest, Guns Illustrated* and in most of the monthly gun magazines. In 1977-1978 he authored a two-book series for DBI Books, *Troubleshooting Your Handgun* and *Troubleshooting Your Rifle and Shotgun*. From 1979 to 1981, Wood wrote and photographed the original six-part *Firearms Assembly/Disassembly* series, a monumental task that turned out to be the best reference ever printed on the subject at hand. Currently, he is revising the series to include recently introduced guns and more guns for which detailed takedown and reassembly instructions may no longer exist.

In 1974, J.B. Wood began a regular monthly relationship with gun magazines. He was Gunsmithing Editor for *Guns & Ammo* magazine for 8 years, is Contributing Editor to *Gun Digest* and *Combat Handguns*, and is currently Gunsmithing Editor for *Shooting Times* magazine. Because he is so well briefed on firearms in general, and self-loading pistols in particular, Wood is considered an international authority, and has testified in many court cases involving firearms as an expert witness. In addition, he has done mechanical design and redesign work for a number of domestic and foreign arms makers. Currently, he is a full-time gunsmith, writer, and firearms consultant and lives in rural Kentucky.

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Part II Revolvers, Revised

by J.B. Wood

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This book is dedicated to the late A. D. Jenkins, one of the last of the old-time gunsmiths.

Acknowledgements

My thanks to these people, who helped to make this book possible

Joseph J. Schroeder, J.T. Ruger and Steve Vogel of Sturm, Ruger & Co., Ron Vogel of F.I.E., Bruce Savane of Taurus, Donna Senecal of New England Firearms, Charles Flint of RG Industries, Frank Nicholson, Rolan M. Bennett, John Yarger of Lock & Load Gun Shop, Dave Ecker of Charter Arms, Glenn Lancaster, E. A. Hurt, Al Paulsen, Harold A. Murtz, Terah L. Flaherty, Eric Brooker, Bill Little, H. E. Rasure, Charles E. Goad, Thomas Brooks Sr., Fred Dewar, Dr. Kenneth M. Eblen, and John Morgan and Jim Arcus of Marksman Police & Shooters Supply.

Contents

Introduction

"How do I take it apart?" This question is one of those most frequently asked by readers of my column on gunsmithing in *Shooting Times* magazine. Quite often, the limited space of a column answer made it impossible to give a detailed reply. In some cases, nothing had been published on the particular gun in question. I have sometimes suggested that the reader try obtaining an instruction booklet from the manufacturer or importer, but this was not always a good answer. With some of the imported guns, the instruction manuals are direct translations—rather humorous to read, but of little help in actual disassembly and reassembly. For some of the older guns, the instruction booklets are valuable collector's items, and are difficult to find.

Something was obviously needed in this area, and this is the idea behind this book. In other volumes in this series, automatic pistols, rifles, and shotguns are covered.

Many of the published instructions on disassembly end with the words "reassemble in reverse order." In many cases, this may be the only instruction needed. With some guns, though, this is not enough, and often results in a trip to your gunsmith, carrying a box full of parts. Where there are difficult points in the reassembly process, this book will note them, and in a number of cases the reassembly tips will be illustrated with photos. When no photos or tips are given, you may assume that carefully reversing the disassembly sequence will get it back together.

In complete disassembly, there are points that will require the special tools and skills of the gunsmith. A very knowledgeable amateur can usually manage it, but he must have some mechanical aptitude. This book is intended for both the average gun person and the professional, and for this reason even the simpler operations are described and illustrated in detail. The previous volume, on automatics, separated field-stripping from total takedown. There is no real equivalent to field-stripping in most revolvers, so this distinction has been omitted here.

Some of the tools required are not readily available at the local hardware store, and for this reason I am including a section on tools, and giving the sources from which they may be obtained.

In the takedown of any gun, there are a few general rules which apply. Although a light tap with a plastic mallet may sometimes be necessary to free a tight assembly, no extreme force should be used. Always wear safety glasses to protect the eyes from parts expelled by compressed springs. Do not disassemble a gun over tall grass, or over a shag rug. Before you start, read the instructions through, all the way, at least once.

I assume that the reader is intelligent enough not to work on a loaded gun, so I will not begin each set of takedown instructions by repeating that the gun must be entirely unloaded. **Before you begin the disassembly of any gun, be sure that all cartridges are removed.** Make this a very thorough visual check, not just a glance.

An important addition to the back of this book is a comprehensive index and cross-reference list, linking all of the revolvers covered here to guns of similar or identical pattern. When these are included in the count, the instructions in this revised edition can be used for the takedown and reassembly of 180 revolvers.

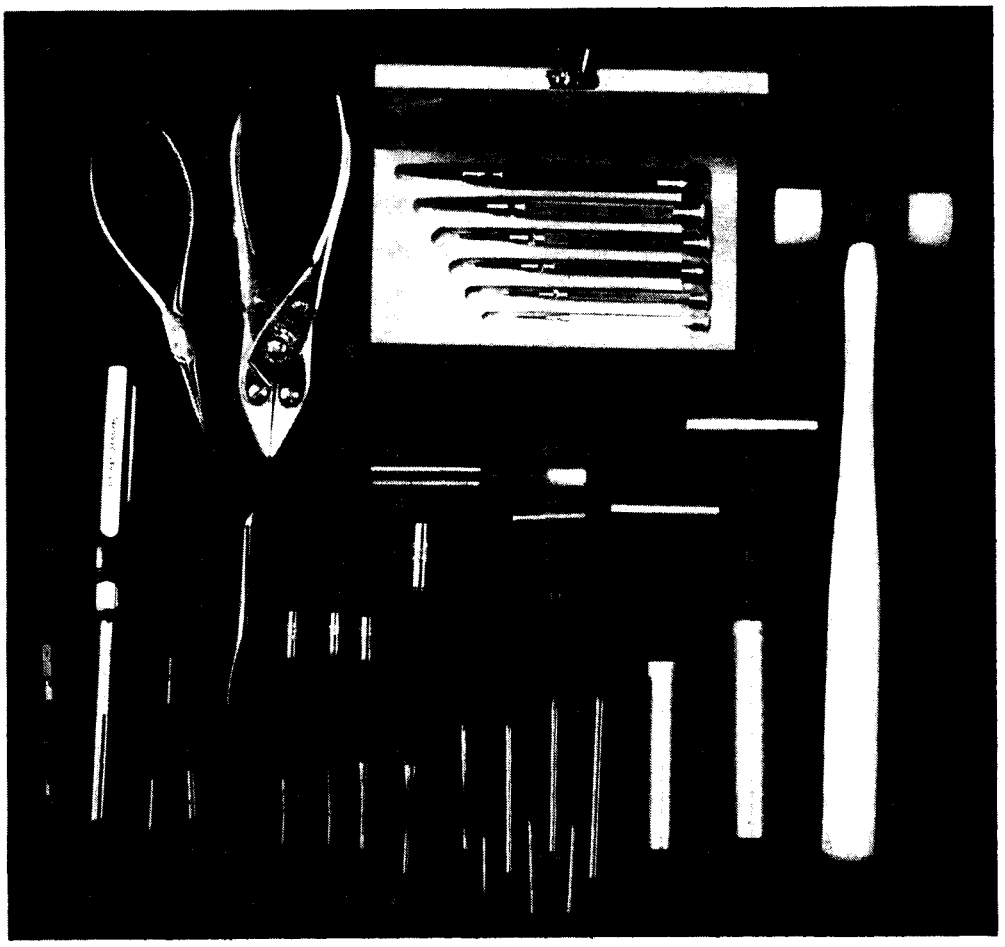
An excellent companion to this book is *The Gun Digest Book of Exploded Firearms Drawings*, also available from DBI Books, Inc. Now going into its fourth volume, this book clearly shows parts relationships and as well as factory part numbers for more than 800 modern and collector's handguns and long guns.

J. B. Wood
Raintree House
Corydon, Kentucky
March, 1990

A Note On Reassembly:

Most of the revolvers covered in this book can be reassembled by simply reversing the order of disassembly, carefully replacing the parts in the same manner they were removed. In a few instances, special instructions are required, and these are listed with each gun under "Reassembly Tips." In certain cases, reassembly photos are also provided.
If there are no special instructions or photos with a particular gun, you may assume that it can just be reassembled in reverse order. During disassembly, note the relationship of all parts and springs, and lay them out on the workbench in the order they were removed. By following this procedure you should have no difficulty.

Tools



Countless firearms, old and new, bear the marks, burrs, and gouges that are the result of using the wrong tools for taking them apart. In the interest of preventing this sort of thing, I am including here a group of tools that are the best types for the disassembly of revolvers. Except for the few shop-made tools for special purposes, all of those shown here are available from one of these two sources:

Brownells Inc.
Route 2, Box 1
Montezuma, Iowa 50171

B-Square Company
P.O. Box 11281
Fort Worth, Texas 76109

General Instructions:

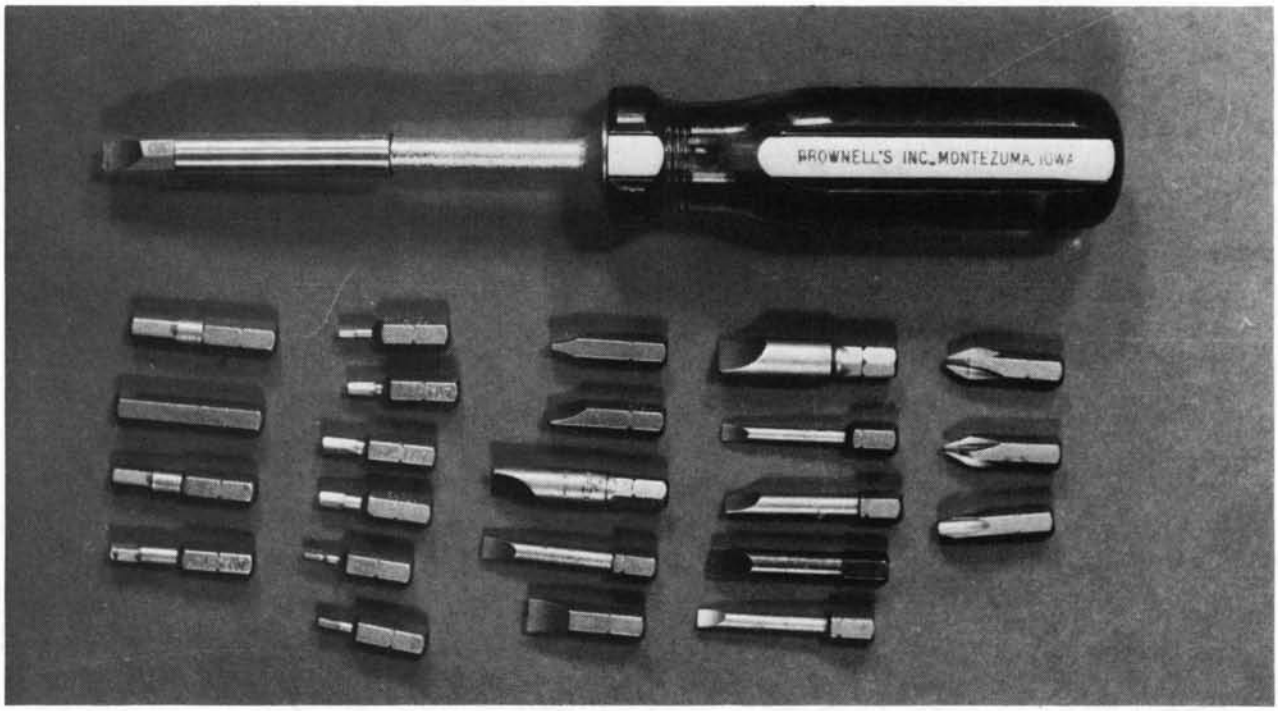
Screwdrivers: Always be sure the blade of the screwdriver exactly fits the slot in the screw head, both in thickness and in width. If you don't have one that fits, grind or file the tip until it does. You may ruin a few screwdrivers, but better them than the screws on a fine pistol.

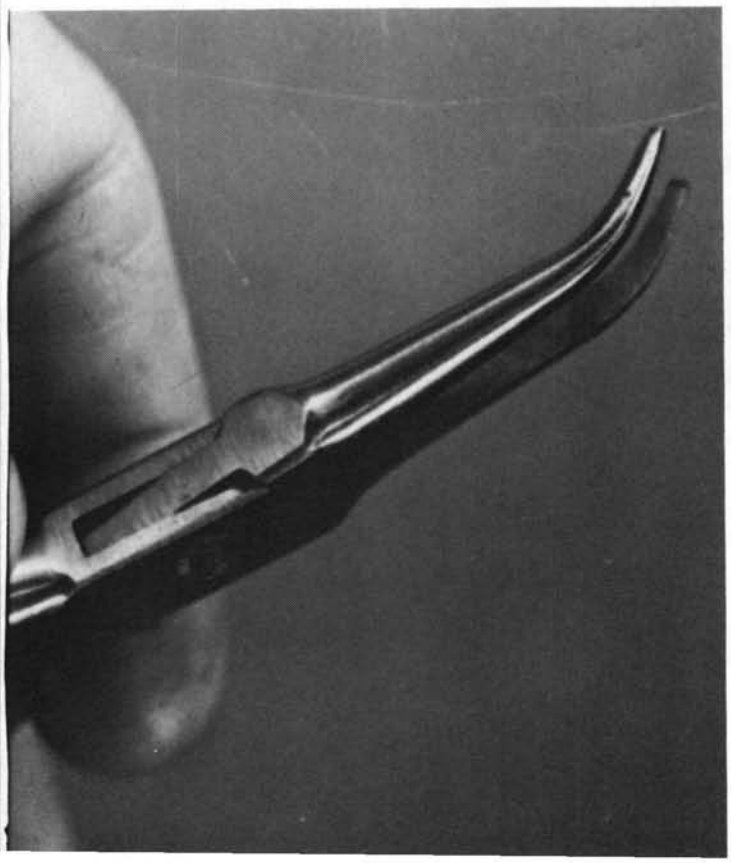
Slave pins: There are several references in this book to slave pins, and some non-gunsmith readers may not be familiar with the term. A slave pin is simply a short length of rod stock (in some cases, a section of a nail will do) which is used to keep two parts, or a part and a spring, together during reassembly. The slave pin must be very slightly smaller in diameter than the hole in the part, so it will push out easily as the original pin is driven in to retain the part. When making a slave pin, its length should be slightly less than the width of the part in which it is being used, and the ends of the pin should be rounded or beveled.

Sights: Nearly all dovetail-mounted sights are drifted out toward the right, using a nylon, aluminum, or brass drift punch.

1. The tiniest of these fine German instrument screwdrivers from Brownells is too small for most gun work, but you'll see the rest of them used frequently throughout the book. There are many tight places where these will come in handy.

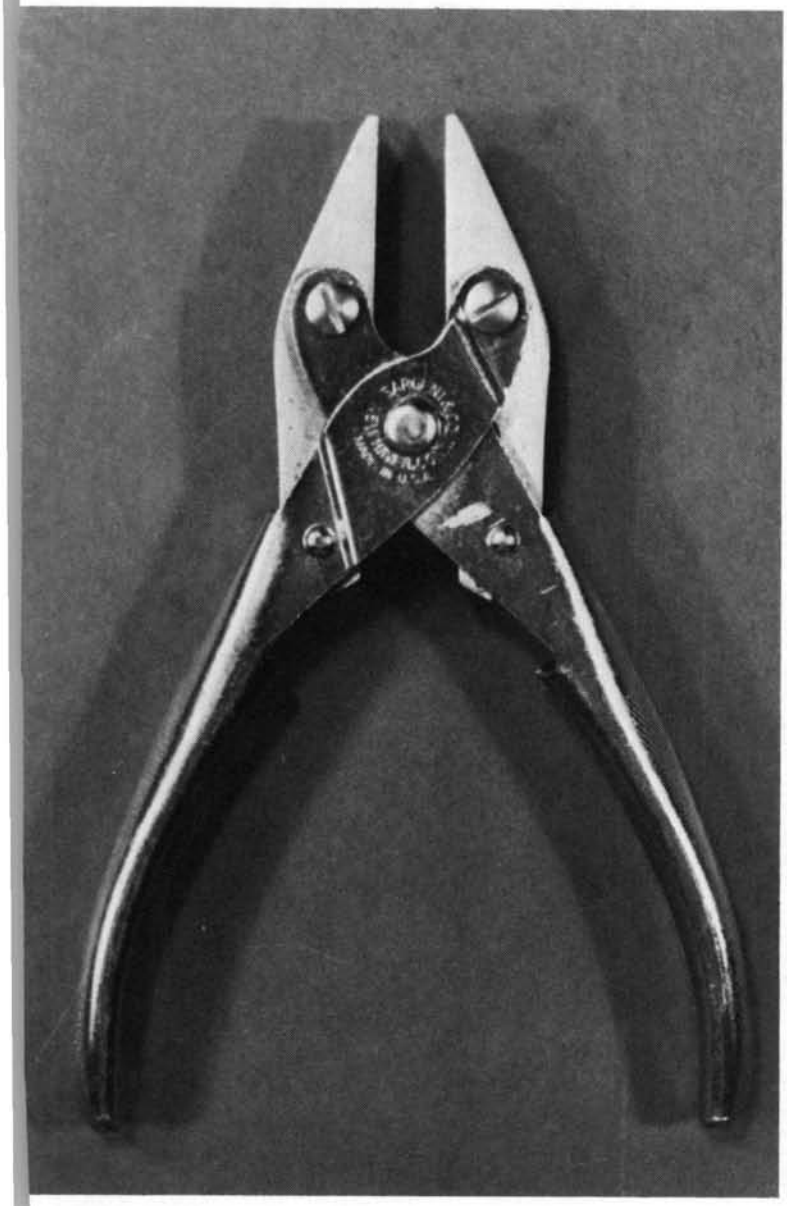
2. When a larger screwdriver is needed, this set from Brownells covers a wide range of blade sizes and also has Phillips- and Allen-type inserts. The tips are held in place by a strong magnet, yet are easily changed. These tips are very hard. With enough force you might manage to break one, but they'll never bend.



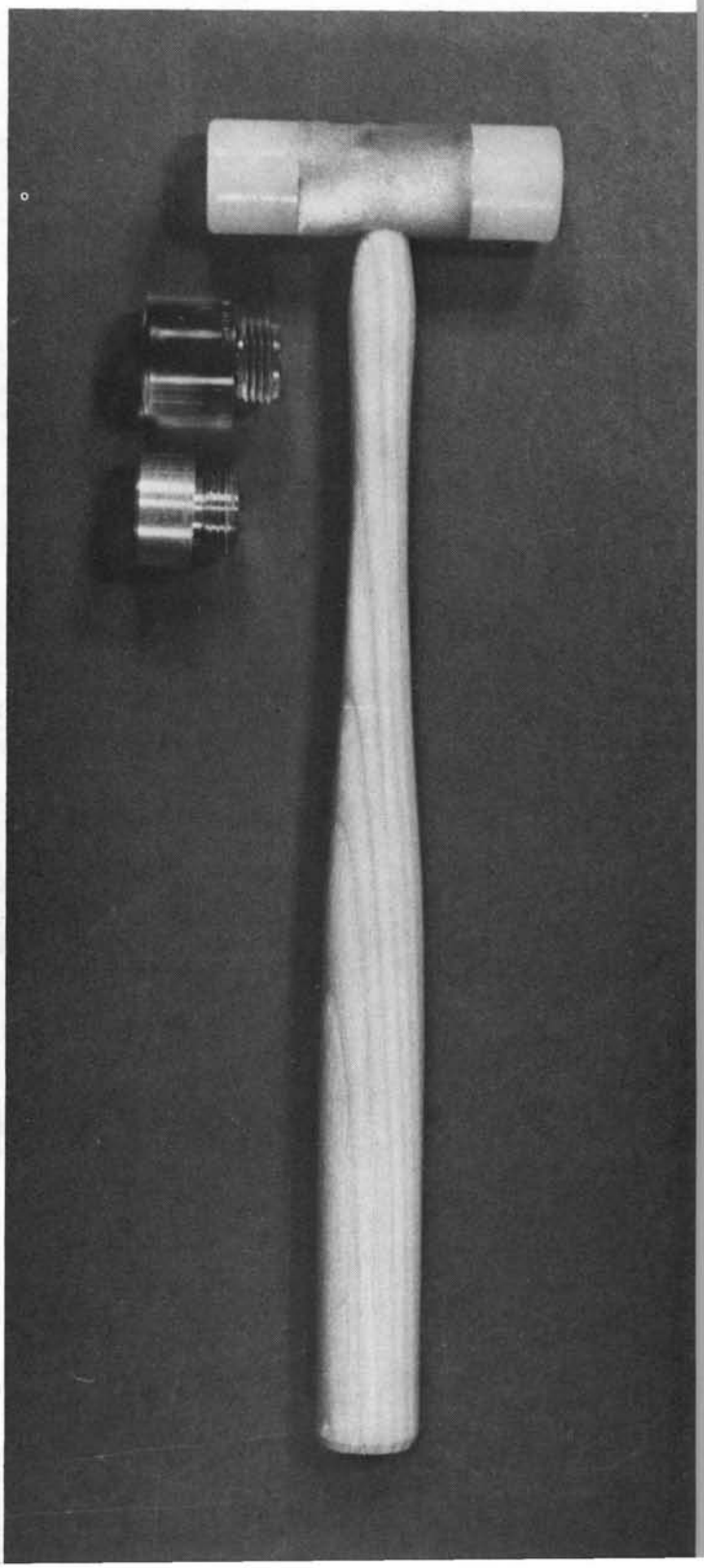


3. You should have at least one good pair of bent sharp-nosed pliers. These, from Brownells, have a box joint and smooth inner faces to help prevent marring.

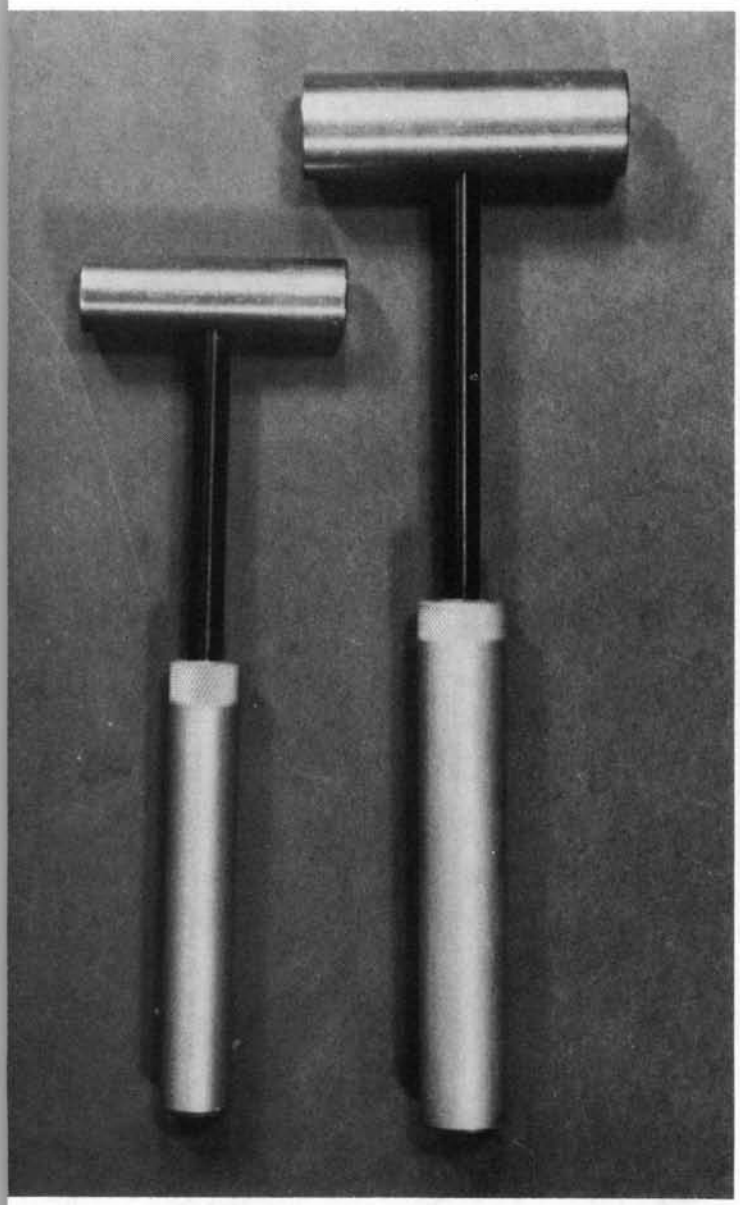
4. For heavier gripping, these Bernard parallel-jaw pliers from Brownells have smooth-faced jaw pieces of unhardened steel to prevent marring of parts.

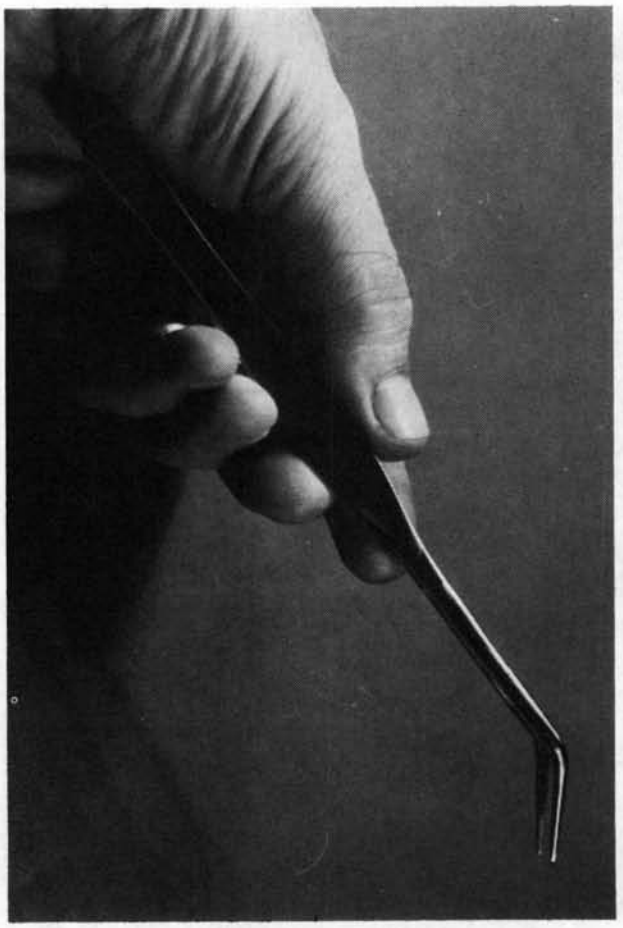


5. For situations where a non-marring rap is needed, this hammer from Brownells is ideal. It is shown with nylon faces on the head, but other faces of plastic and brass are also available. All are easily replaceable.



6. For drifting out pins, these small all-metal hammers from B-Square are the best I've seen. Two sizes (weights) are available and they're well worth the modest cost.

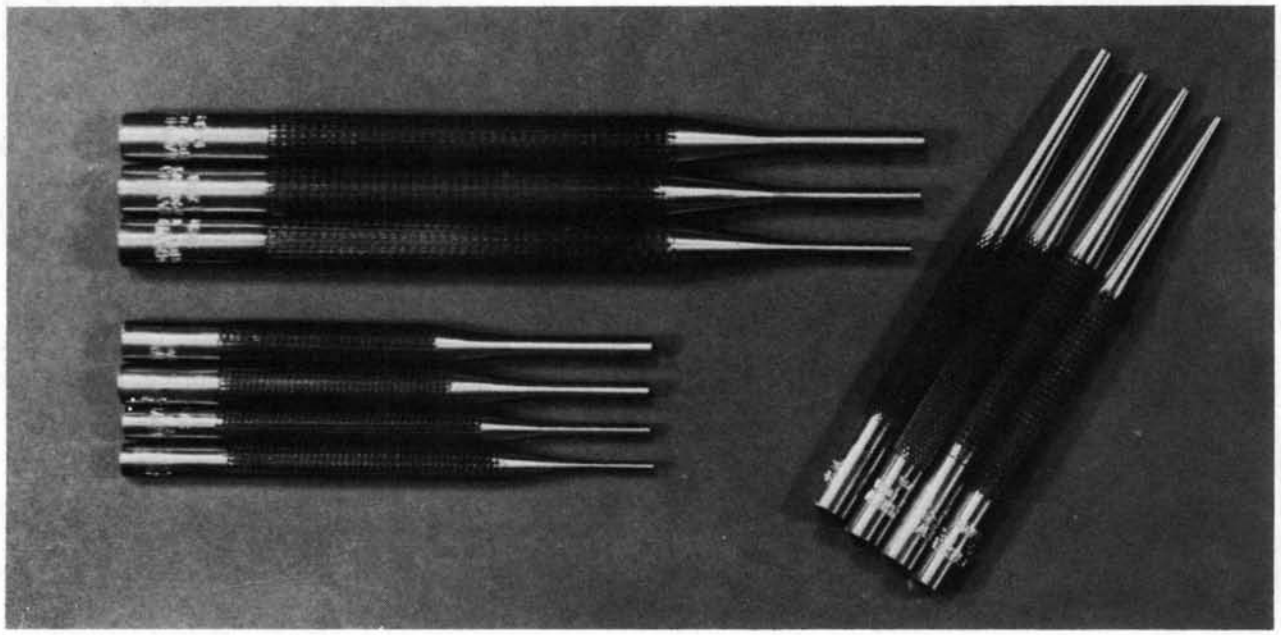




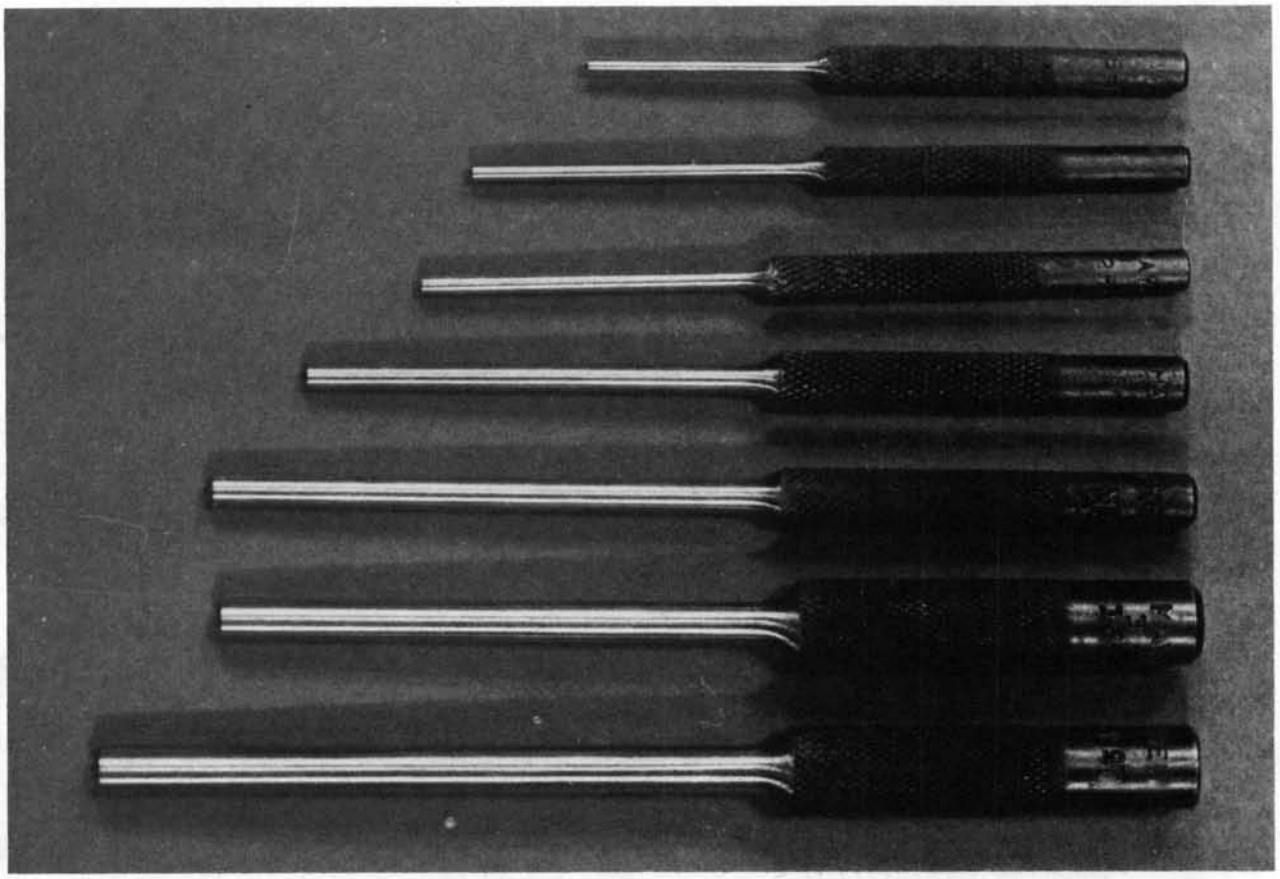
7. For situations where reach and accessibility are beyond the capabilities of sharp-nosed pliers, a pair of large sharp-nosed forceps (tweezers) will be invaluable. From Brownells.

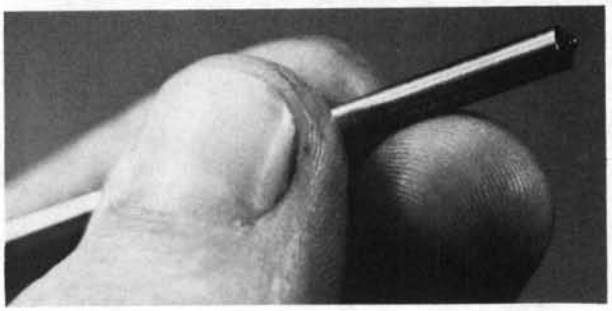
8. This universal Colt tool from Brownells will also work on some other autos of similar design, and even has features for some revolver work. Its main function, of course, is for the removal of a tight barrel bushing on Colt autos.

9. One of the most-used tools in my shop is this nylon-tipped drift punch, shown with an optional brass tip in place on the handle. It has a steel pin inside the nylon tip for strength. From Brownells, and absolutely essential.



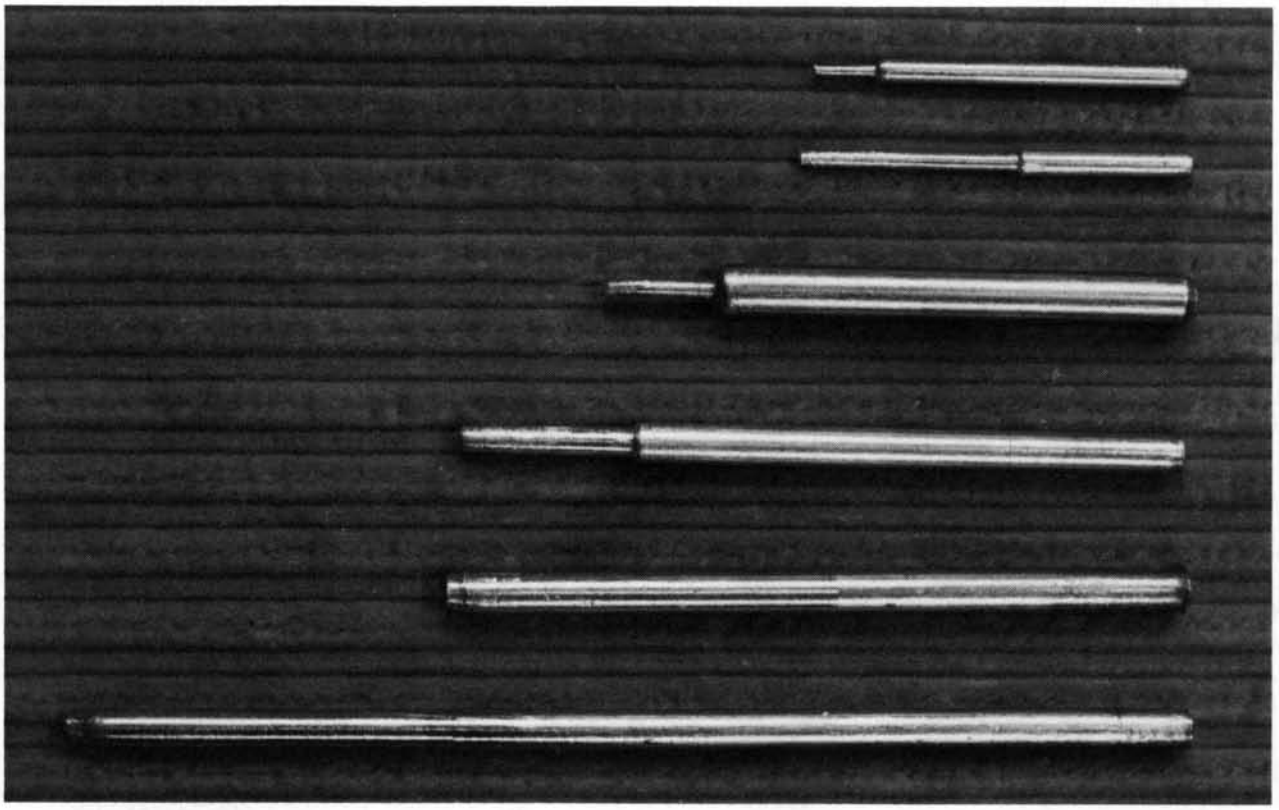
10. A good set of drift punches will prevent a lot of marred pins. These, from Brownells, are made by Mayhew. The tapered punches at the right are for starting pins, the others for pushing them through. Two sizes are available—4" or 6".

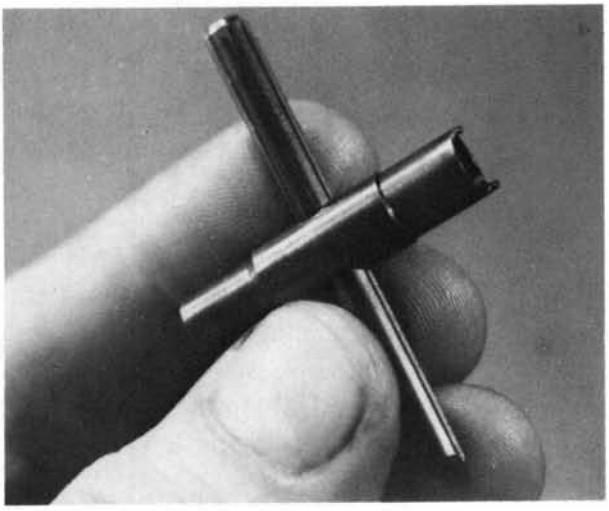




11. These punches by Mayhew are designed specifically for roll pins and have a projection at the center of the tip to fit the hollow center of a roll pin, driving it out without deformation of the ends. From Brownells.

12. Some of the necessary tools are easily made in the shop. These non-marring drift punches were made from three sizes of welder's brazing rod.





13. This little double-ended wrench covers two sizes of ejector spring retaining nuts in Colt revolvers. Without it, removal of the retaining nut will be very difficult, and will probably result in damage to the nut and the cylinder arbor. This wrench is available from Brownells.

Astra 357

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Astra 357 also apply to the following gun.

Astra 44 Magnum

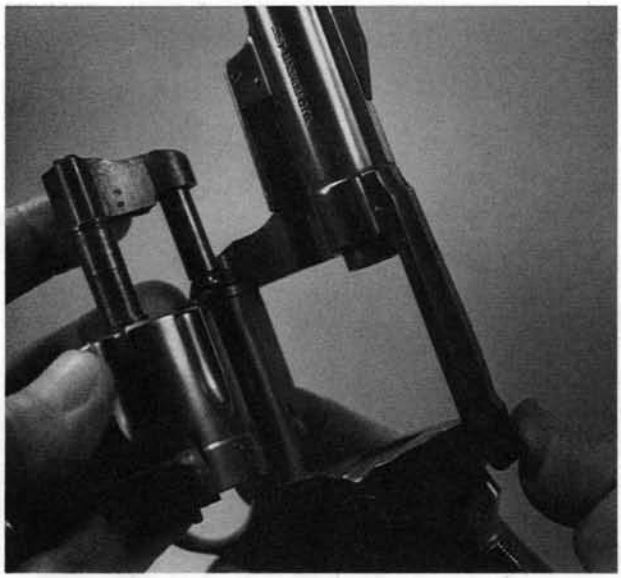
Data:	Astra 357
Origin:	Spain
Manufacturer:	Astra-Unceta y Compania, Guernica
Cartridges:	357 Magnum, 44 Magnum
Cylinder capacity:	6 rounds
Overall length:	11 1/4 inches (6-inch barrel)
Barrel lengths:	3, 4, 6 and 8 1/2 inches
Weight:	40 ounces (6-inch barrel)

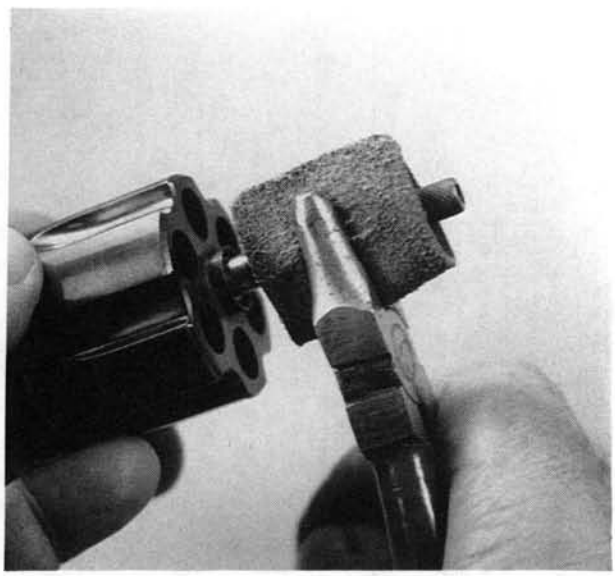
Astra-Unceta y Compania introduced their 357 Magnum revolver in 1972, and in 1980 a heavier version was offered in 44 Magnum. They are mechanically the same. While there is a similarity to Smith & Wesson design, there are important internal differences. In both chamberings, the guns are available in several barrel lengths. Interarms is the U.S. importer.

Disassembly:

1. Remove the grips, and take out the forward sideplate screw.

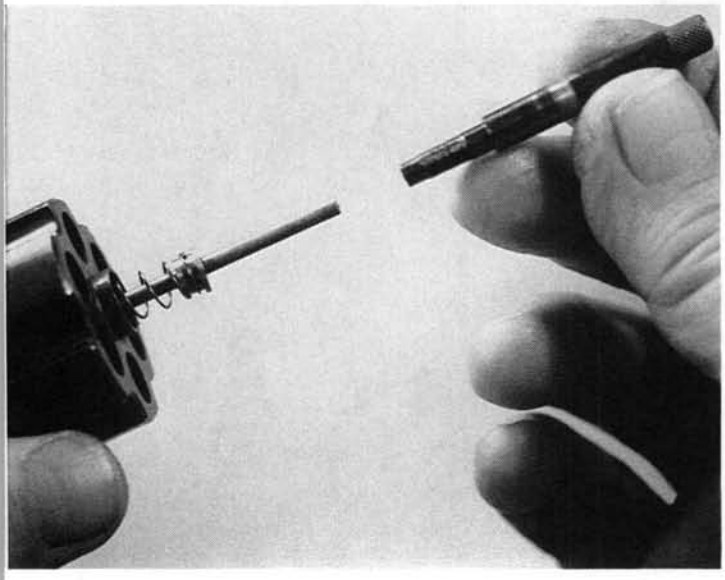
2. Remove the crane and cylinder assembly toward the front. Remove the crane from the cylinder.



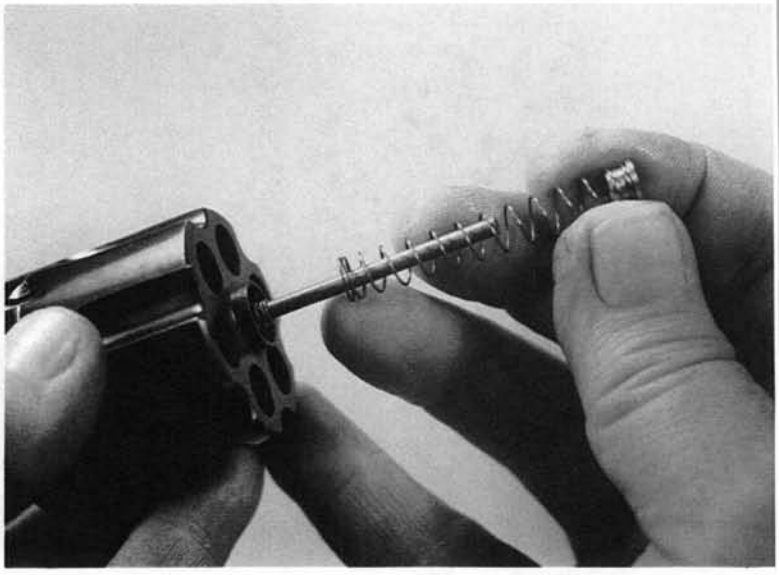


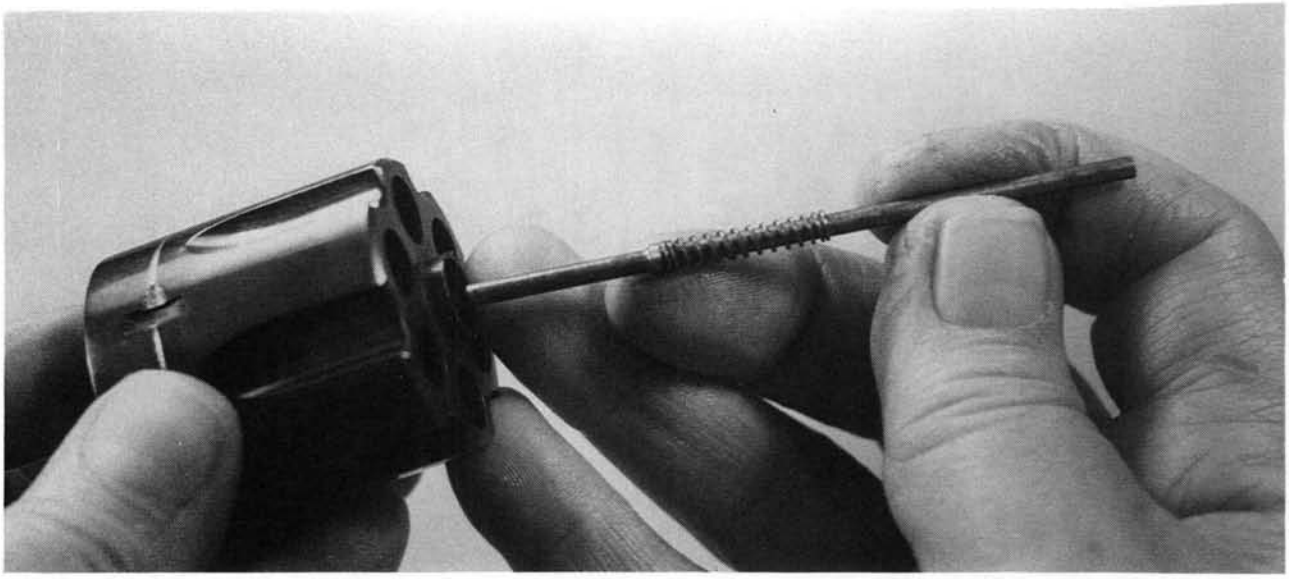
3. The ejector rod has a reverse thread. It unscrews clockwise, front view. If it is not too tight, it can be removed as shown, with leather-padded pliers. If it is tight, grip the rod in a leather-padded vise, insert two empty cartridge cases in opposed chambers to protect the guide spline, and turn the cylinder.

4. Remove the ejector rod toward the front.



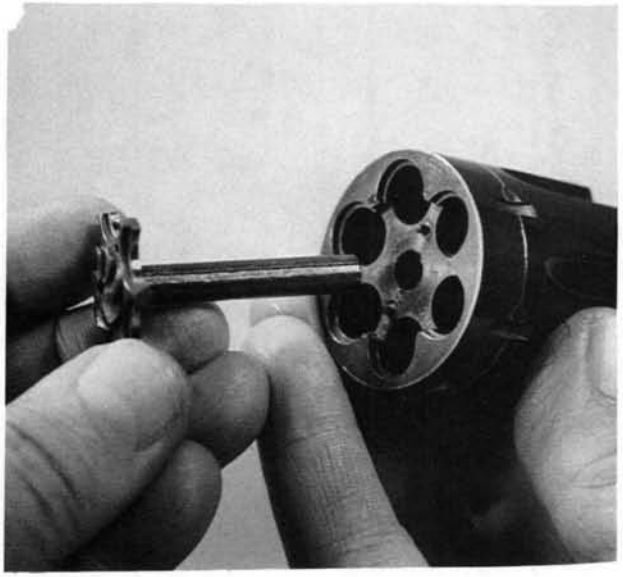
5. Remove the spring bushing and spring toward the front.





6. Remove the locking rod and its spring toward the front.

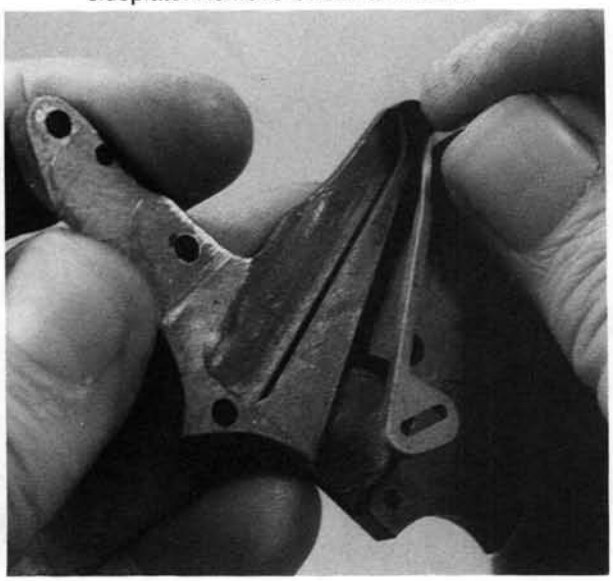
7. Remove the ejector/ratchet unit toward the rear.



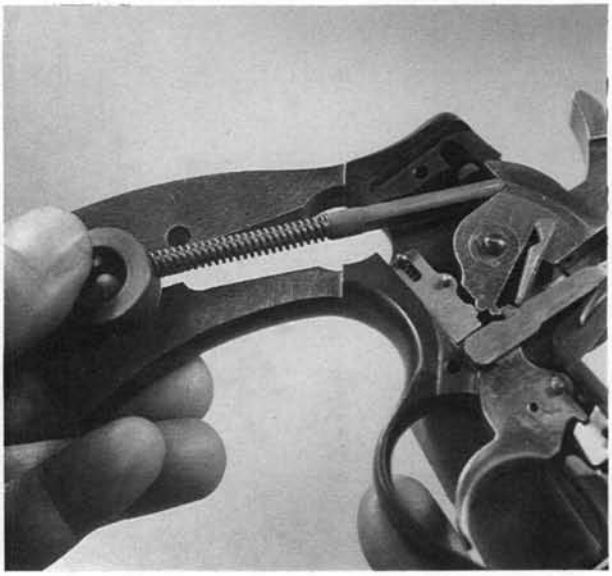
8. With a screwdriver of proper dimensions, remove the other three sideplate screws. Note that the upper screw will require a wider blade.

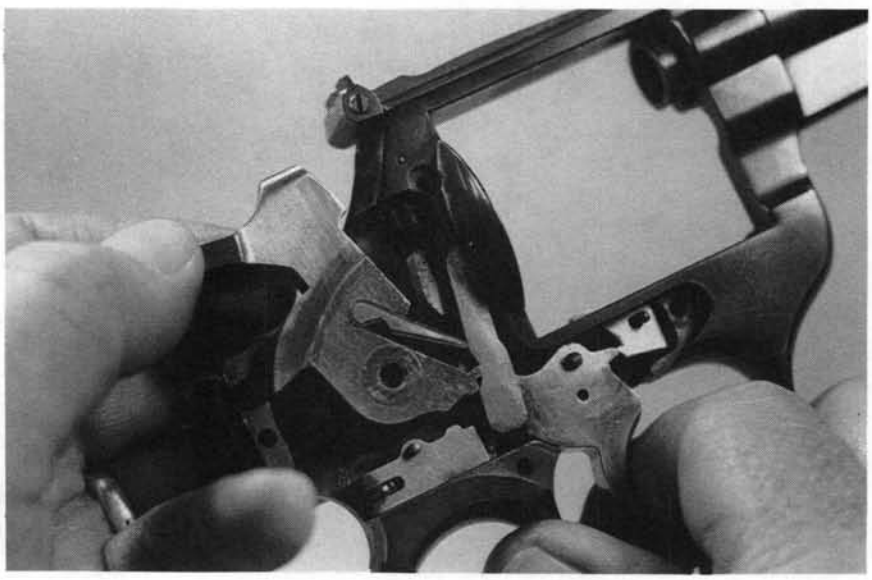
9. With the gun held as shown, tap the grip frame with a non-marring mallet until the sideplate drops into the hand.

10. The safety-block bar will likely come off with the sideplate. Remove it from its recess.



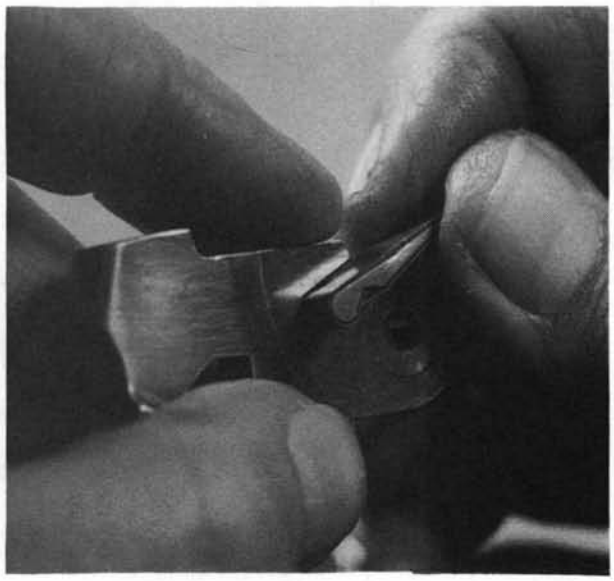
11. Push the hammer spring base ring out of the frame toward the left, controlling the spring as it comes out. When the hammer strut and spring are separated from the base ring, note which of the recesses is being used. There are four, of varying depths, for spring power adjustment.



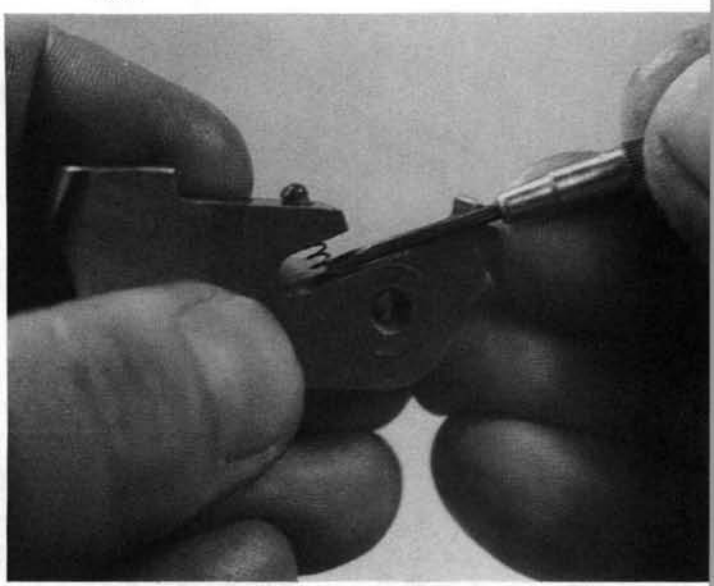


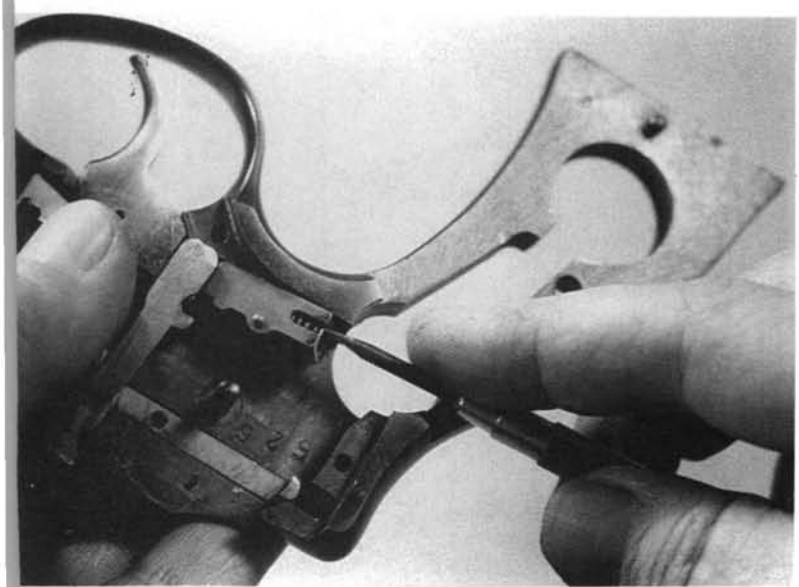
12. Move the cylinder latch button to the rear, and depress the trigger until the hammer clears the frame recess. Remove the hammer toward the right.

13. Hold a fingertip over the hole at the front of the hammer to arrest the spring and plunger, and push the double-action lever out of its recess toward either side.



14. A small tool can be used to lift the plunger and spring out of the hammer, through the hole at the front.

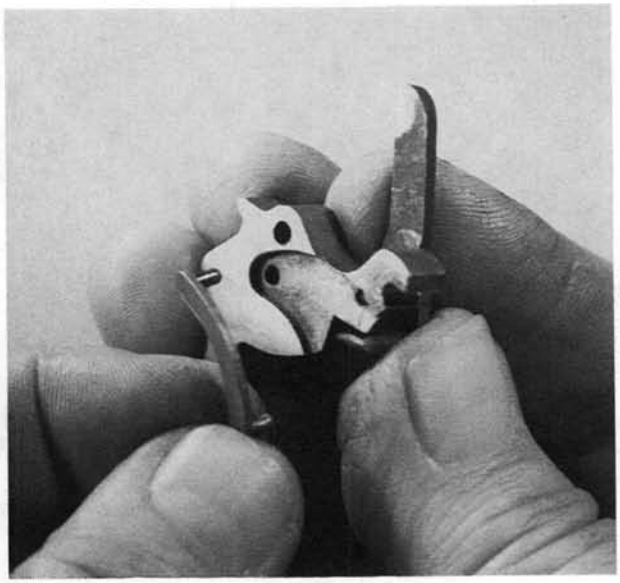


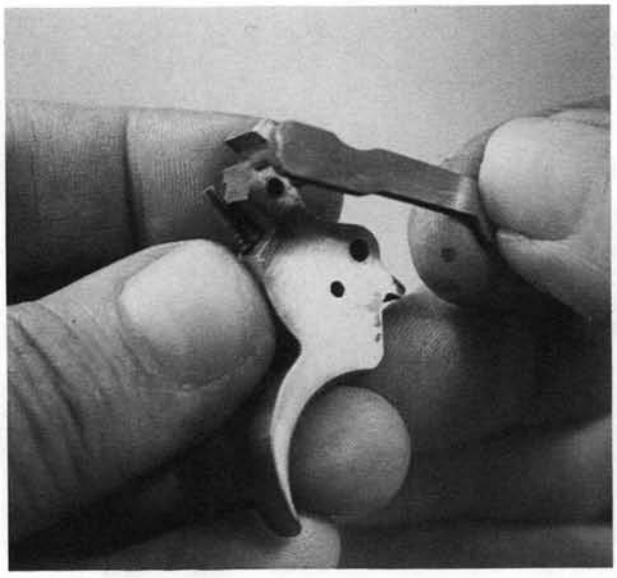


15. With a small screwdriver, slightly depress the spring and lift the rear of the trigger rebound slide off its post in the frame for removal. **Caution:** *The spring is under tension, so control it.*

16. Move the cylinder hand slightly rearward to clear its slot in the frame, and remove the trigger assembly toward the right.

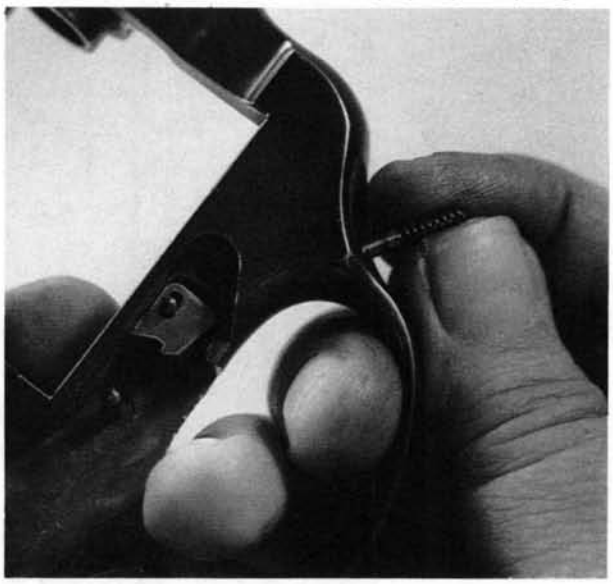
17. Remove the rebound slide strut from the left side of the trigger. Control the cylinder hand plunger and spring.



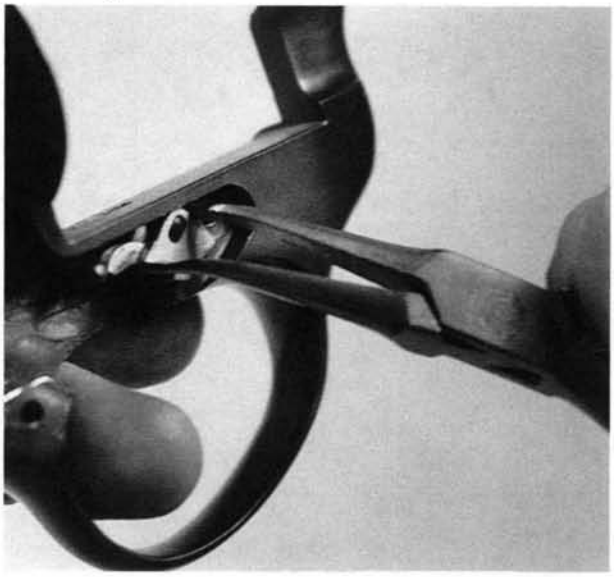


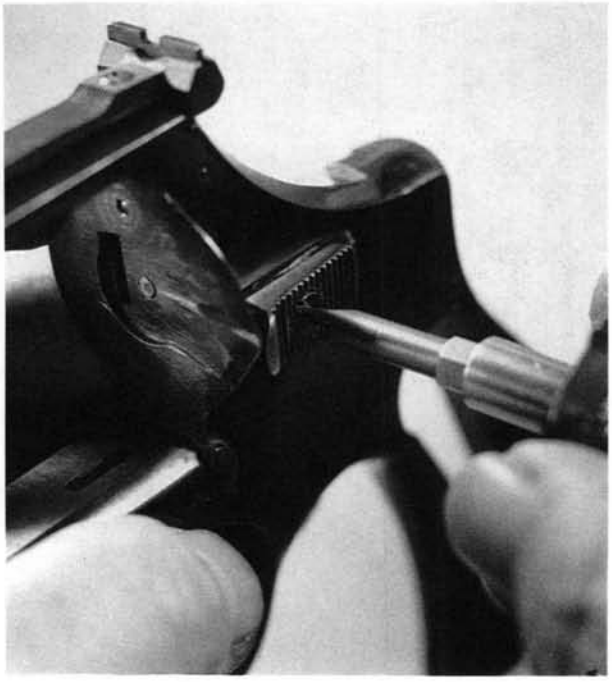
18. Remove the cylinder hand from the right side of the trigger, and the plunger and spring from the rear.

19. Take out the screw at the front of the trigger guard, and remove the cylinder stop spring and plunger.



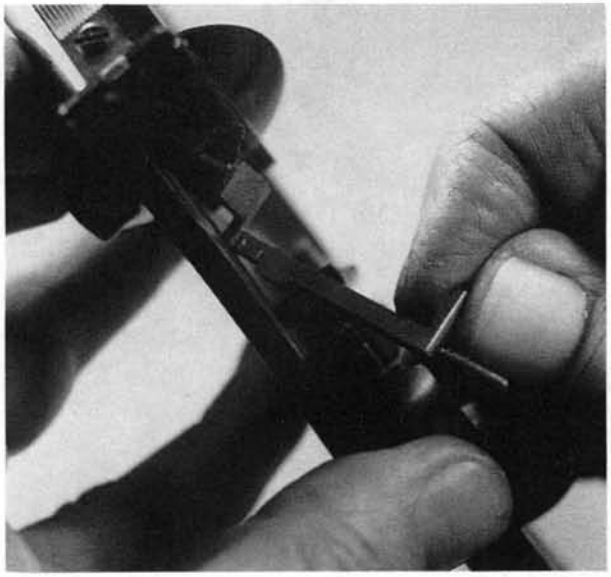
20. Move the cylinder stop to its rearmost position on the post, tilt it downward, and remove it toward the right.

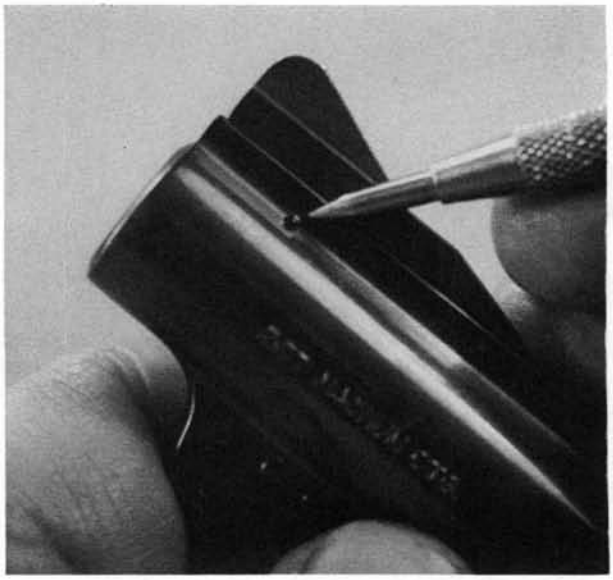




21. Remove the screw that retains the cylinder latch button. During removal of the screw, keep a fingertip on the latch bar inside, to prevent it from being forced outward. Remove the latch button toward the left.

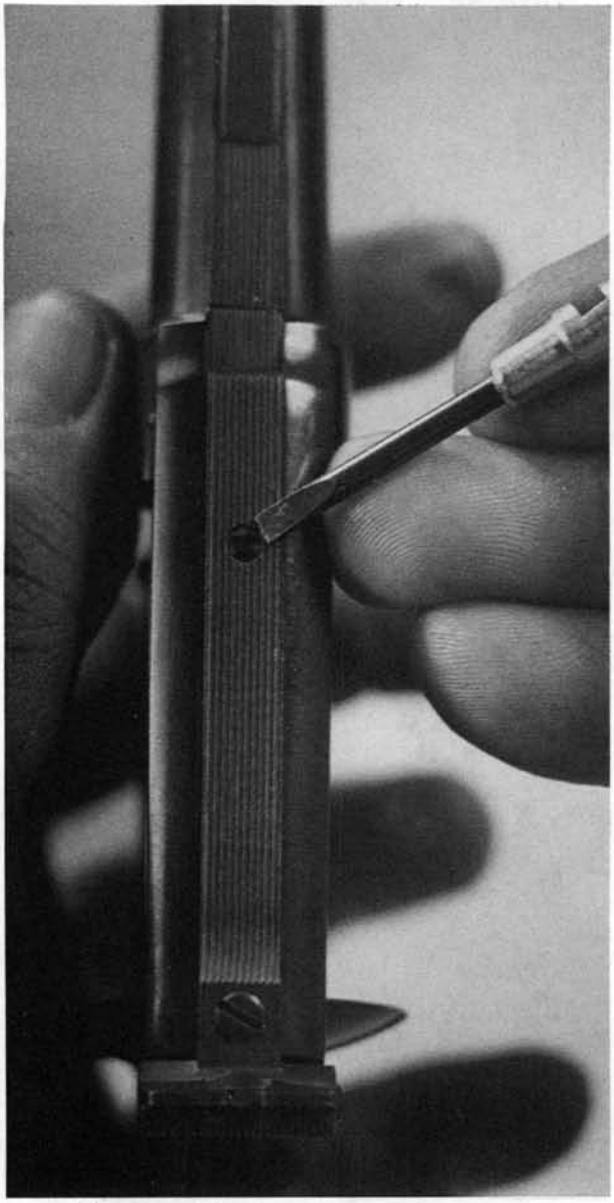
22. Move the latch bar to the rear, and tilt its rear cross-piece outward (toward the right). **Caution:** *As the inside rear tip of the bar clears the frame, the plunger and spring will be released.* Remove the latch bar rearward and toward the right.



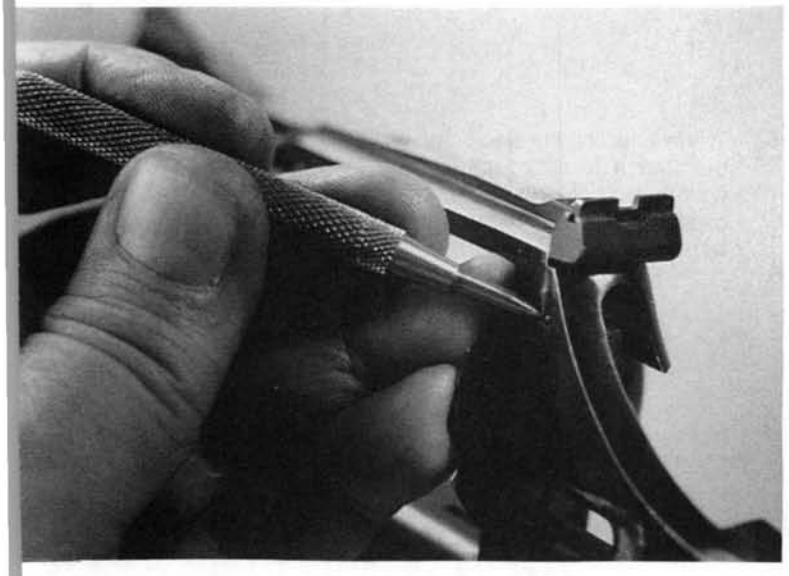


24. The front sight is retained by a roll cross-pin. After the pin is driven out, it is taken off upward.

23. The rear sight assembly is retained by a single screw in its forward extension, and it is taken off upward.



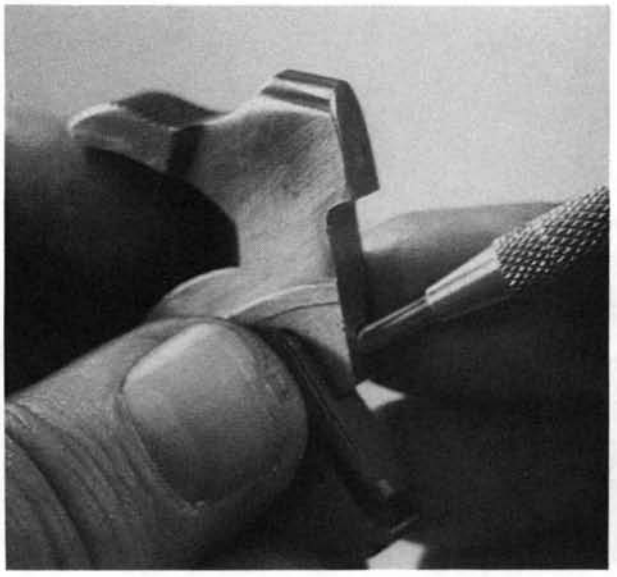
25. Drifting out a cross-pin in the barrel underlug will release the front cylinder locking plunger and its spring for removal toward the rear.

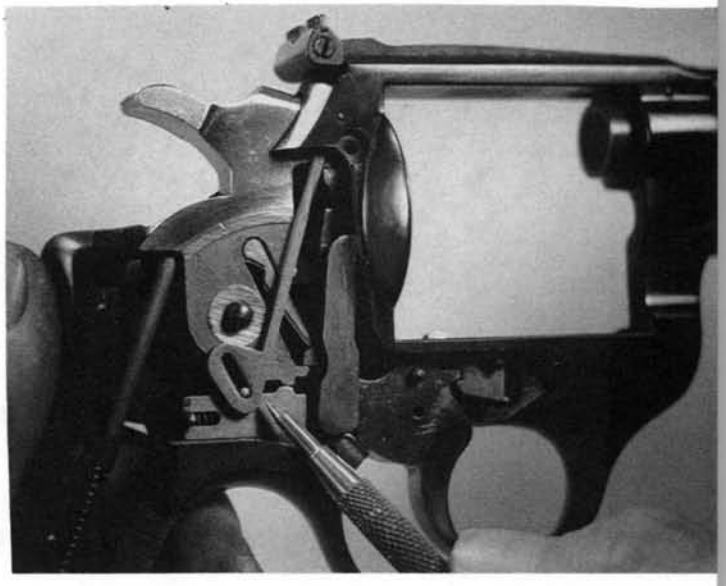


26. The firing pin and its spring are retained by a small cross-pin in the frame.

Reassembly Tips:

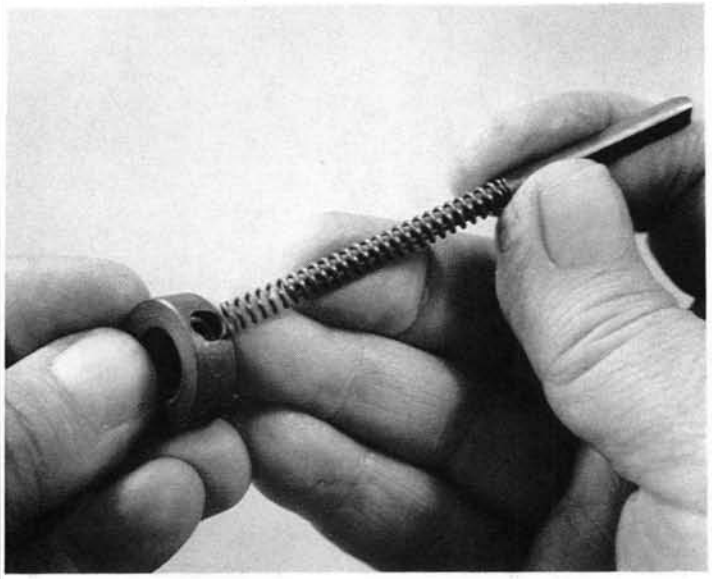
1. When replacing the double-action lever in the hammer, insert a small drift through the hole at the front to depress the plunger and spring until the lever covers the plunger.



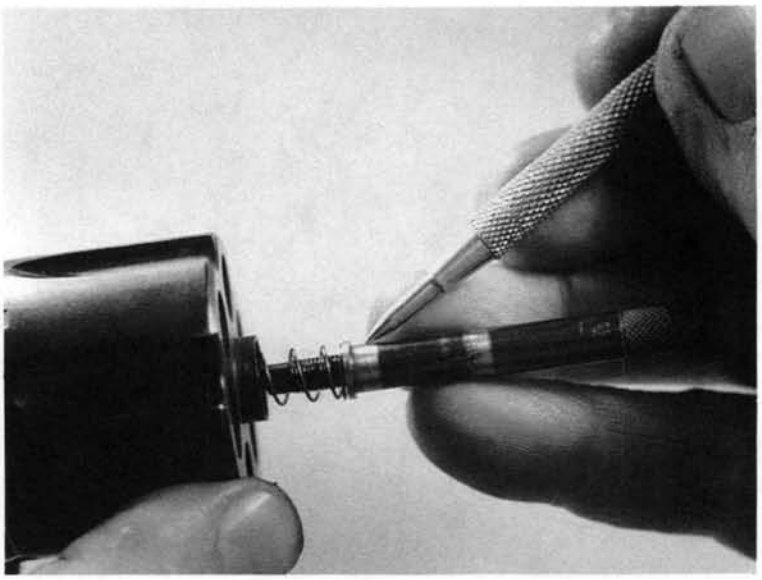


2. Install the hammer-block bar on its post on the rebound slide in its uppermost position. Fit the guide track to it as the sideplate is installed.

3. Select the hammer spring tension wanted by placing the spring in one of the four recesses in the base ring. The deeper the recess, the less tension.



4. When installing the spring bushing, note that its flange must be oriented as shown.



5. When installing the ejector rod in the cylinder, remember that it turns counterclockwise (front view) to tighten. Do not over-tighten, or the fine threads may be stripped. Place empty cartridge cases in the chambers to protect the spline.

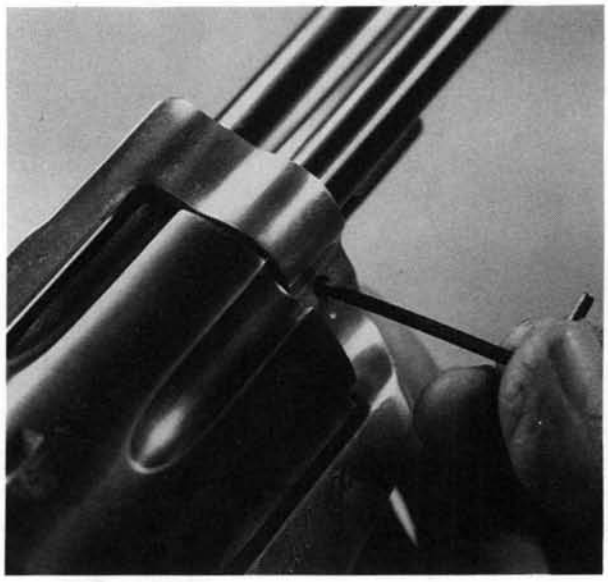
Century 45-70 Model 100

Data:	Century 45-70 Model 100
Origin:	United States
Manufacturer:	Century Gun Distributors, Greenfield, Indiana
Cartridges:	45-70 (others on a custom basis)
Cylinder capacity:	6 rounds
Overall length:	15 inches (8-inch barrel)
Barrel lengths:	$6\frac{1}{2}$, 8, 10, 12 inches
Weight:	$5\frac{3}{4}$ pounds

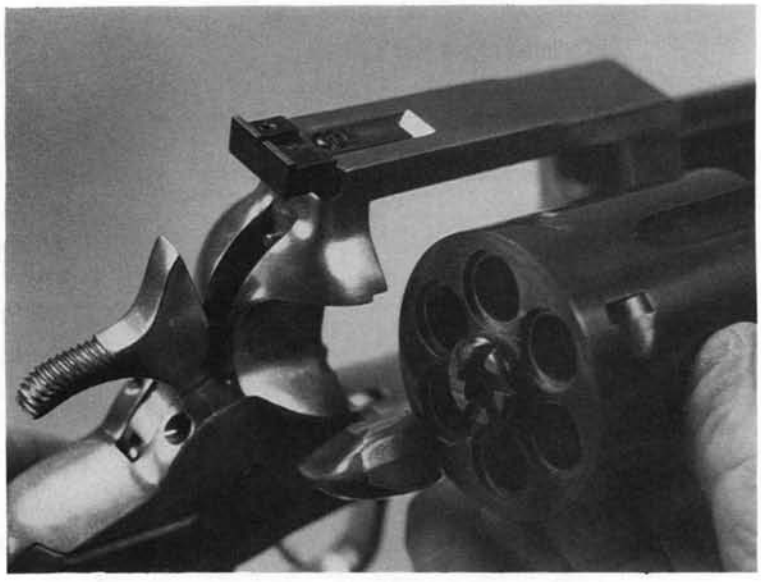
The Century 45-70 revolver was first made by Earl Keller in Evansville, Indiana. About a year before his death, Mr. Keller sold the manufacturing rights, and the gun is now made by Century Gun Distributors in Greenfield, Indiana. While the gun is of basic single-action design, there are several internal points that are not of traditional configuration. Later guns have sights that are different from the one shown here. Serial number 034, this one was made for the writer by Earl Keller.

Disassembly:

1. Use an Allen wrench to back out the screw that retains the cylinder base pin.

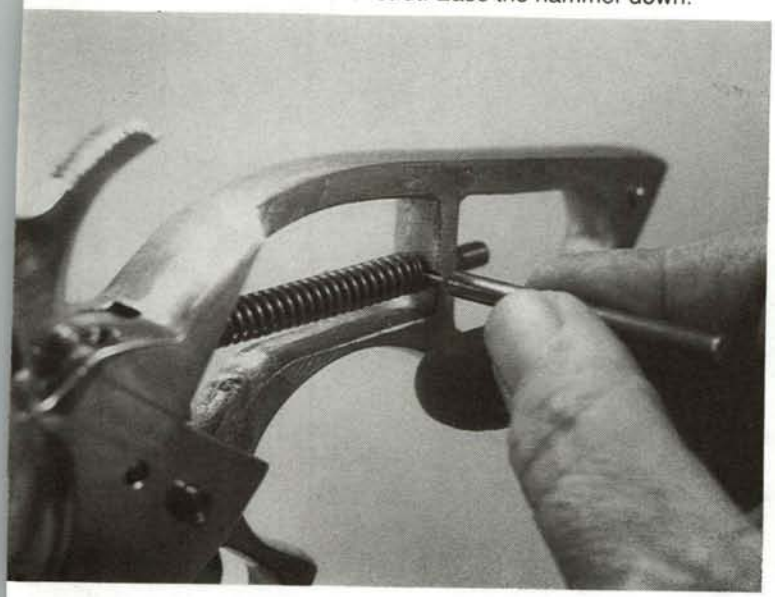


2. Set the hammer on the loading step ("half-cock") and move the base pin forward. It will be stopped by the ejector handle.

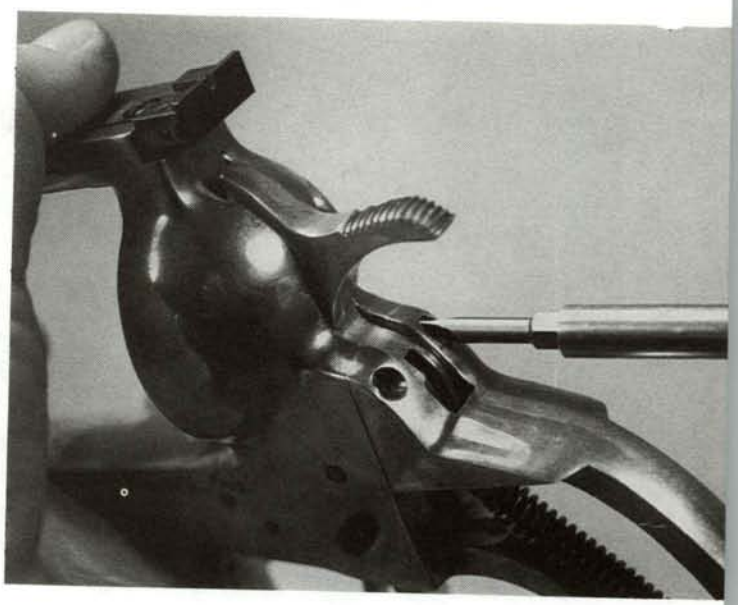


3. Open the loading gate, and remove the cylinder toward the right.

4. Remove the grips. Move the hammer a little past the half-cock position, and insert a small drift into the hole in the hammer strut. Ease the hammer down.

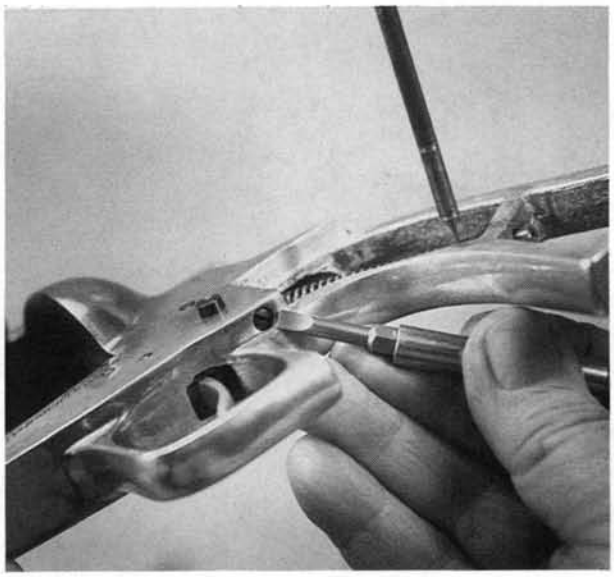


5. Remove the two upper grip frame screws.

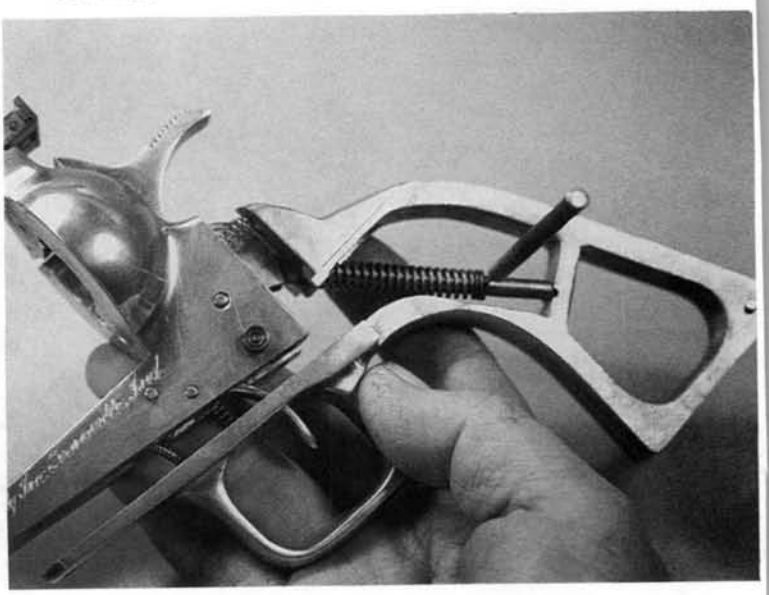


6. Remove the front grip frame screw on the underside.

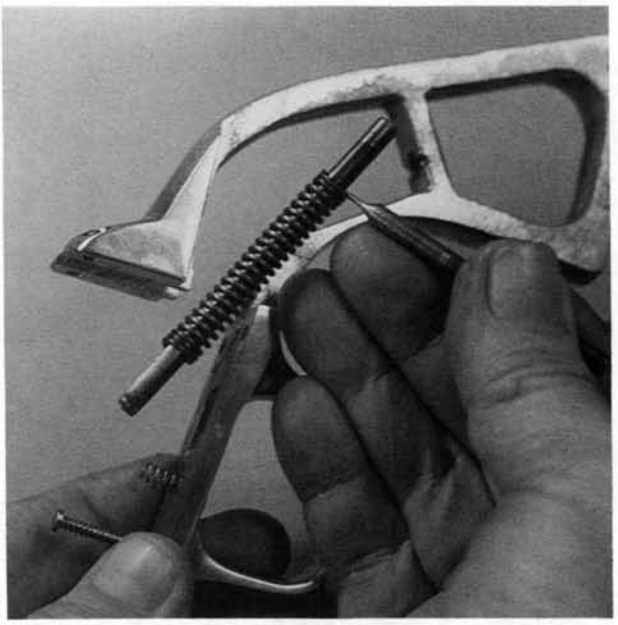
7. Remove the two vertical screws on the underside behind the trigger guard.



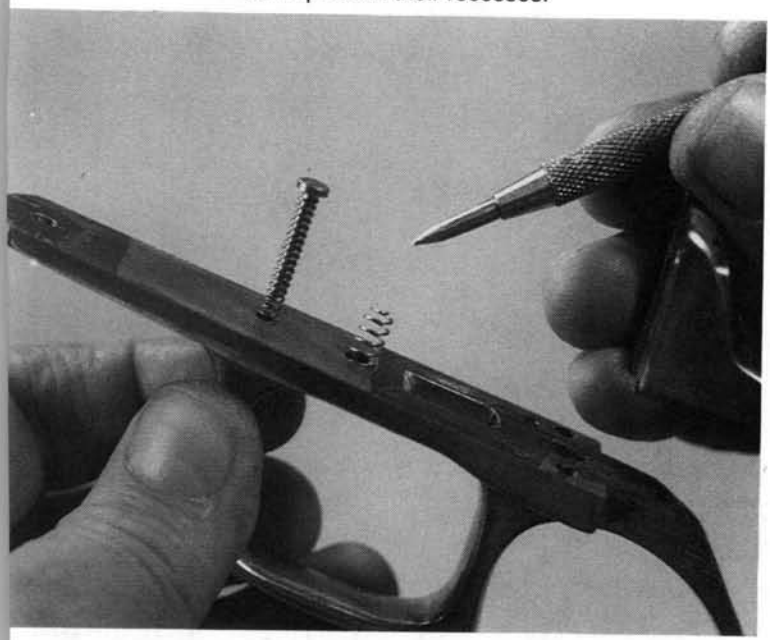
8. Move the grip frame rearward, and take it off downward.



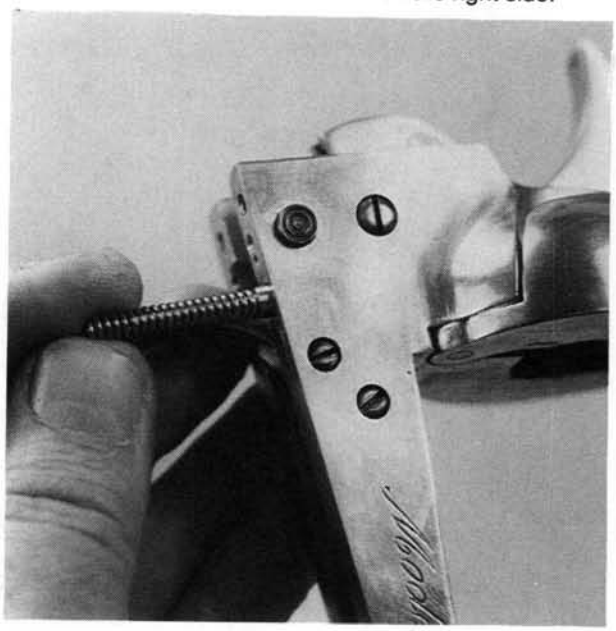
9. Remove the hammer spring unit from the grip frame. If separation of these parts is necessary, wrap them in a heavy shop cloth, and remove the drift.

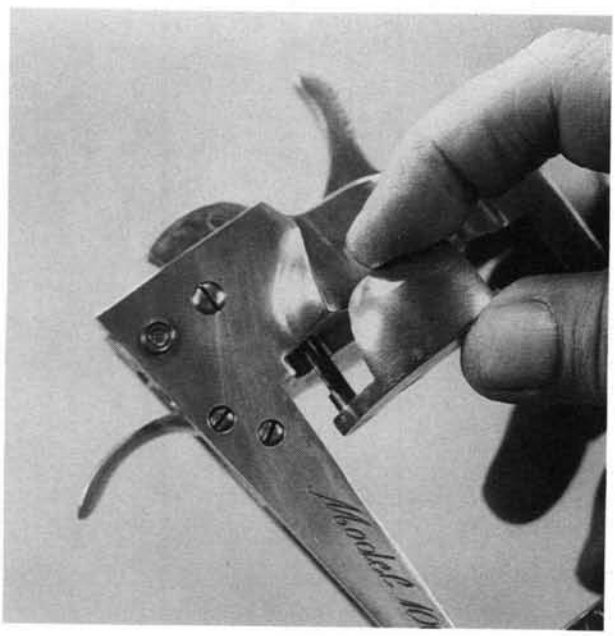


10. Remove the cylinder stop plunger and spring, and the trigger spring, if necessary. If not, they can be left in place in their recesses.



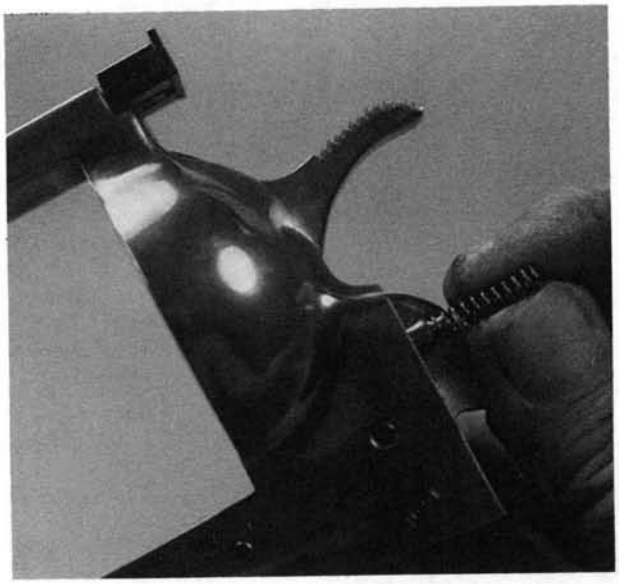
11. Remove the loading gate spring and plunger from the underside of the frame on the right side.

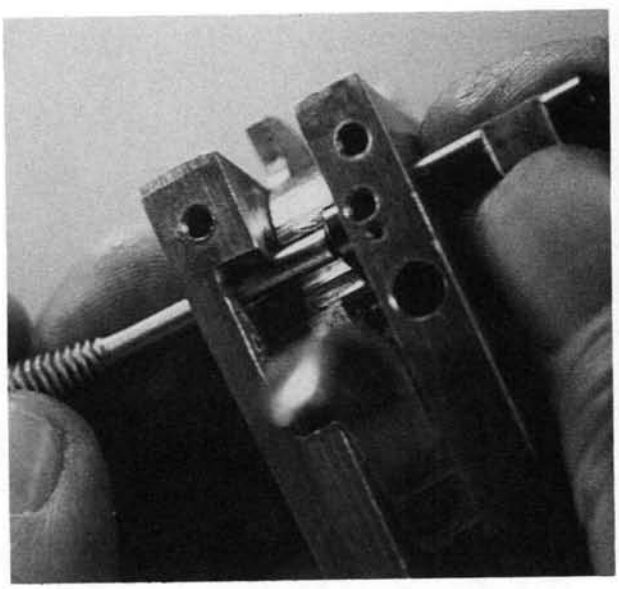




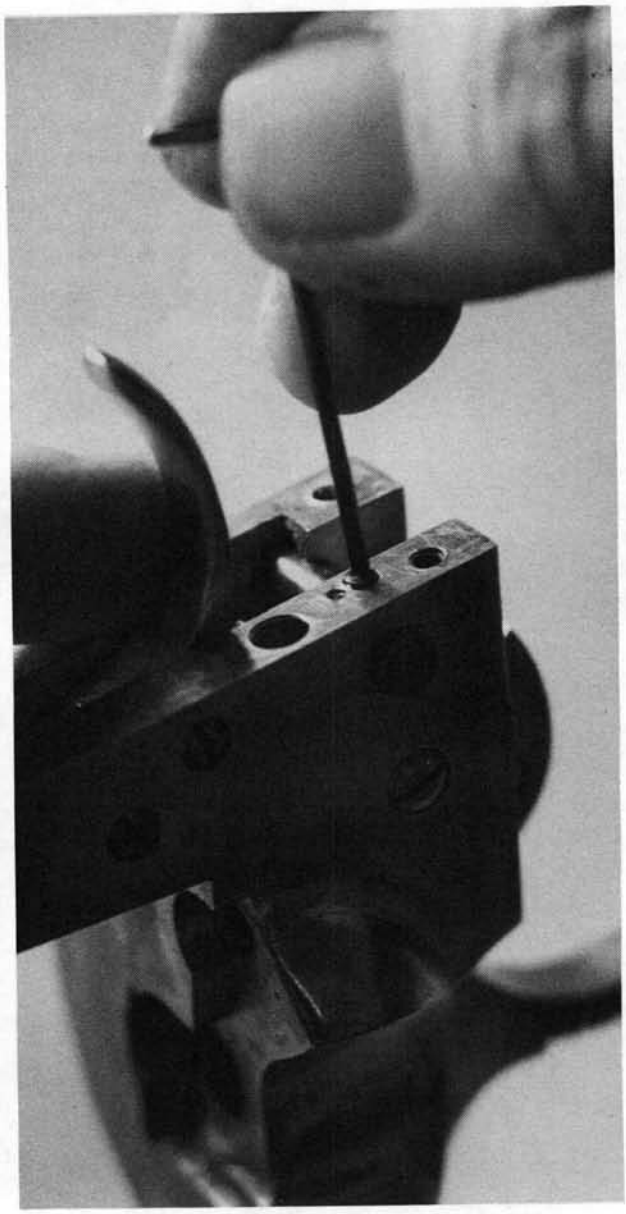
12. Remove the loading gate toward the front.

13. Remove the cylinder hand spring and plunger toward the rear.



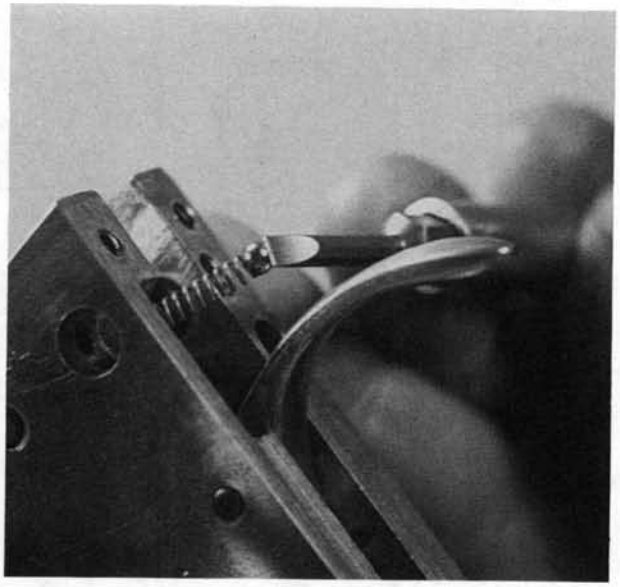


14. Use an Allen wrench to remove the safety-catch retaining screw from the underside of the frame.

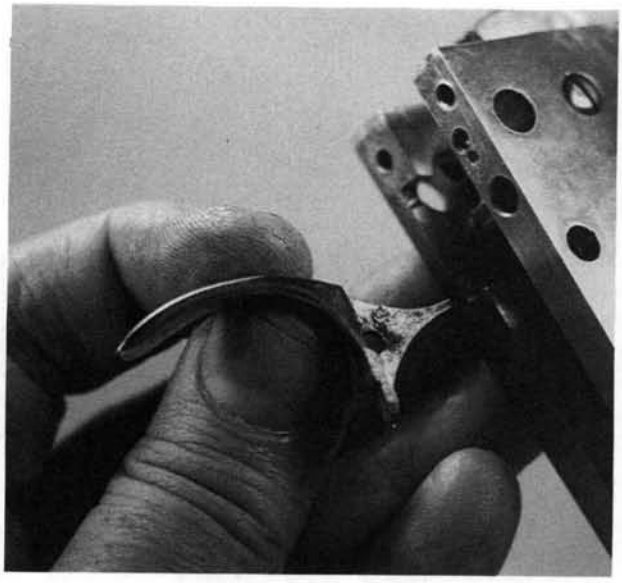


15. Push the safety-catch out toward the right.

16. Insert a magnetized tool to lift out the safety detent ball and spring from their recess in the frame.

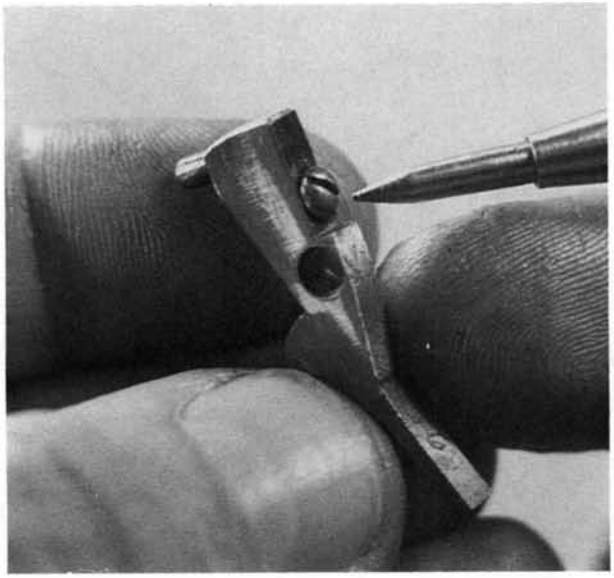


17. Remove the trigger cross-screw, and take out the trigger downward.

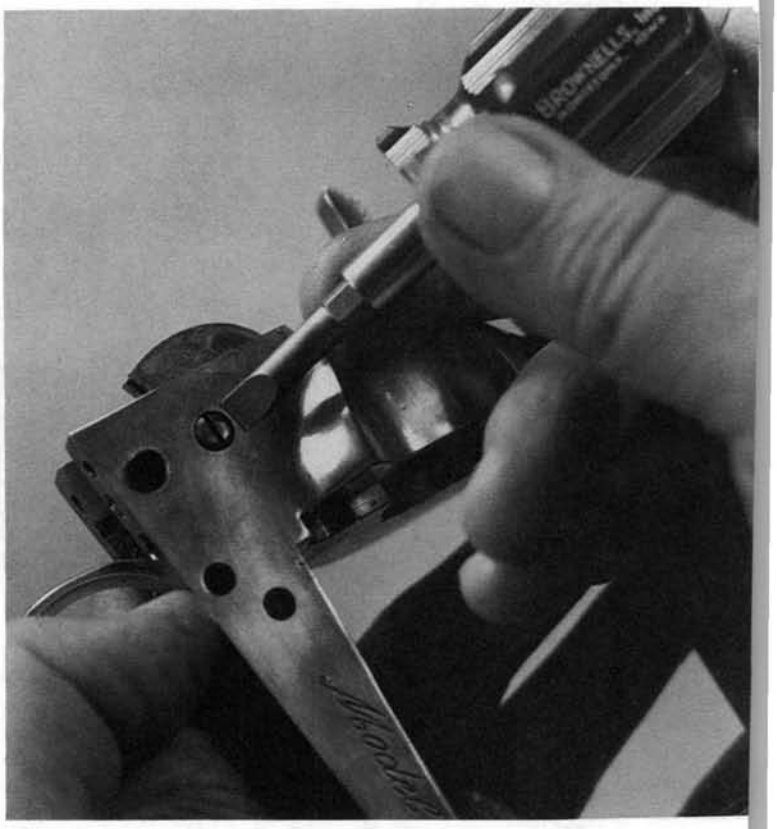


18. Remove the cylinder stop cross-screw, and take out the cylinder stop downward.

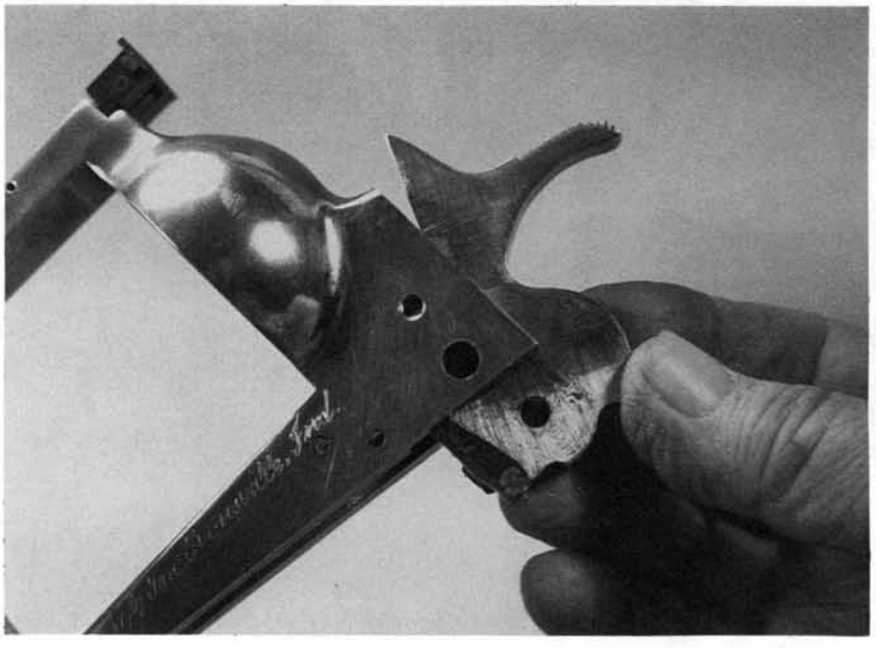
19. Removal of the small screw in the bottom of the cylinder stop will release the closure plate, and will allow removal of the cylinder stop plunger and spring. In normal takedown, this unit is best left intact.



20. Remove the hammer screw. Note that this screw has an internal spring-ring lock, and a coned access hole is provided on the right rear of the frame for insertion of a slim tool to "unlock" the screw. In my gun, this did not work as intended, but you can try it.

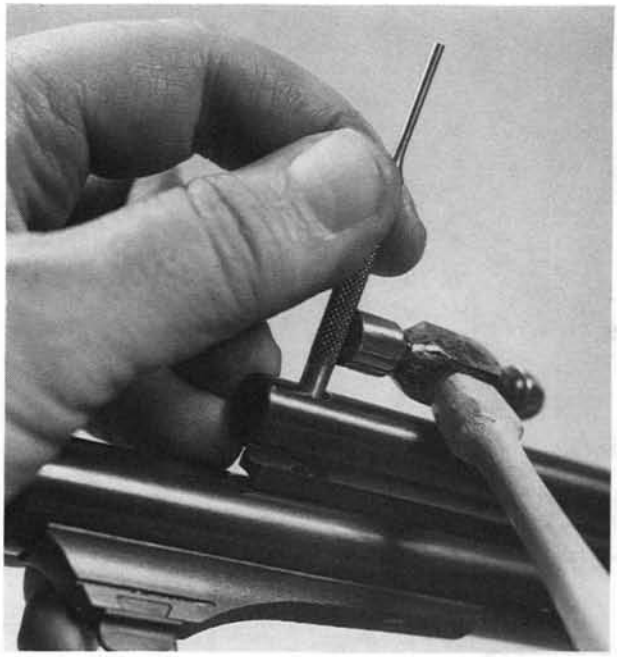


21. Remove the hammer assembly downward. The cylinder hand is easily detached from the hammer.

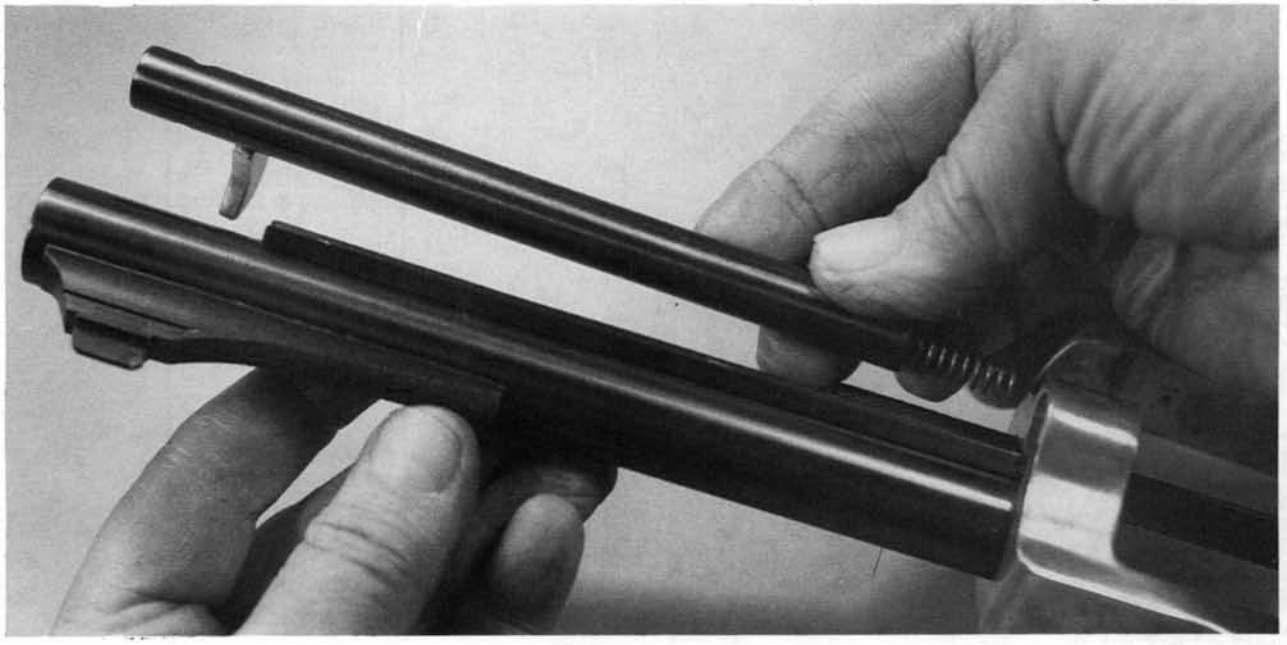


22. An Allen wrench is used to take out the ejector housing retaining screw.

23. The ejector housing is often tightly fitted, and it may be necessary to use a drift and hammer, as shown, to nudge it forward out of the frame.

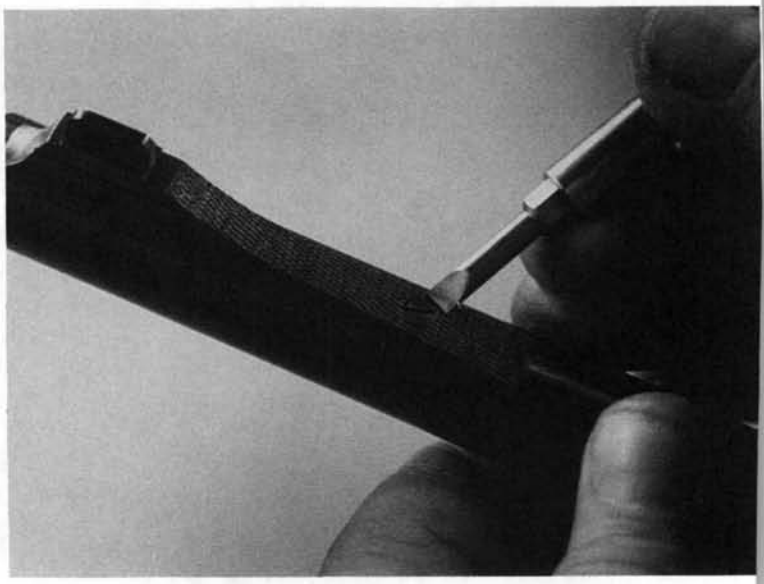


24. Remove the ejector assembly toward the front. The spacer rib is permanently attached to the barrel, and it is not removed. The ejector and its spring are easily removed from the housing toward the rear.



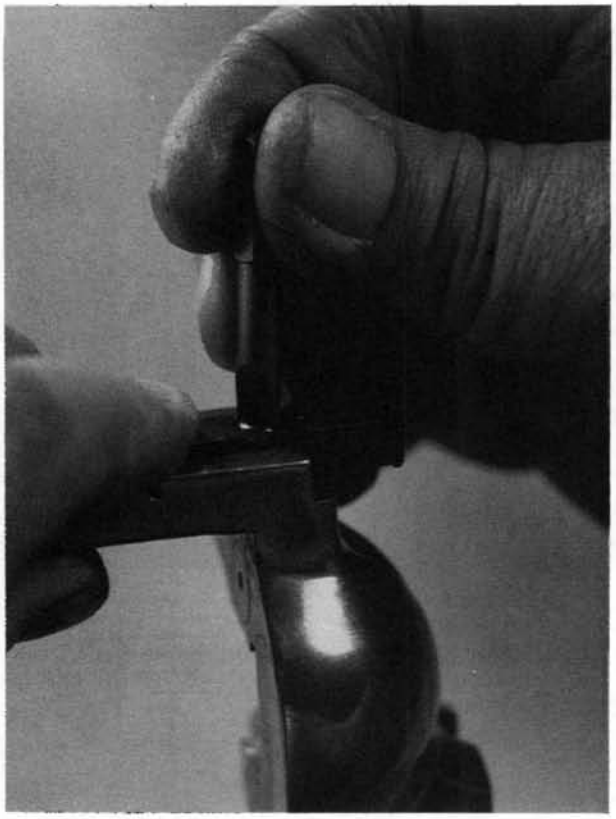
25. The cylinder base pin can now be removed from the frame

26. The front sight is retained by two screws. One is visible, as shown. The other is covered by the sight blade, and the blade must be drifted out of its dovetail for access to the screw. If the sight is to be taken off, drift out the blade before removal of the rear screw.



27. Drift out the cross-pin at the front of the rear sight.

28. Keep tension on the front of the sight, and back out the elevation screw. The sight will be pushed upward by the spring as the screw clears.

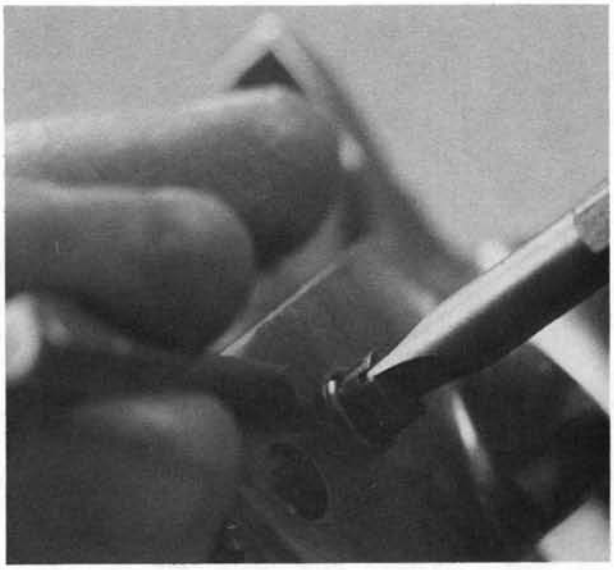


29. Remove the rear sight spring from its well in the top of the frame.

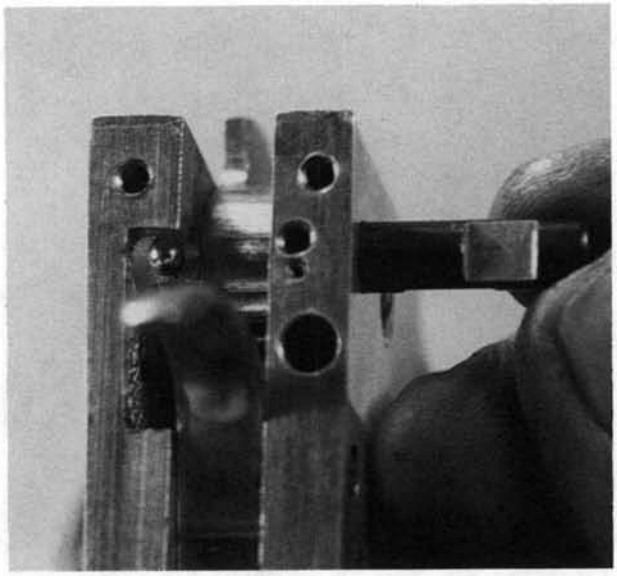
30. If removal of the firing pin and its spring and housing is necessary, insert an Allen wrench in the sight screw hole, and back out the Allen screw that retains the firing pin assembly. In normal takedown, this system is best left in place.

Reassembly Tips:

1. When replacing the hammer pivot screw, note that the spring-ring lock must be pressed into place as the screw head enters the frame. The frame is sure to be marred by this operation. When I reassembled my gun, I removed the spring lock, and replaced it with a small lock washer to give the proper seating depth.



2. When replacing the safety, be sure the two depressions for the detent ball are on the left side, and are turned toward the ball. This can be gauged by keeping the small recess shown in alignment with the retaining screw.



When replacing the grip frame, remember to first insert the hammer spring assembly, and be sure that all of the springs bear on their respective parts.

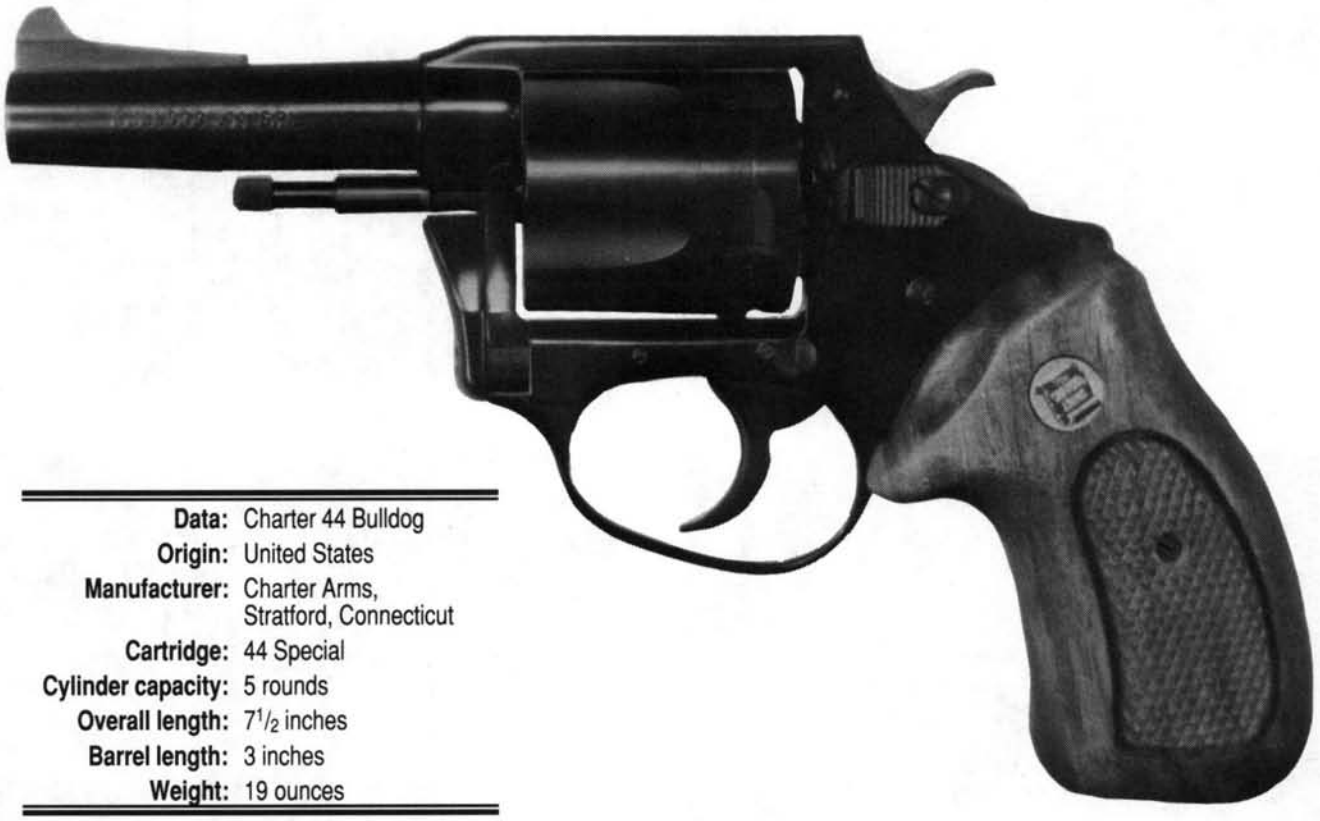
3. When replacing the cylinder base pin, it must be oriented so that its side recess aligns with the retaining screw.

Charter 44 Bulldog

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Charter 44 Bulldog also apply to the following guns.

Charter Bulldog Pug
Charter Pathfinder
Charter Police Undercover
Charter Bulldog Tracker
Charter Pit Bull
Charter Target Bulldog
Charter Off-Duty
Charter Police Bulldog
Charter Undercover

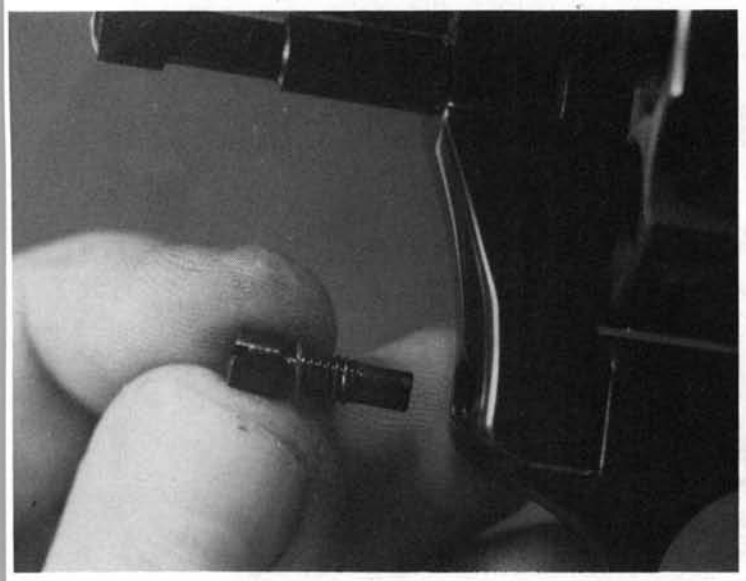


Data: Charter 44 Bulldog
Origin: United States
Manufacturer: Charter Arms, Stratford, Connecticut
Cartridge: 44 Special
Cylinder capacity: 5 rounds
Overall length: 7 1/2 inches
Barrel length: 3 inches
Weight: 19 ounces

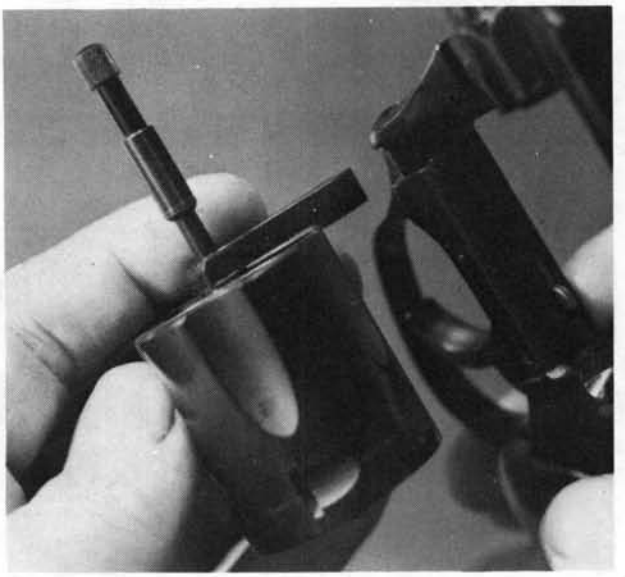
In 1973, Charter Arms adapted their excellent small-frame revolver to the 44 Special cartridge, and, in my opinion, made it one of the best personal defense or police back-up guns in current production. Its pronounced recoil takes it out of the "fun gun" class, but for its intended purpose it is without equal. The mechanism is simple, and these guns seldom need repair. However, there are a few points in total takedown that can give the amateur some difficulty. Mechanically, the Bulldog is essentially the same as the other Charter guns, and the instructions can be used for those as well.

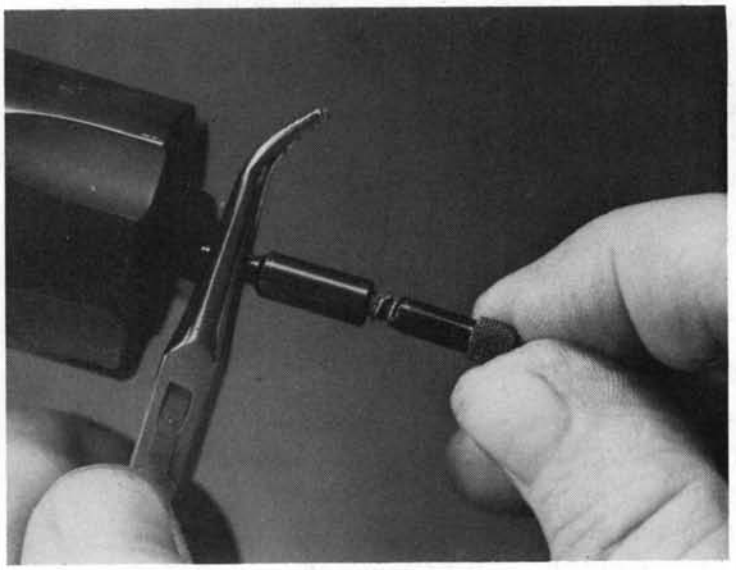
Disassembly:

1. The crane retaining screw is located at the lower front of the frame. Remove the crane screw, taking care not to lose the nylon lock-washer.

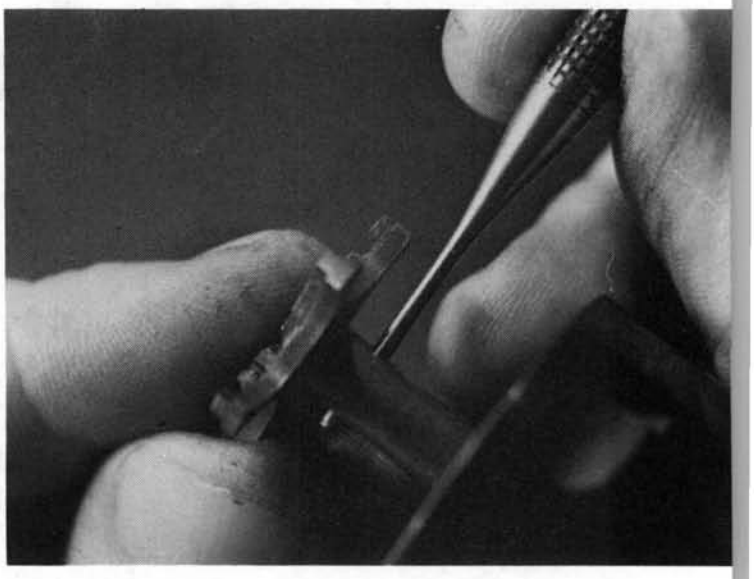


2. Operate the cylinder latch, swing the cylinder out and remove the cylinder and crane assembly toward the left.

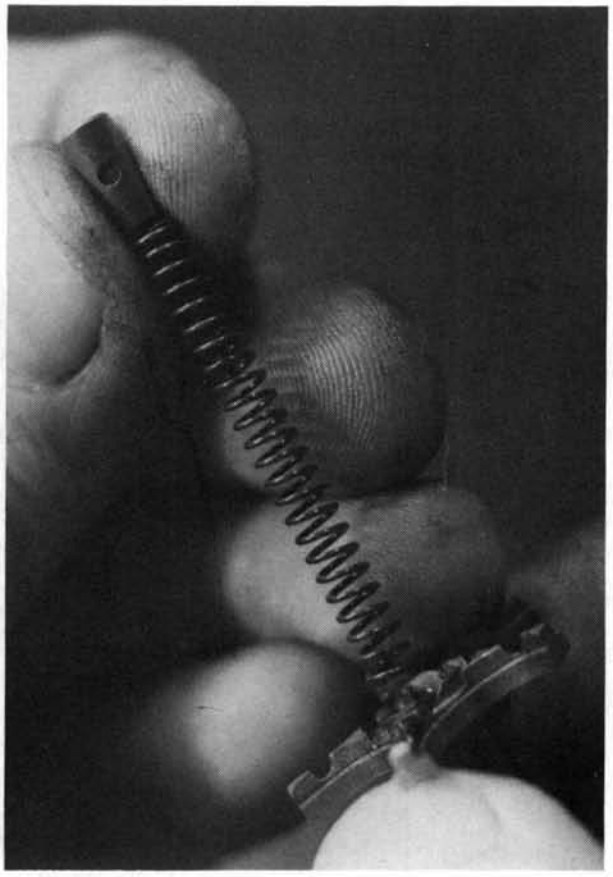


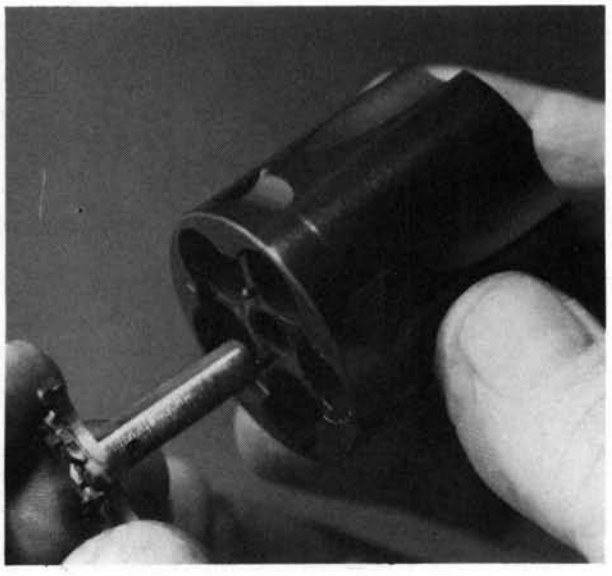


3. Use smooth-jawed pliers to grip the ejector rod near the crane, and unscrew the ejector knob. Remove the knob, spring, and sleeve toward the front. Remove the crane toward the front.



4. Depress the rear tip of the ejector rod and turn the rod until its internal pin aligns with the cross-hole in the ejector/ratchet piece. Use a drift punch of small diameter to push out the small cross-pin. **Caution:** *The spring is under compression and removal of the pin will release both the ejector rod at the front, and the ejector bushing at the rear. Ease them out, and take care not to lose the tiny bushing pin.*

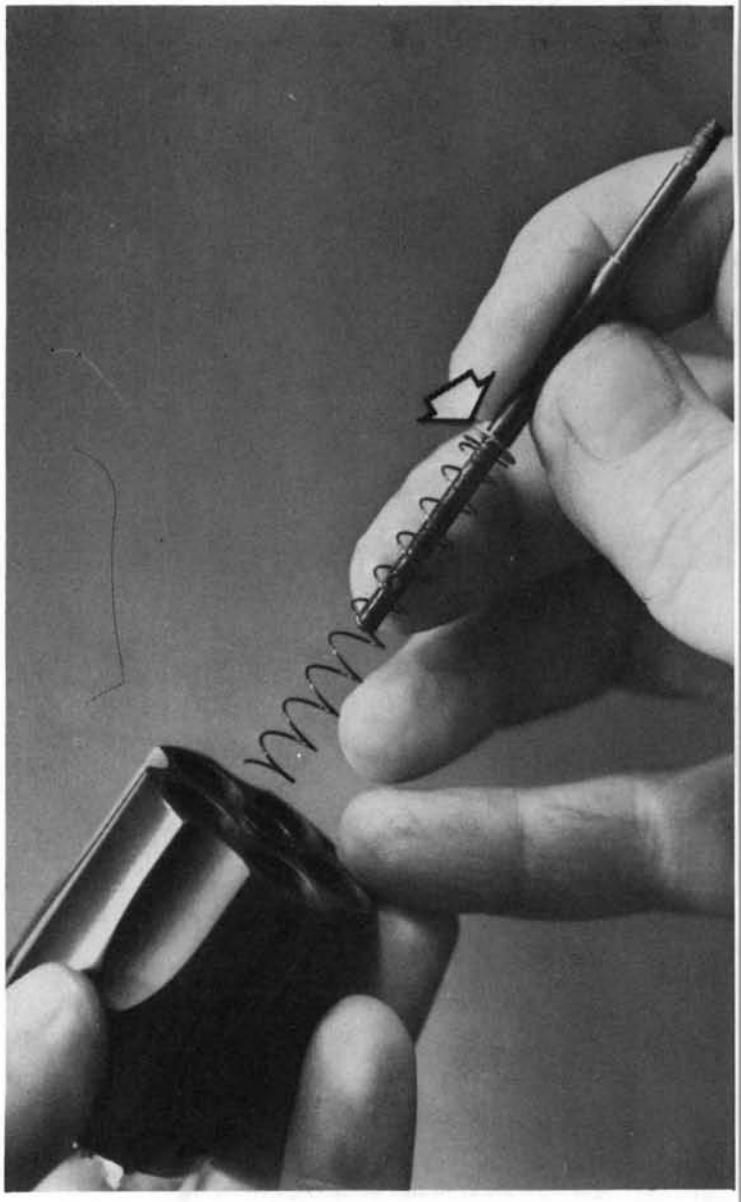




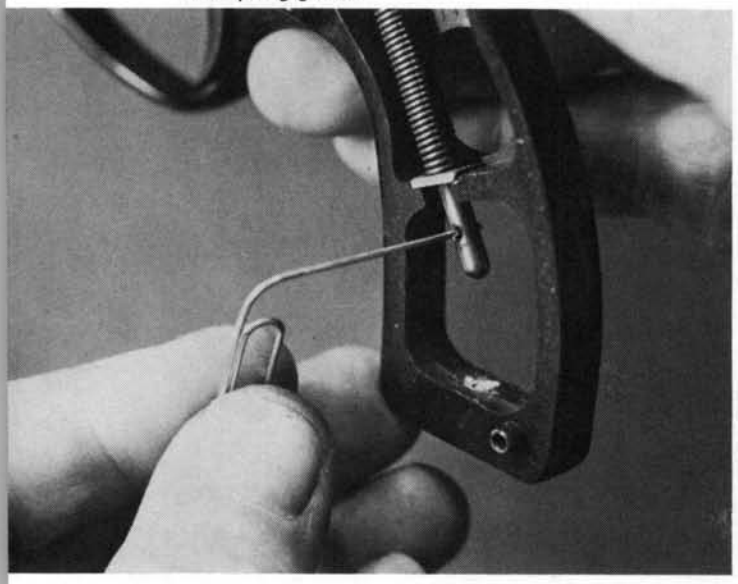
7. Remove the ejector/ratchet piece from the rear of the cylinder.

5. Remove the ejector bushing and spring from the ejector/ratchet piece.

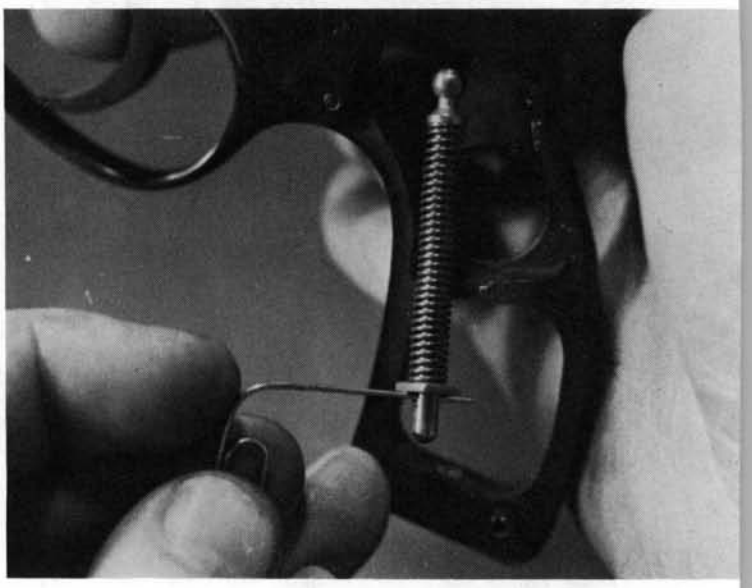
6. Remove the ejector rod and spring from the front of the cylinder. If the spring is removed from the rod, take care not to lose the compression washer (arrow).

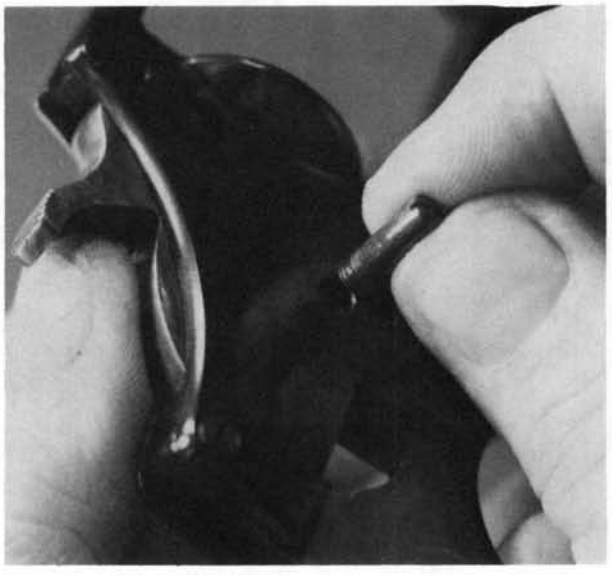


8. Remove the grips. Cock the hammer, and insert an opened paper clip through the cross-hole in the hammer spring guide.



9. Release the hammer and lower it gently, then remove the hammer spring unit toward the left and downward. If the unit is to be disassembled, take care, as the spring is under compression. Place the compression plate against a slightly opened vise, compress the spring by pushing on the guide, take out the paper clip, and slowly release the spring tension.



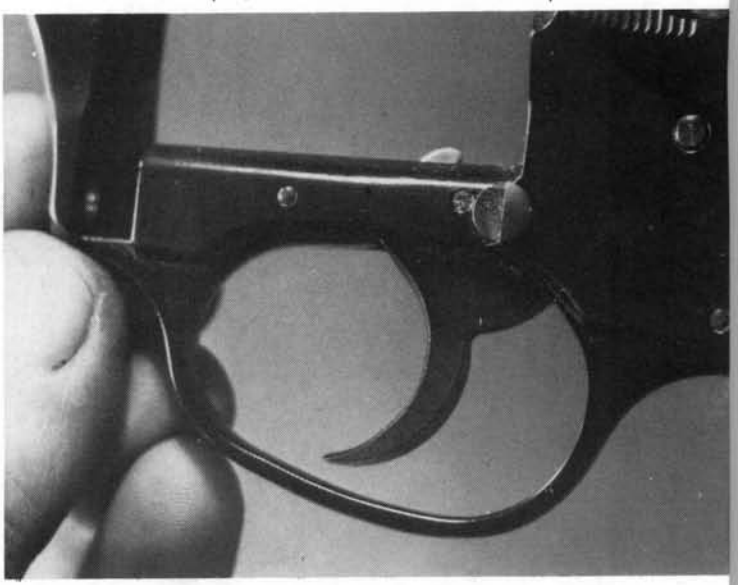


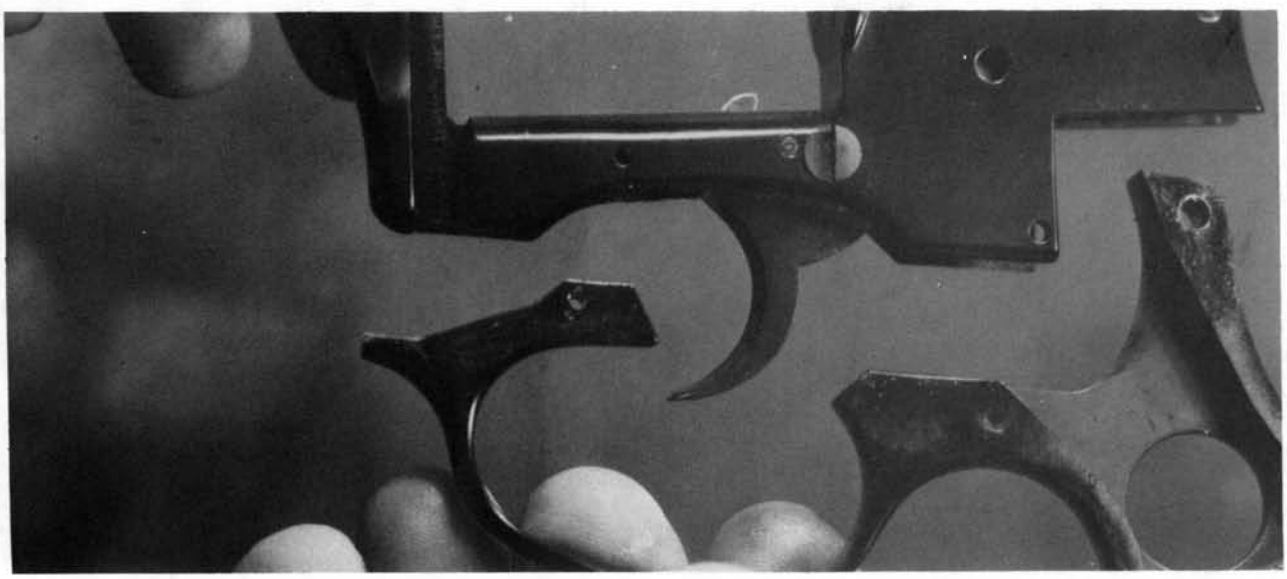
10. The hammer retaining screw is located at the center of the right side of the frame and comes out toward the right.

11. Pull the trigger to the rear and lift the hammer straight up out of the frame. Removal of the cross-pin at the front of the hammer will release the double-action lever and its plunger and spring.

12. Remove the cross-screw at the upper rear of the frame.

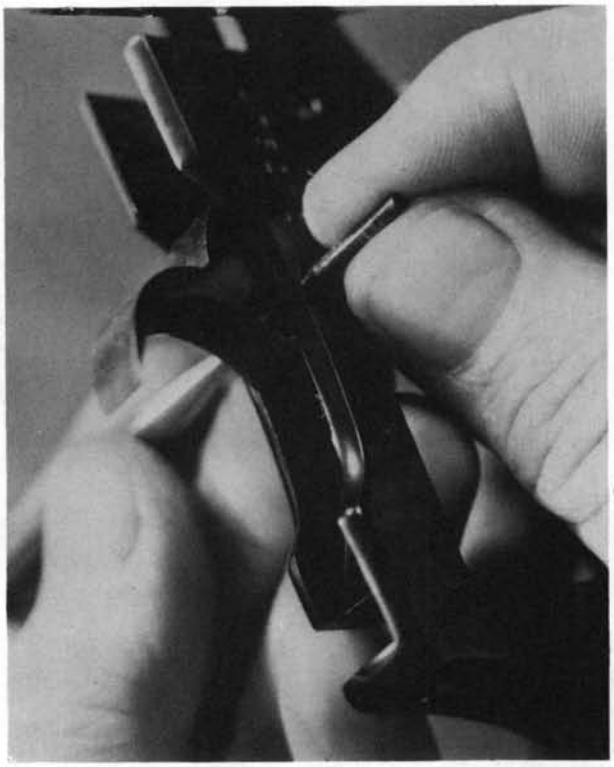
13. In addition to the cross-screw, the sub-frame is also retained by two pins at its lower edge, located forward and behind the trigger. Remove the forward cross-pin, then remove the rear cross-pin.





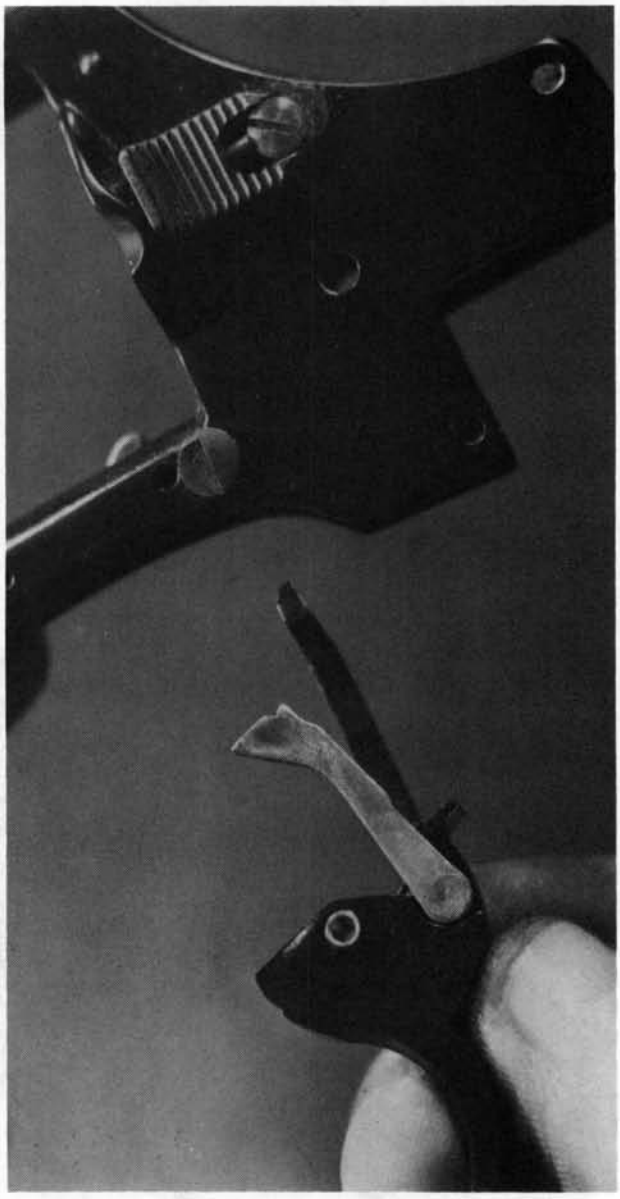
14. Remove the sub-frame downward.

15. Push out the cross-pin that retains the trigger. **Caution:** *The trigger spring is under tension, so restrain the trigger and ease it out.*

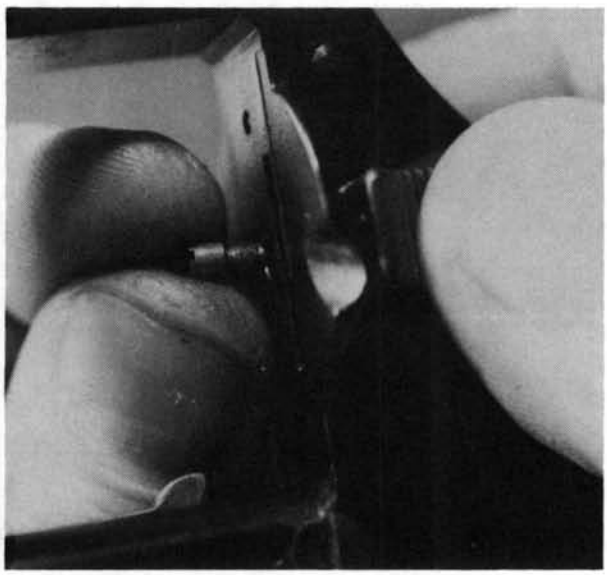


17. Push out the trigger pivot bushing, and remove the trigger spring from the top of the trigger.

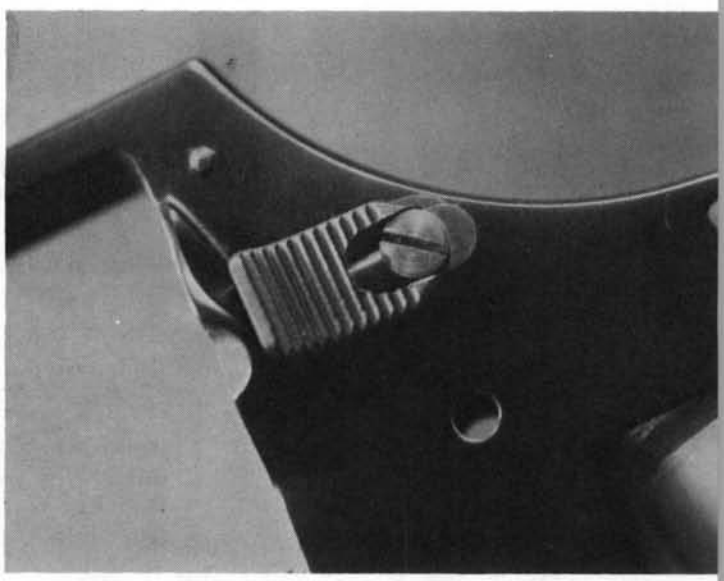
16. Remove the trigger assembly from the bottom of the frame. The cylinder hand and the transfer bar are easily removed from each side of the trigger.

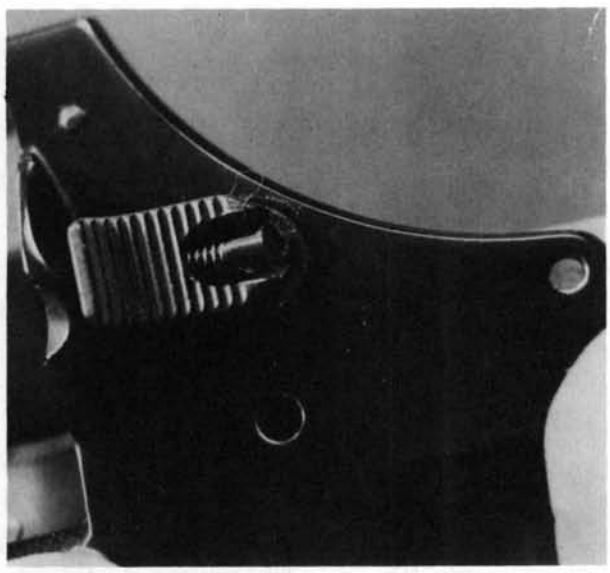


18. Remove the cylinder latch screw from its recess in the breech face.

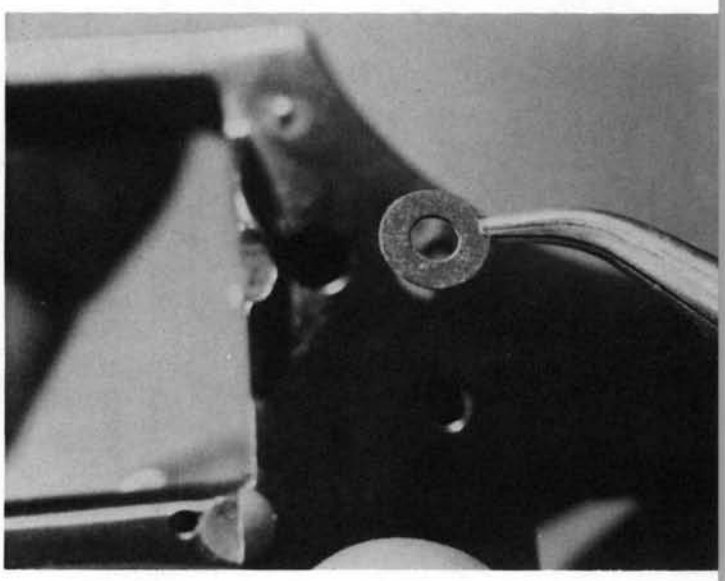


19. Remove the cylinder latch retaining screw and its small oblong cover plate from the left side of the frame. Note that the long tab of the cover plate goes toward the rear.





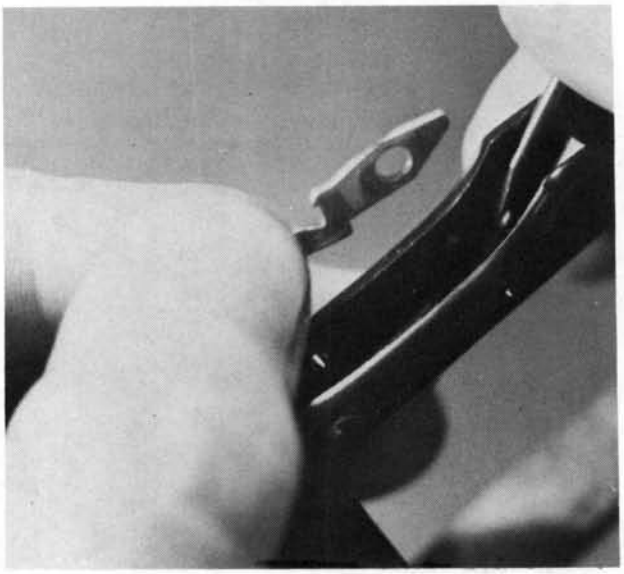
20. If the cylinder latch plunger and spring are left in their hole in the latch piece, take care that they aren't lost during removal of the latch piece. Move the latch piece toward the rear to clear its front lip from the frame, and remove the piece toward the left.

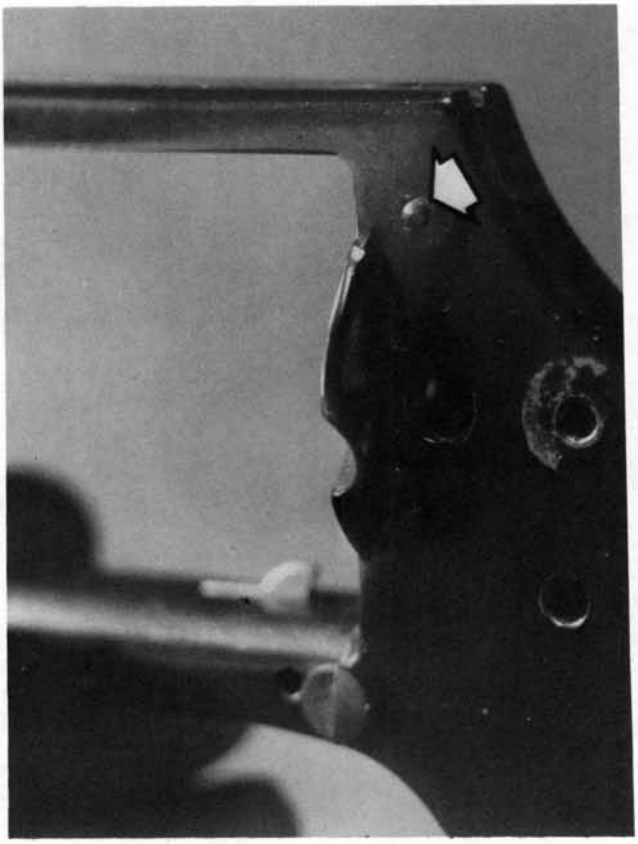


21. Remove the cylinder latch washer from the left side of the frame. This part will often fall free when the latch retaining screw is taken out, and is frequently unnoticed and lost.

22. Use a small screwdriver to depress the cylinder stop plunger, and tip the rear of the cylinder stop out of its slot in the frame.

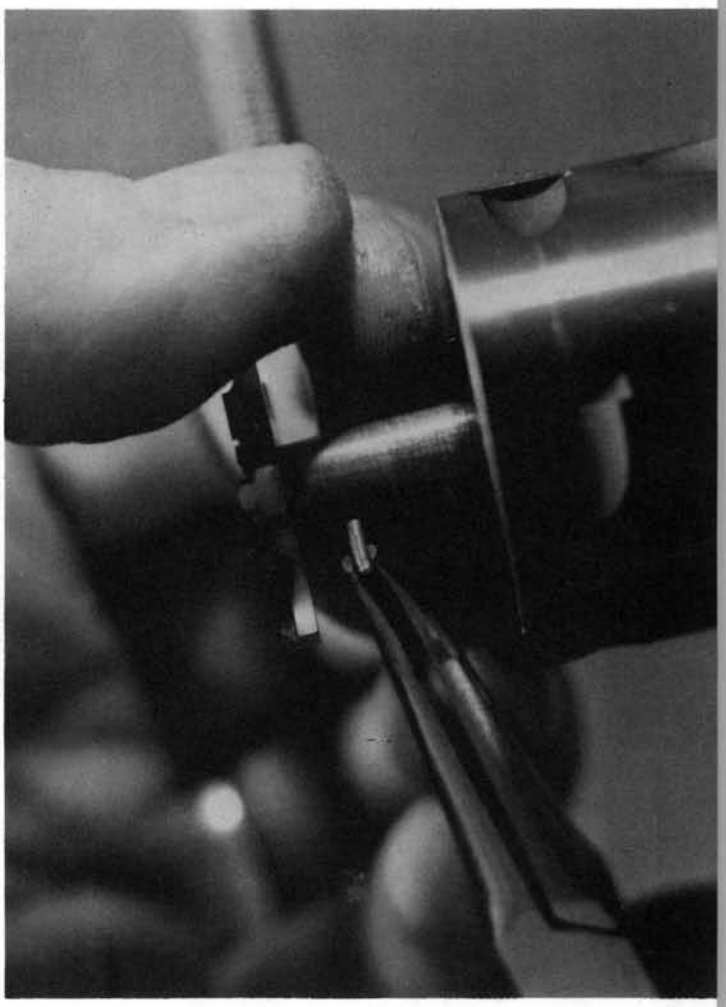
23. Move the cylinder stop inward, off its post, and remove it from the frame. Take care to release the plunger and compressed spring slowly. If it escapes, it can travel quite a distance.





24. The firing pin and its return spring are retained by a cross-pin at the top of the frame (arrow). After the pin is drifted out, they are removed toward the rear.

Reassembly Tips:



1. When reassembling the cylinder/ejector system, use a small-diameter drift punch to hold the components in place while inserting the retaining pin.

When replacing the cylinder latch retaining screw, use a small screwdriver to depress the plunger and spring while inserting the screw. Be sure the small cover plate is installed with its long tab toward the rear.

When assembling the trigger system, note that the looped end of the trigger spring goes toward the rear, and must rest on the inner shelf of the cylinder hand. As the trigger is moved into place, the other arm of the trigger spring is compressed by placing the trigger at the rear of the frame recess, with the upper arm of the spring bearing on the edge of the vertical inner surface of the frame. Keeping upward pressure on the trigger, move it forward and insert a small drift punch to hold it in place while inserting the cross-pin.

When replacing the ejector knob, be sure it is tight enough to prevent loss, but do not over-tighten it. The knob is made of alloy, and extreme pressure will strip the threads.

Colt Lightning

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt "Lightning" also apply to the following gun.

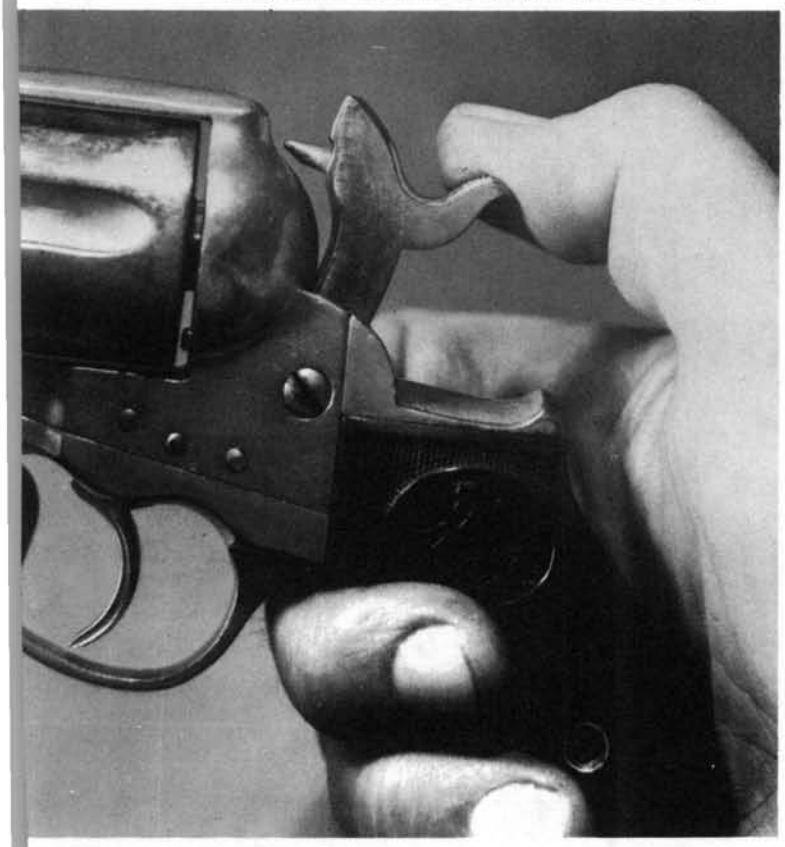
Colt "Thunderer"

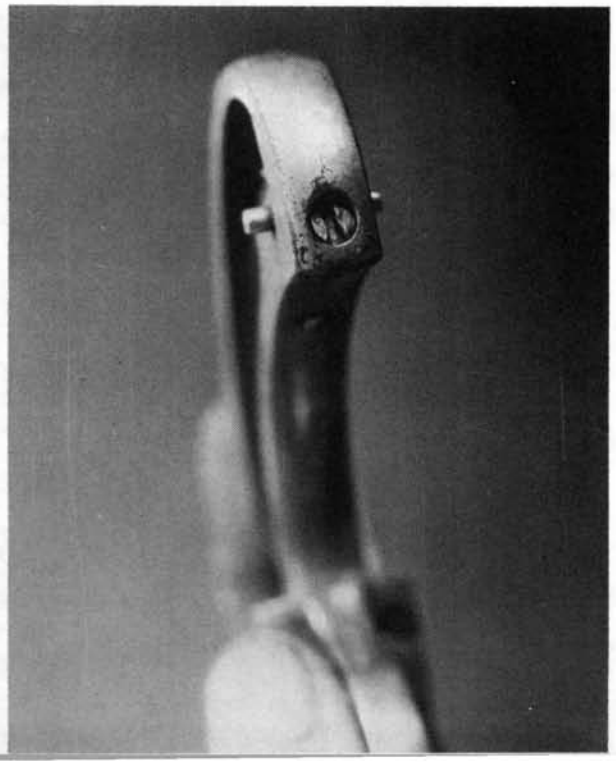
Data:	Colt "Lightning"
Origin:	United States
Manufacturer:	Colt's, Hartford, Connecticut
Cartridges:	41 Colt, 38 Colt
Cylinder capacity:	6 rounds
Overall length:	9 inches (with 4 1/2-inch barrel
Barrel length:	4 1/2 to 6 inches
Weight:	23 ounces

Most every Colt collector will know that the names "Lightning" for the 38 and "Thunderer" for the 41 caliber were not official Colt names. They were coined by a distributor for advertising purposes. The Colt firm did have an officially-named Lightning Model gun, but it was a slide-action rifle. The revolver covered here has the dubious honor of having, perhaps, the worst double-action system ever devised. Any "Lightning" that works properly is a rare exception.

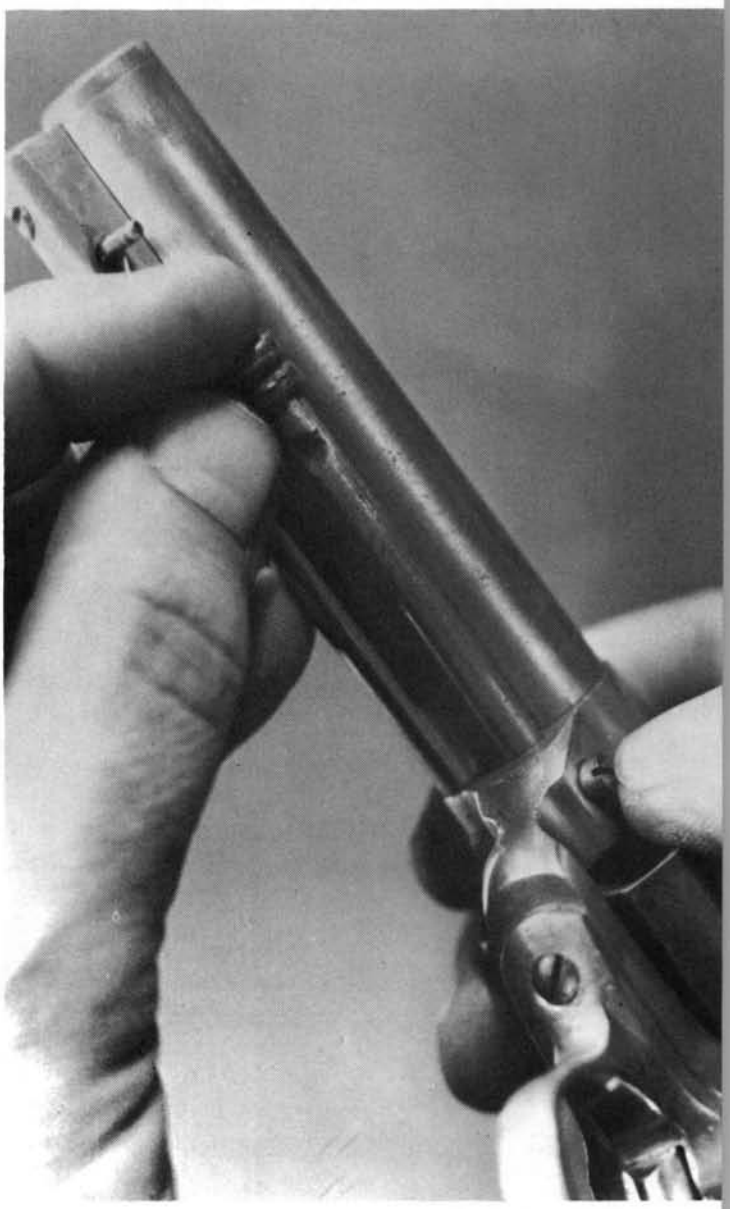
Disassembly:

1. Set the hammer in the loading notch (half-cock position) to free the cylinder from the cylinder stop.



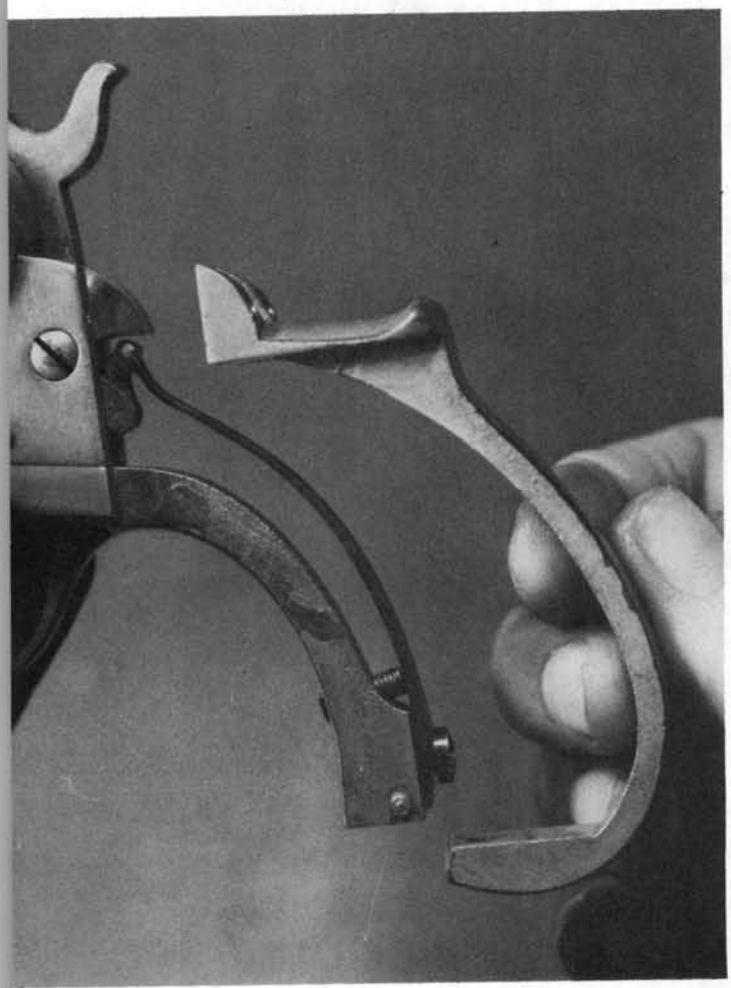


2. Depress the cylinder base pin latch on the left side, and remove the base pin. Open the loading gate on the right side, and remove the cylinder toward the right.

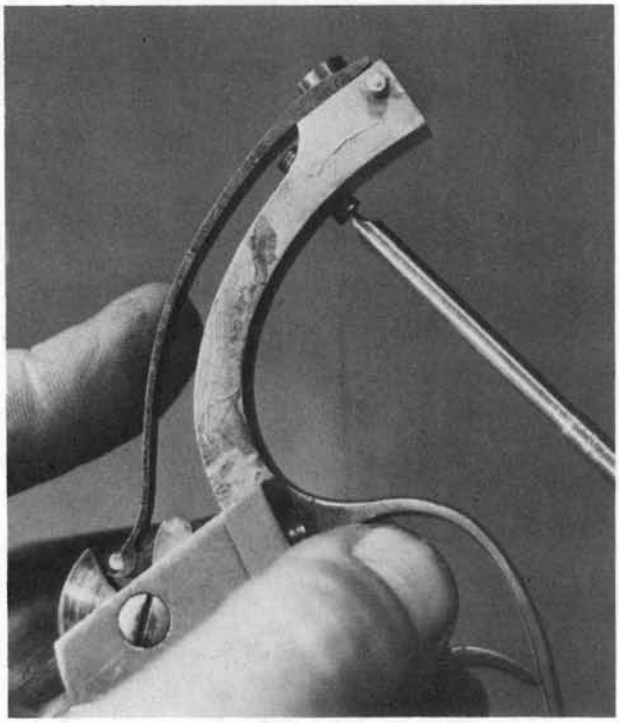


3. Remove the screw that retains the grips, and take them off. Remove the screw at the bottom of the grip frame.

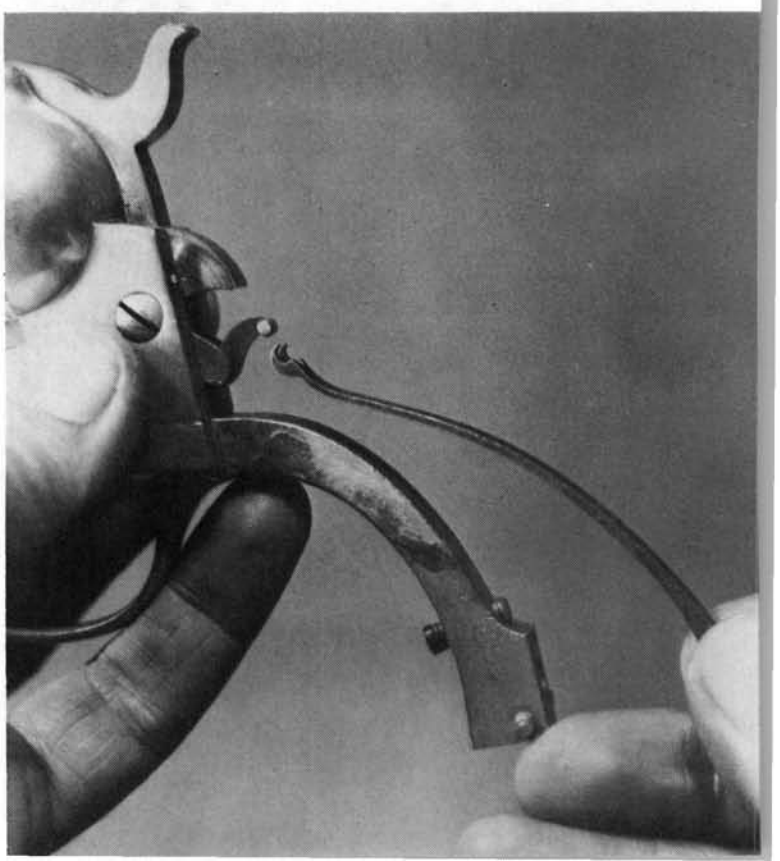
4. Remove the two screws at the upper rear of the grip frame and pull it back and off.



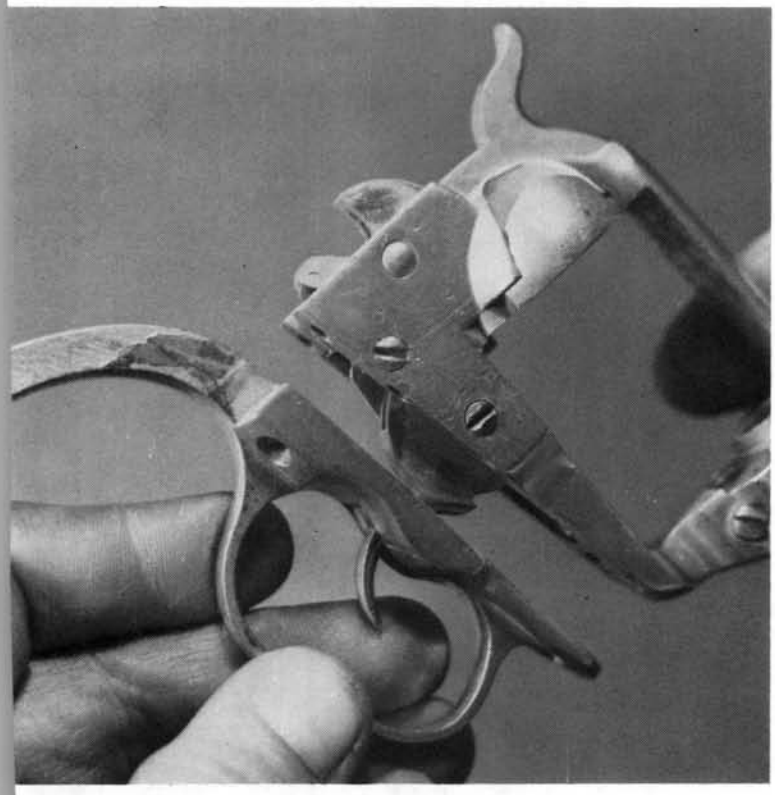
5. Back out or remove the hammer spring tension screw.



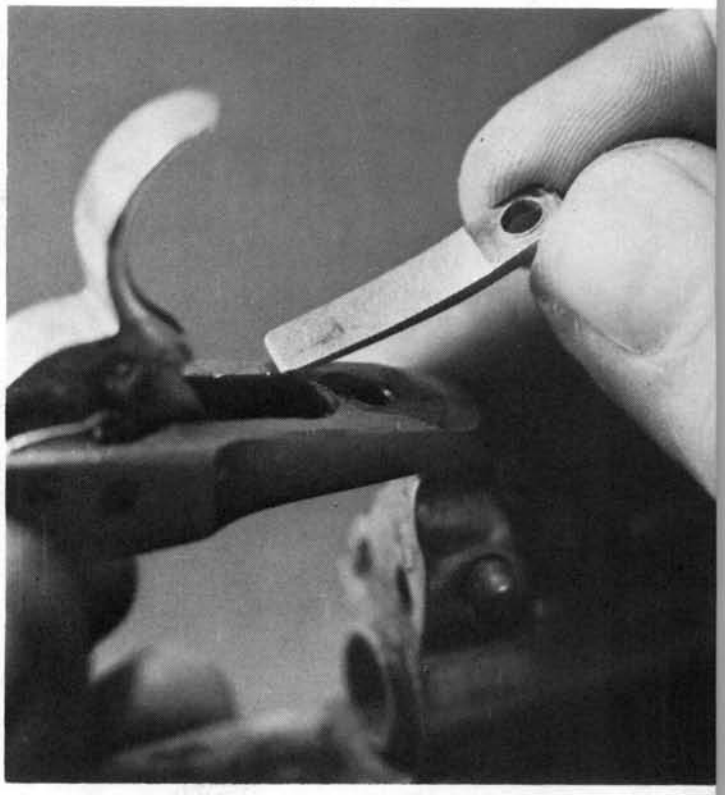
6. Remove the hammer spring mounting screw located at the base of the spring. Detach the hammer spring hooks from the stirrup on the hammer and remove the spring toward the rear.

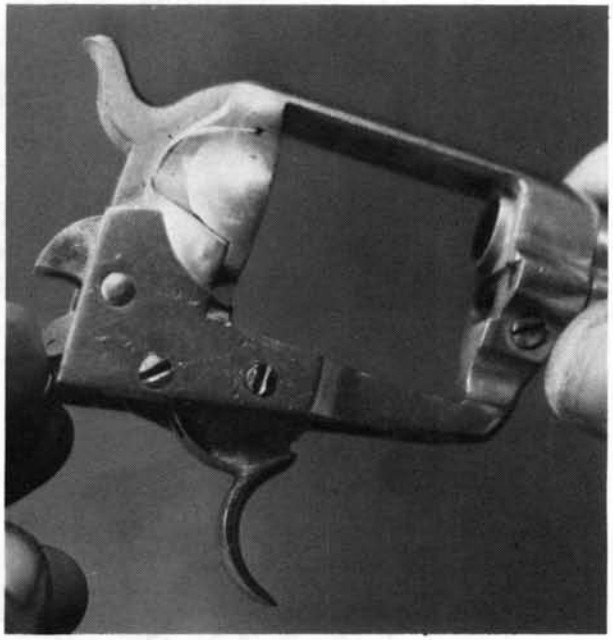


7. Remove the three screws that retain the trigger guard and frontstrap unit. Move the guard slightly forward to clear the front lip of the trigger, and pull the guard and frontstrap unit down and off.



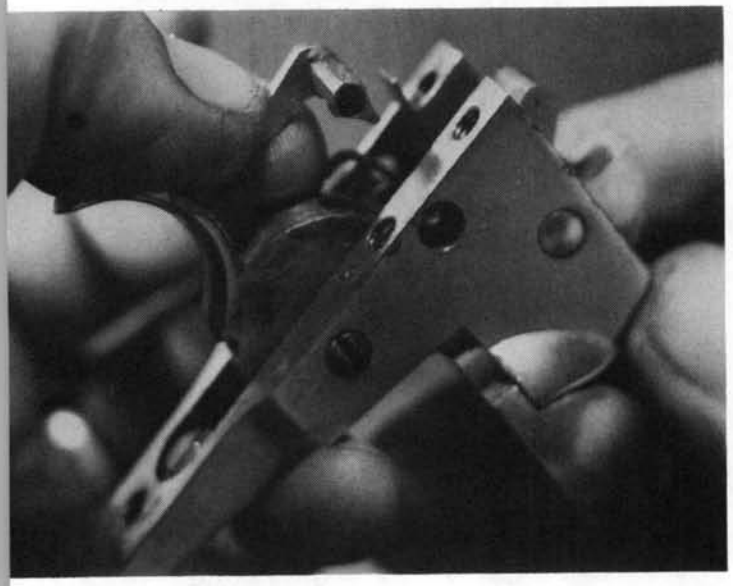
8. The trigger spring is retained by a large screw at the forward end of the trigger recess in the frame. Remove the screw, then the trigger spring from its recess.



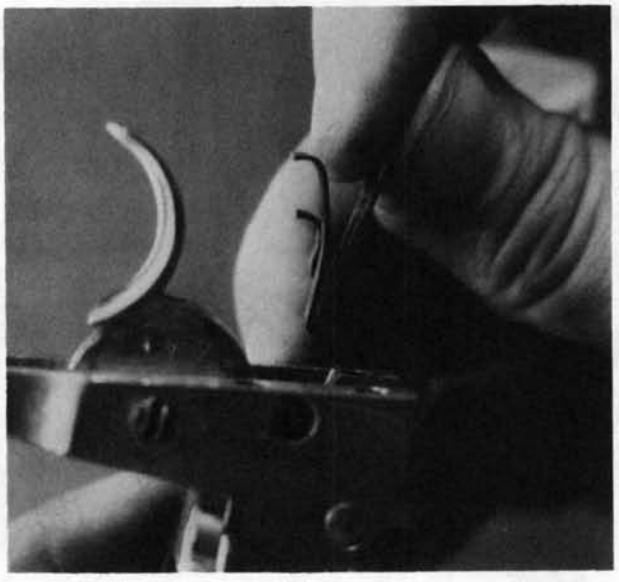


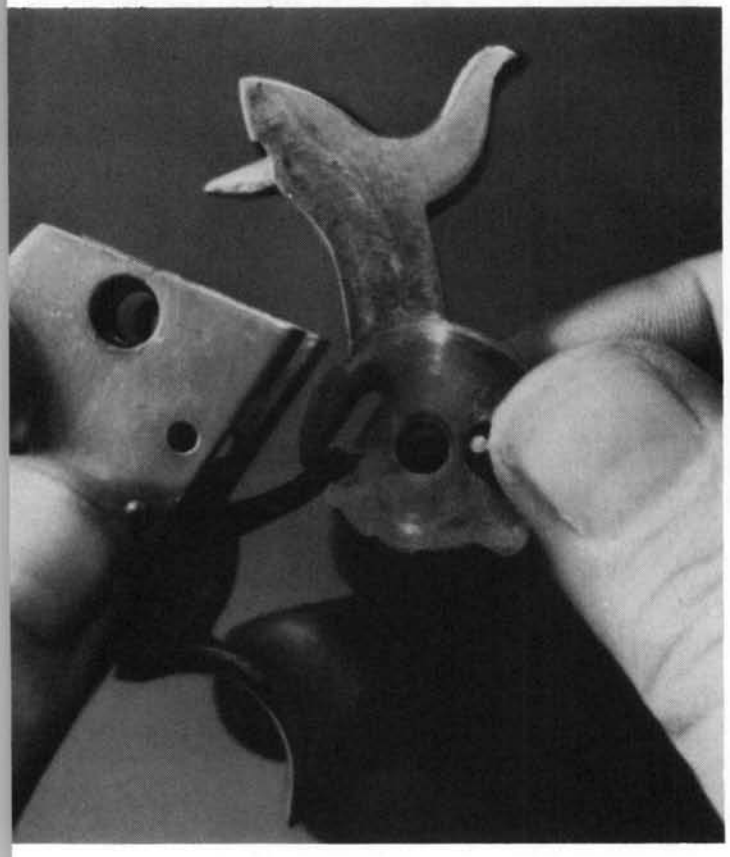
9. The forward screw on the right side retains the trigger, and the one to the rear is the sear screw.

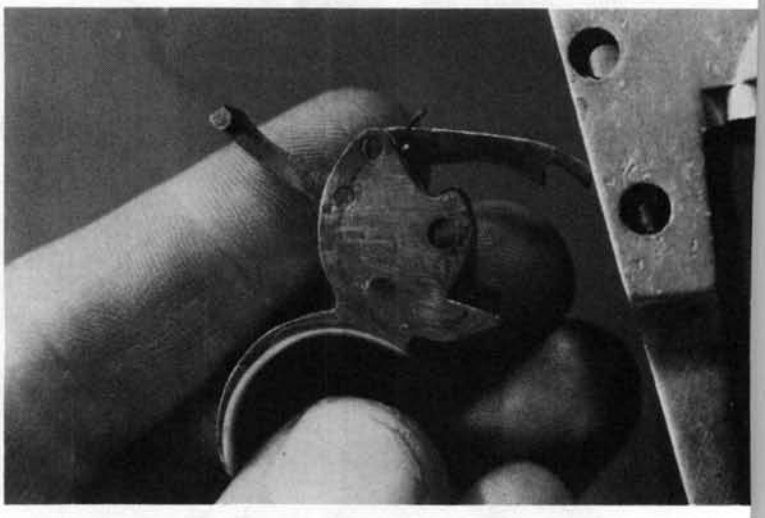
10. When the sear screw is removed, the sear and its spring will move slightly out of the frame. Detach the spring arm from the sear and remove the sear from the frame.



11. Remove the combination sear and cylinder stop spring from its recess in the frame.



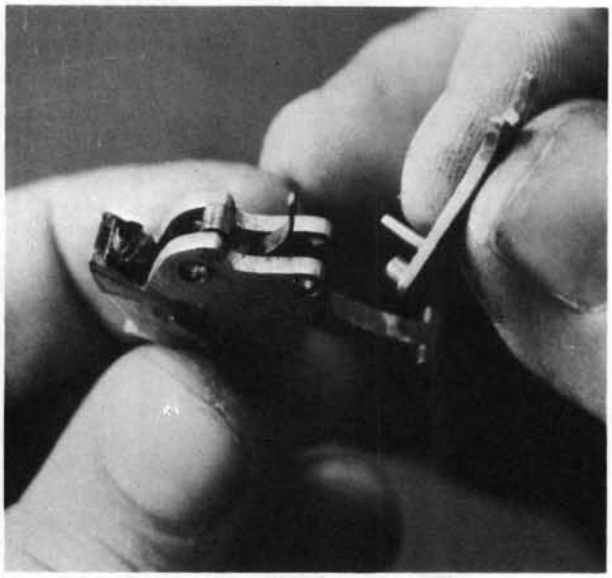




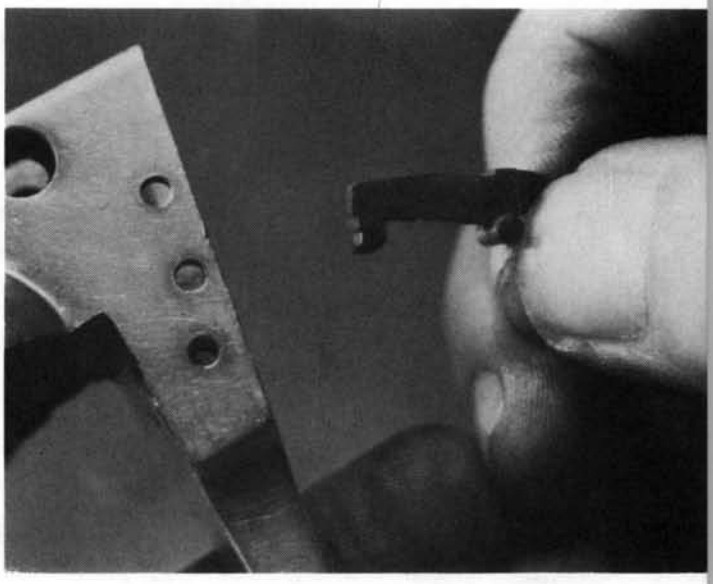
13. Take out the trigger screw, and pull the trigger assembly down and out of the frame.

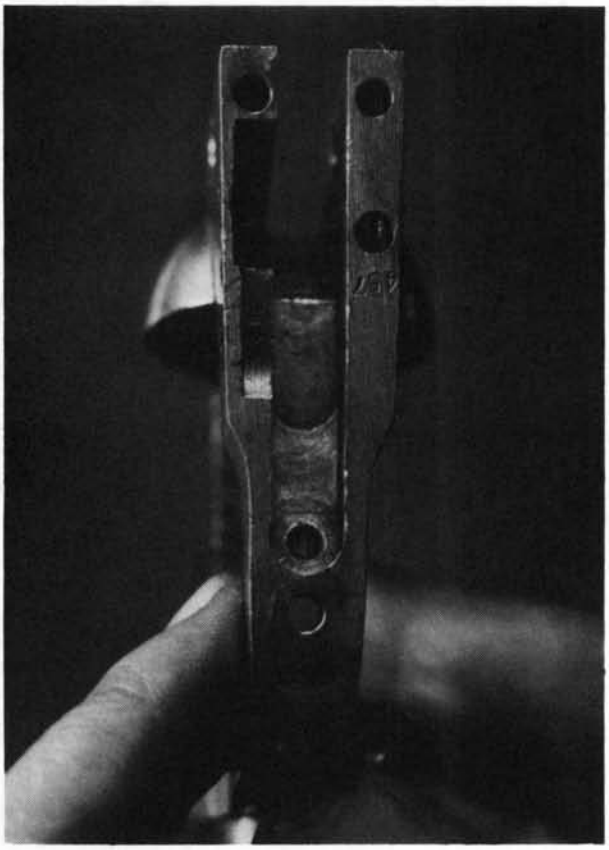
12. Take out the large screw on the left side of the frame which retains the hammer. Move the hammer down out of the frame, then move it toward the right to detach it from the double-action lever on the trigger.

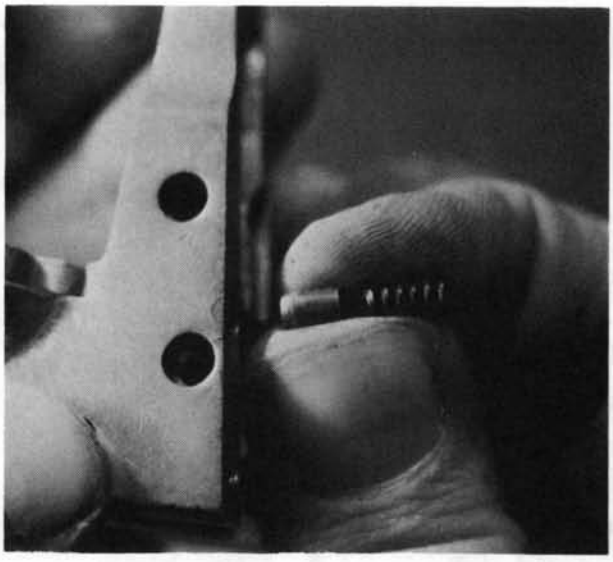
14. The cylinder hand is easily detached from the trigger. Drifting out a cross-pin will free the double-action lever, and a small screw at the front of the trigger holds the two springs which power the lever and hand. Note the arrangement of these springs for proper reassembly as they are not interchangeable. A small cross-pin retains the spring roller at the top of the trigger, but removal of the roller is not advisable in normal disassembly.



15. After the trigger is removed, the cylinder stop can be moved inward and out of its pivot-hole in the frame, then removed downward.



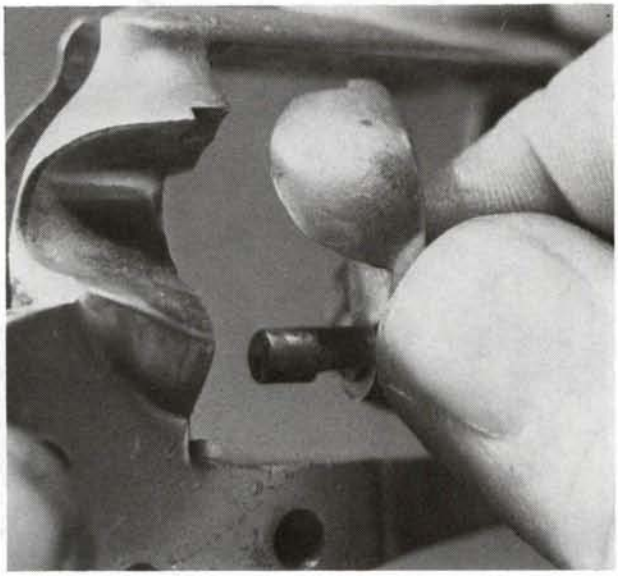


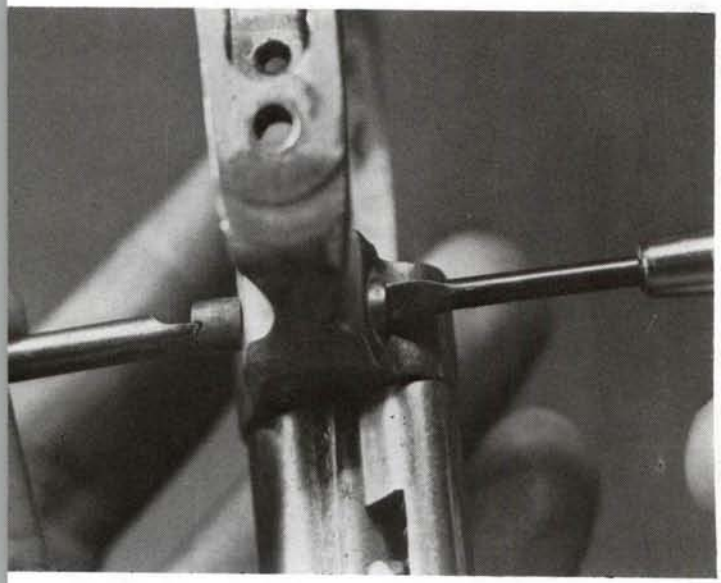


17. After the screw is taken out, remove the spring and plunger.

16. A screw in the underside of the right wall of the frame retains the gate spring and plunger.

18. Move the loading gate forward out of its hole in the frame.





19. Two screwdrivers are required for removal of the cylinder base pin latch. The button and spring come off toward the left, the latch piece toward the right.

20. A screw near its muzzle end retains the ejector rod housing. After taking out the screw, tip the front end of the housing away from the barrel to clear the screw stud. Remove the housing toward the front. The rod and spring are easily removed by sliding them out the rear of the housing.

Reassembly Tips:

Unbelievable as it may seem, there are no special tricks and no particularly difficult points in the reassembly of the Lightning. Just reverse the disassembly process slowly and carefully, and there should be no problems.

Colt Model 1849 Replica

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Model 1849 replica also apply to the following guns.

Colt Baby Dragoon
Colt Model 1851 Army
Colt Model 1851 Navy
Colt Sheriff's Model
Colt Wells Fargo

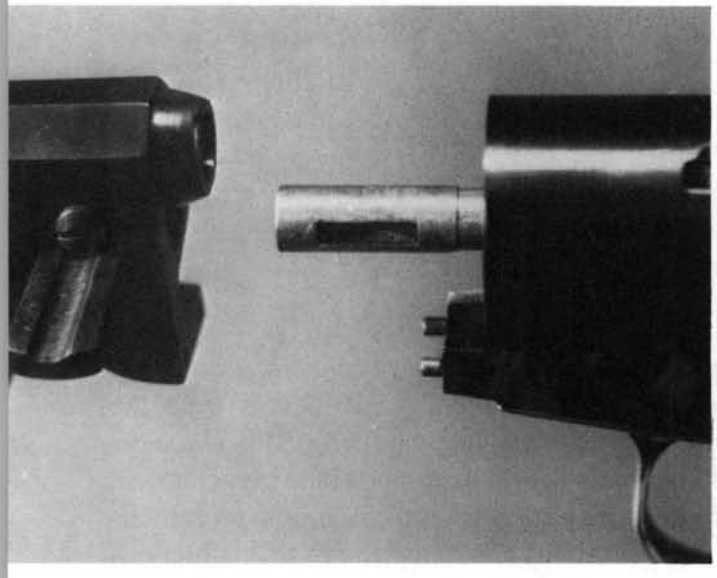
Data:	Colt Model 1849 Replica
Origin:	Italy
Manufacturer:	Various makers in Brescia. Imported by Dixie and others
Caliber:	31 caliber, percussion muzzleloader
Cylinder capacity:	5 shots
Overall length:	11 inches (with $5^7/_8$-inch barrel)
Barrel length:	$5^7/_8$ inches (other lengths made)
Weight:	24 ounces (with $5^7/_8$-inch barrel)

The original 1849 Pocket Revolver was made from 1850 to 1873 and differed in several small details from the previous model, the "Baby Dragoon" of 1848. The most recognizable difference is in the shape of the trigger guard, which was squared at the rear on the earlier model. Internally, the mechanism is the same, and the instructions which follow can be used for any Colt-pattern revolver of this general type. The reproduction shown in the photos was assembled from a kit sold by Dixie Gun Works.

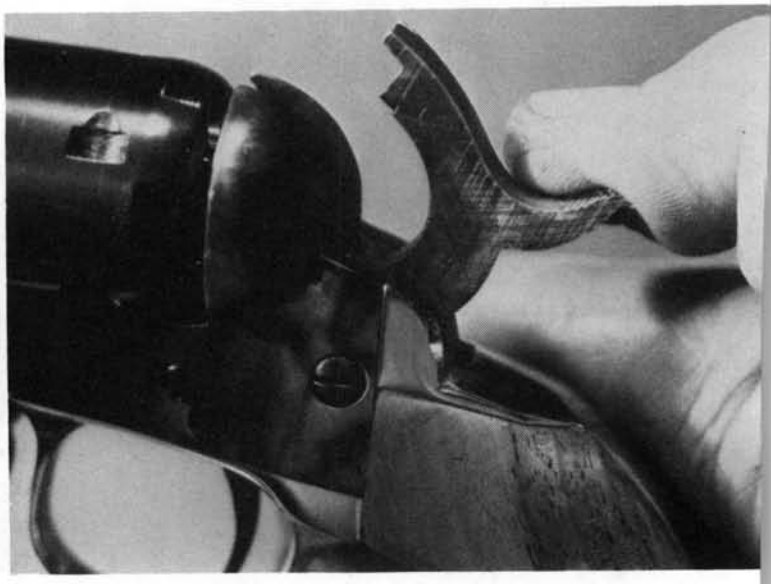
Disassembly:

1. With a small brass hammer, or a hammer and brass drift punch, tap the barrel wedge out toward the left side.

2. Pull the wedge out until it is stopped by its retaining screw.



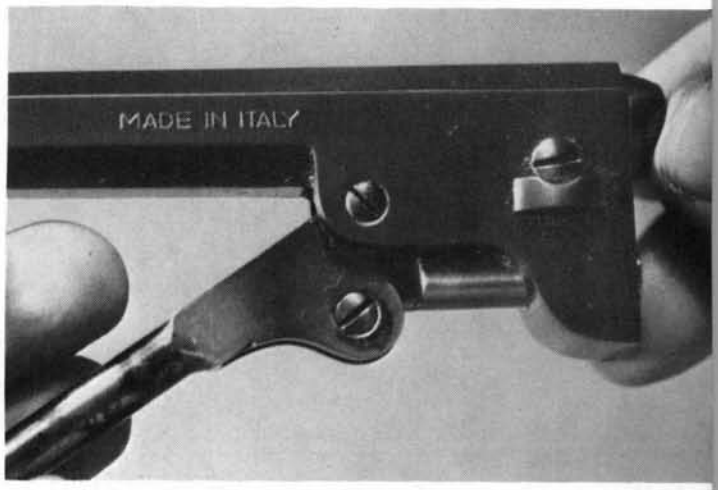
3. Remove the barrel assembly toward the front.

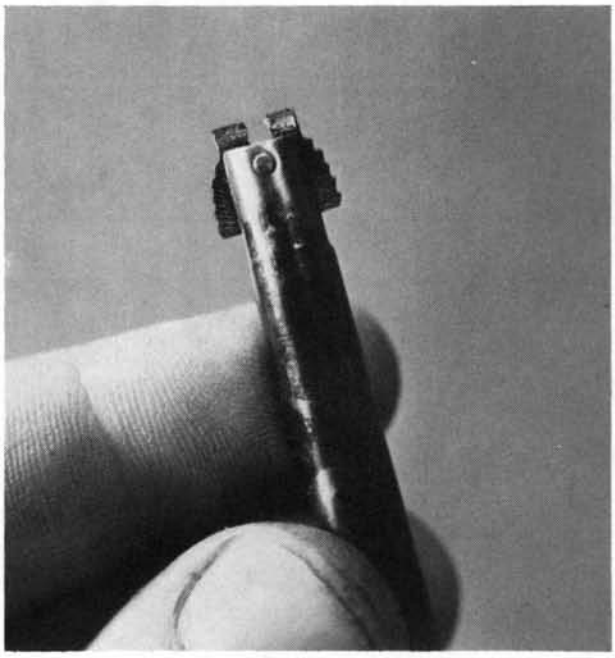


4. Set the hammer on the loading step, the middle notch, to free the cylinder.

5. Remove the cylinder toward the front.

6. Taking out the screw above the barrel wedge will allow removal of the wedge toward the left. Backing out the cross-screw below the barrel will release the loading lever assembly for removal. Removal of the screw in the lever allows separation of the lever and rammer.

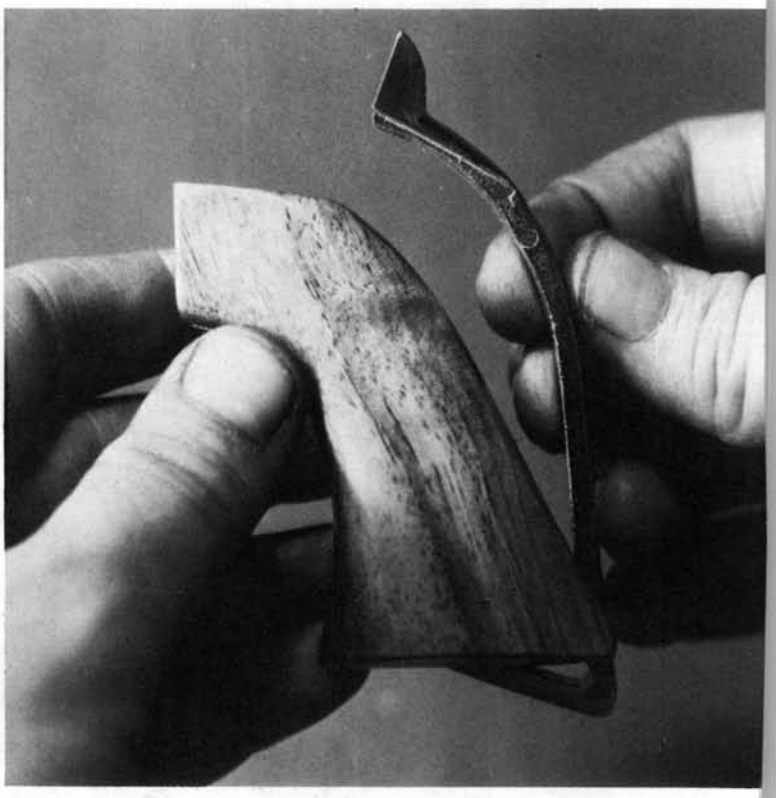


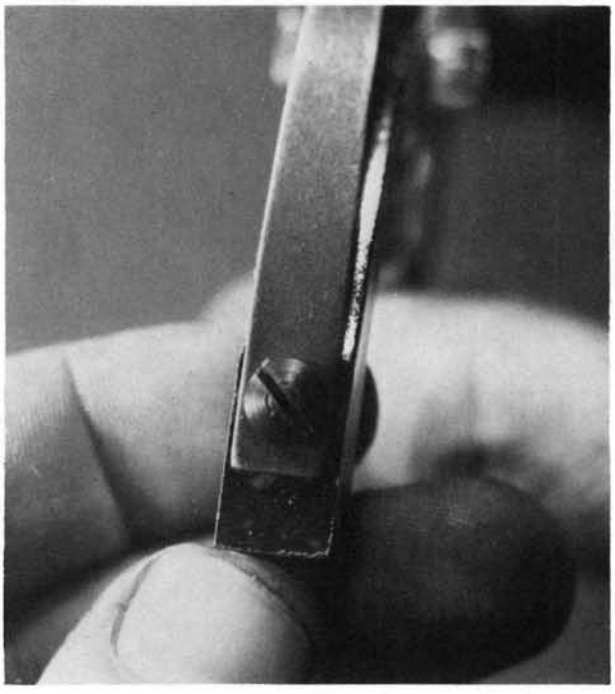


7. Drifting out the small pin at the end of the loading lever will release the lever latch and its spring for removal.

8. Remove the screw at the front underside of the grip frame, the two screws at the upper rear of the grip frame, and remove the backstrap of the grip frame and the attached grip piece toward the rear.

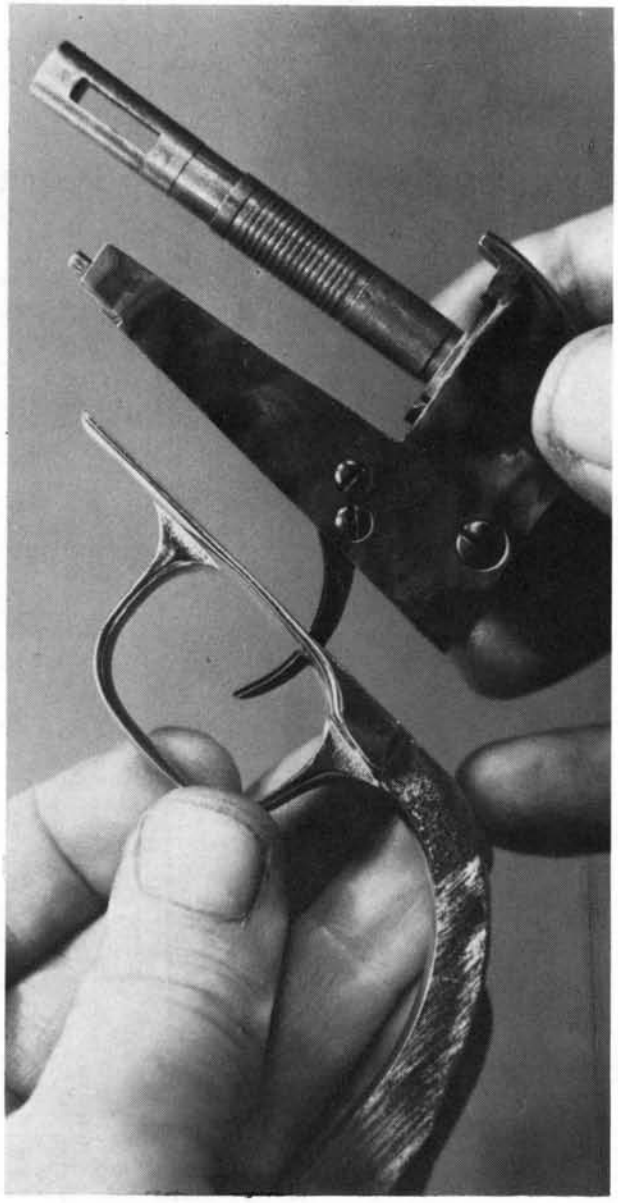
9. Tip the upper portion of the backstrap toward the rear, and remove it from the grip piece.



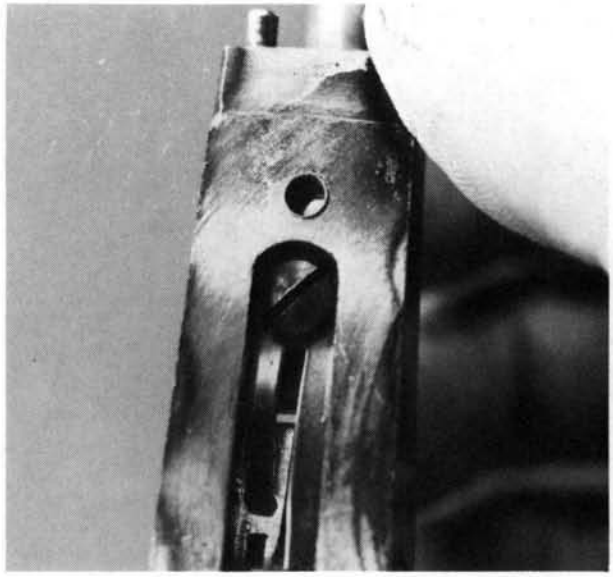


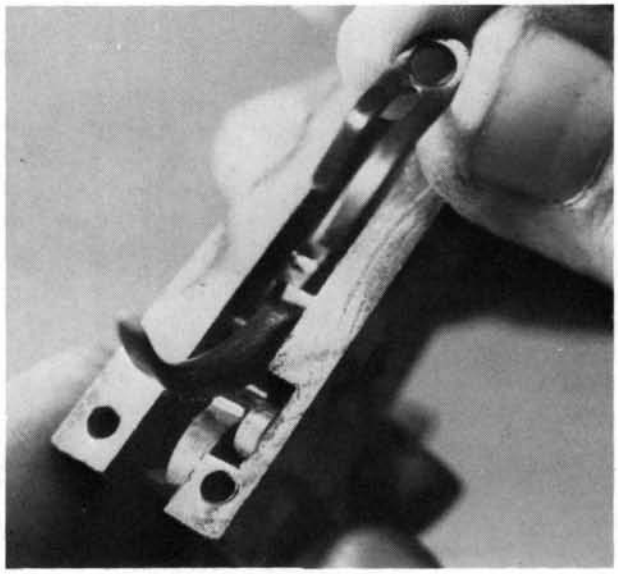
10. Remove the large screw at the lower rear of the frontstrap to release the hammer spring.

11. Remove the screw on the underside of the frame, just forward of the trigger guard, the two screws on the underside of the frame at the rear of the trigger guard, and remove the trigger guard frontstrap unit downward.



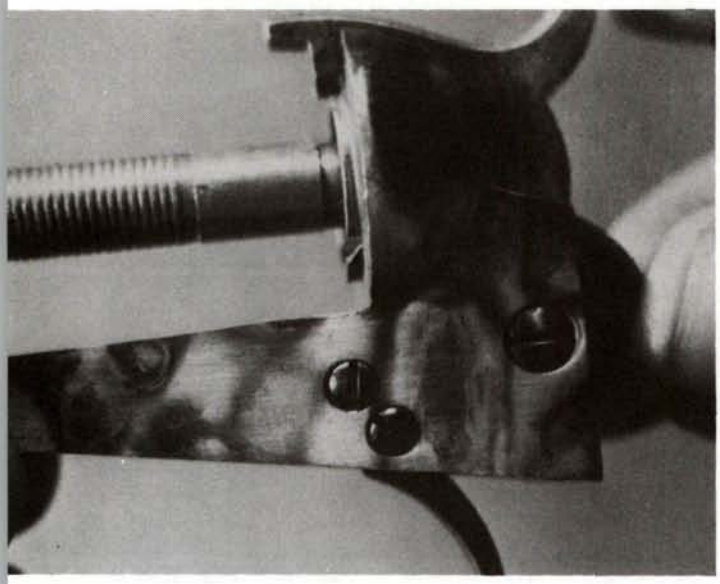
12. Remove the large screw at the front of the frame recess.



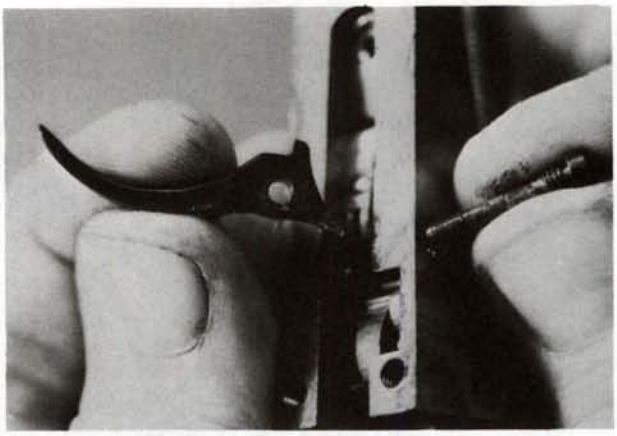


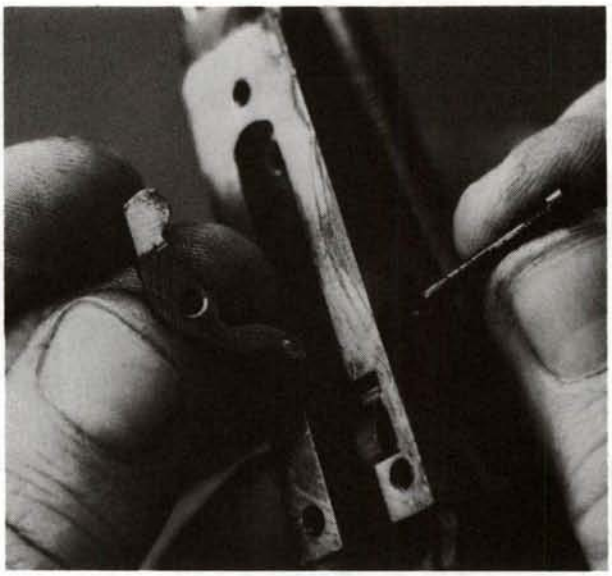
13. Remove the combination spring that powers the trigger and cylinder stop.

14. The cylinder stop, trigger, and hammer are retained by cross-screws in the frame.



15. Remove the trigger screw and take out the trigger from the bottom of the frame.





16. Take out the cylinder stop screw and remove the cylinder stop from the bottom of the frame.

17. Take out the hammer screw, and remove the hammer and cylinder hand downward. Remove the cylinder hand from the left side of the hammer.

Reassembly Tips:

The Colt Model 1849, like most other Colt-pattern revolvers, is easily reassembled in reverse order.

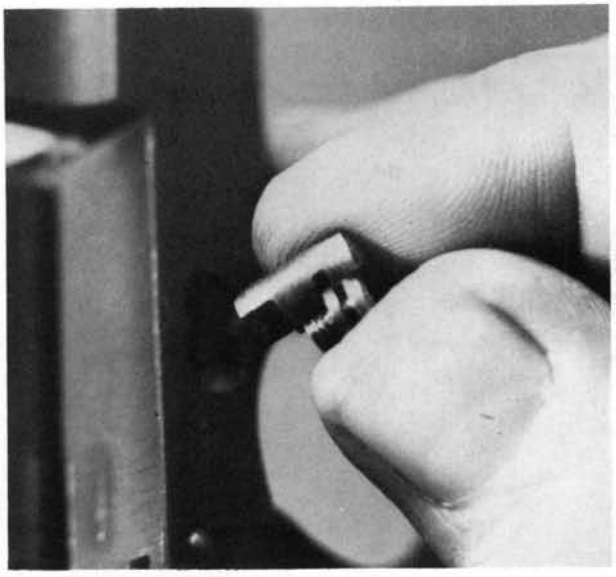
Colt Model 1917

Data:	Colt Model 1917
Origin:	United States
Manufacturer:	Colt's, Hartford, Connecticut
Cartridge:	45 ACP (in half-moon clips)
Cylinder capacity:	6 rounds
Overall length:	$10^{3}/_{4}$ inches
Barrel length:	$5^{1}/_{2}$ inches
Weight:	40 ounces

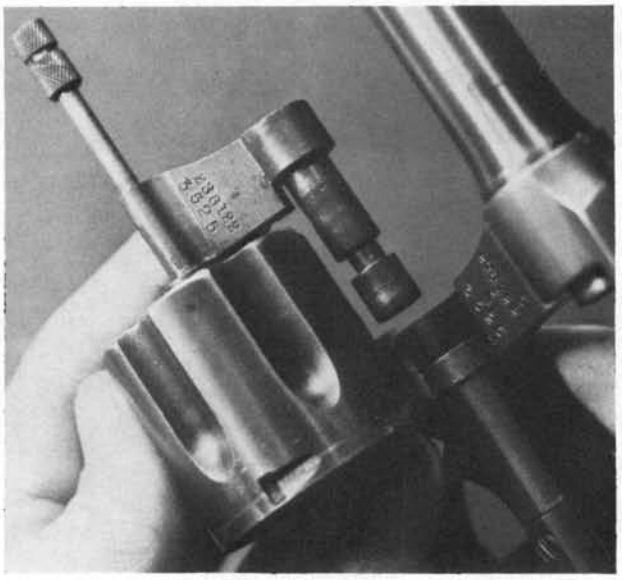
At the beginning of World War I, the newly-adopted automatic pistol had not been produced in quantities sufficient to arm the rapidly increasing numbers of troops, and the 45 Colt revolver was put into military production to serve as a substitute standard sidearm. The Model 1917 was designed to chamber the same 45 ACP round as the automatic pistol, and an ingenious three-round "half-moon" clip was made to facilitate extraction of the rimless cases. Later, a rimmed, lead-bullet round, the 45 Auto-Rim, was made for use in these guns.

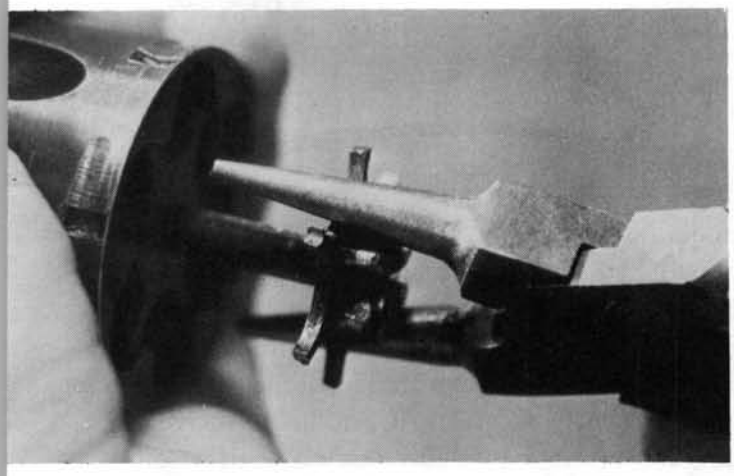
Disassembly:

1. Backing out the crane retainer screw will lift the crane retainer from its recess in the frame. Remove the screw and retainer from the right side of the frame.

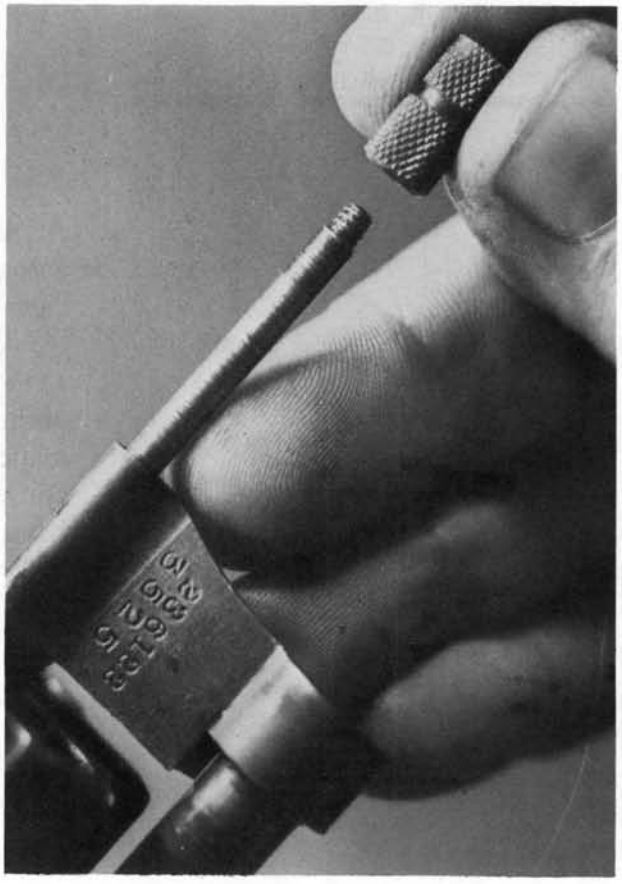


2. Move the crane post out of the frame, and remove the crane and cylinder assembly toward the front.



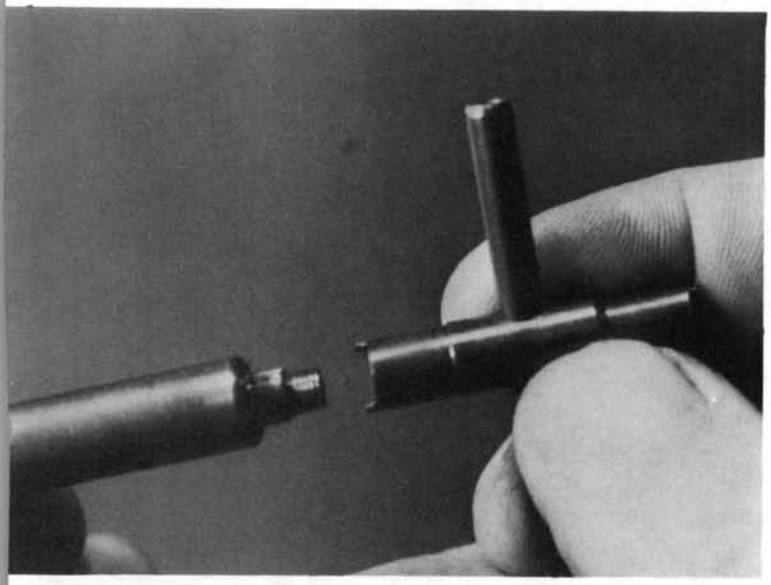


3. The existing commercial wrenches are not large enough for the ejector/ratchet of the Model 1917. To avoid marring the ejector star, use round-nosed wire bending pliers to unscrew the ejector toward the left (counterclockwise, viewed from the rear). Remove the ejector/ratchet from the end of the ejector rod.

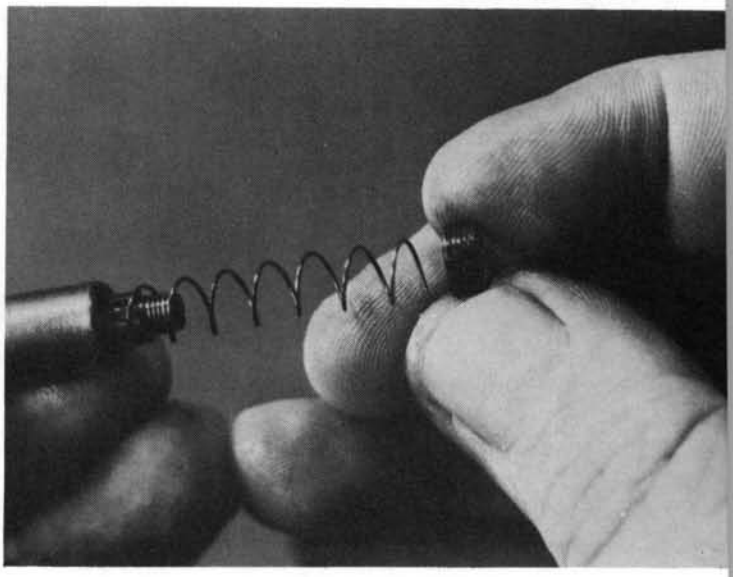


4. Unscrew the ejector knob from the front of the ejector rod. If the knob is very tight, use leather-padded pliers to start it. Then remove the cylinder from its arbor on the crane.

5. Use the large end of a standard Colt wrench to unscrew the retainer from the rear of the cylinder arbor, releasing the ejector spring and the ejector rod. Without the special wrench, it is extremely difficult to remove the retainer nut, and damage will be likely.

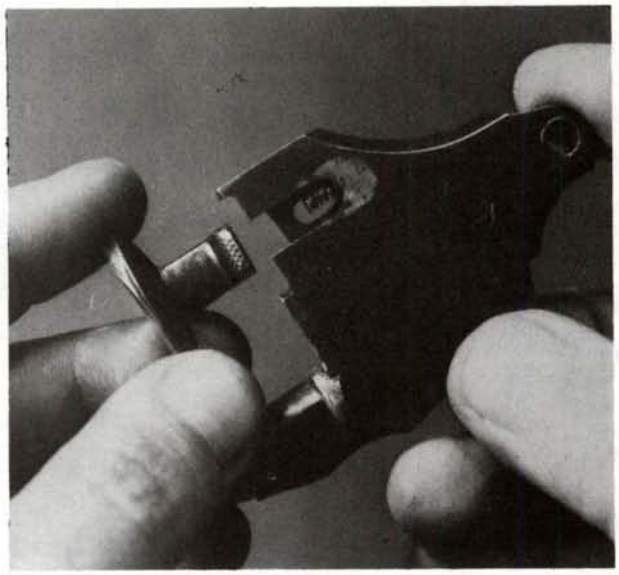


6. Remove the retainer nut and the ejector spring toward the rear. Then remove the ejector rod toward the rear.

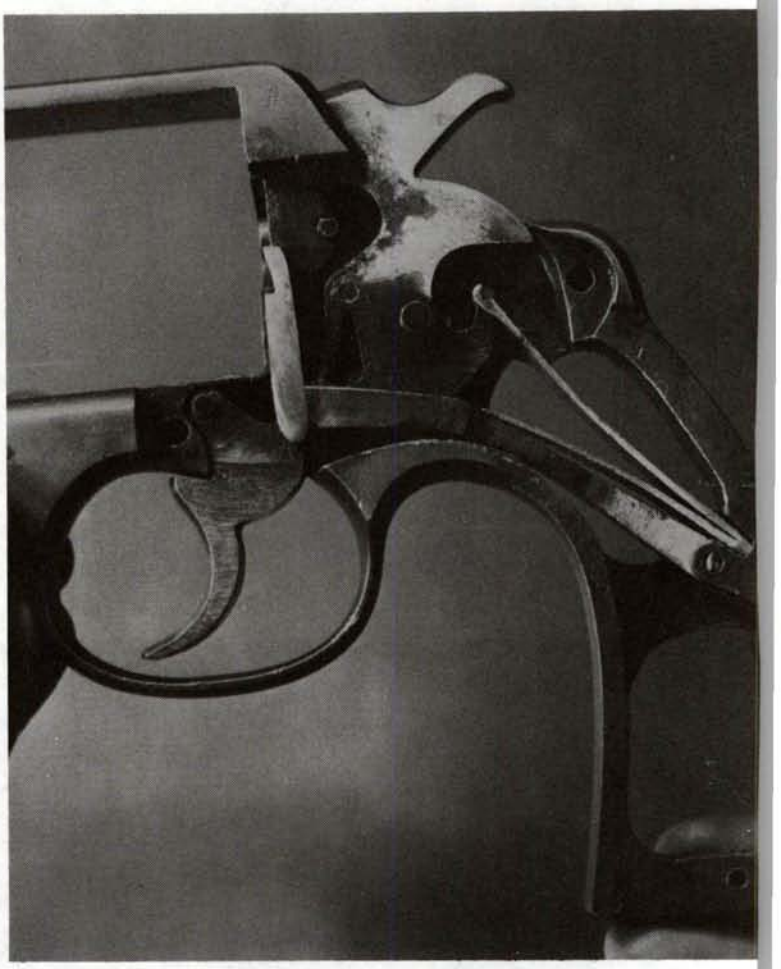


7. The sideplate is retained by two screws on the left side, one at the upper rear, the other above the trigger. After removing the screws, hold the gun as shown, and tap the grip frame with a nylon mallet to loosen and finally remove the sideplate.

8. Remove the cylinder latch and its spring from the sideplate.

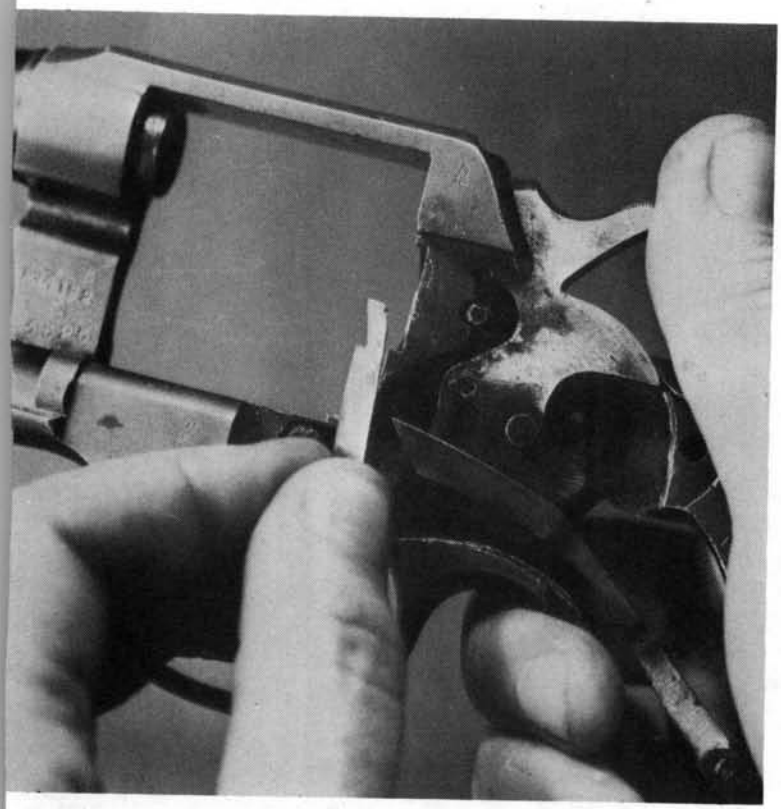


9. The internal mechanism is shown here in its proper arrangement, prior to disassembly.

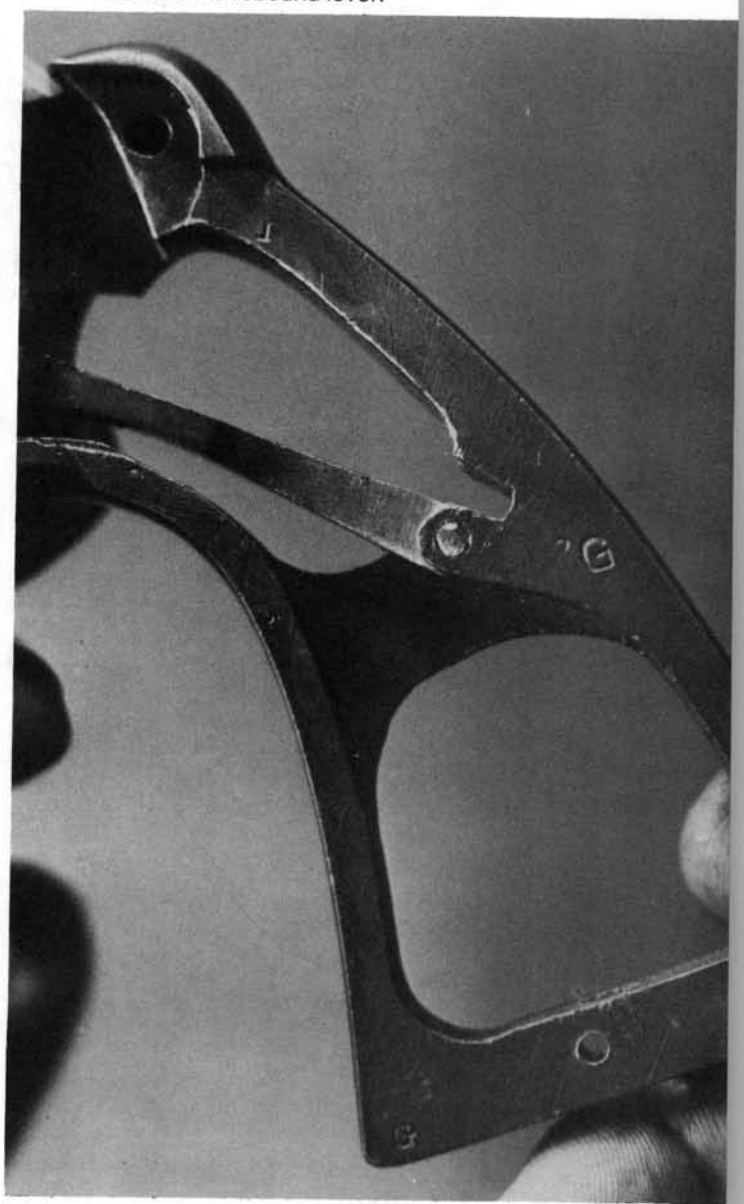


10. Grip the mainspring with smooth-jawed sharp-nosed pliers, compress the spring, and remove it toward the left side, detaching its upper-arm hooks from the hammer stirrup.

11. Remove the cylinder hand toward the left.

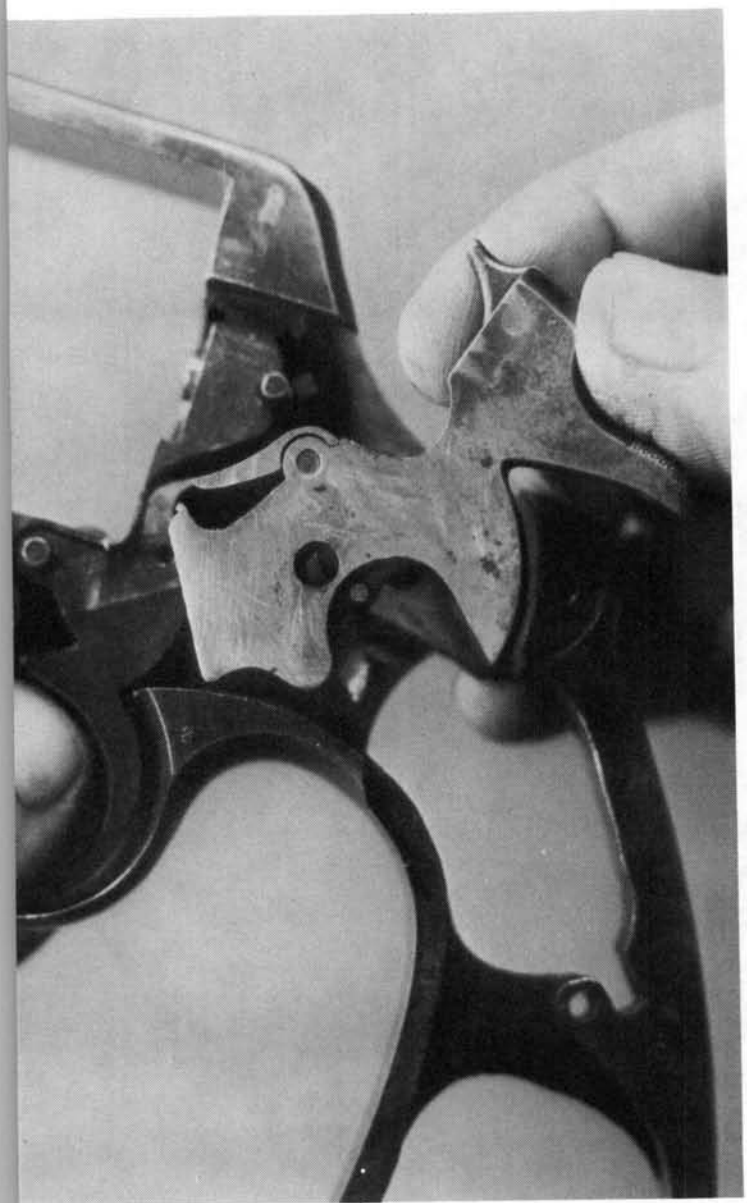


12. Drift out the pin at the center of the grip frame to release the rebound lever.

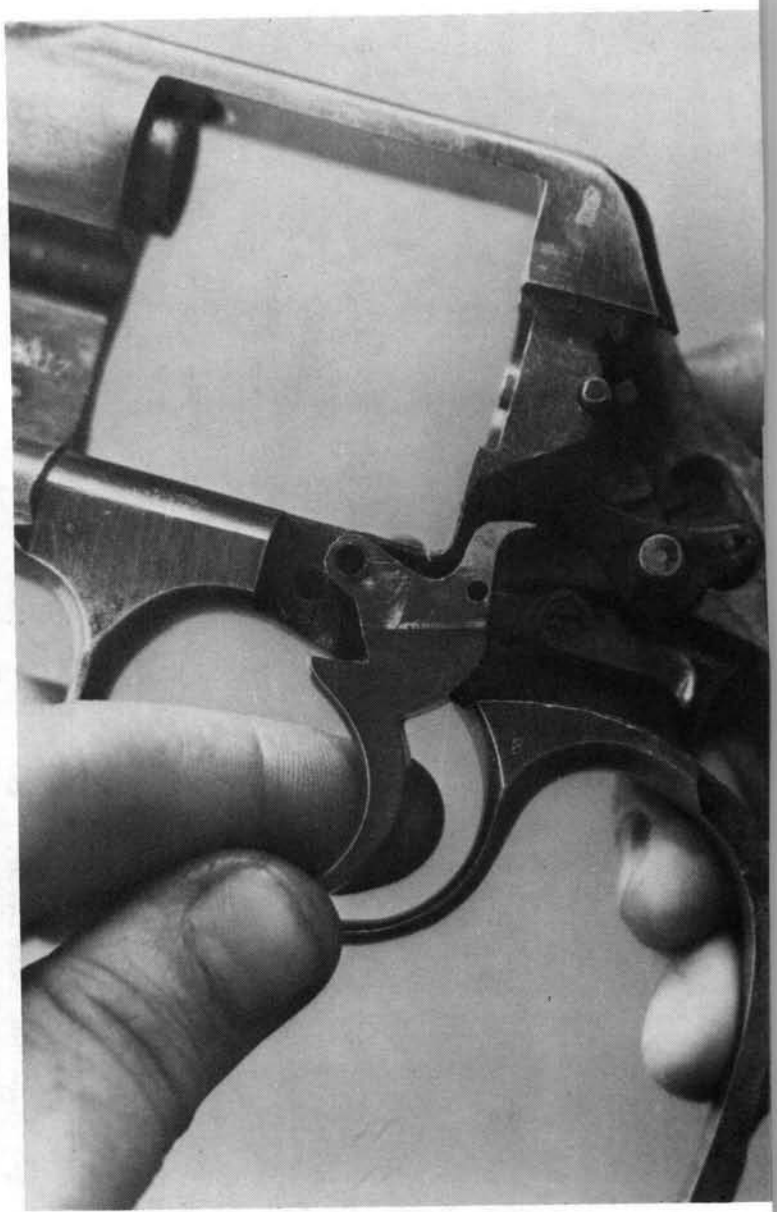


13. Move the lower end of the rebound lever out of its recess in the grip frame, and remove the lever toward the left.

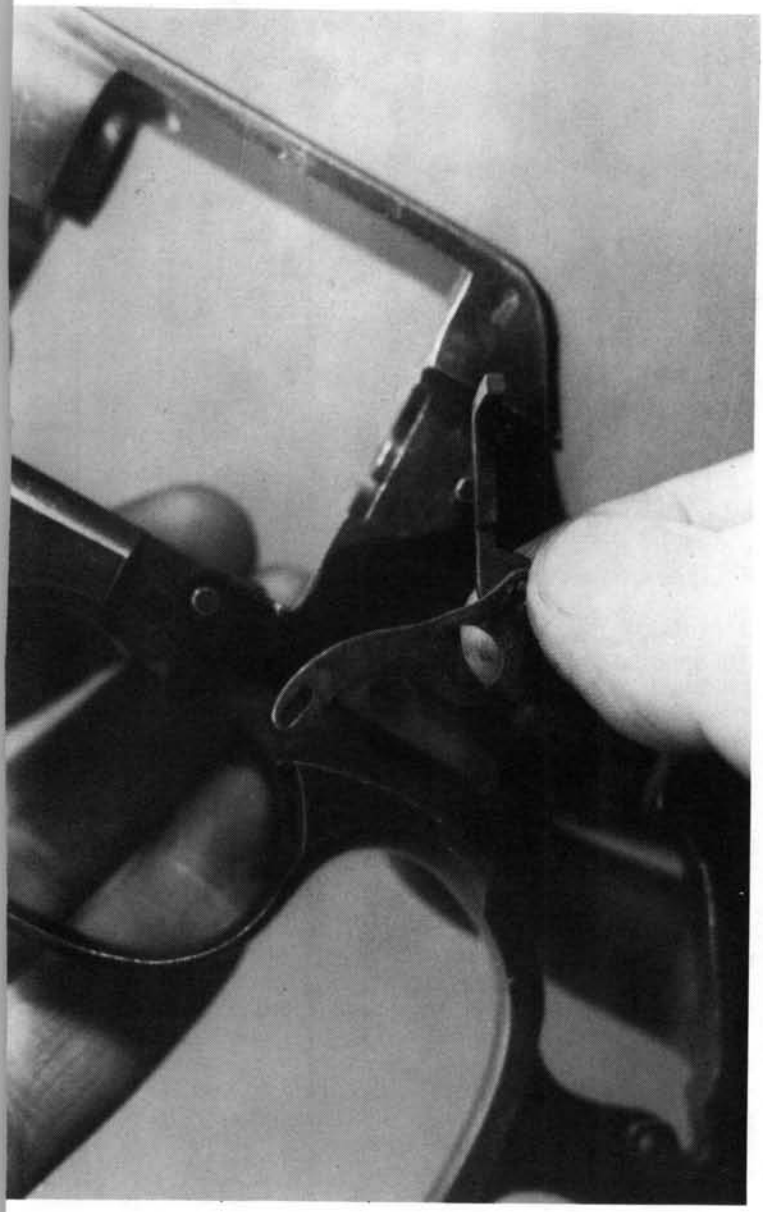
14. Pull the trigger to tip the hammer to the rear, and remove the hammer toward the left.

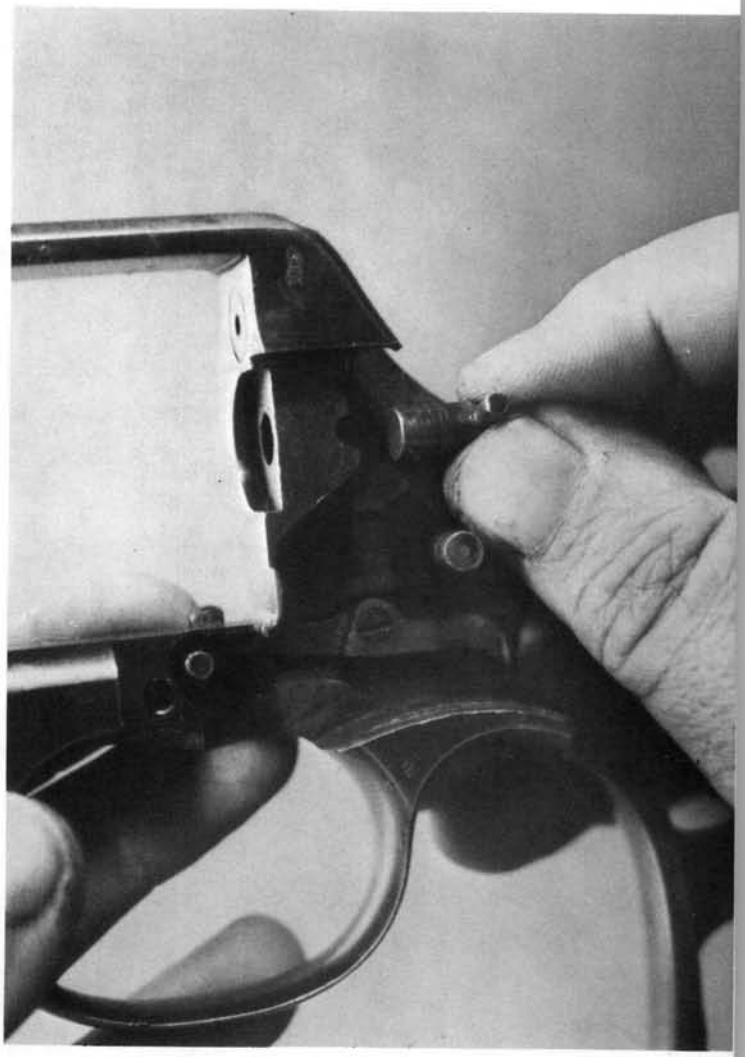


15. Remove the trigger toward the left.



16. Remove the hammer block bar and its flat lever toward the left.



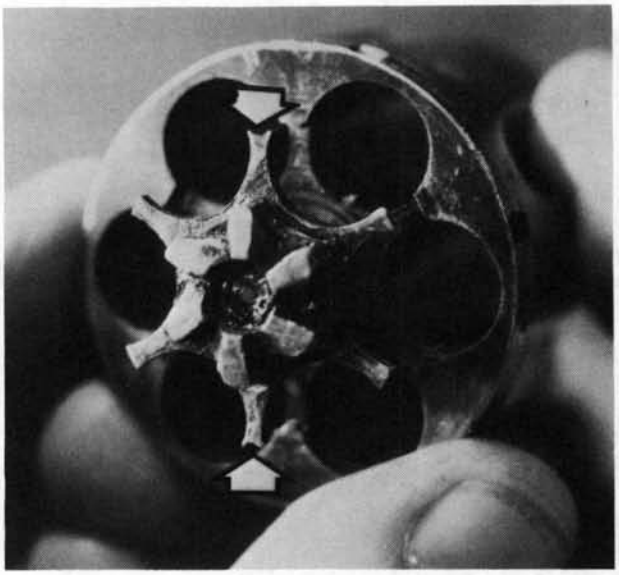


17. Remove the cylinder latch bolt toward the rear.

18. The cylinder stop is retained by a stepped screw which forms the pivot for the stop.

19. After removal of the screw, pry the cylinder stop spring outward from its recess in the frame with a small screwdriver. Move the cylinder stop down, then toward the rear for removal. Take care that the small spring is not detached and lost.

Reassembly Tips:



1. When tightening the ejector/ratchet, note that two opposed projections have concave tips (arrows), and these must be aligned with convex studs on the cylinder.

When replacing the cylinder stop in the frame, be sure its center is properly aligned before tightening the pivot screw, or the stepped edge of the screw may be damaged, causing a binding burr.

When replacing the hammer block system, note that the shorter arm of the flat lever goes toward the rear, pointing upward. When replacing the trigger, be sure the stud on its rear inner surface enters the slot in the hammer block lever.

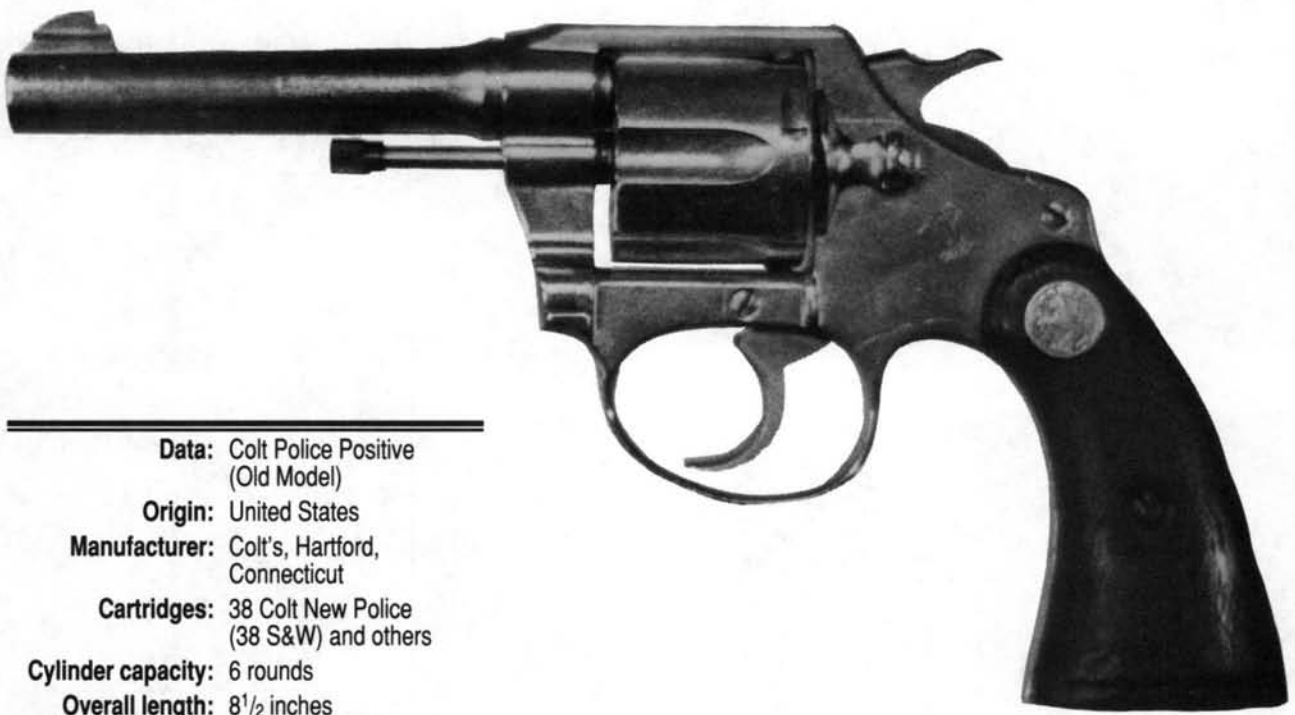
When replacing the sideplate, take care that the stud on the side of the cylinder latch bolt enters the hole on the inside of the cylinder latch. With the bolt forward, align the front of the latch with the edge of the sideplate, then ease the sideplate inward.

Colt Police Positive

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Police Positive also apply to the following guns.

Colt Army Special
Colt Official Police
Colt Police Positive Special
Colt Banker's Special
Colt Officer's Model Match
Colt Police Positive Target
Colt Detective Special
Colt Officer's Model Target
Colt Shooting Master

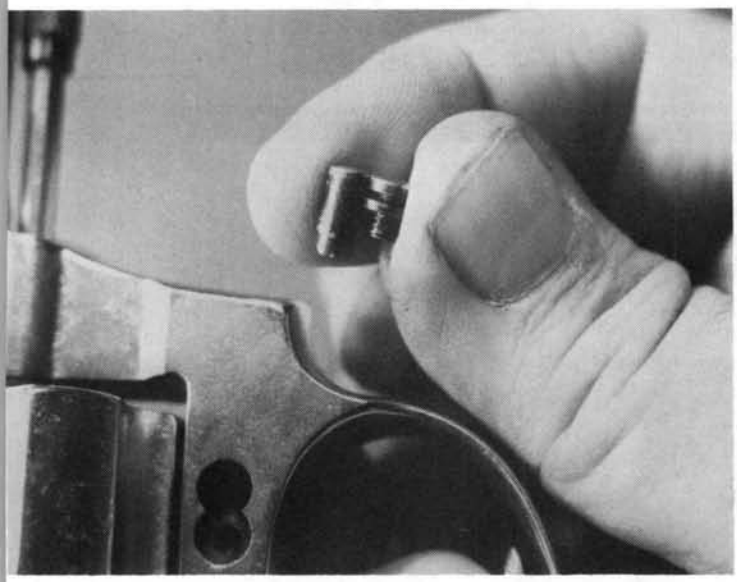


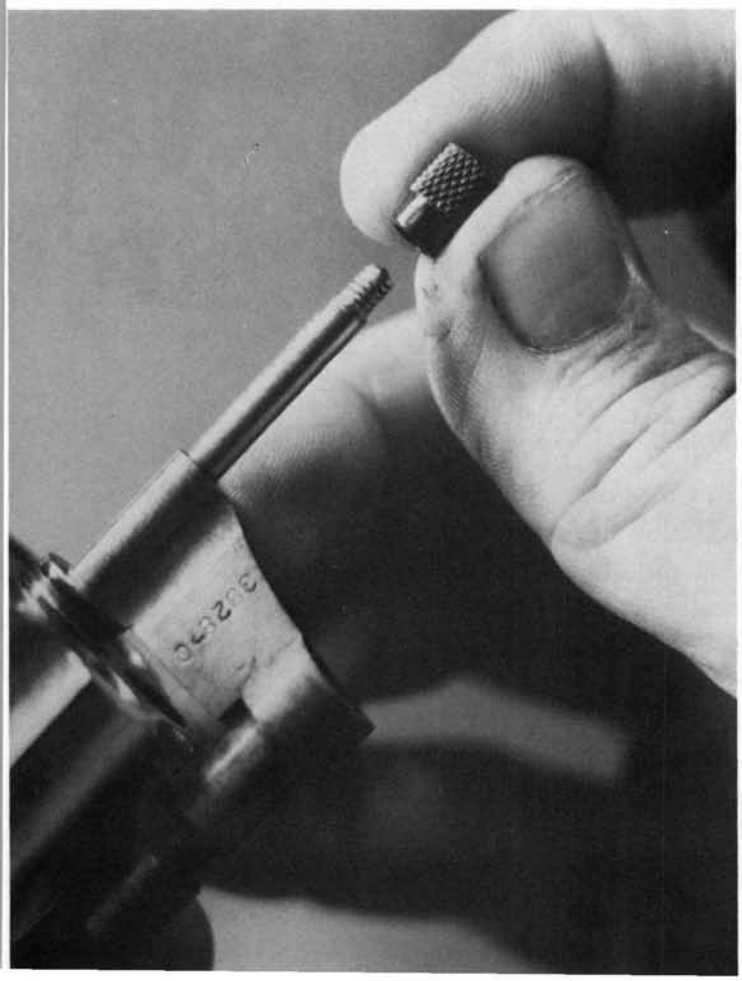
Data:	Colt Police Positive (Old Model)
Origin:	United States
Manufacturer:	Colt's, Hartford, Connecticut
Cartridges:	38 Colt New Police (38 S&W) and others
Cylinder capacity:	6 rounds
Overall length:	8 1/2 inches (with 4-inch barrel)
Barrel lengths:	2 1/2, 4, 5, and 6 inches
Weight:	20 ounces (with 4-inch barrel)

The original Colt Police Positive was introduced in 1905 and its production life ran to 1947. Along the way there were several modifications, the most notable external change being a widening of the upper neck of the grip frame. The Police Positive Special, which began in 1907, was available in 38 Special, and was made until 1973. These guns are mechanically the same, and the takedown and reassembly instructions will apply to either one. This also applies to the Target models and the other variations listed in the cross-reference list.

Disassembly:

1. The crane retainer and its screw are located on the right side of the frame, just forward of the trigger. Remove the crane retainer and its screw toward the right.

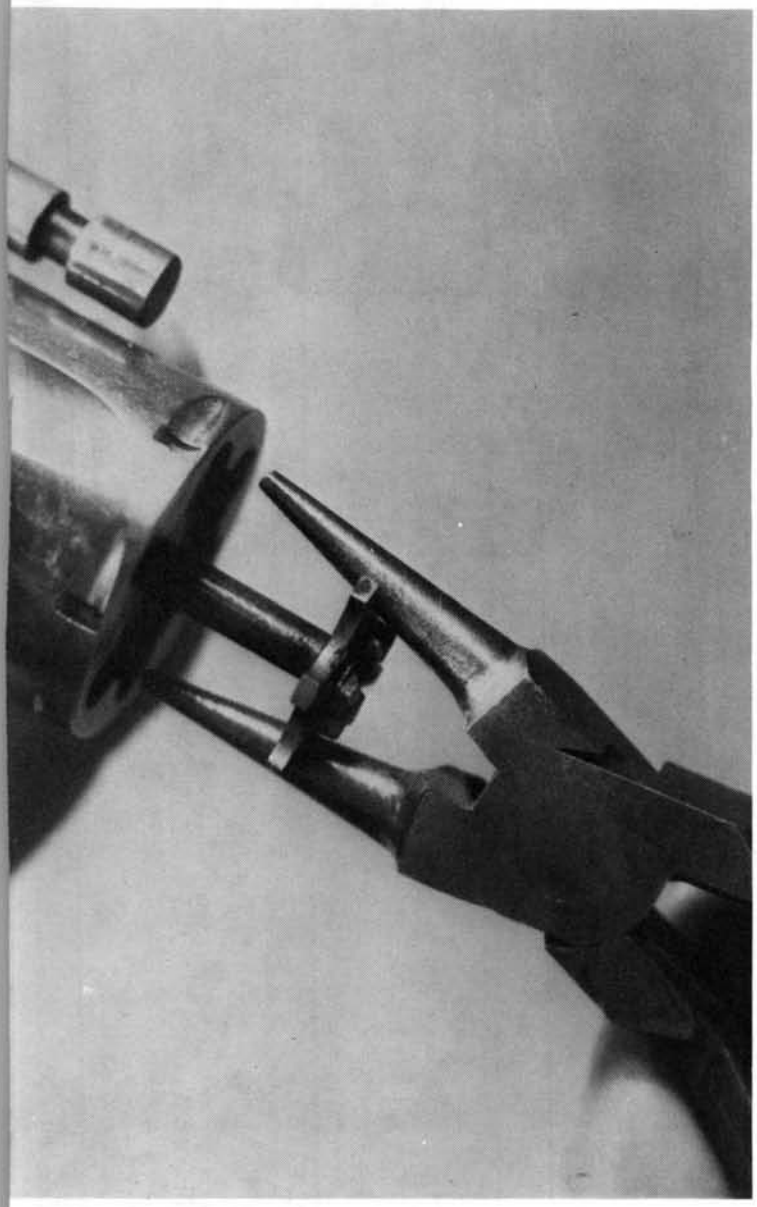




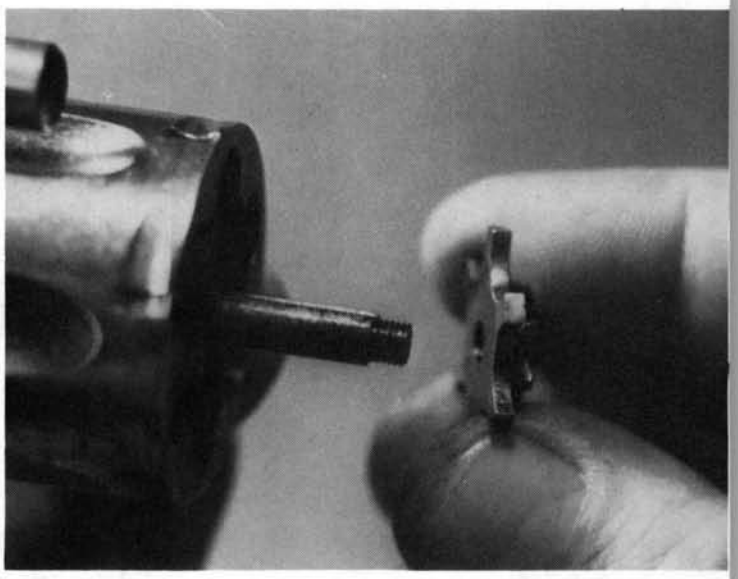
2. Move the crane forward out of the frame, and remove the crane and cylinder assembly toward the left.

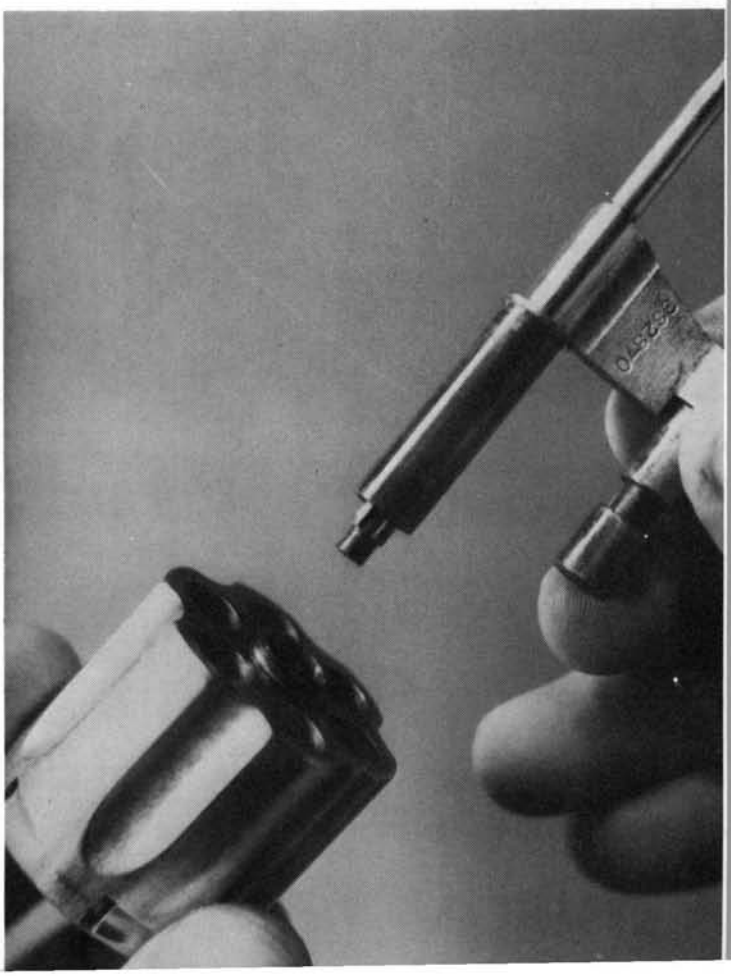
3. Grip the ejector rod head with leather-padded smooth-jawed pliers, and unscrew it counterclockwise (front view).

4. Brownells has a wrench that will fit the ejector/ratchet of the 38-caliber guns, but the one shown is a 32, so another tool must be used. Round-nosed wire-bending pliers will work, without burring the edges of the ejector. Unscrew the ejector/ratchet head counterclockwise (rear view).



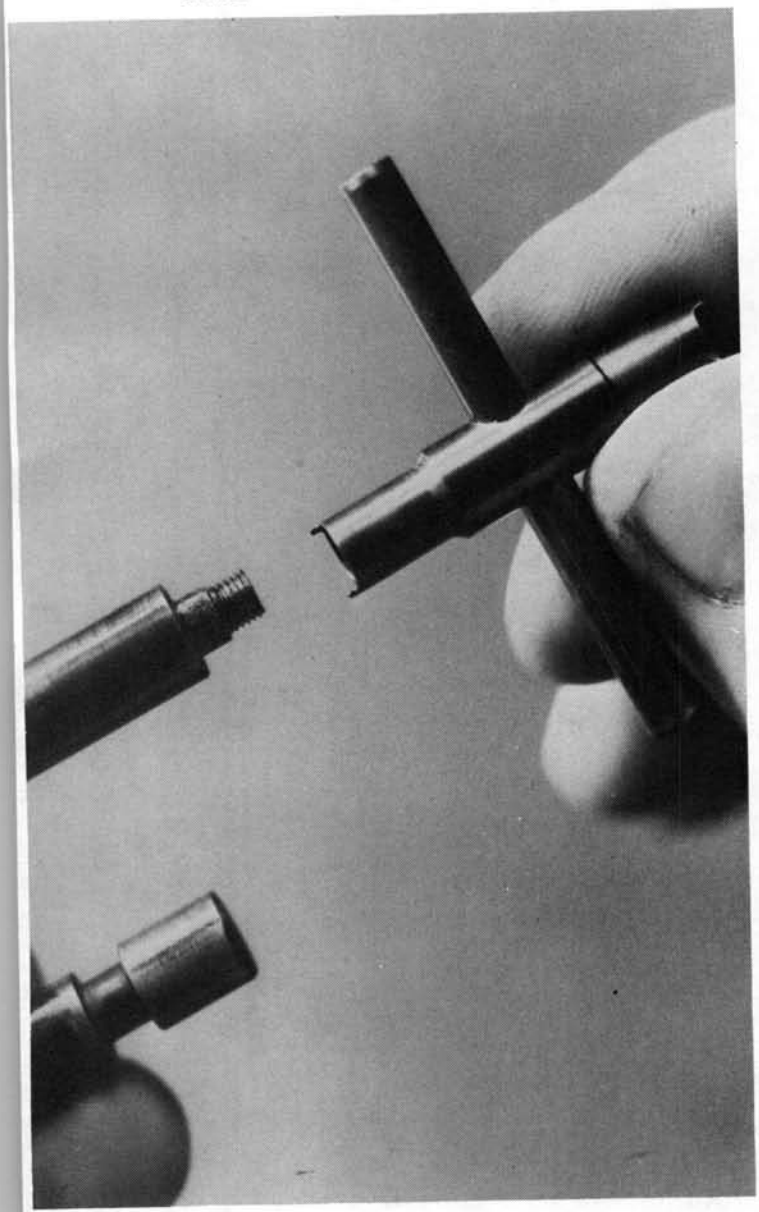
5. Remove the ejector/ratchet head from the ejector rod, toward the rear.



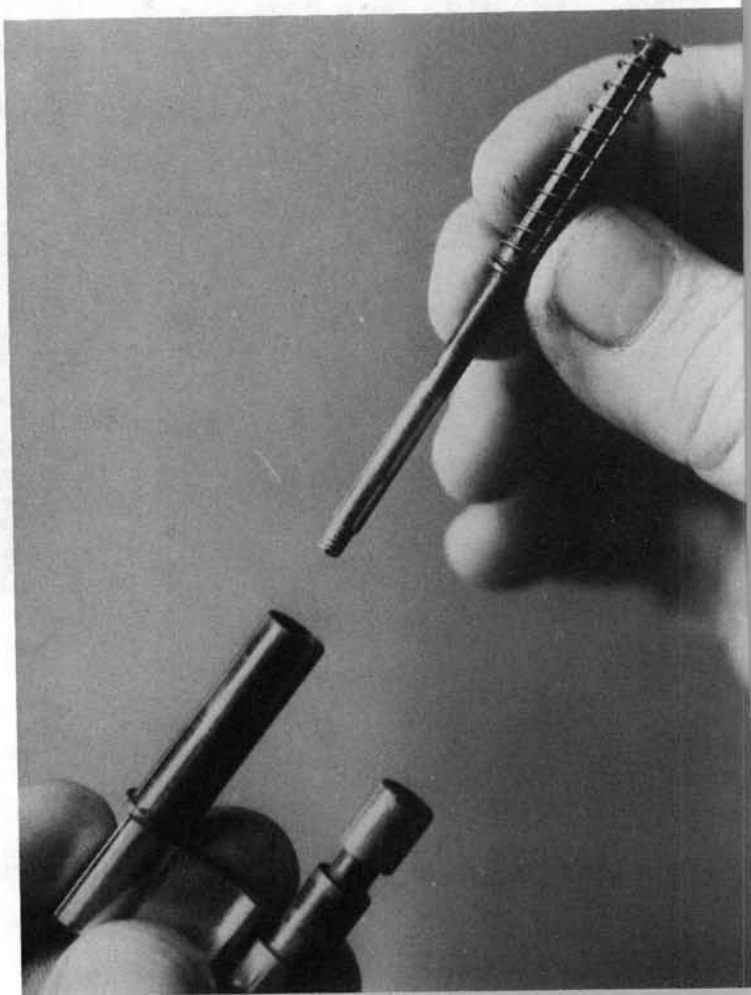


6. Remove the crane/ejector rod assembly from the front of the cylinder.

7. Use a standard Colt wrench to unscrew the ejector retainer nut from the rear of the cylinder arbor on the crane.

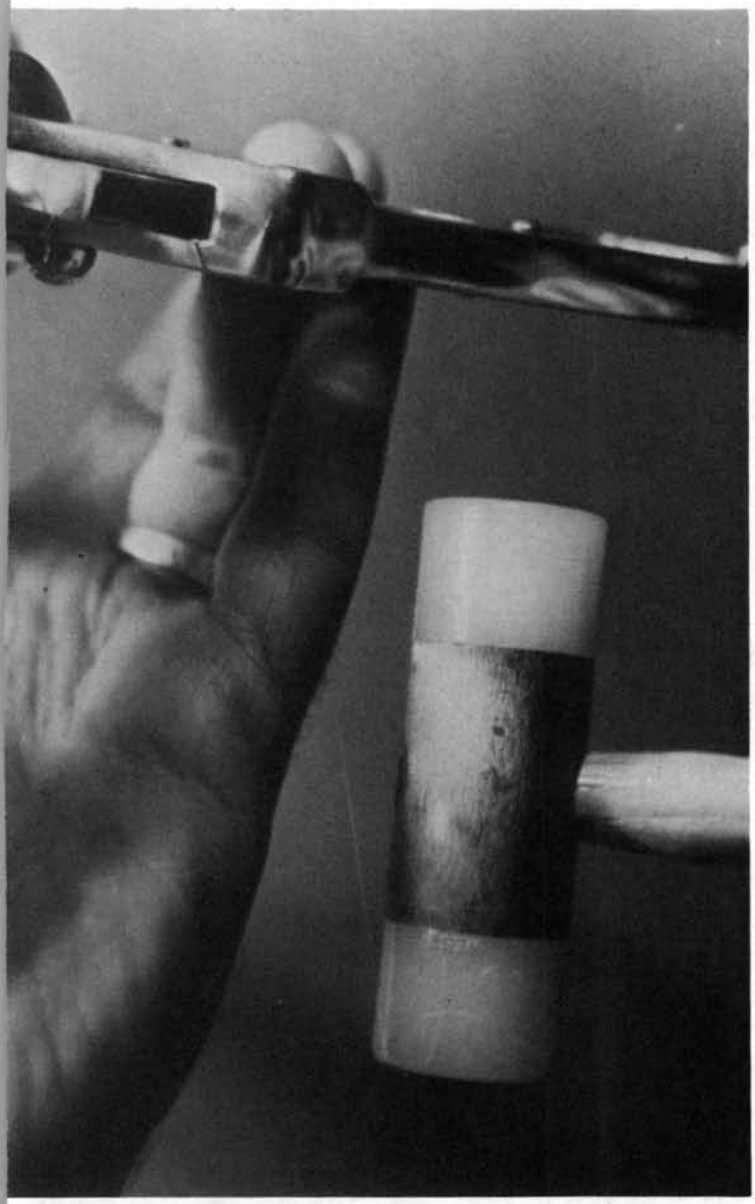


8. Remove the retaining nut toward the rear.

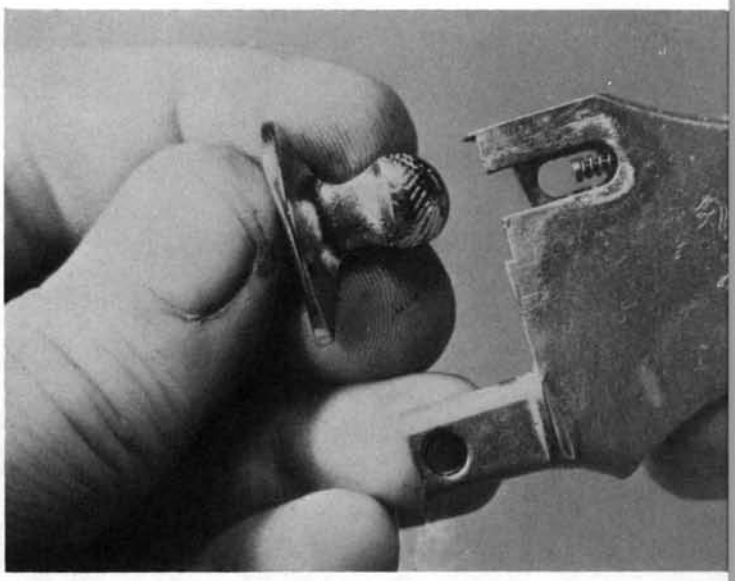


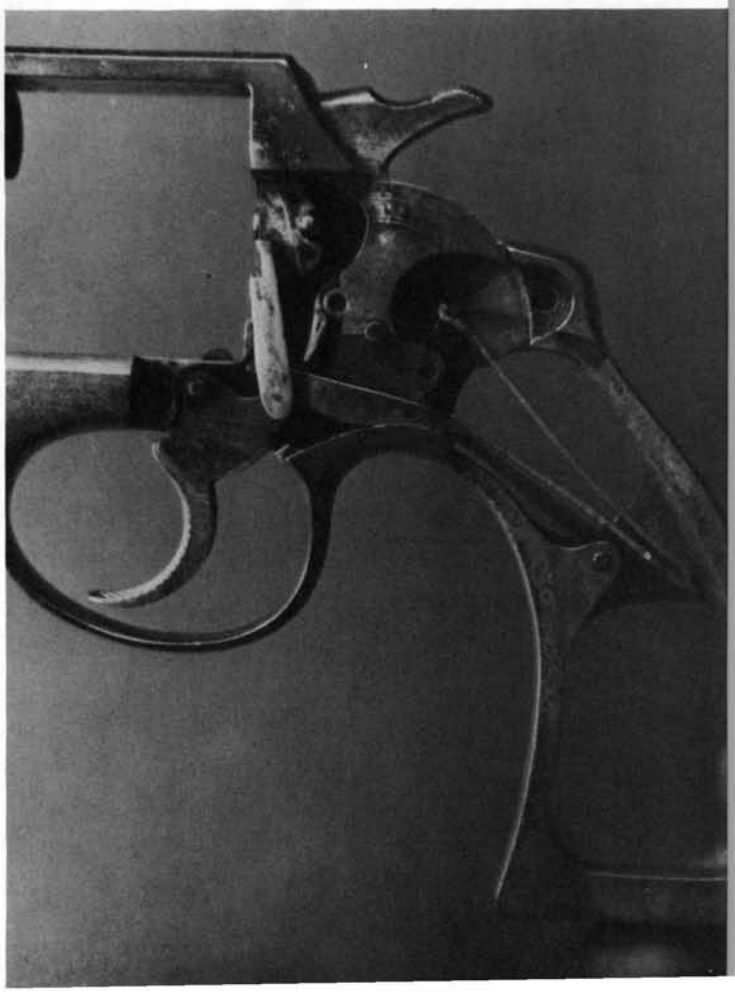
9. Remove the ejector rod and its spring toward the rear.

10. Remove the two sideplate screws on the left side of the frame. Hold the gun as shown, and tap the grip frame with a nylon mallet until the sideplate drops into the hand.



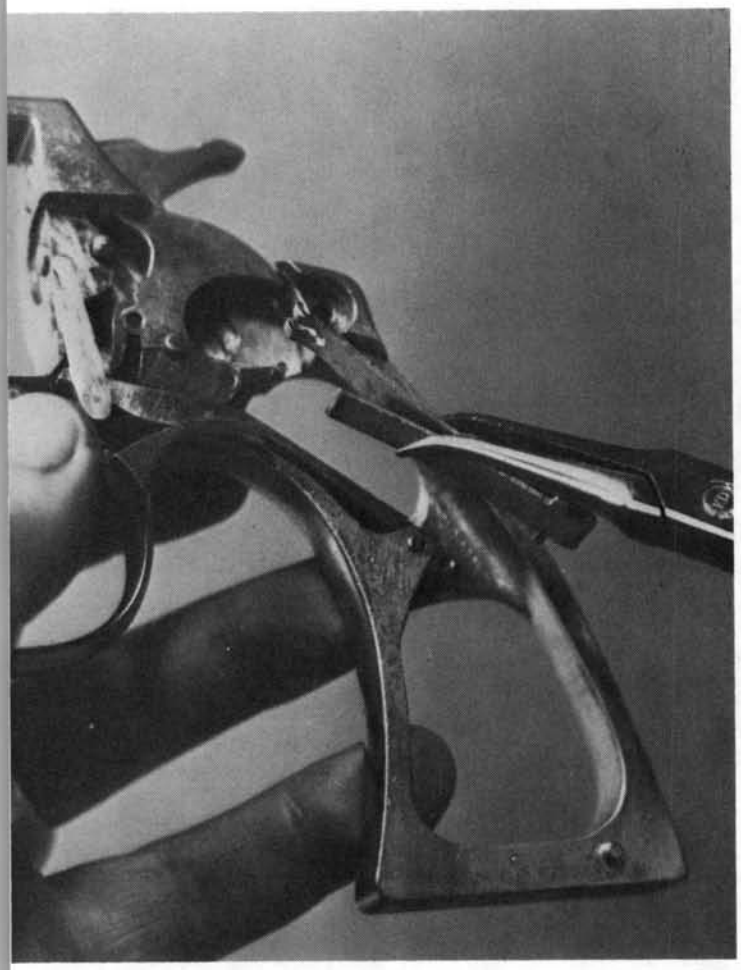
11. Remove the cylinder latch thumb piece and its spring and plunger from the sideplate.





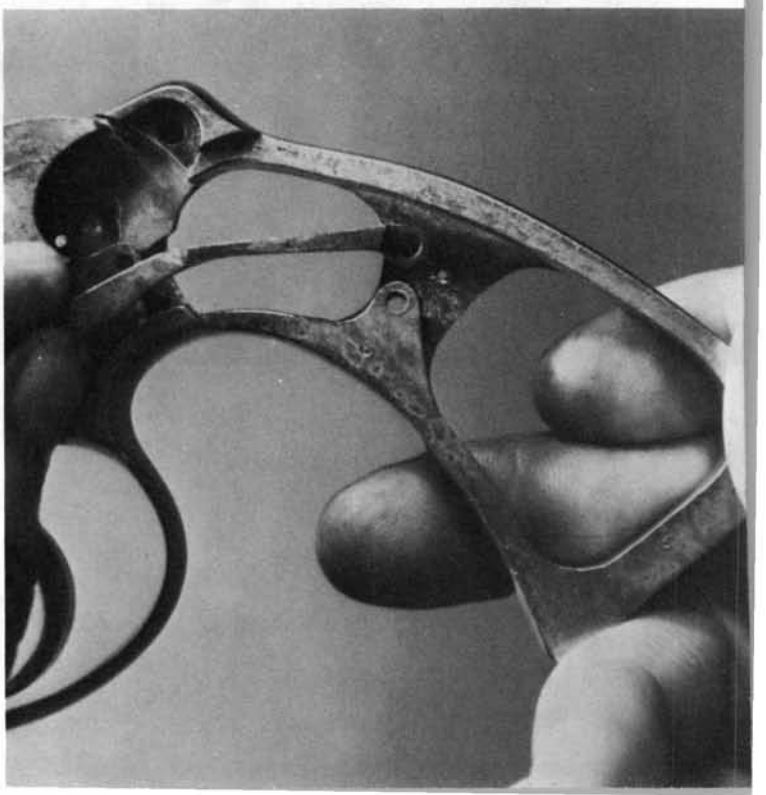
12. The internal parts are shown in proper order, prior to disassembly.

13. Grip the mainspring with smooth-jawed sharp-nosed pliers, and compress it slightly. Lift its rear end out toward the left, disengage the spring hooks from the hammer stirrup, and remove the spring toward the left.

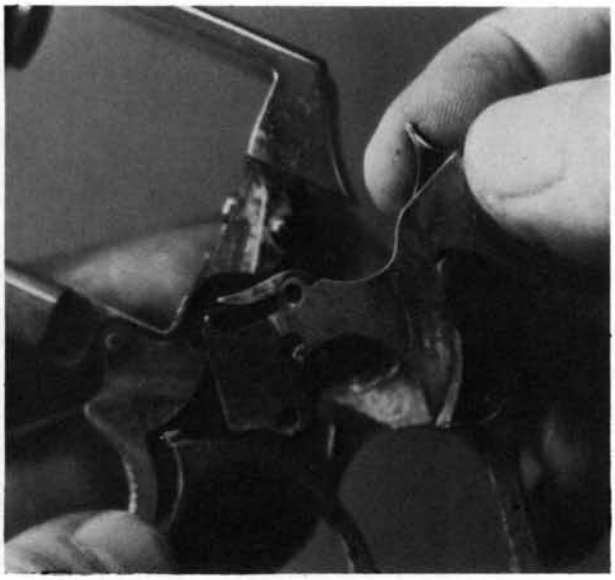


14. Remove the cylinder hand toward the left.

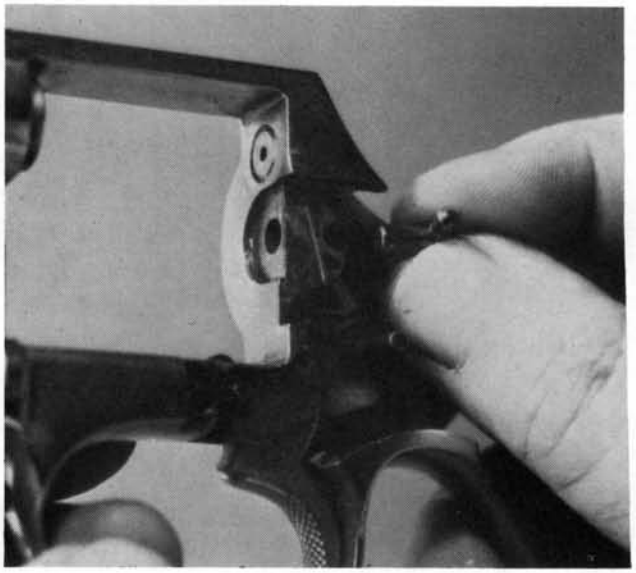
15. Drift out the rebound lever pin, located at the center of the grip frame. Move the rear loop of the rebound lever out of its recess in the grip frame, and remove the lever toward the left.

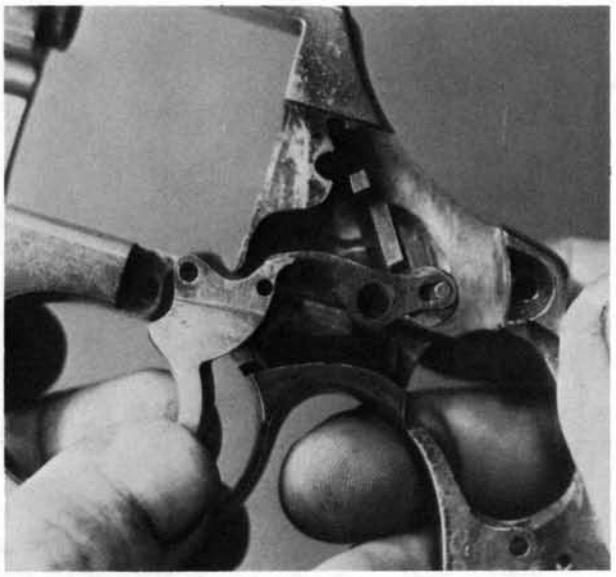


16. Pull the trigger to the rear, tipping the hammer back, and remove the hammer toward the left. Drifting out the cross-pin at the front of the hammer will allow removal of the double-action lever and its spring. The cross-pin at the lower rear of the hammer retains the hammer stirrup.

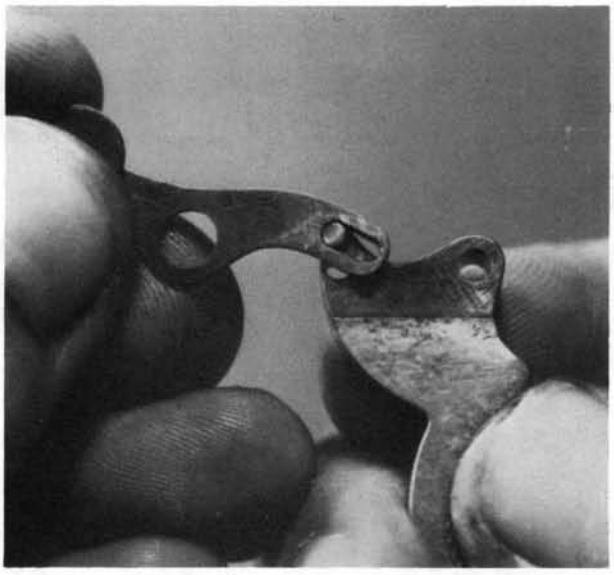


17. Remove the cylinder latch bolt toward the rear.



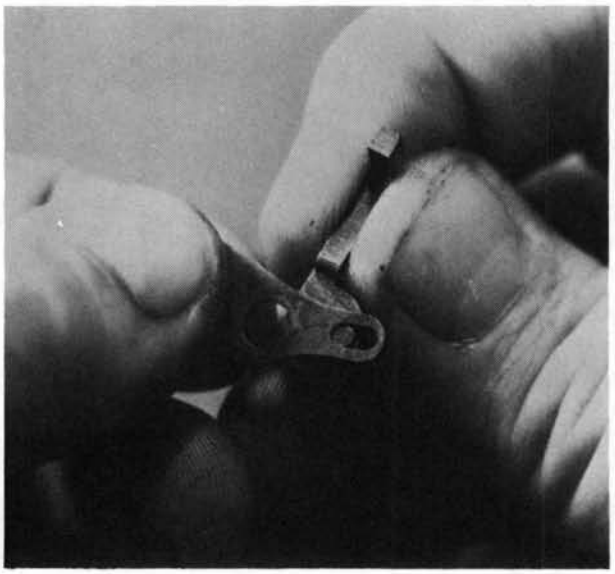


18. Remove the trigger, and the attached hammer block system, toward the left.



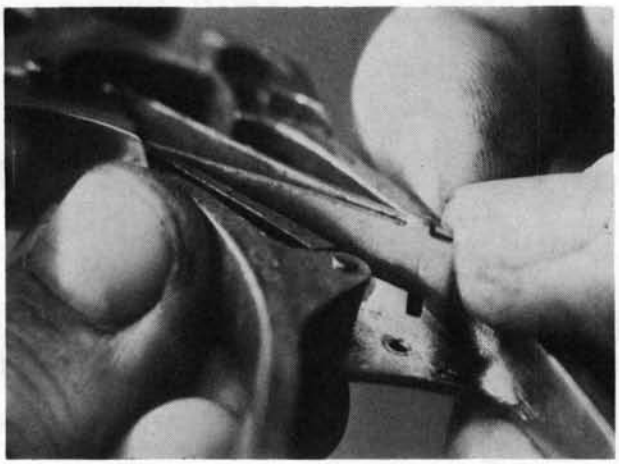
19. The hammer block lever is attached to the trigger by a stud on the right side, its head keyed into a slot in the lever. Move the stud back to the enlarged opening in the slot, and separate the lever from the trigger.

20. Separate the lever from the hammer block in the same way.

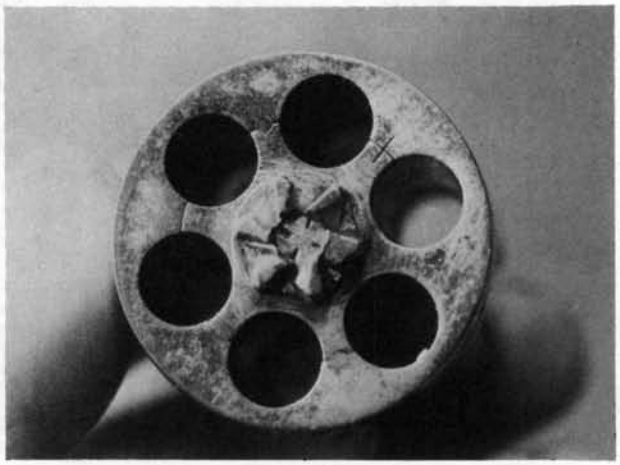


21. Remove the internal screw (arrow) that retains the cylinder stop. Move the front of the cylinder stop down out of its slot in the frame, and remove the stop and its spring toward the rear. Take care not to lose the small coil spring.

Reassembly Tips:

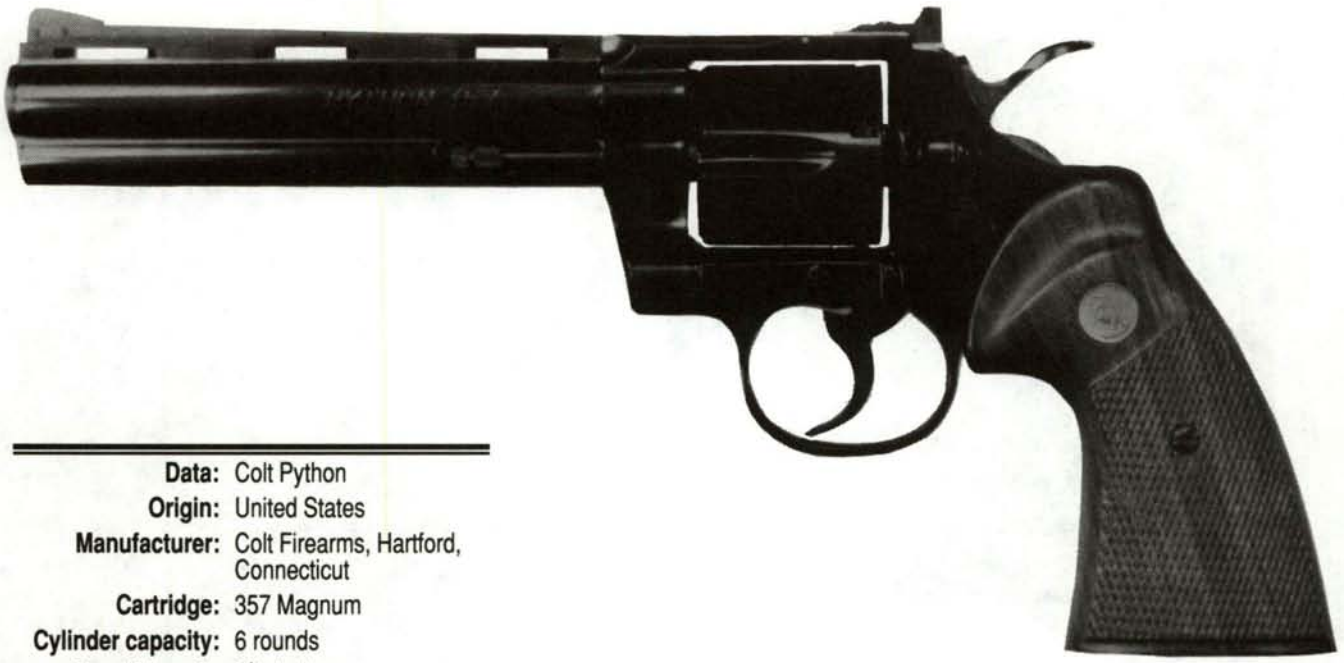


1. When replacing the hammer spring, engage the hooks with the stirrup first, then compress the spring and move it into place. Be sure the stud on the right side of the spring at the rear enters its hole in the grip frame.



2. When replacing the ejector/ratchet, note that one arm of the ejector has an index line at its tip, to be aligned with a corresponding line on the rear face of the cylinder.

Colt Python

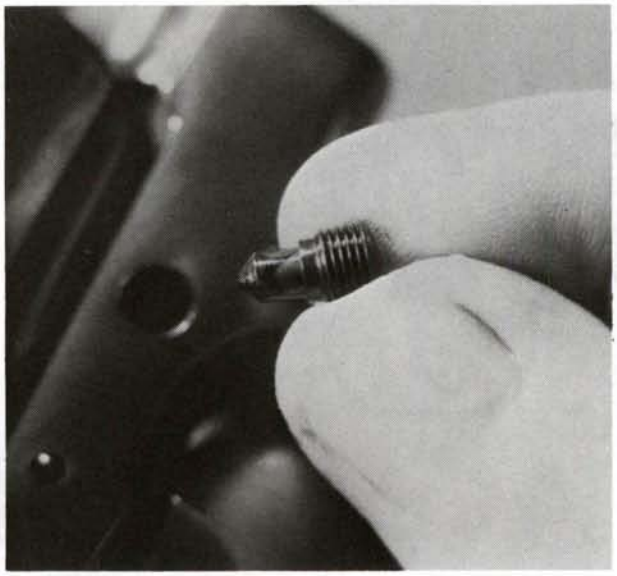


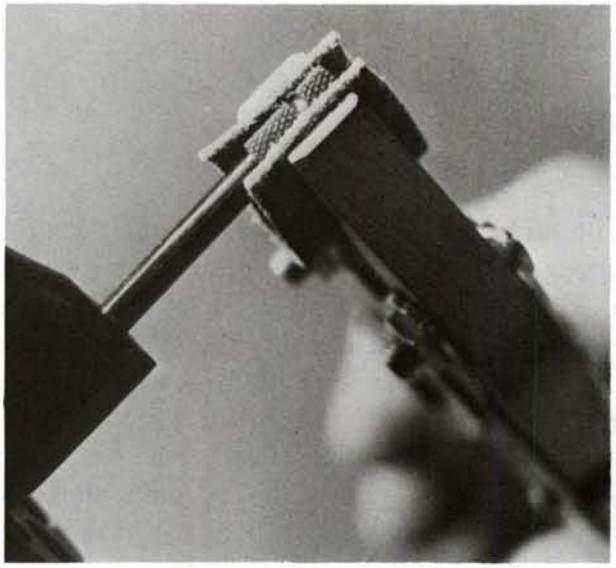
Data:	Colt Python
Origin:	United States
Manufacturer:	Colt Firearms, Hartford, Connecticut
Cartridge:	357 Magnum
Cylinder capacity:	6 rounds
Overall length:	$9\frac{1}{4}$ inches (with 4-inch barrel)
Barrel lengths:	$2\frac{1}{2}$, 4, and 6 inches
Weight:	38 ounces (with 4-inch barrel)

Colt's main problem with their top-of-the-line Python is making enough of them to satisfy the great demand for this fine gun. Although it's essentially a target revolver, the Python is frequently carried as a duty gun by law officers. The smoothness of its double-action trigger pull is well known, and the hand-fitting by which this is accomplished is reflected in its substantial price. There are no particularly difficult points in the takedown, but all parts are fitted rather more precisely than in guns of lesser quality, and extra care should be taken to avoid marring.

Disassembly:

1. The hollow cap screw that covers the crane retainer is located on the right side of the frame, just forward of the trigger. Remove the cap screw, along with the retainer plunger and its spring.

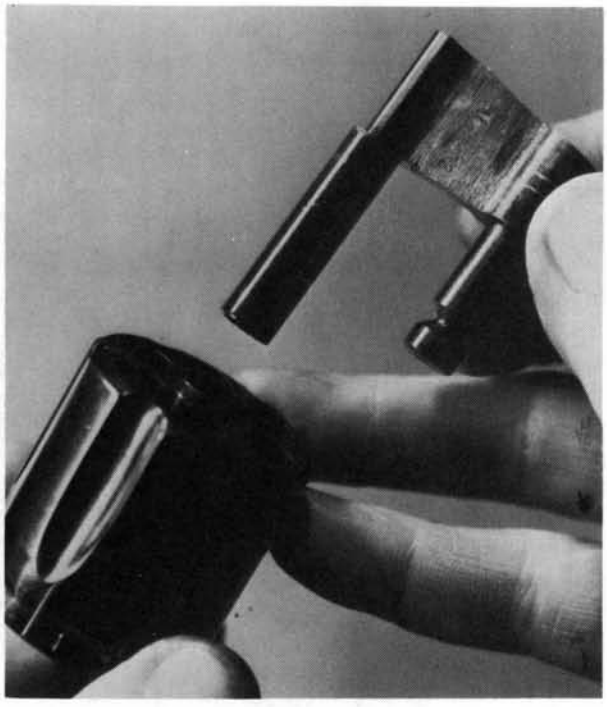




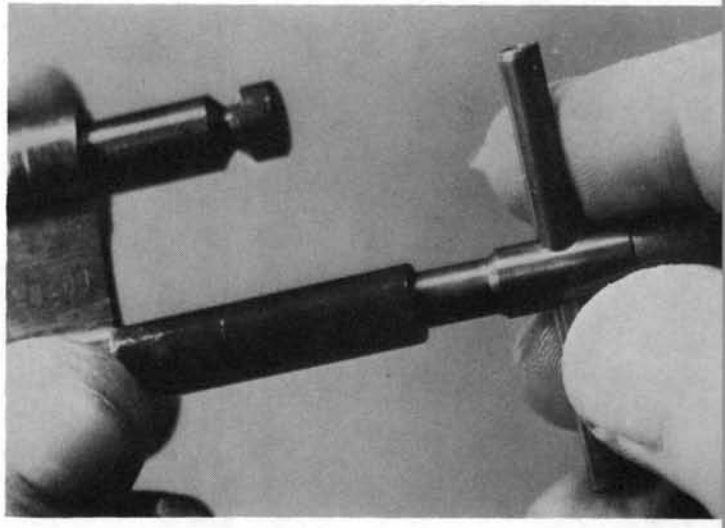
2. Move the crane forward out of the frame, and remove the crane and cylinder assembly.

3. Grip the ejector rod head with leather-padded smooth-jawed pliers, and unscrew the rod counterclockwise (viewed from the front).

4. Remove the ejector rod and the crane from the front of the cylinder.



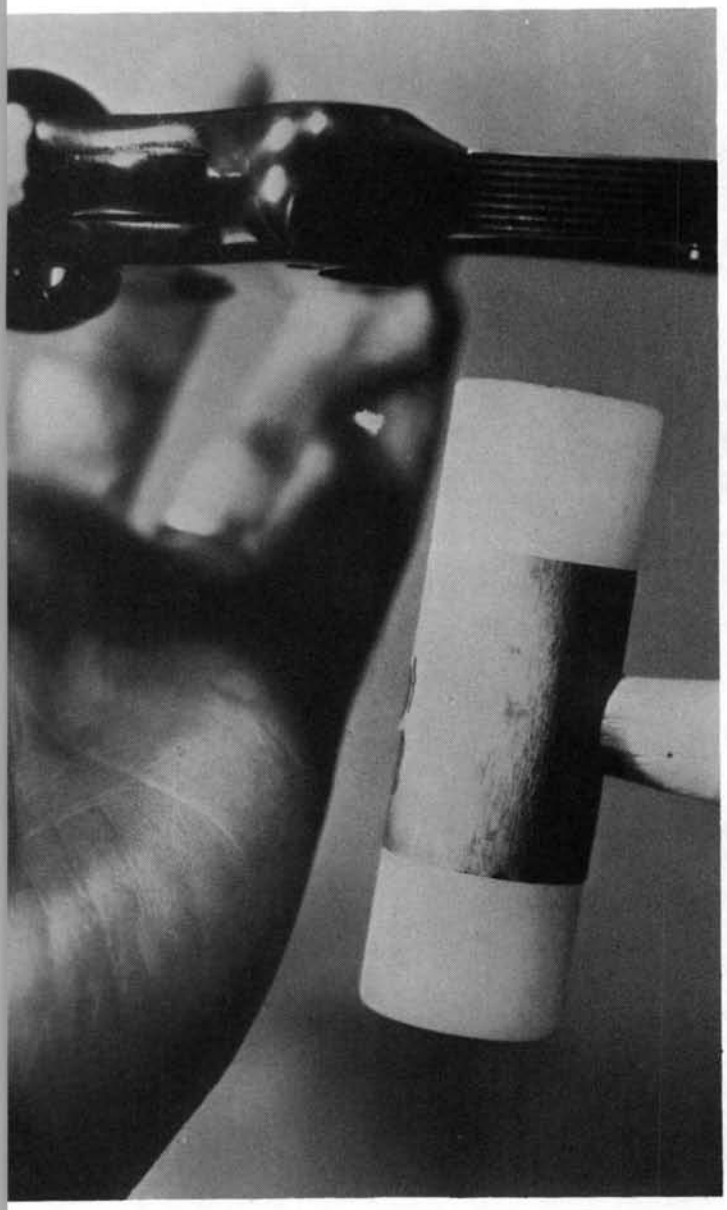
5. Remove the bushing from the front of the cylinder.



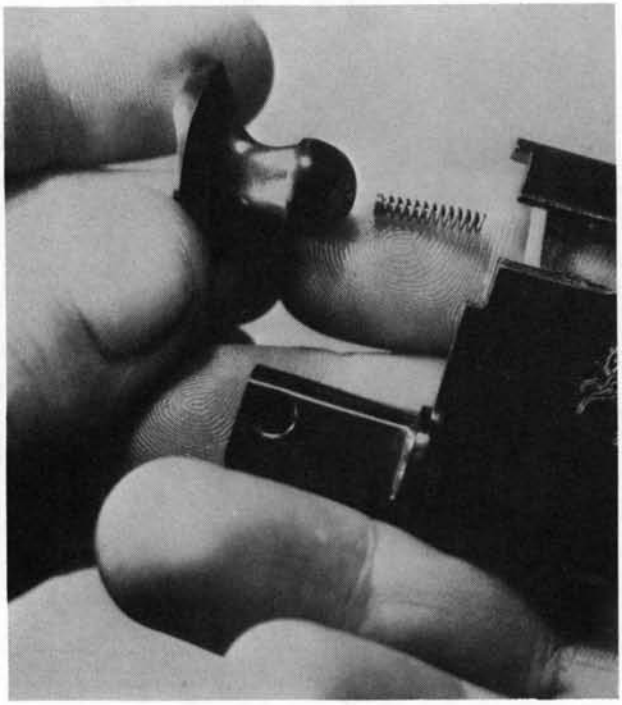
7. Use the Colt wrench to unscrew the retainer at the rear of the cylinder arbor on the crane, and remove the ejector spring toward the rear.

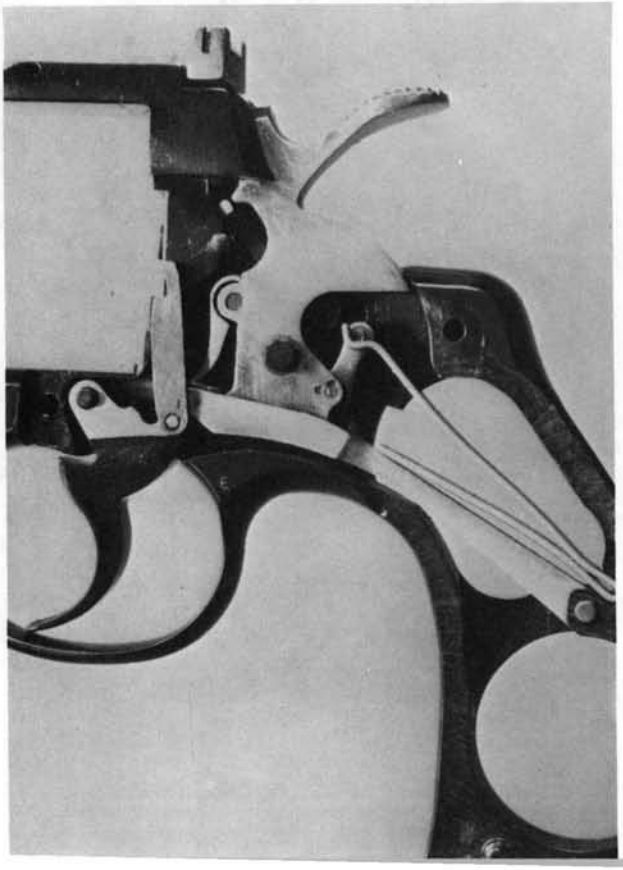
6. Remove the ejector/ratchet from the rear of the cylinder.

8. The sideplate is retained by two screws, one at the upper rear, and one just forward of the trigger. After the screws are removed, hold the gun as shown and tap the grip frame with a nylon mallet. The sideplate will fall off into the palm of the hand.



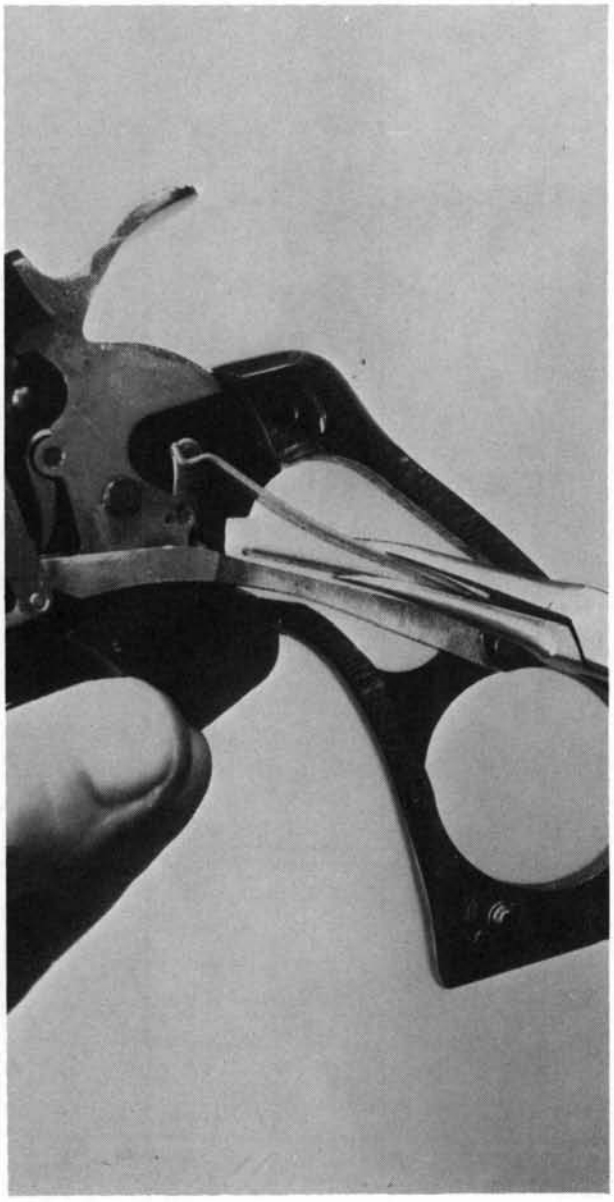
9. Remove the cylinder latch and its spring and plunger toward the front of the sideplate.



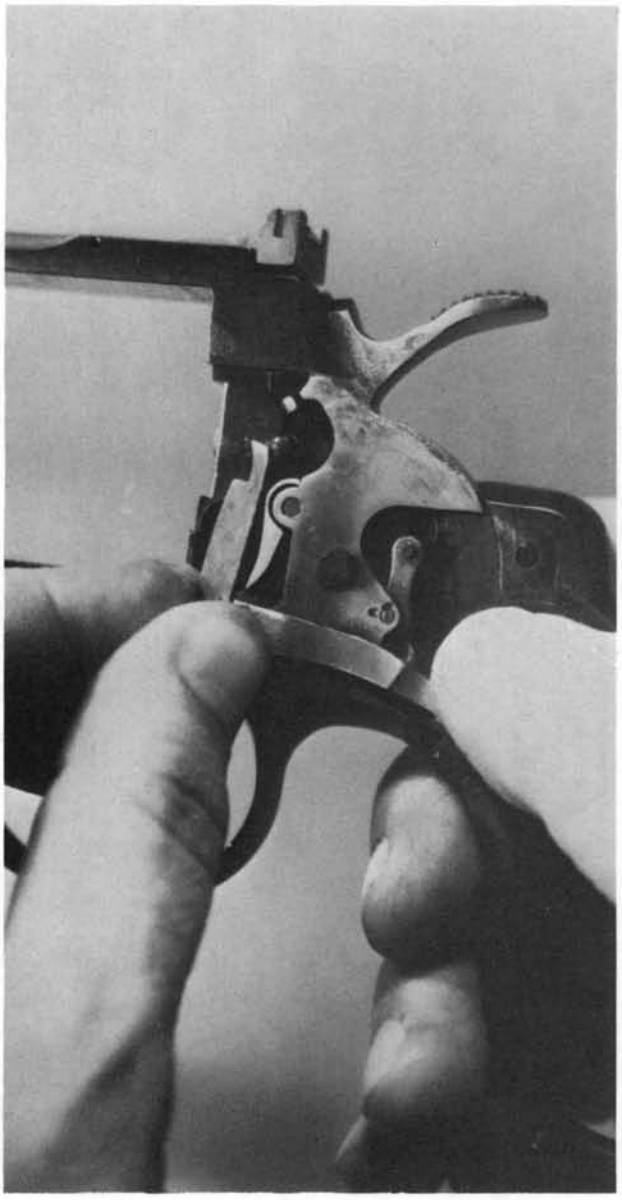


10. The internal parts are shown in their proper relationship, prior to disassembly.

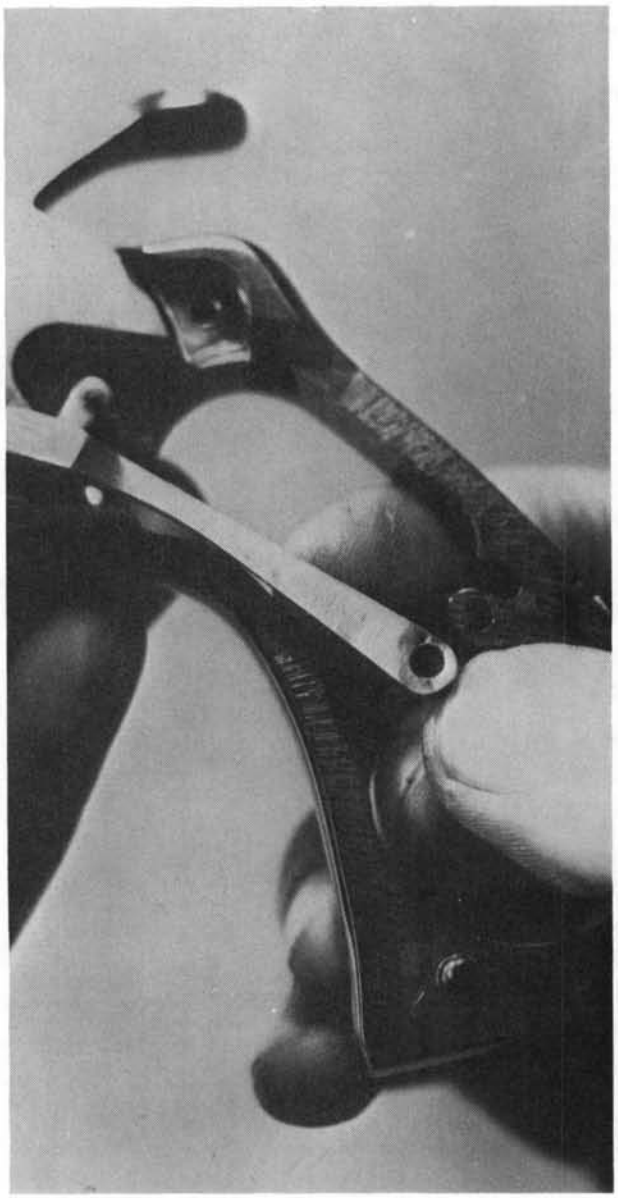
11. Grip the mainspring with smooth-jawed sharp-nosed pliers, and compress it slightly. Lift the lower end of the spring from its recess in the frame, then move it toward the rear, disengaging the spring hooks from the hammer stirrup.



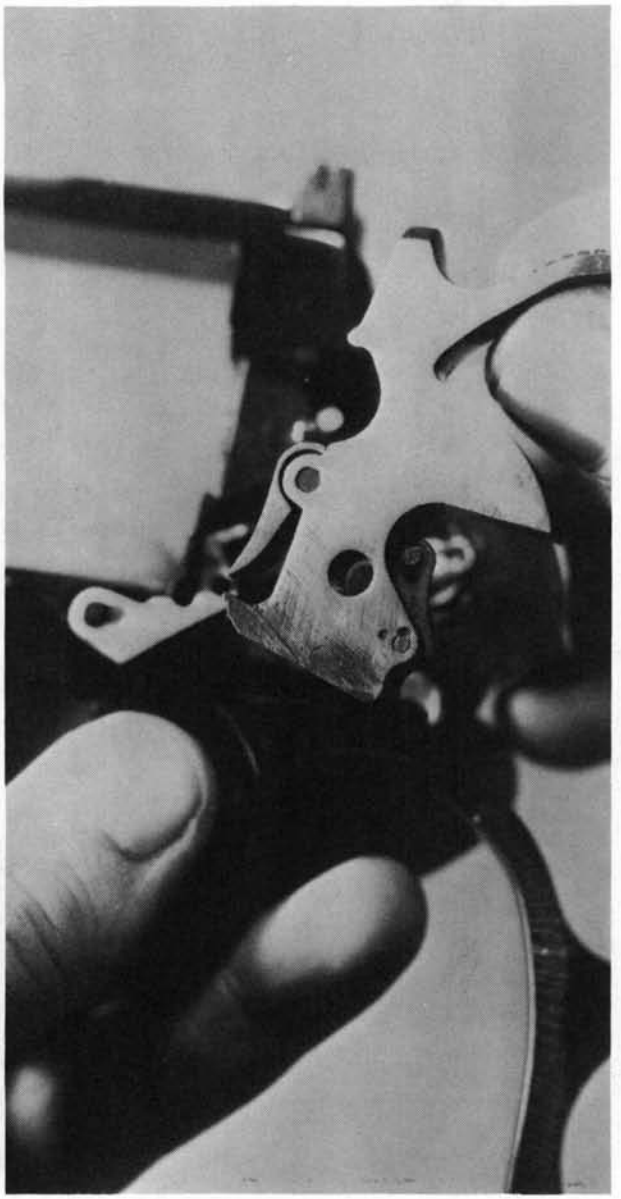
12. Remove the cylinder hand toward the left.



13. Drift out the rebound lever pin, located at the center of the grip frame. Move the rebound lever down and forward, out of its loops on the frame, and remove the lever toward the left.

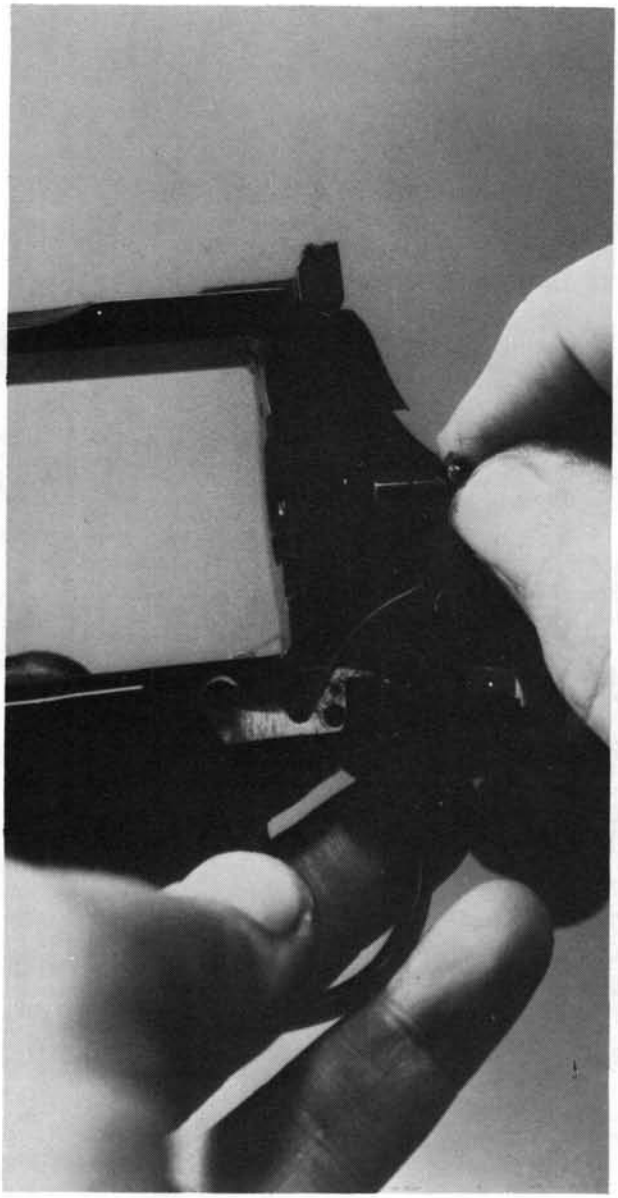


14. Pull the trigger to the rear, and remove the hammer toward the left.

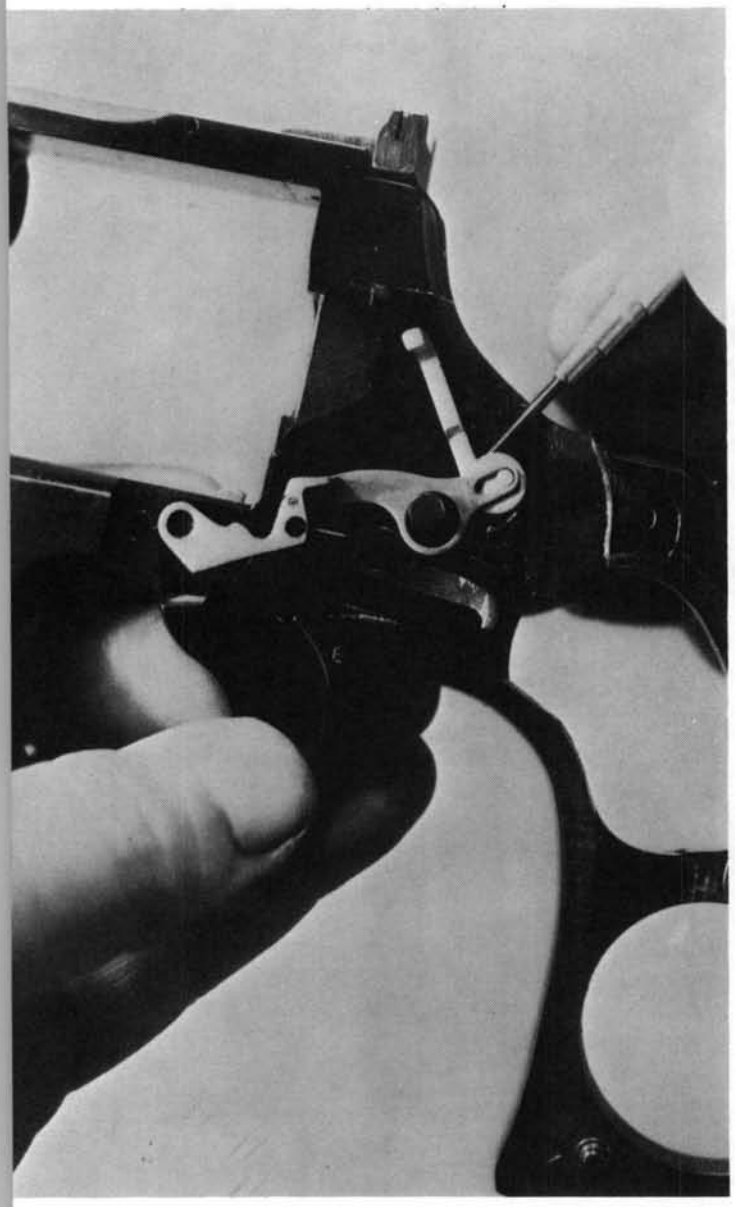


15. The trigger and hammer block safety system are shown in proper order, prior to disassembly.

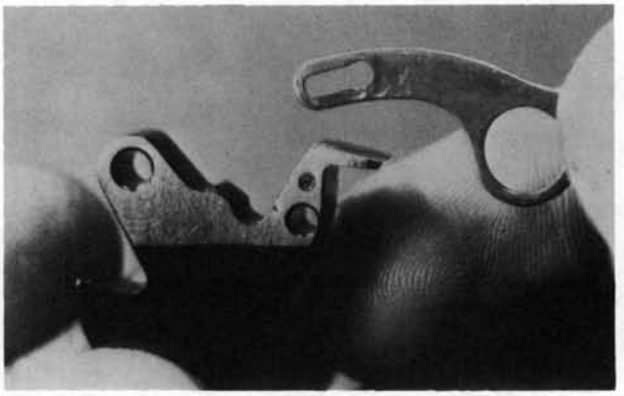
16. Remove the cylinder latch bolt toward the rear.

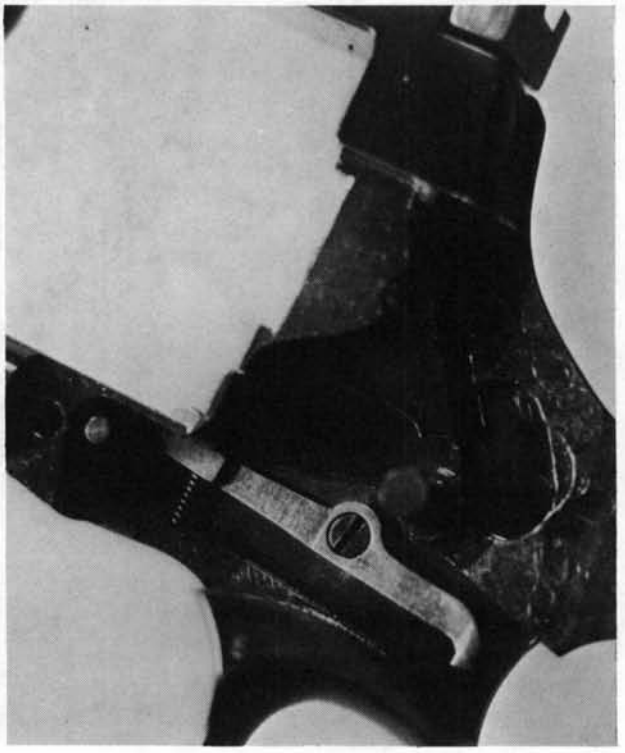


17. Use a small screwdriver to lift the hammer block from its recess, and move the trigger and hammer block system out toward the left.



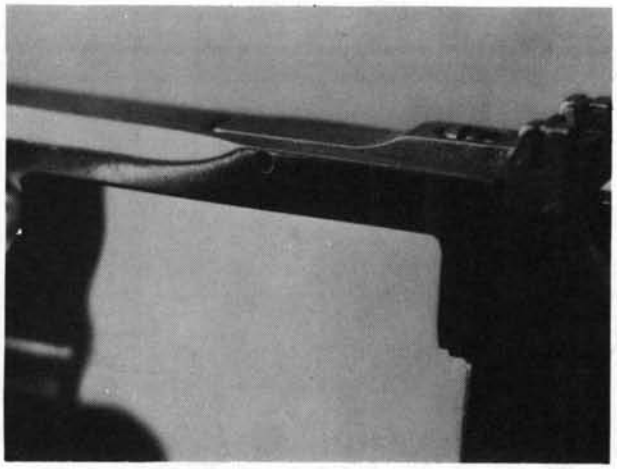
18. Disengage the hammer block lever from the trigger by sliding the lever forward on its stud to align the enlarged end of its slot with the head of the stud, and remove it toward the right. The hammer block can be separated from the lever in the same way.





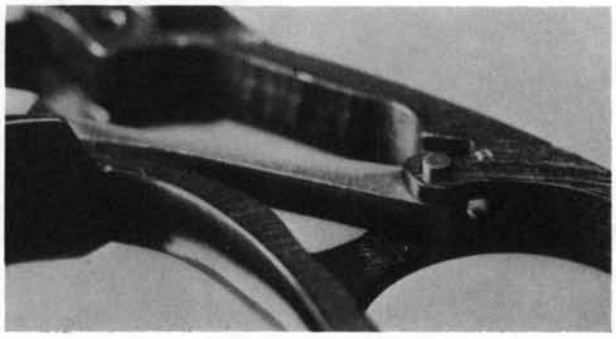
19. Remove the internal screw which retains the cylinder stop and tip the lower end of the cylinder stop spring out of its recess in the frame. Move the cylinder stop down, then out toward the left. Take care not to lose the small spring.

20. The rear sight is retained by a cross-pin at the top of the frame, and by its elevation screw.

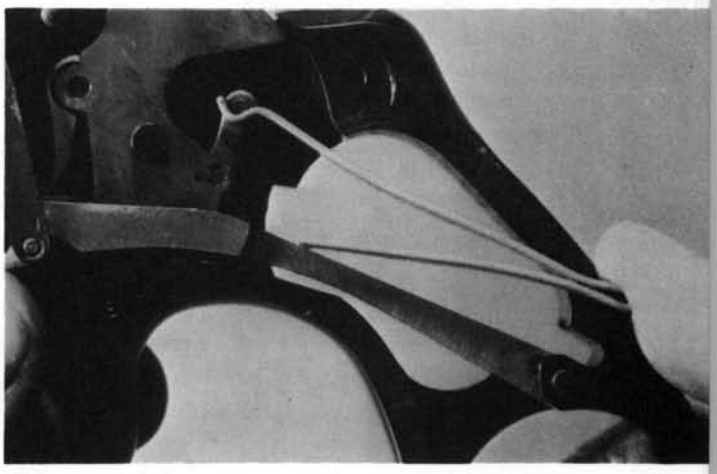


21. After the rear sight is removed, depress the firing pin head and slide the firing pin retaining plate upward out of the frame. The firing pin and its spring are removed toward the rear.

Reassembly Tips:



1. When replacing the rebound lever pin, the pin should be even with the right side of the grip frame and should protrude slightly, as shown, on the left.



2. When replacing the mainspring, engage the hooks with the hammer stirrup first, then move the rear of the spring down into its frame recess.

When replacing the cylinder hand, be sure that its inner shelf makes proper contact with the front of the rebound lever.

When replacing the sideplate, be sure that the cylinder latch aligns with the stud on the side of the latch bolt. With the latch bolt all the way forward in the frame, align the front face of the latch with the front edge of the sideplate, and ease the plate into place.

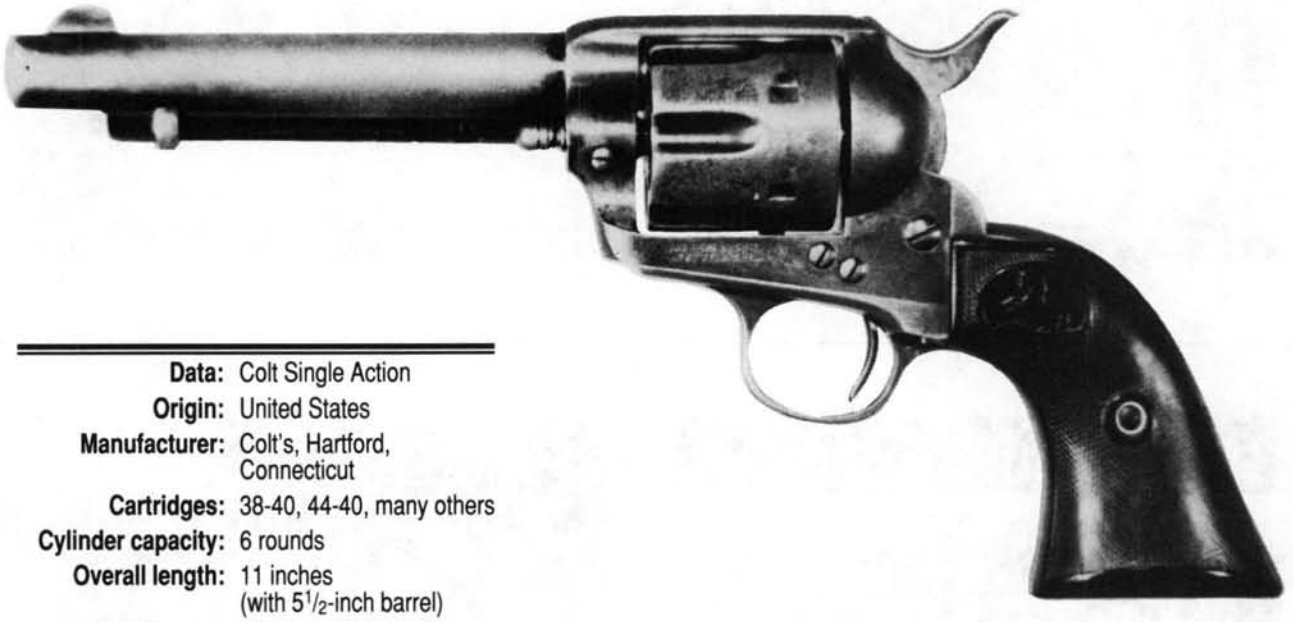
When tightening the ejector rod, seat it firmly, but take care not to over-tighten it. Too much pressure can strip the threads, or break the rebated tip of the rod.

Colt Single Action

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Single Action also apply to the following guns.

Dakota Bisley **Dakota Single Action** **F.I.E. Hombre**



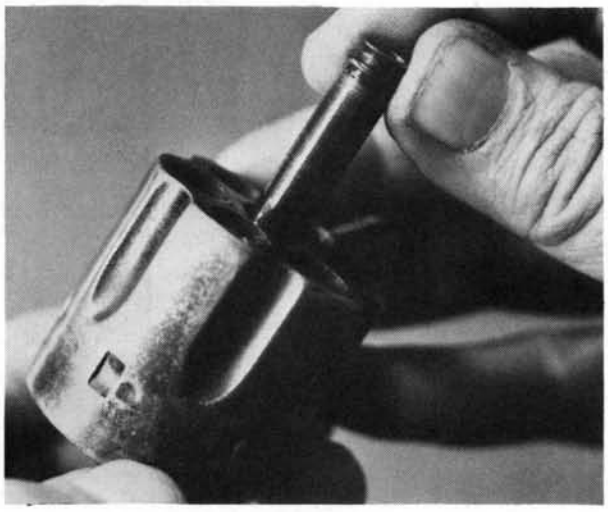
Data:	Colt Single Action
Origin:	United States
Manufacturer:	Colt's, Hartford, Connecticut
Cartridges:	38-40, 44-40, many others
Cylinder capacity:	6 rounds
Overall length:	11 inches (with 5 1/2-inch barrel)
Barrel length:	4 3/4, 5 1/2, and 7 1/2 standard
Weight:	38 ounces (with 5 1/2-inch barrel)

Anything said here about the legendary Peacemaker will be redundant. But for those who have recently joined the firearms fraternity, I will note that the gun was made continuously from 1872 to 1940, then was brought back into production from 1955 to 1982. Mechanically, the only variation which concerns us here is in the pre-1898 guns, which have a screw in the front of the frame to retain the cylinder pin, rather than the cross-bolt type spring release. There are several European-made copies of the Colt Single Action, listed in the cross-references, that have practically the same basic mechanism. The only basic difference is that the Colt has a hammer-mounted firing pin, the others generally have a frame-mounted firing pin. The instructions can be used for these, also.

Disassembly:

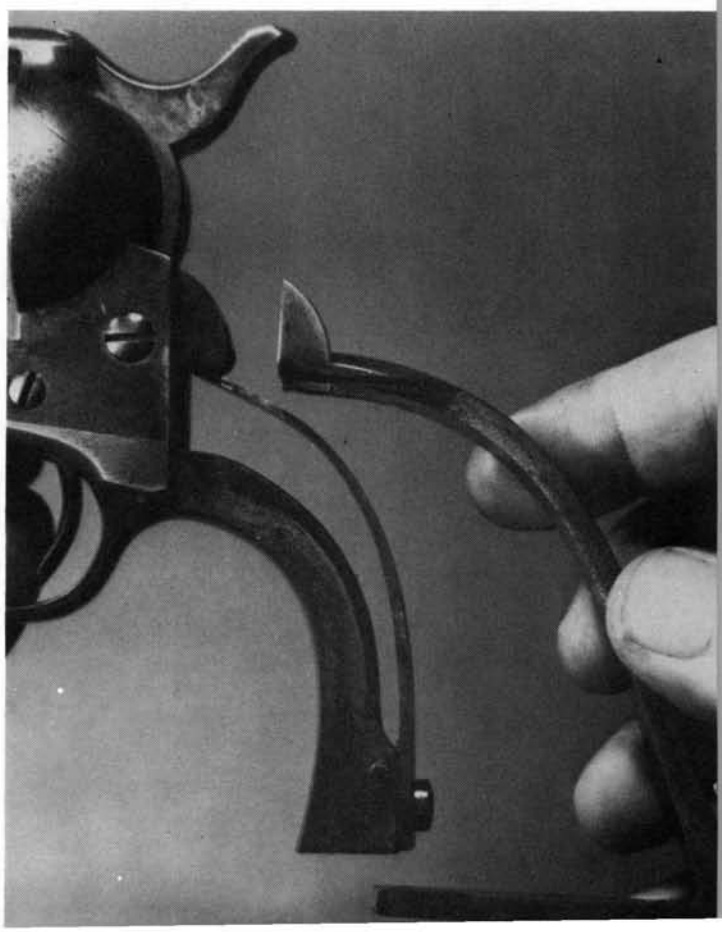
1. Set the hammer on the loading step, the middle notch. Depress the cylinder base pin latch and take out the base pin toward the front.

2. Open the loading gate and remove the cylinder toward the right.



3. Remove the bushing from the front of the cylinder.

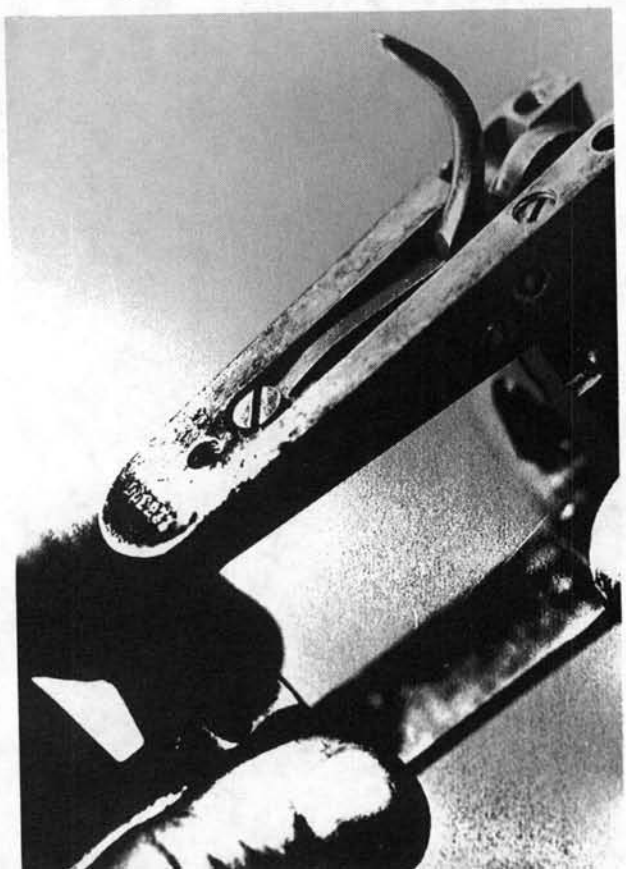
4. Remove the screw at the forward underside of the grip frame, the two screws at the upper rear of the grip frame, and remove the backstrap of the grip frame toward the rear.



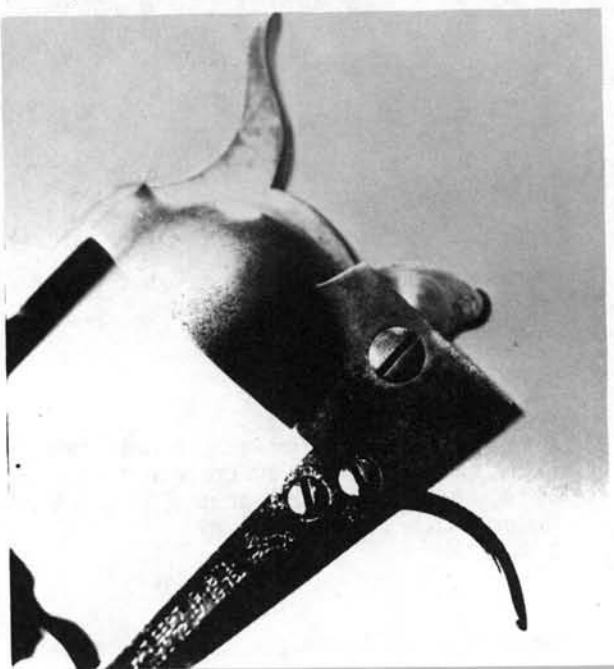
5. Remove the hammer spring screw, located at the lower rear of the frontstrap. Remove the spring.

6. Remove the three screws on the underside of the trigger guard/frontstrap unit and remove it from the frame.

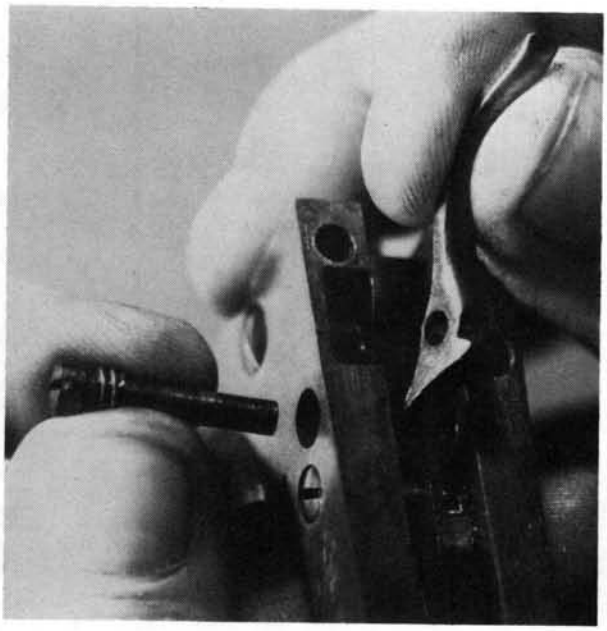
7. Remove the screw retaining the combination trigger and cylinder stop spring, and take out the spring.



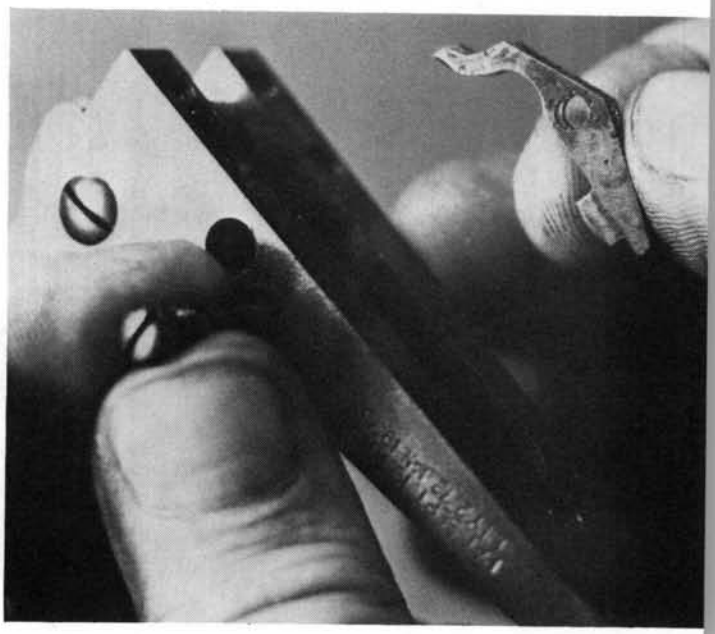
8. The hammer, trigger, and cylinder stop are retained by cross-screws in the frame (shown right to left).

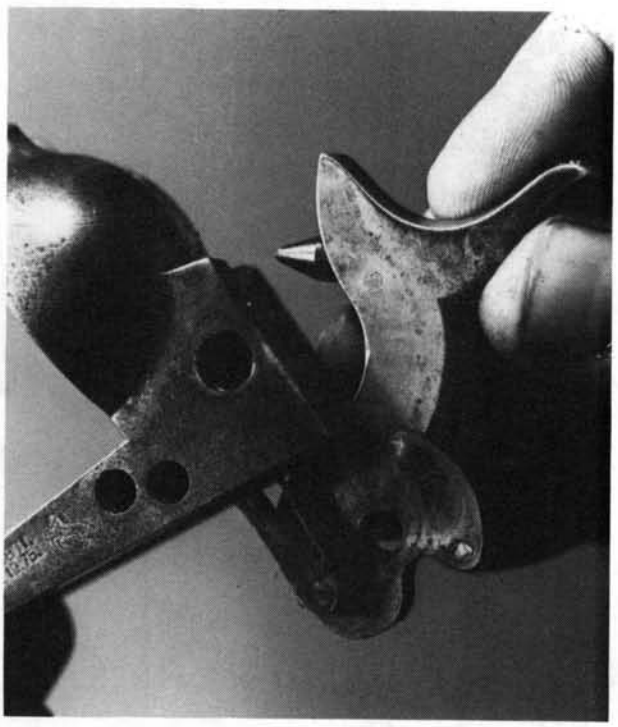


9. Take out the rearmost of the two smaller screws and remove the trigger from the frame.



10. Take out the forward screw and remove the cylinder stop from the frame.

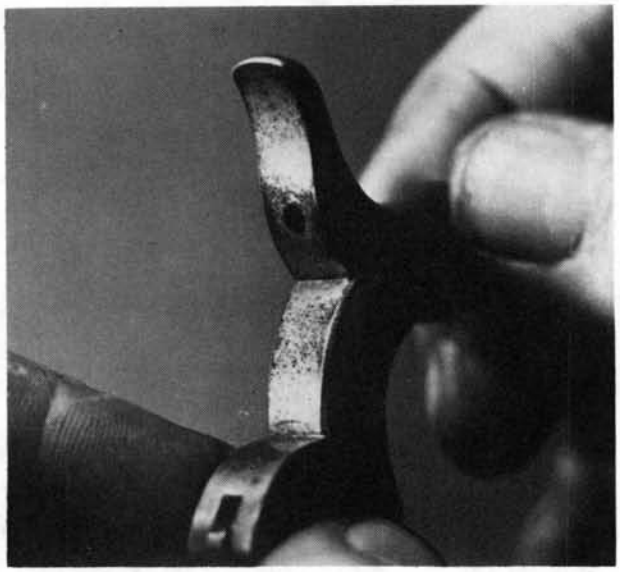




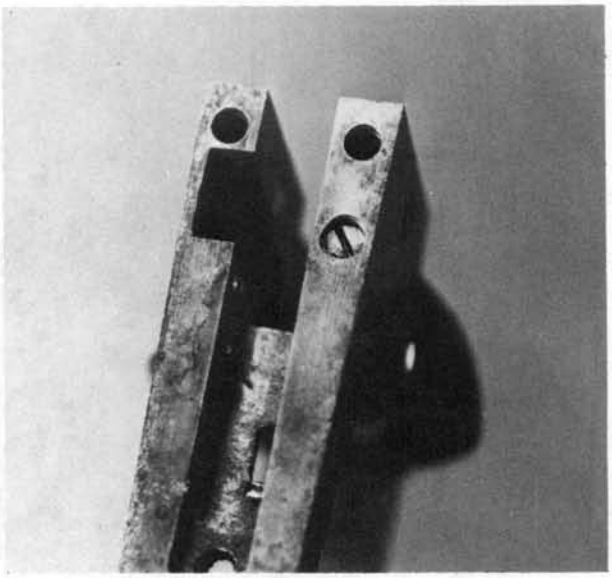
11. Take out the hammer screw and move the hammer and the attached cylinder hand and spring down out of the frame.

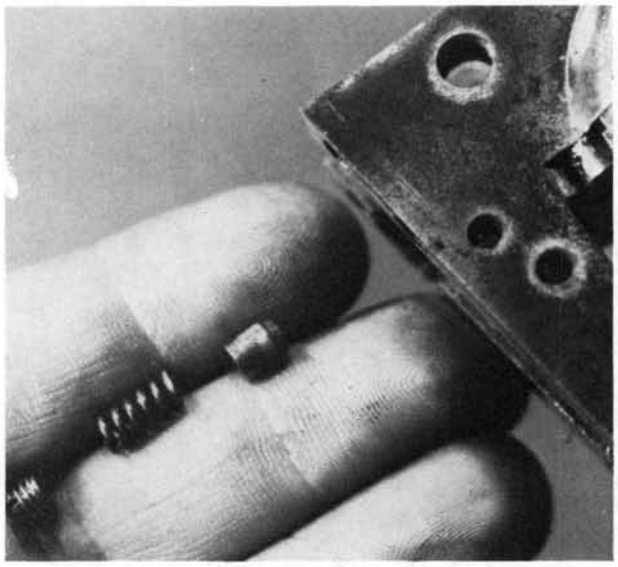
12. Remove the cylinder hand and spring toward the left.

13. The firing pin is retained in the hammer by a cross-pin. If a broken tip makes replacement necessary, a hole in the back of the hammer allows the firing pin to be drifted out forward, after the cross-pin is removed.



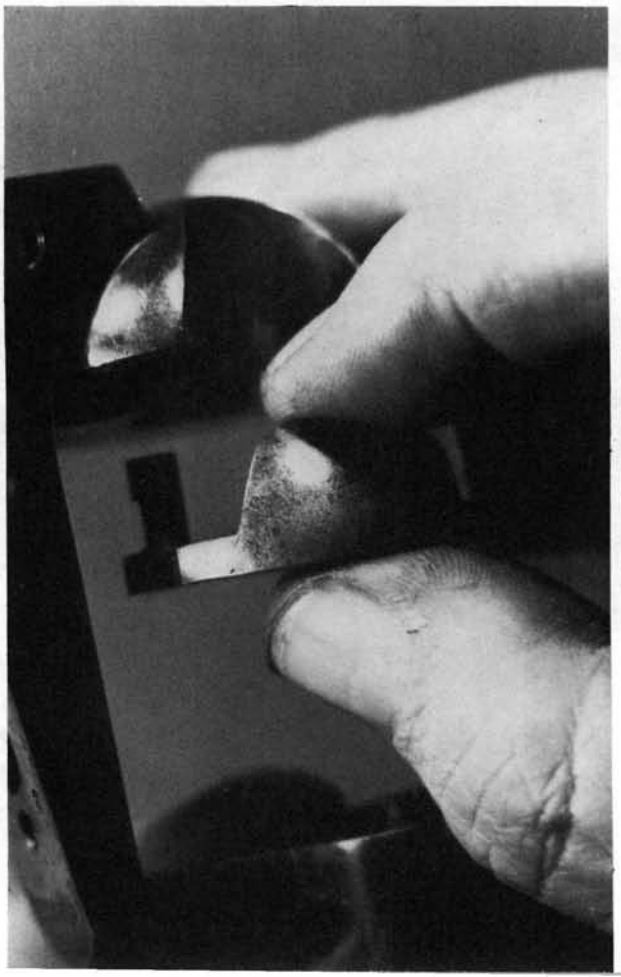
14. To remove the loading gate, back out the small screw in the right underside of the frame.



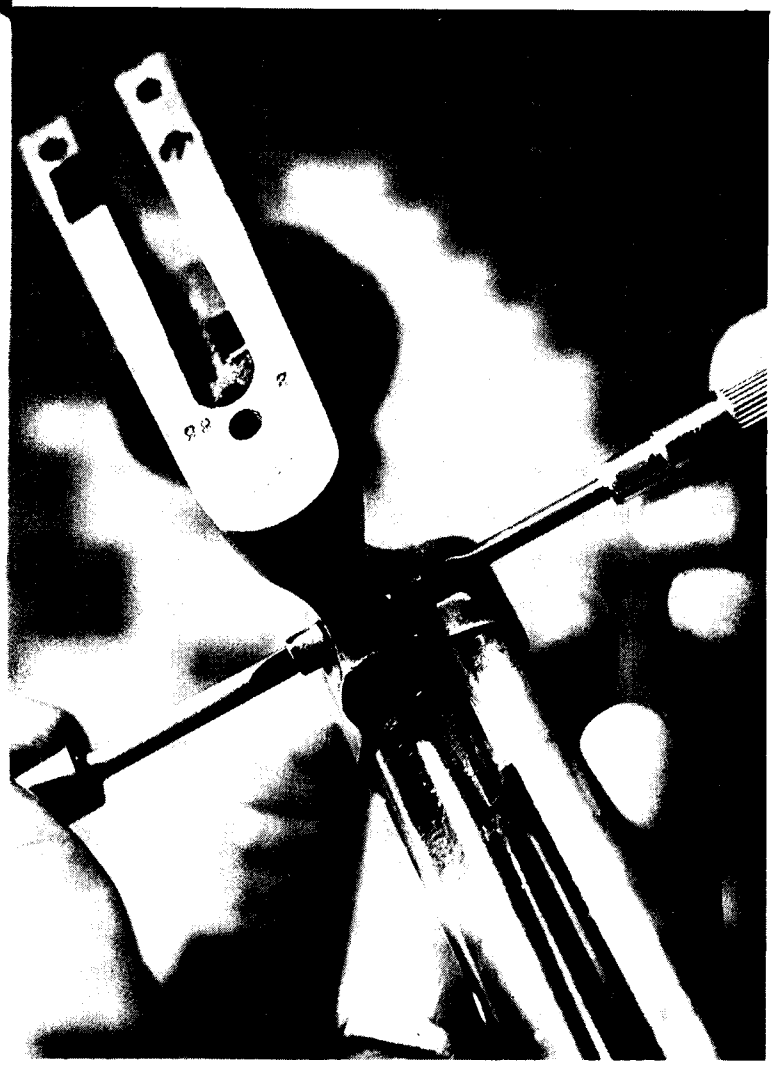


15. After the screw is taken out, remove the gate spring and plunger.

16. The loading gate can now be moved forward out of the frame.



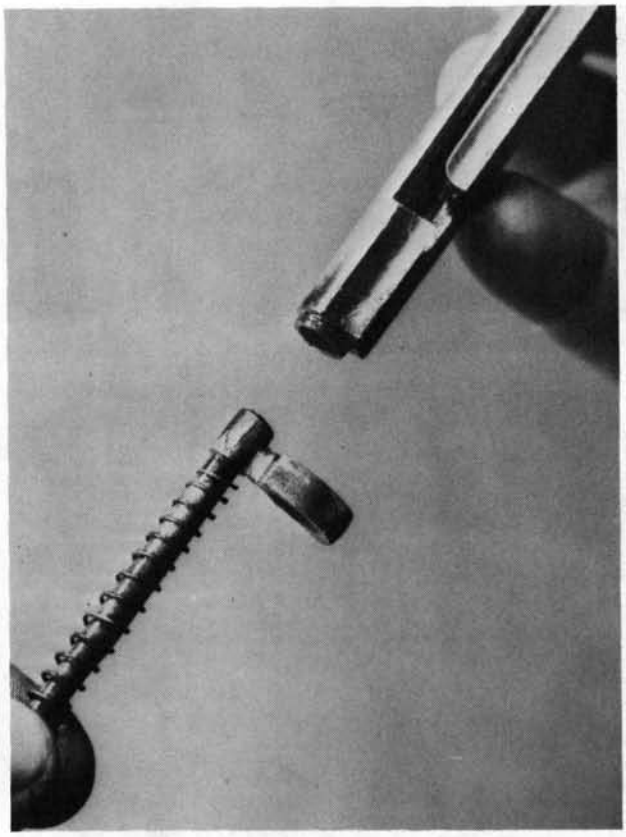
17. Two opposed screwdrivers are required for removal of the cylinder base pin latch. After unscrewing, the latch piece is removed toward the right, the cap nut and spring toward the left.



18. The ejector housing is retained by a single screw near its forward end.

19. After the screw is taken out, tip the housing away from the barrel, then remove it toward the front.

20. Move the ejector and its spring toward the rear of the housing, turn the ejector handle over into the exit track, and remove the ejector and spring toward the rear.



Reassembly Tips:

Unbelievable as it may seem, there are no special tricks and no particularly difficult points in the reassembly of the Colt Single Action. Just reverse the disassembly process slowly and carefully, and there should be no problems.

Colt Trooper Mark III

Similar/Identical Pattern Guns
The same basic assembly/disassembly steps for the Colt Trooper also apply to the following guns.

Colt King Cobra **Colt Trooper** **Colt Trooper Mark V**

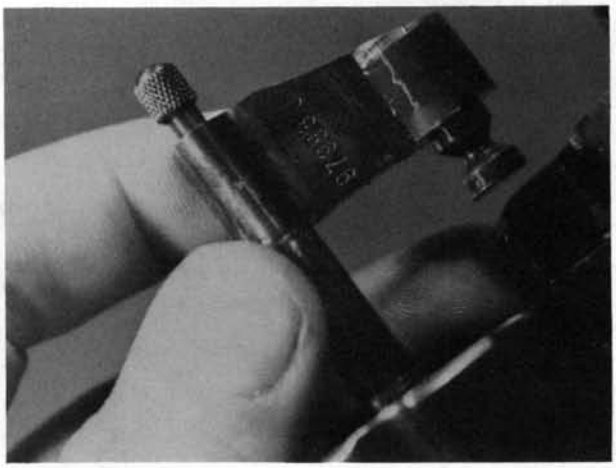
Data:	Colt Trooper Mark III
Origin:	United States
Manufacturer:	Colt Firearms, Hartford, Connecticut
Cartridge:	22 LR, 22 WMR, 357 Magnum
Cylinder capacity:	6 rounds
Overall length:	9 1/2 inches (with 4-inch barrel)
Barrel length:	4 inches (6-inch available)
Weight:	39 ounces

Externally, the Trooper has traditional Colt appearance, but inside it's entirely different. The mechanical application is more modern and it's an excellent design. While it might be temporarily puzzling to an old-time gunsmith who is familiar only with the standard Colt mechanism, it's not really complicated. In some ways, it's actually easier to disassemble or repair. The original Trooper was first offered in 1953, and it was replaced in 1969 by the Mark III. In 1984, the Mark V was introduced, and it was replaced in 1986 by the King Cobra. While there have been some changes, all of these are mechanically similar.

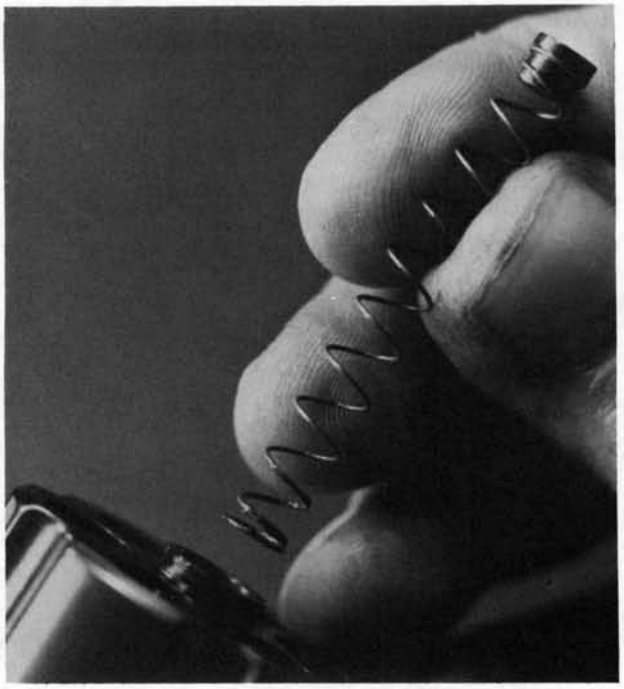
Disassembly:

1. A large hollow screw on the right side near the front of the frame covers a spring and plunger which retains the cylinder crane. Back out the screw, and remove the spring and plunger.

2. Move the cylinder crane forward out of the frame, and detach the crane and cylinder assembly.



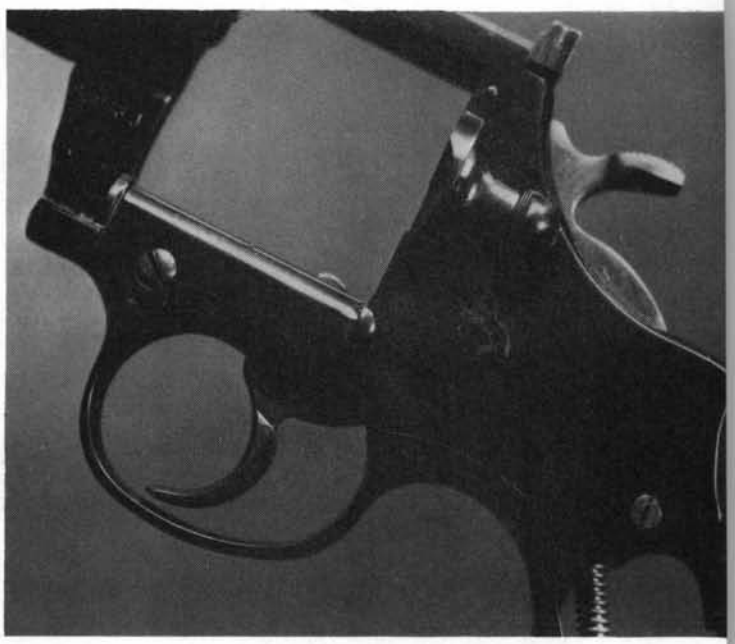
3. With leather-padded pliers, unscrew the ejector rod (turning it toward the left, front view) and remove the rod and crane from the cylinder. If the rod is very tight, pad a vise with leather or wood, insert two empty cartridge cases in opposite chambers to stabilize the ejector. Then clamp the rod into the vise, turning the cylinder by hand until it breaks free.



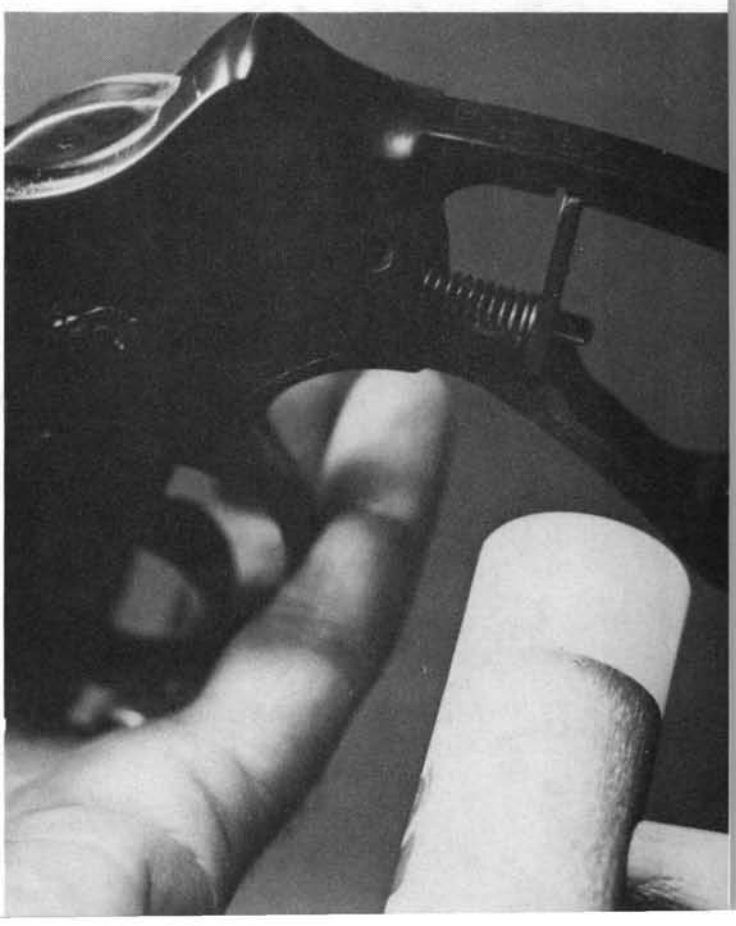
4. Remove the ejector spring and its bushing from the cylinder. Remove the ejector rod from the crane.

5. Remove the ejector/ratchet from the cylinder.

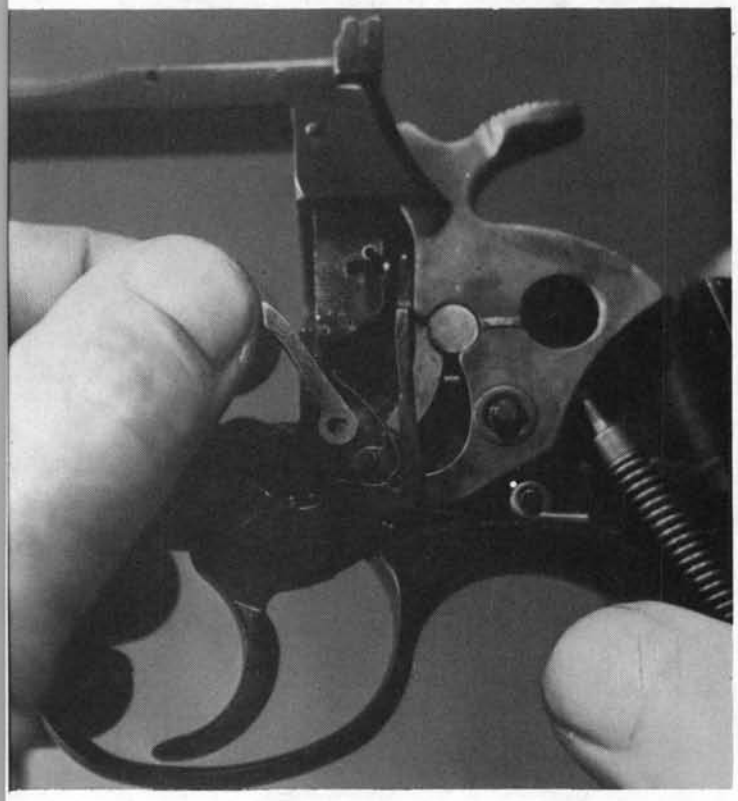
6. Remove the grips. The sideplate is retained by screws at the front and rear.



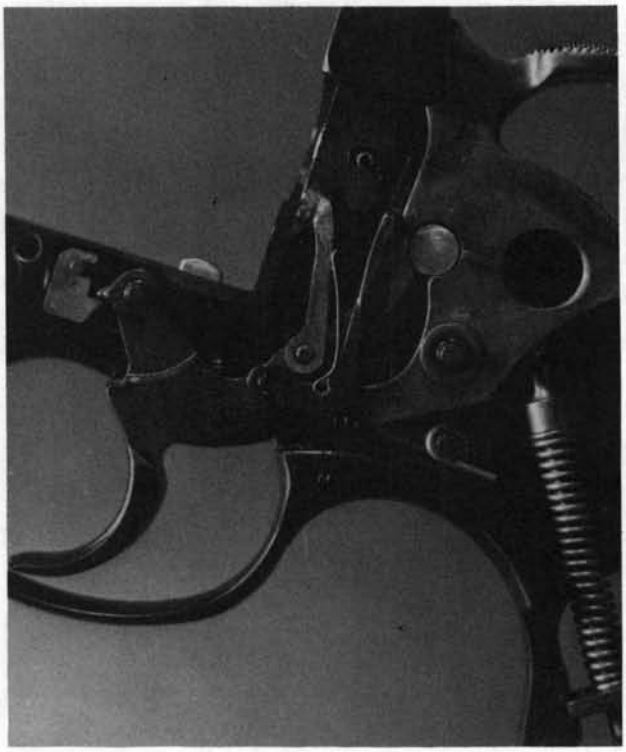
7. After the two screws are removed, hold the gun as shown and tap the grip frame with a nylon hammer or some other non-marring tool; the sideplate will fall off into the palm of the hand. Do not pry the sideplate off as this will burr the edges.



8. Remove the cylinder latch and its spring toward the front of the sideplate. Note the small nylon bearing pin at the rear of the latch recess in the sideplate. If necessary, this can be easily detached from its hole in the sideplate.



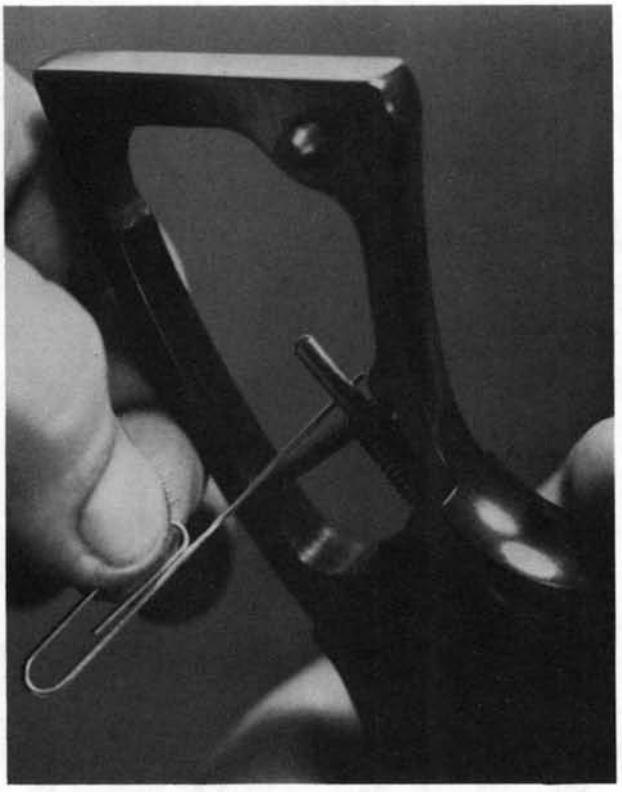
9. The transfer bar and cylinder hand will often come off as the sideplate is removed. This photo shows all of the internal parts in their proper positions.



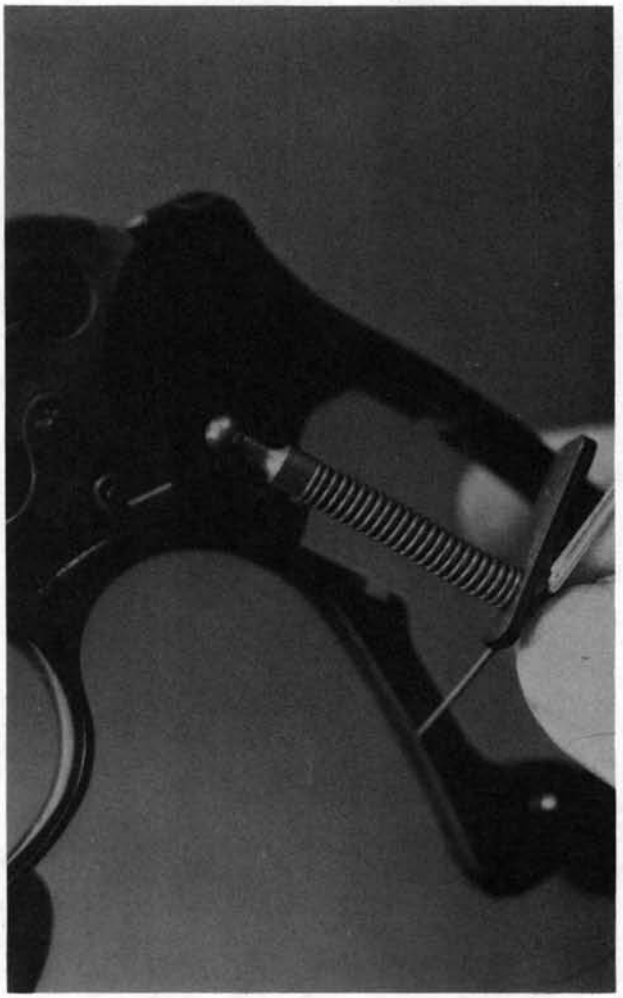
10. Remove the cylinder hand from its stud on the trigger.

11. Remove the transfer bar and its captive leaf spring from its stud on the trigger.

12. Cock the hammer and insert an opened paper clip through the small hole in the hammer spring guide. Let the hammer down slowly.

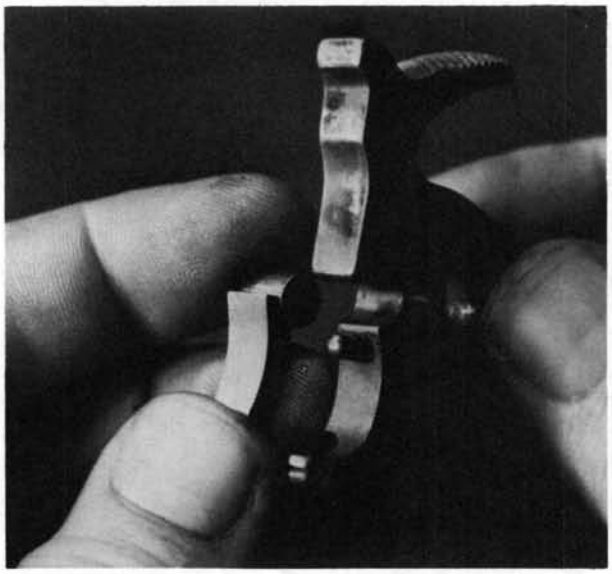


13. The trapped hammer spring, guide, and compression plate can now be removed from the frame. If they are to be separated, clamp the plate in a vise, push on the guide to compress the spring, and remove the paper clip from the hole. Be careful to release the spring tension slowly.



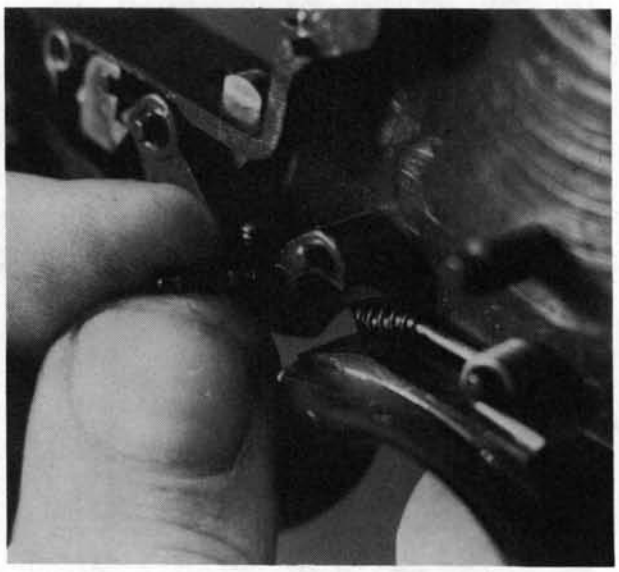
14. Pull the trigger to the rear, and remove the hammer toward the left.

15. The double-action lever is easily detached from the hammer by sliding it out toward either side. Take care not to lose the small spring and plunger behind the lever. These parts can now be removed from their hole in the hammer.



16. Remove the cylinder latch bolt from its hole in the frame, moving it out toward the rear.

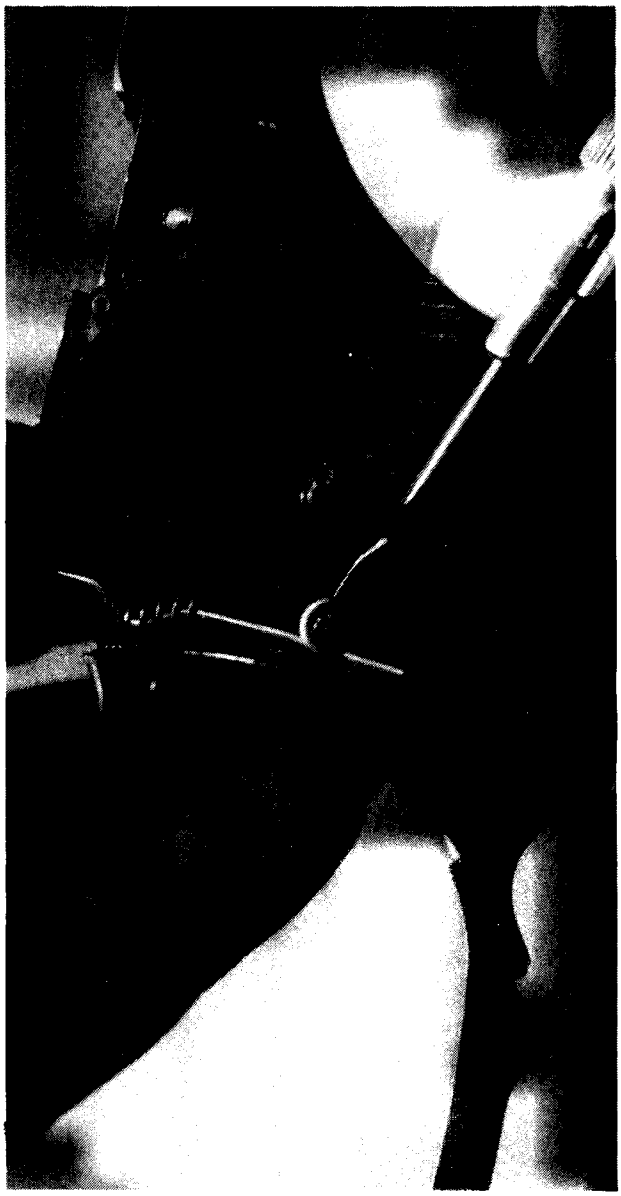
17. Insert a small screwdriver beneath the front arm of the trigger spring, and lift it slightly to free its forward end from a groove in the spring bearing pin in the trigger. Move the pin toward the left while the spring is raised.



18. Remove the spring bearing pin from the trigger.

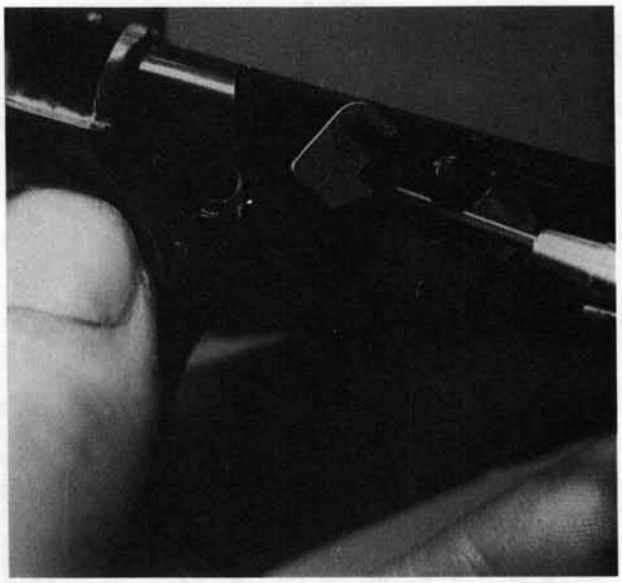
19. Remove the trigger toward the left.

20. The trigger spring can now be pried gently toward the left off its fixed post on the frame. **Caution:** *The spring is under tension, even when at rest. Keep it under control as it is removed, and take care not to lose the small coil spring on its forward arm.*



21. Insert a small screwdriver into the loop of the cylinder stop spring, and gently lever it out of its recess in the frame. The spring is under compression but it will be caught by the screwdriver shaft if this is done properly.

22. Use a small tool to lift the cylinder stop out toward the left. Note that it must be tipped downward, out of its slot in the floor of the cylinder recess. The firing pin and its spring and bushing are retained by a cross-pin, and after removal of the pin all three parts are removed forward. A cross-pin also retains the rear sight. After removal of the pin, the elevation screw must be turned counterclockwise to free the sight for removal.



Reassembly Tips:

When replacing the sideplate, be sure that the side pin of the cylinder latch bolt enters its hole on the inside of the cylinder latch piece. Be sure the bolt is all the way forward, and depress the latch piece until it is even with the edge of the frame, then push the sideplate gently inward. During this operation, take care that the cylinder hand and transfer bar do not come free of their studs on the trigger.

Enfield No. 2 Mark I*

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Enfield No. 2 Mark I* also apply to the following gun.

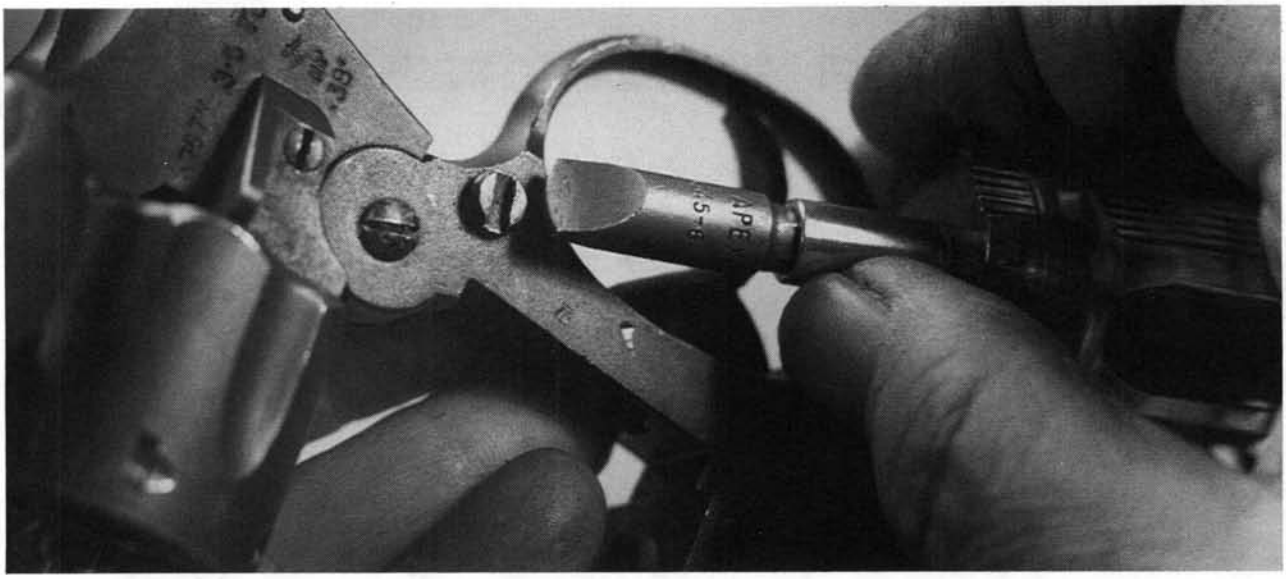
Enfield No. 2 Mark I

Data:	Enfield No. 2 Mark I*
Origin:	England
Manufacturer:	Royal Small Arms Factory, Enfield Lock, Middlesex
Cartridges:	38-200 (38 S&W)
Cylinder capacity:	6 rounds
Overall length:	10 1/4 inches
Barrel length:	5 inches
Weight:	27 ounces

In 1932, the Royal Small Arms Factory at Enfield Lock began production of the Mark I revolver, a simplified version of the basic Webley Mark IV design. The inclusion of a sideplate made ordnance maintenance easier than the solid-frame design of the Webley. The spurless hammer of the No. 2 Mark I* gun shown here is original, and the trigger system was designed for double-action only-firing.

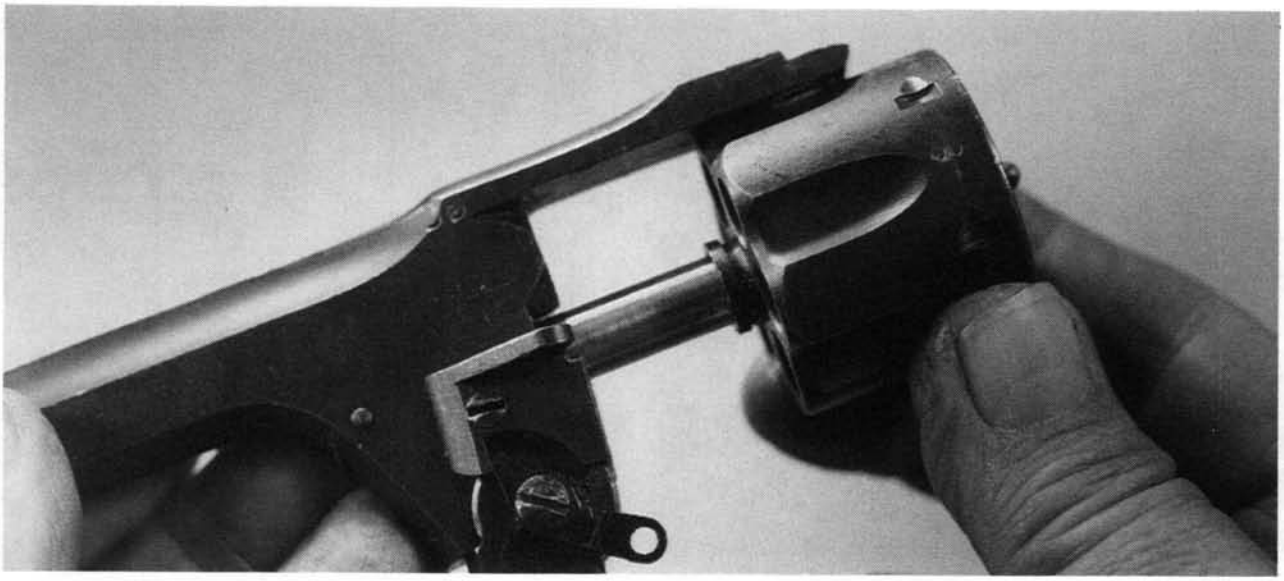
Disassembly:

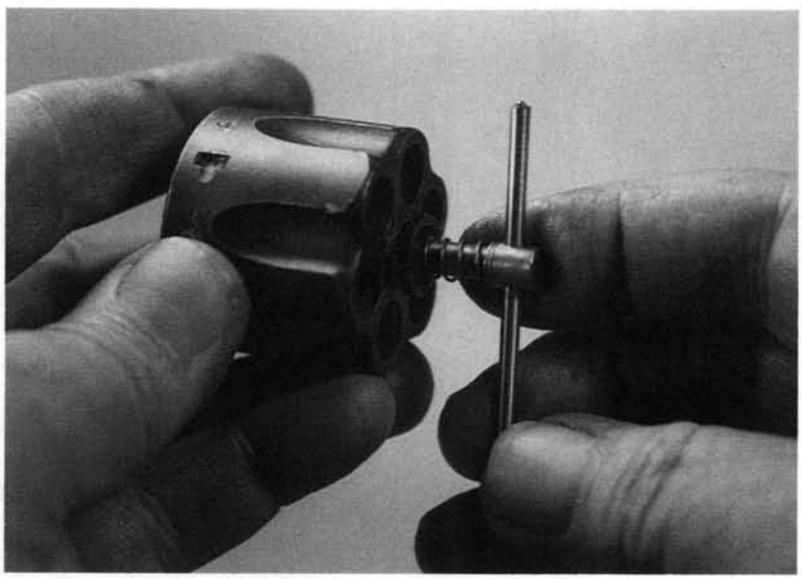
1. Use a coin or a screwdriver with a thick blade to back out or remove the large screw on the right side at the front of the trigger guard.



2. Rotate the lower end of the cylinder retainer lever upward until it tips the retainer out of engagement with the cylinder collar.

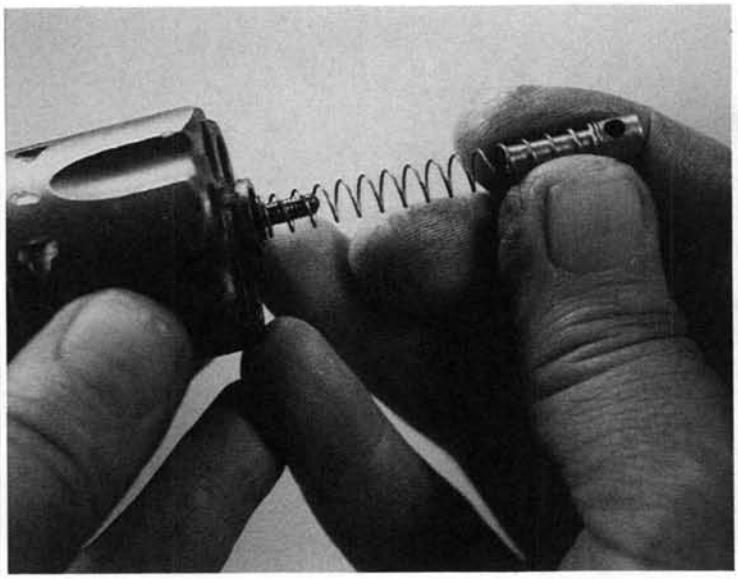
3. Remove the cylinder from its arbor on the barrel unit.



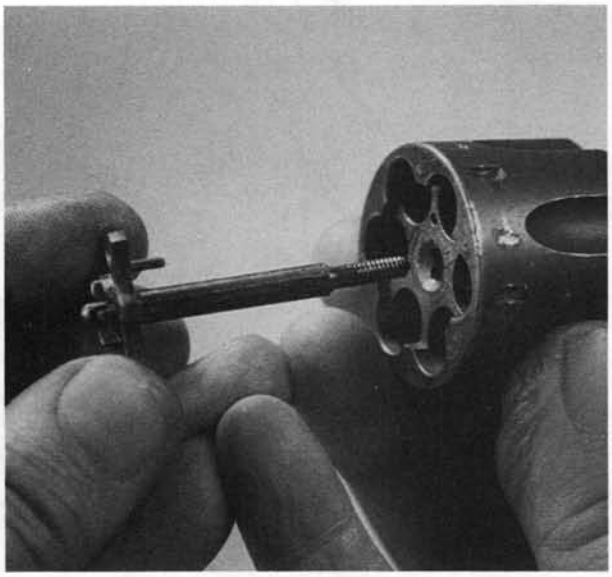


4. Insert a rod or drift punch through the hole in the end of the ejector rod, and unscrew the rod counterclockwise (front view).

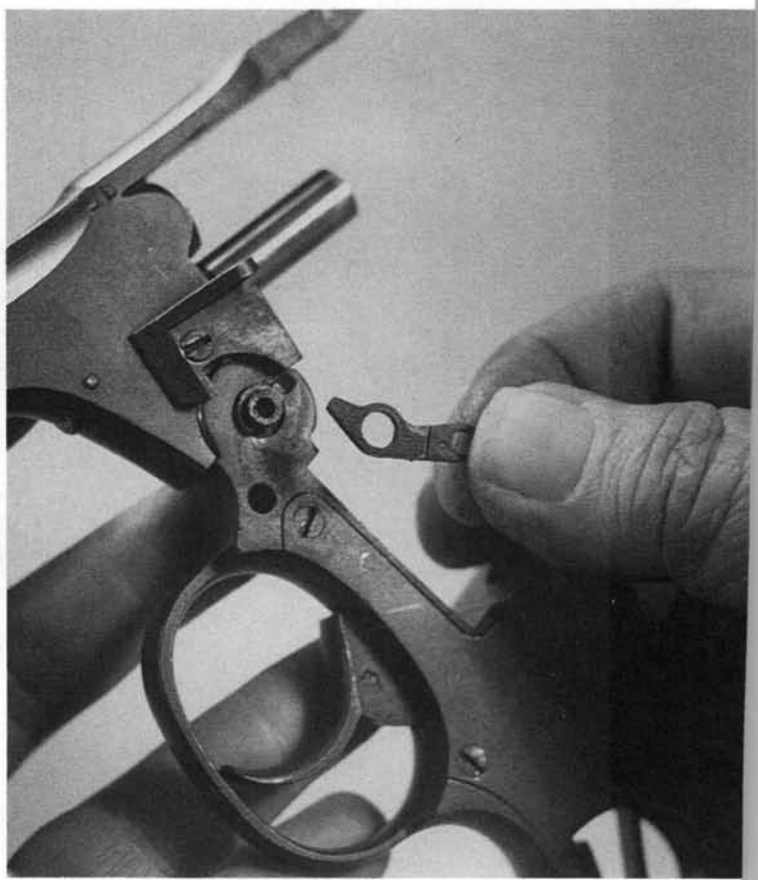
5. Remove the ejector rod and its spring toward the front.

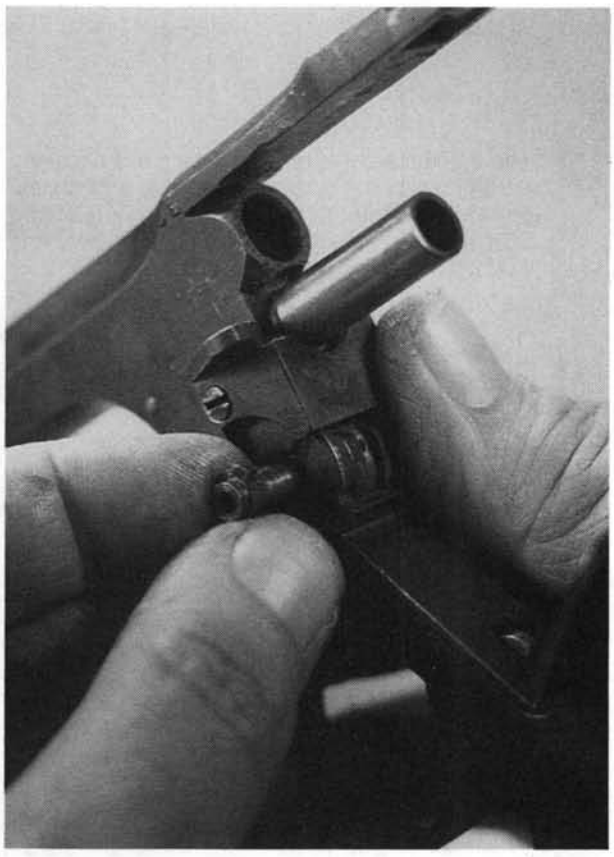


6. Remove the ejector/ratchet unit toward the rear.



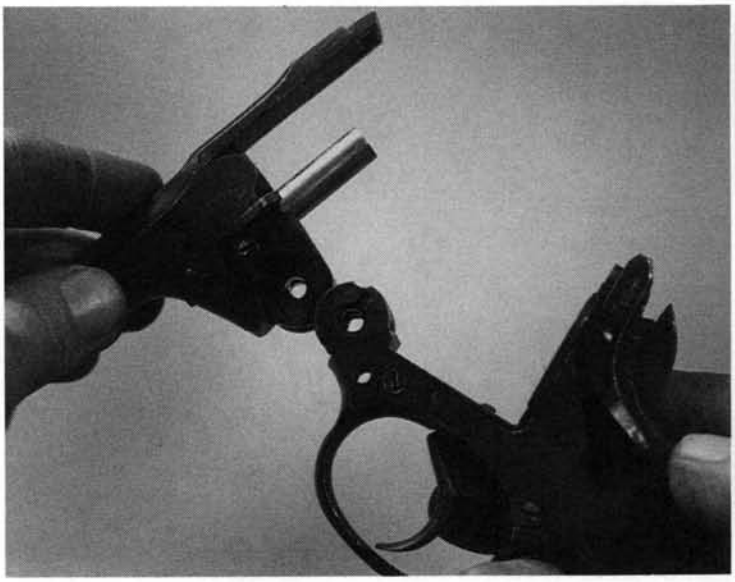
7. Remove the barrel hinge cap screw on the left side, and take off the cylinder retainer lever toward the left.

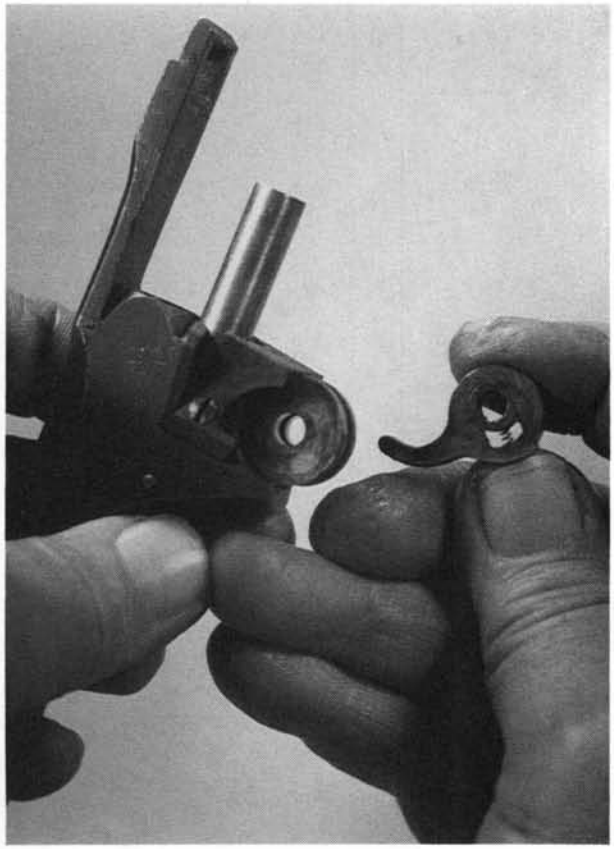




8. Remove the barrel hinge cap screw on the right side, and push out the barrel hinge toward the left. If the hinge is tight, first loosen the screw two turns, and tap it with a nylon mallet before removal, to start the hinge leftward.

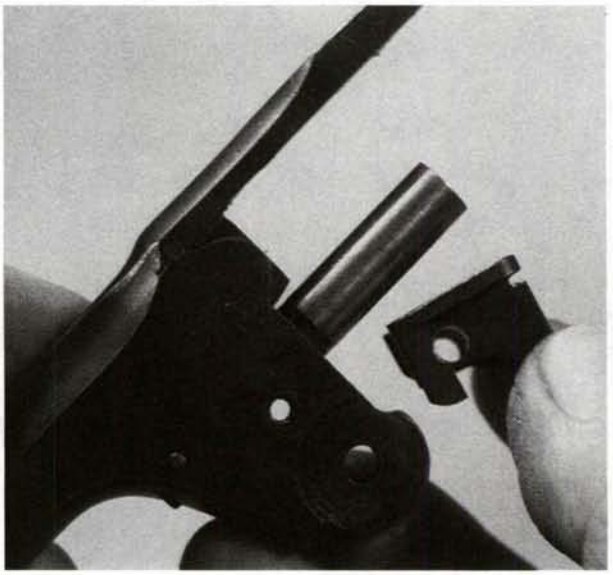
9. Remove the barrel assembly from the frame.



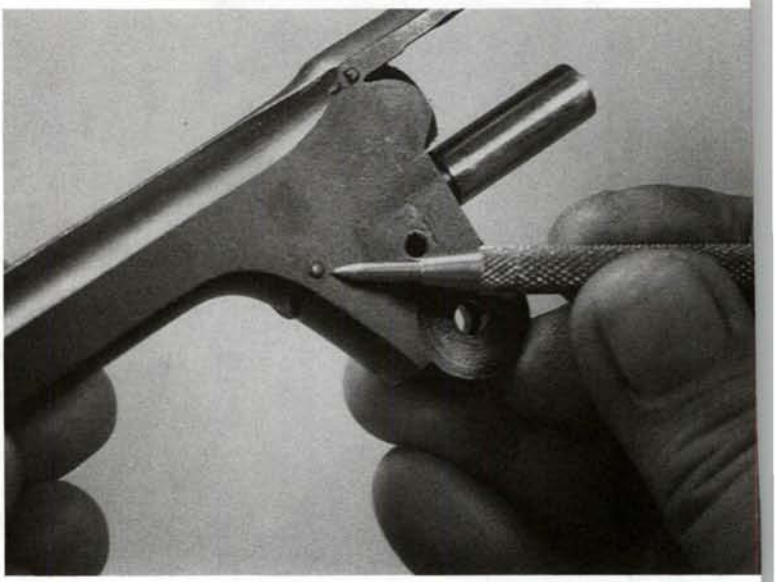


10. Remove the ejector cam from the barrel assembly, downward. Note that the internal block and spring are easily removed from the center of the cam, but control the small spring, and take care that it isn't lost.

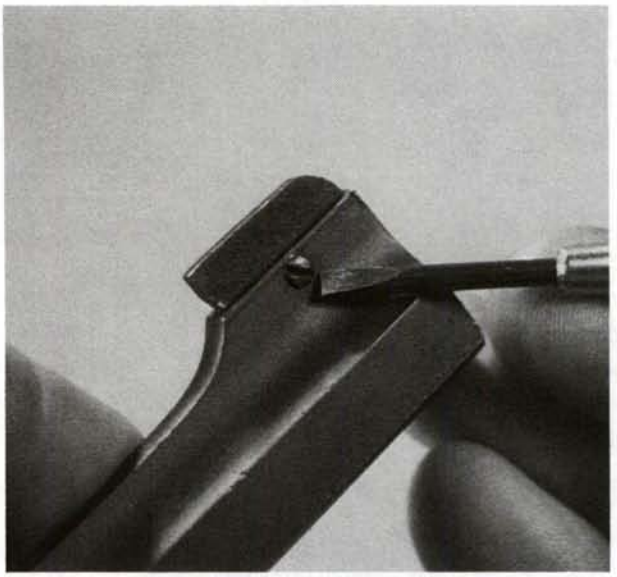
11. Remove the screws on each side of the cylinder retainer, and take it off rearward.



12. The cylinder arbor is retained by a cross-pin at the front of the barrel underlug, and it is partially exposed at the front to facilitate tapping it rearward for removal. However, in normal takedown, it is best left in place.

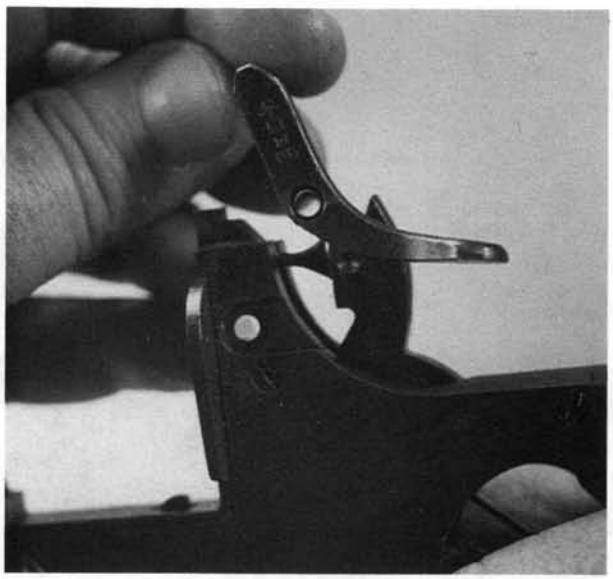


13. The front sight blade is retained by a cross-screw that enters from the right. After removal of the screw, the blade is taken out upward.



14. Remove the cross-screw in the barrel latch toward the left. When the threads have cleared, it will be necessary to use a drift to push the screw out.

15. Move the latch to the rear, and take it off upward.

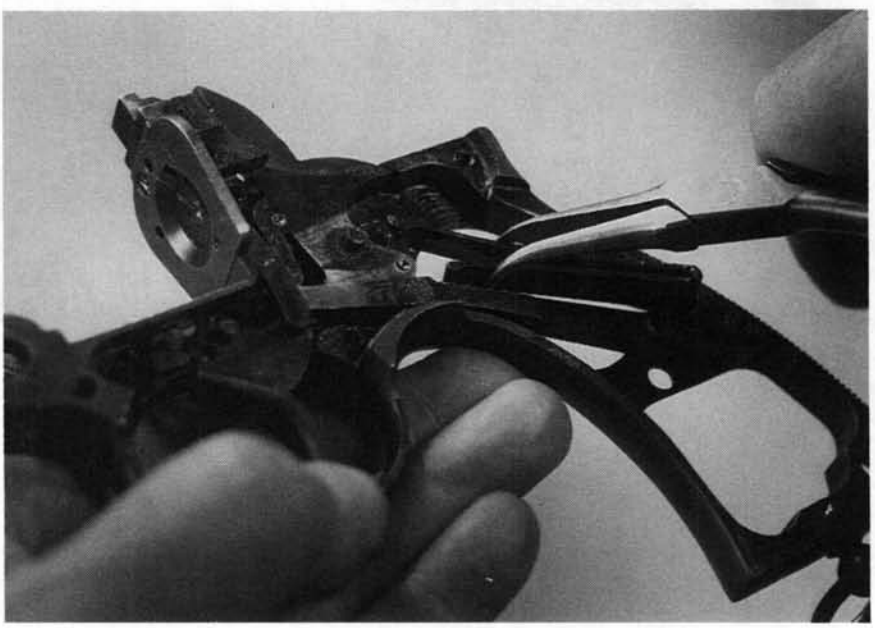


16. Remove the barrel latch spring from the right side of the frame.

17. Remove the four sideplate screws on the left side.

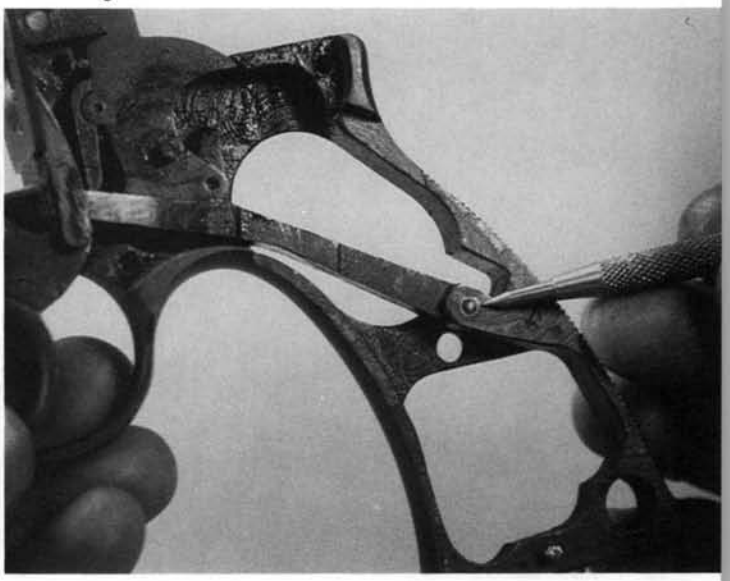
18. Hold the gun as shown, and tap the grip frame with a nylon mallet until the sideplate falls into the hand.

19. Slightly compress the mainspring, unhook it from the stirrup, and remove it. **Caution:** *Control the spring.*



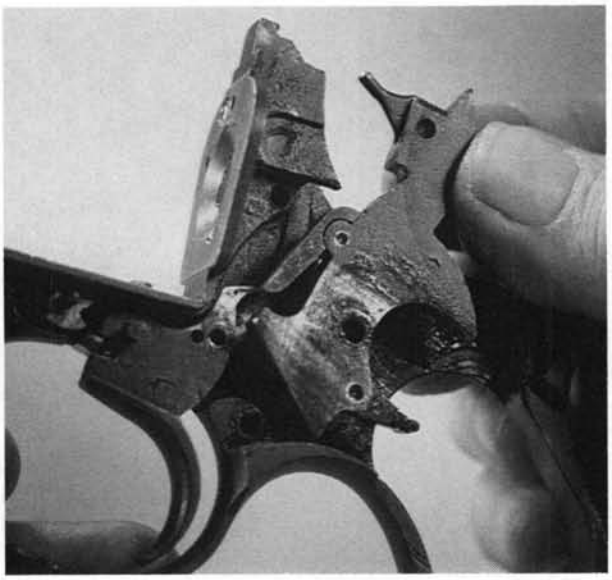
20. Turn the cylinder hand out of its recess in the frame, and remove it toward the left.

21. Drift out the rebound lever cross-pin toward the right.

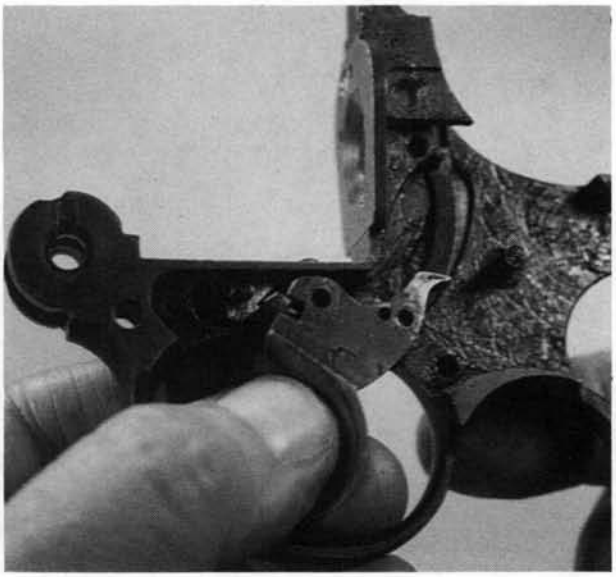


22. Move the rear end of the rebound lever forward and downward, out of its recess, and take it out toward the left.

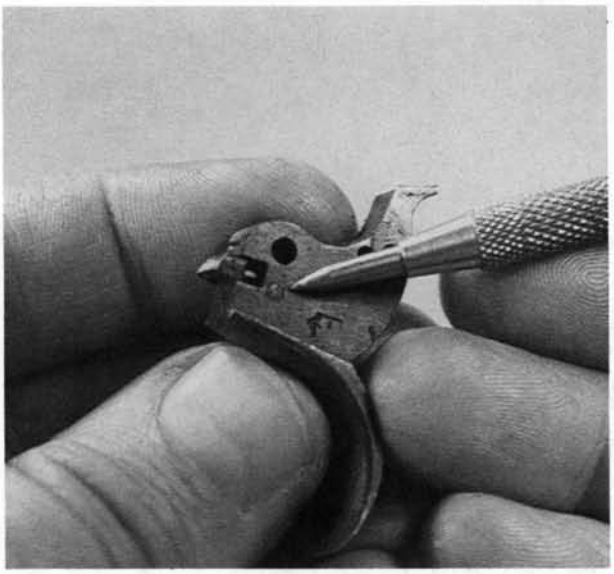
23. Remove the hammer toward the left. The double-action lever, the stirrup, and the firing pin are retained on the hammer by cross-pins, and these are usually staked or riveted in place. They should be removed only for repair purposes. If the double-action lever is taken out, take care that the small coil spring isn't lost.



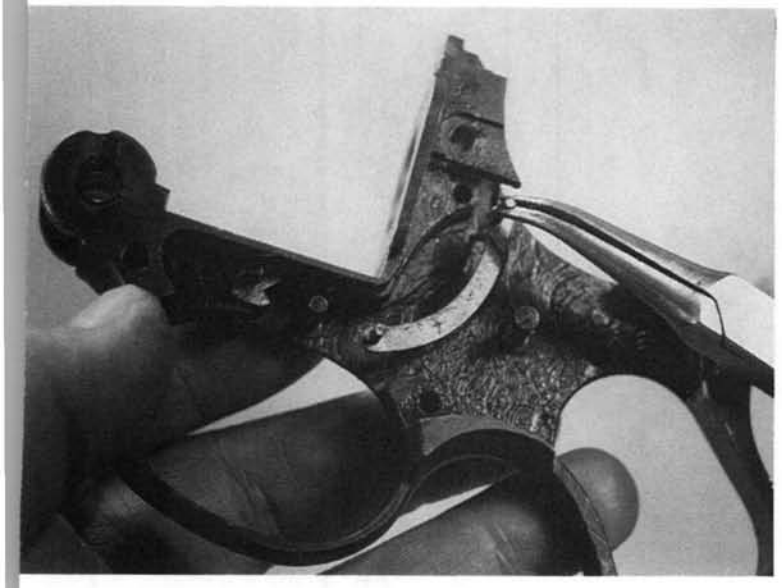
24. Remove the trigger toward the left.



25. The cylinder stop trip and its coil spring are retained in the trigger by a cross-pin. Unless it is necessary to remove them for repair, they are best left in place.



26. Remove the hammer block bar from its recess in the frame.



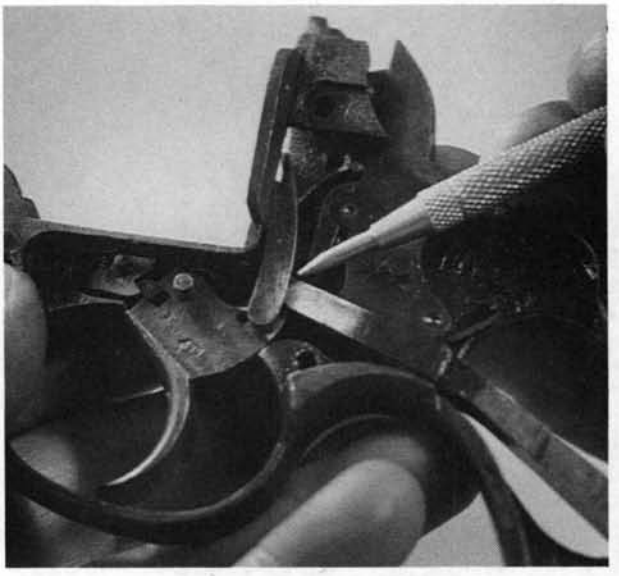
27. Use a tool from above to depress the cylinder stop below the inside surface of the frame, and another tool to nudge it out toward the left. **Caution:** *As the stop clears its post in the frame, the compressed spring will be released, so control it.*

28. The lanyard ring is retained on the frame by a cross-pin which also stabilizes the grip panels. Drifting out the cross-pin will release the post and ring for removal downward.

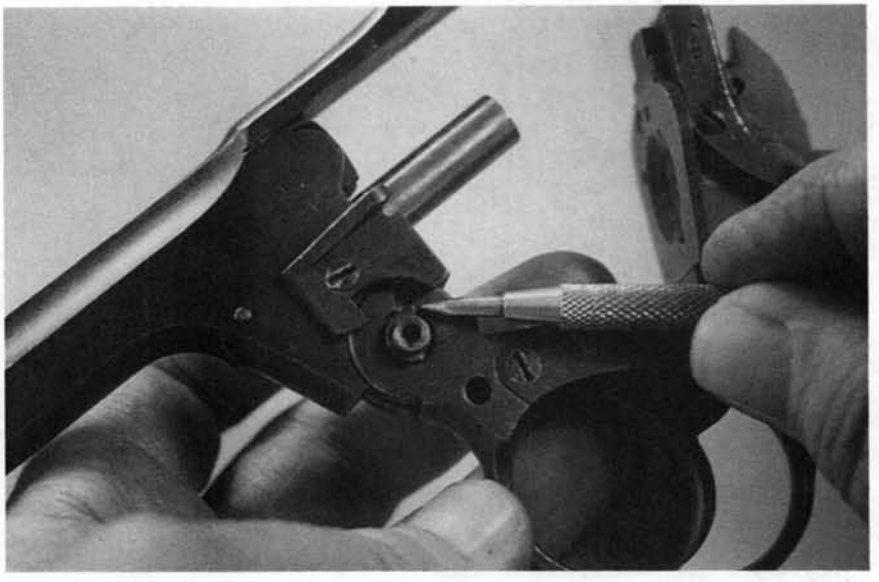
Reassembly Tips:

1. When replacing the trigger assembly, be sure the lower post of the hammer block bar is in the forward hole of the two at the rear of the trigger. As the trigger is pushed into place, it will be necessary to depress the cylinder stop trip, to properly engage the cylinder stop.

2. Be sure the forward extension of the rebound lever properly engages its shelf on the inside of the cylinder hand.



3. When replacing the barrel hinge, be sure the barrel assembly is snugged all the way into the frame, and keep it open to mid-point, to allow clearance of the ejector cam center block. Proceed carefully, and use no extreme force. As the hinge is seated in place, be sure the square tab on the hinge is aligned with its recess in the frame.



F.I.E. Arminius HW 7

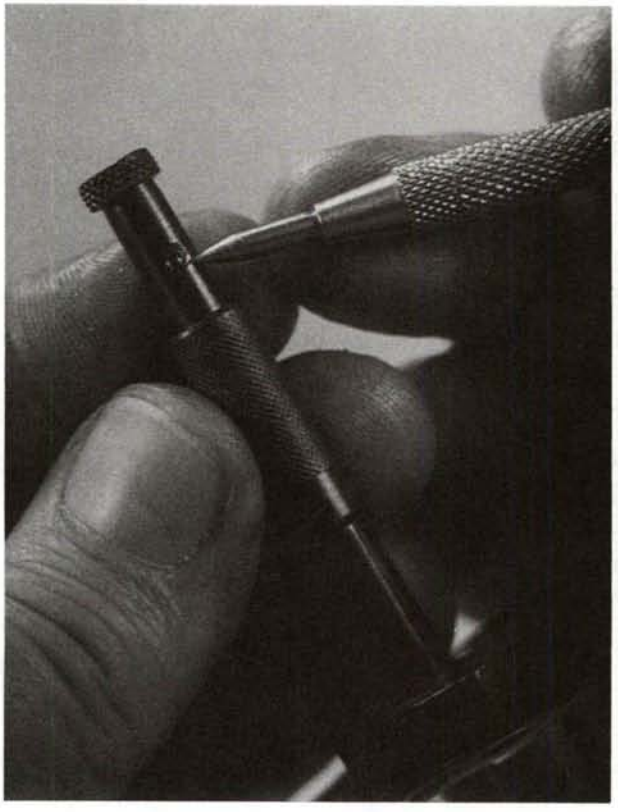
Data:	F.I.E. Arminius Model HW7
Origin:	West Germany
Manufacturer:	Hermann Weihrauch KG, Mellrichstadt
Cartridges:	22 LR, 22 WMR, 32 S&W Long,38 Special, 357 Magnum
Cylinder capacity:	8 rounds (22LR)
Overall length:	11 inches (6-inch barrel)
Barrel length:	2, 3, 4, and 6 inches
Weight:	35 ounces (22 LR, 6-inch barrel)

The Arminius name and trademark has been used in the past by other European makers, but it is now used only by Hermann Weihrauch of Mellrichstadt, West Germany. Imported into the U.S. by F.I.E. of Miami, these good revolvers are offered in several variations of barrel length, sight equipment, and chamberings. There are some differences in parts among the various calibers, of course, but all of them are essentially the same mechanically.

Disassembly:

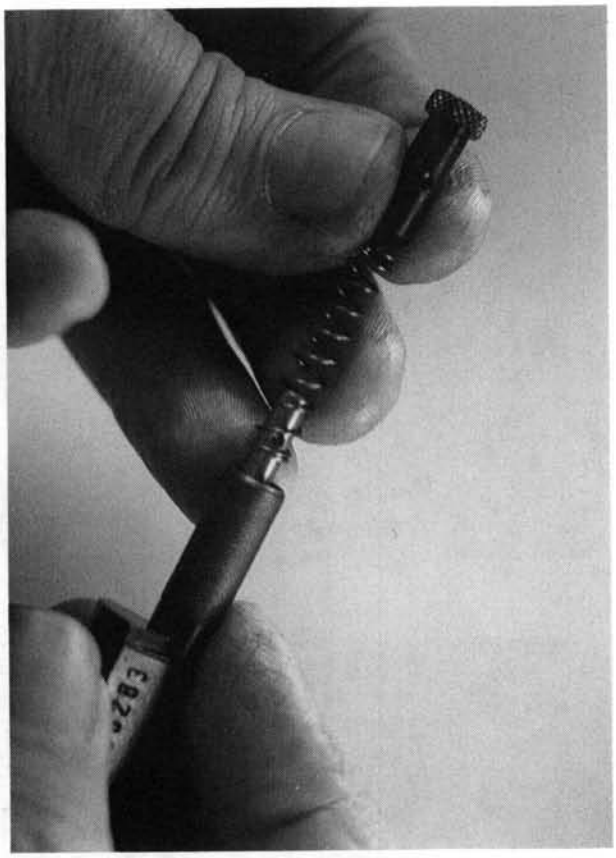
1. Remove the crane hinge screw.

2. Operate the cylinder latch, and remove the crane and cylinder assembly toward the left.

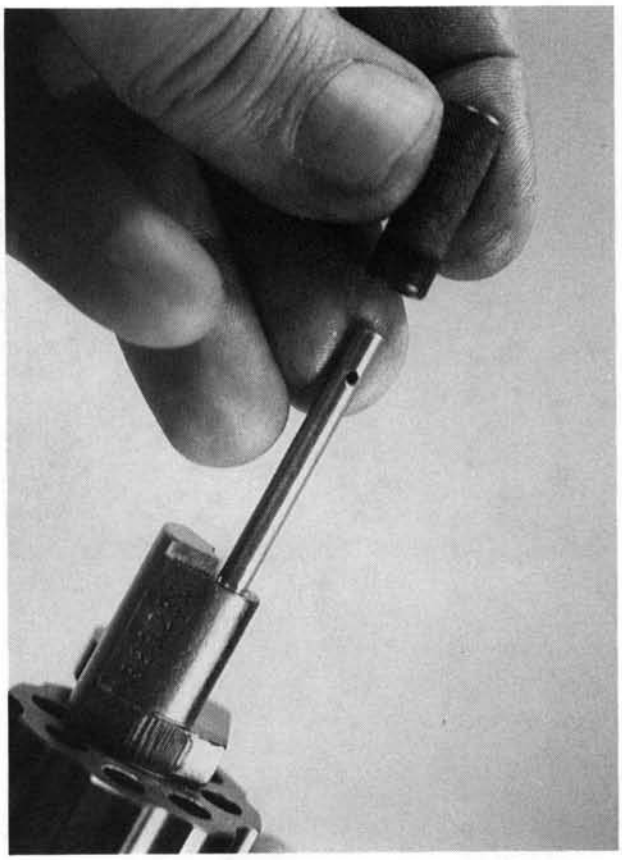


3. Support the ejector rod knob on a non-marring surface, and drift out the knob cross-pin.

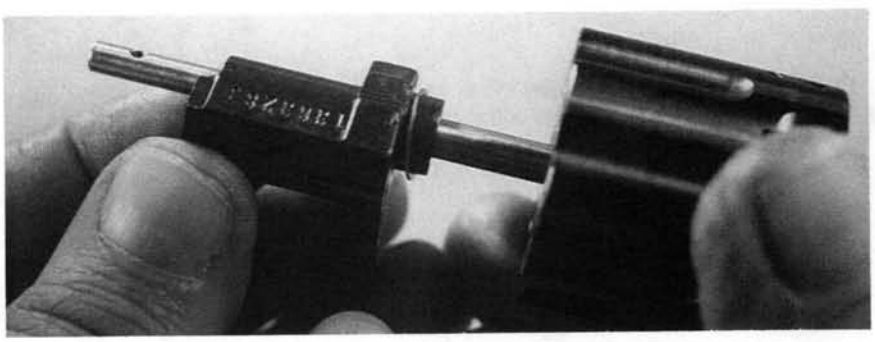
4. Remove the ejector knob and the locking sleeve spring toward the front.



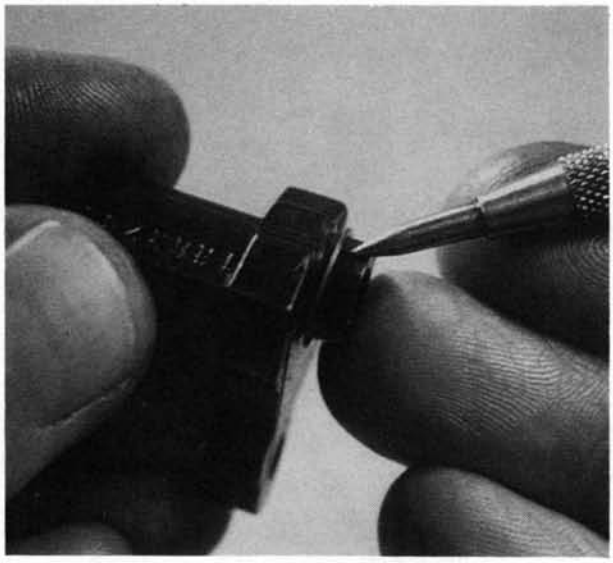
5. Remove the locking sleeve toward the front.



6. Remove the crane toward the front.

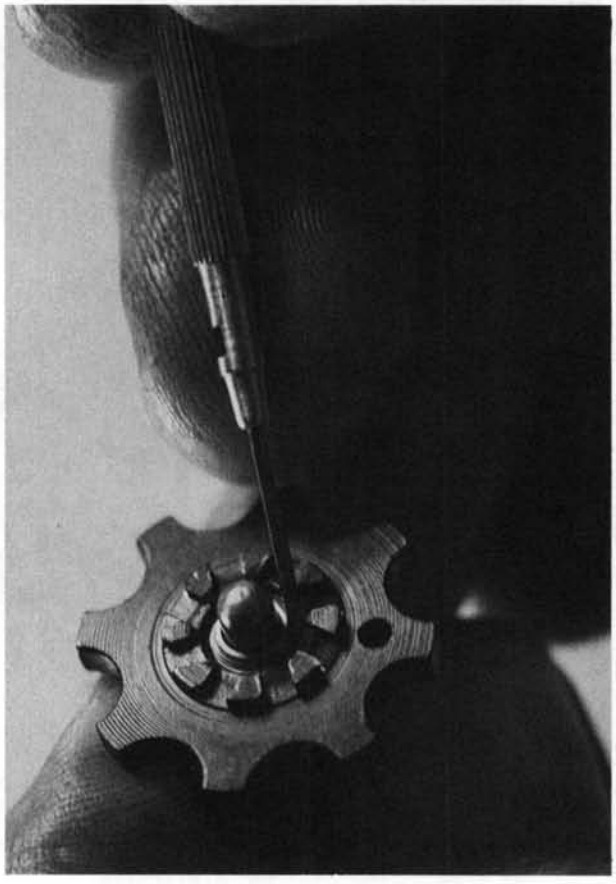


7. Take care that the spacer ring ("gasket") on the crane isn't lost.



8. Remove the ejector rod unit toward the rear.

9. A small "spring ring" retains the ejector/ratchet on the rod, along with the internal collar and spring. The rear edge of the collar is flanged over the spring ring, and removal may deform or break it. Unless necessary for repair, this unit is best left together.



10. Remove the screw at the lower end of the grip, and take off the grip piece downward.

11. Drift out the cross-pin at the front of the guard.

12. Drift out the cross-pin at the center of the frame.

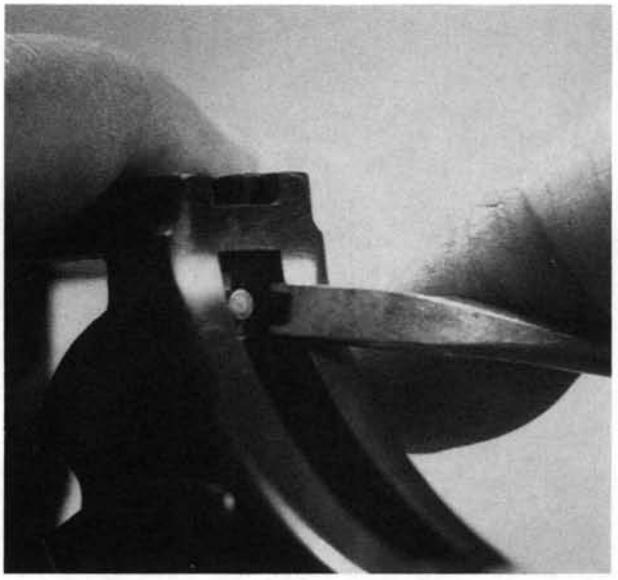
13. Cock the hammer, and use a tool to depress the firing pin. Move the sub-frame slightly downward, to clear the hammer block bar past the head of the firing pin.

14. Ease the hammer down to fired position, and move the sub-frame downward to the level shown.

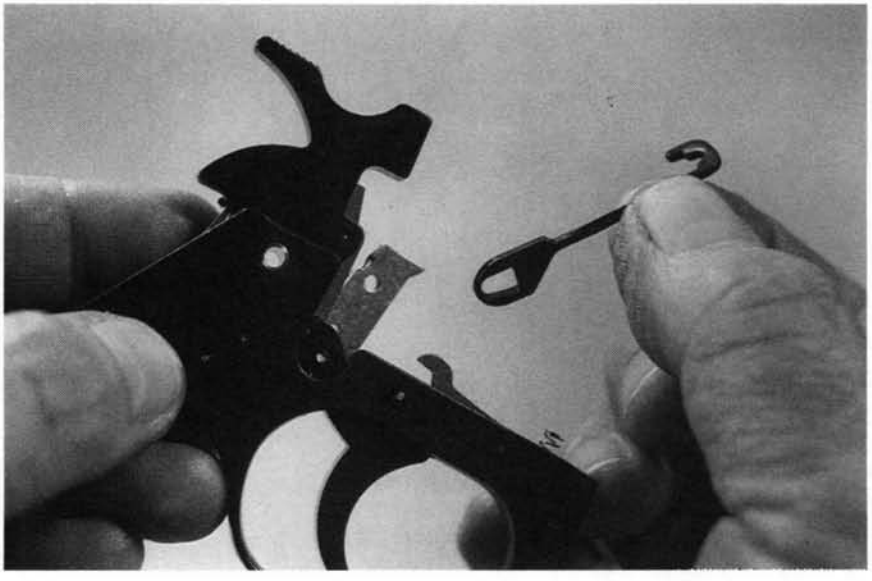
15. Push the cylinder latch button rearward, to clear the hammer block cross-piece, and remove the sub-frame downward

16. Use an Allen wrench to remove the screw in the cylinder latch button. The button and spring are taken off toward the left, and the push bar and plunger from inside the frame.

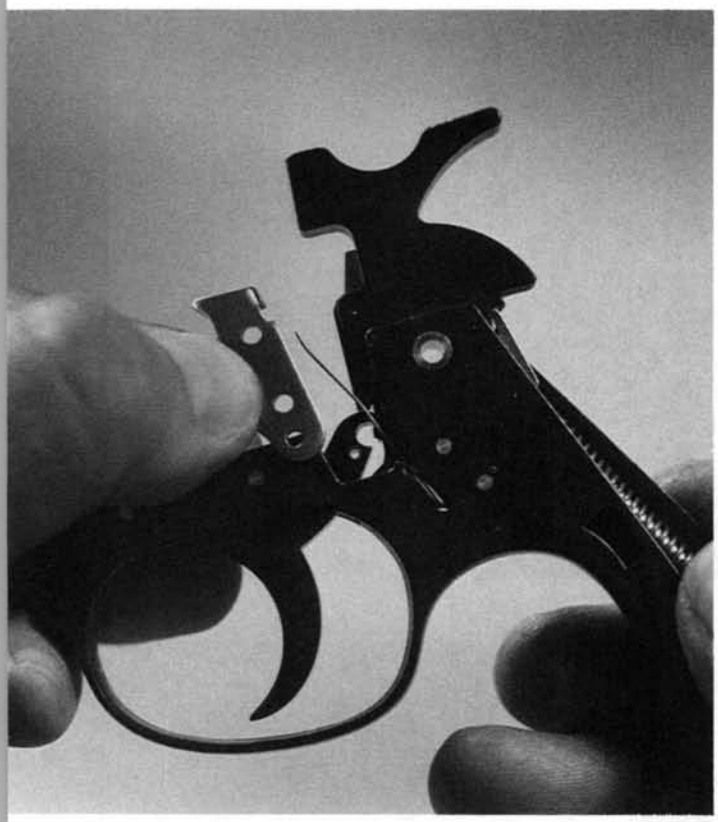
17. Removal of the firing pin requires a special two-point wrench, easily made from an old screwdriver. The firing pin retainer unscrews counterclockwise (rear view). The retainer, firing pin, and spring are taken out rearward. The steel impact ring may stay in the recess, or may come out after the spring. Take care that it isn't lost.



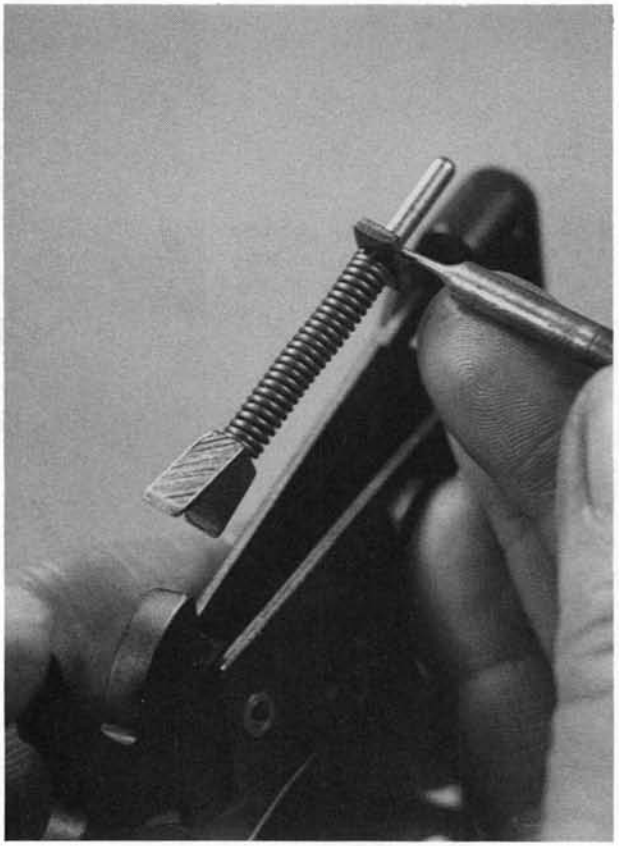
18. The hammer block bar will likely drop free as the sub-frame is taken out. If not, remove it from the right side of the sub-frame.



19. Turn the cylinder hand outward at the front, and remove it from its post on the trigger. The hand spring is staked in place on the sub-frame, and it's best to leave it there unless repair is necessary.

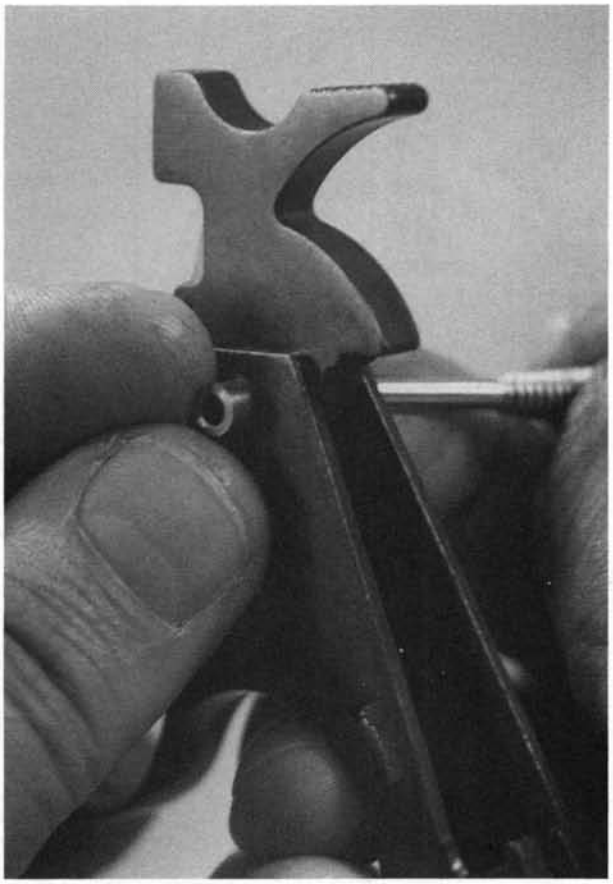


20. Cock the hammer, and insert a small drift punch or the end of an opened paper clip through the hole in the hammer spring strut.

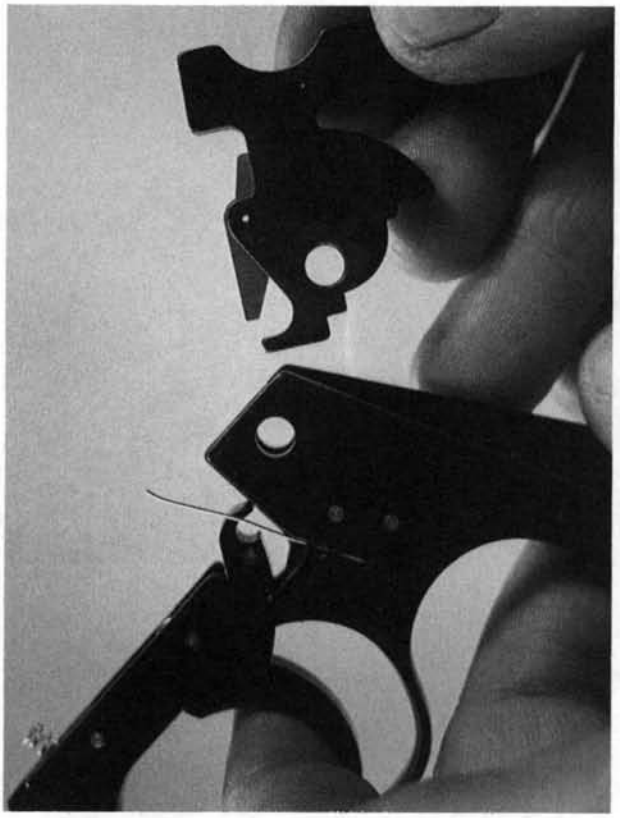


21. Ease the hammer down, and remove the hammer spring assembly upward and toward the rear. If it is necessary to separate the spring unit parts, wrap the unit in a heavy shop cloth and pull out the drift or paper clip.

22. Push out the hammer pivot bushing toward either side.

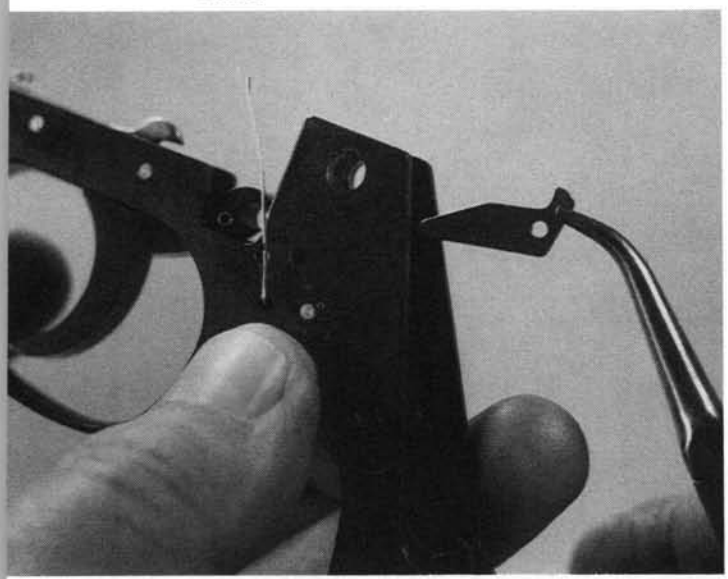


23. Pull the trigger, and remove the hammer from the sub-frame. Drifting out the cross-pin will free the double-action lever and its spring for removal. In normal takedown, they are best left in place.

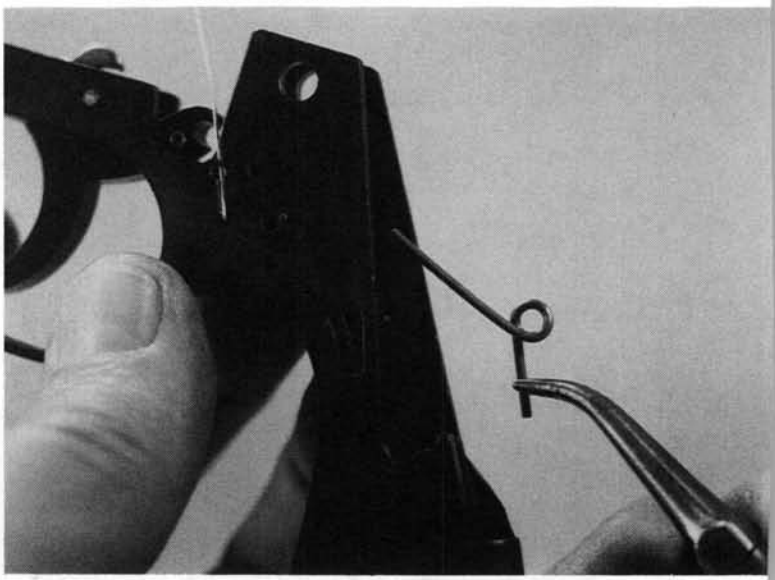


24. Push out the hammer rebound lever cross-pin toward the left.

25. Remove the hammer rebound lever from the sub-frame.

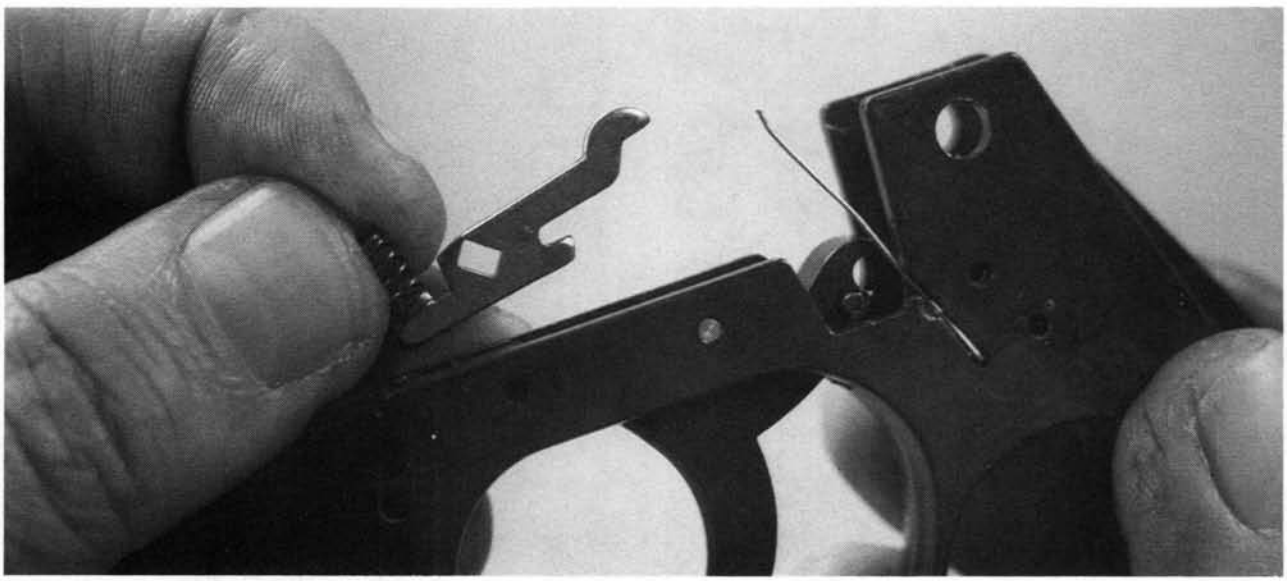


26. Restrain the strong trigger spring, and push out the trigger spring cross-pin toward the left and remove the trigger spring from the sub-frame. **Caution:** *Keep the spring under control.*



27. Push out the cylinder stop cross-pin toward the left.

28. Remove the cylinder stop and its spring upward.



29. Push out the trigger cross-pin toward the left.

30. Remove the trigger upward.

Reassembly Tips:

1. When reassembling the sub-frame, install the trigger spring first. Position the spring, use a large screwdriver to press it down, and insert a drift to hold it for insertion of the cross-pin. Be sure the longer end of the spring is toward the front, as shown.

2. Use a small drift as a guide to hold the ejector knob for insertion of the cross-pin.

Freedom Arms Mini

Data:	Freedom Arms Mini-Revolver
Origin:	United States
Manufacturer:	Freedom Arms, Freedom, Wyoming
Cartridges:	22 LR, 22 WMR
Cylinder capacity:	5 rounds (4 in 22 WMR)
Overall length:	4 inches ($1^{3}/_{16}$-inch barrel)
Barrel lengths:	$1^{3}/_{16}$, $1^{3}/_{4}$, and 3 inches
Weight:	4 ounces ($1^{3}/_{16}$-inch barrel)

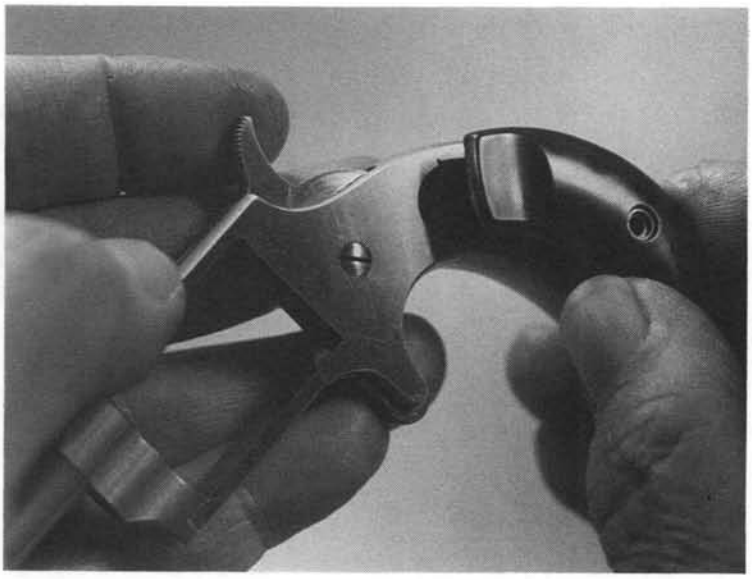
There are two makers of these tiny 22 revolvers—Freedom Arms of Freedom, Wyoming, and North American Arms of Spanish Fork, Utah. While they are obviously similar, there are mechanical differences. A knowledgeable gun person, though, could probably apply the instructions for the Freedom Arms gun, shown here, to the little North American revolver.

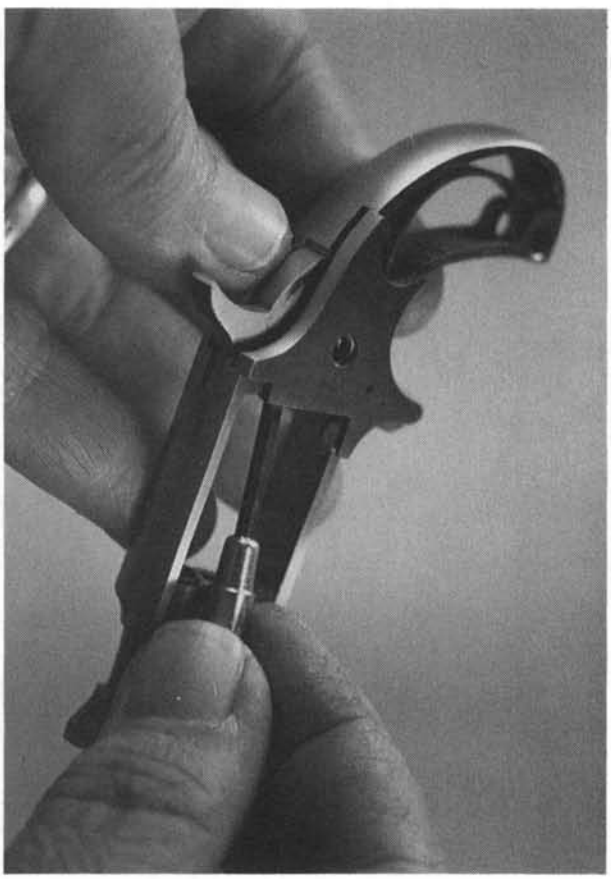
Disassembly:

1. Push in the cylinder base pin, give it one-half turn, and take it out toward the front.

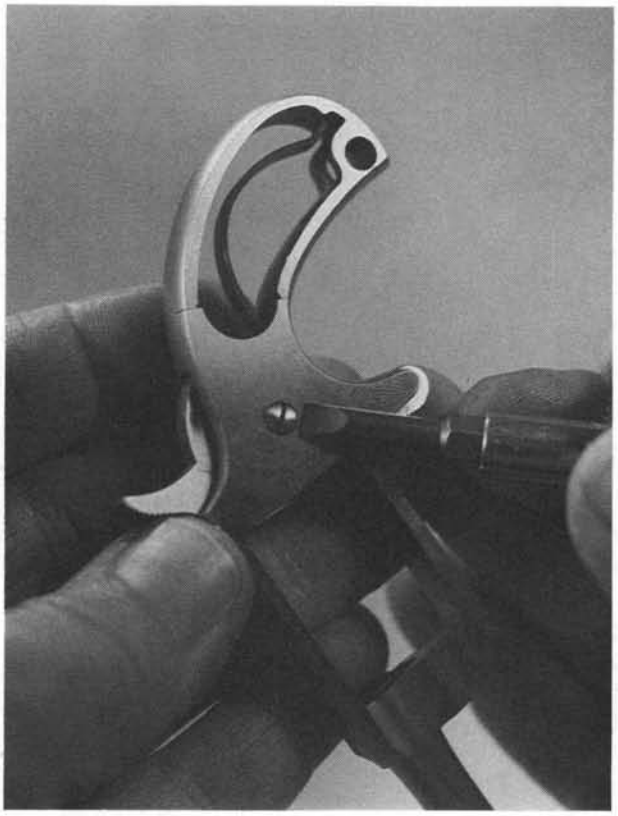
2. Remove the cylinder toward the right.

3. Remove the grip screw and take off the grips.



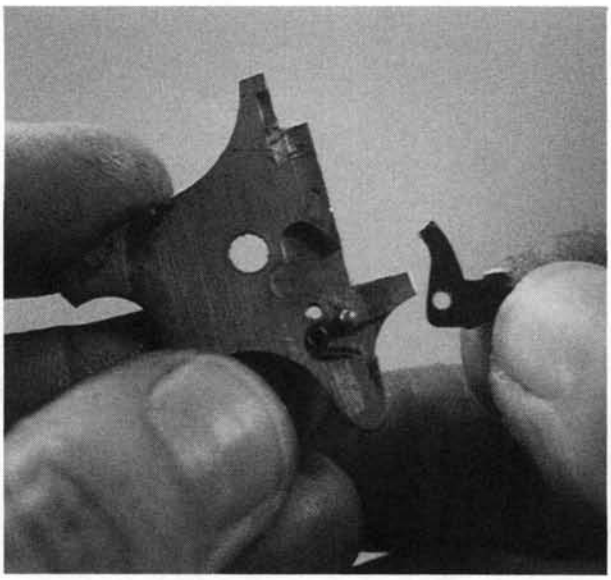


4. Remove the sideplate screw.

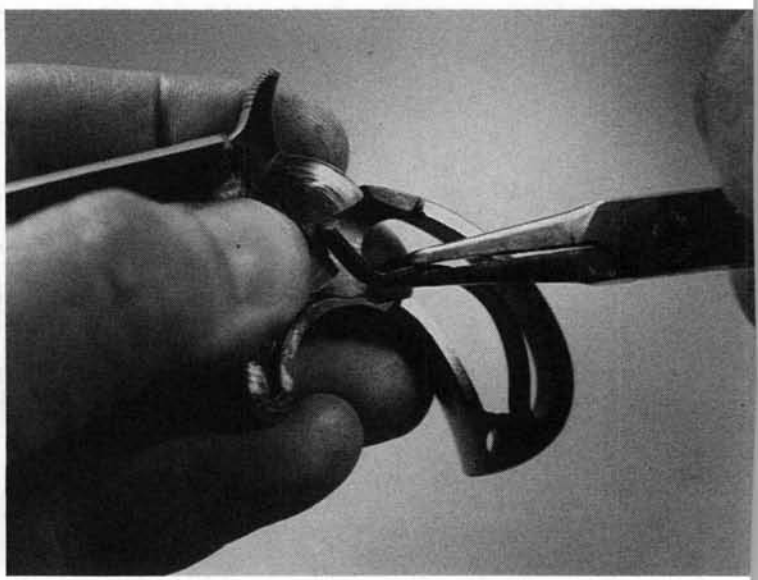


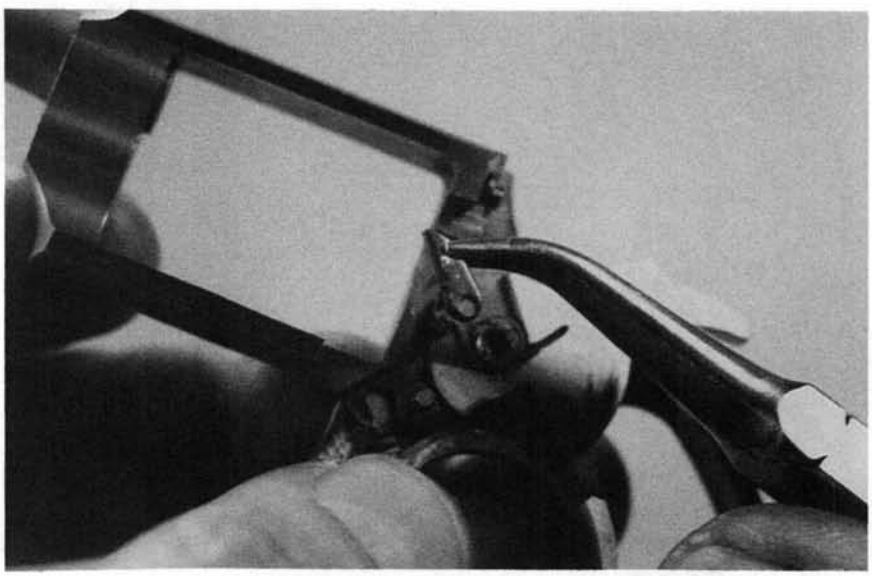
5. At front and rear, gently pry the sideplate outward, evenly, until it is free.

6. The cylinder stop is mounted in a recess in the sideplate, and will likely come off with it. Restrain the small torsion spring, and remove the cylinder stop from its post. The torsion spring is easily removed from the recess.



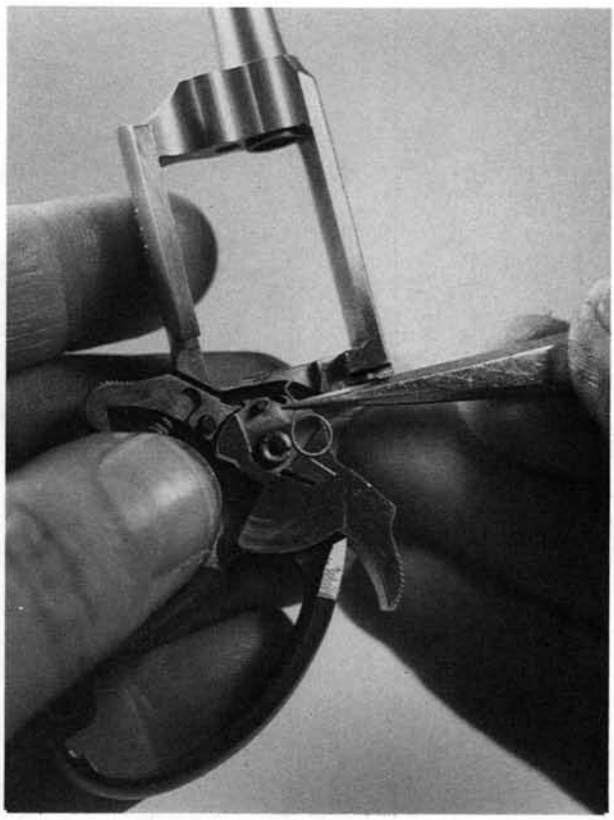
7. Use pliers to grip the hammer spring near its top. Flex it slightly downward, and tip it out toward the left for removal. **Caution:** *This is a strong spring, under tension. Control it.*



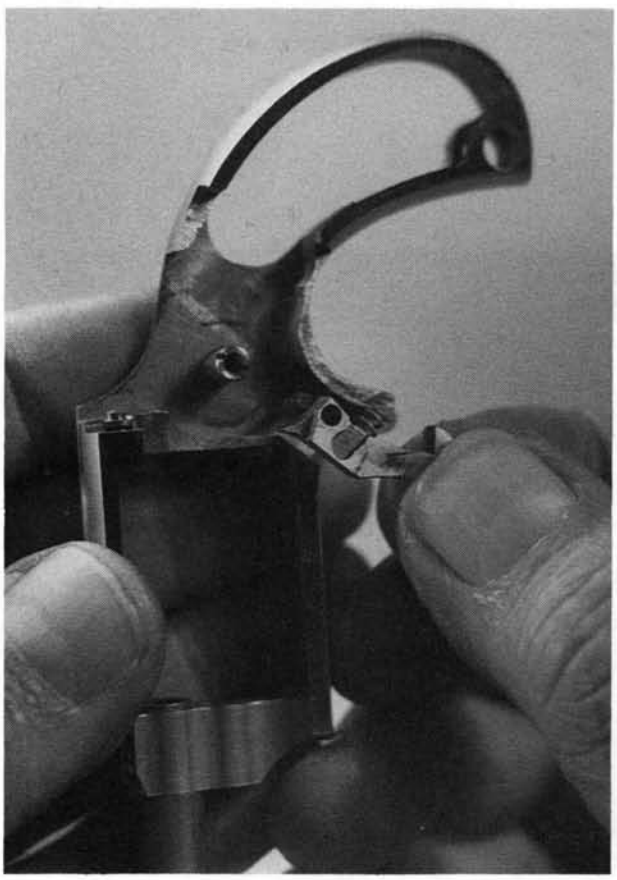


8. Restrain the small torsion spring, and remove the cylinder hand from its post on the hammer.

9. Carefully remove the tiny torsion spring that powers the cylinder hand from the hammer. Tweezers are recommended.

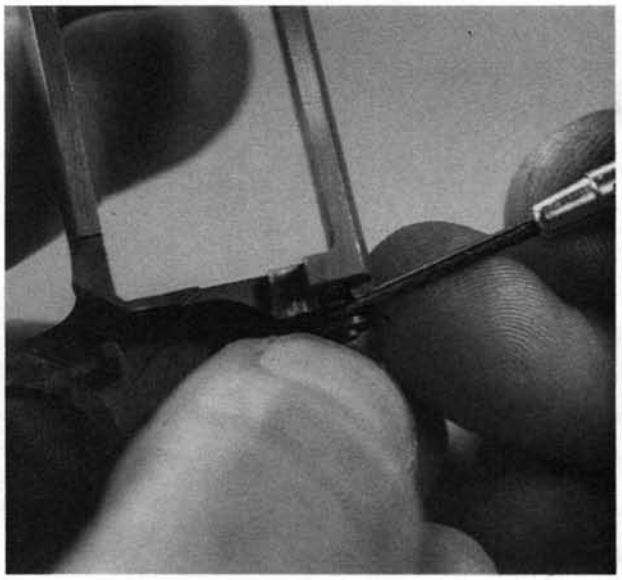


10. Depress the trigger, and remove the hammer toward the left.

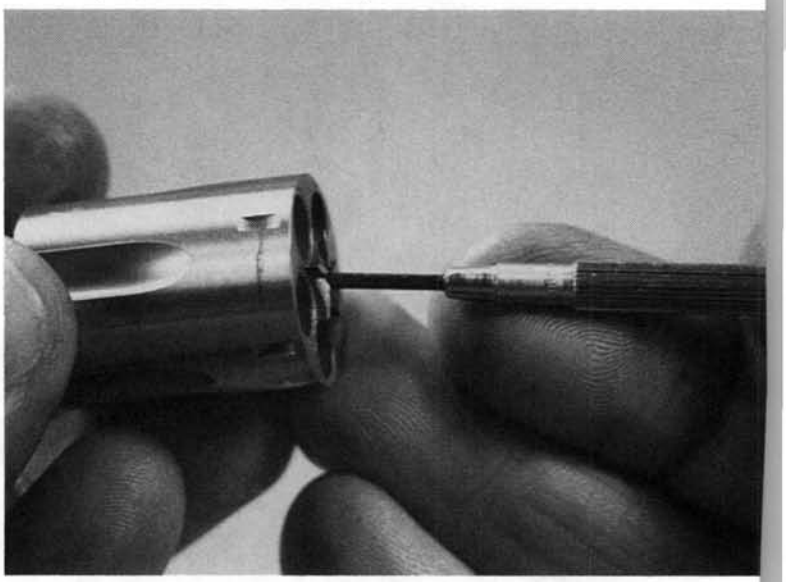


11. Remove the trigger toward the left. The coil spring is easily removed from the back of the trigger.

12. Use a small screwdriver to gently pry the firing pin out of its recess in the frame, and remove the firing pin and its spring toward the rear. Control the spring as the pin flange clears the frame.

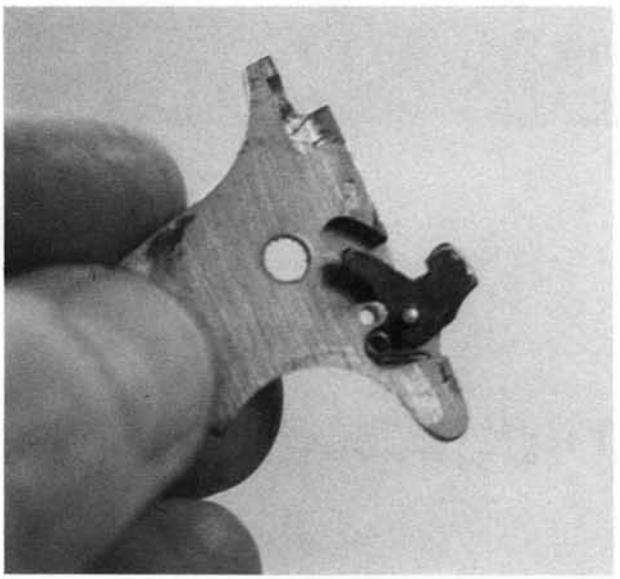


13. If necessary for repair, a small screwdriver or drift can be inserted at the rear to nudge the base pin spring out the front of the cylinder.



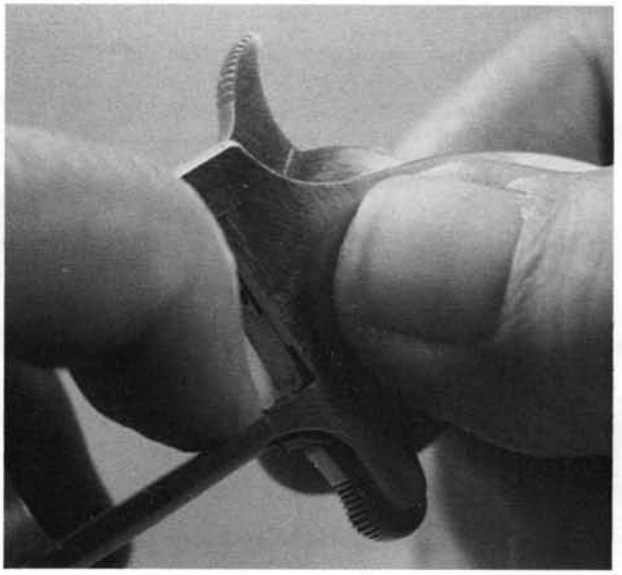
Reassembly Tips:

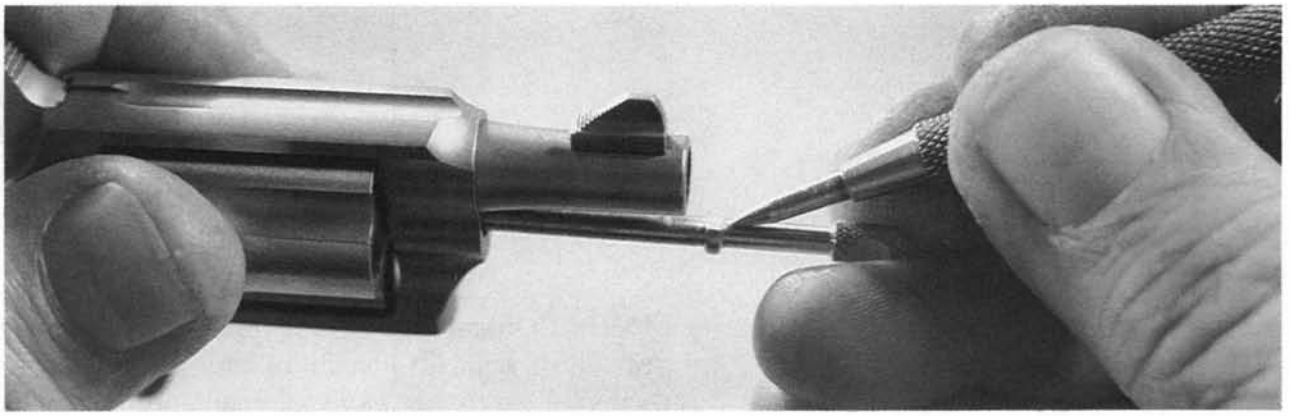
1. When replacing the cylinder stop in the sideplate, be sure the upper arm of the torsion spring enters the groove in the underside of the cylinder stop. When properly installed, the stop will be as shown.



2. When replacing the cylinder hand on its post on the hammer, be sure its spring enters the groove in the back of the hand.

3. As the sideplate is pushed into place, be sure the hammer is fully down. It will be necessary to depress the cylinder stop as the sideplate is finally seated.





4. When replacing the cylinder base pin, the flat side of its collar must be oriented upward. The pin is then pushed in against spring tension, given a half-turn, and is released to lock.

French Modele 1892

Data:	French Modele d'Ordonnance 1892
Origin:	France
Manufacturer:	Manufacture d'Armes de St. Etienne
Cartridge:	8mm Modele 1892 (8mm Lebel)
Cylinder capacity:	6 rounds
Overall length:	9.36 inches
Barrel length:	4.60 inches
Weight:	30 ounces

The Modele d'Ordonnance 1892 revolver was adopted in that year as the standard French military sidearm, and it was used until the change to an automatic pistol in 1935. Even though it had been officially replaced, many of these revolvers saw service during World War II, and a fair number of them were brought to the U.S. as souvenirs. The holster that was with the gun shown here had Foreign Legion markings.

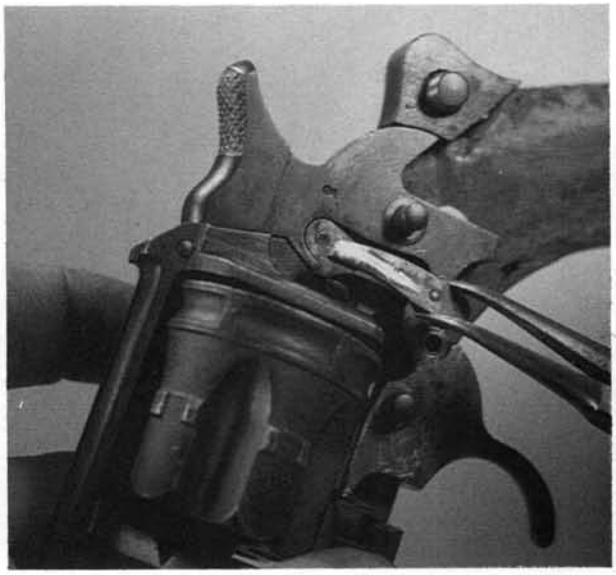
Disassembly:

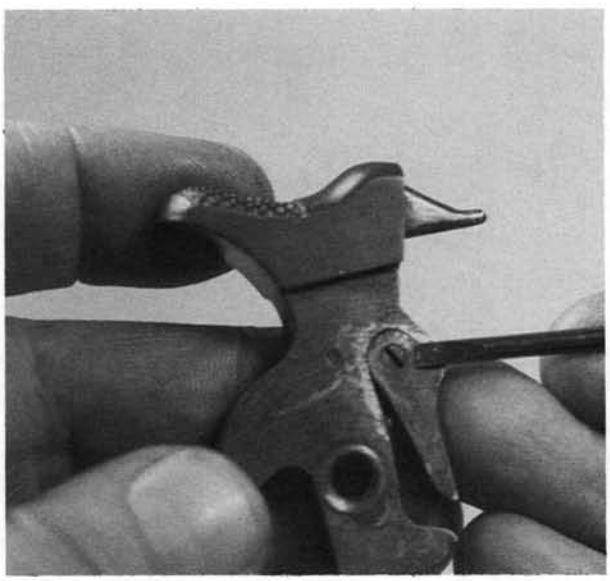
1. Use a large screwdriver to turn the screw at the upper rear of the frame until the sideplate is free to swing open.

2. Open the sideplate, and move the left grip upward and outward for removal.

3. Slightly compress the mainspring, lift its lower end out of its recess in the grip frame, and remove it. The roller at the top of the spring is removable by drifting out the cross-pin, but in normal takedown, it is best left in place.

4. Remove the cylinder hand toward the left.





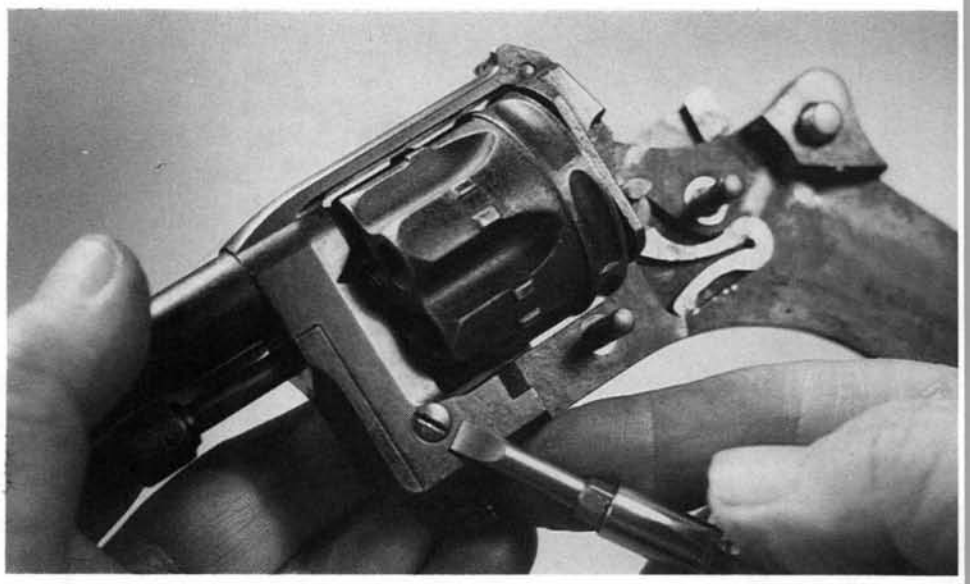
5. Remove the hammer toward the left.

6. A screw that enters from the right side retains the double-action lever and its spring on the hammer. The firing pin is retained by a cross-pin, and unless repair is necessary, it is best left in place.

7. Remove the trigger toward the left.

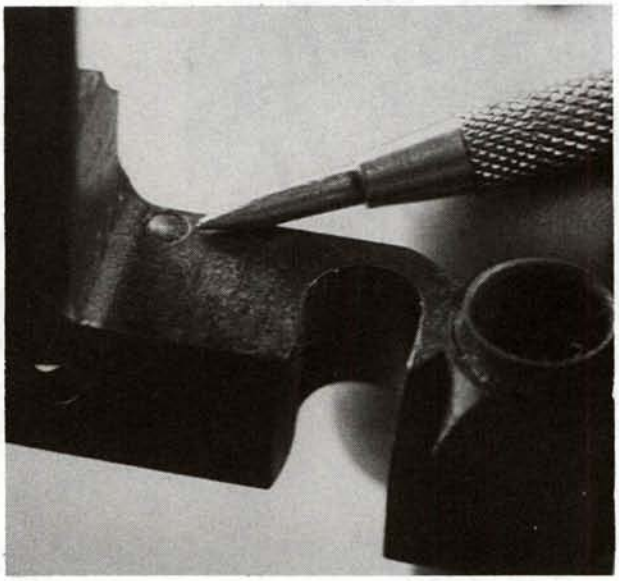
8. Remove the screw at the front of the trigger guard/sideplate unit, and take the unit off its post downward

9. Remove the cross-screw at the front of the frame.



10. Operate the cylinder release, and move the crane to the half-open position. Move the crane and cylinder forward out of the frame, turning the crane to the fully-opened position after its detents have cleared the positioning spring.

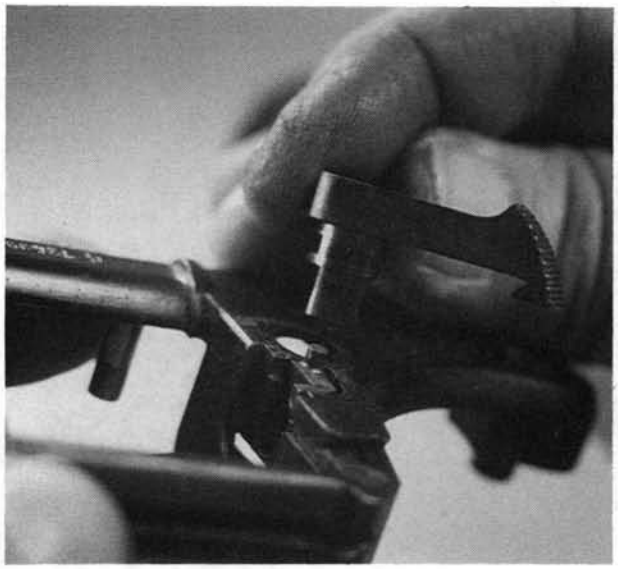
11. If removal of the crane positioning spring is ever necessary, its mounting post can be driven out toward the front from inside the cylinder space.



12. Use a drift of the proper size to tip the rear end of the cylinder latch spring slightly outward.

13. Use a small screwdriver to pry the latch spring out of its recess as shown. **Caution:** *The powerful spring will exit quickly, once its lower arm clears. Hold a shop cloth over it as it is pried out.*

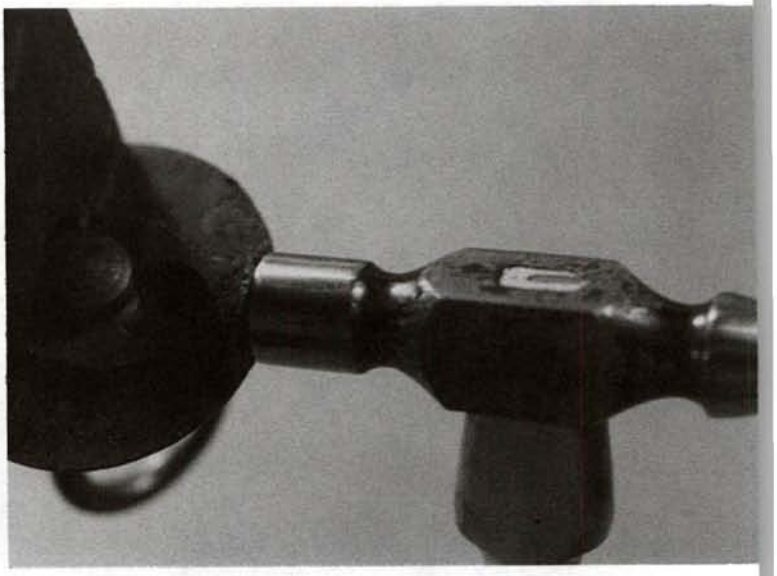
14. Tip the cylinder latch lever to the rear, to clear its notch at the top, and remove it toward the right.

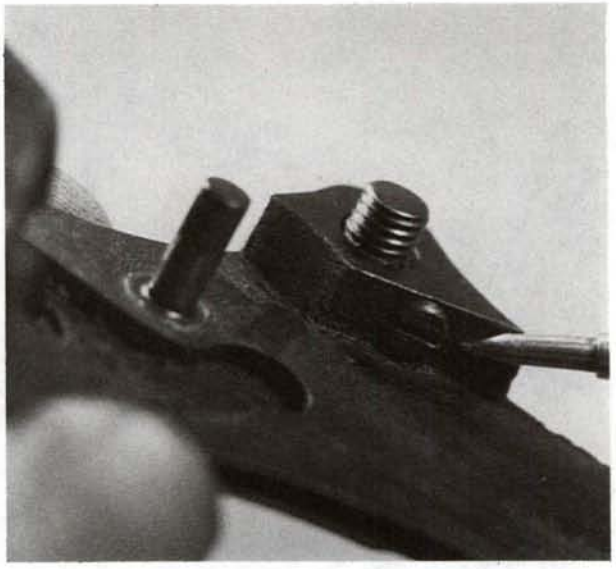


15. Swing the cylinder latch lock-piece out of its recess toward the front, and remove it toward the right.

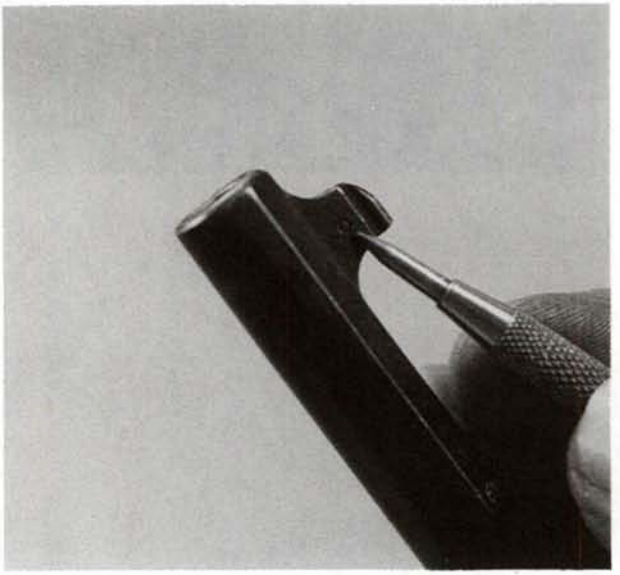
16. The right grip is retained by a screw on the inside of the grip frame.

17. If removal of the lanyard ring is necessary, the grip stabilizer is pushed or driven toward the right until its internal opening aligns with the lanyard ring post. The post and ring are then taken off downward.



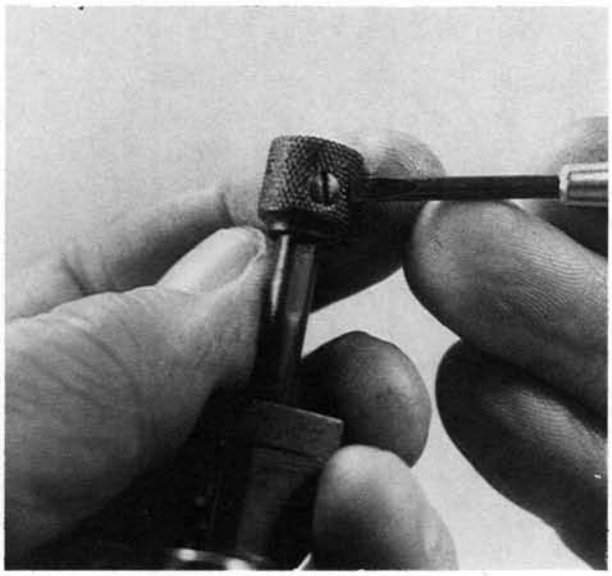


18. Taking out the small screw inside the upper rear of the frame will allow removal of the large sideplate screw.

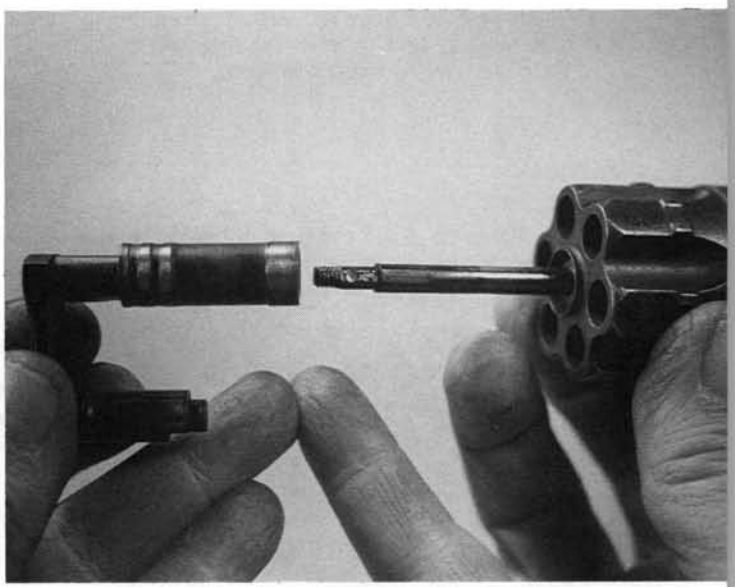


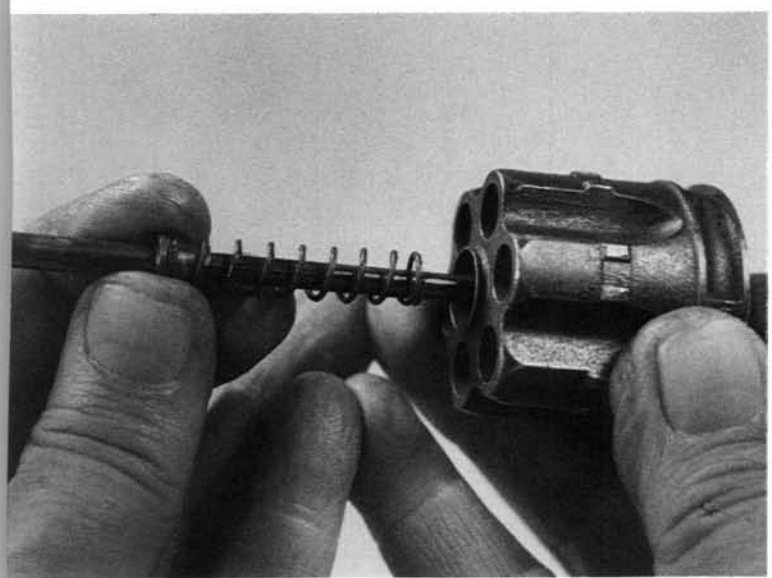
19. The front sight blade is retained by a small cross-pin, and the blade comes off upward. In normal takedown, it is left in place.

20. Remove the small cross-screw in the ejector knob. Unscrew the knob (counterclockwise, front view), and remove it.



21. Remove the crane toward the front.

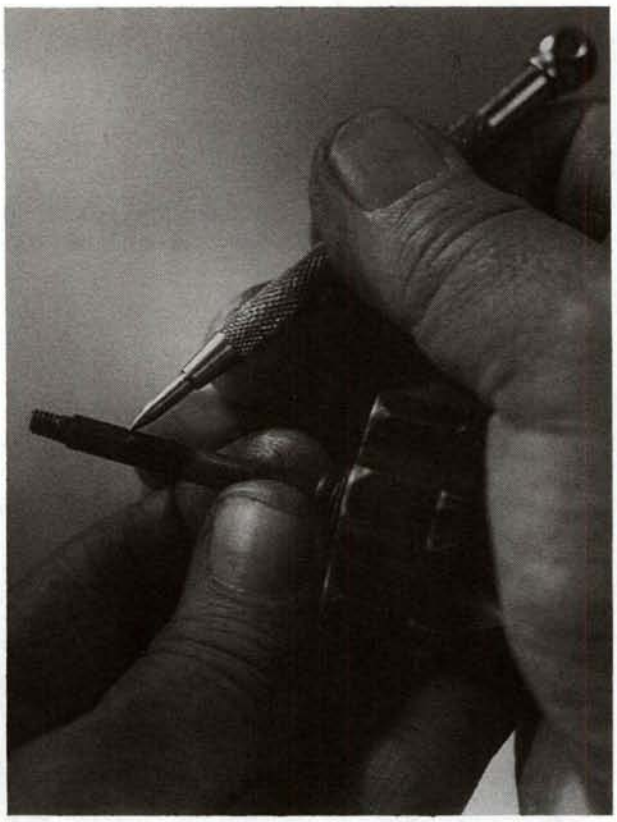




22. Remove the ejector rod sleeve and ejector spring toward the front.

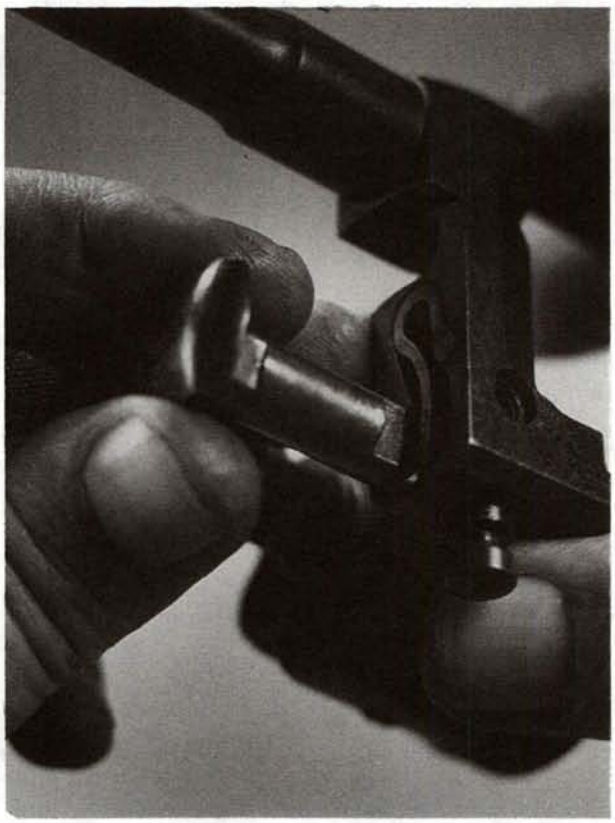
23. Remove the ejector/ratchet unit toward the rear.

Reassembly Tips:



1. Note that the ejector rod sleeve has flattened sides at its forward end. It must be oriented so these are aligned with the flats on the rod.

2. The rear tip of the crane shaft has a shelf-cut that is turned after insertion to compress the positioning spring.



H & R Auto-Ejector

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Harrington & Richardson Auto-Ejector also apply to the following guns.

Harrington & Richardson Model 40 **Harrington & Richardson Model 50** **Harrington & Richardson Model 55**
Harrington & Richardson Premier

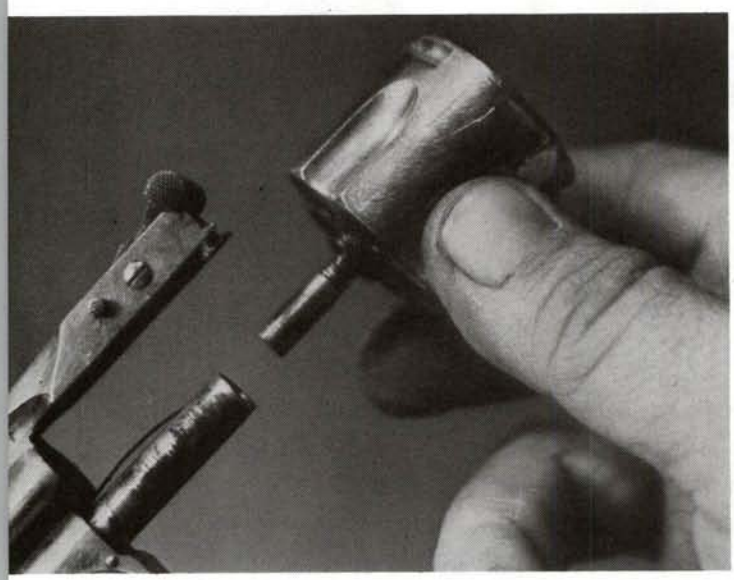
Data:	Harrington & Richardson Auto-Ejector
Origin:	United States
Manufacturer:	Harrington & Richardson, Worcester, Massachusetts
Cartridges:	32 S&W and 38 S&W
Cylinder capacity:	6 rounds (32), 5 rounds (38)
Overall length:	$7^{3}/_{16}$ inches (with $3^{1}/_{4}$-inch barrel)
Barrel lengths:	$3^{1}/_{4}$, 4, 5, and 6 inches
Weight:	15 ounces

Introduced in 1878, the H&R top-break revolver was called the "Auto-Ejecting" model by the factory, in reference to the mechanism which expelled the fired cases when the gun was opened. Like the Iver Johnson, the H&R was one of the better top-break guns of its era, both of them surpassed in quality only by Smith & Wesson. Also, like the Iver Johnson, many of these guns are still in everyday use. Mechanically, the H&R is quite different from its contemporaries. The spurless hammer on the one shown is original, offered as an option by the factory in its time. There were later versions with differences in the frame and grip shapes, and these are listed in the cross-reference list. The same instructions will apply.

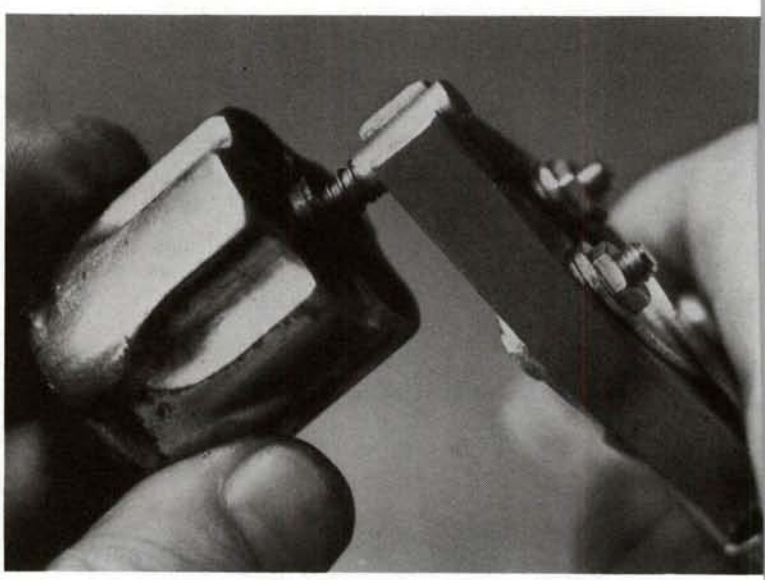
Disassembly:

1. Push in the small knurled button on the left side of the barrel extension, hold it in, and lift the barrel latch and cylinder retainer upward. Release the button, and the latch and retainer will be held in raised position.

2. In this view, the retainer can be seen in its slot on the underside of the latch. Both are shown in the raised and locked position.

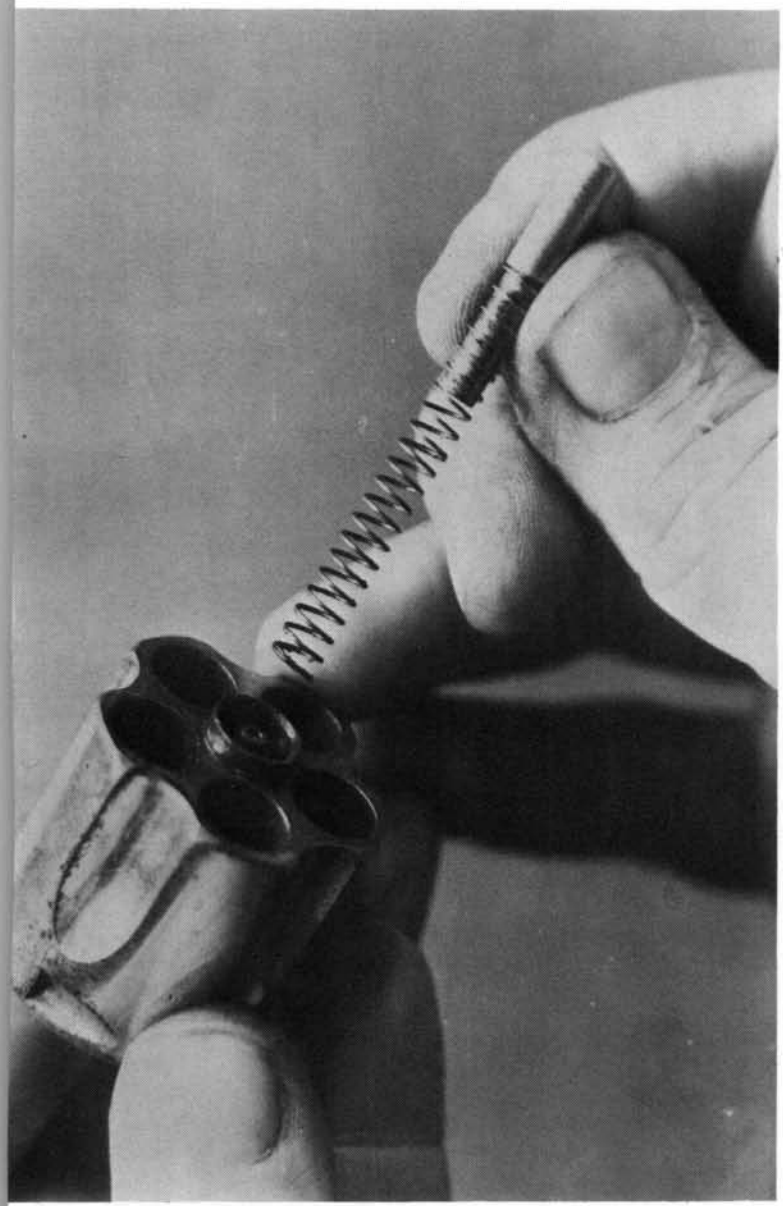


3. Remove the cylinder toward the rear. Pushing in the small button will release the latch and retainer to drop back into place.

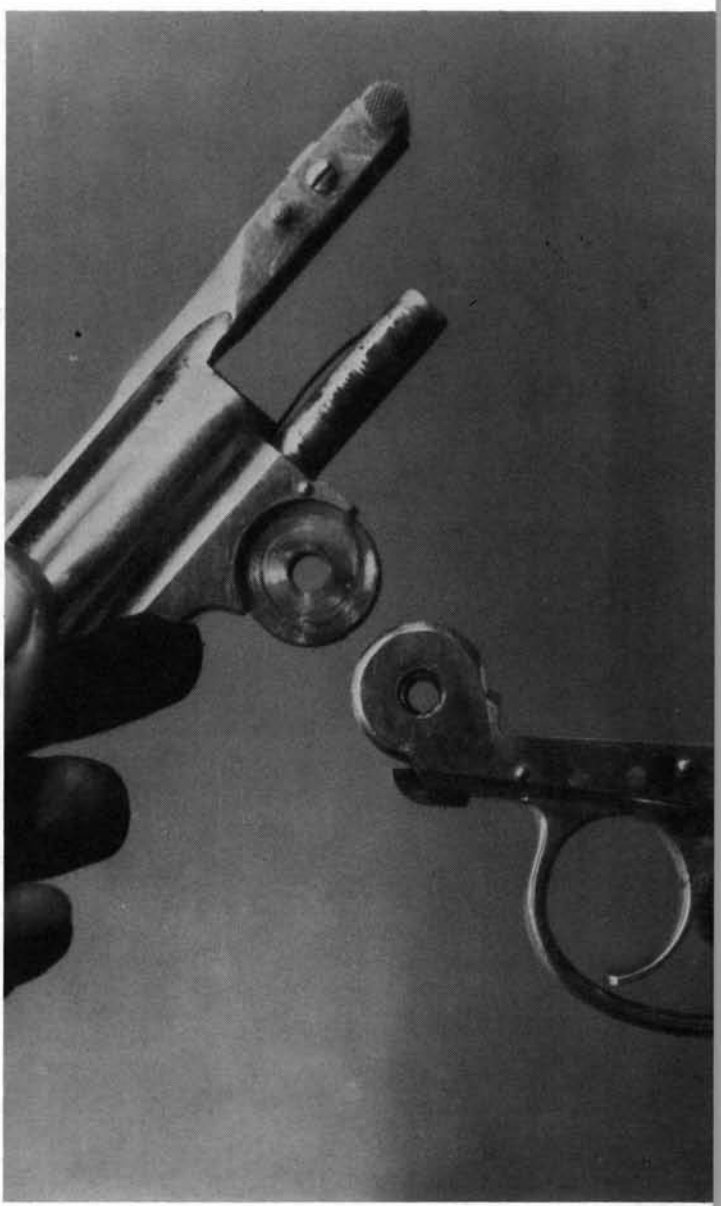


4. Grip the ejector post with smooth-jawed pliers and unscrew the post counterclockwise (front view).

5. Remove the post and ejector spring from the front of the cylinder. Then remove the ejector/ratchet from the rear of the cylinder.

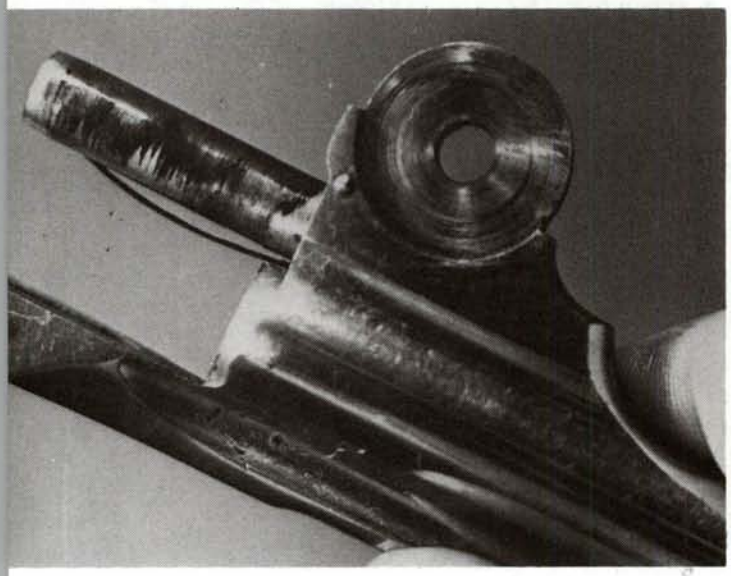


6. Remove the barrel hinge screw and remove the barrel assembly from the frame.

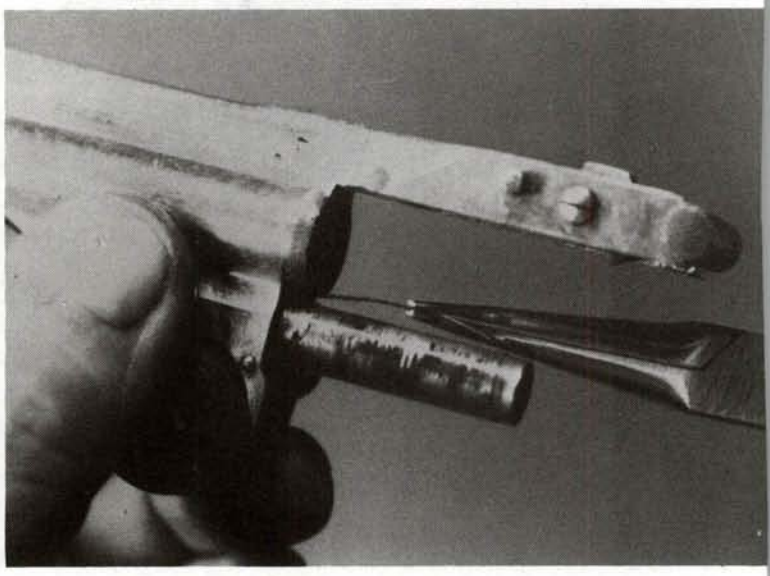


7. Remove the ejector cam from the barrel assembly.

8. Remove the ejector cam trip from the front of the frame, and extract its small coil spring from the hole behind it.

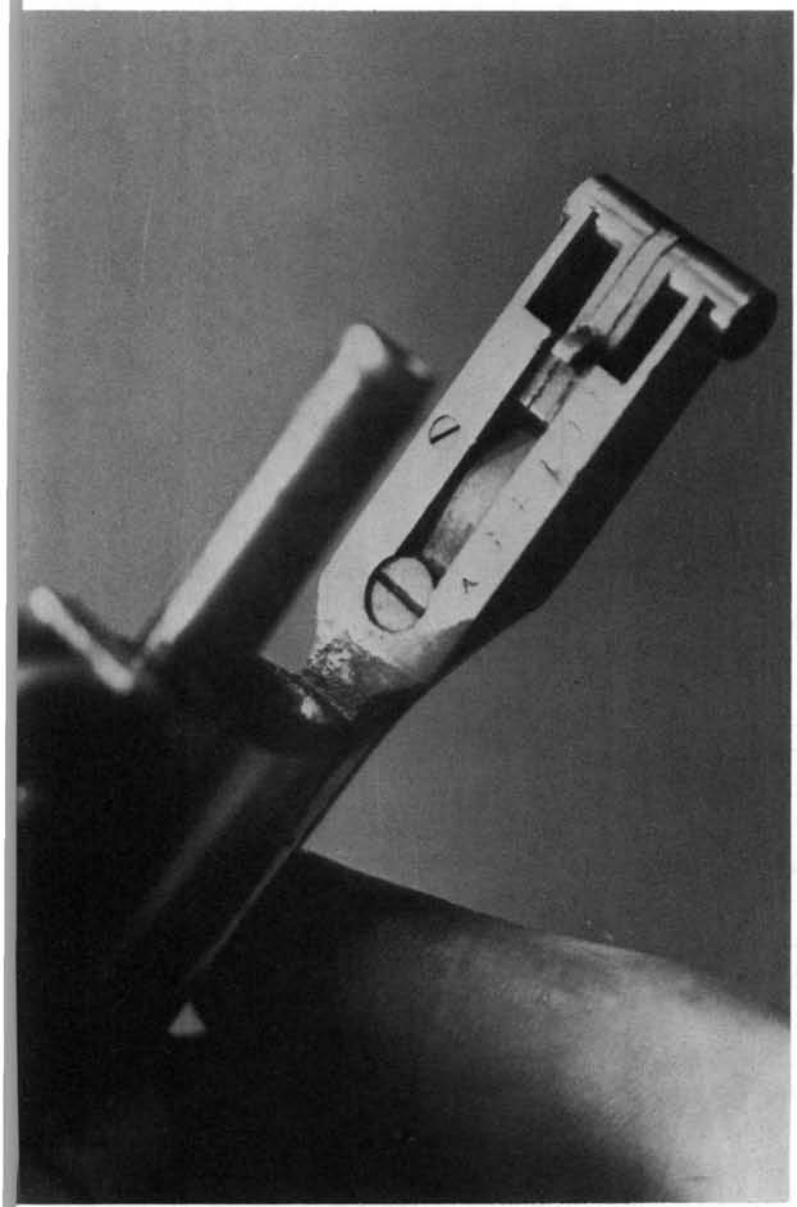


9. The cylinder arbor is removable by drifting out its cross-pin and forcing it out toward the rear, but some damage to the arbor is almost inevitable, and in normal takedown it is best left in place.

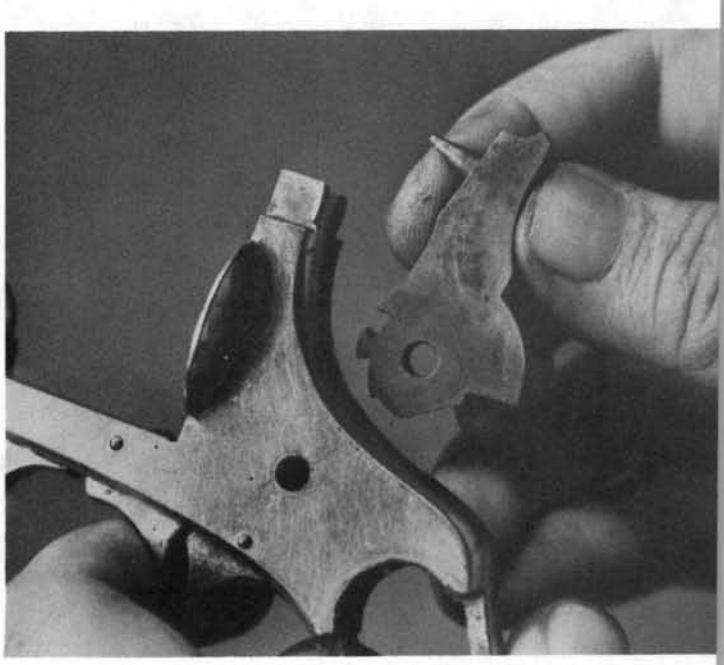


10. Grip the cylinder arbor tension spring with sharp-nosed pliers, and gently pull it straight out toward the rear.

11. With a screwdriver ground to an angle tip, take out the large screw on the underside of the barrel extension and remove the barrel latch spring. Taking out the cross-screw in the barrel extension allows removal of the barrel latch and cylinder retainer. The small screw in the left underside of the barrel extension holds the cylinder retainer button and its spring, and these are removed toward the left.

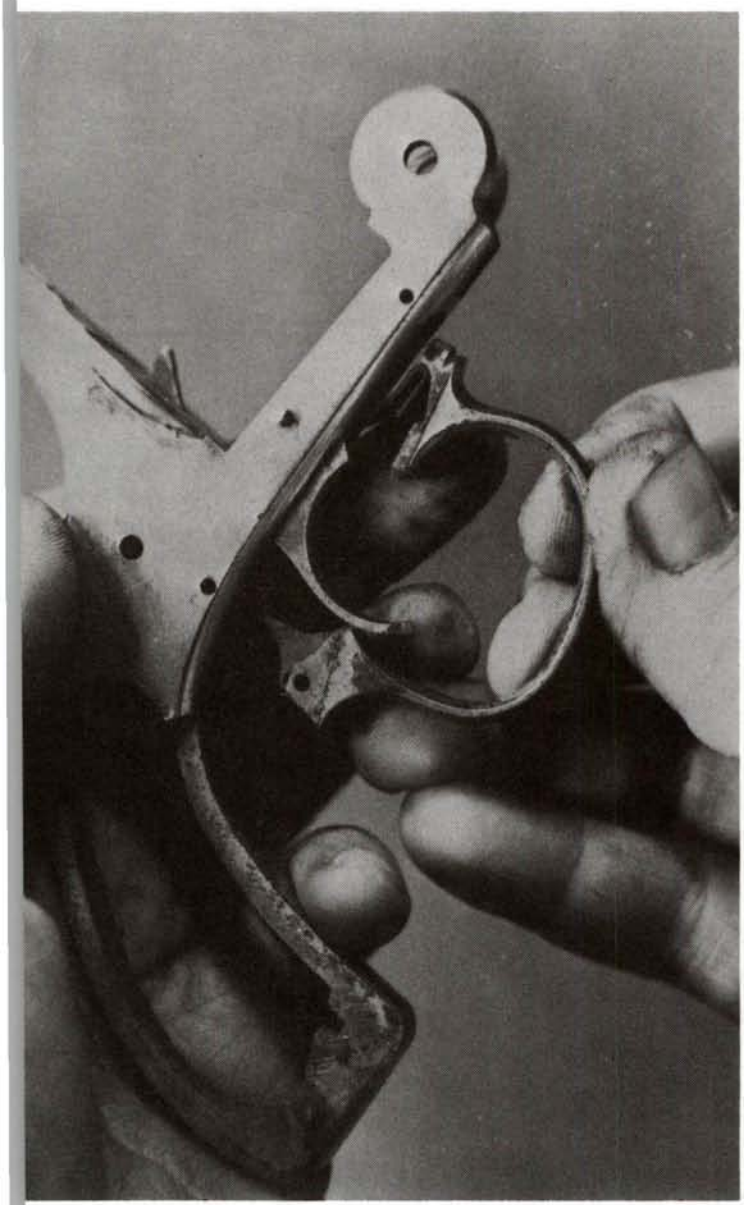


12. Move the lower end of the hammer spring toward the left, out of its slot in the frame, and remove the spring downward.

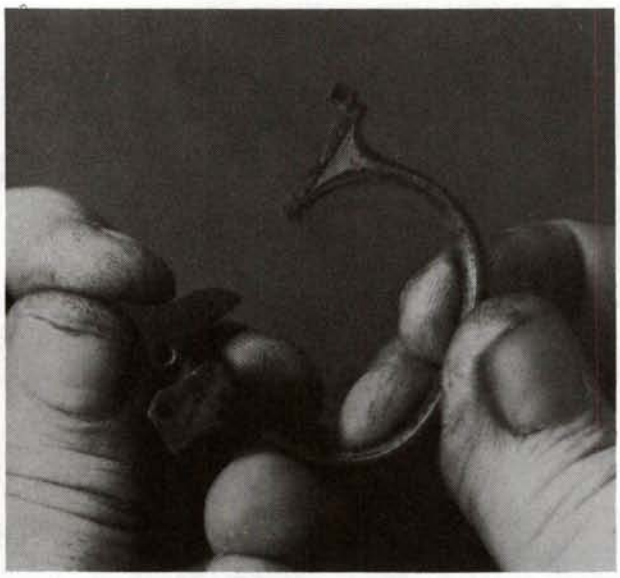


13. The hammer is retained by a cross-screw, and the trigger and guard are held in place by cross-pins. Take out the hammer screw, pull the trigger to the rear, and remove the hammer from the top of the frame. It may be necessary to insert a small tool downward, in front of the hammer, to disengage the lifter from its recess.

14. Drift out the cross-pins at the front and rear of the guard, and remove the guard by moving it slightly toward the rear, then down.

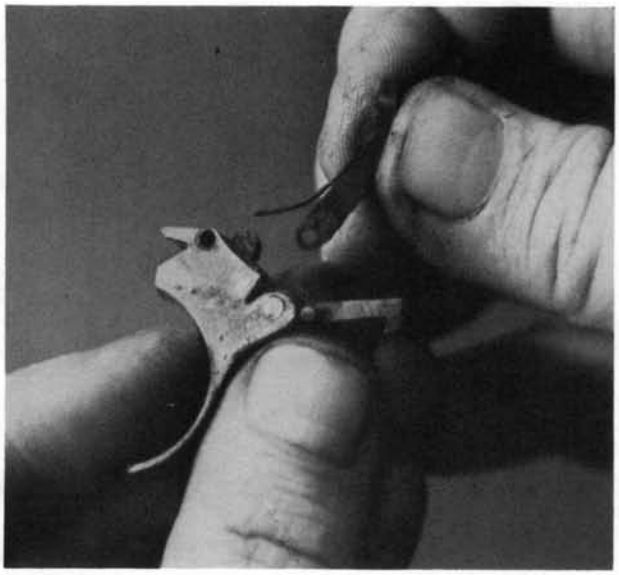


15. Remove the sear from the rear of the guard, along with its spring.



16. Remove the trigger spring from the underside of the frame.

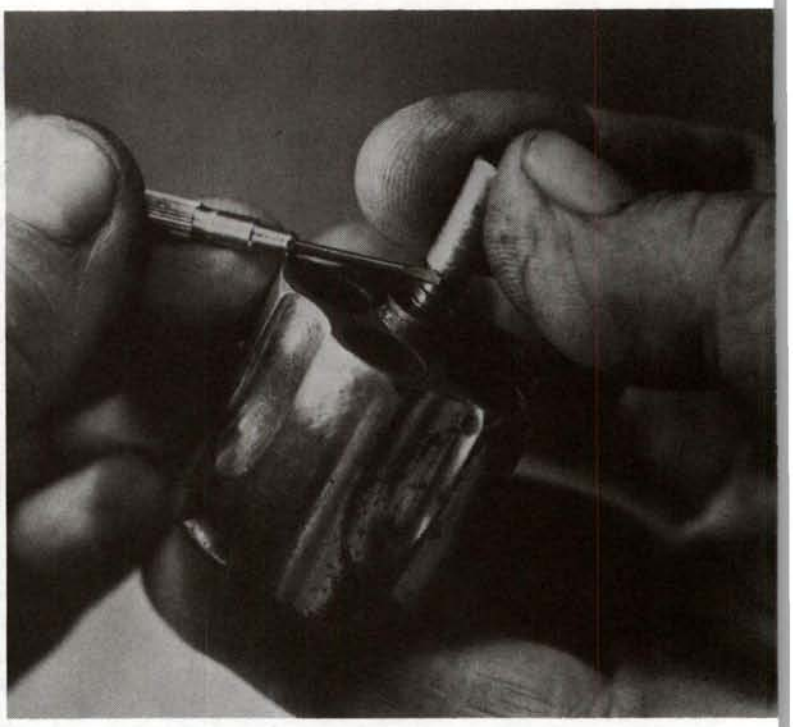
17. Drift out the trigger pin and remove the trigger assembly from the bottom of the frame.



18. Detach the cylinder hand and spring from its stud on the left side of the lifter. Drifting out the cross-pin at the rear of the trigger will free the lifter for removal.

Reassembly Tips:

1. When replacing the ejector/ratchet in the cylinder, note that one arm of the ejector will have the last digits of the serial number stamped on it. Align that arm with the corresponding number on the cylinder.



2. When replacing the ejector post, use a small screwdriver to arrest the end of the ejector spring as you turn the post into place. Otherwise, the spring may bind and be deformed.

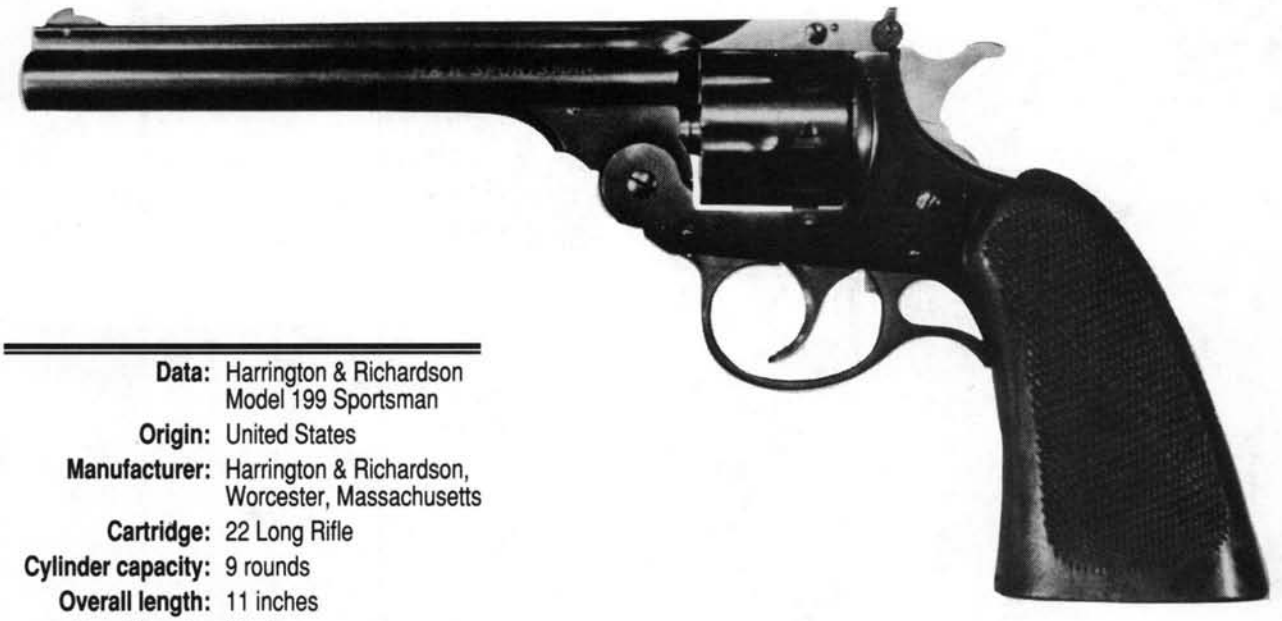
When replacing the guard in the frame, be sure the rear tip of the trigger spring engages the front lip of the trigger, and replace the front pin first. Use a slave pin to keep the sear in place until insertion of the rear pin.

H & R Model 199 Sportsman

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Harrington & Richardson Model 199 Sportsman also apply to the following guns.

H&R "Bobby"
H&R Model 299 New Defender 32
H&R Model 926
H&R Model 976
H&R Guardsman
H&R Model 766
H&R Model 945
H&R Model 999
H&R 22 Special
H&R Model 925 Defender
H&R Model 955 Expert



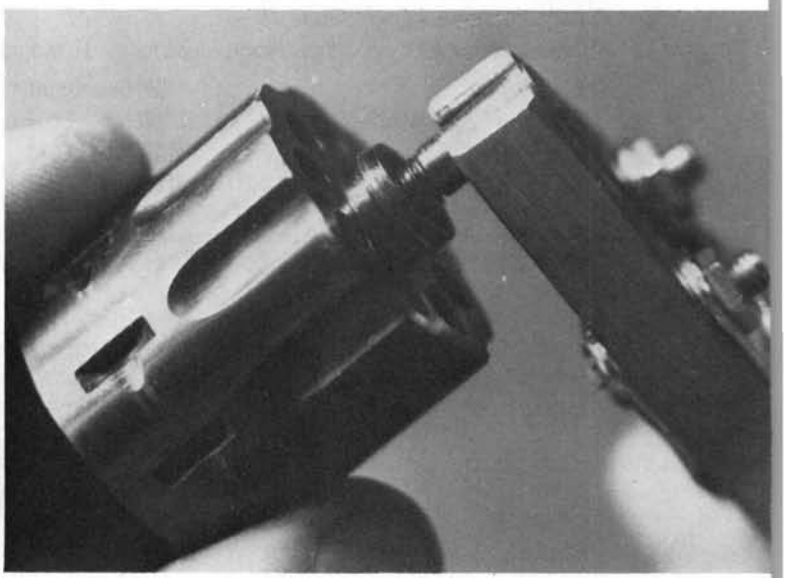
Data:	Harrington & Richardson Model 199 Sportsman
Origin:	United States
Manufacturer:	Harrington & Richardson, Worcester, Massachusetts
Cartridge:	22 Long Rifle
Cylinder capacity:	9 rounds
Overall length:	11 inches
Barrel length:	6 inches
Weight:	29 ounces

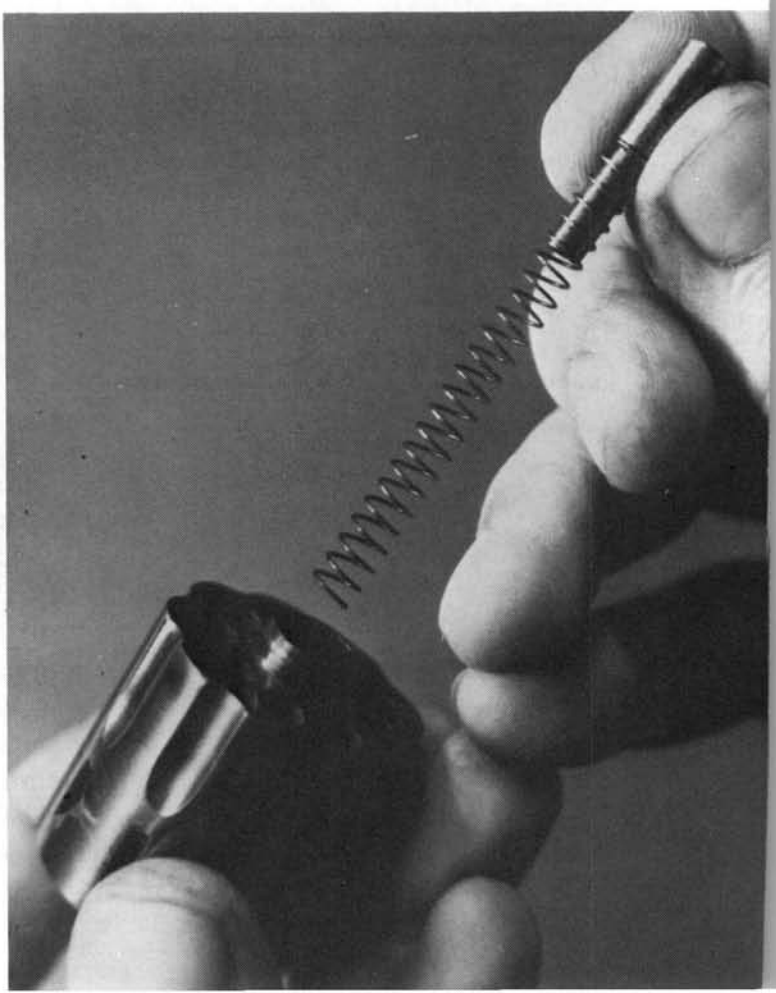
Although it has undergone some external changes since its introduction in 1933, the essential mechanism of the H&R Sportsman is practically the same. The last version, listed as the Model 999, has a different grip frame and a ventilated-rib barrel. The gun shown here is an early version of the Sportsman, probably made around 1935. The H&R Sportsman is an excellent design, and is well made of quality materials. The takedown is not difficult, but reassembly has a few points that require extra attention. In both rimfire and centerfire versions, there are at least 10 H&R revolvers that have this same basic mechanism. The instructions can be used for any of these.

Disassembly:

1. The cylinder retainer is located on the right side of the barrel, just forward of the cylinder. Depress the knurled forward end of the retainer and remove the cylinder toward the rear.

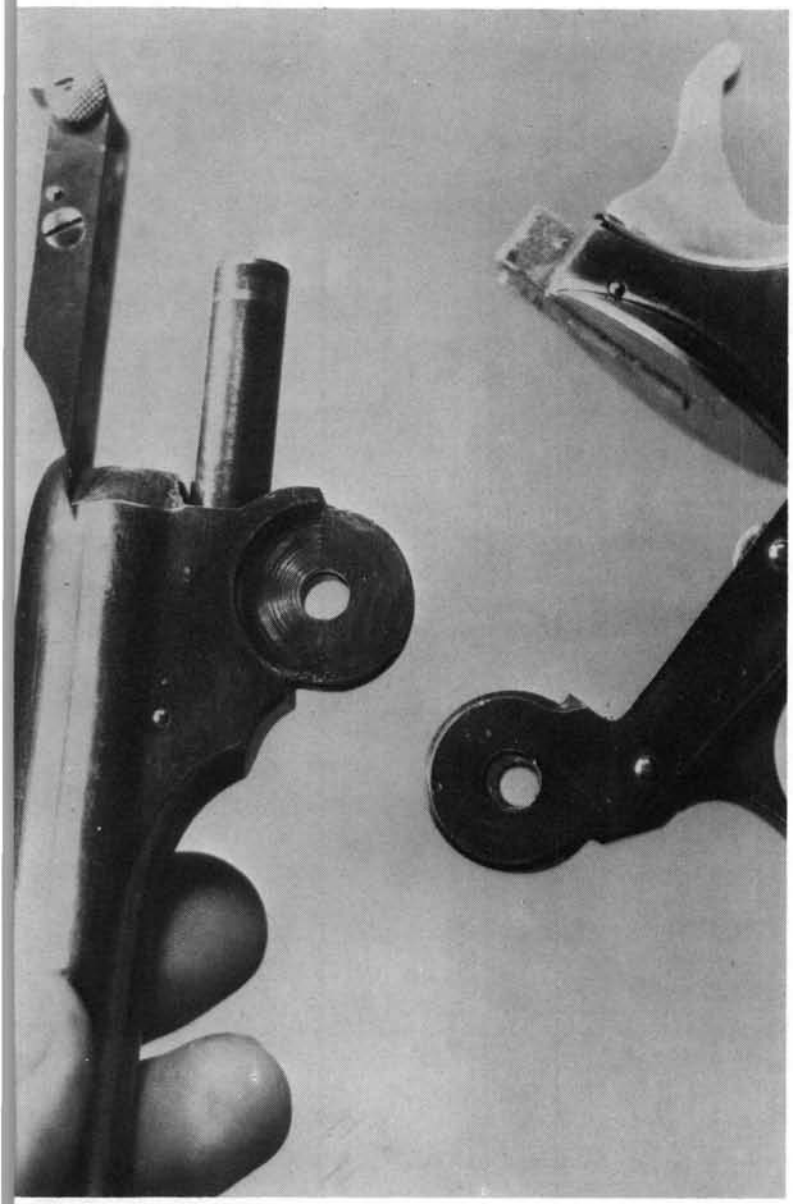
2. Grip the ejector post with smooth-jawed pliers and unscrew it counterclockwise (front view).



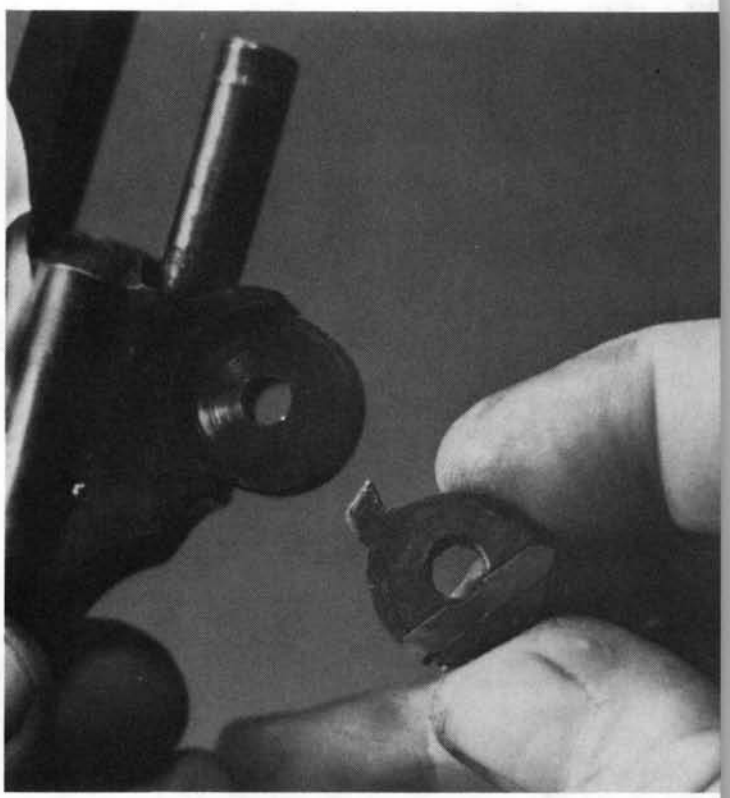


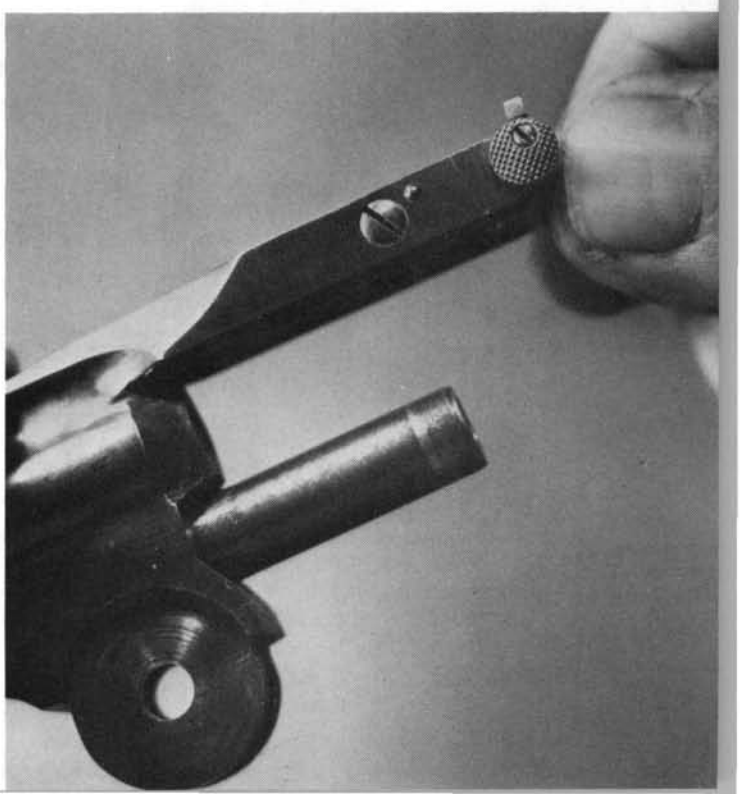
3. Remove the ejector post and ejector spring from the front of the cylinder. Remove the ejector/ratchet from the rear of the cylinder.

4. Remove the barrel hinge screw toward the left and remove the barrel assembly from the frame.



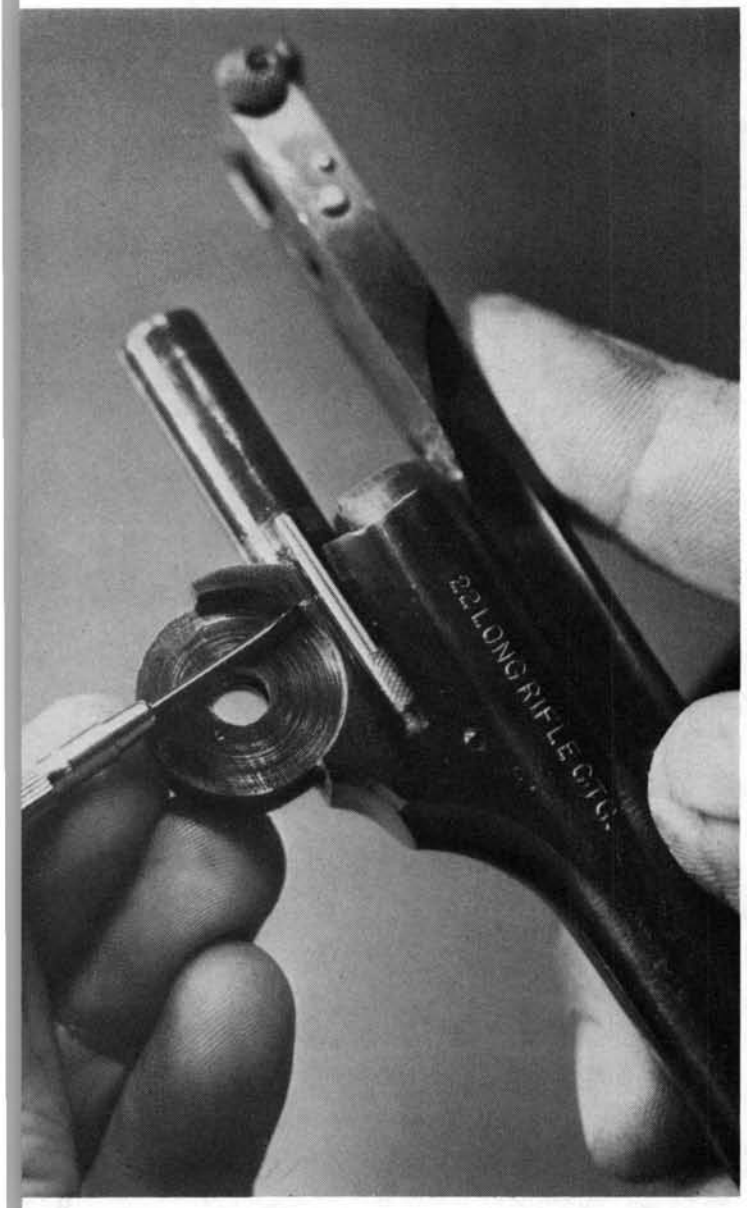
5. Remove the ejector cam from the bottom of the barrel hinge loops. The ejector cam trip is easily detached from its recess in the cam.



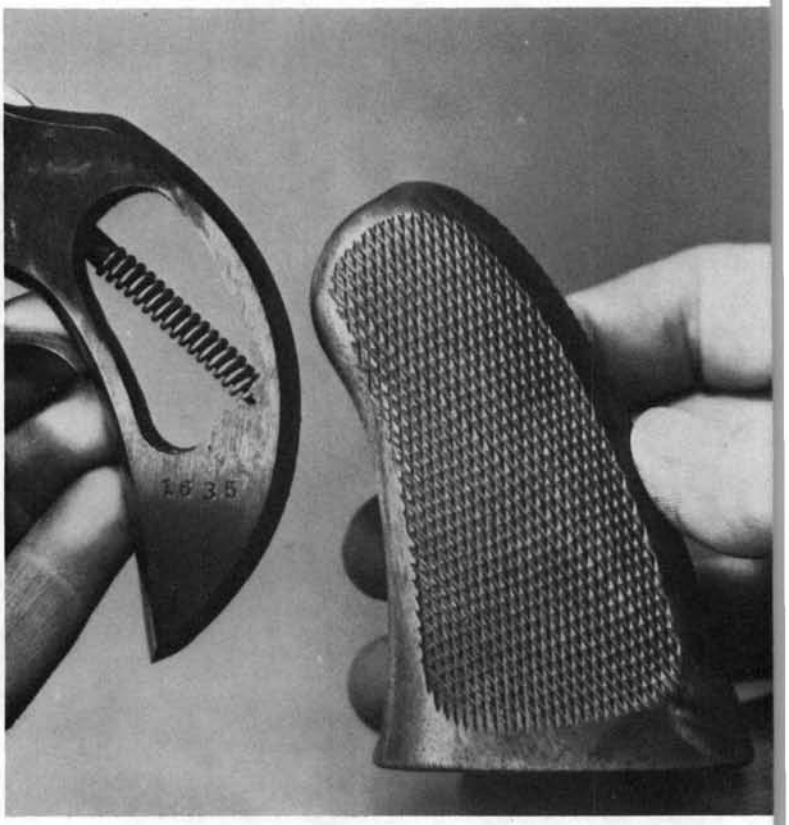


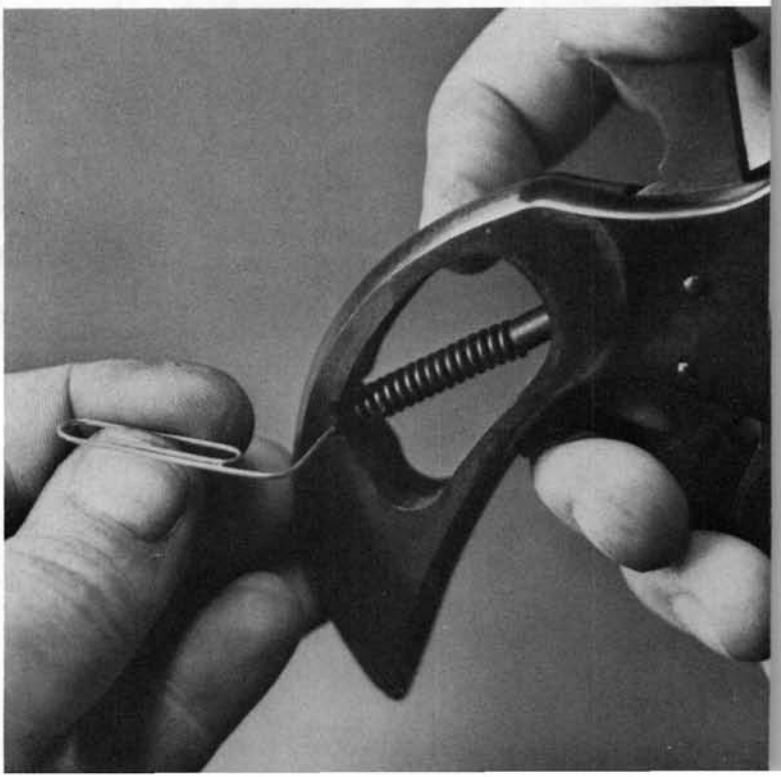
6. Remove the cross-screw and the limit pin beside the screw at the center of the barrel extension, and take out the barrel latch, plunger, and spring toward the rear. Taking out the small set screws in the latch knobs will allow removal of the sight leaf.

7. The cylinder latch is retained by a small vertical screw in the inner ledge of the right barrel hinge recess. When the latch is removed, take care not to lose the tiny spring and screw.



8. Remove the large screw at the lower rear of the grips and pull them off toward the rear.

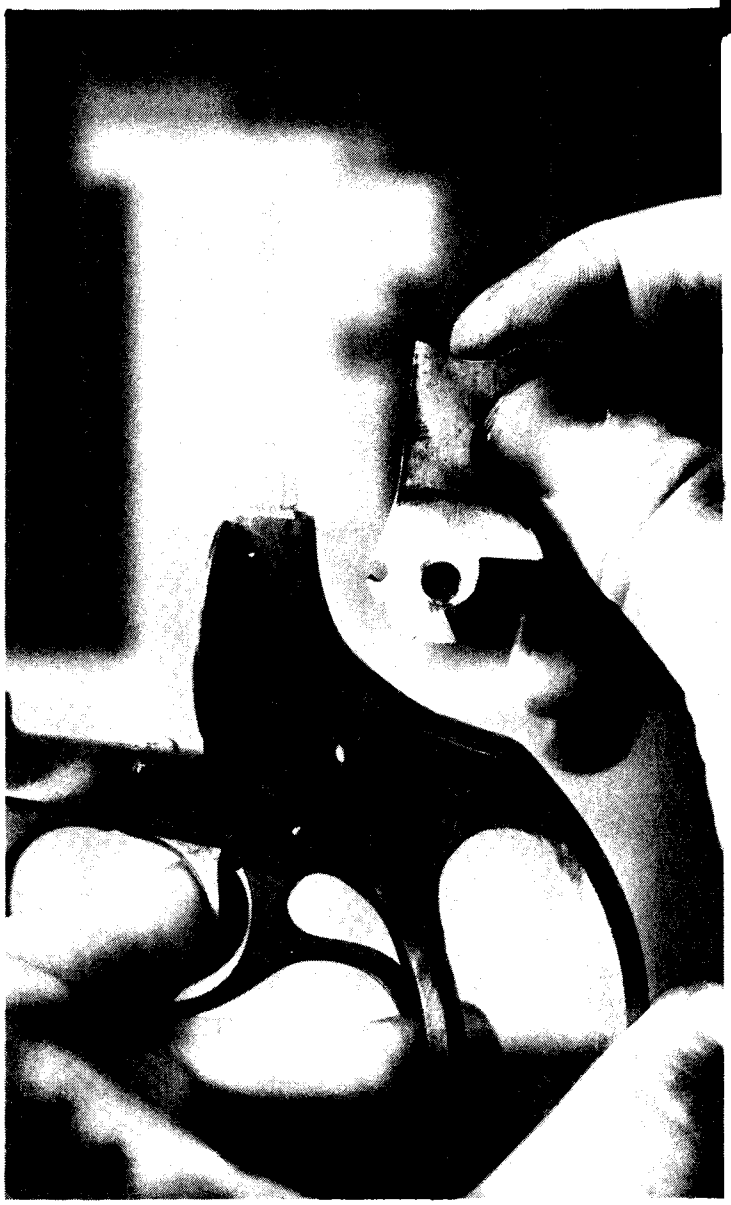




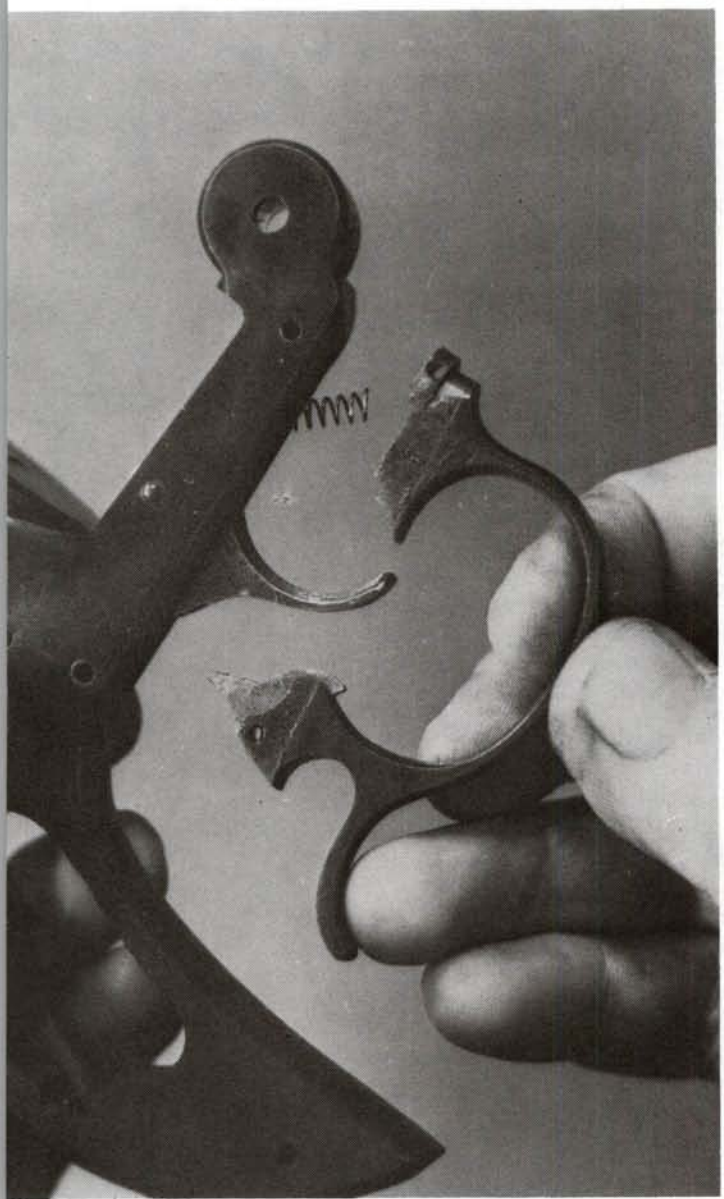
9. Move the hammer back until the small transverse hole in the lower end of the hammer strut is visible in the lower notch, and insert the end of an opened paper clip through the hole. Let the hammer down, and the hammer spring will be trapped on the strut.

10. Move the lower end of the strut and spring out toward the right and remove it downward. If the spring and strut are to be separated, grip the head of the strut firmly, and press the lower end against a slightly opened bench vise to compress the spring, then withdraw the paper clip and ease the tension off slowly.

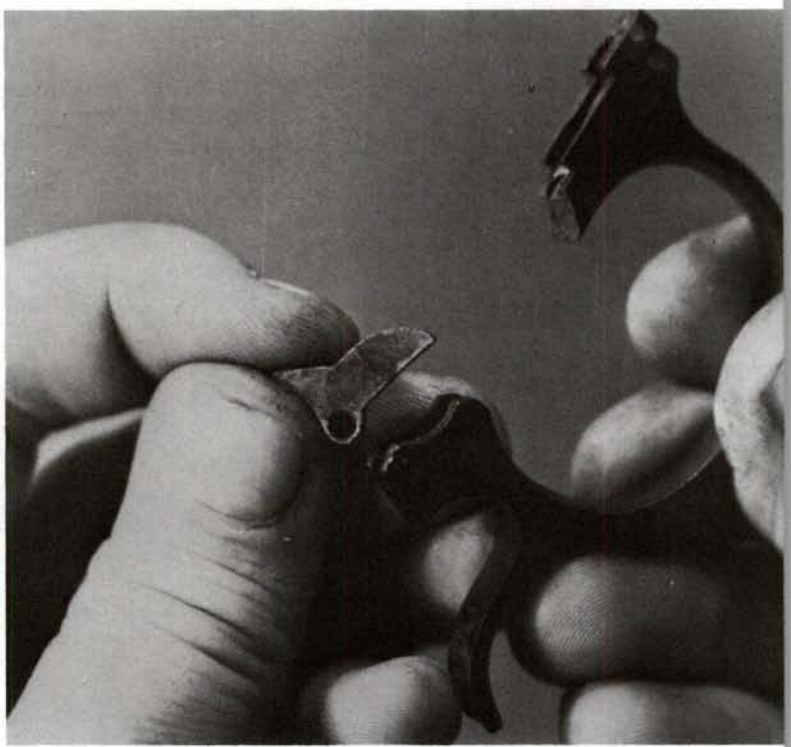
11. The hammer is retained by a cross-screw in the frame. Remove the hammer screw toward the left. Pull the trigger to the rear, and remove the hammer from the top of the frame.



12. Drift out the cross-pins at the front and rear of the trigger guard toward the right. Move the guard slightly toward the rear, then remove it downward.



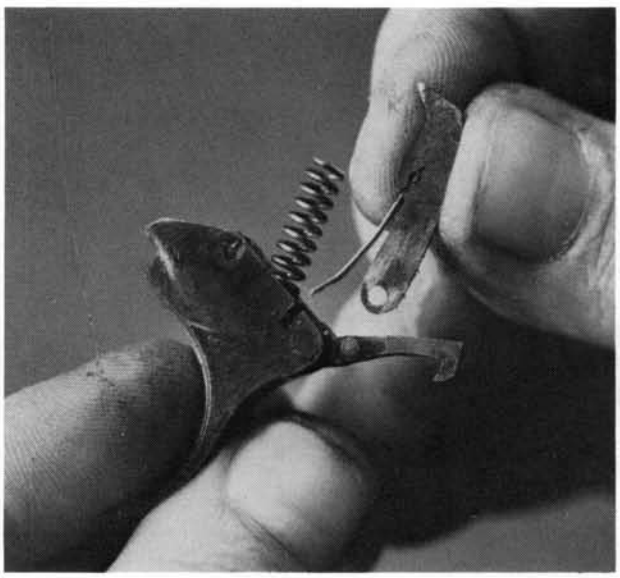
13. Remove the sear and its spring from the top rear of the guard.

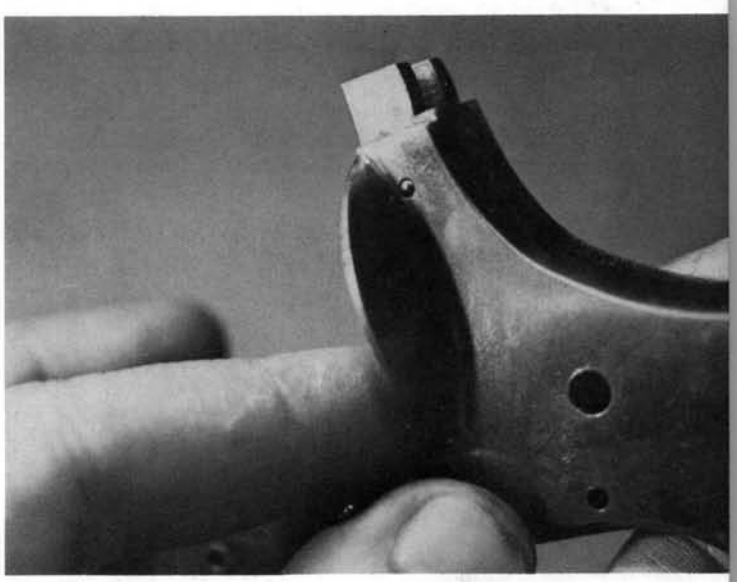


14. Pull the trigger to the rear and remove the cylinder stop and its attached spring forward and down.

15. Drift out the trigger pin toward the right and remove the trigger assembly from the bottom of the frame.

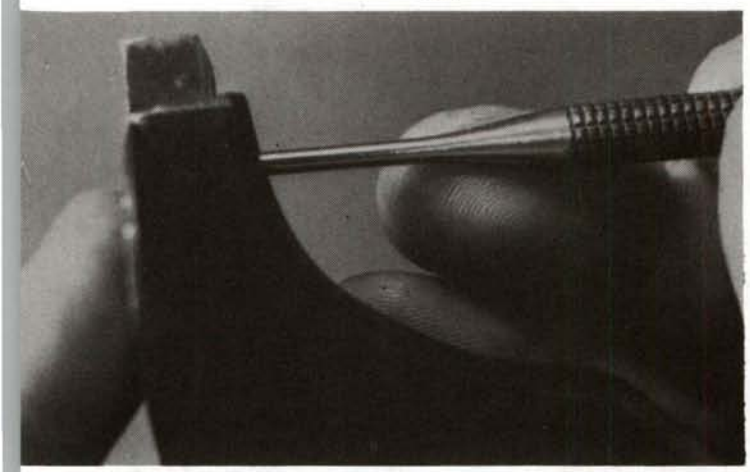
16. Detach the cylinder hand and its attached spring from the stud on the left side of the hammer lifter. The trigger spring is easily removed from its hole in the top of the trigger. Drifting out the cross-pin at the rear of the trigger toward the left will free the lifter for removal.



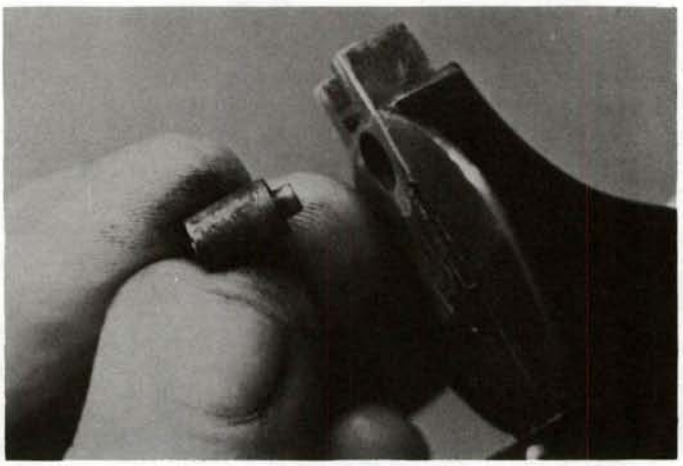


17. Drift out the cross-pin at the top of the frame, just below the cylinder latch posts.

18. After removal of the pin, use a drift of smaller diameter than the firing pin head to exert forward pressure on the firing pin.



19. Remove the firing pin housing, firing pin, and return spring forward from the breech face.



Reassembly Tips:

1. When replacing the trigger in the frame, be sure the top of the trigger spring is seated in the circular recess inside the frame, located just to the rear of the cylinder stop slot.

When replacing the firing pin housing in the frame, be sure the retaining groove is at the bottom, and use a tapered tool inserted through the pin hole to insure alignment before inserting the original pin.

2. When replacing the ejector post, use a small screwdriver to arrest the tip of the ejector spring while turning the post into place, or the spring may bind and deform.

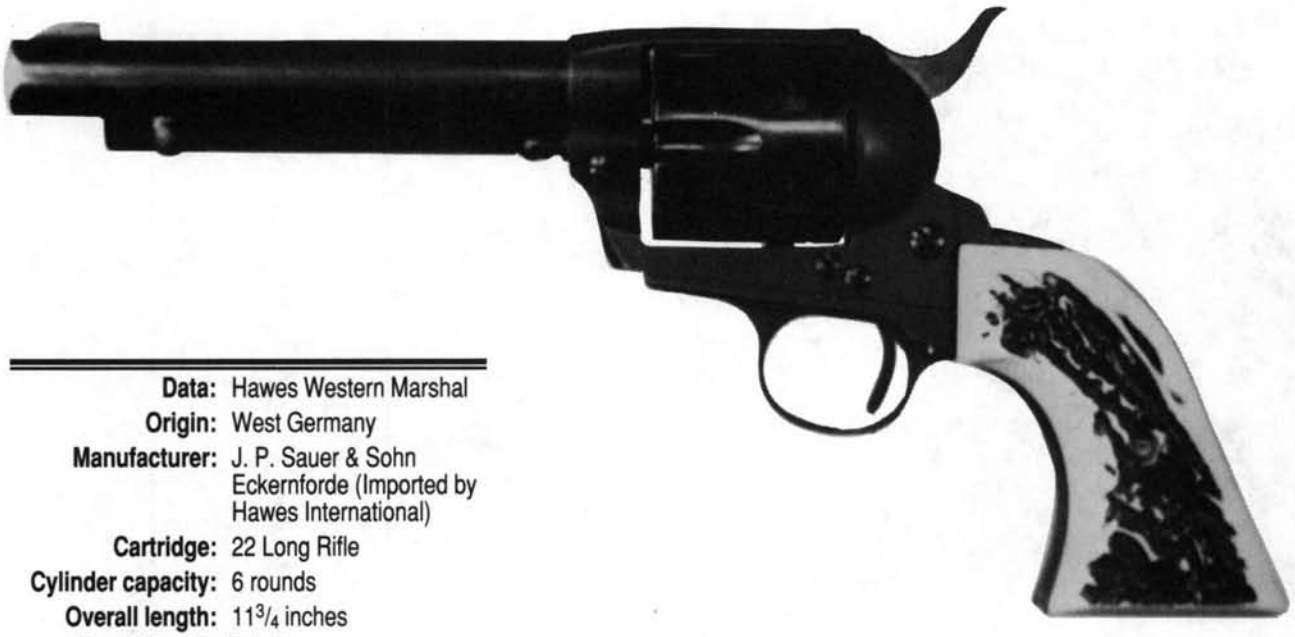
When replacing the trigger guard on the frame, use a slave pin to hold the sear in place until the cross-pin at the rear is inserted. The front of the guard should be installed first, moving the guard back onto the end of the cylinder stop spring, then up and forward to engage the front lip of the guard with its recess in the frame.

Hawes Western Marshal

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Hawes Western Marshal also apply to the following gun.

Hy Hunter Single Action

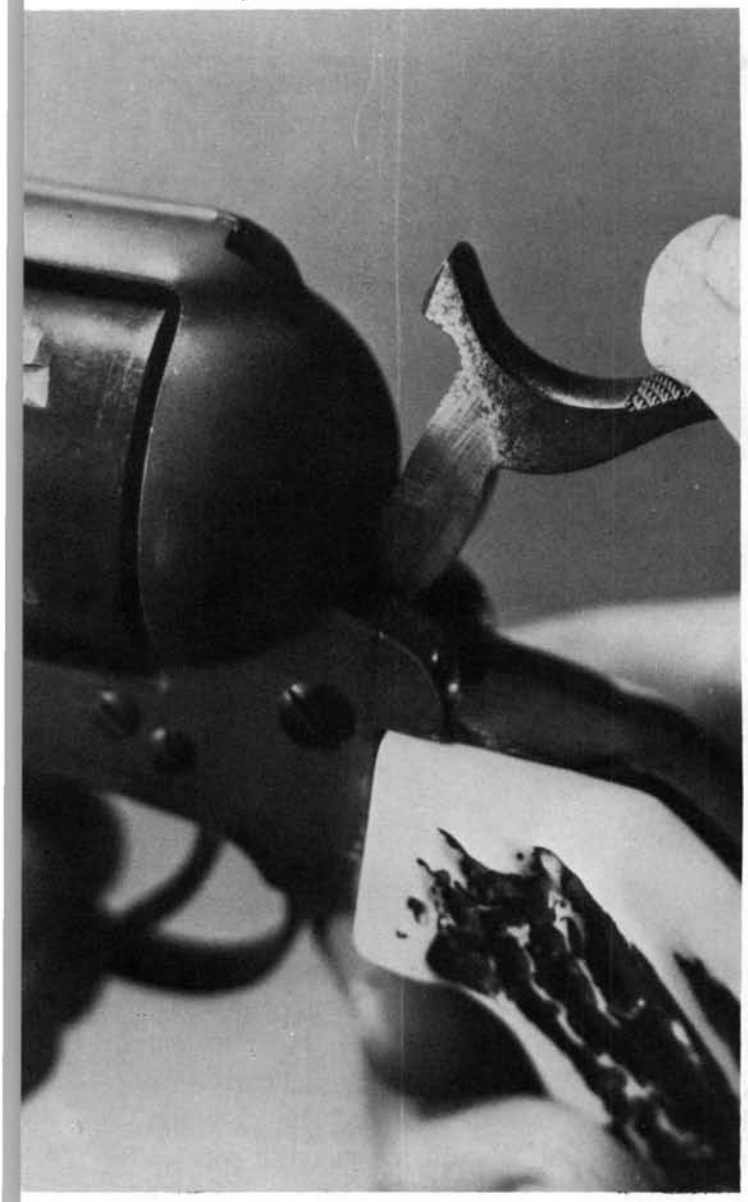


Data:	Hawes Western Marshal
Origin:	West Germany
Manufacturer:	J. P. Sauer & Sohn Eckernforde (Imported by Hawes International)
Cartridge:	22 Long Rifle
Cylinder capacity:	6 rounds
Overall length:	$11\frac{3}{4}$ inches
Barrel length:	6 inches
Weight:	44 ounces

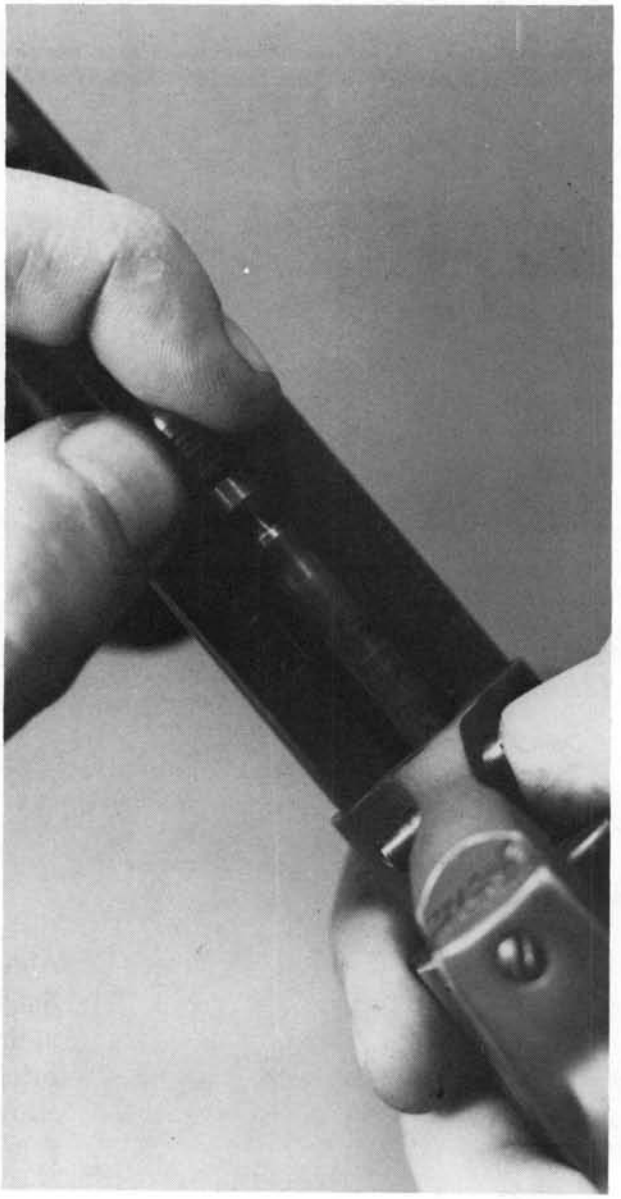
Although this gun has the external appearance of the Colt Single Action, there are mechanical differences, primarily in the firing pin system. The Hawes/Sauer has a separate firing pin in the frame, and the major external parts are of alloy. Otherwise, it follows the classic "Single Action" pattern. In addition to the 22-caliber version, it was also available in all-steel models chambered for the 357 Magnum, 44 Magnum, and 45 Colt rounds. These instructions will apply to those as well, and to the same guns with the "Hy Hunter" name, which preceded them in importation.

Disassembly:

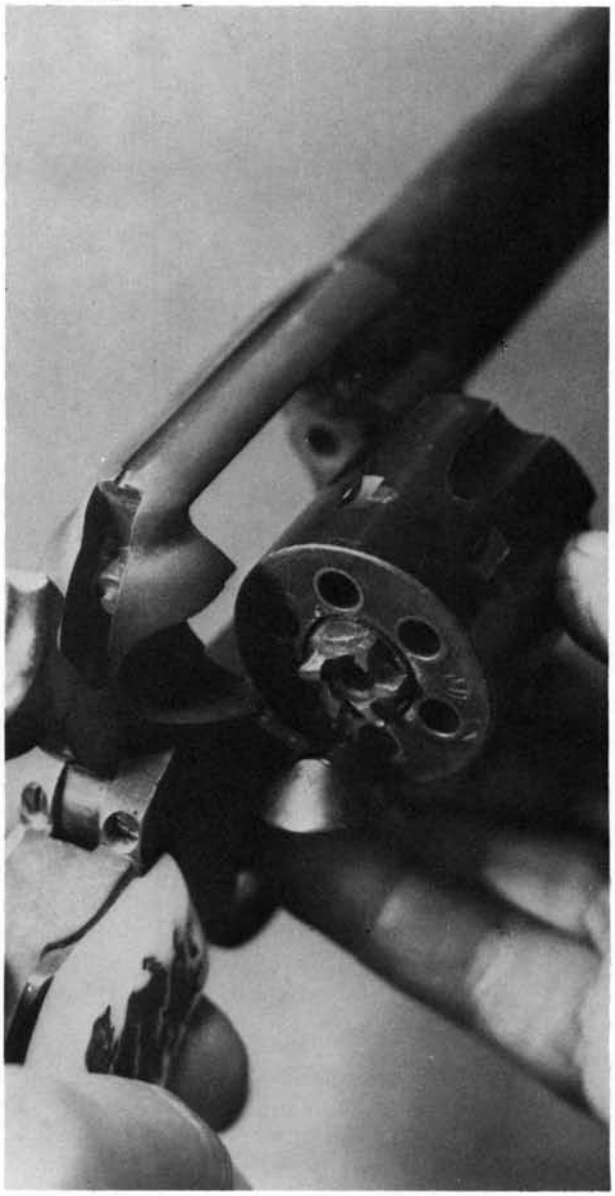
1. Set the hammer on the loading or middle step to free the cylinder.



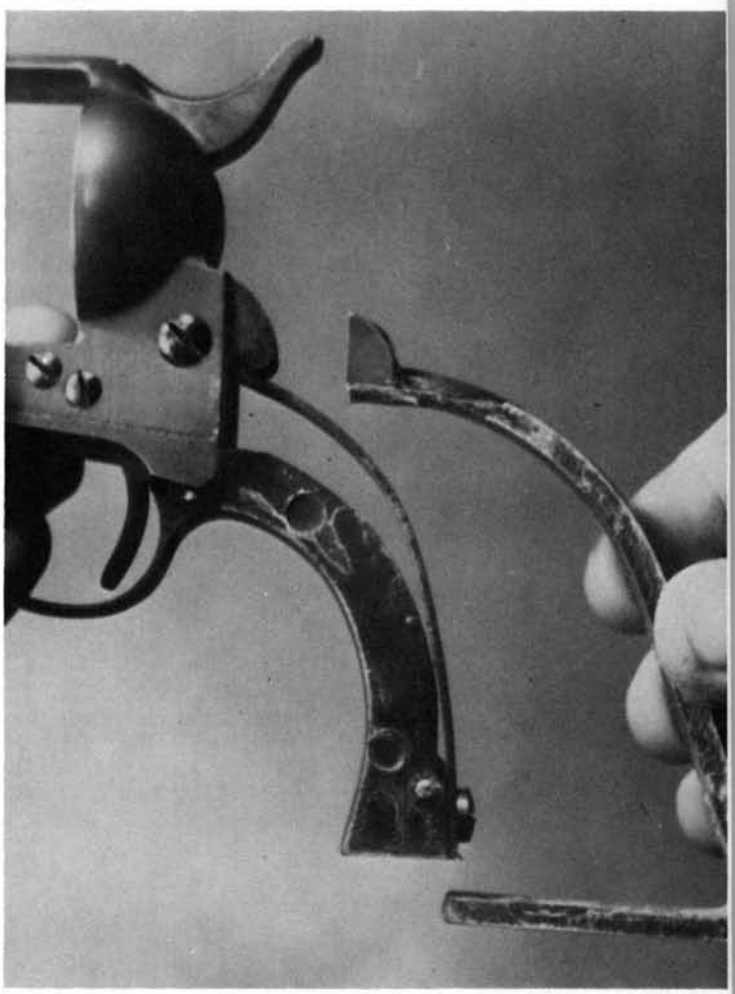
2. Depress the cylinder base pin latch and remove the base pin toward the front.

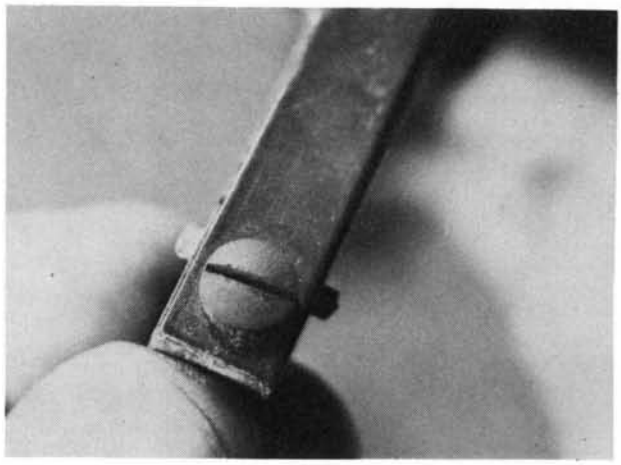


3. Open the loading gate and remove the cylinder toward the right.



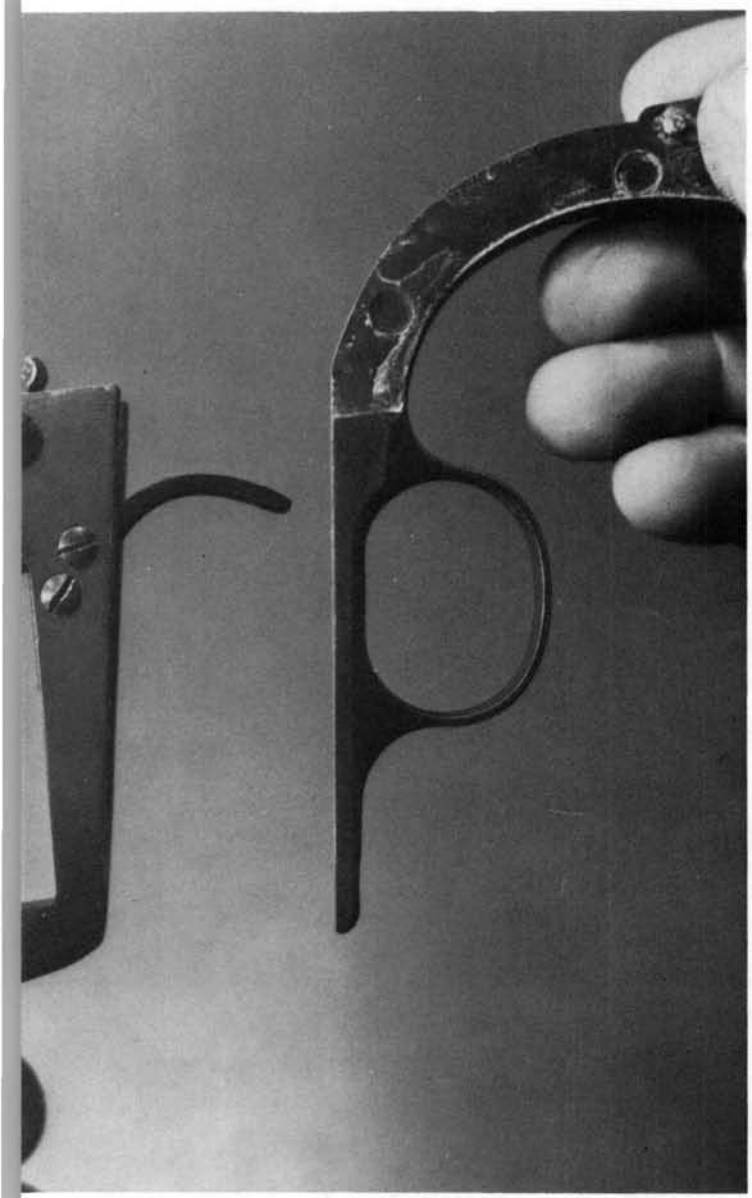
4. Remove the screw at the front underside of the grip frame, the two screws at the top rear of the grip frame and remove the backstrap of the grip frame toward the rear.





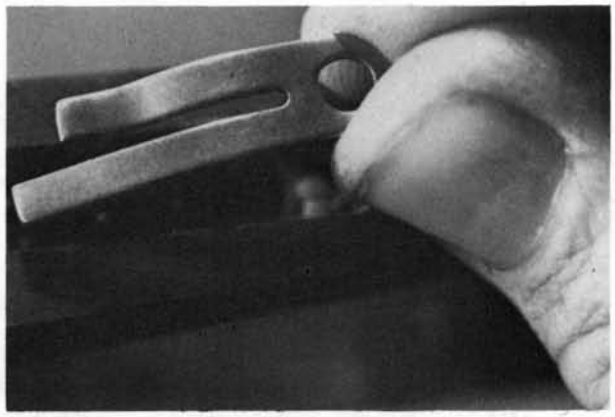
5. Remove the hammer spring screw and take off the hammer spring toward the rear.

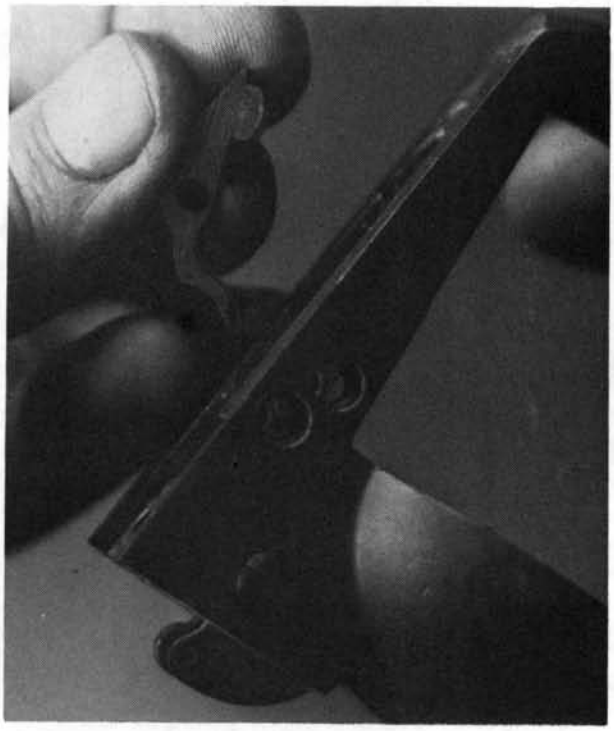
6. Remove the three screws on the underside of the trigger guard/frontstrap unit and remove the guard/frontstrap from the frame.



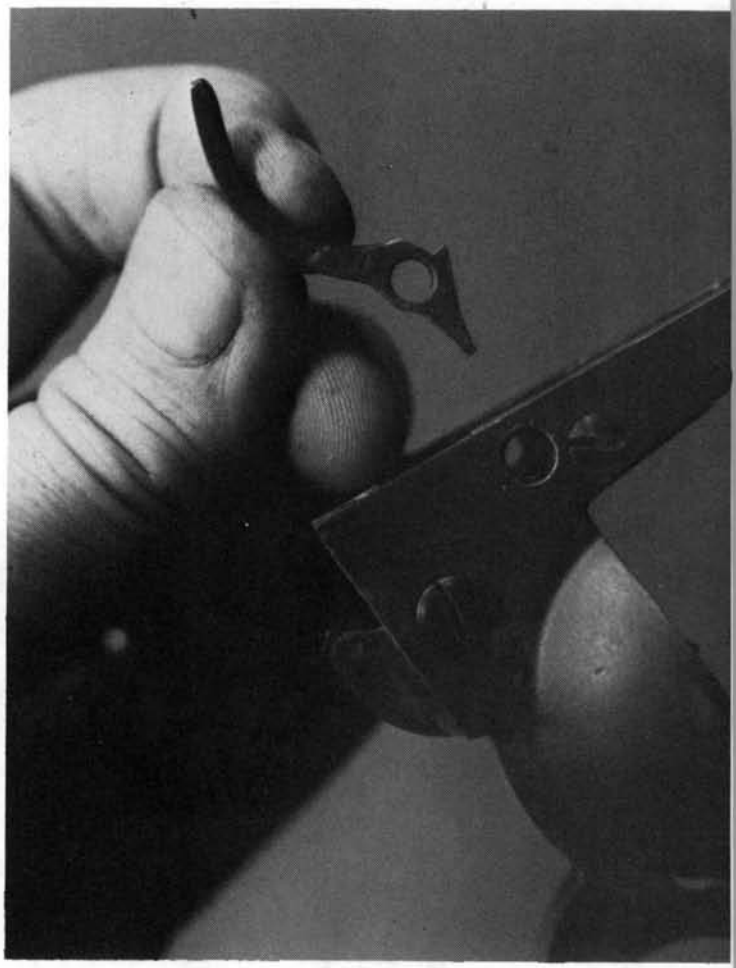
7. Remove the large screw that retains the combination trigger and cylinder stop spring.

8. Remove the trigger/cylinder stop spring from the frame recess.



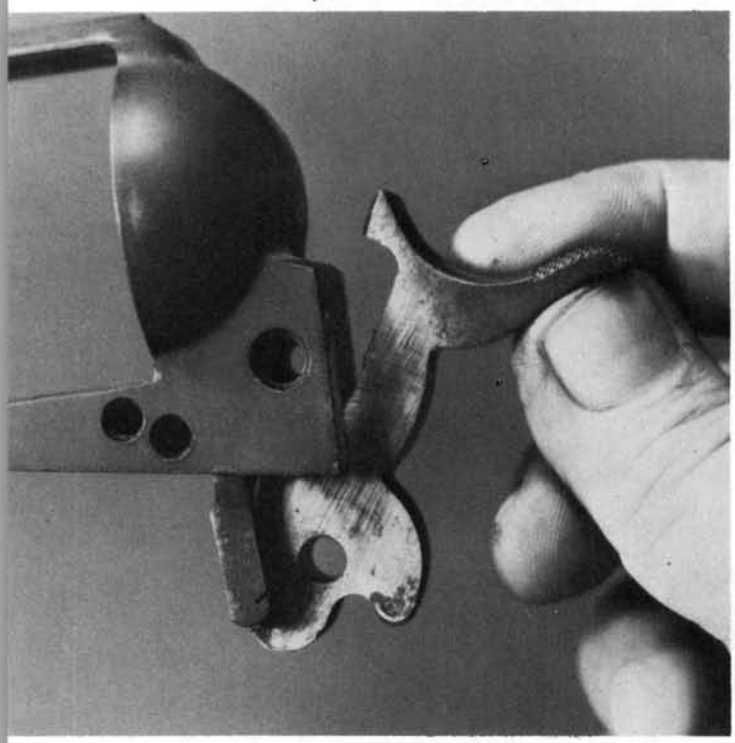


9. The hammer, trigger, and cylinder stop are retained in the frame by cross-screws. Take out the trigger screw and remove the trigger from the bottom of the frame.

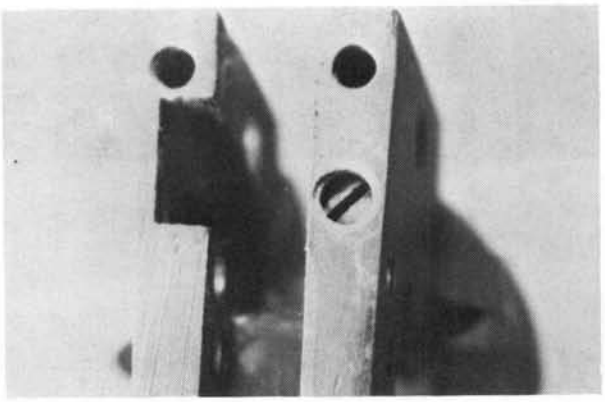


10. Take out the cylinder stop screw and remove the cylinder stop from the bottom of the frame.

11. Remove the hammer pivot screw. Move the hammer downward out of the frame, along with the attached cylinder hand and spring.

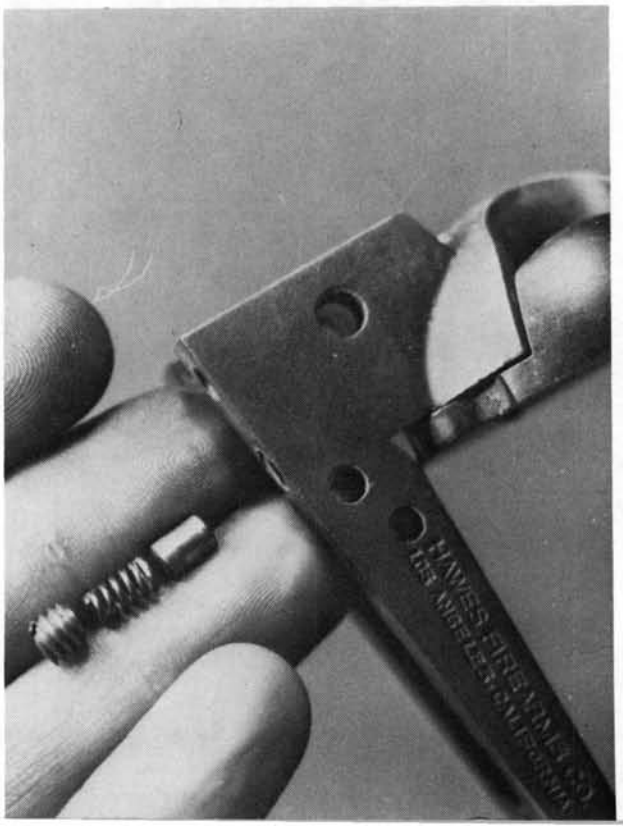


12. Remove the cylinder hand and spring from the left side of the hammer.

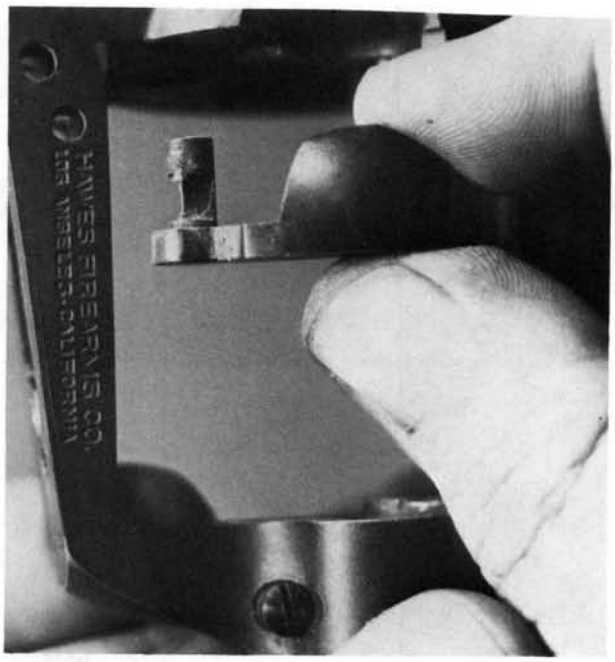


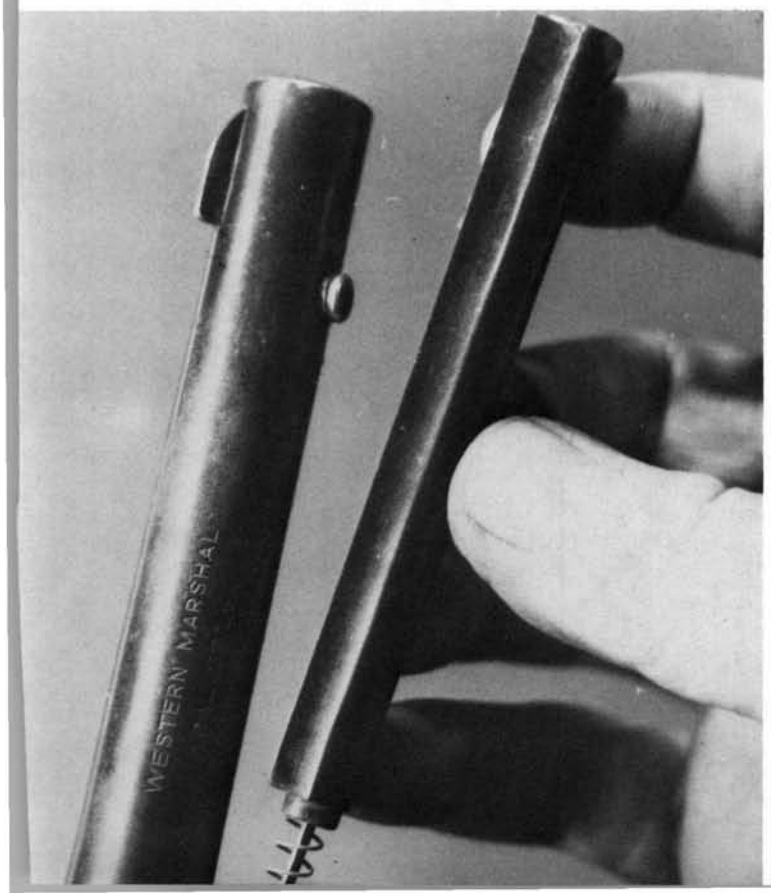
13. Remove the small screw in the right underside of the frame.

14. Take out the loading gate plunger and spring.

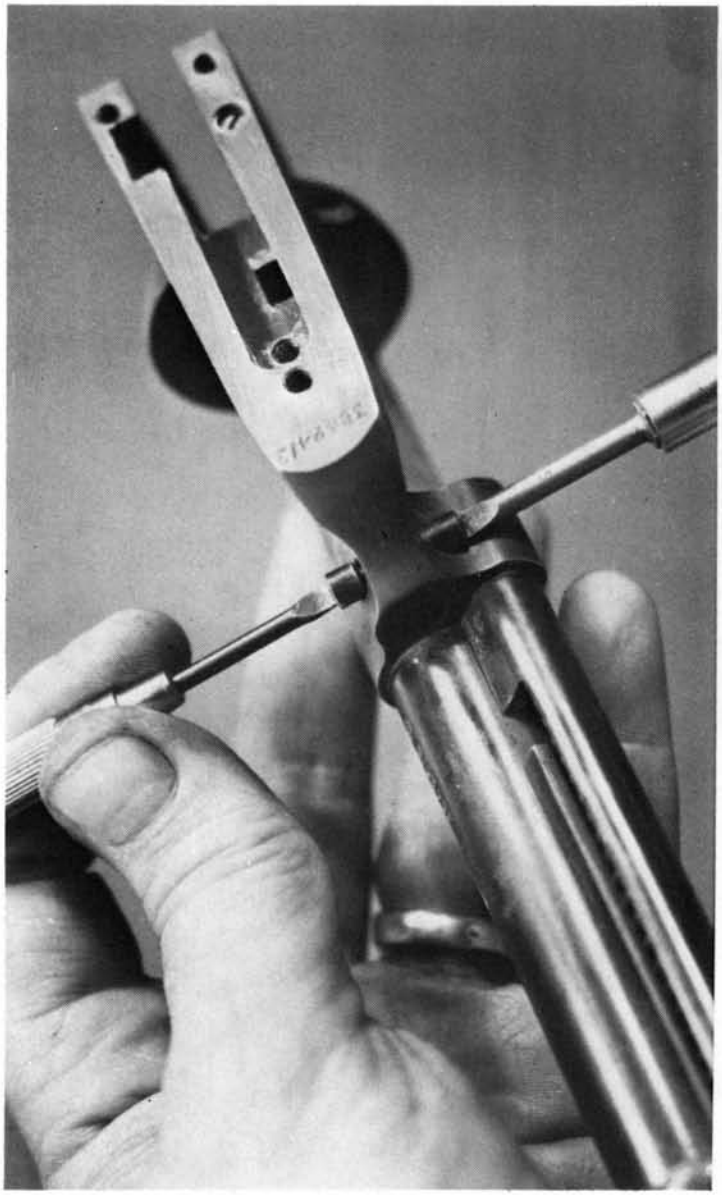


15. Move the loading gate forward out of the frame.



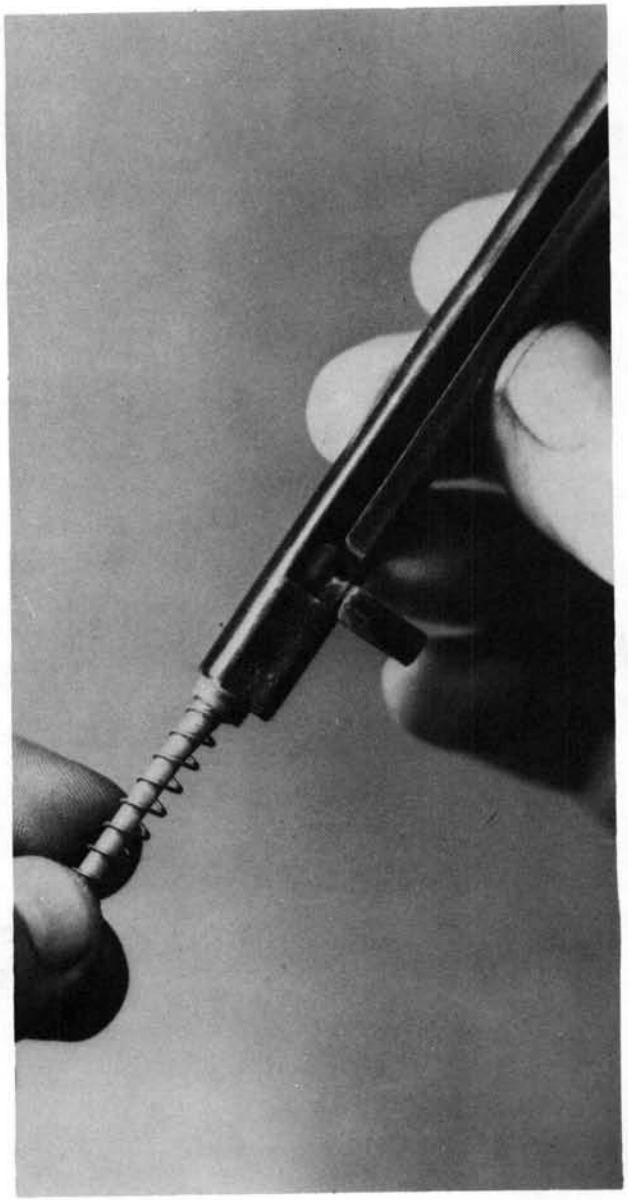


16. Using two opposed screwdrivers, unscrew the cylinder base pin latch. The latch piece is taken off toward the right, the cap nut and spring toward the left.

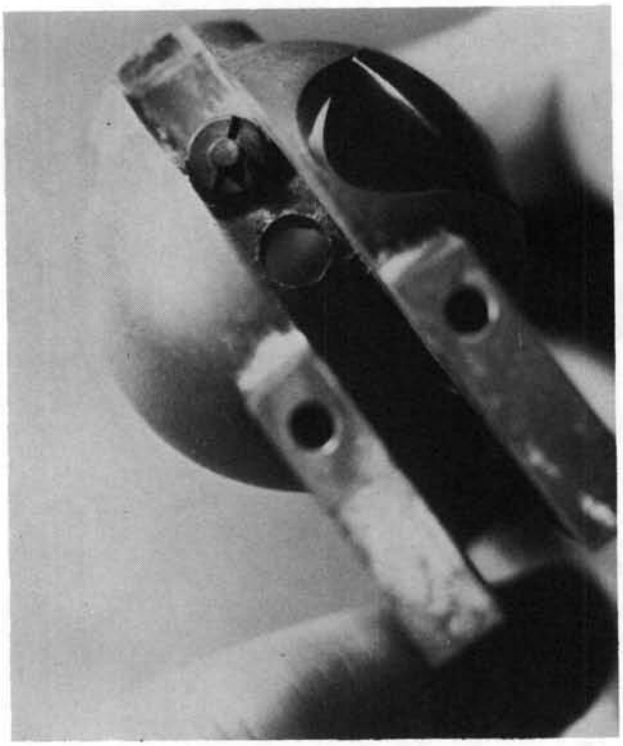


17. Remove the screw at the forward end of the ejector rod housing. Tip the housing away from the barrel at the front, then remove it forward, along with the ejector and spring.

18. Slide the ejector toward the rear, turn it over into the exit track, and remove the ejector and spring from the housing.

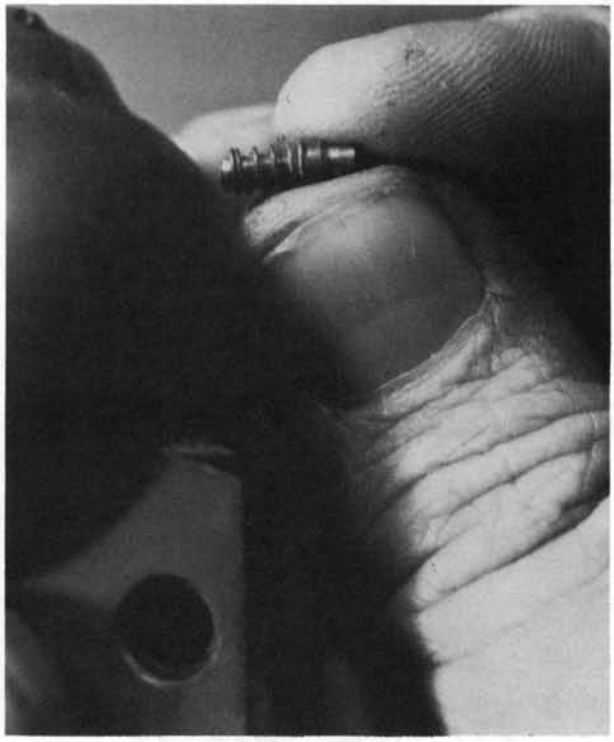


19. Removal of the firing pin housing requires a twin-pointed tool as described in the tool section. It is unscrewed counterclockwise (rear view).

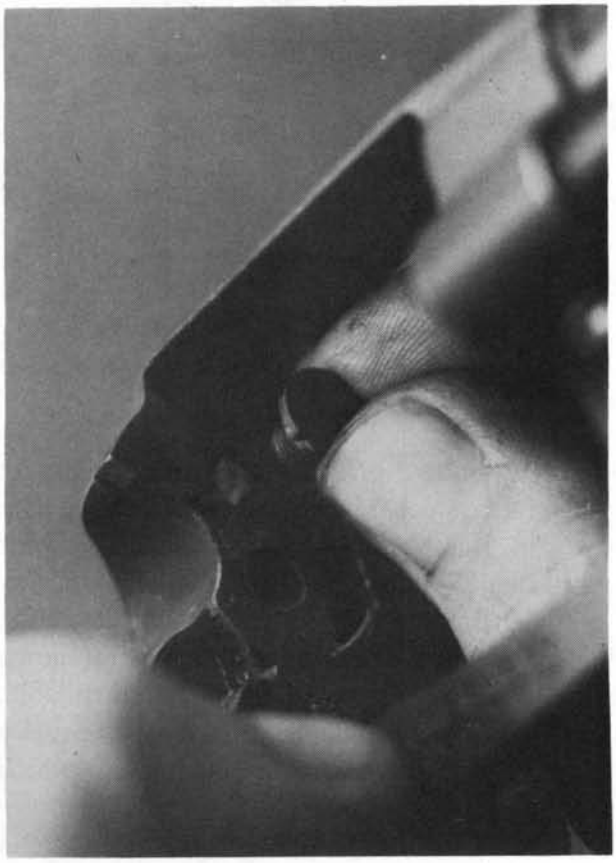


20. Remove the housing nut toward the rear.

21. Remove the firing pin and spring toward the rear.



22. Remove the firing pin housing toward the front.



Reassembly Tips:

When replacing the firing pin housing in the frame, use a tool to hold the right lower edge of the housing at the front, to prevent rotation as the housing nut is screwed into place. Otherwise, the tilted housing face will interfere with insertion of the cylinder.

When replacing the combination trigger and cylinder stop spring, be sure its trigger spring arm engages the front lip of the trigger before replacing the retaining screw.

Hi-Standard Sentinel Mark IV

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Hi-Standard Sentinel Mark IV also apply to the following guns.

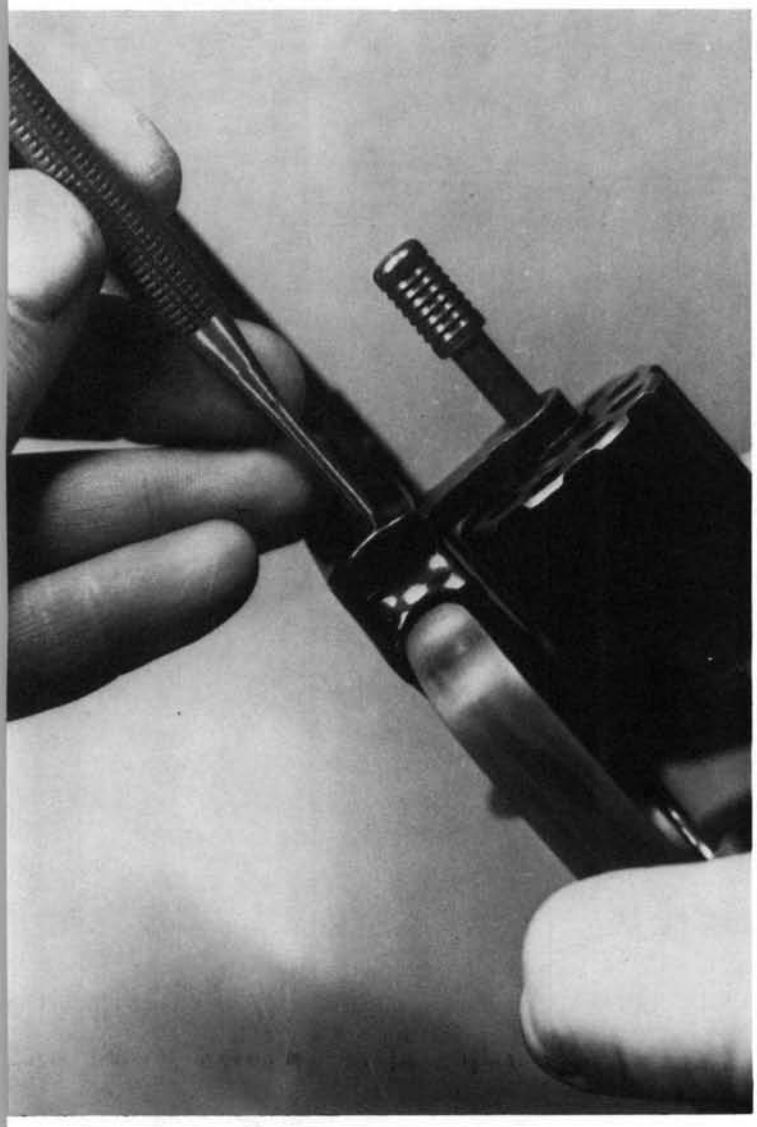
Hi-Standard Sentinel
Hi-Standard Sentinel Mark I
Hi-Standard Sentinel Deluxe
Hi-Standard Sentinel Snub
Hi-Standard Sentinel Kit Gun

Data:	Hi-Standard Sentinel Mark IV
Origin:	United States
Manufacturer:	High Standard, Hamden, Connecticut
Cartridge:	22 WMR (22 Magnum)
Cylinder capacity:	9 rounds
Overall length:	8 inches (with 3-inch barrel)
Barrel lengths:	2, 3, and 4 inches
Weight:	23 ounces (with 3-inch barrel)

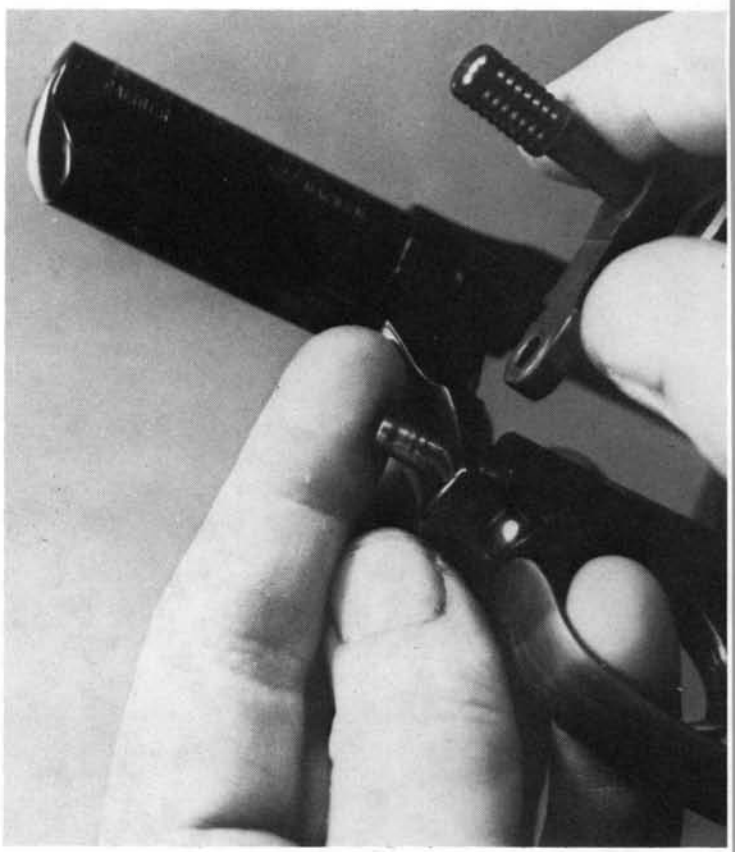
At one time, Hi-Standard offered the regular 22 and 22 WMR versions of the steel-framed Sentinel as two separate models, the Mark I and the Mark IV. Later, the gun was available with dual cylinders in a single model, and it's possible to switch from one to the other with very little effort. When the change was made, the 3-inch barrel shown here was dropped, and only two lengths were available. Earlier alloy-frame models of the Sentinel have essentially the same internal mechanisms, so the instructions which follow can apply to those as well.

Disassembly:

1. Insert a small drift punch into the hole at the lower front of the frame and depress the crane pivot beyond the level of the crane. Keeping it depressed, move the opened cylinder and crane toward the left until stopped by the punch. Remove the punch, hold a fingertip over the hole, and remove the cylinder and crane assembly toward the left.

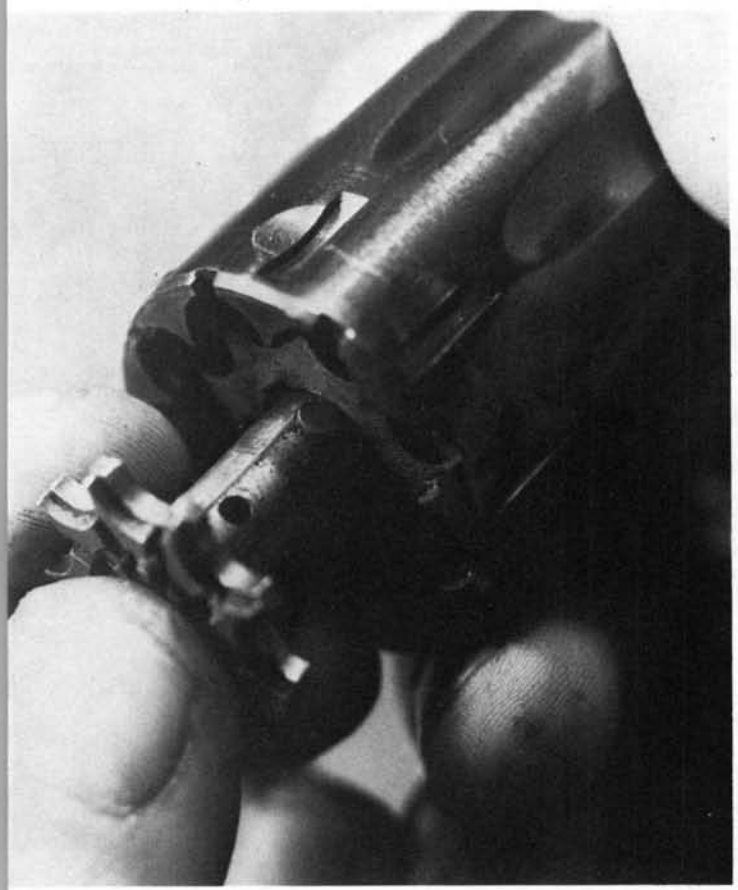


2. When the crane is removed, the cylinder stop spring will propel the crane pivot toward the front, to be stopped by the fingertip.

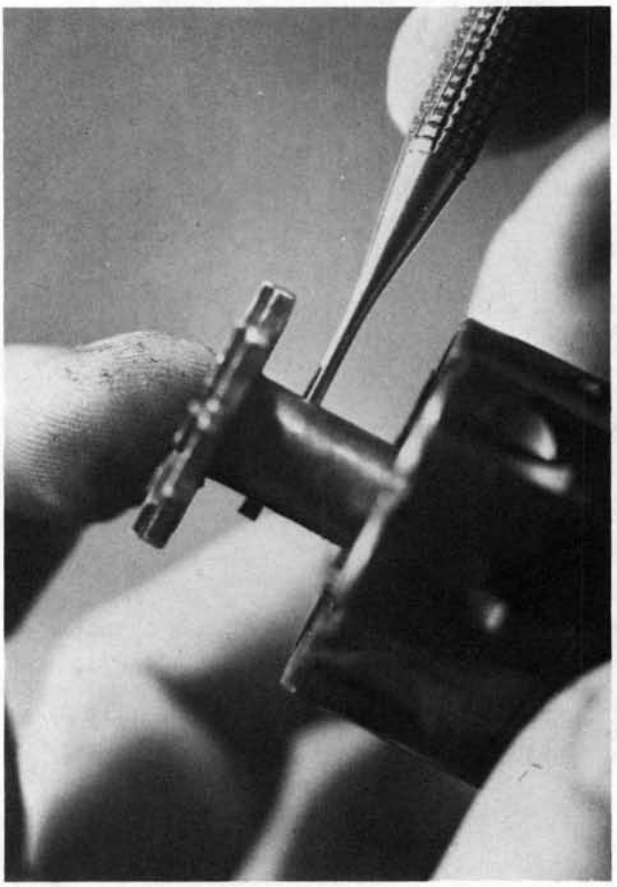


3. Remove the crane pivot and cylinder stop spring from the front of the frame.

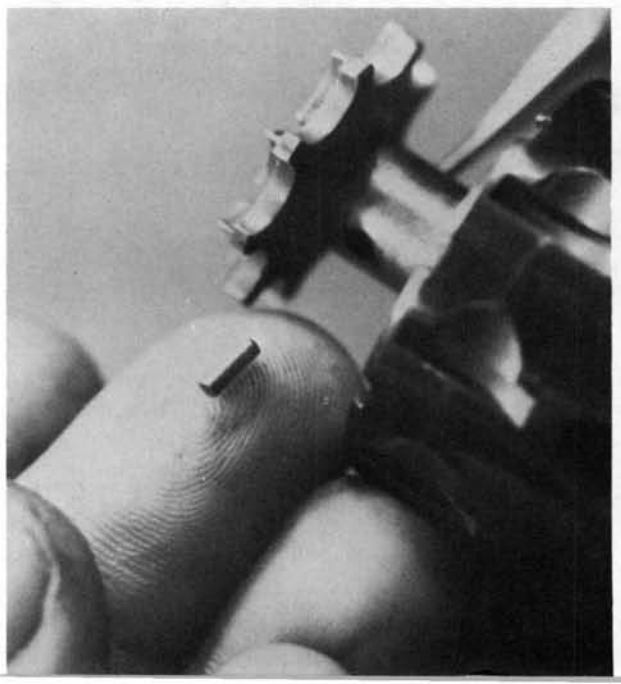
4. Pull the ejector/ratchet to the rear until its side lug emerges from the cylinder, and turn it to lock it in position. Note the retaining pin hole, just to the rear of the lug.



5. Depress the cylinder lock plunger at the center of the ejector/ratchet and turn the ejector rod until the retaining pin is seen through the hole in the side of the ejector shaft. Use a small-diameter punch to push out the pin.

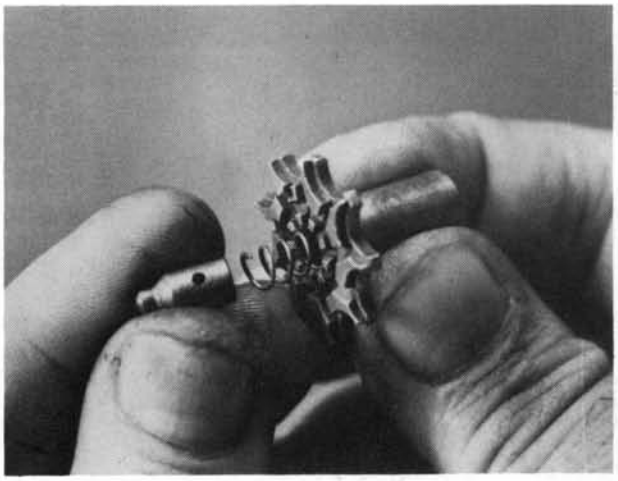


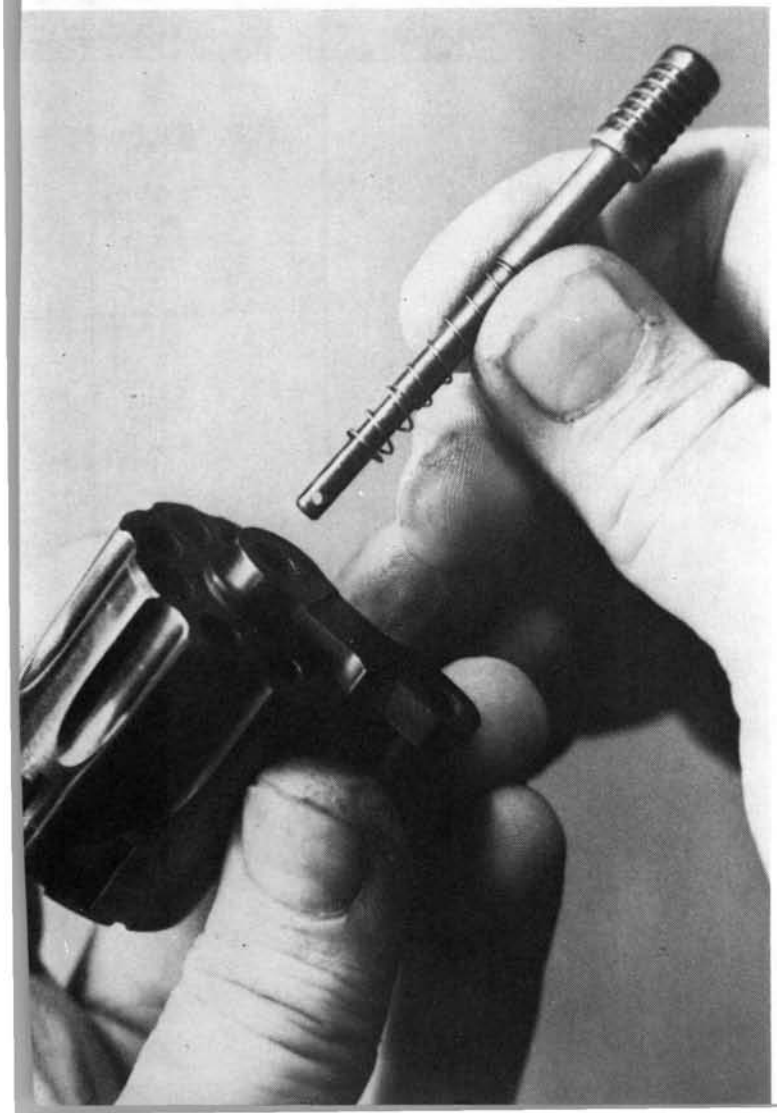
6. The retaining pin is very small, and its precise length is critical for proper functioning, so take care that it isn't lost.

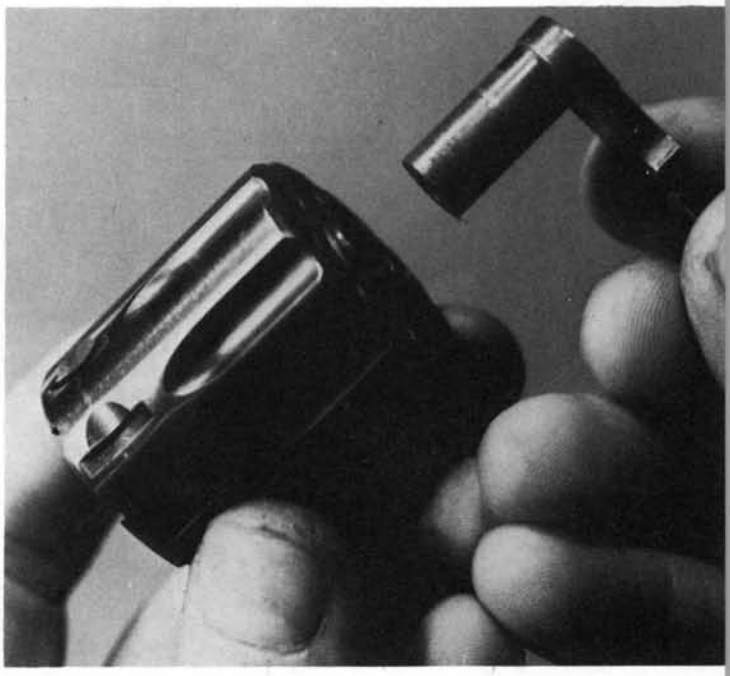


7. Restrain the ejector rod at the front and the lock plunger at the rear against the tension of their springs, and remove the drift punch from the assembly. Remove the ejector/ratchet toward the rear.

8. Remove the cylinder lock plunger and its spring from the center of the ejector/ratchet.



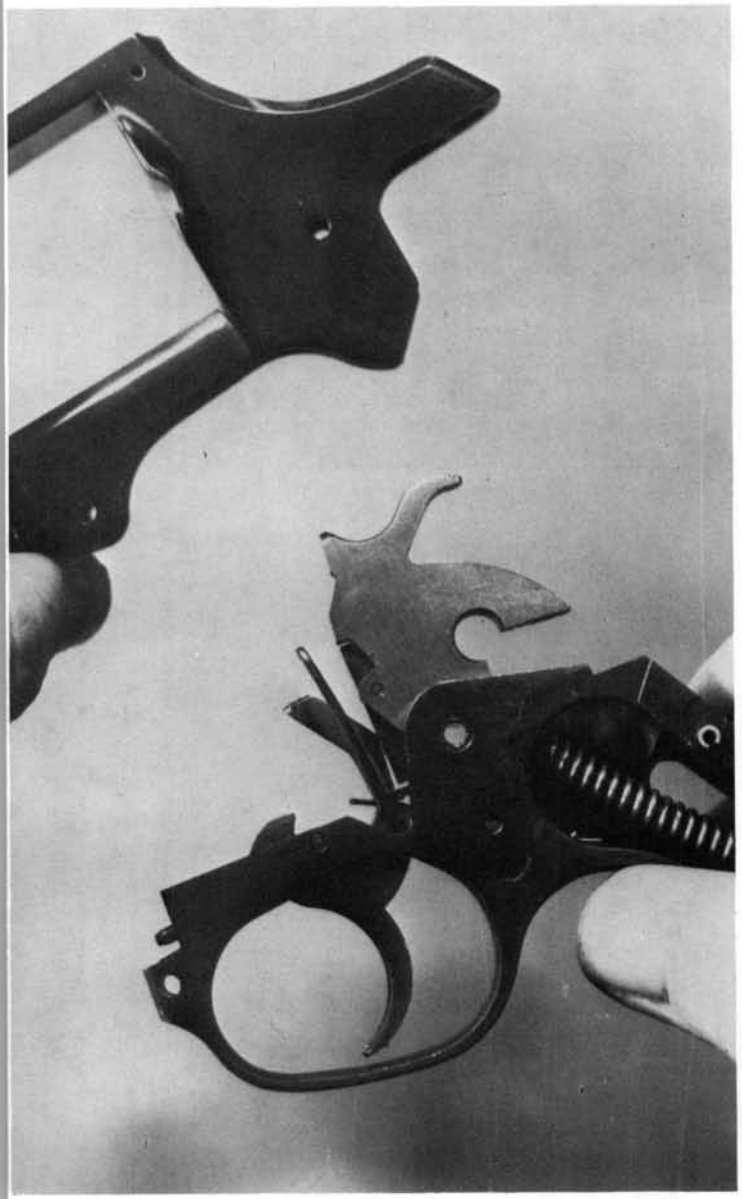




10. Remove the crane from the front of the cylinder.

9. Remove the ejector rod and its spring from the front of the cylinder.

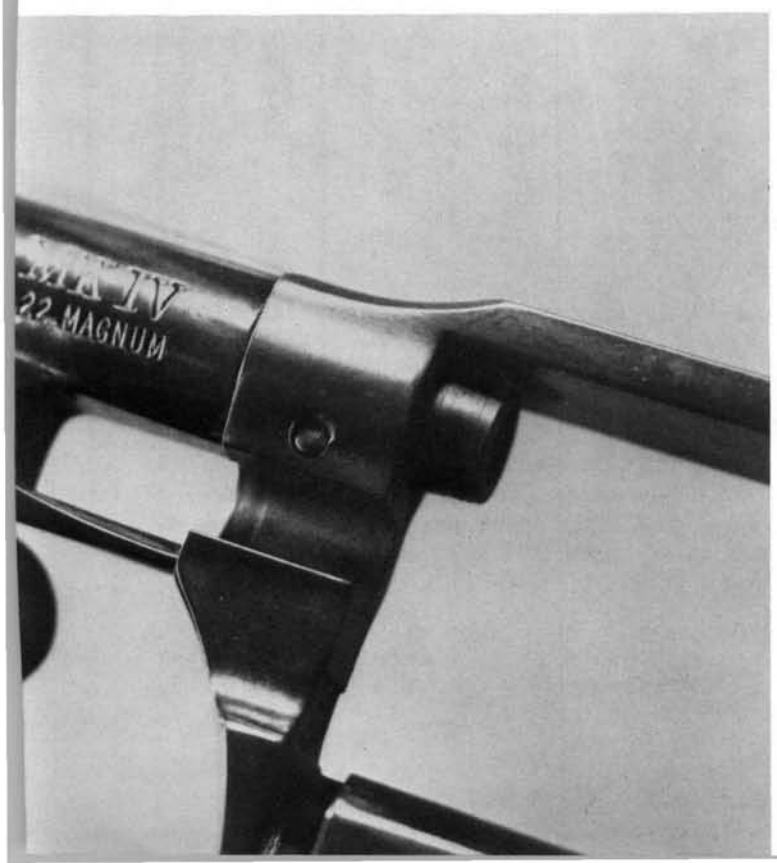
11. Drift out the cross-pins at the front of the trigger guard and at the rear center of the frame. Remove the sub-frame downward.



12. Remove the hammer block bar from the left side of the trigger.

13. The lower right end of the hammer block bar also serves as the cylinder hand pivot. Disengage the arm of the hand spring from its shelf on the hand, and remove the cylinder hand toward the right.

14. Remove the cylinder stop from the top of the sub-frame.

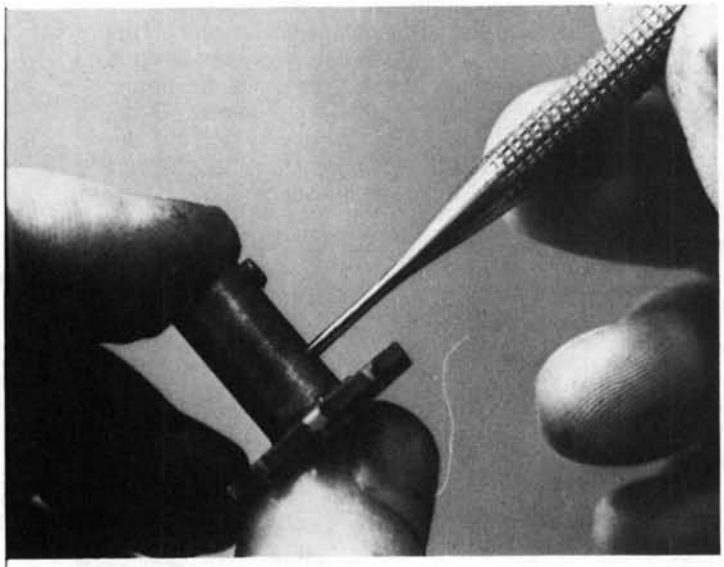


15. Restrain the hammer against the tension of its spring, and push out the hollow hammer pivot. Release the spring tension slowly, removing the hammer, strut, and spring from the top of the sub-frame. Drifting out the cross-pin at the front of the hammer will release the double-action lever and its spring for removal. Push out the trigger pin and remove the trigger from the top of the sub-frame. The remaining small cross-pin, just below the hammer pivot, holds the trigger spring and cylinder hand spring. Note the arrangement of these springs before removal, for proper reassembly.

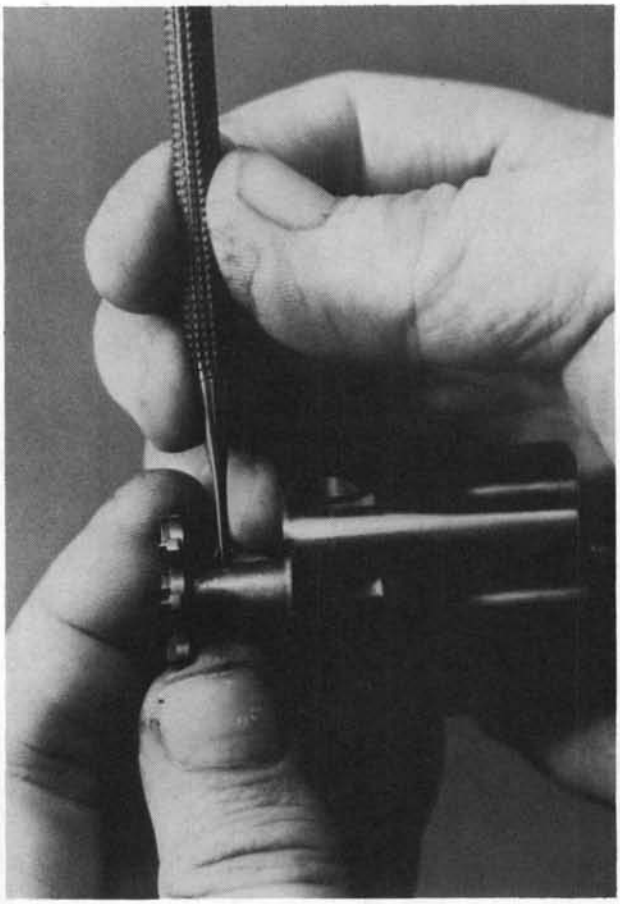
16. The barrel is retained in the frame by a large cross-pin. Under normal circumstances, removal is not advisable. Drifting out the small cross-pin at the top of the frame (not shown) will release the firing pin and its spring for removal toward the rear.

Reassembly Tips:

1. When preparing to reassemble the ejector components, begin by aligning the hole in the cylinder lock plunger with the hole in the side of the ejector/ratchet, and depress the plunger to allow the insertion of a small drift punch. Insert the punch only as far as is necessary to hold the plunger in place, not into the central cavity.



2. With the punch still in place, insert the ejector/ratchet into the rear of the cylinder, and insert the ejector rod and its spring into the front. Turn the rod until the small transverse hole at its rear tip is aligned with the tip of the punch, and move the punch inward to hold the assembly in place.



3. Insert the original retaining pin from the side opposite the drift punch, and tap it into place, forcing the punch out. When the retaining pin is properly centered, the cylinder lock plunger will be pushed out by its spring to proper rear protrusion.

When replacing the sub-frame, be sure the cylinder hand enters its slot in the frame. The sub-frame should slip easily into place. If it meets resistance, something is not right. Check to see that all parts are in their proper position.

When replacing the cylinder stop spring and crane pivot, be sure the spring surrounds the forward tip of the cylinder stop, or the spring will be deformed as the pivot is pushed in.

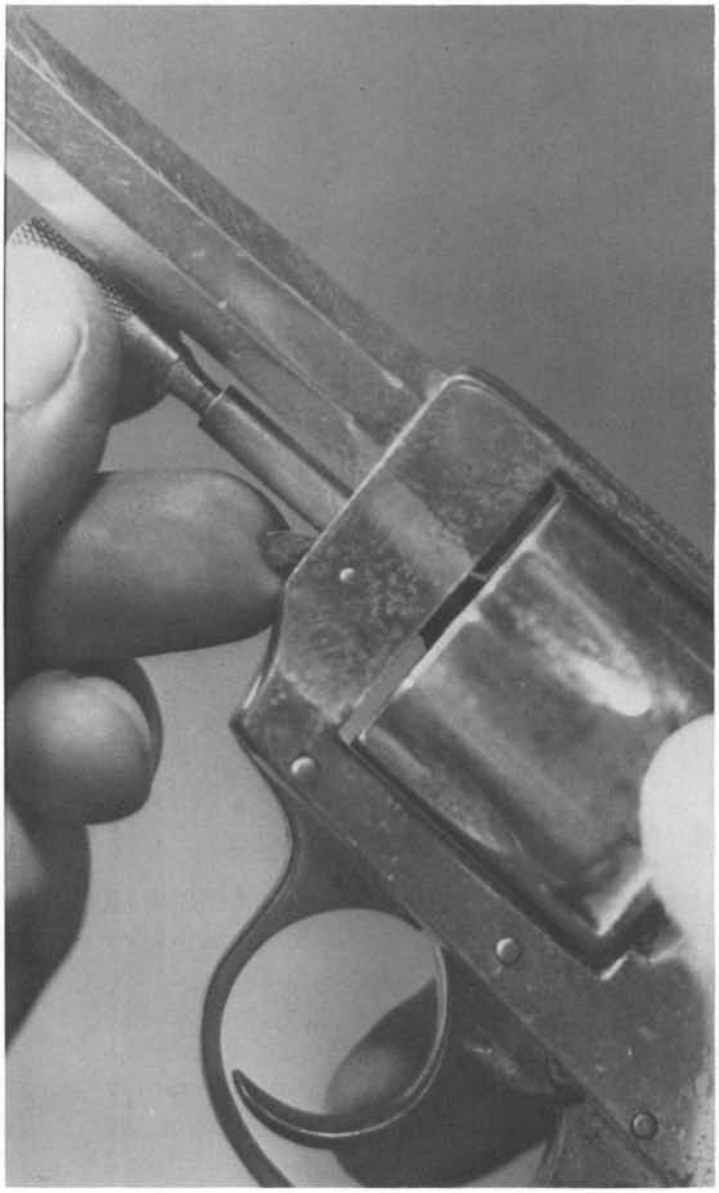
Hopkins & Allen Double Action No. 6

Data:	Hopkins & Allen Double Action No. 6
Origin:	United States
Manufacturer:	Hopkins & Allen, Norwich, Connecticut
Cartridge:	38 S&W
Cylinder capacity:	5 rounds
Overall length:	$8\frac{3}{4}$ inches (varies with barrel length)
Height:	$3\frac{7}{8}$ inches
Barrel length:	$4\frac{1}{2}$ inches (other lengths were made)
Weight:	15 ounces

The H&A Double Action No. 6 is typical of the small solid-frame revolvers made by several companies in New England during the 1880 to 1910 period, and is included in this book for that reason. These guns were low priced in their time and many thousands of them were sold. While the quality was somewhat lower than a Colt or Smith & Wesson, they served well for self-defense, their main purpose. A good number of them still do.

Disassembly:

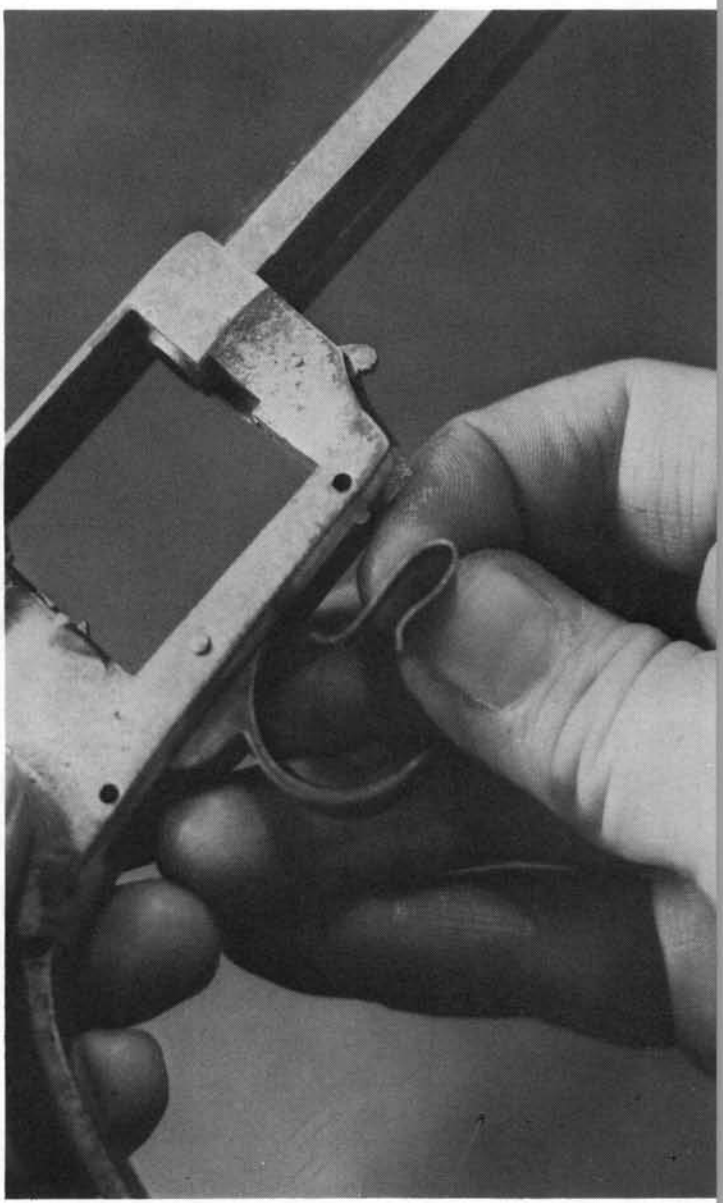
1. Depress the cylinder base pin latch upward and remove the base pin toward the front.



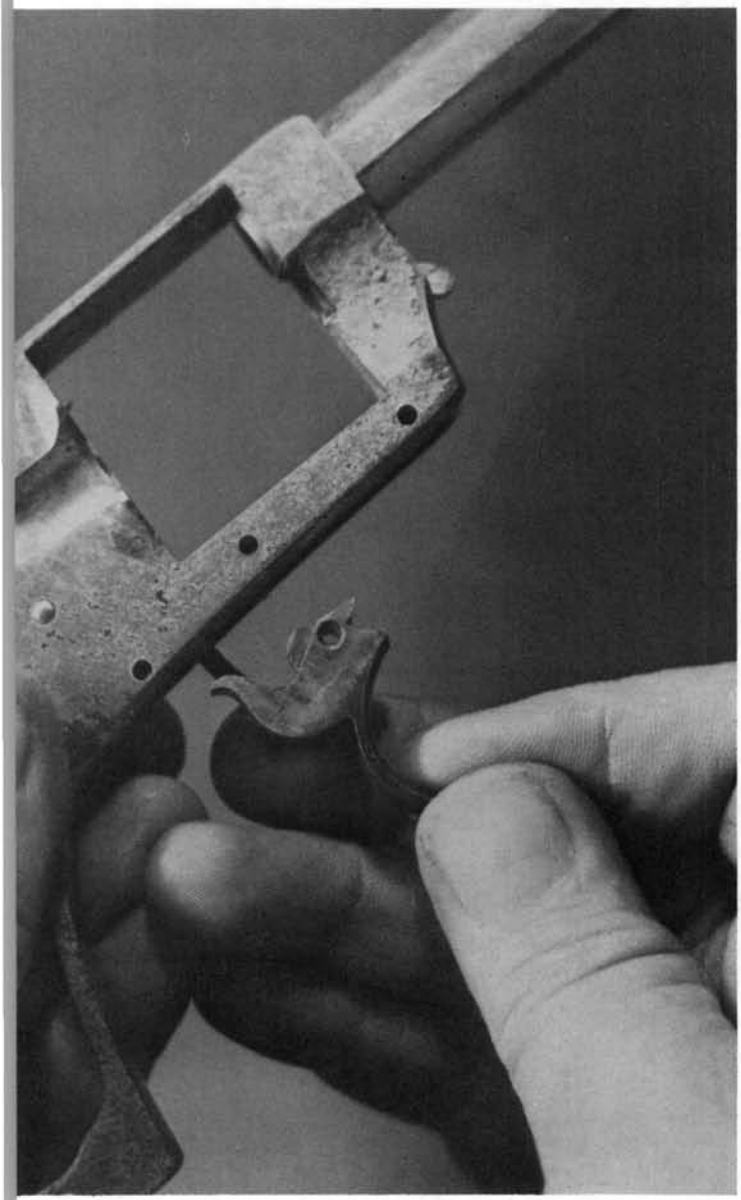
2. Remove the cylinder toward the right.

3. The trigger guard is retained by cross-pins at the front and rear. After drifting out the pins, the guard is removed straight downward.

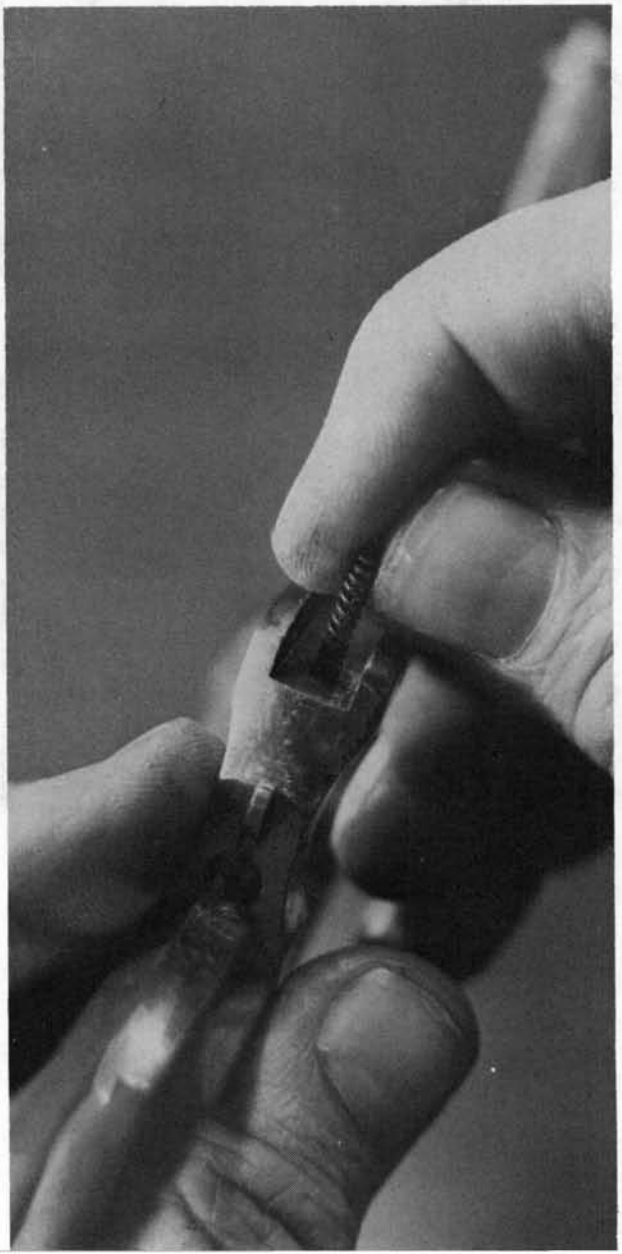
4. Remove the trigger spring from the lower front of the frame.



5. Drift out the cross-pin holding the trigger, and remove the trigger downward, along with the cylinder hand.

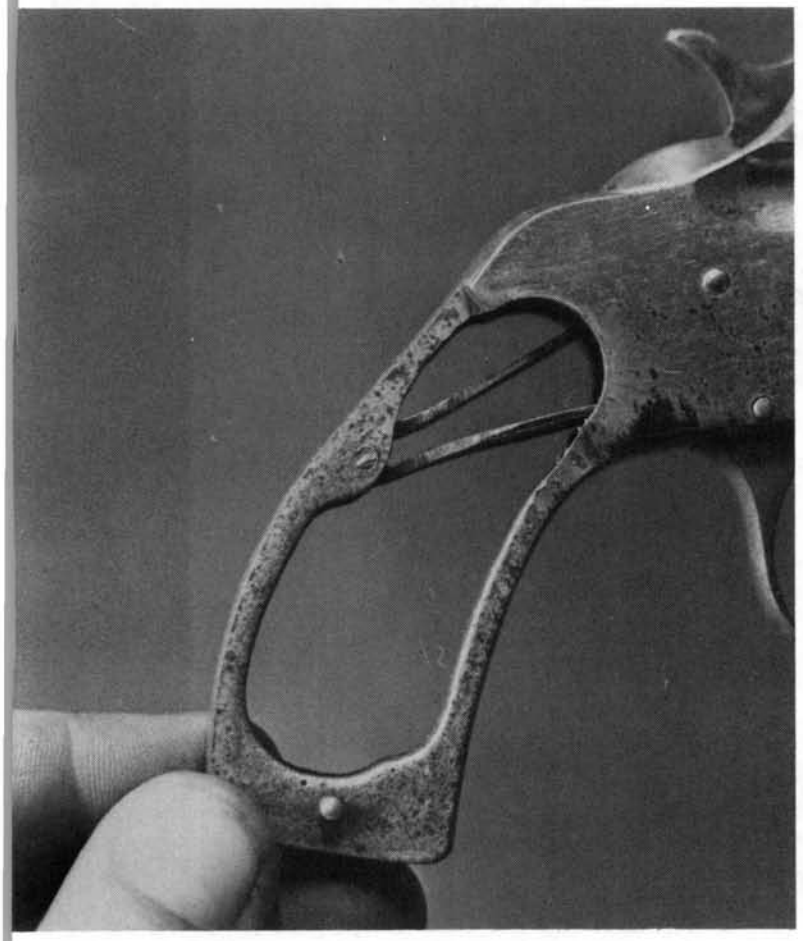


6. The cylinder hand and its spring are easily detached from the stud on the left side of the trigger. The cylinder hand spring is staked into a slot in the hand, and routine removal is not advisable.

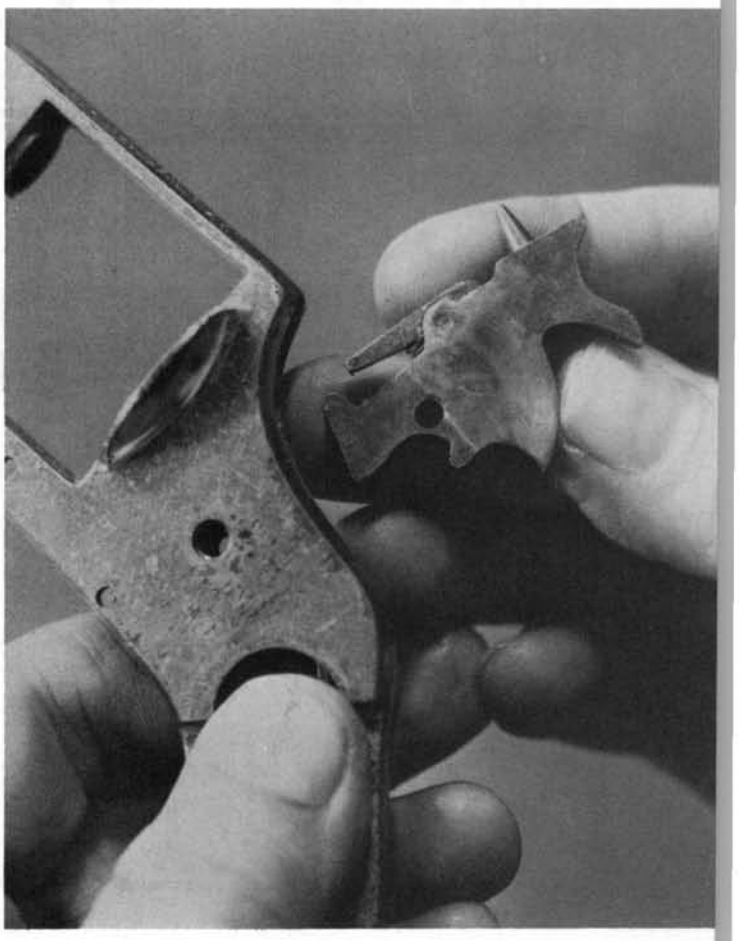


7. Remove the cylinder base pin latch spring from its hole in the forward underside of the frame. Drifting out the cross-pin that retains the latch will allow its removal toward the front.

8. A cross-pin at the middle rear of the grip frame holds the hammer spring. After the pin is removed, the spring can be compressed with pliers and moved downward, then out toward the side.



9. Back out the hammer pivot screw and remove the hammer from the top of the frame. A cross-pin at the front of the hammer retains the double-action lever and its spring.



Reassembly Tips:

When replacing the hammer spring, be sure the upper arm of the spring goes under the compression lobe on the lower rear of the hammer.

When replacing the trigger, be sure the cylinder hand enters its slot in the frame, and that the rear beak of the trigger goes between the double-action lever and the lower front projection of the hammer.

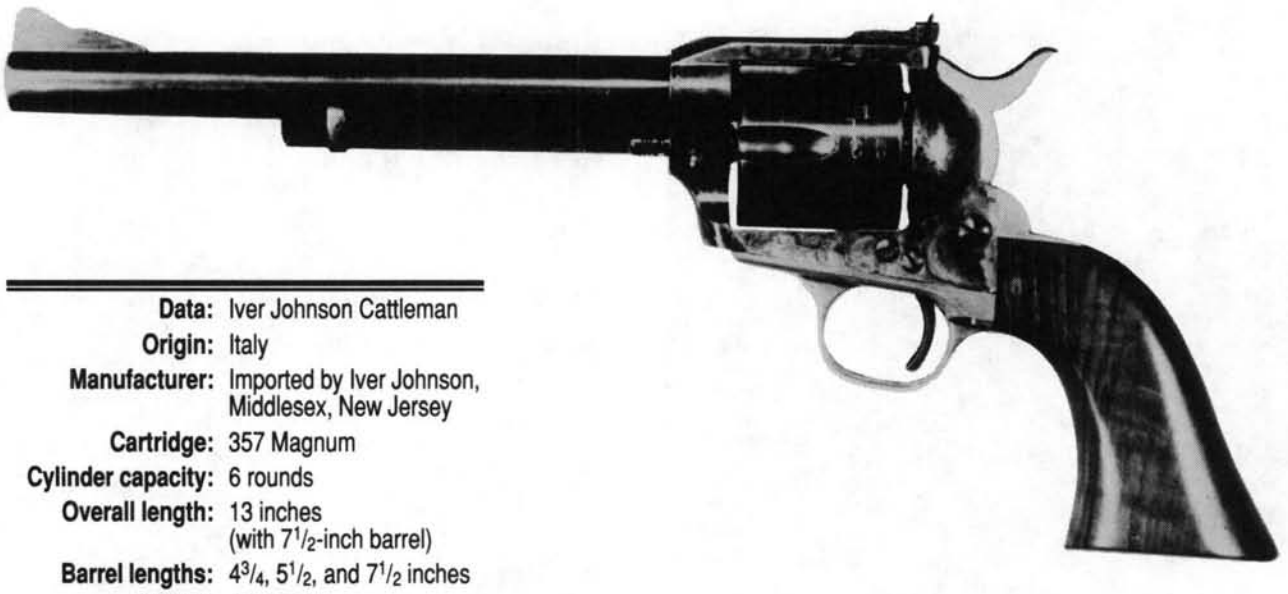
When replacing the guard, take care that the trigger spring stays to the rear, beneath the top front projection of the trigger. Install the front guard pin first, then the rear one.

Iver Johnson Cattleman

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Iver Johnson Cattleman also apply to the following guns.

Cimarron 1873 Peacemaker
Cimarron Artillery
Cimarron Sheriff Model
Cimarron U.S. Cavalry
Iver Johnson Cattleman Buckhorn
Iver Johnson Cattleman Buntline
Iver Johnson Cattleman Trailblazer

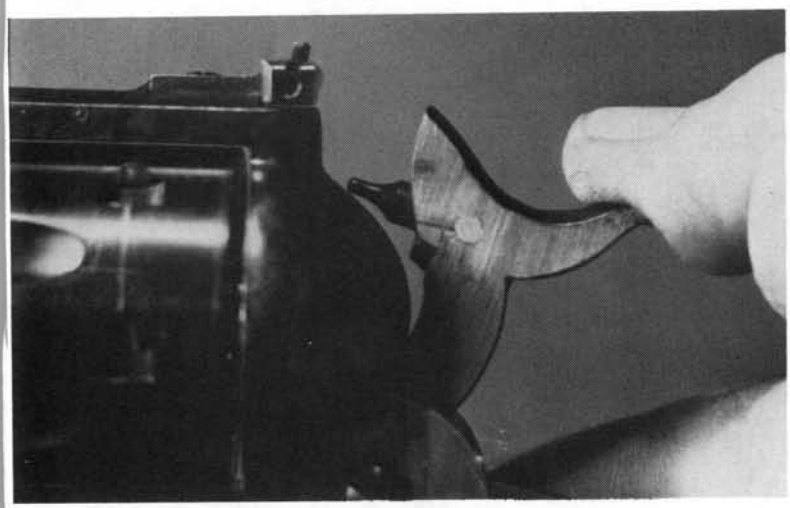


Data:	Iver Johnson Cattleman
Origin:	Italy
Manufacturer:	Imported by Iver Johnson, Middlesex, New Jersey
Cartridge:	357 Magnum
Cylinder capacity:	6 rounds
Overall length:	13 inches (with $7^1/_2$-inch barrel)
Barrel lengths:	$4^3/_4$, $5^1/_2$, and $7^1/_2$ inches
Weight:	40 ounces (with $7^1/_2$-inch barrel)

Another of the recreations of the Colt Single Action, the Cattleman has one of the best safety systems ever made for guns of this type. When the hammer is set on the safety step, a small vertical plunger tips a steel block to bear on the frame, keeping the hammer from full forward travel. This entire mechanism is contained within the hammer, and operates automatically, with no external controls to mar the traditional look of the gun. The Cattleman was also offered in Buckhorn, Buntline, and Trailblazer models. All are identical, mechanically. These Uberti-made guns have also been imported under other trade names such as Cimarron.

Disassembly:

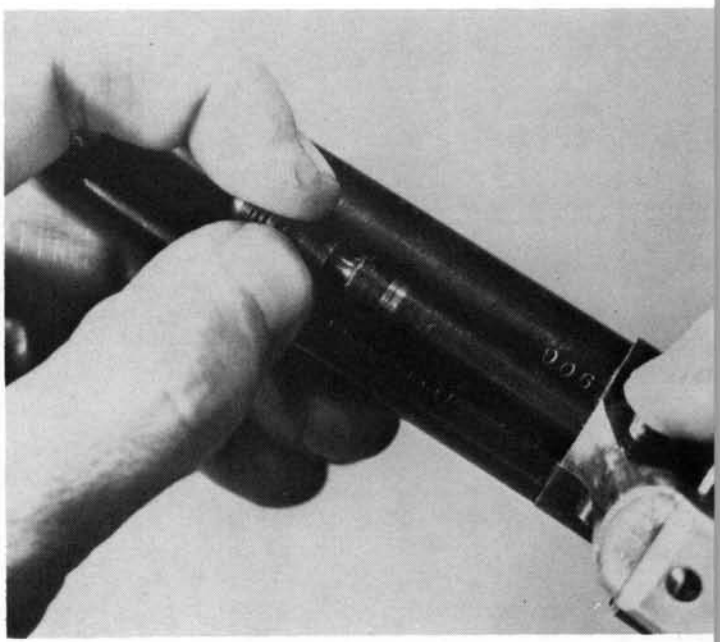
1. Set the hammer on the loading step, the middle notch, to free the cylinder.



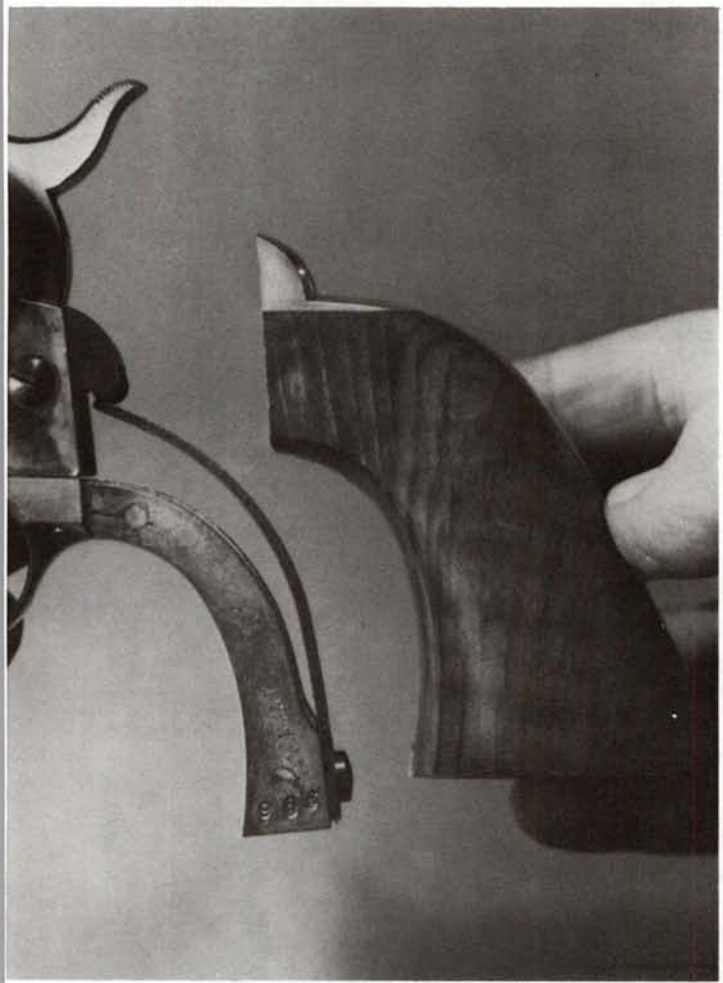
3. Open the loading gate and remove the cylinder toward the right.

4. Remove the bushing from the front of the cylinder.

2. Depress the base pin latch and remove the cylinder base pin toward the front.



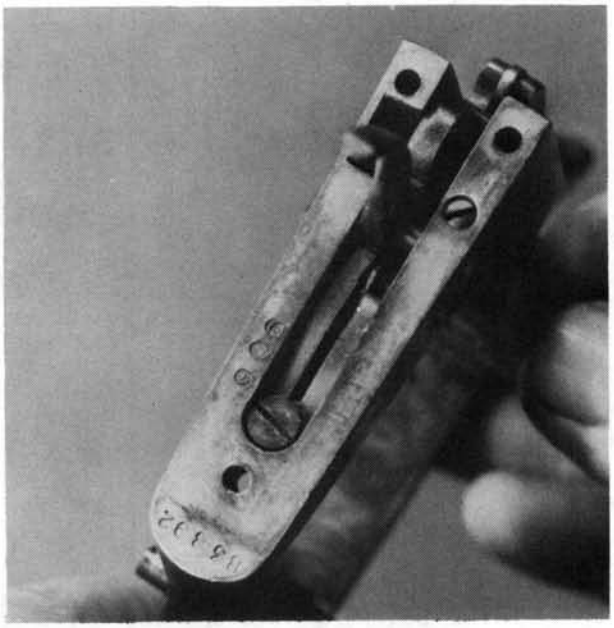
5. Remove the screw at the front underside of the grip frame, the two screws at the top rear of the grip frame, and remove the backstrap of the grip frame and the grip piece toward the rear.



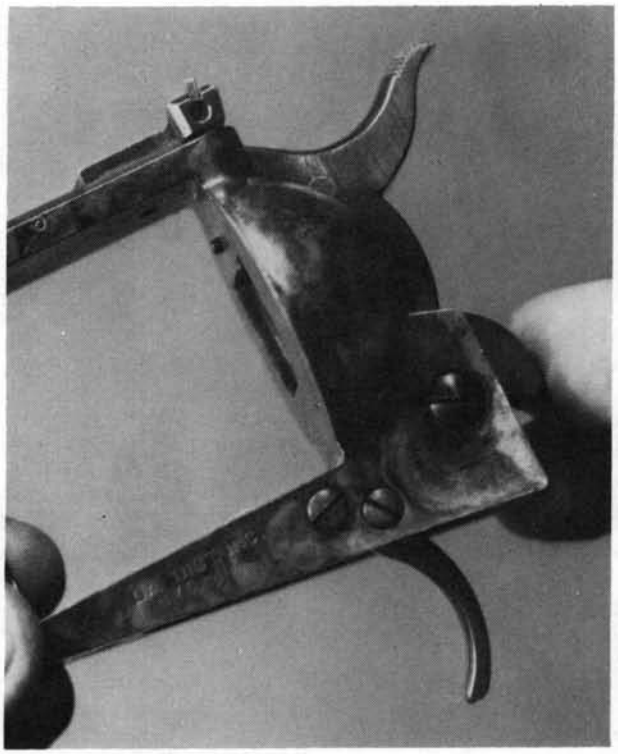
6. Remove the hammer spring screw from the lower back of the frontstrap, and take off the hammer spring.

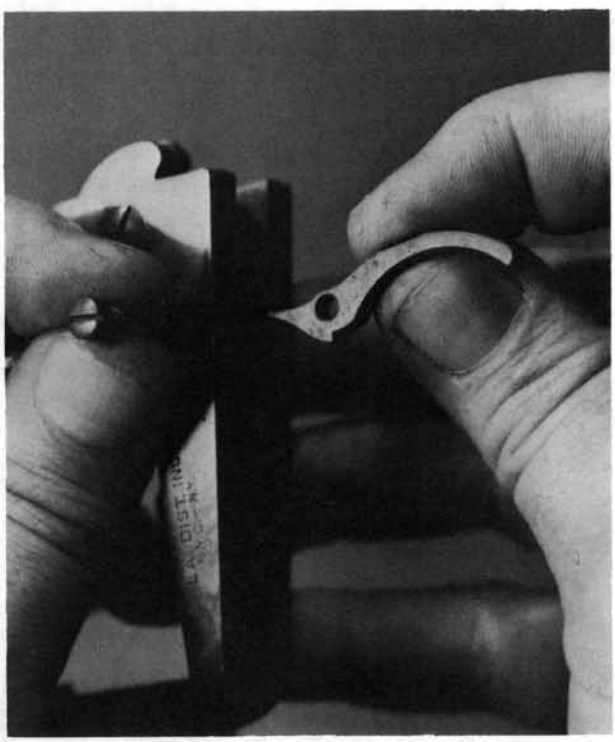
7. Remove the screw in the front underside of the trigger guard and the two screws at the rear of the trigger guard. Then remove the trigger guard/frontstrap downward from the frame.

8. The combination trigger and cylinder stop spring is retained by a large screw at the front of the frame recess. Remove the screw and take out the spring.

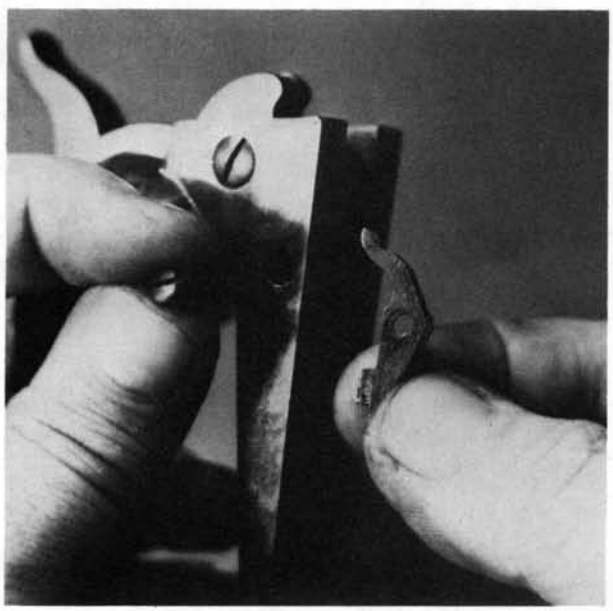


9. The trigger, cylinder stop, and hammer are retained by cross-screws in the frame.



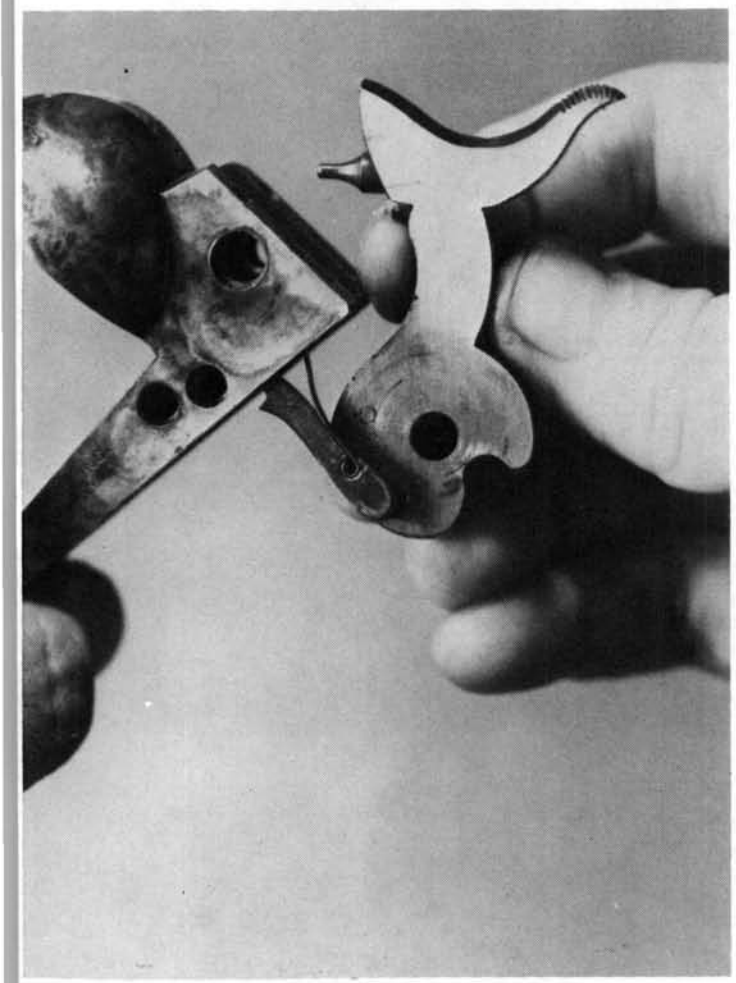


10. Remove the trigger screw and take out the trigger from the bottom of the frame.

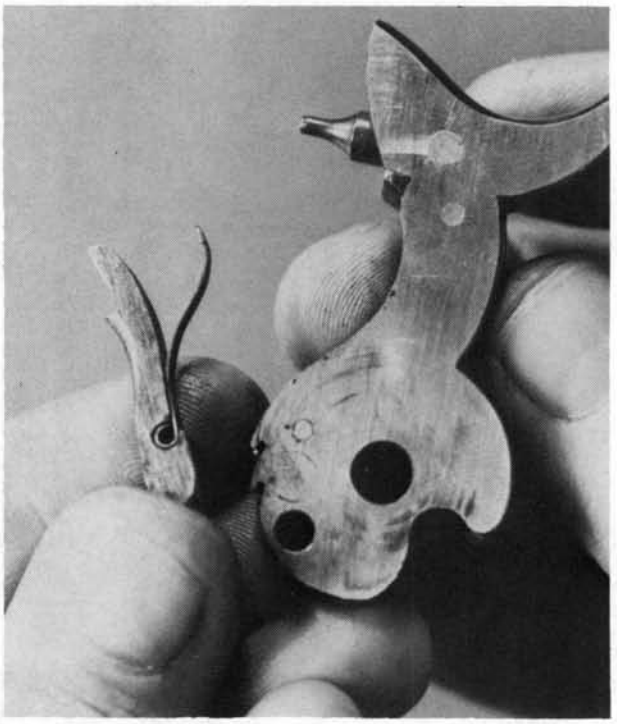


11. Remove the cylinder stop screw and take out the cylinder stop from the bottom of the frame.

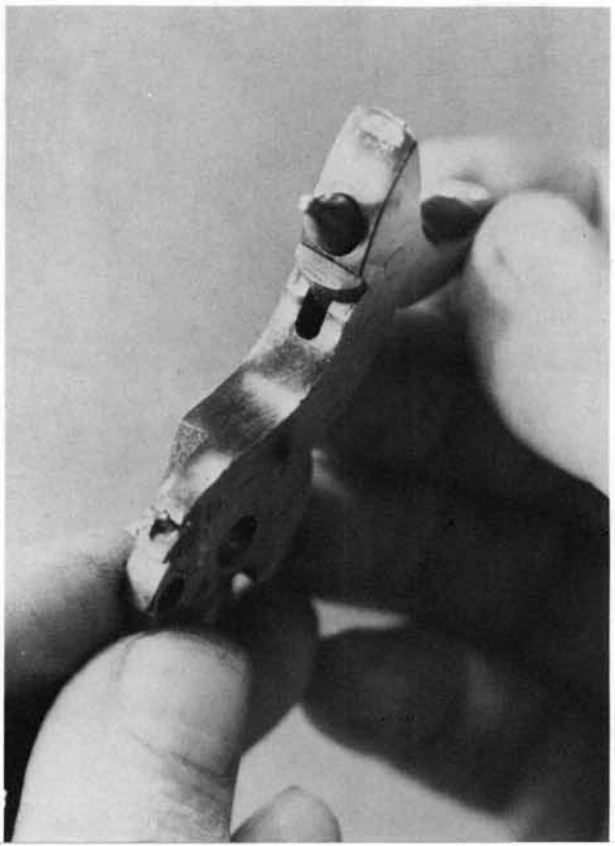
12. Remove the hammer screw and move the hammer and cylinder hand downward out of the frame.



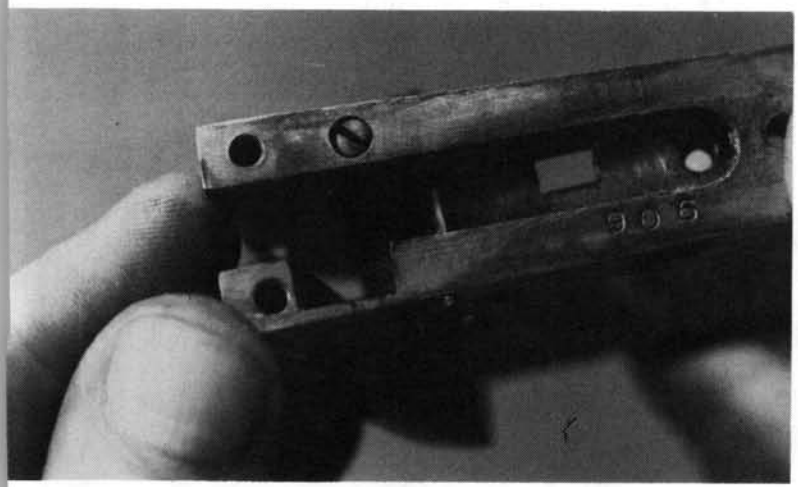
13. Remove the cylinder hand and spring from the left side of the hammer. Drifting out the cross-pin at the lower front of the hammer will allow removal of the hammer block plunger downward.



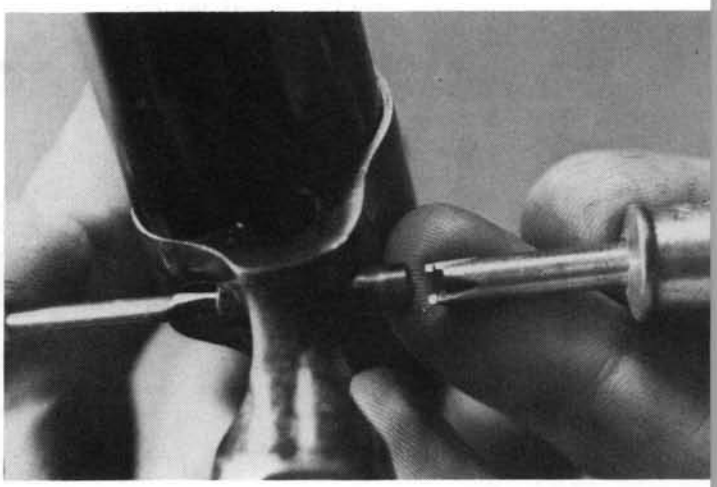
14. Drifting out the smaller cross-pin at the top of the hammer will allow removal of the hammer block toward the front. The larger cross-pin retains the firing pin.

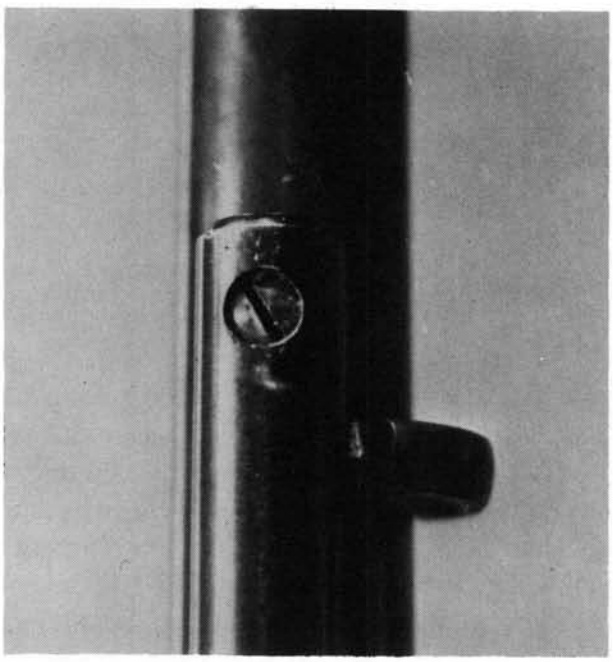


15. Remove the small screw in the underside of the right frame wall, and take out the loading gate spring and plunger. Move the loading gate forward out of the frame.

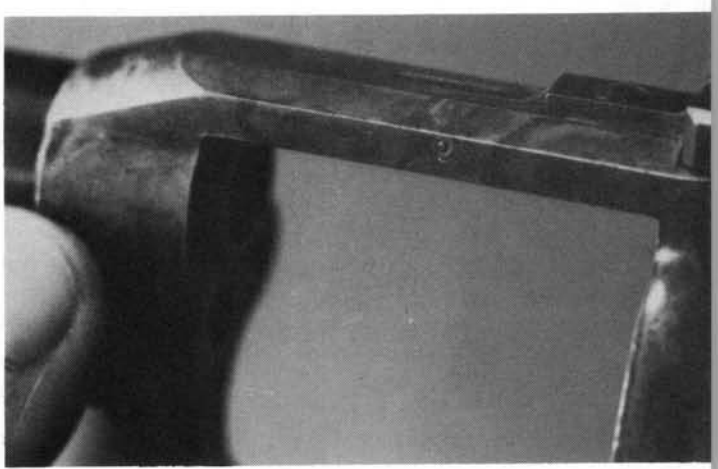


16. Removal of the base pin latch requires a regular screwdriver on the right, and a twin-pointed tool on the left side. The tool shown was made by grinding the tip of an old Phillips screwdriver. The latch piece is removed toward the right, the cap nut and spring toward the left.





17. The ejector housing is retained by a single screw at its forward end. After removal of the screw, tip the housing outward at the front, then remove it forward. The ejector and its spring are easily removed from the housing, toward the rear.



18. The rear sight is retained by a small cross-pin at the top of the frame, and by its elevation screw.

Reassembly Tips:

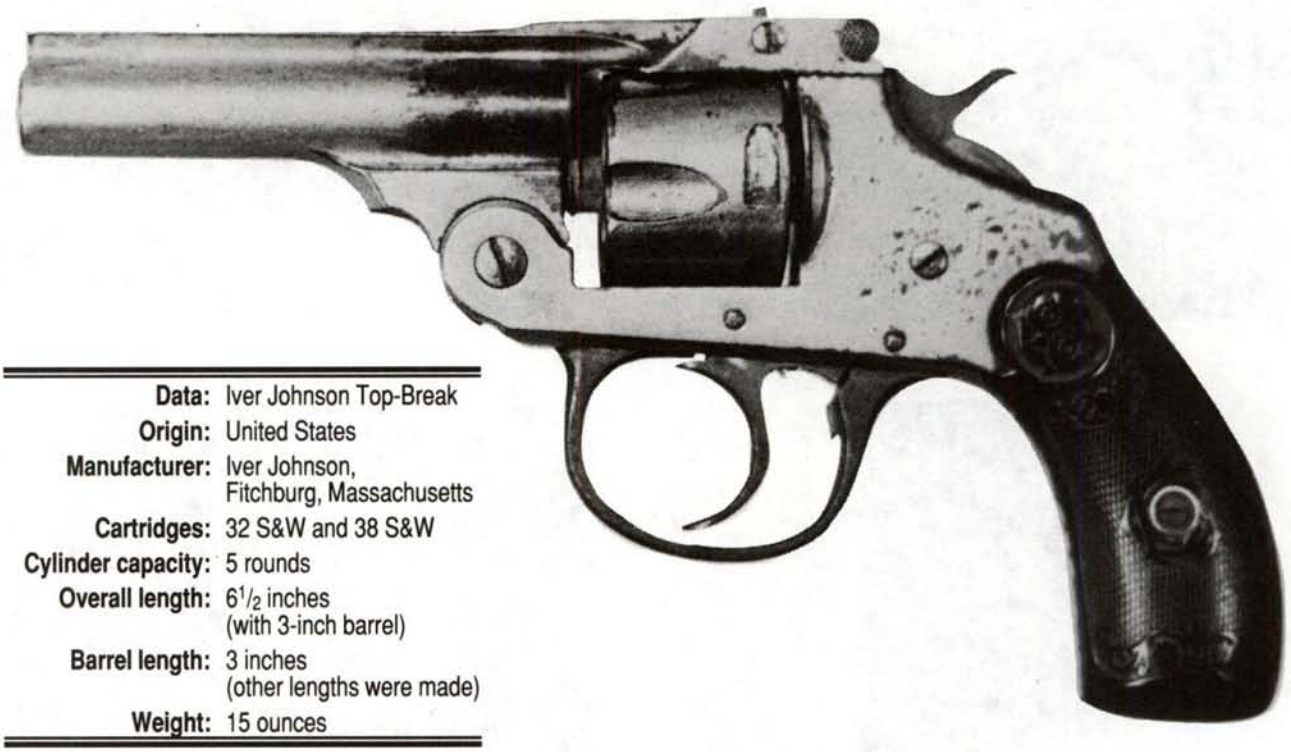
There are no special tricks and no particularly difficult points in the reassembly of the Iver Johnson Cattleman. Just reverse the disassembly process slowly and carefully, and there should be no problems.

Iver Johnson Top-Break

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Iver Johnson Top-Break also apply to the following gun.

Iver Johnson Safety Hammerless

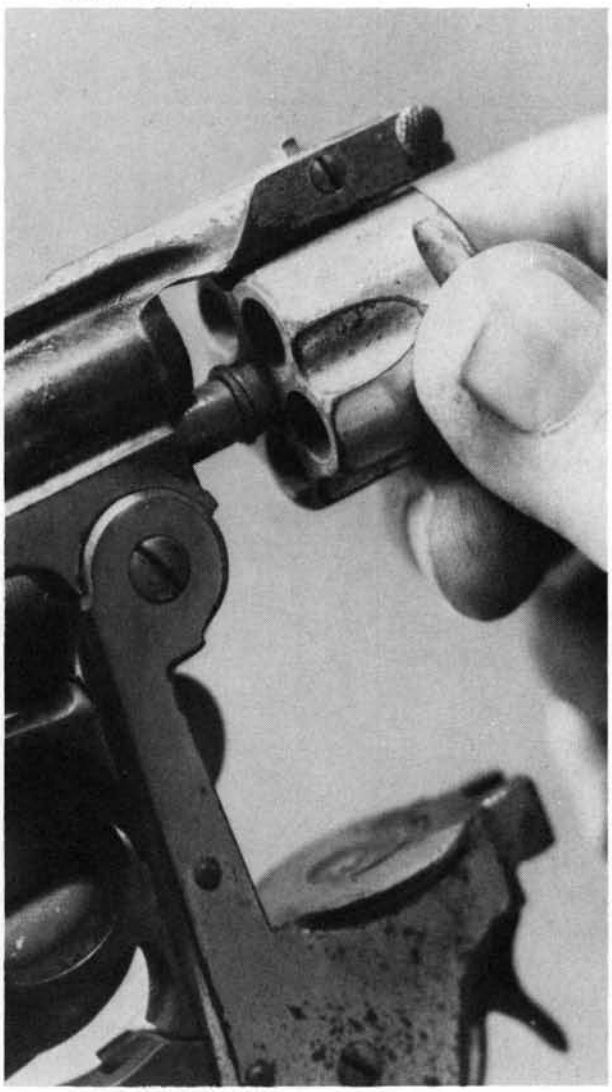


Data:	Iver Johnson Top-Break
Origin:	United States
Manufacturer:	Iver Johnson, Fitchburg, Massachusetts
Cartridges:	32 S&W and 38 S&W
Cylinder capacity:	5 rounds
Overall length:	6 1/2 inches (with 3-inch barrel)
Barrel length:	3 inches (other lengths were made)
Weight:	15 ounces

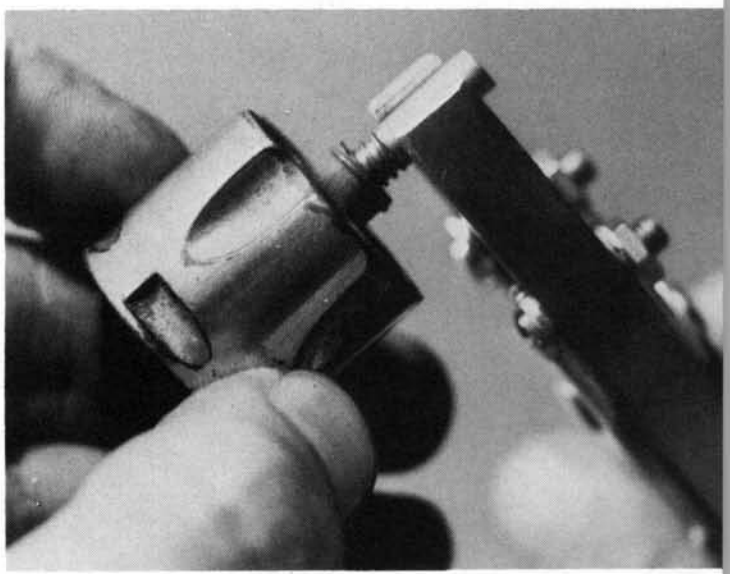
For many years, it has been common practice among gun traders to refer to any old top-break revolver as an "owl head," but this registered trademark belongs only to Iver Johnson, and was embossed at the top of each grip panel. These were the first revolvers to use Andrew Fyrberg's safety lifter mechanism, a device now used in several modern revolvers and called a transfer bar. Simple and reliable, the old Iver Johnson had a long production life, from 1892 to 1950. The "hammerless" (actually, internal hammer) version has a cross-pin-retained frame cap at the upper rear. Otherwise, it has the same basic mechanism.

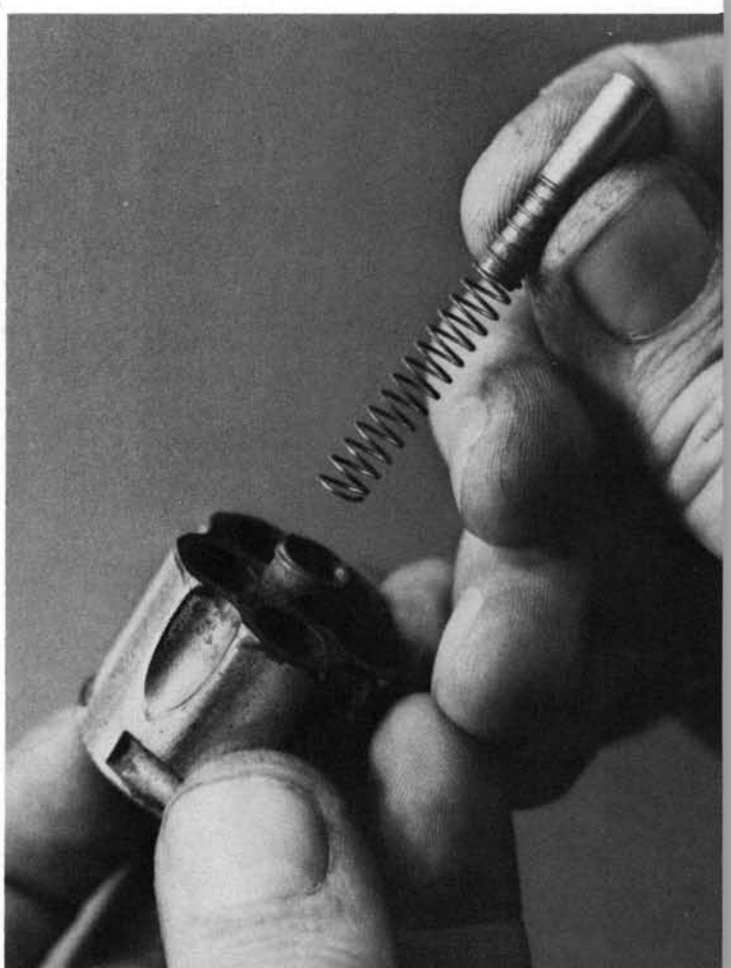
Disassembly:

1. Open the gun and turn the cylinder counterclockwise (rear view) while exerting slight rearward pressure to run the helical track at the front out of its mating surface in the underside of the barrel. On some guns, it may also be necessary to hold the barrel latch in raised position, as some have a retaining lug on the underside.



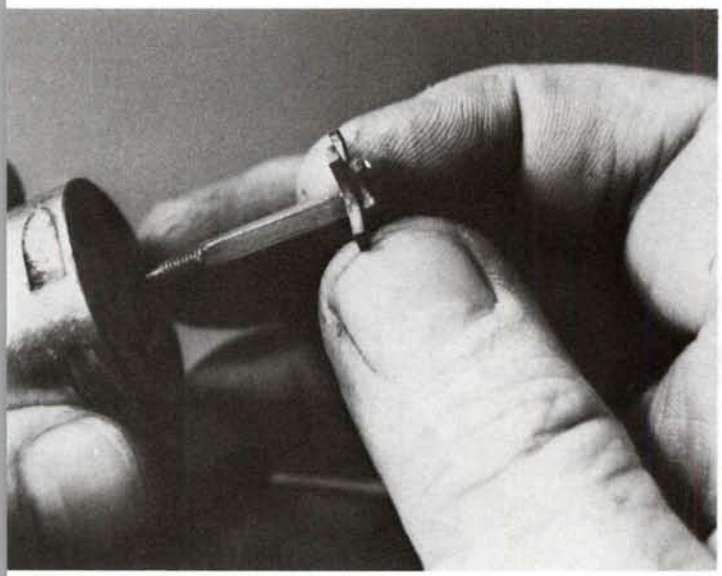
2. Grip the ejector post with soft-jawed smooth pliers and unscrew the post counterclockwise (front view).

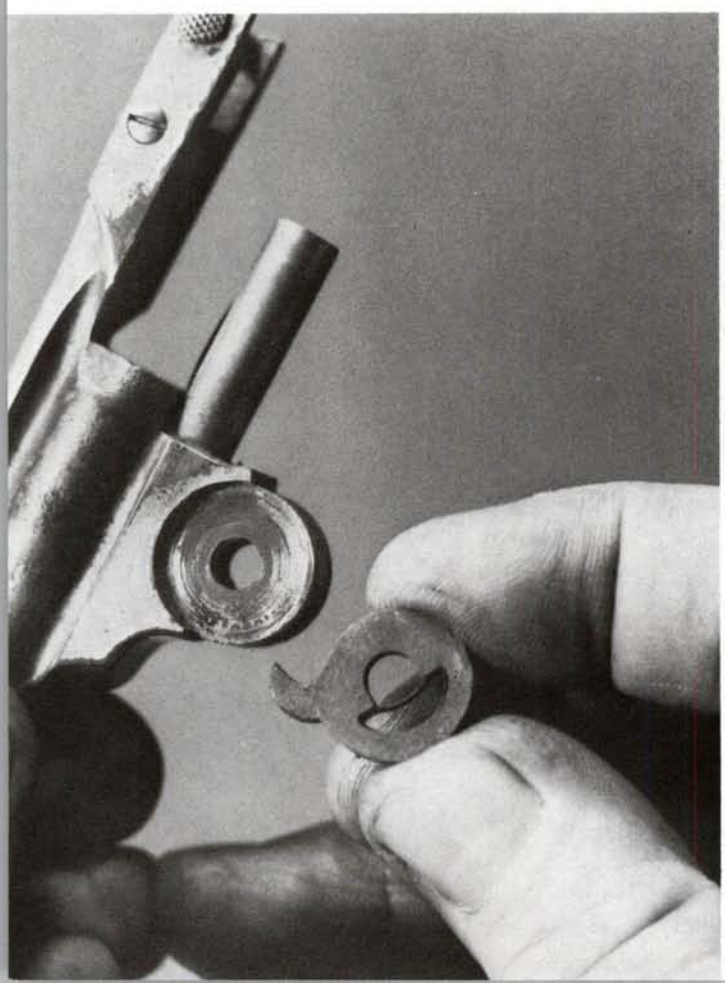




3. Remove the post and ejector spring from the front of the cylinder.

4. Remove the ejector/ratchet from the rear of the cylinder.

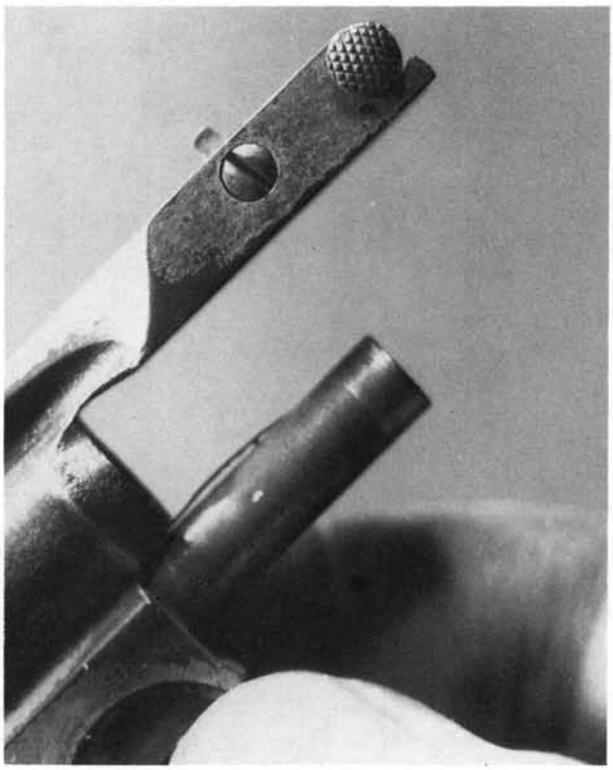


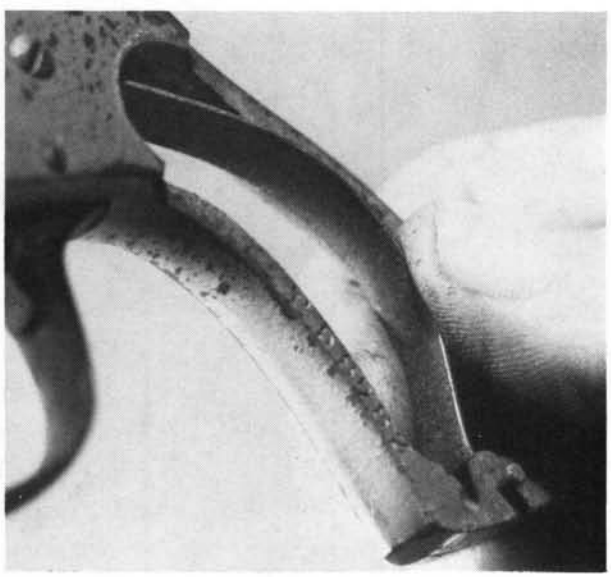


5. Remove the barrel hinge screw from the left side of the frame and remove the barrel assembly.

6. Remove the ejector cam from the bottom of the barrel assembly. The small blade spring inside the cam can be pushed carefully out toward either side.

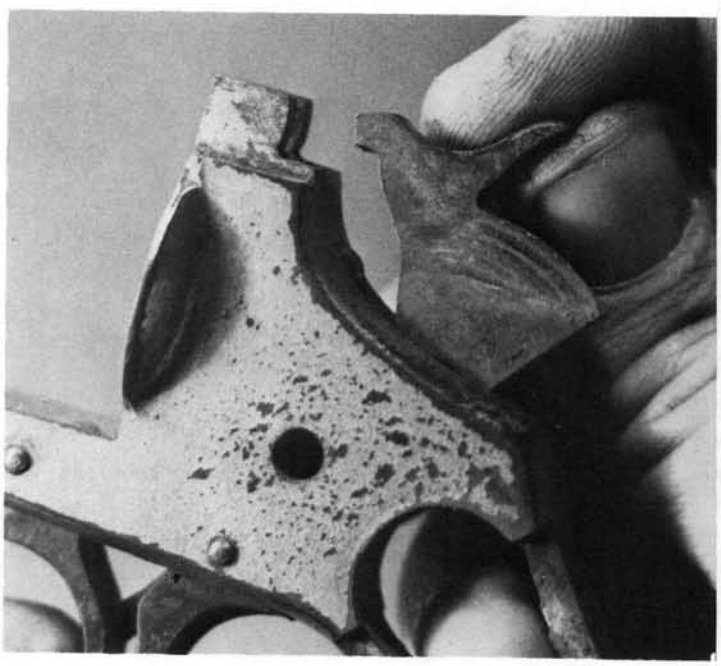
7. Remove the cross-screw in the barrel extension toward the left, and take out the barrel latch, plunger, and spring toward the rear.





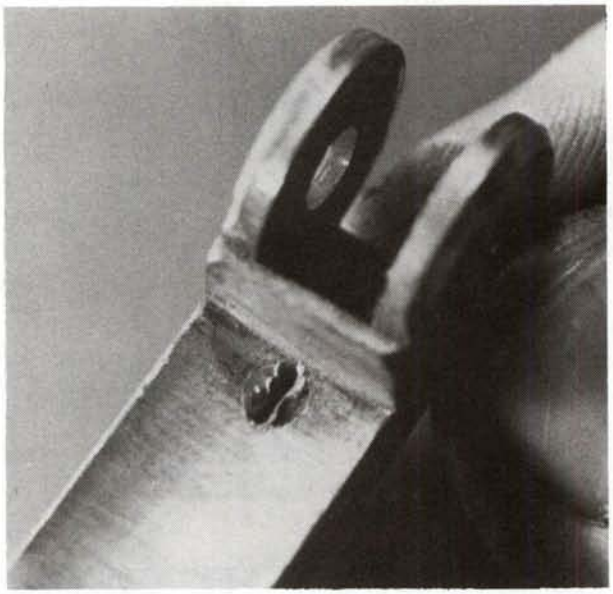
9. Move the hammer spring out of its recess at the lower inside of the grip frame and remove it downward.

8. Grip the cylinder arbor tension spring with a pair of sharp-nosed pliers and pull it straight out toward the rear.

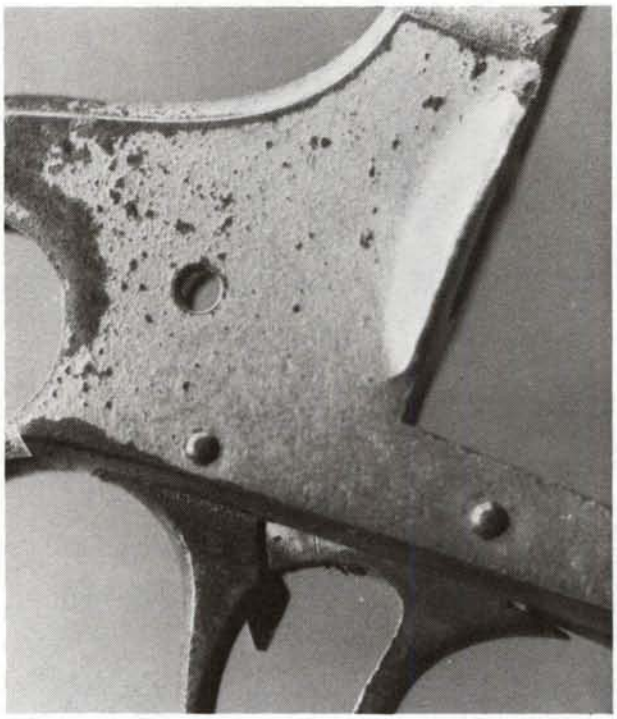


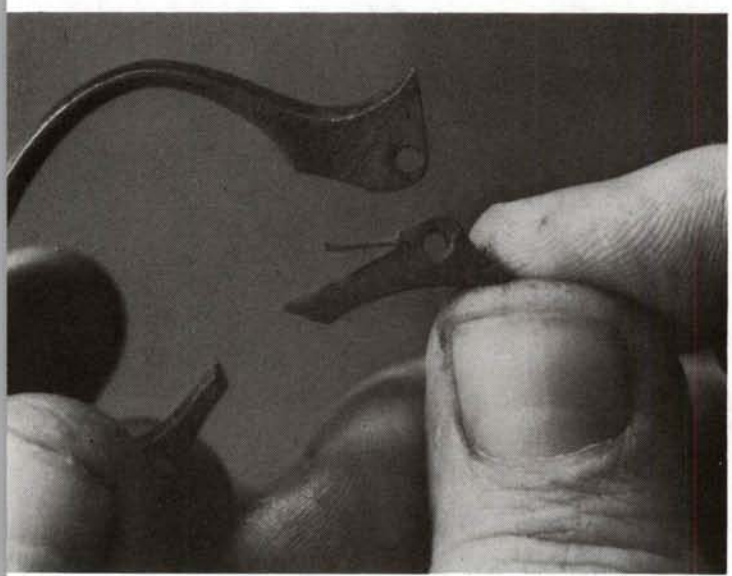
10. Remove the hammer pivot screw, pull the trigger to the rear, and remove the hammer from the top of the frame.

11. Remove the vertical screw at the inside front of the frame. This one has been burred by using the wrong size screwdriver blade. Use of proper tools is a must!



12. Drift out the cross-pin at the rear of the trigger guard and remove the trigger guard downward.



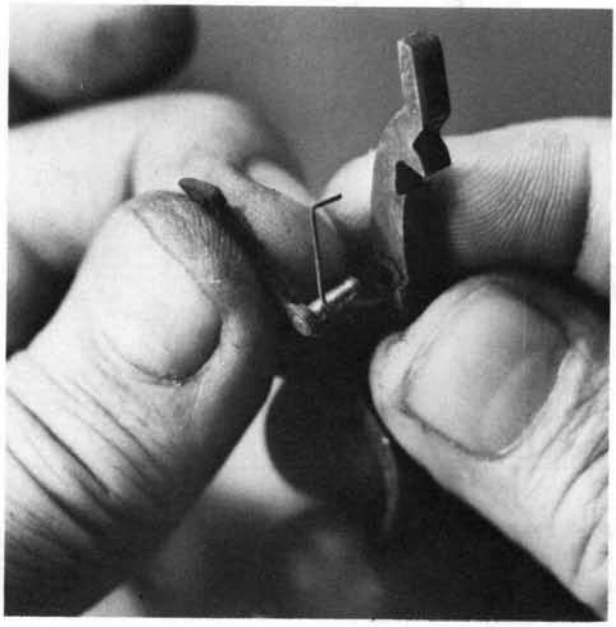


13. Remove the sear and its spring from the rear of the trigger guard.

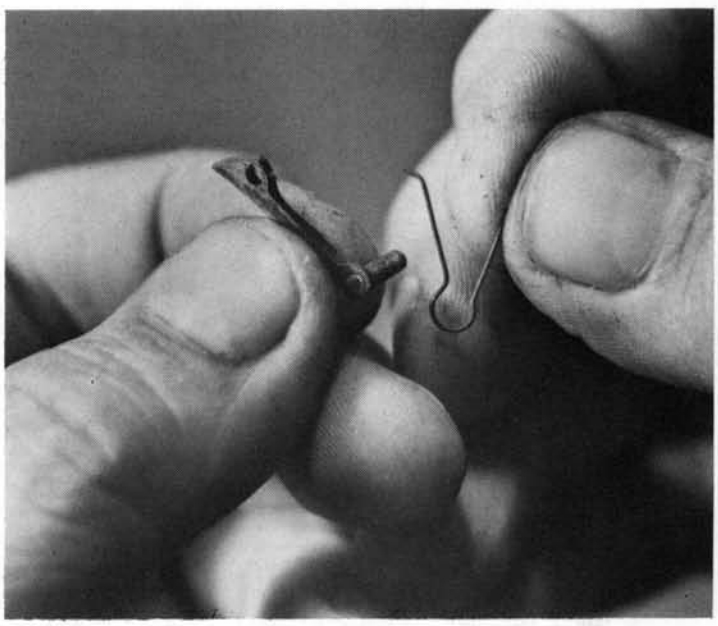
14. Remove the trigger spring from the front of the guard recess in the frame.

15. Drift out the trigger pivot pin and remove the trigger assembly downward.

16. Remove the cylinder hand and its spring toward the left.

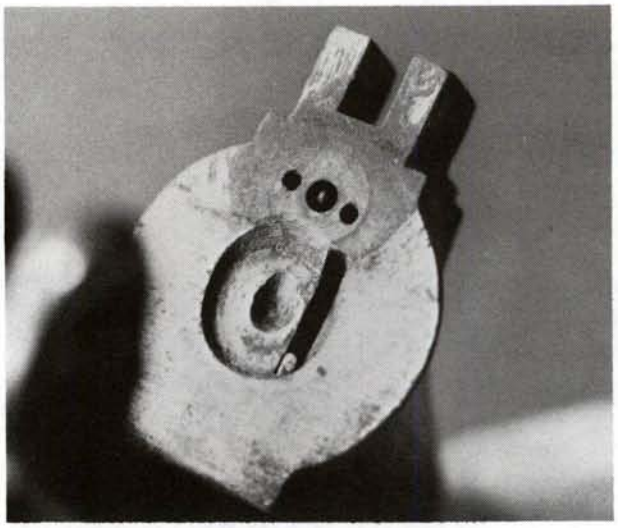


17. Remove the safety lifter upward.



18. Remove the spring from the cylinder hand.

19. Removal of the firing pin retainer requires a twin-pointed tool as described in the tool section. The retainer is unscrewed counterclockwise (front view), and is removed toward the front, along with the firing pin and its spring.



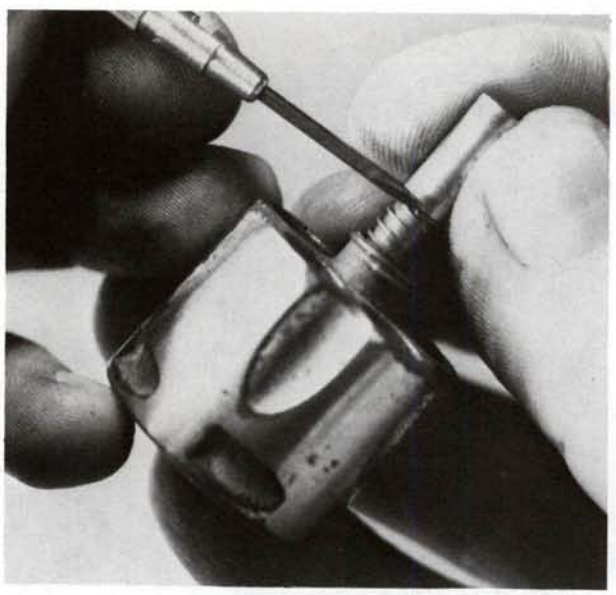
Reassembly Tips:

1. When replacing the ejector/ratchet in the cylinder, note that one arm of the ejector has a concave tip, which mates with a convex surface on the cylinder.

When replacing the guard in the frame, use a slave pin to hold the sear in place until insertion of the cross-pin.

When replacing the front portion of the guard, be sure the rear tip of the trigger spring is engaged with the front lip of the trigger before inserting the screw.

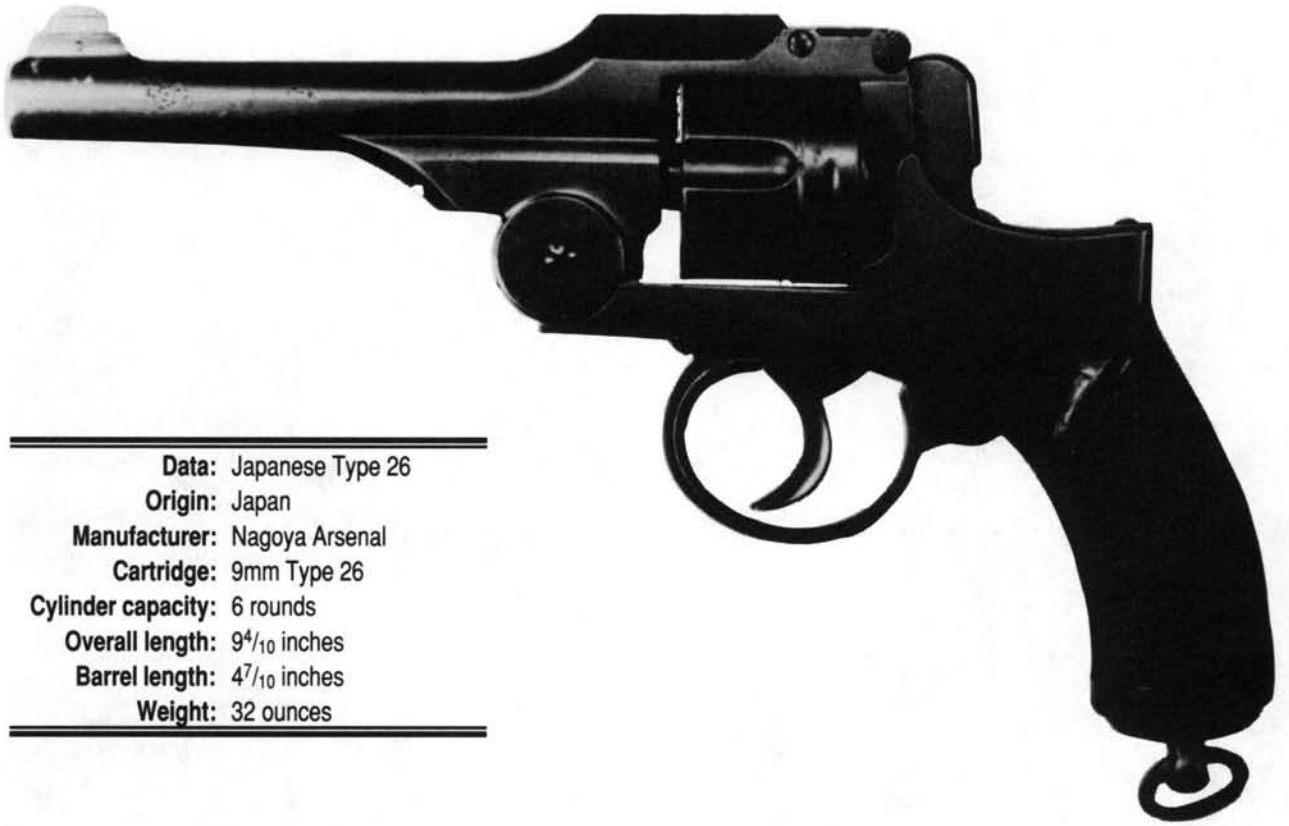
2. When turning the post back onto the ejector shaft, use a small screwdriver to arrest the tip of the ejector spring, to avoid binding the spring and causing it to deform.



When replacing the cylinder hand and lifter spring, note that the forward tip of the spring must enter a small hole in the upper back of the hand.

When replacing the hammer spring, be sure its upper end is engaged with the recess in the back of the hammer, then flex the spring until its lower end can be slipped into its notch.

Japanese Type 26



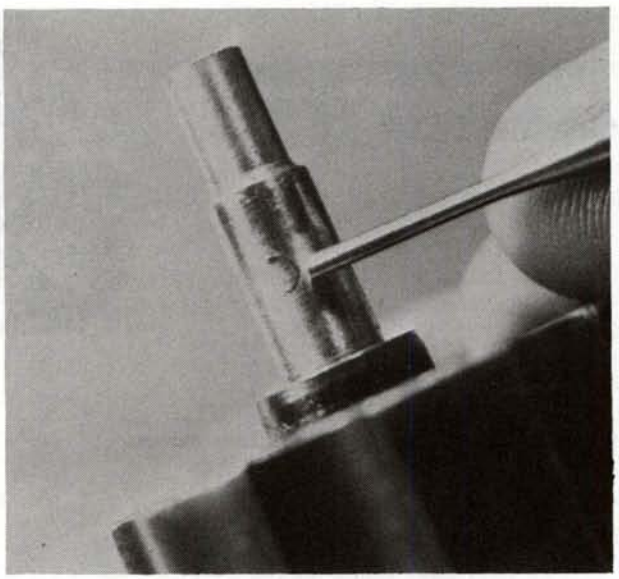
Data:	Japanese Type 26
Origin:	Japan
Manufacturer:	Nagoya Arsenal
Cartridge:	9mm Type 26
Cylinder capacity:	6 rounds
Overall length:	$9^{4}/_{10}$ inches
Barrel length:	$4^{7}/_{10}$ inches
Weight:	32 ounces

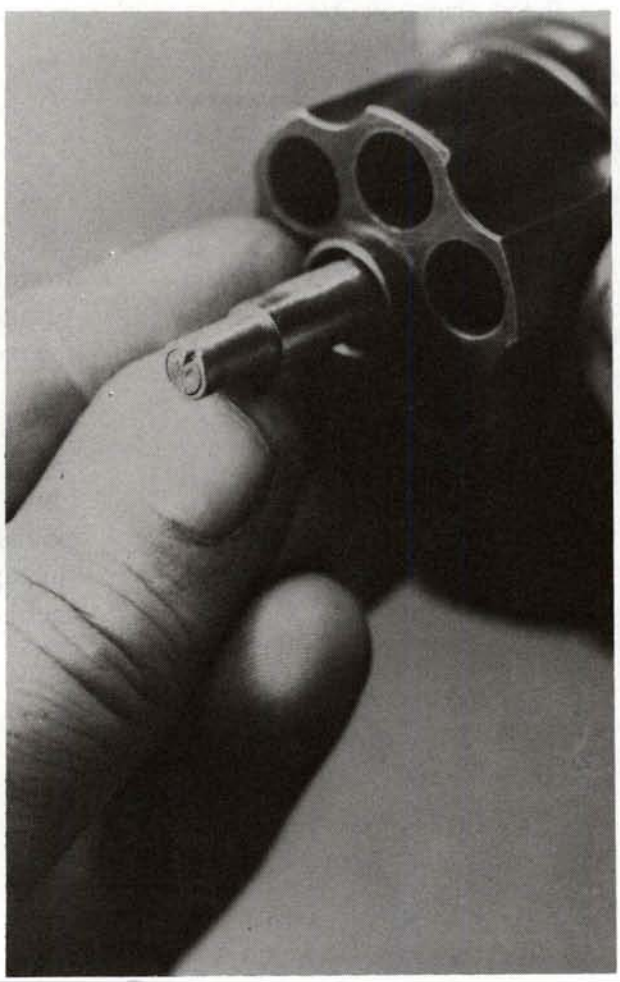
This revolver was the standard Japanese military sidearm from 1893 to 1914, and it has several unusual features. The firing system is double action only, with no provision in the mechanism for thumb-cocking the hammer. The lockwork is similar to several European revolvers of its time, and is closest to the Austrian Rast & Gasser design, including a hinged sideplate which swings open to expose the entire internal mechanism. There are several unique design points, though, most notable of which is the projection at the top which firmly locks the barrel latch when the hammer is down in the firing position.

Disassembly:

1. With the barrel tipped forward, hold the barrel latch in raised position and turn the cylinder counterclockwise (viewed from the rear) while exerting slight rearward pressure on the cylinder. When the cylinder is free, remove it toward the rear.

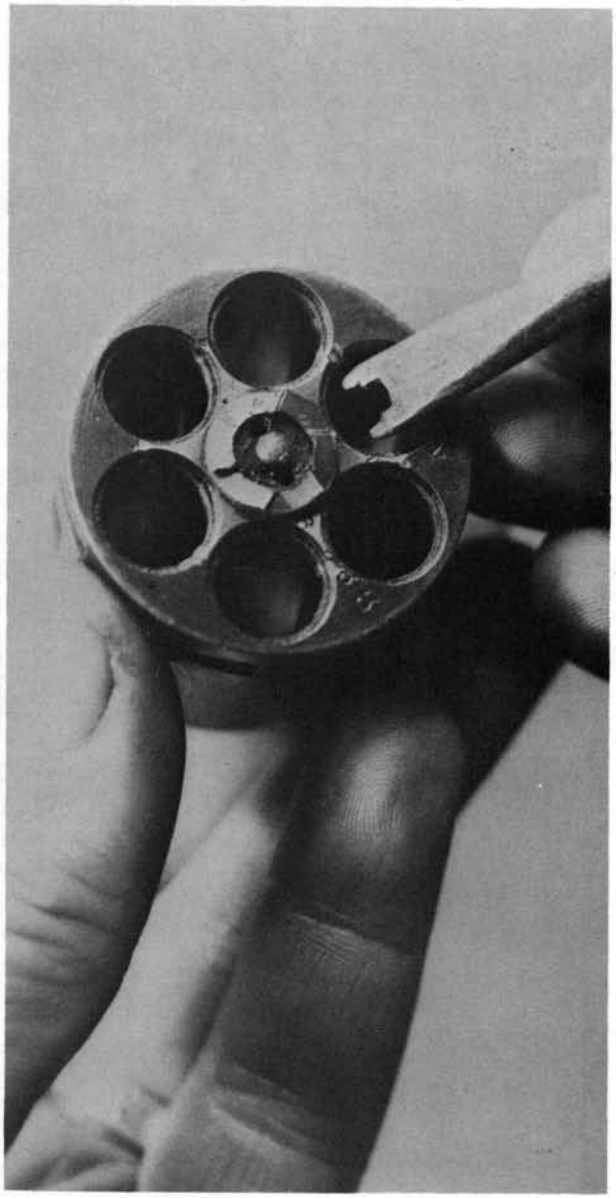
2. The ejector rod head is cross-pinned to the shaft of the ejector, and the pin is often difficult to locate on the polished surface. The tip of the drift punch is pointing to the pin here. The pin must be drifted out before the ejector head can be unscrewed.



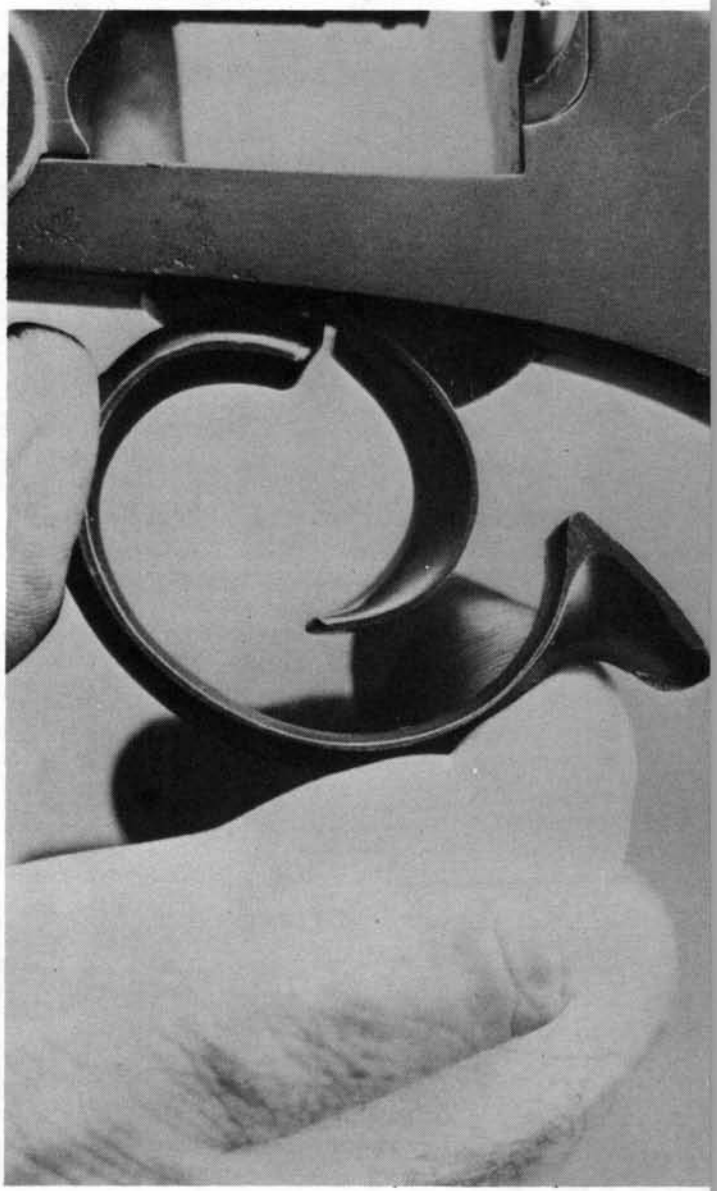


3. In addition to the cross-pin, the end of the head and ejector shaft are often staked in place, making removal difficult. Removal of the sleeve-like head-piece will allow the ejector spring to be taken out toward the front of the cylinder, and the ejector/ratchet toward the rear. Considering the fit of these parts, they should be left in place during routine disassembly.

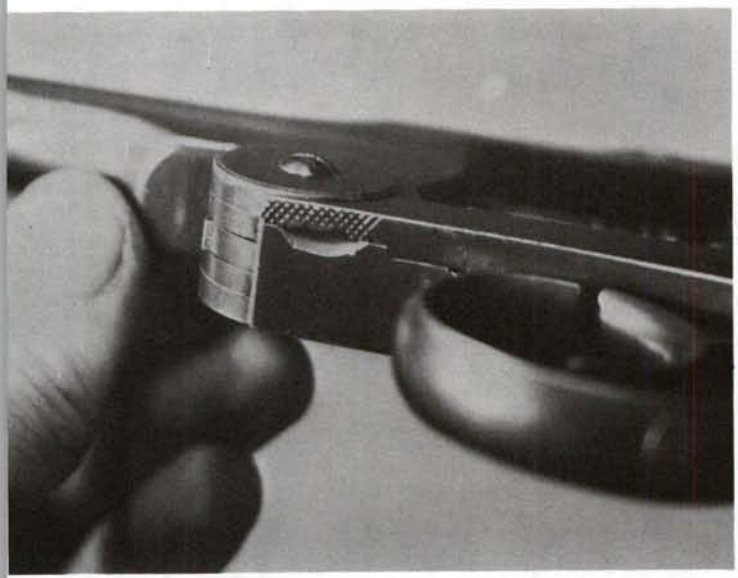
4. The center guide stud in the rear face of the ejector/ratchet can be unscrewed by using a shop-made twin-pointed tool, such as the one shown. Again, unless necessary for repair or refinishing, it should be left in place during normal disassembly.

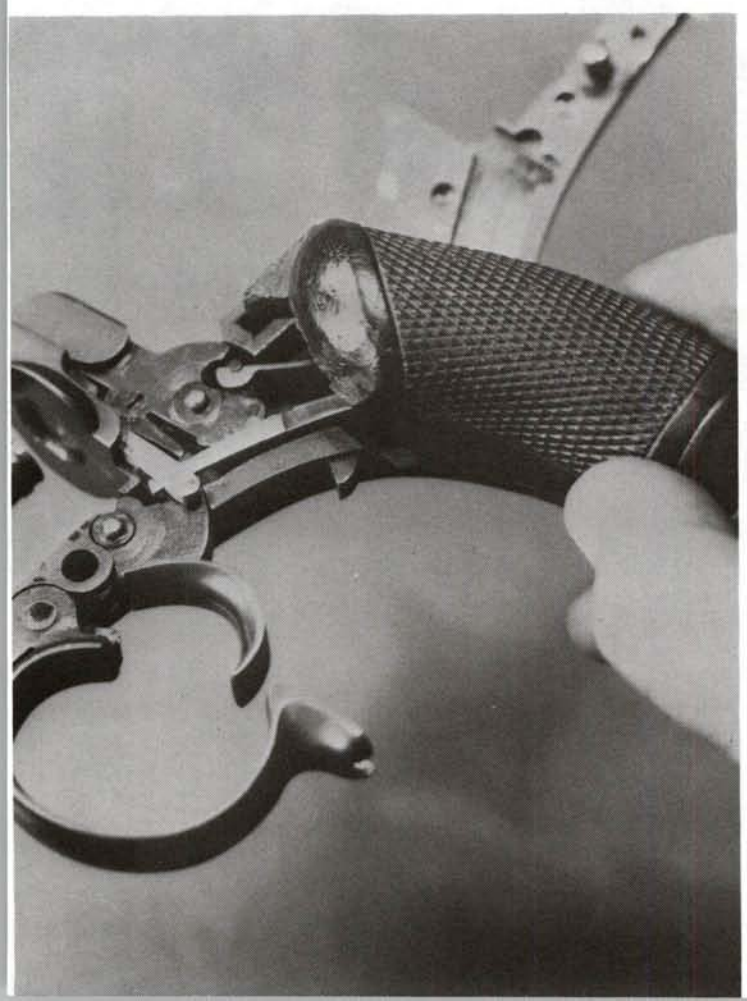


5. Squeeze the rear of the trigger guard toward the trigger while pulling it downward, and pivot the guard down and forward.



6. The sideplate has a serrated area at its forward tip, with a fingernail depression beside it.

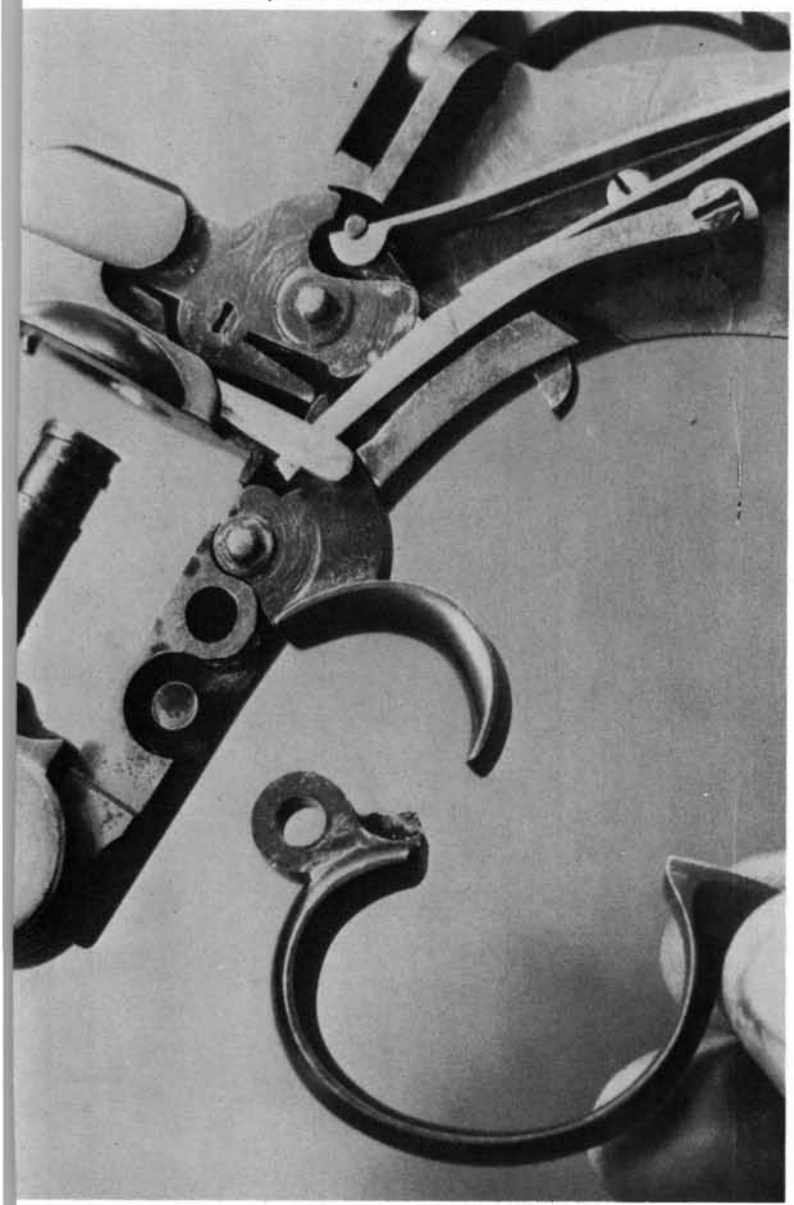




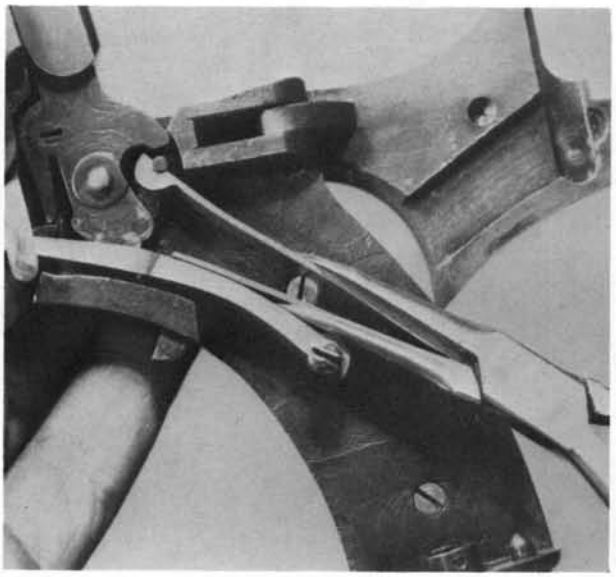
7. Swing the sideplate outward and turn it all the way around toward the rear.

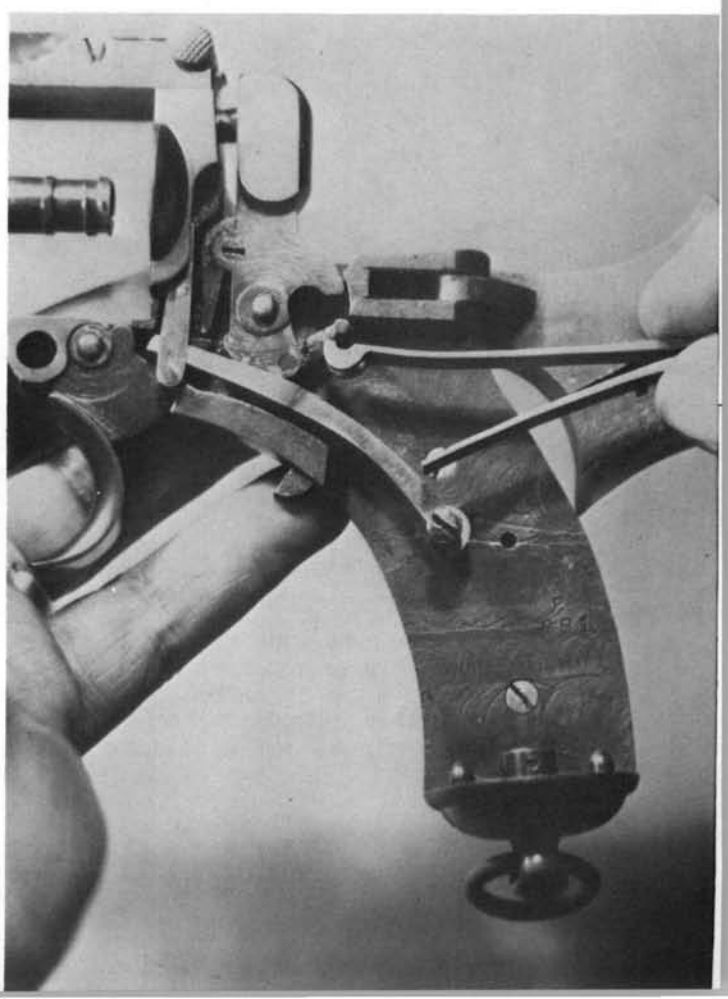
8. Lift the left grip piece at its top, out toward the left, then move it up off the lower studs and remove it from the frame.

9. With the sideplate opened, the guard can be lifted off its post toward the left and removed.



10. If you have strong fingers, lift the lower end of the mainspring to free its stud from the frame, and ease it out. Otherwise, use a pair of smooth-jawed pliers to slightly compress the spring and lift it out.

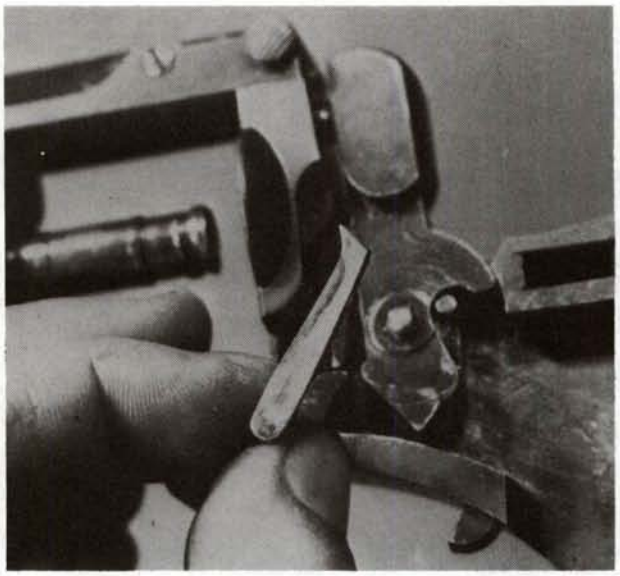


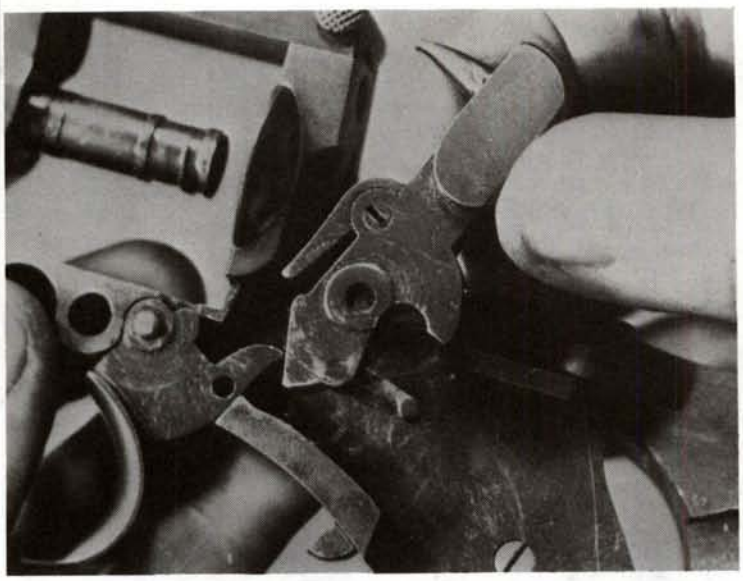


11. Disengage the spring hooks from the hammer stirrup, and remove the spring toward the left.

12. Move the lower end of the rebound lever up and toward the rear to clear its screw/stud on the frame, and remove the lever toward the rear.

13. Remove the cylinder hand toward the left.

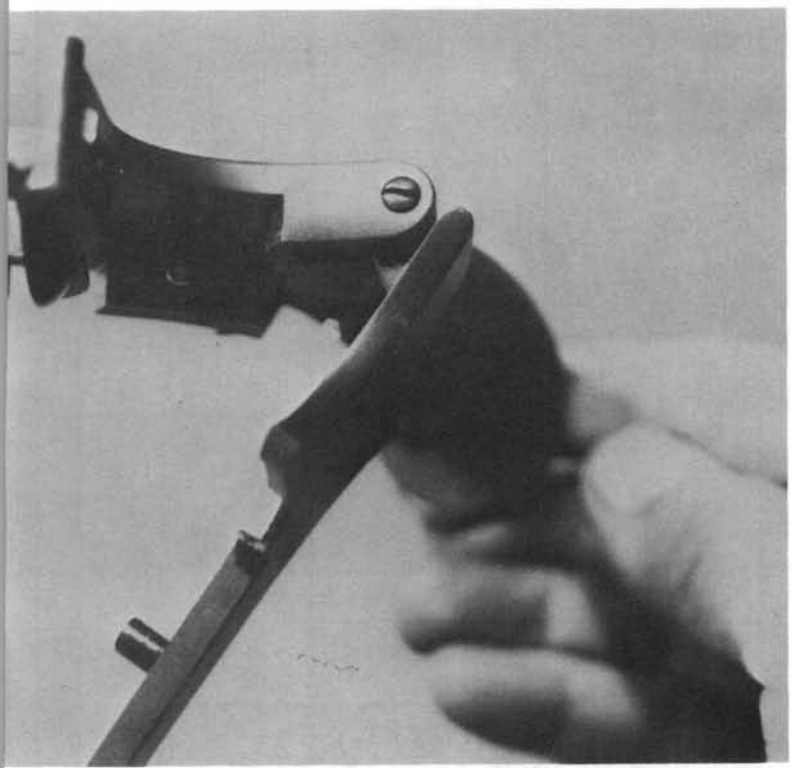




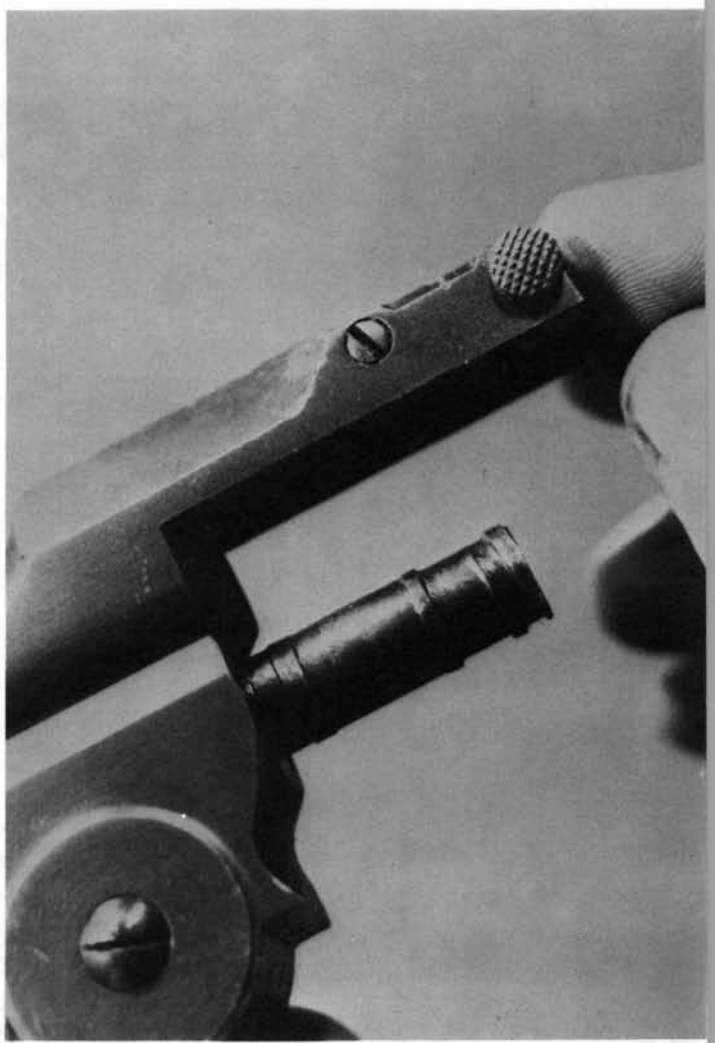
14. Tip the hammer back to clear the firing pin from the frame, and remove the hammer toward the left. Removal of the cross-screw at the front of the hammer will free the double-action lever and its spring for removal toward the front. Drifting out the cross-pin at lower rear will free the stirrup for removal.

15. Remove the trigger toward the left.

16. Backing out the vertical screw at the upper rear of the frame will allow removal of the sideplate.

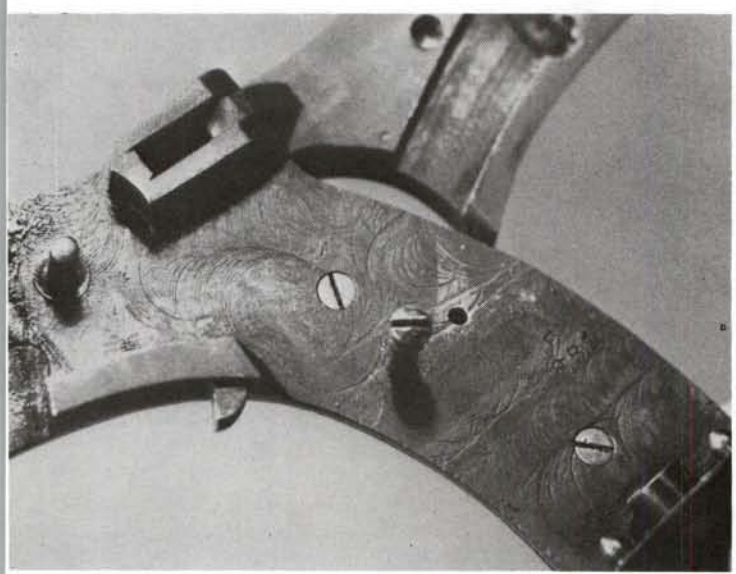


17. Taking out the cross-screw at the top of the barrel extension will free the barrel latch for removal. The barrel latch plunger and its spring can then be removed toward the rear.



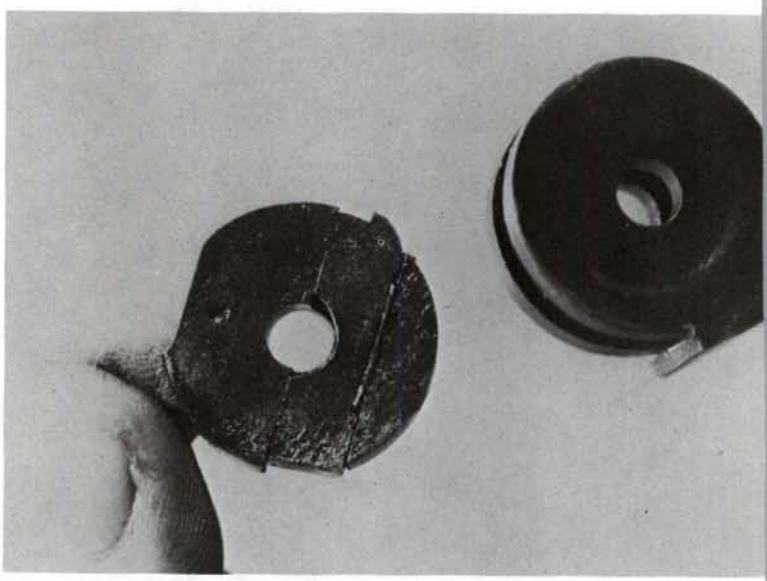
18. The barrel hinge is retained by a large screw on the left side. After removal of the screw, use a drift punch of small diameter to push the hinge pin out toward the right side.

19. Remove the hinge pin from the right side. Note the small stud on the side of the pin, which must be oriented to enter a keyway when the pin is replaced. Then remove the barrel assembly from the frame.



21. Backing out the two screws on the inside of the grip frame will allow removal of the right grip piece. The rebound lever screw/stud can also be removed. A tiny cross-screw holds a cap sleeve which retains the lanyard ring shaft, but the sleeve is staked in place and this assembly should not be disturbed unless absolutely necessary.

20. Remove the ejector cam from the frame. The ejector cam trip can now be slid out of its recess in the cam, along with its small blade spring. Take care that the spring isn't lost, and note that its concave side goes toward the cam trip.



Reassembly Tips:

When replacing the rebound lever stud/screw, do not turn it in so tightly that the head of the screw binds the rebound lever. Be sure the forward end of the lever is properly engaged in the shelf on the inside of the cylinder hand.

When replacing the barrel latch plunger, be sure its rear slant matches the front of the barrel latch.

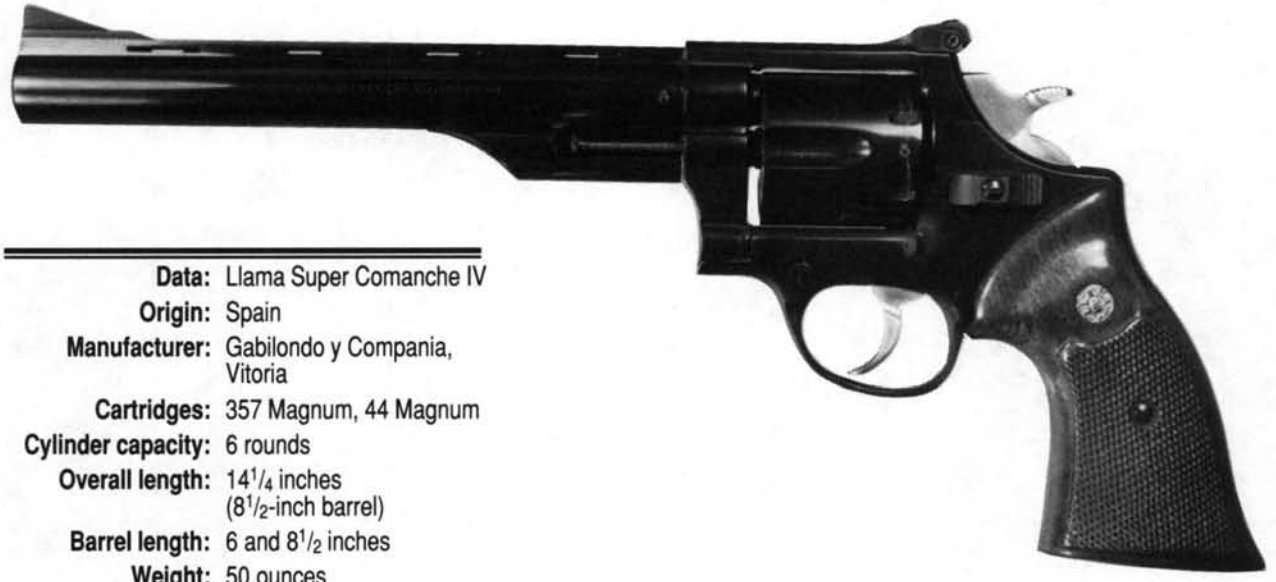
The mainspring can usually be replaced without tools, by hooking its upper arm into the stirrup, then turning the spring downward until its stud can be inserted into the hole in the grip frame.

Be sure the left grip piece is firmly in place before closing the sideplate or the grip will be marred.

Llama Super Comanche IV

Similar/Identical Pattern Guns
The same basic assembly/disassembly steps for the Llama Super Comanche IV also apply to the following gun.

Llama Comanche III

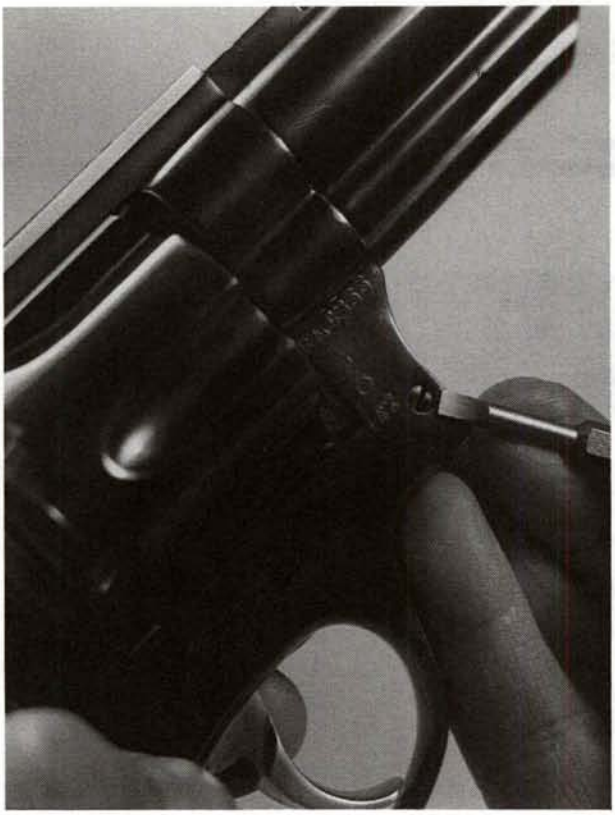


Data:	Llama Super Comanche IV
Origin:	Spain
Manufacturer:	Gabilondo y Compania, Vitoria
Cartridges:	357 Magnum, 44 Magnum
Cylinder capacity:	6 rounds
Overall length:	14 1/4 inches (8 1/2-inch barrel)
Barrel length:	6 and 8 1/2 inches
Weight:	50 ounces (8 1/2-inch barrel)

The Llama 357 Magnum and 44 Magnum revolvers were introduced by Gabilondo y Compania in 1977 and 1979, respectively. Stoeger Industries is the U.S. importer. Two unique features are a forward crane lock and a hammer that moves downward as it pivots to strike the firing pin. The 44 Magnum Super Comanche is the gun shown here.

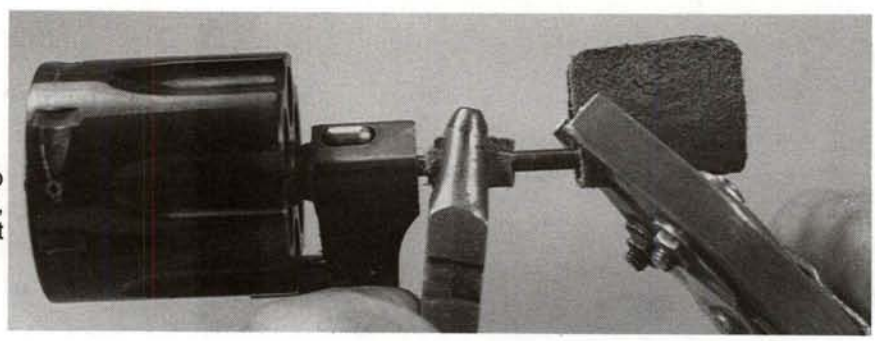
Disassembly:

1. Remove the small screw on the right side near the front of the frame.

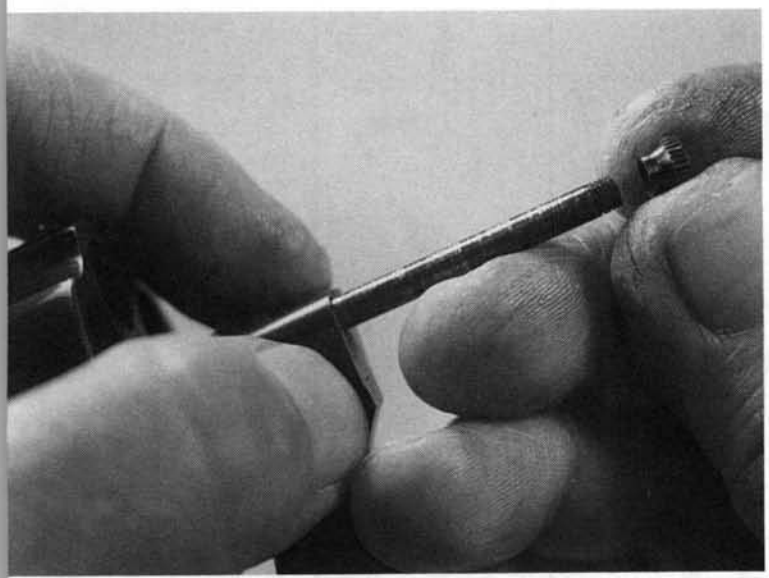


2. Operate the cylinder latch, move the crane and cylinder assembly forward out of the frame, and take it off toward the left.

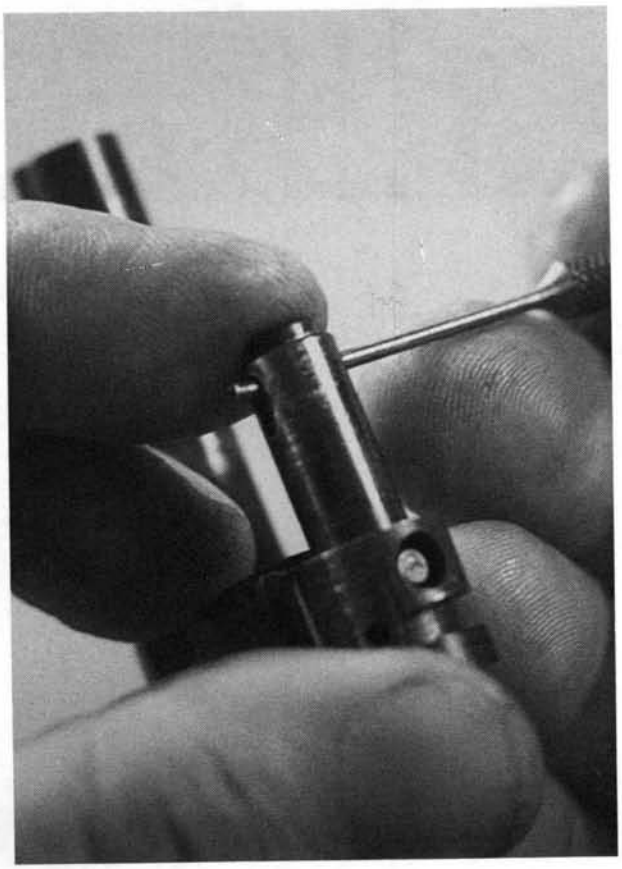
3. With leather-padded pliers, grip the ejector rod and the rod knob, and loosen the knob by turning it counterclockwise (front view).



4. Unscrew the ejector rod knob, and remove it.

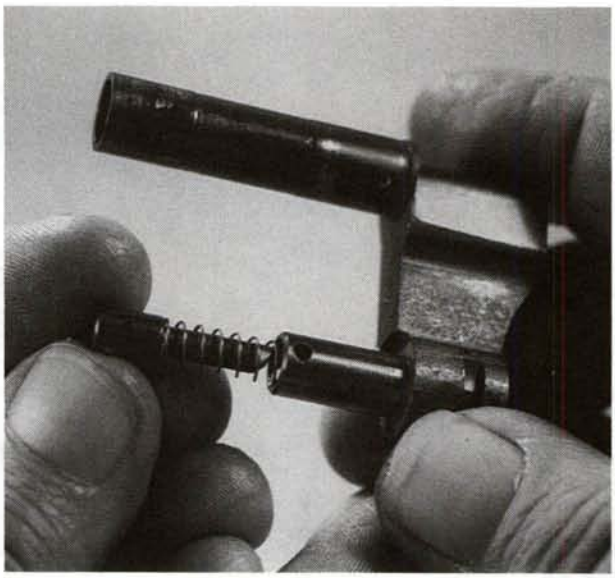


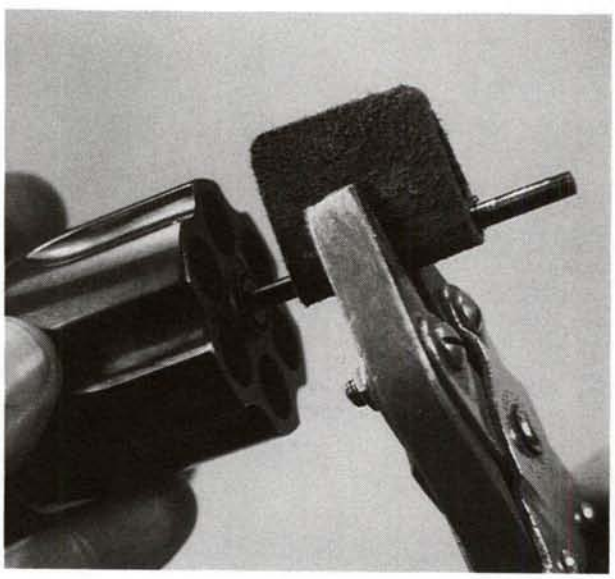
5. Remove the crane toward the front.



6. Depress the plunger at the rear tip of the crane, and use a small roll pin punch to drift out the cross-pin, as shown.

7. Remove the crane latch plunger toward the rear, along with its spring.

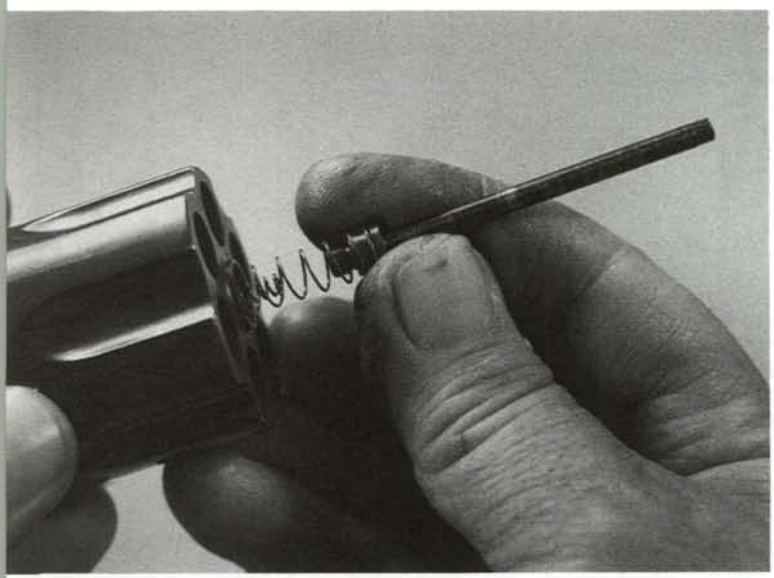




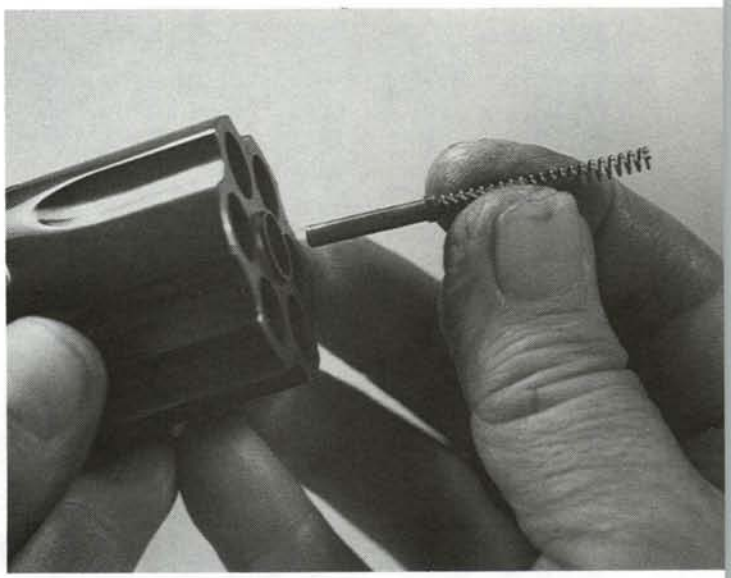
8. Remove the front crane latch and its spring upward.

9. Use leather-padded pliers to unscrew the ejector rod from the ejector/ratchet unit, counterclockwise (front view).

10. Remove the ejector rod and the ejector spring toward the front.



11. Remove the cylinder latch plunger and spring toward the front.



12. Remove the ejector/ratchet unit toward the rear.

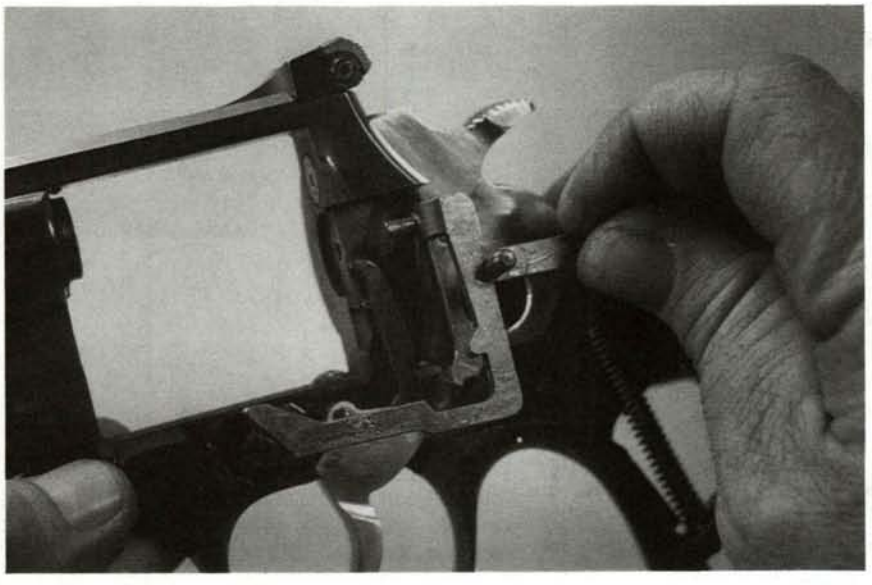
13. Remove the grip screw and take off the grips. The grip stabilizer pin may come out with one of the grip panels. Take care that it isn't lost.

14. Remove the rear sideplate screw. It may be necessary to grip the smooth nut on the opposite side as the screw is removed. Take off the nut toward the right.

15. Using a screwdriver with a wider blade, remove the front sideplate screw on the left side.

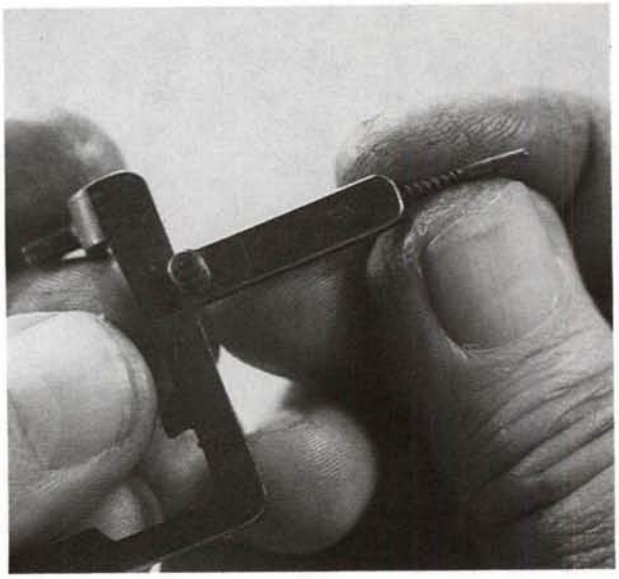
16. Remove the screw at the center of the cylinder latch button, and take off the button toward the left.

17. Use a tool to gently pry the lower edge of the sideplate outward, at the rear and beside the trigger. Move the sideplate slightly forward and downward, and take it off toward the left.

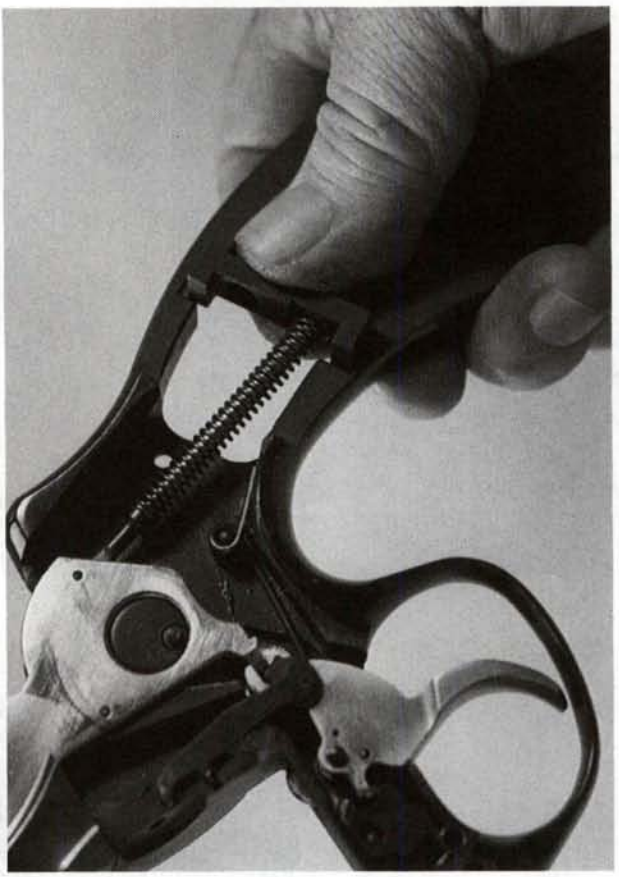


18. Remove the cylinder latch by moving it rearward to clear its center nose from the frame, then take it off toward the left.

19. Remove the small plunger and spring from the rear of the cylinder latch.



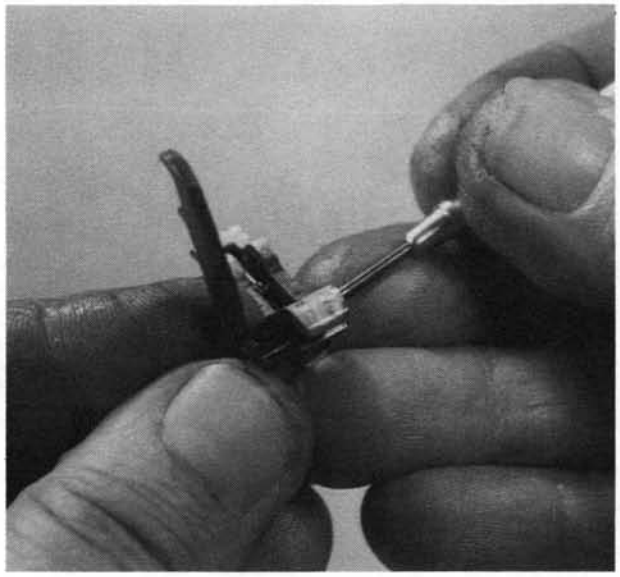
20. Move the hammer spring base out of the grip frame toward the left. The spring is a captive unit.

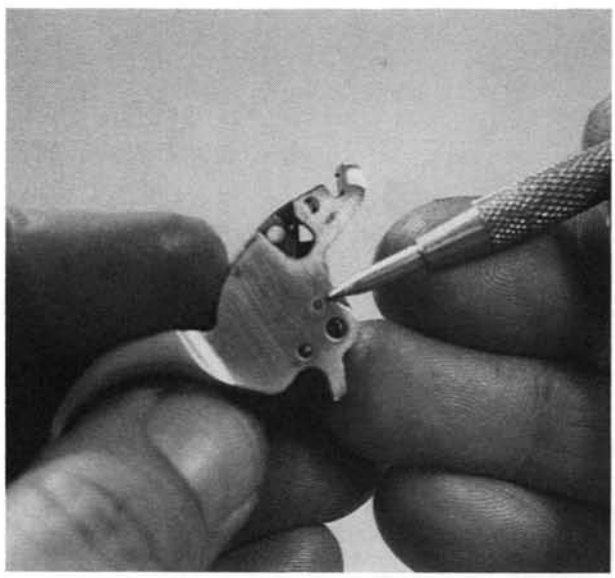


21. Remove the hammer spring assembly downward. This unit can be disassembled by drifting out the small roll pin at its lower end, but in normal takedown it is best left intact.

22. Insert a tool to lift the front arm of the trigger spring slightly upward, and remove the trigger assembly toward the left.

23. Insert a small tool to lift the rear arm of the cylinder hand spring, and remove the cylinder hand from the trigger.

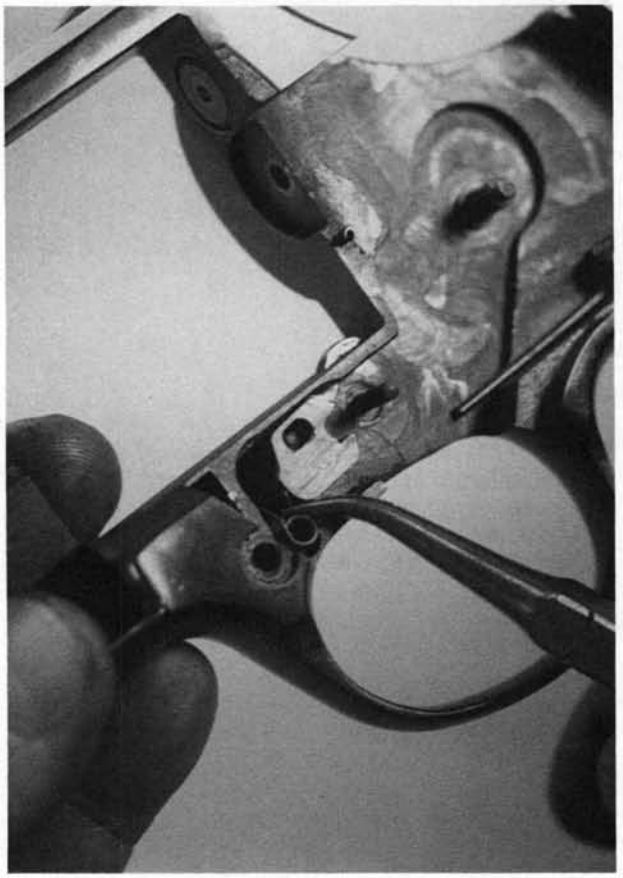




24. If necessary for repair, the cylinder hand spring can be removed by drifting out this cross-pin. If this is done, remember that the torsion spring is under tension. The larger cross-pin is a spring bearing point, and it retains no part.

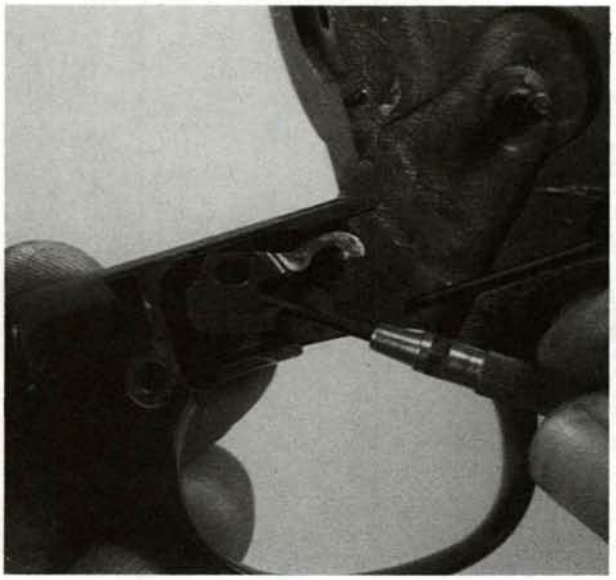
25. Tip the hammer back out of its frame recess, and remove it toward the left. Drifting out the cross-pin at the front of the hammer will release the double-action lever and its spring for removal. The cross-pin at lower rear retains no part.

26. Remove the hammer pivot cam toward the left.

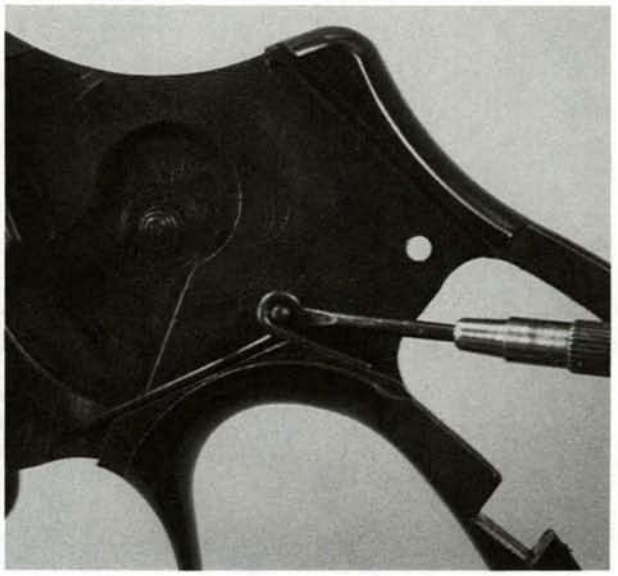


27. Use slim pliers to grip the cylinder stop spring as shown, and remove it toward the left.

28. Move the cylinder stop to its rearmost and lowest position, and take it out toward the left.

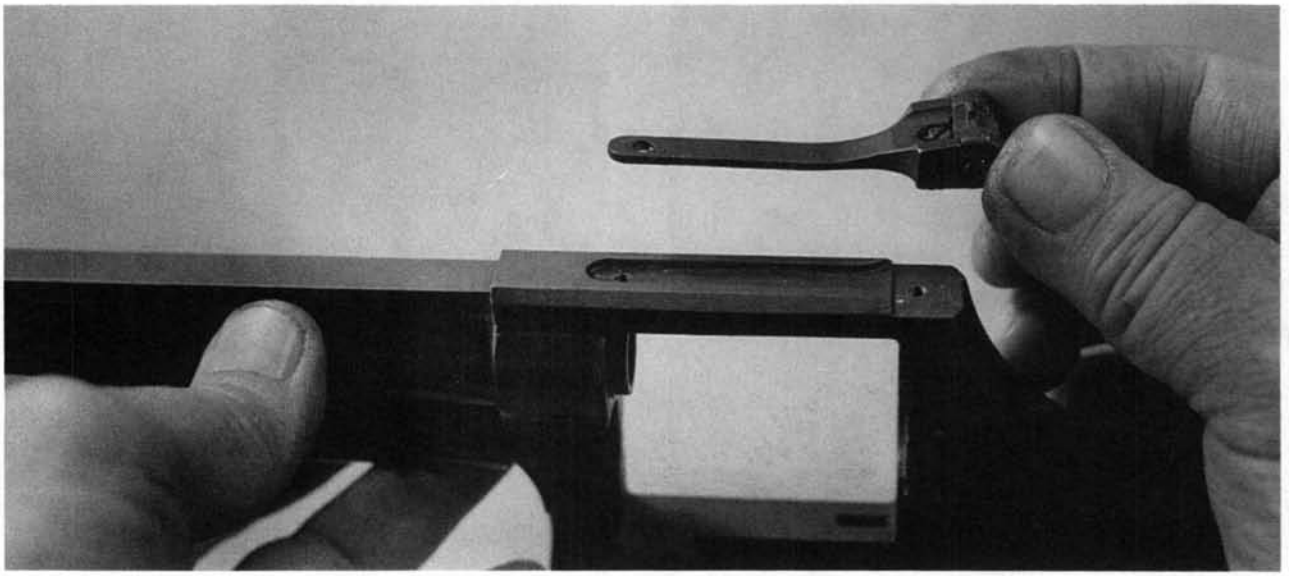


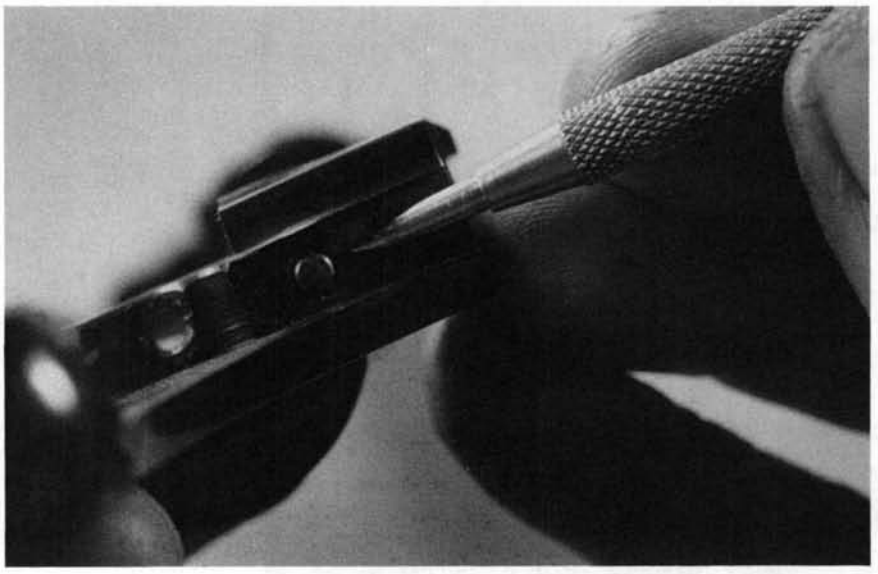
29. If it is necessary to remove the trigger spring, hold a heavy shop cloth over the area and use a tool to pry it gently off its mounting post in the frame. When it is nearly clear, grip its rear arm with pliers and control it, to avoid marring the frame edge.



30. Remove the small screw in the forward extension of the rear sight.

31. Keep upward pressure on the sight to avoid release of the detent ball, and unscrew the sight elevation screw until the sight can be lifted off. Keep the screw down in the sight, to retain the detent ball.

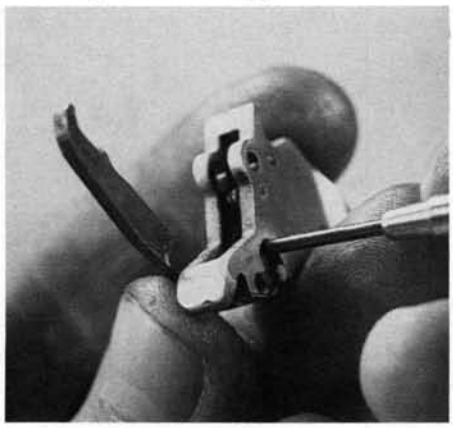




32. The firing pin and its spring are factory installed by crimping the recoil plate in place on the breech face, and there is no practical method for routine removal.

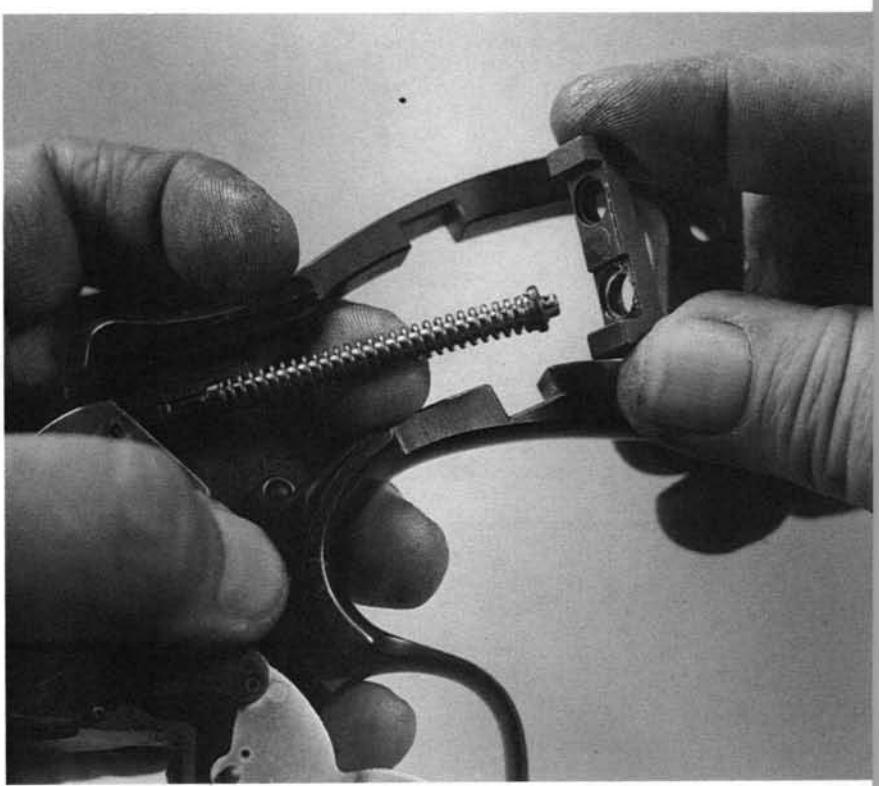
Reassembly Tips:

1. When replacing the cylinder hand on the trigger, insert a small tool to lift the rear arm of the hand spring for entry of the bearing pin.



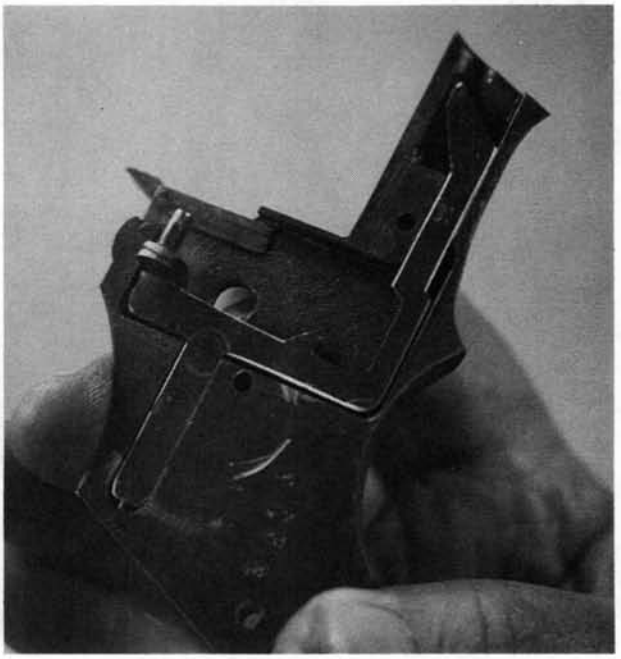
2. When replacing the trigger assembly in the frame, be sure the stud on the right side of the trigger engages the arm of the hammer pivot cam. Also, a tool must be used to lift the front arm of the trigger spring to engage the bearing pin on the trigger.

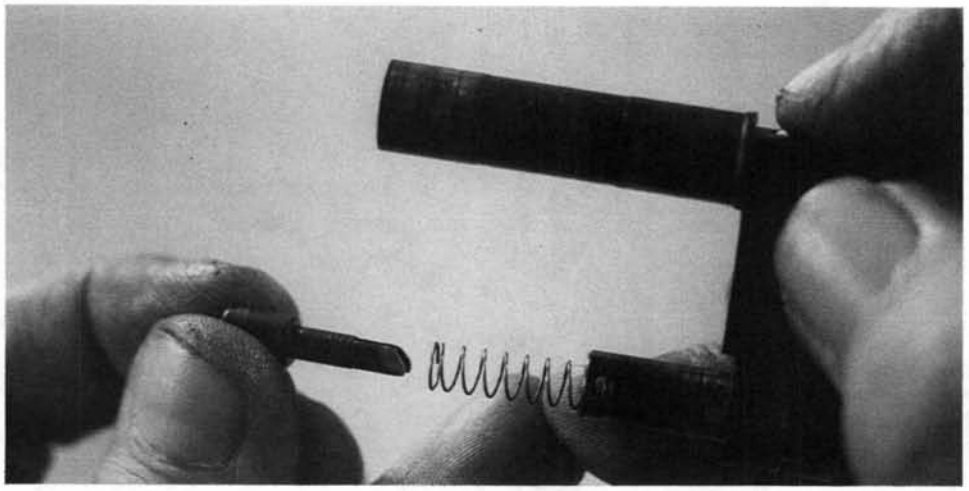
3. Note that the hammer spring base has four seat levels, and can be inverted, to adjust the spring tension. Whatever level is chosen, the spring unit must be located near the frontstrap of the grip frame.



4. When installing the cylinder latch bar, it can't be just laid inside, as shown, because the small plunger and spring at the rear will not enter the sideplate recess, and they will be damaged.

5. Place the latch bar in the sideplate recess, without its button installed, and push it fully to the rear, compressing the plunger and spring. Hold it in this position while the sideplate is moved very carefully back into place.





6. When replacing the front latch plunger in the crane, be sure it is *not* as shown here. The sloped ends of its forward projections must face *downward*. Unfortunately, the part will install either way.

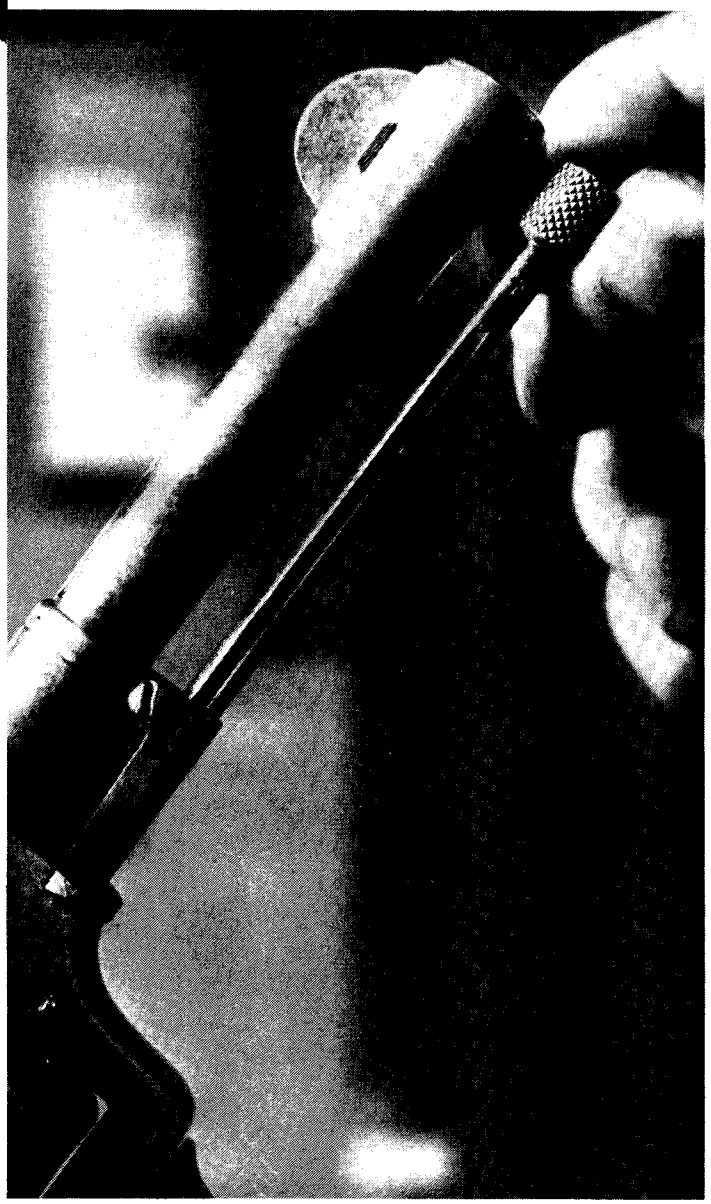
Nagant

Data:	Russian Nagant
Origin:	Imperial Russia, later U.S.S.R.
Manufacturer:	Tula Arsenal and other factories
Cartridge:	7.62mm Nagant
Cylinder capacity:	7 rounds
Overall length:	$9^{1}/_{16}$ inches
Barrel length:	$4^{1}/_{2}$ inches
Weight:	25 ounces

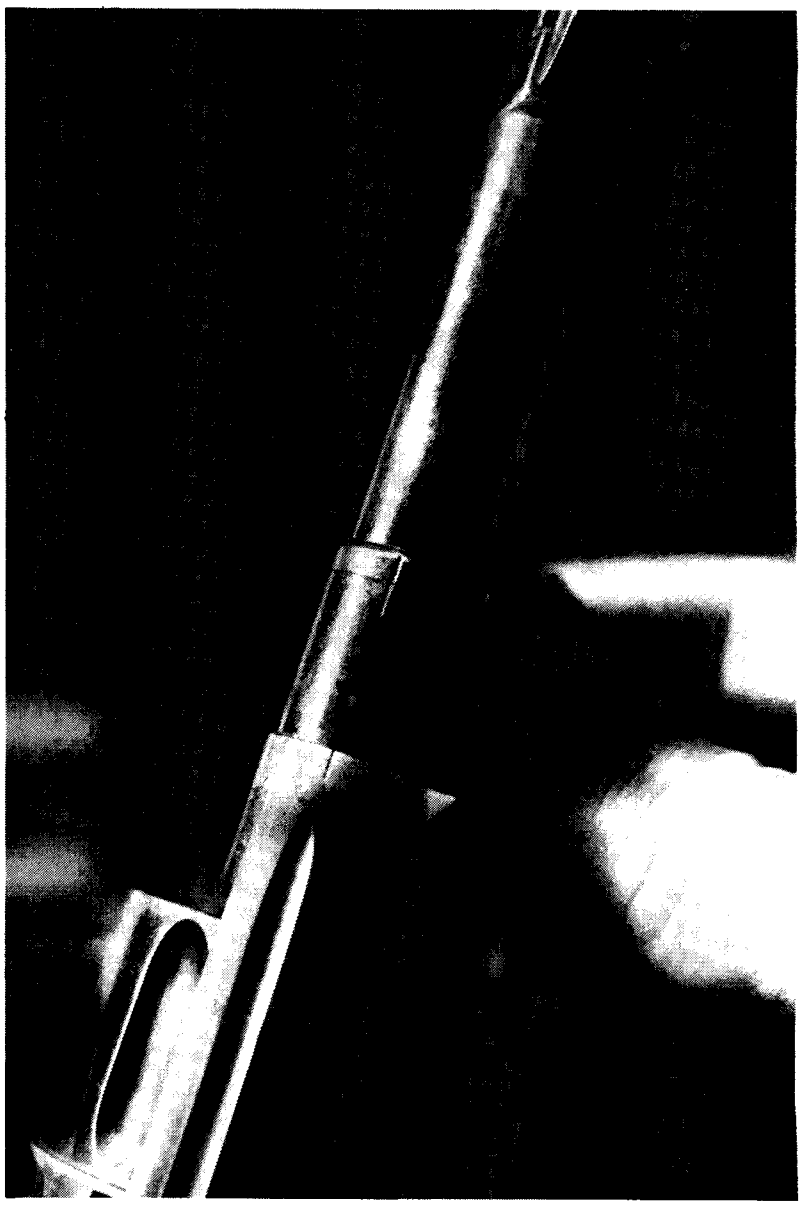
Designed by Leon Nagant of Belgium, this gun was adopted as military standard by Czarist Russia in 1895, and by 1900 it was being made in Russian arsenals. Production continued through WWII, even though the gun was replaced by the Tokarev pistol in 1930. The Nagant is famous for being the only successful "gas seal" revolver ever made, the cylinder moving forward as the hammer is cocked to insert the case of its odd cartridge directly into the rear of the barrel. The gun was made in both single- and double-action versions. The single-action type is covered here.

Disassembly:

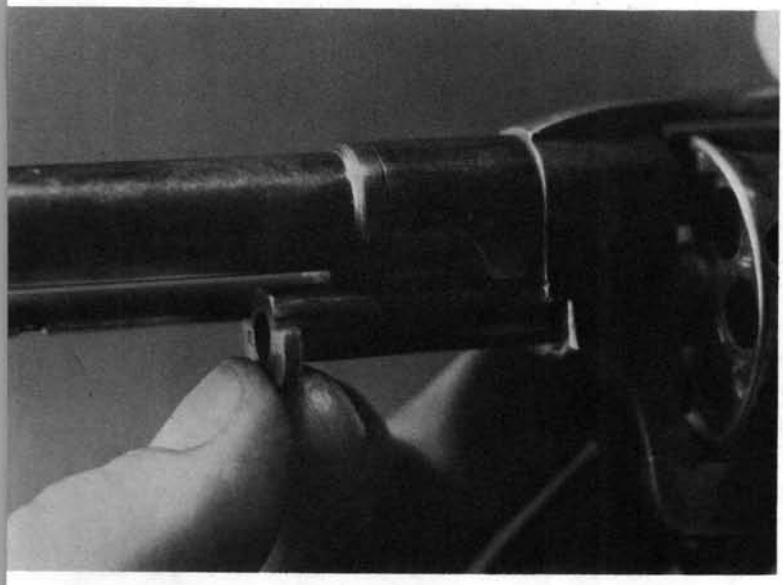
1. Turn the ejector knob toward the left until it stops, then pull the rod out until its knob is nearly even with the muzzle.

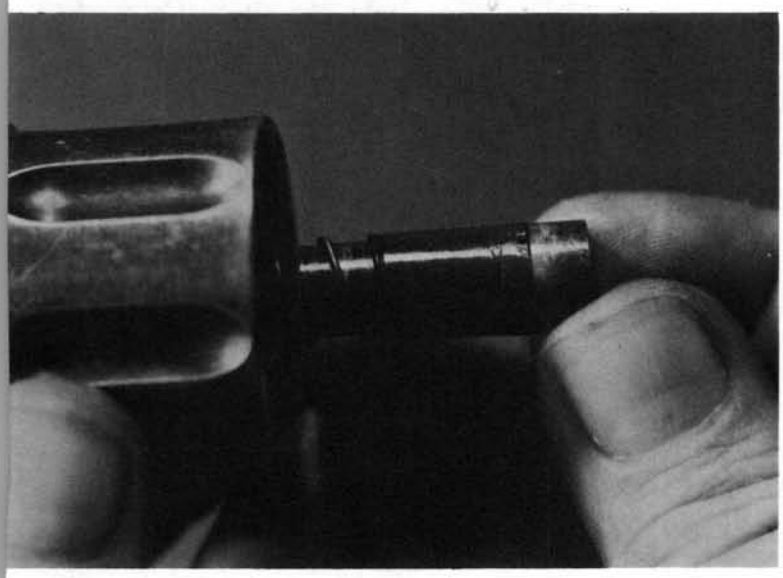


2. Turn the ejector housing from beneath the barrel toward the right side of the gun until the small groove on its right side aligns with a similar groove in the top of the barrel.

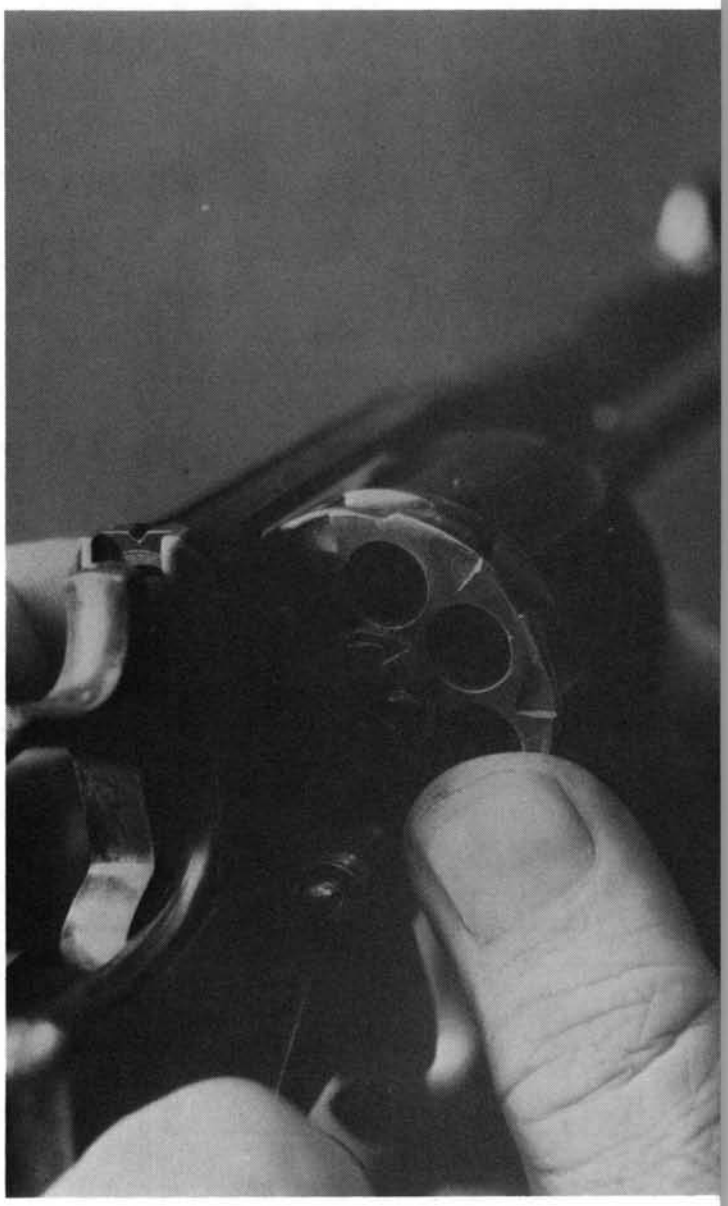


3. Pull the cylinder arbor out toward the front, and remove it from the frame.





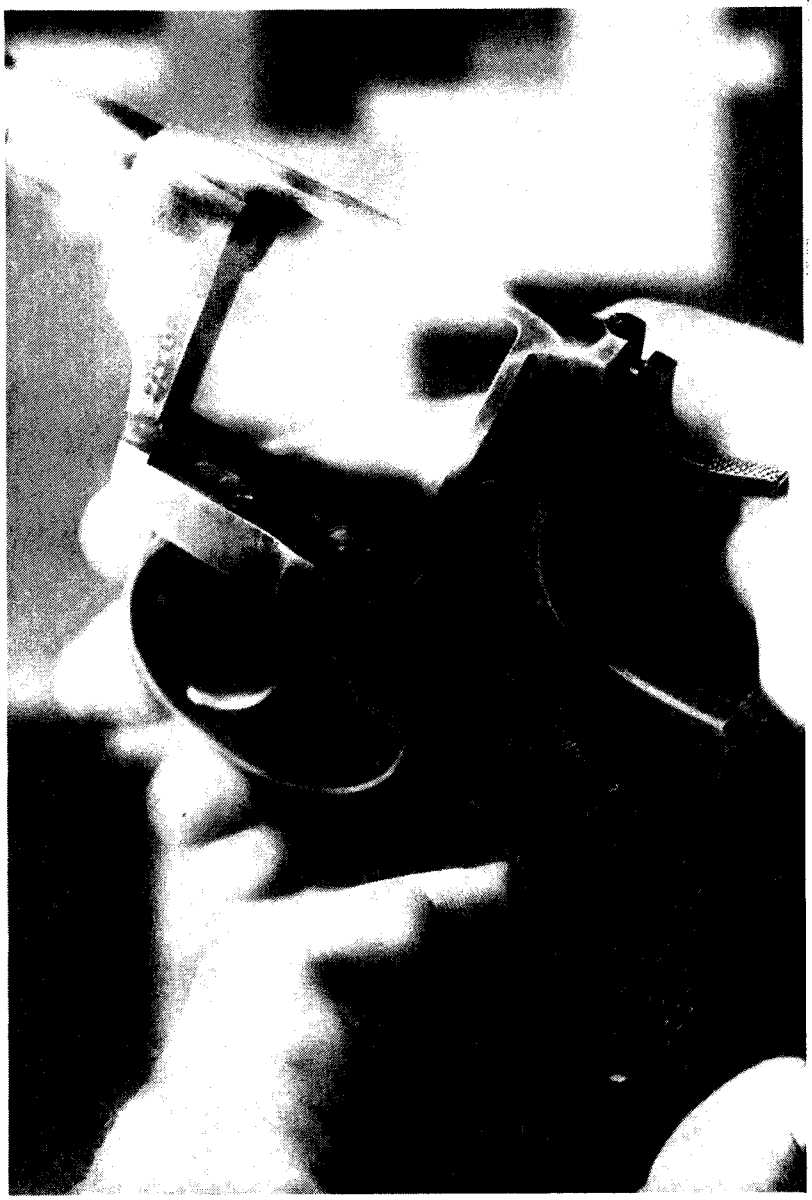
4. Open the loading gate on the right side and take out the cylinder toward the right.



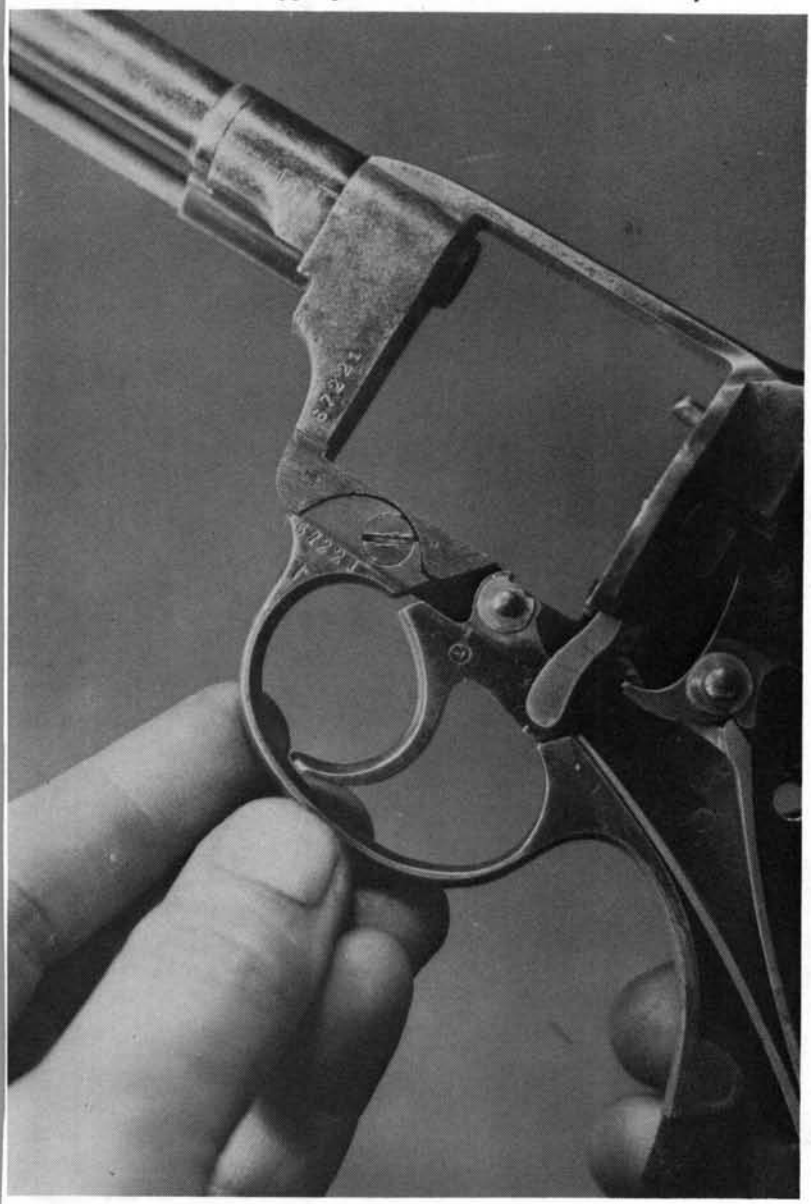
5. Turn the cylinder bushing until the small lug on the bushing aligns with its exit track in the front of the cylinder, and remove the bushing and spring toward the front.

6. Remove the large screw located above the top center of the right grip panel.

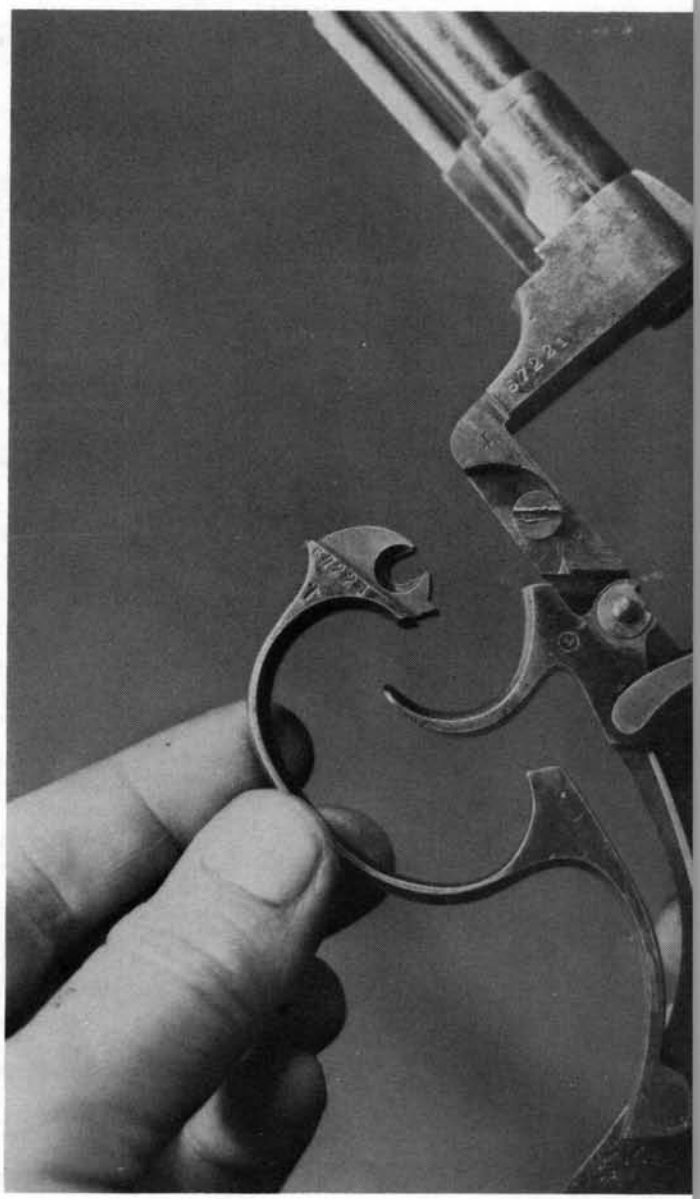
7. Removal of the screw will release the entire left side of the frame, including the grip panel, to be taken off toward the left.



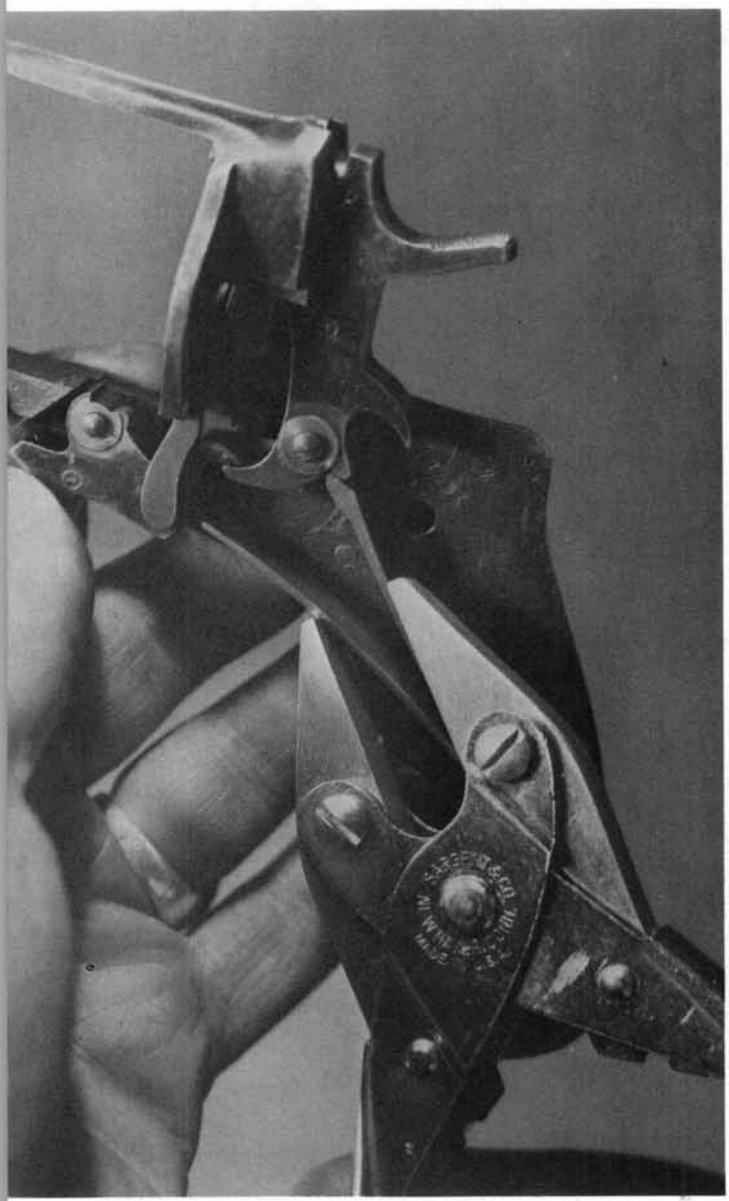
8. Back out the large screw at the upper front of the trigger guard. It does not have to be entirely removed.



9. Swing the guard downward, then lift its rear arm off its frame post by moving it toward the left.

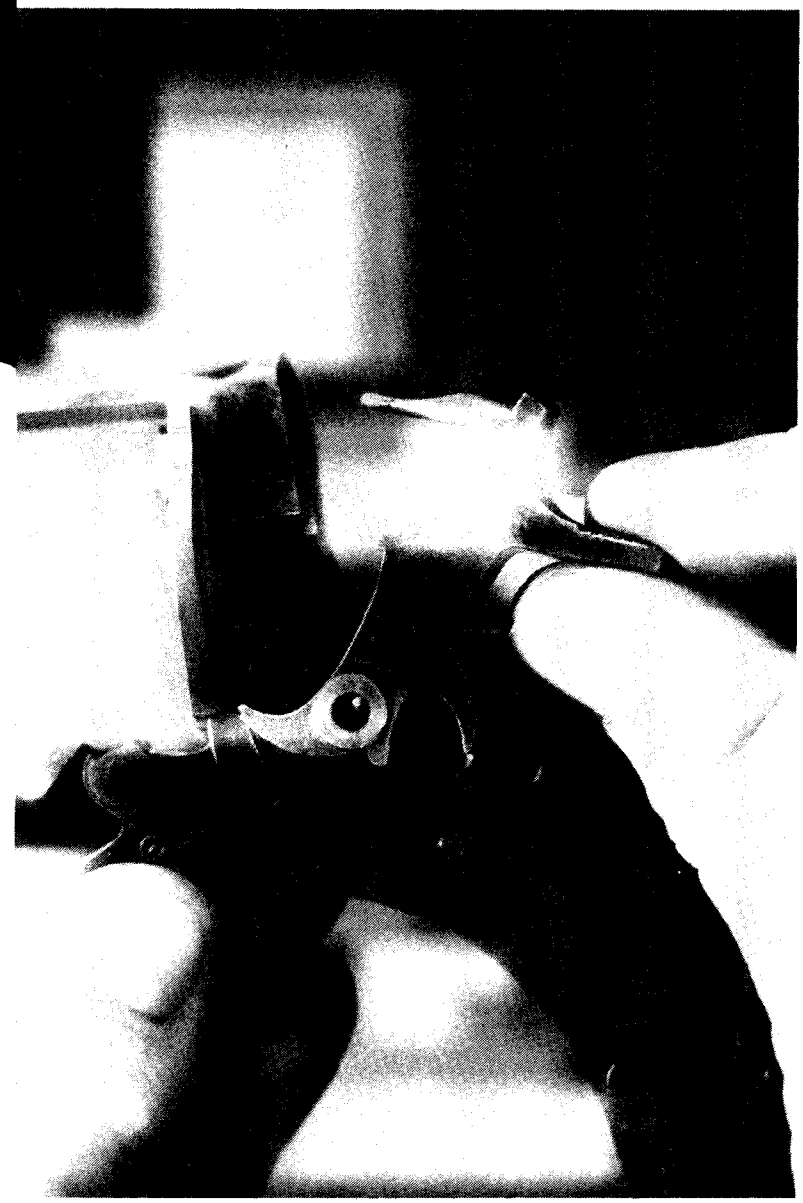


10. Grasp the mainspring with smooth parallel-jaw pliers, compress it slightly, and lift its rear mounting stud from the hole in the grip frame. The spring can then be removed downward and to the rear.

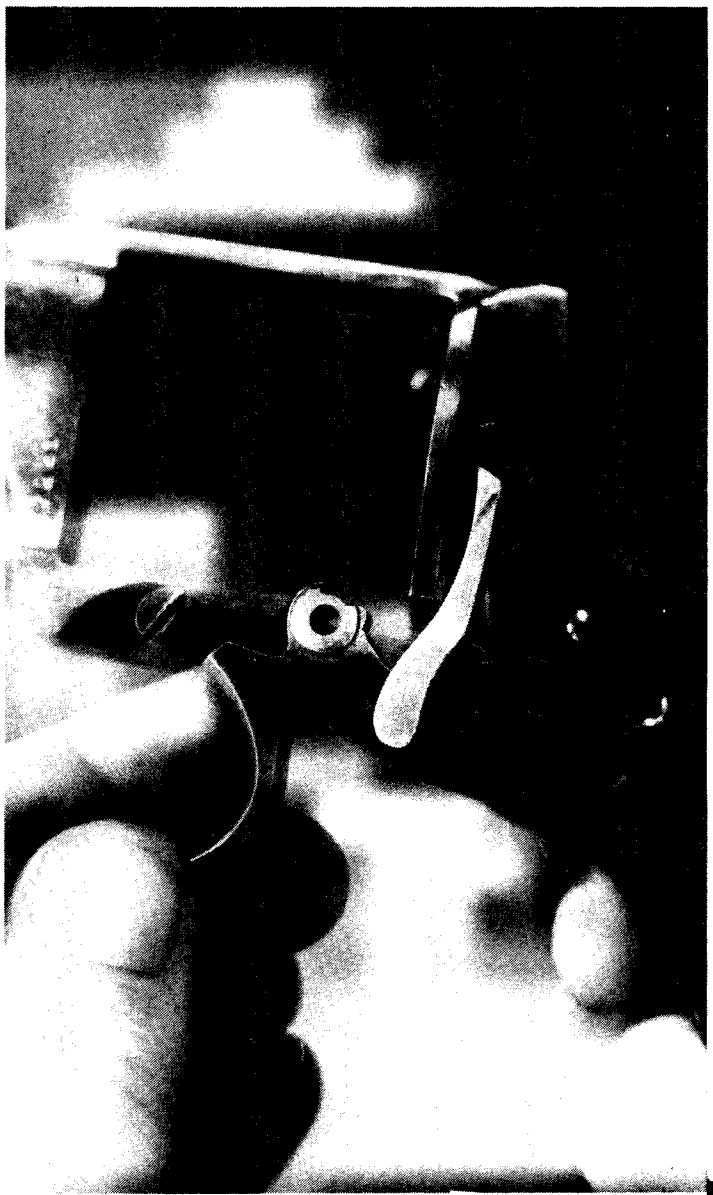


11. The hammer and trigger systems are shown here in the proper arrangement.

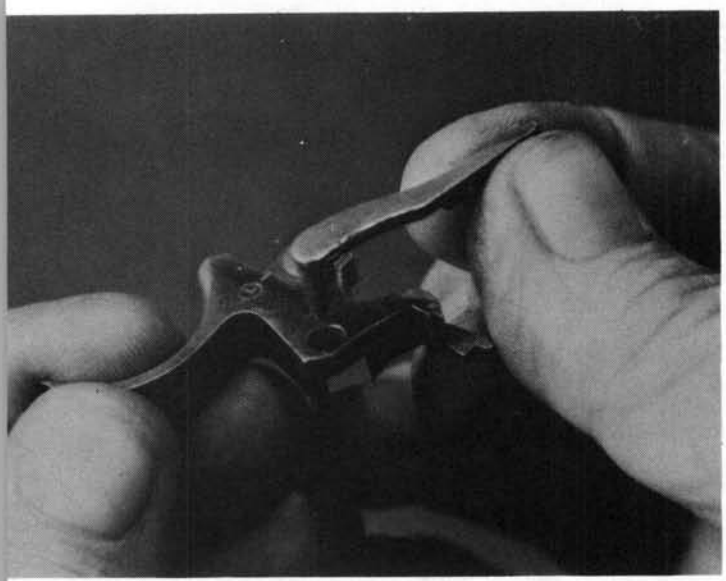
12. Tip the hammer back to clear the frame and lift it off toward the left. The firing pin is retained on the hammer with a cross-pin, but removing it is not advisable in normal takedown.

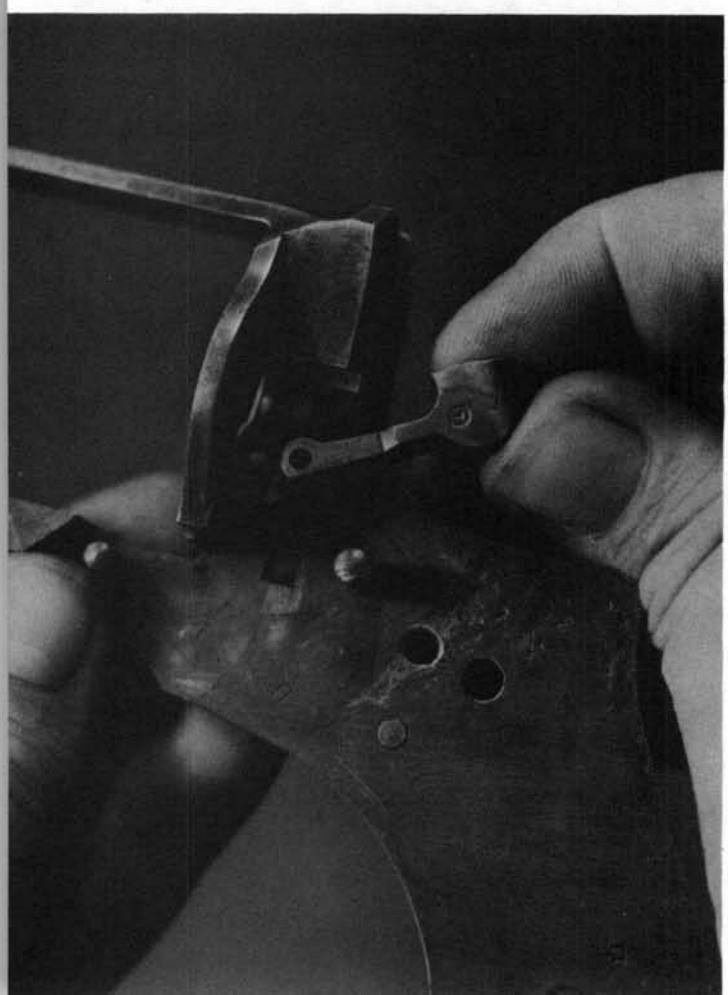


13. Tip the cylinder hand back to clear the frame and lift the trigger off toward the left.

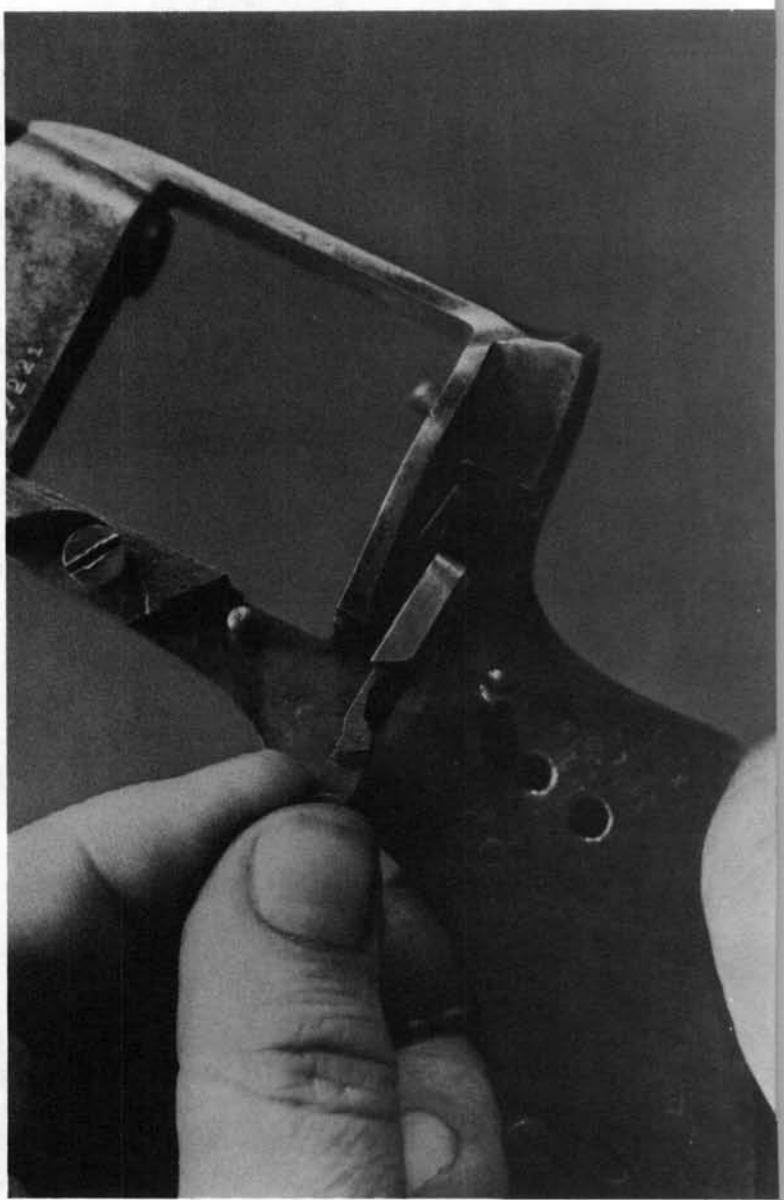


14. The cylinder hand is then easily detached from the trigger.





15. Slide the camming block downward, then lift it off toward the left.



16. Tip the cartridge support block back until it clears the frame, then lift it off its post toward the left and remove it from the frame.

17. The larger screw on the frame sideplate retains a wood filler block, the smaller screw holds the left grip.

18. The screw in the center of the grip frame holds the right grip. Drifting out the cross-pin at the lower end of the grip frame will allow the lanyard ring to be unscrewed and removed.

19. Take out the large screw that retains the loading gate spring, move the spring toward the rear and downward, then remove it toward the right.

20. Remove the loading gate pivot screw, then remove the loading gate from its loop on the frame.

21. Take out the small screw which retains the ejector rod spring.

22. Removal of the spring will release the ejector rod, allowing it to be pulled out toward the front. The ejector housing can be taken off only after barrel removal, and this is not advisable in normal takedown.

Reassembly Tips:

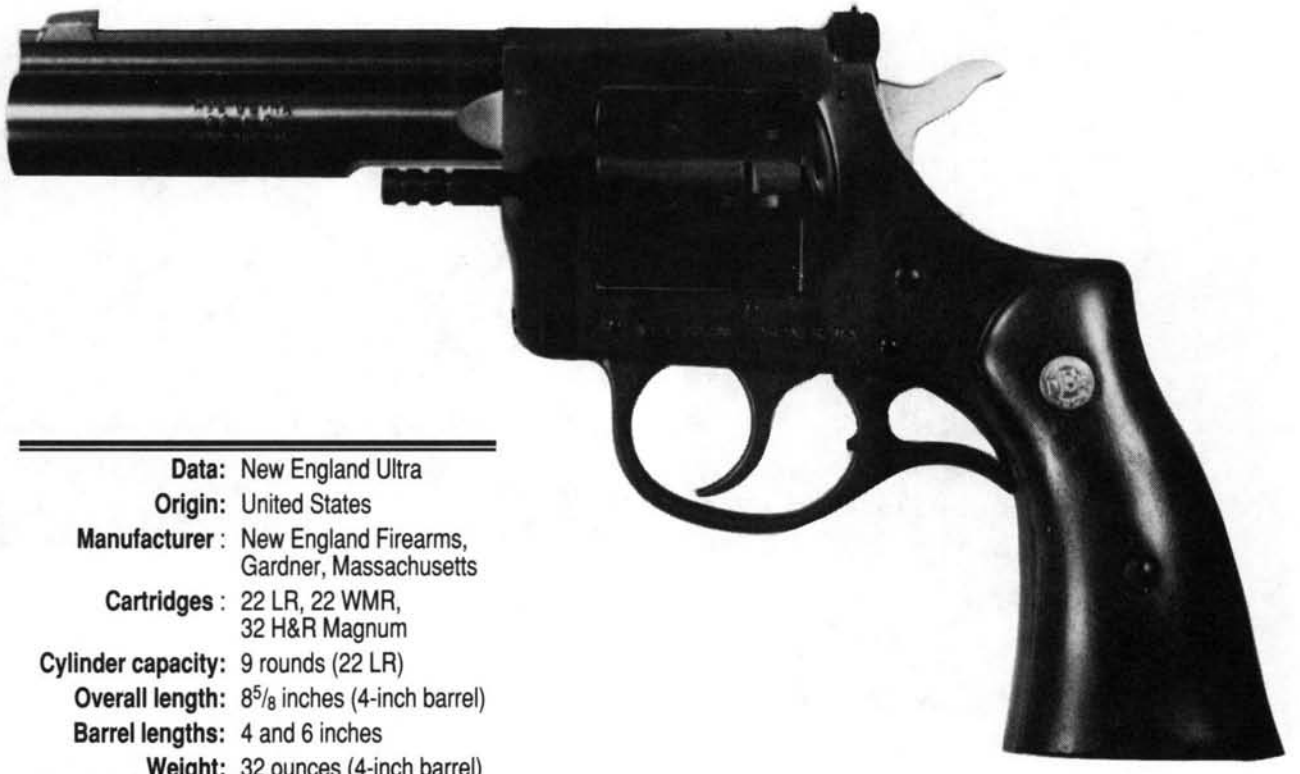
There are no special tricks and no particularly difficult points in the reassembly of the Nagant revolver. Just reverse the disassembly process slowly and carefully, and there should be no problems.

New England Ultra

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the New England Ultra also apply to the following gun.

New England Firearms Standard

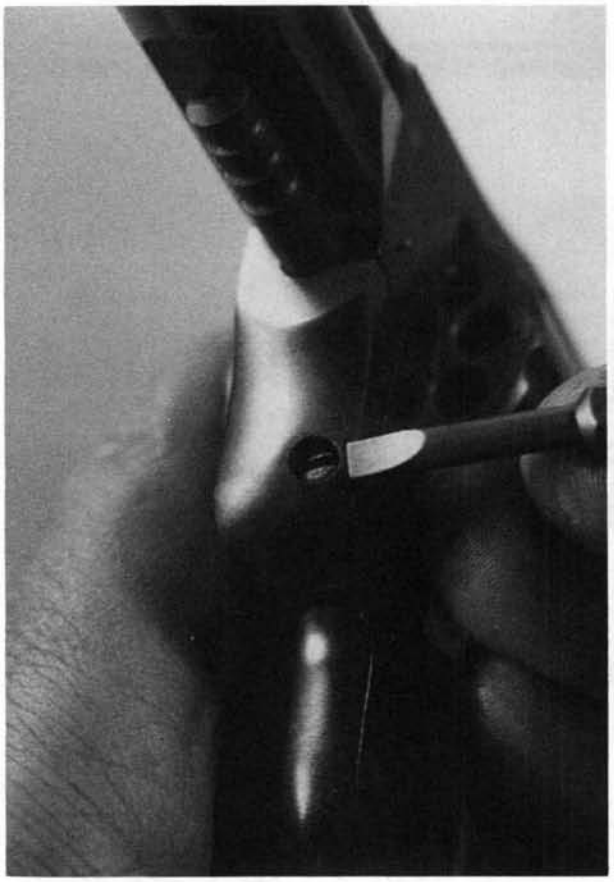


Data:	New England Ultra
Origin:	United States
Manufacturer:	New England Firearms, Gardner, Massachusetts
Cartridges:	22 LR, 22 WMR, 32 H&R Magnum
Cylinder capacity:	9 rounds (22 LR)
Overall length:	$8^5/_8$ inches (4-inch barrel)
Barrel lengths:	4 and 6 inches
Weight:	32 ounces (4-inch barrel)

When the Harrington & Richardson firm went out of business, their manufacturing facility was purchased by a new company, New England Firearms. Several of the well-liked guns of the original firm have been put back into production, but they are not exactly the same. There have been some mechanical improvements, and parts are often not interchangeable with the guns of the old firm. In addition to the Ultra models, the New England Firearms revolvers are also offered in "Standard" versions. The mechanism is the same.

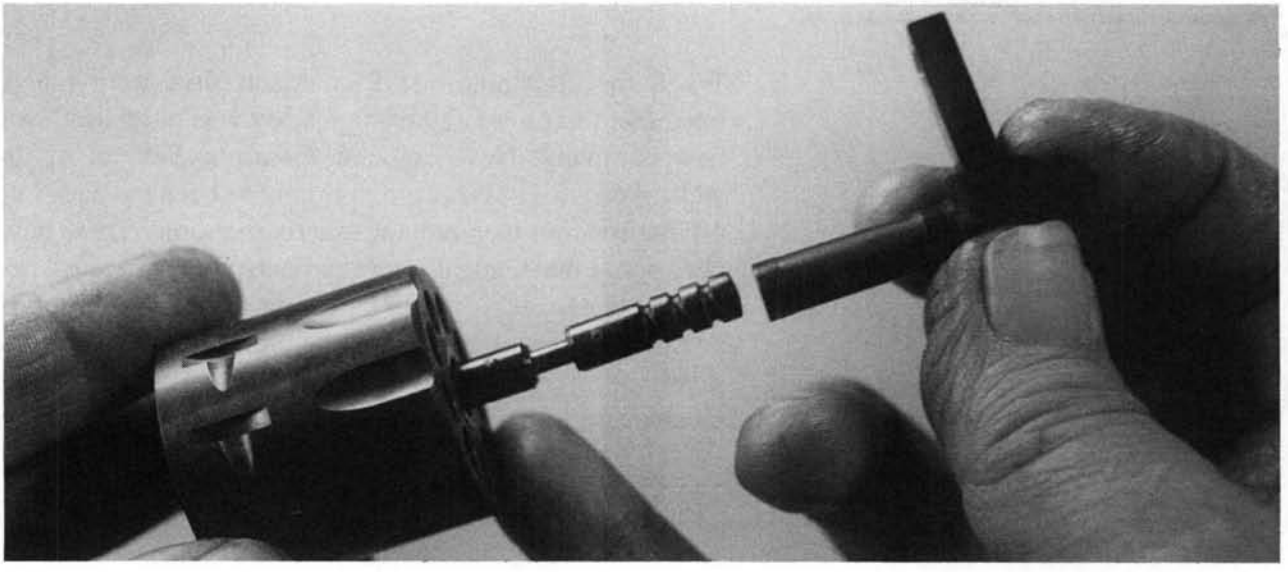
Disassembly:

1. Remove the crane pivot screw at the front of the frame.

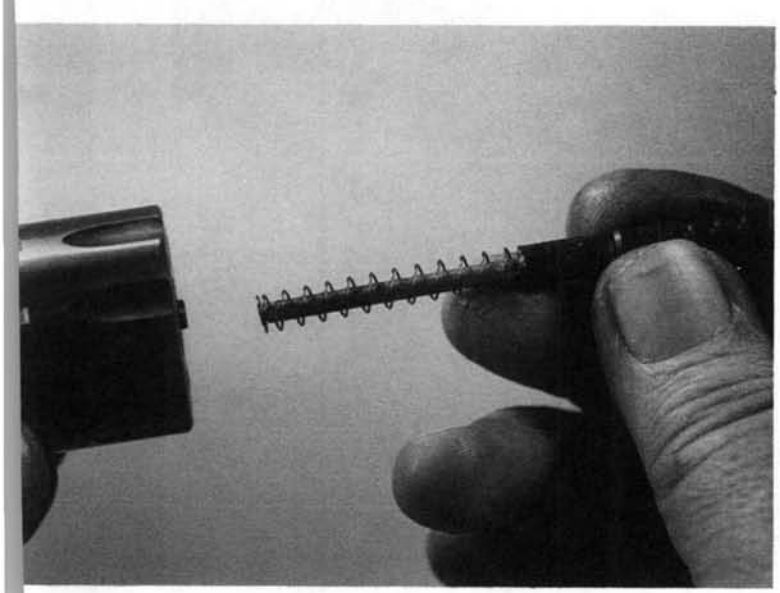


2. Open the cylinder, and remove the crane and cylinder assembly toward the left.

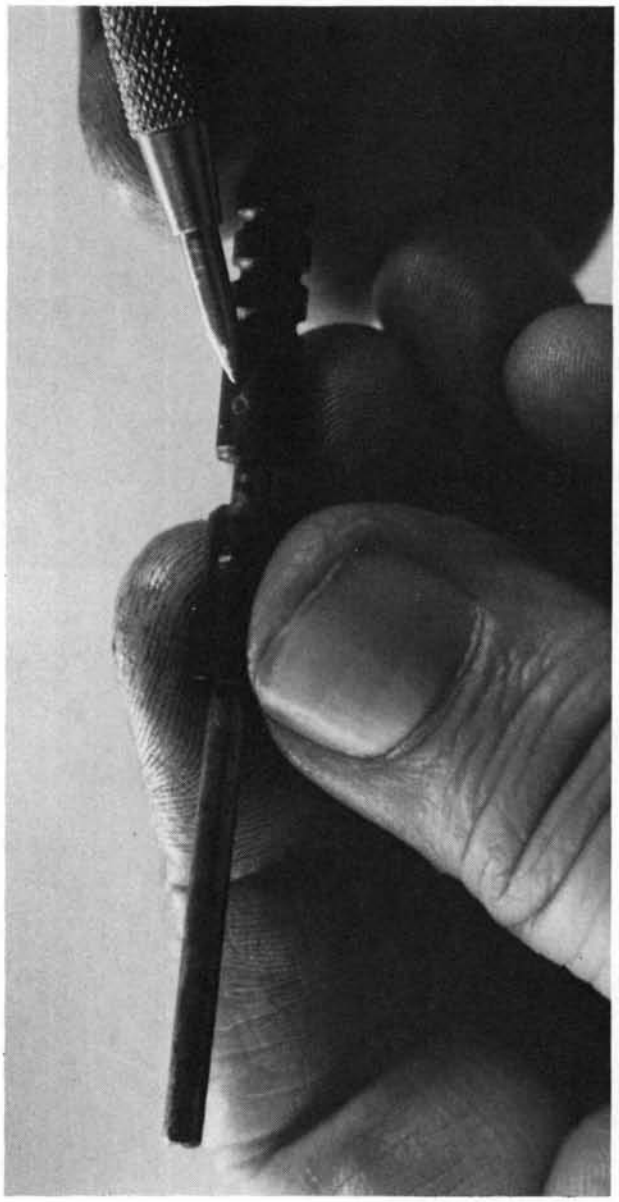
3. Remove the crane toward the front.



4. Use smooth-jawed pliers to grip the ejector rod sleeve, and turn the cylinder counterclockwise (rear view), unscrewing the ejector/ratchet from the sleeve.

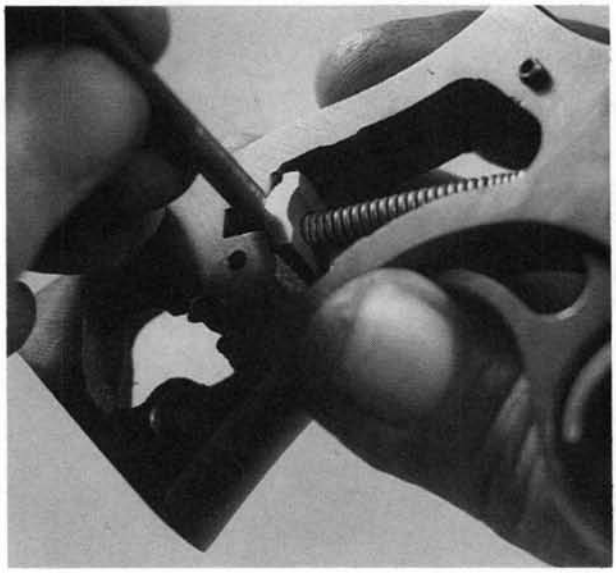


5. Remove the ejector rod, sleeve, and spring toward the front.



6. The knob is mounted on the rod with a blind pin, and the only way to remove it would be to drill it out. Because of this, the sleeve and its spring are not routinely removable from the rod.

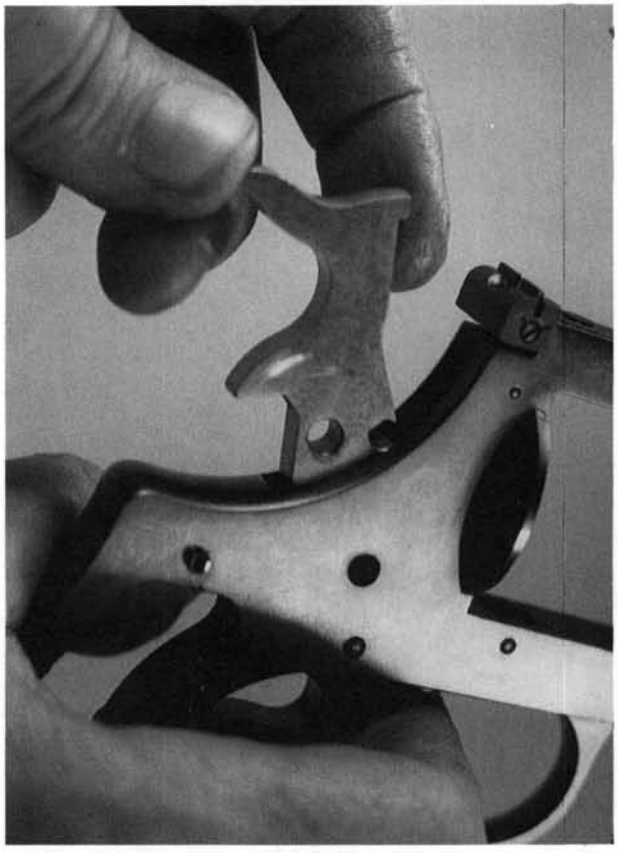
7. Remove the ejector/ratchet unit toward the rear.



8. Remove the grip screws on each side and take off the grips. Cock the hammer, and depress it just beyond the full-cock position. Insert a small drift in the hole at the end of the hammer spring strut. Let the hammer down, trapping the spring and base on the strut.

9. Tip the spring unit out to the side, and remove it. If the unit is to be disassembled, remember that a powerful spring is under full compression, and use CAUTION.

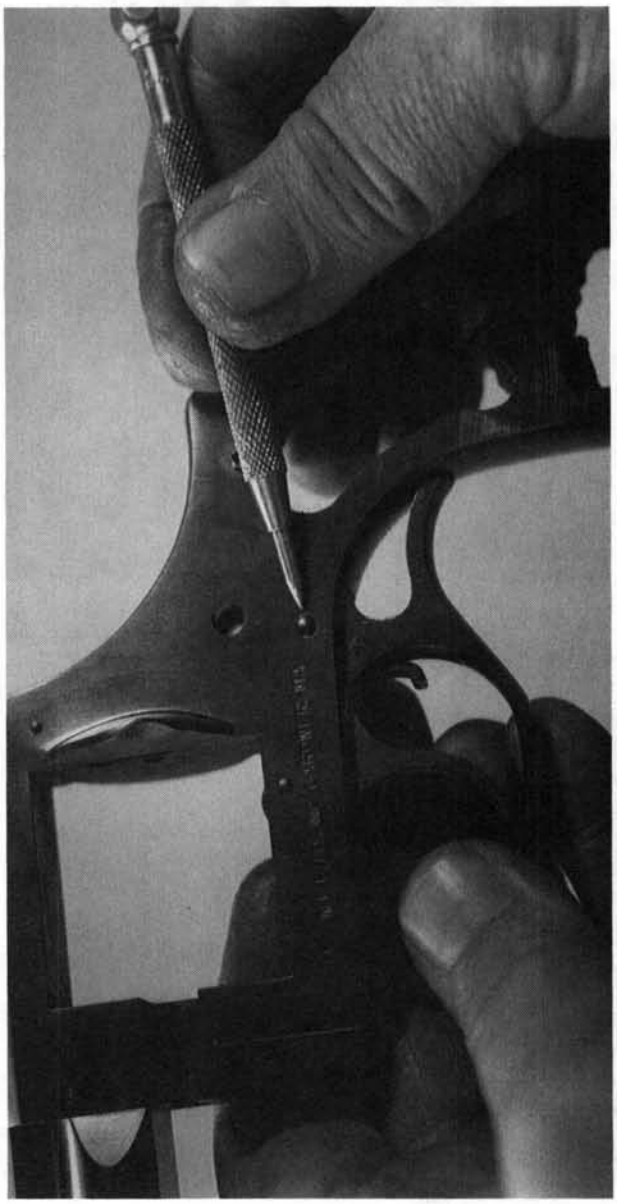
10. Note that all of the cross-pins have splined ends, and they are factory-installed from right to left. Thus, they must be driven out toward the right. Drift out the hammer cross-pin toward the right.



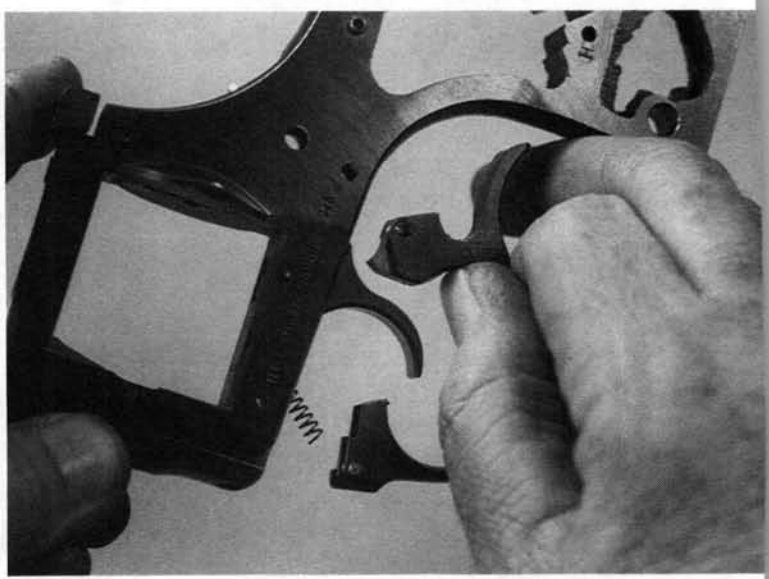
11. Pull the trigger, and remove the hammer upward.

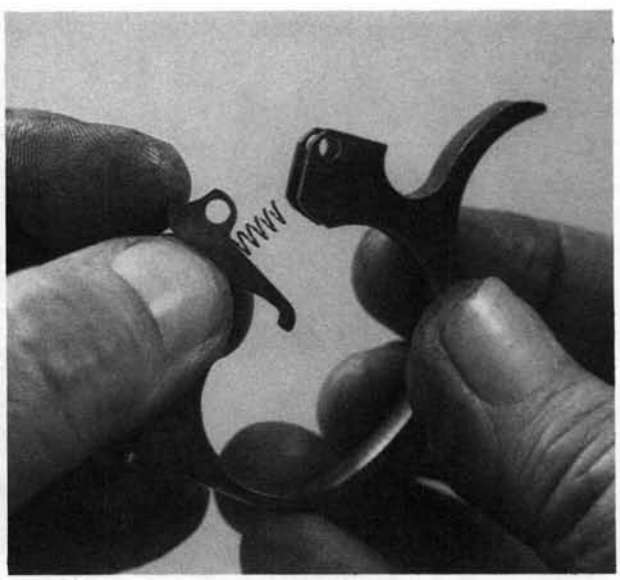
12. Drift out the forward trigger guard cross-pin.

13. Drift out the rear trigger guard cross-pin.



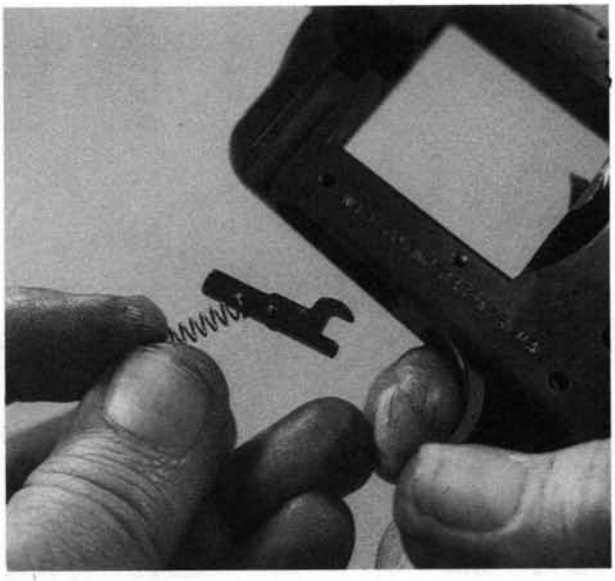
14. Remove the trigger guard downward and forward.



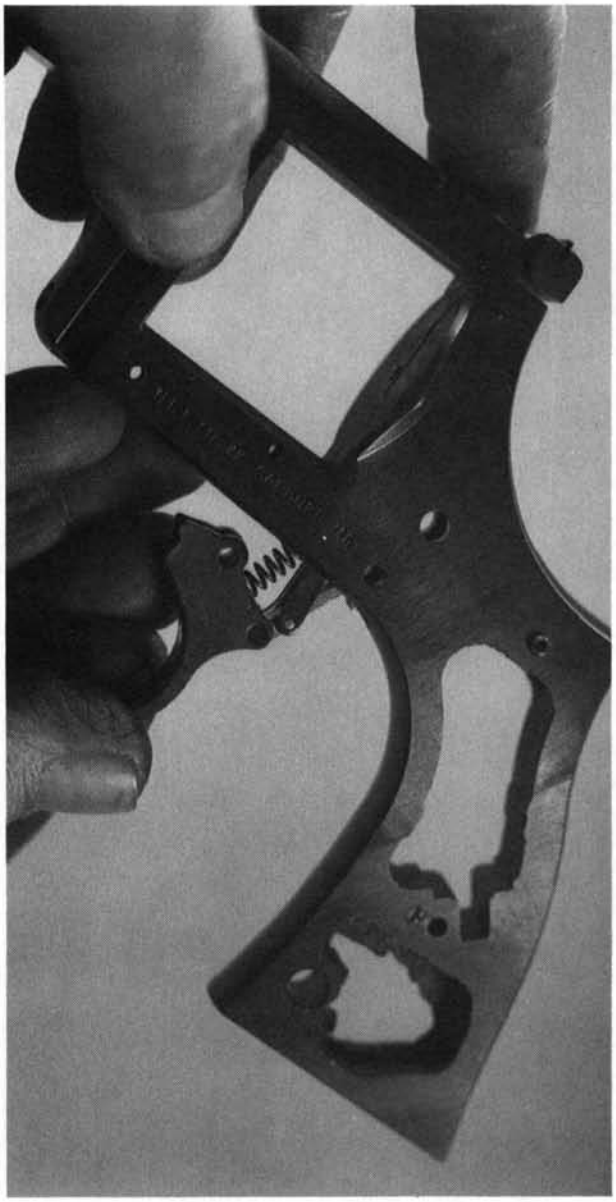


15. The sear and sear spring will be released at the rear of the guard as it emerges.

16. Pull the trigger, and move the cylinder stop out of the frame forward and downward. Unless repair is necessary, the spring is best left attached to the cylinder stop.

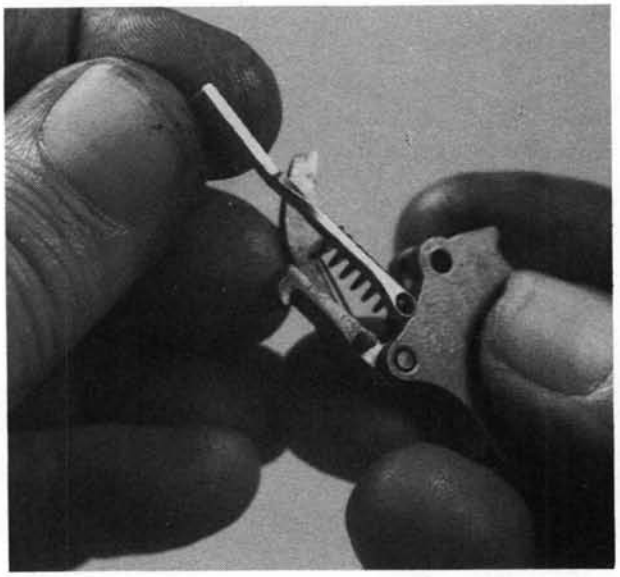


17. Drift out the trigger cross-pin toward the right.

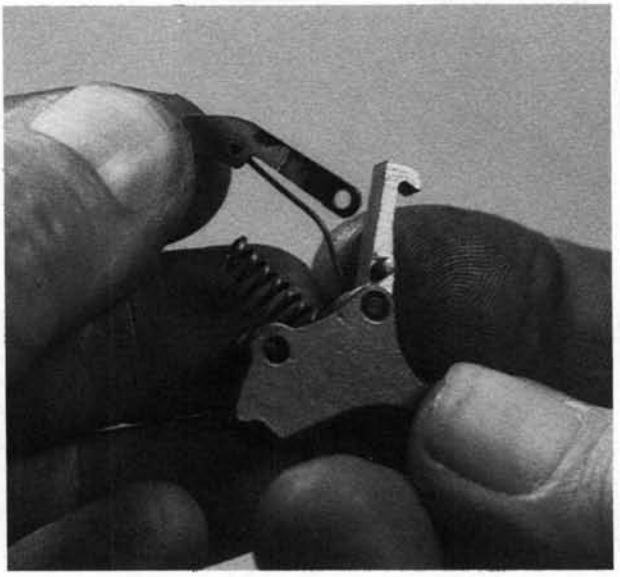


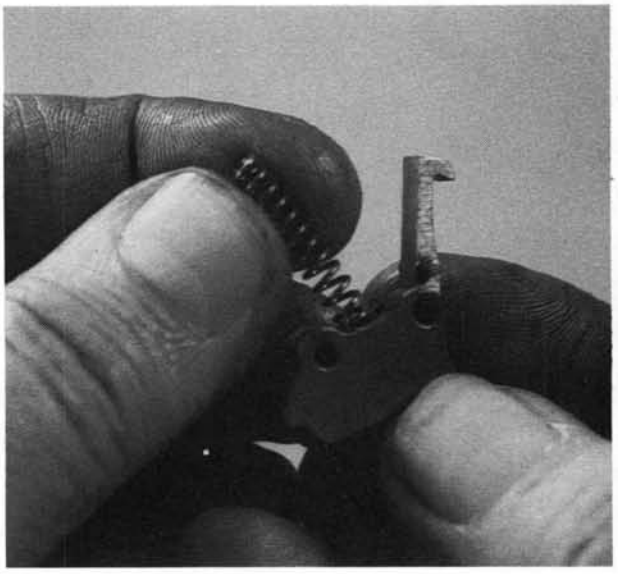
18. Remove the trigger assembly downward.

19. Remove the transfer bar from its post on the right side of the hammer lever.

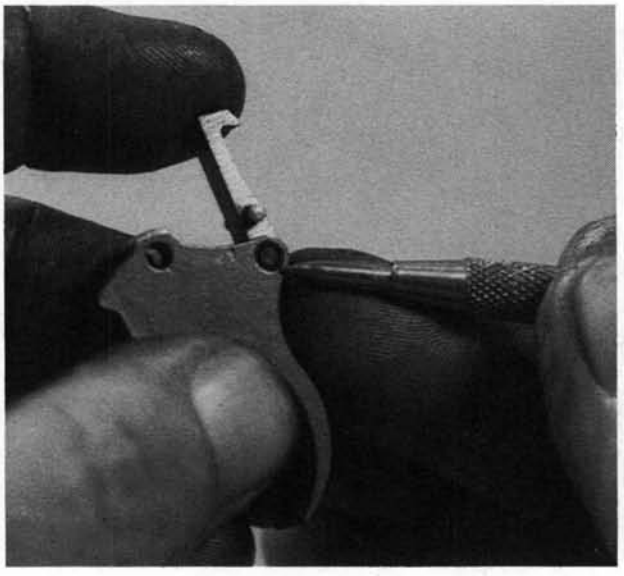


20. Carefully detach the cylinder hand from its post on the left side of the hammer lever, and remove it upward. Be careful with the cylinder hand spring and avoid deforming it.





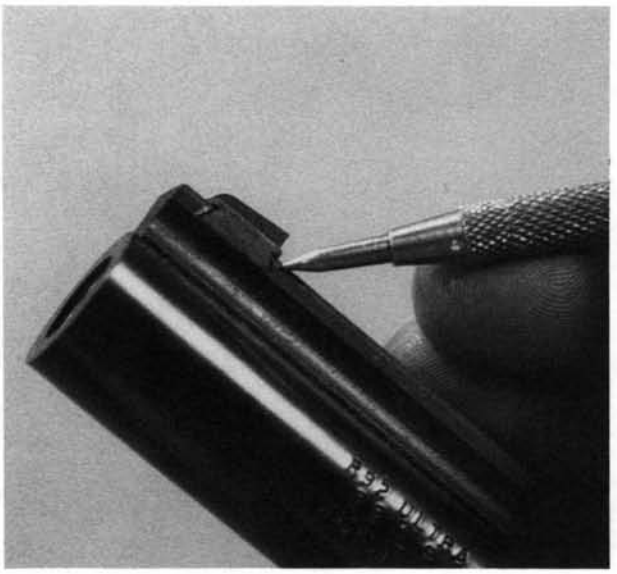
21. Remove the trigger spring upward.



22. The hammer lever cross-pin is lightly riveted in place, and it should be driven out only when it is necessary for repair.

23. The firing pin and its return spring are retained in the frame by a cross-pin, and after it is drifted out, the firing pin and spring are taken out toward the rear.

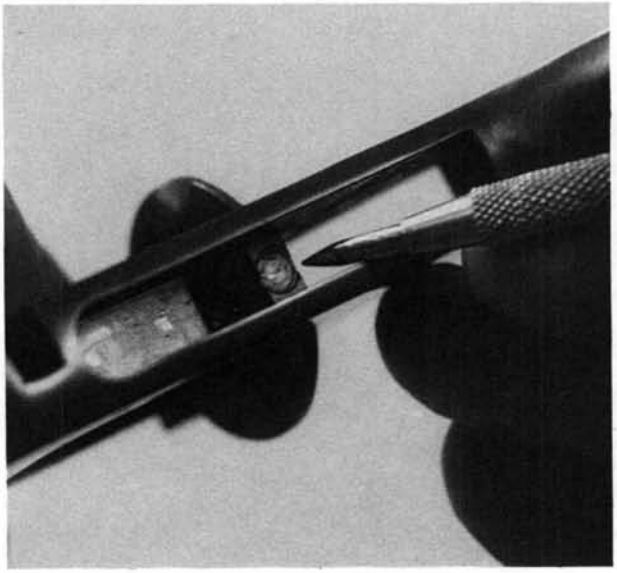
24. The rear sight is retained by a cross-pin. After the pin is driven out, unscrewing the elevation screw will release the sight. If the sight is removed, note that there is a spring under it.



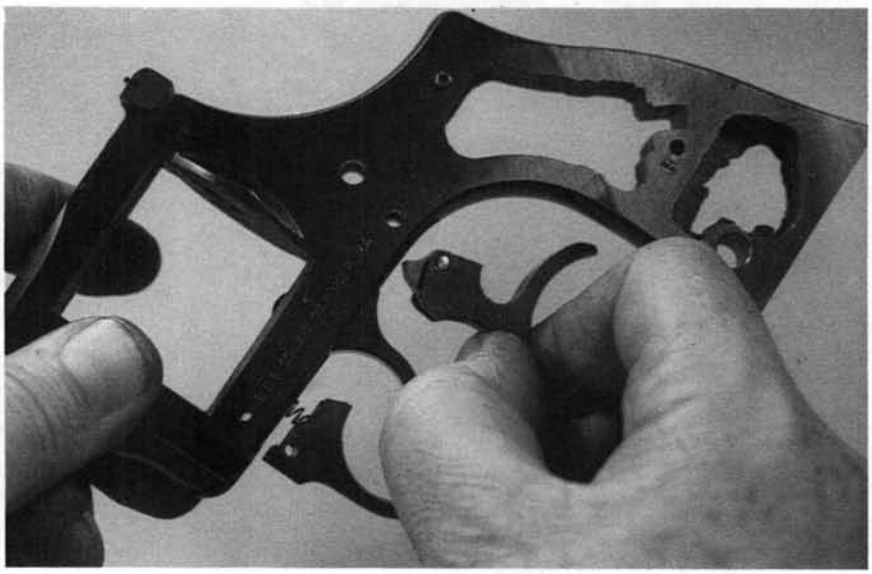
25. The front sight is dovetail-mounted in the barrel rib. If removal is necessary for repair, it is driven out toward the right.

Reassembly Tips:

1. When the trigger assembly is put back into the frame, be sure the trigger spring engages its recess.



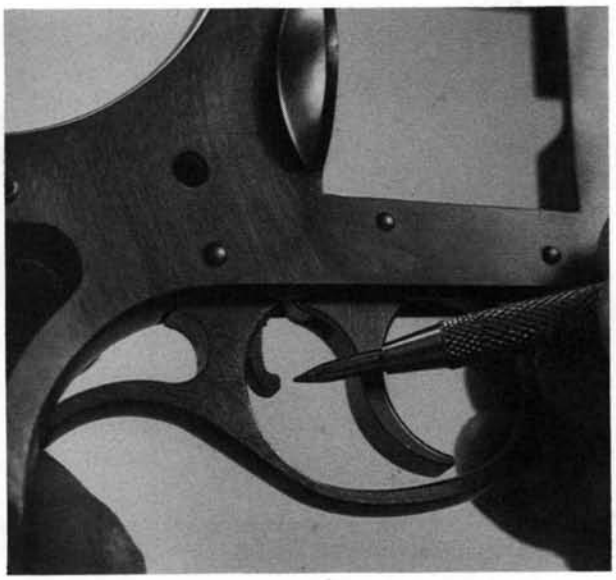
2. When replacing the cylinder stop, the trigger must be pulled while the stop is inserted.



3. Installation of the trigger guard, along with the sear and sear spring, will require a short slave pin to hold the sear until insertion of the rear cross-pin. Also, be sure that the cylinder stop spring properly enters its recess in the front of the guard.

4. Insert the rear guard pin first. It will push out the slave pin on the left side, as shown.

5. Before replacing the hammer in the frame, be sure the sear is turned down to the position shown, and keep the trigger pulled as the hammer is put in. Also, be sure the transfer bar is forward.



6. When installing the hammer spring unit, note that it is oriented with the bend at the top as shown.

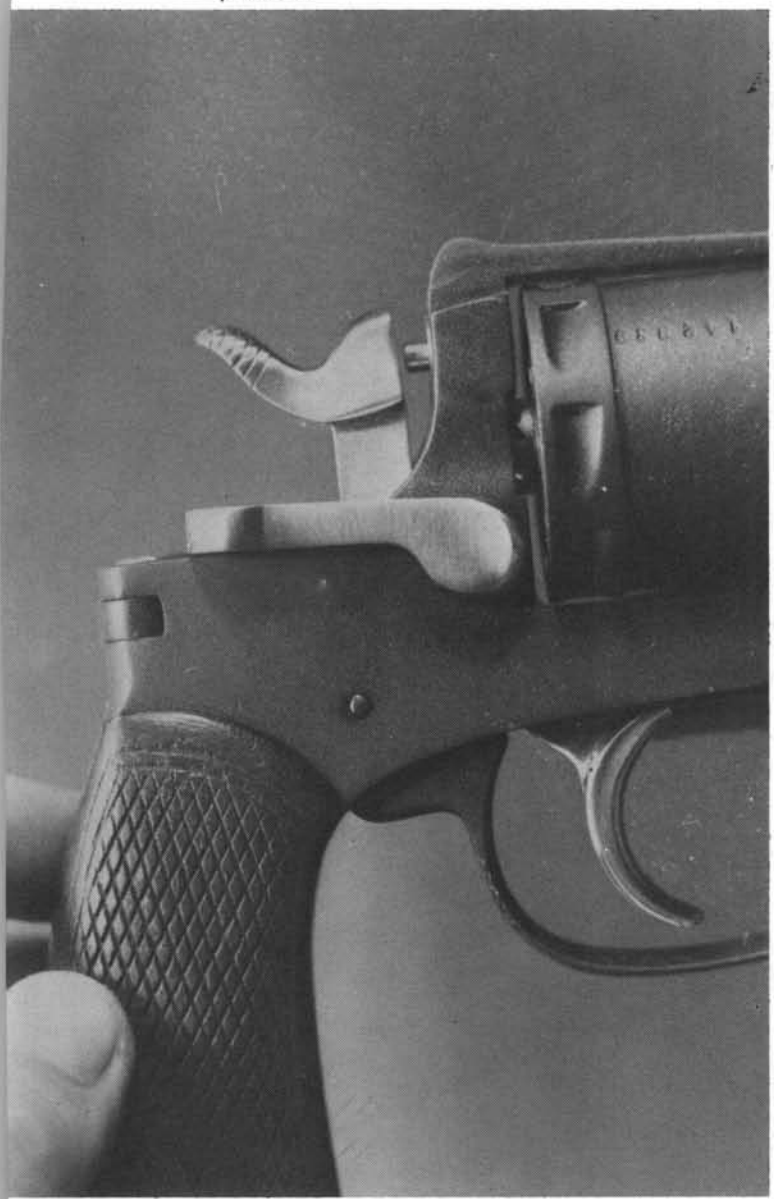
Rast & Gasser

Data:	Rast & Gasser
Origin:	Austria
Manufacturer:	Rast & Gasser, Vienna
Cartridge:	8mm Gasser
Cylinder capacity:	8 rounds
Overall length:	$8^5/_8$ inches
Barrel length:	$4^1/_2$ inches
Weight:	32 ounces

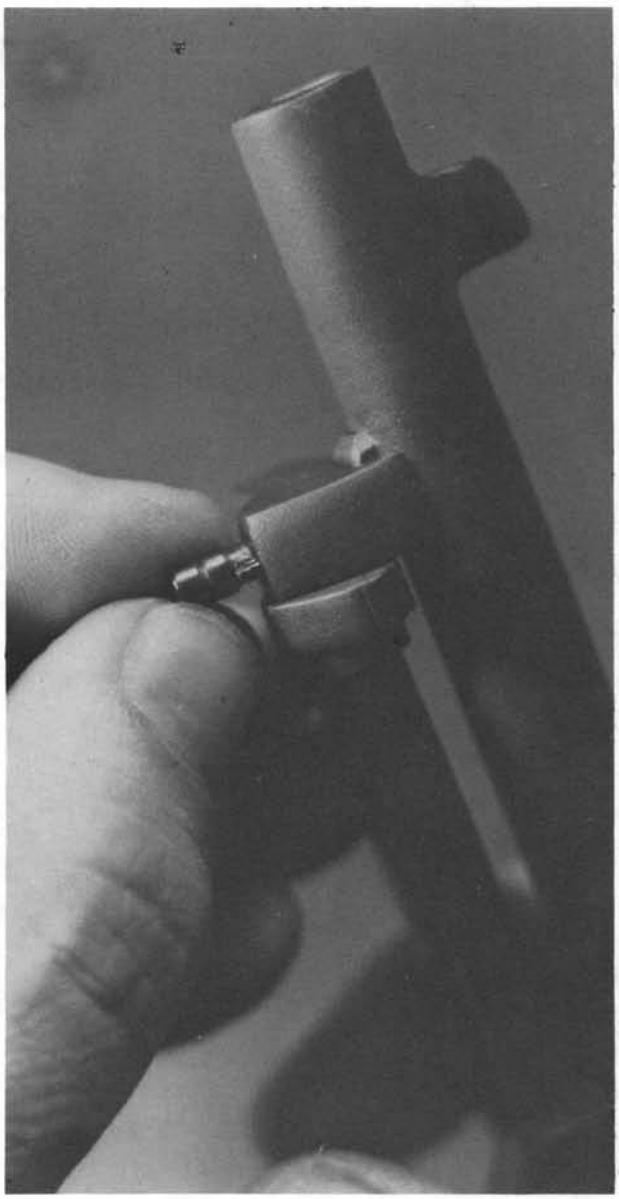
Adopted as military standard by the Austro-Hungarian Empire in 1898, the Rast & Gasser has several unique design touches, several of which have since appeared in more modern guns. This revolver has a rebounding hammer and a frame-mounted firing pin, and except for a few screw-mounted parts, it can be disassembled without tools. Opening the loading gate disconnects the trigger from the hammer, allowing the trigger to turn the cylinder while the fired cases are ejected. The ejector return spring is unusual, operating by expansion (stretching) rather than by compression.

Disassembly:

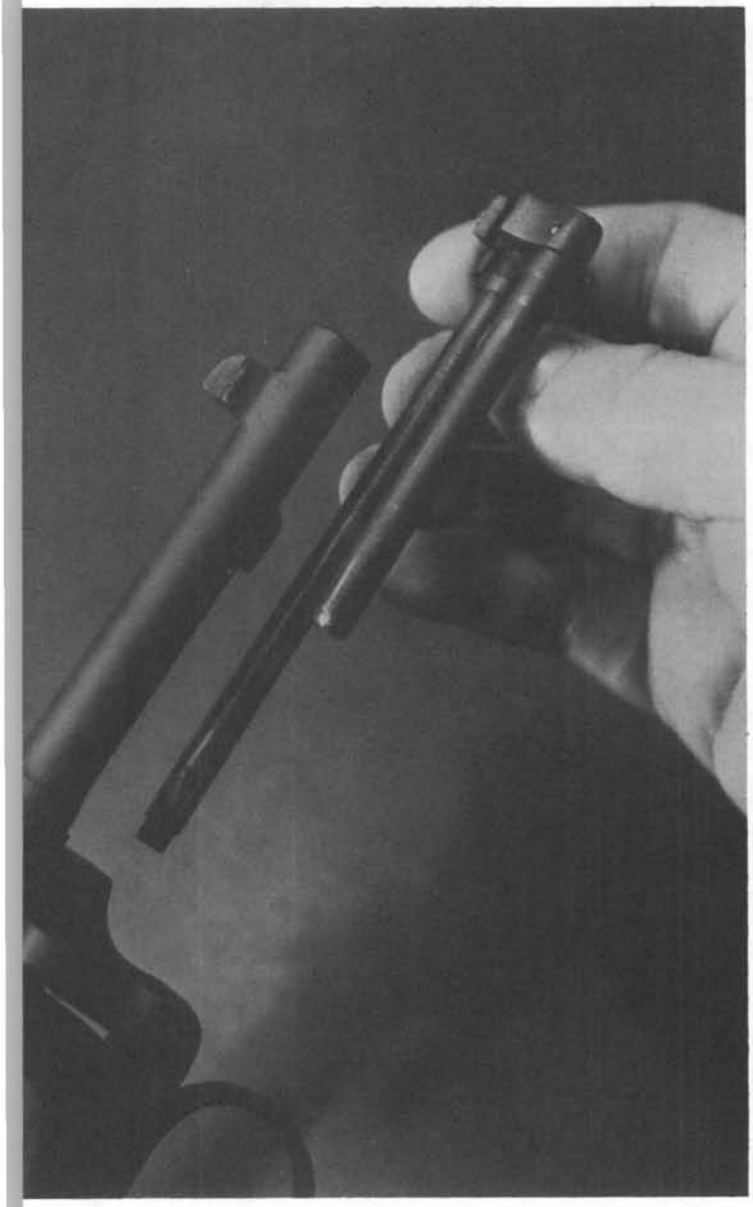
1. Turn the loading gate down to the horizontal opened position.



2. Pull the ejector assembly latch downward and turn it slightly, so its side lug will lock it in position.

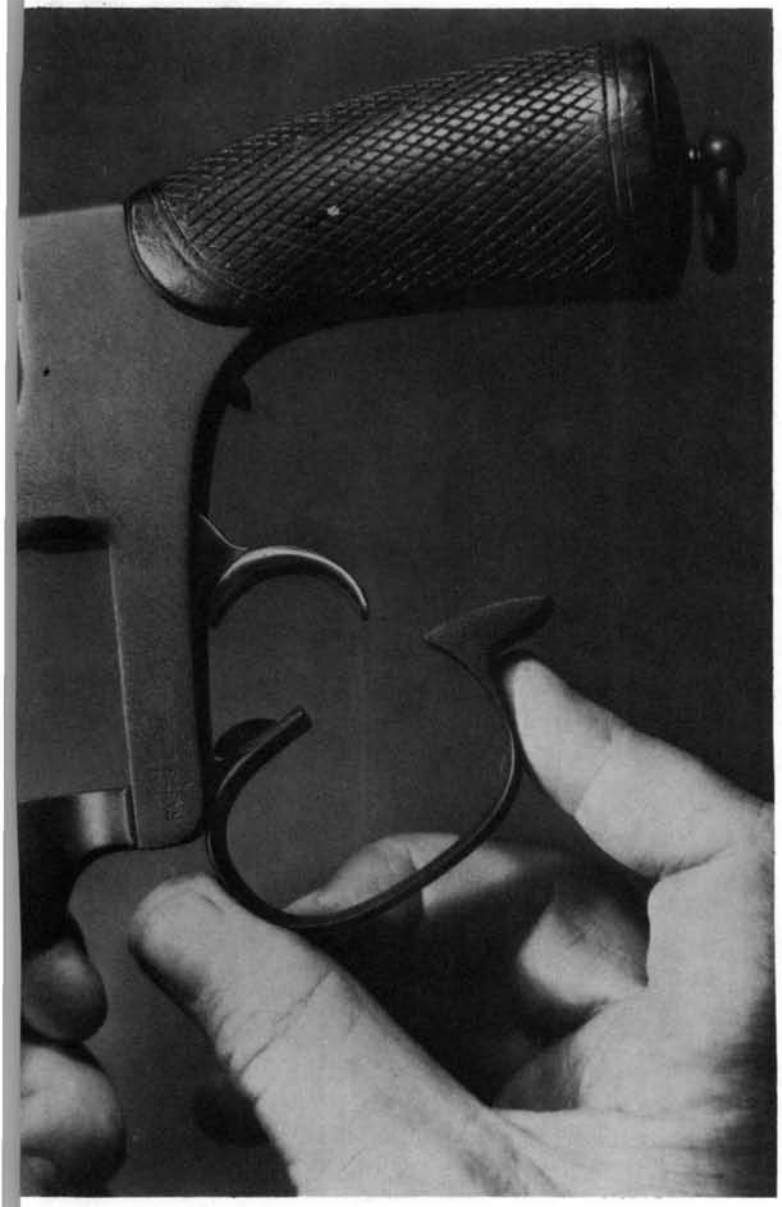


3. Pull the ejector assembly and the attached cylinder base pin forward out of the frame.

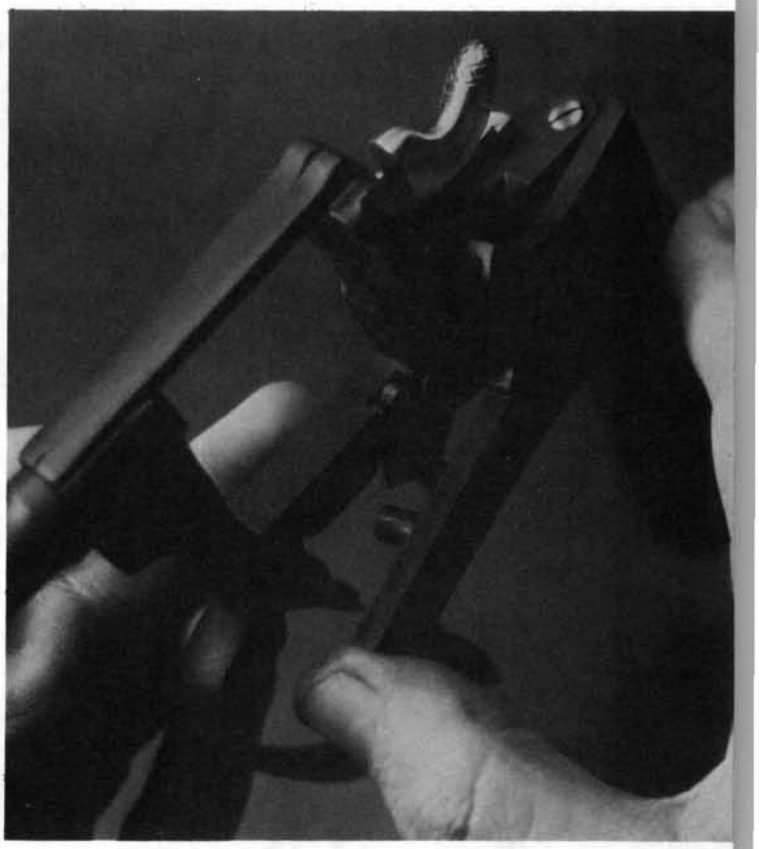


4. Remove the cylinder toward the right.

5. Exert forward pressure on the rear of the trigger guard and pull it downward. Pivot it forward until it stops against the frame.

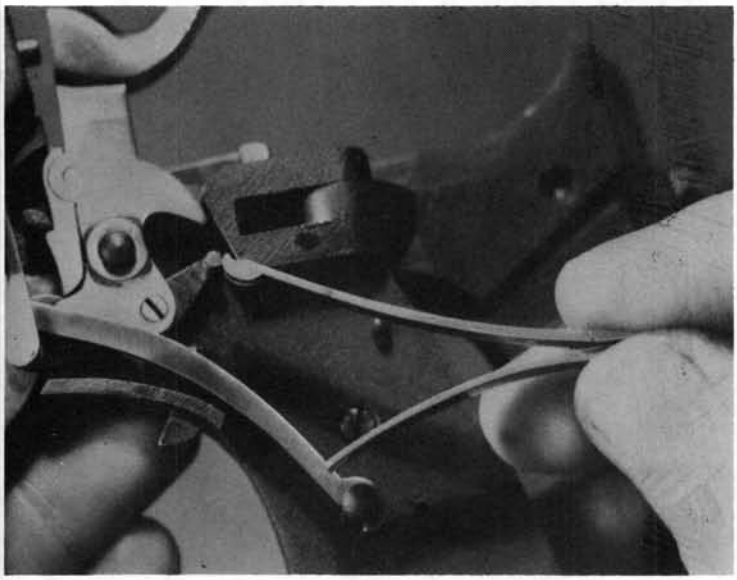


6. Pivot the sideplate out toward the left, and turn it all the way around toward the rear.

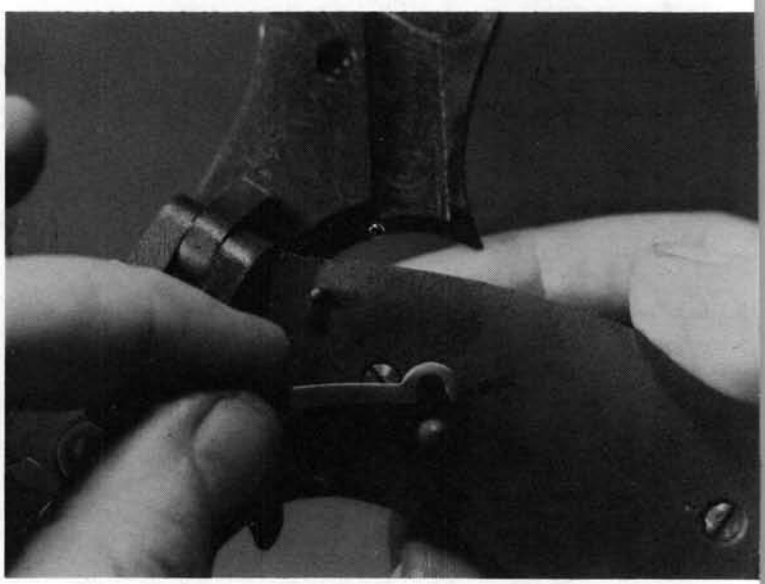


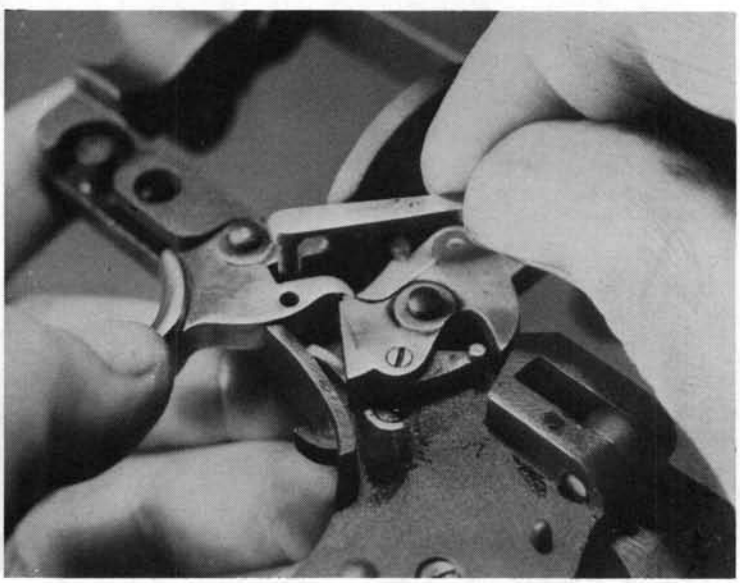
7. Move the top of the left grip out toward the left and when it has cleared its shelf in the frame, move it upward for removal.

8. Lift the lower end (the "V") of the mainspring outward, toward the left, to move its mounting stud from its hole in the frame. Then, release its tension by moving the spring upward. Disengage the spring hooks from the hammer stirrup, and remove the spring toward the left.

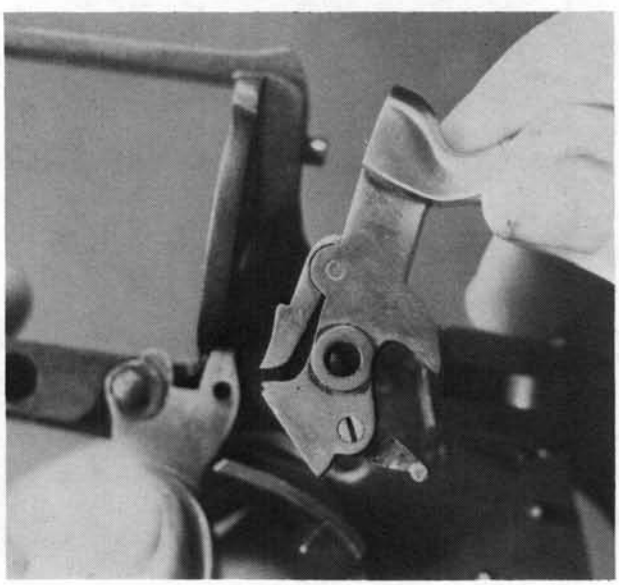


9. Move the rear hook of the rebound lever upward and toward the rear, off its stud in the frame, and remove the lever toward the rear.



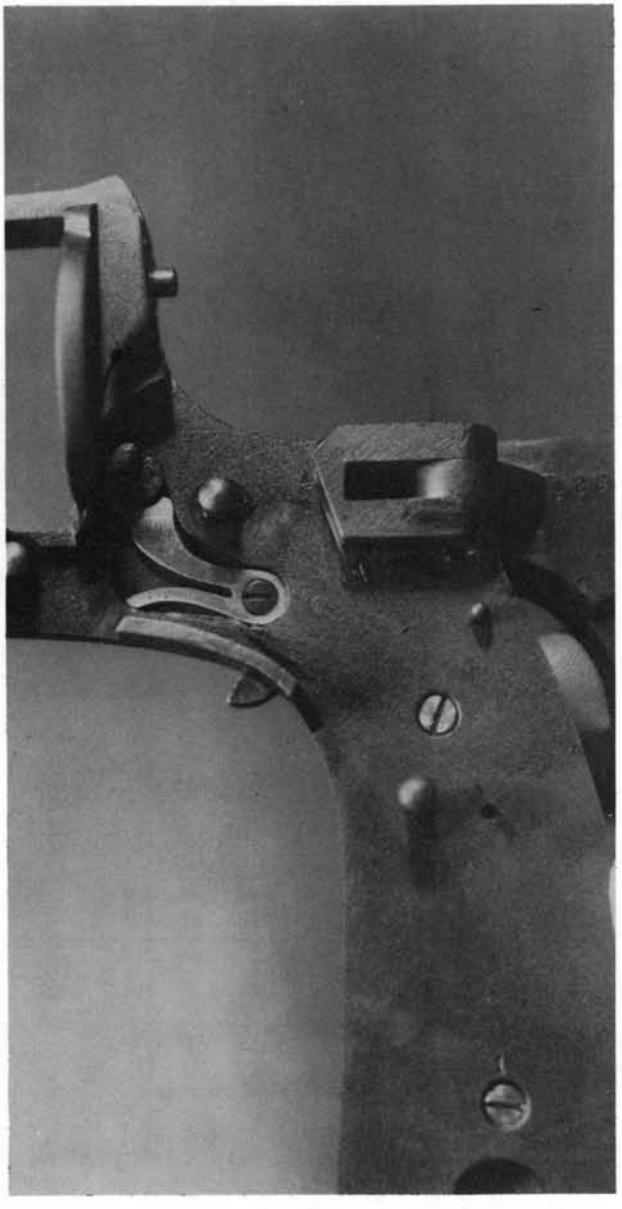


10. Remove the cylinder hand toward the left.

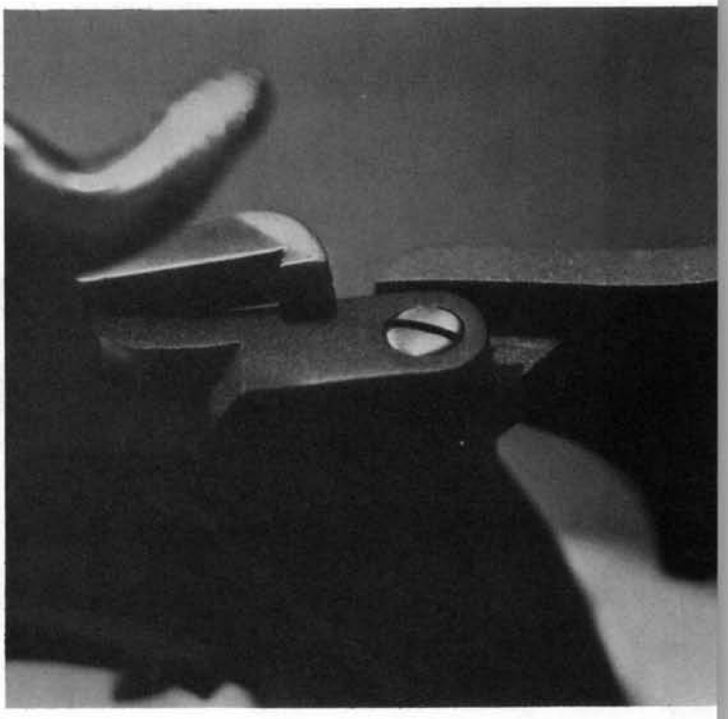


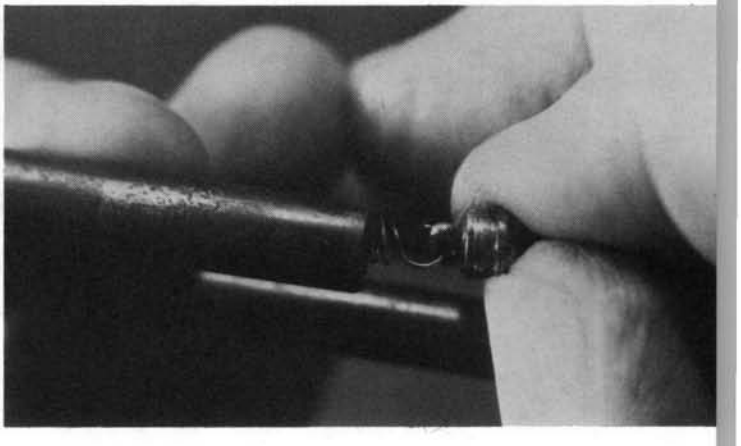
11. Remove the hammer toward the left. Taking out the small screw at the lower rear of the hammer will release the stirrup for removal. Removal of the cross-screw at the front of the hammer allows removal of the hammer lever and its spring. Remove the trigger toward the left.

12. The flat spring screw-mounted in a recess in the right wall of the frame both powers and retains the loading gate. Removal of the screw and spring will allow the gate to be taken off toward the right. The two screws inside the grip frame retain the right grip panel.



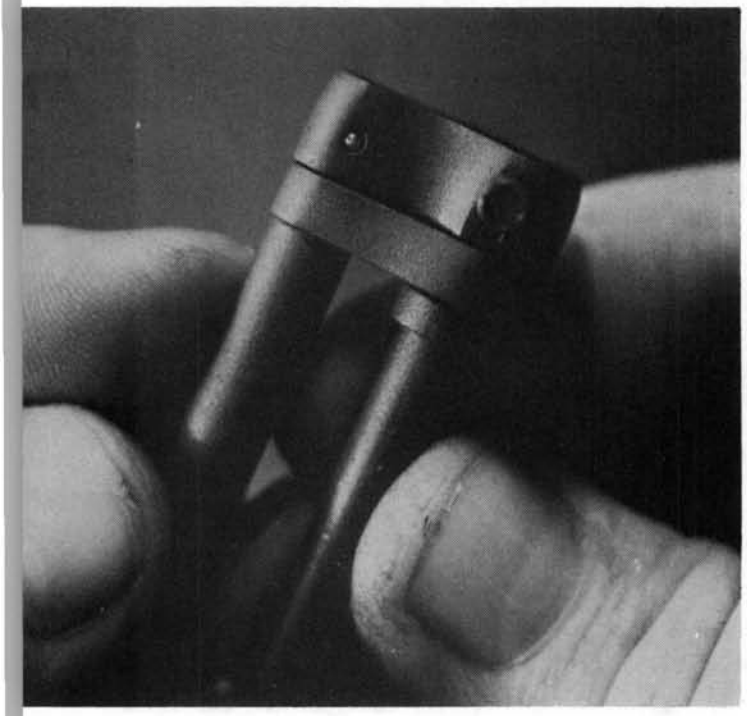
13. Backing out the vertical screw at the upper rear of the frame will allow removal of the sideplate.



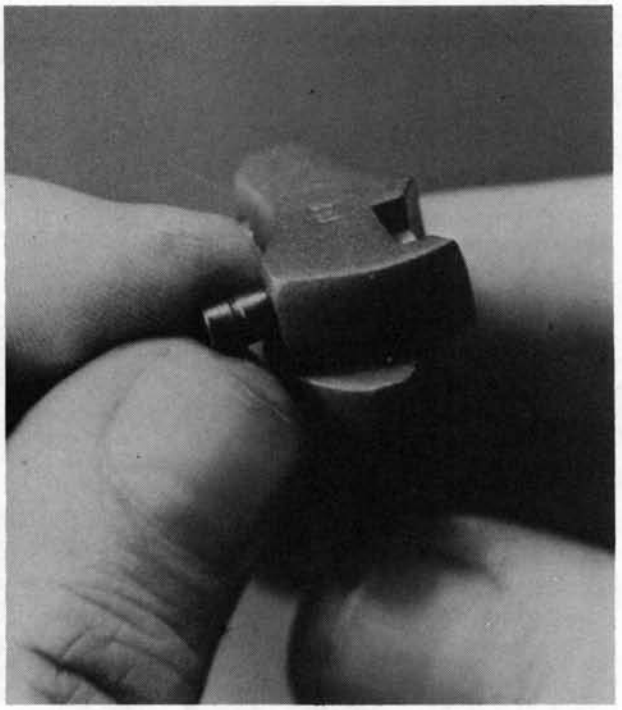


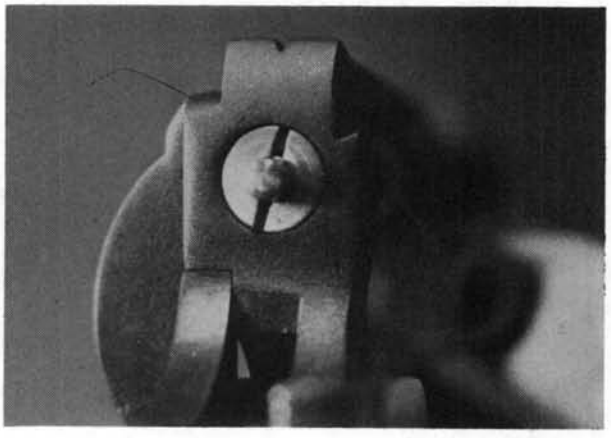
14. To detach the ejector endpiece, pull it outward, grip the end loop of the spring with sharp-nosed pliers, and unhook the endpiece from the loop.

15. The ejector can now be turned out of its closed position and removed from the shaft, toward the rear. Drifting out the small pin in the right lobe of the ejector mount will release the spring for removal, as this pin passes through the front loop of the spring.



16. When the latch knob is returned to the locked position, it can be unscrewed from the latch. The knob is taken off downward, and the latch and spring toward the top.





17. The firing pin housing has ample depth, and a twin-pointed tool is not required. Using a regular screwdriver of the proper dimensions, push the firing pin head in and unscrew the retaining plate. The plate, firing pin, and spring are removed toward the rear.

Reassembly Tips:

There are no special tricks and no particularly difficult points in the reassembly of the Rast & Gasser revolver. Just reverse the disassembly process slowly and carefully, and there should be no problems.

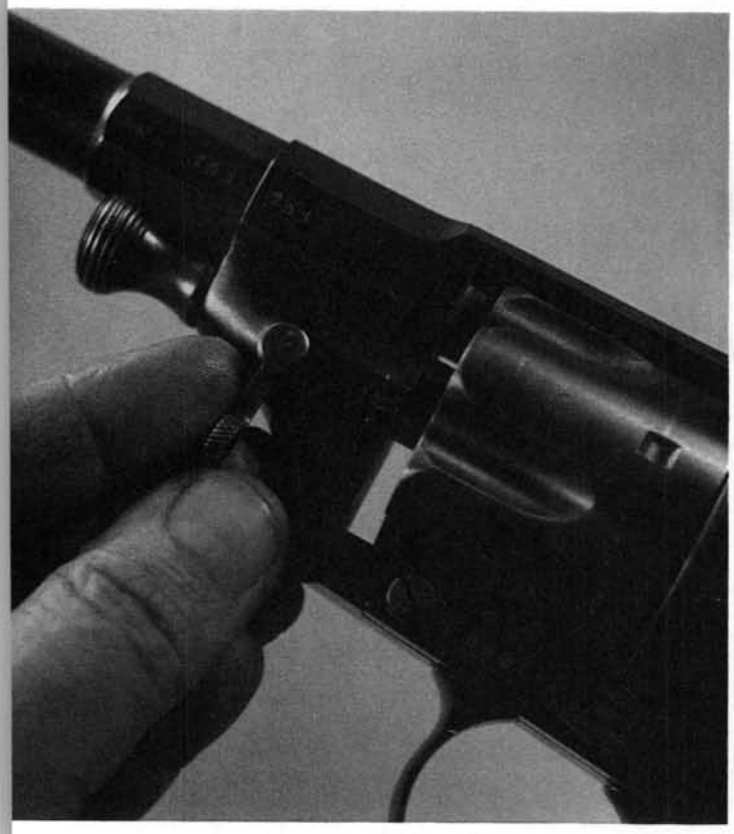
Reichs-Revolver Modell 1879/83

Data:	Reichs-Revolver Modell 1879/83
Origin:	Germany
Manufacturer:	Mauser, Oberndorf and other contractors
Cartridge:	10.6mm German Revolver
Cylinder capacity:	6 rounds
Overall length:	12.20 inches (1879), 10.25 inches (1883)
Barrel length:	7.20 inches (1879), 4.96 inches (1883)
Weight:	37 ounces (1879), 33 ounces (1883)

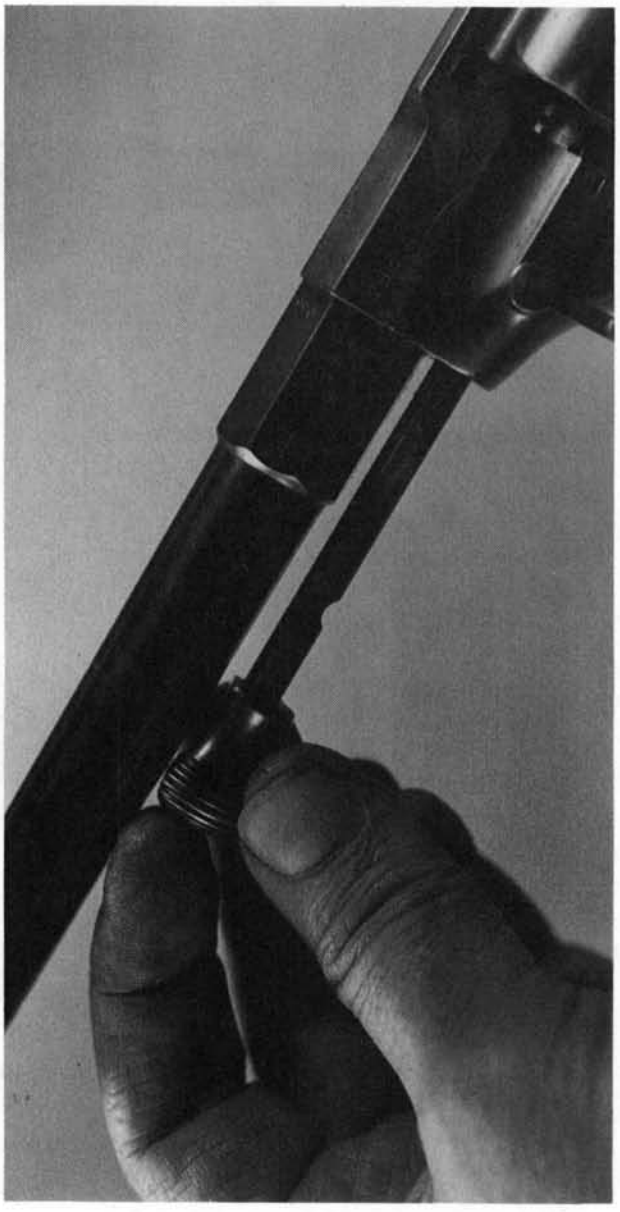
Originally adopted as the official German military sidearm in 1879, the Reichs-Revolver was slightly redesigned in 1883. It was used by all German forces until the adoption of the Luger by the German Navy in 1904, and the army in 1908. These revolvers are rarely seen now, as most of them are owned by collectors of military arms. The gun shown here is the earlier version, the Modell 1879.

Disassembly:

1. Set the hammer on the safety step, to free the cylinder, and turn the base pin latch downward to the position shown.

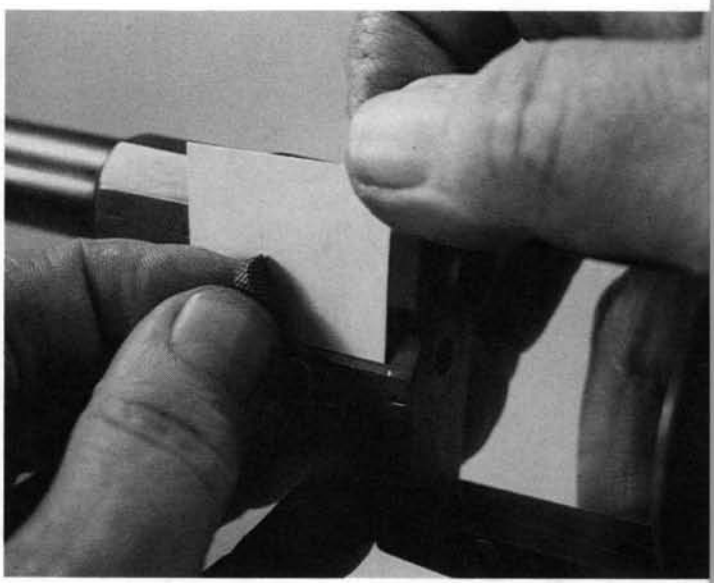


2. Remove the cylinder base pin toward the front.



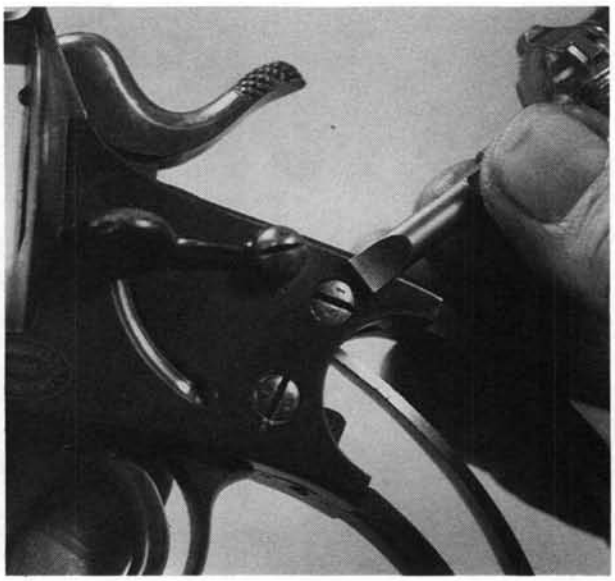
3. Open the loading gate, and remove the cylinder toward the right. A special two-point wrench can be used to unscrew and remove the cylinder arbor sleeve, but in normal takedown this is not taken out.

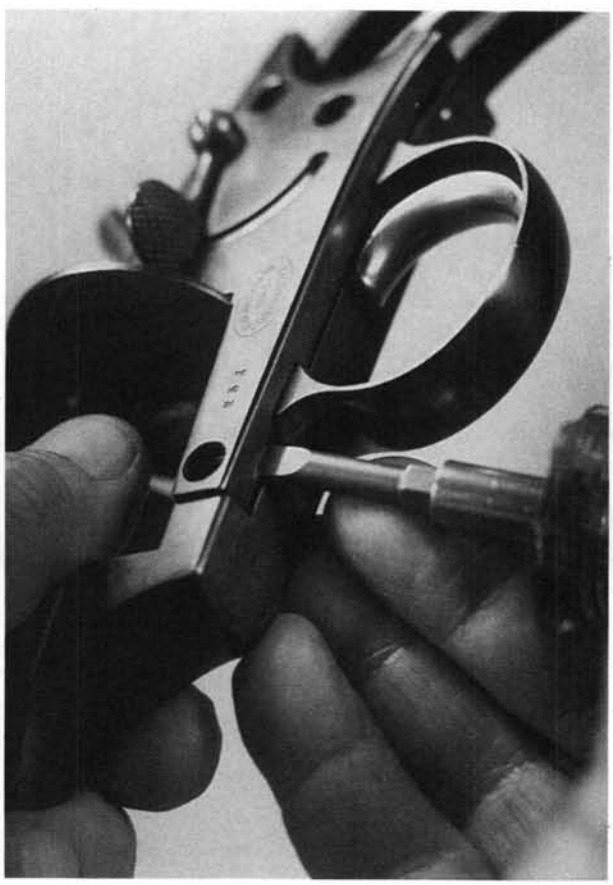
4. To remove the base pin latch, turn it upward, and unscrew it from the frame counterclockwise. To prevent marring of the frame on the first turn, use a piece of index card as a shield.



5. Remove the grip screw, and take off the grips.

6. Remove the three sideplate screws, two as shown, and one forward at the trigger guard. Note that they are of differing lengths, and keep them in order.

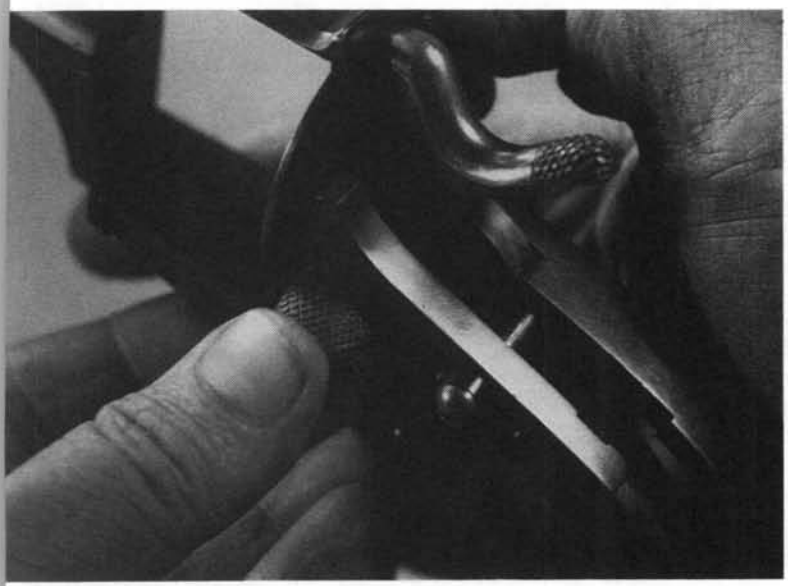




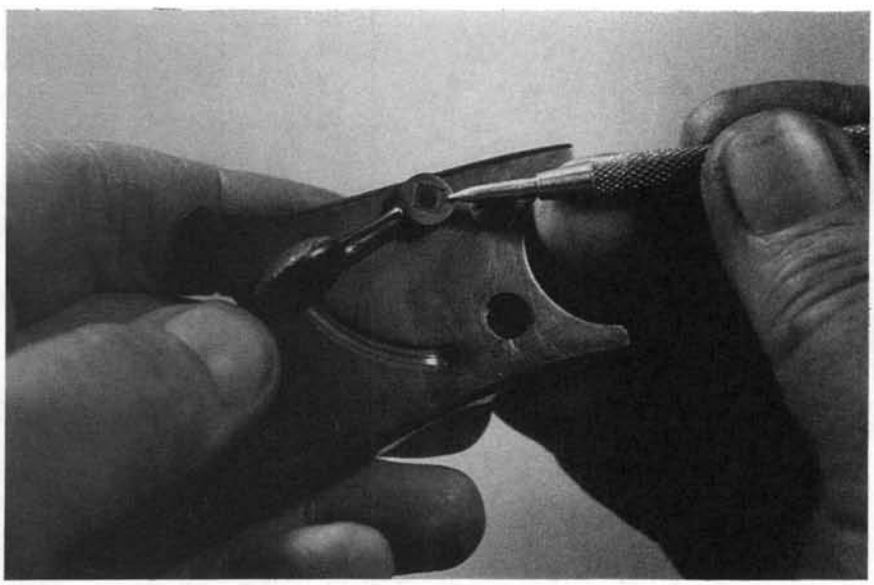
7. Insert a screwdriver in the slot provided at the lower edge of the sideplate, just behind the trigger guard, and pry the sideplate gently outward.

8. Note that there is also a slot provided at the front of the guard, and one at upper rear. Pry the sideplate equally, at all three points.

9. Remove the sideplate toward the left.

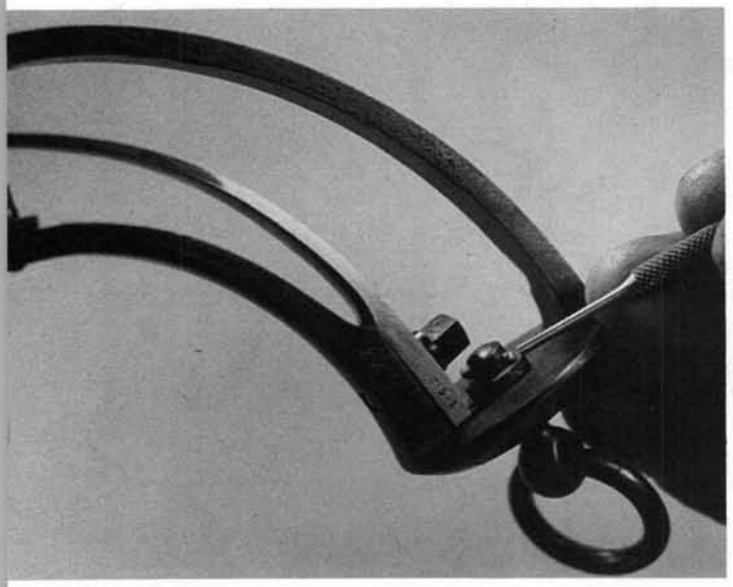


10. Remove the cap screw on the safety-lever.

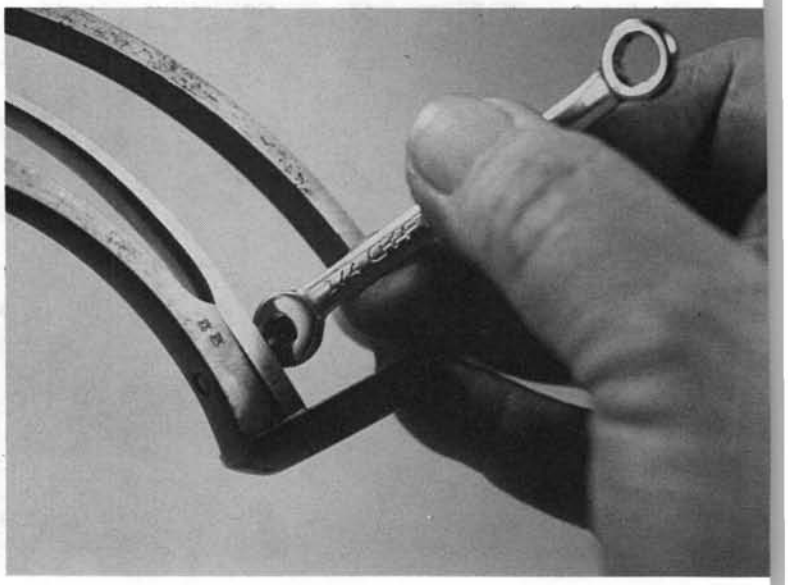


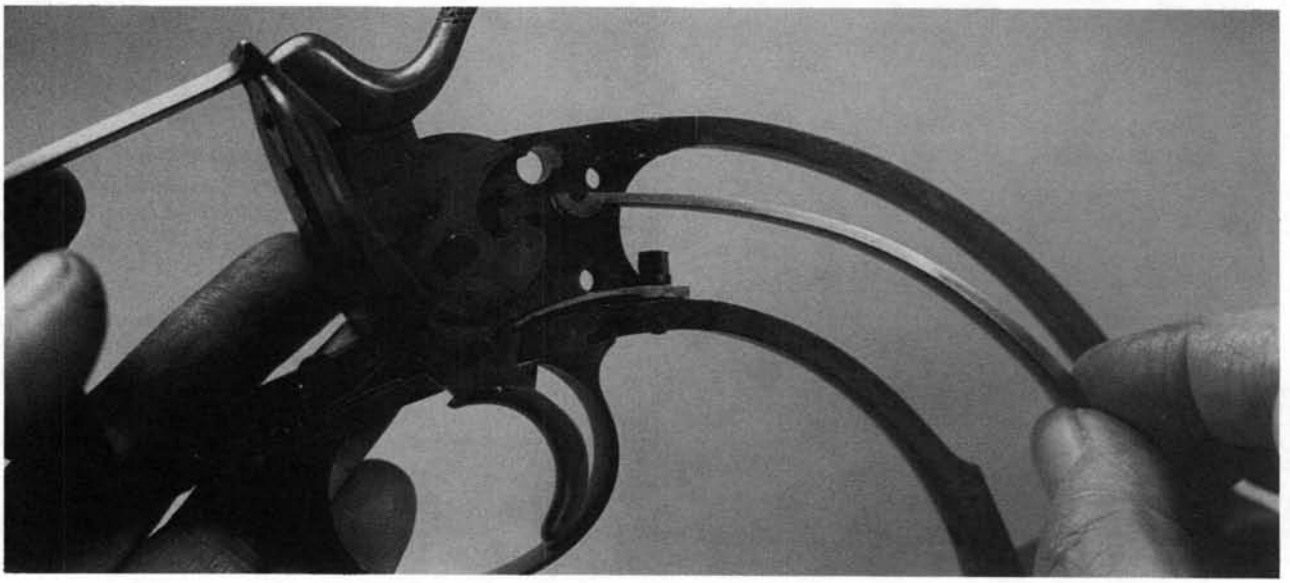
11. By inserting a small drift into the screw hole, and supporting the sideplate on the back, the safety shaft can be driven out of the lever. In normal takedown, it is best left in place. If this unit is taken apart, its orientation must be carefully noted for proper replacement.

12. Drive out the cross-pin in the lanyard ring post, and take off the post and ring downward. The internal ring/spacer will be freed for removal.



13. With a wrench of suitable size, unscrew the hammer spring retainer.





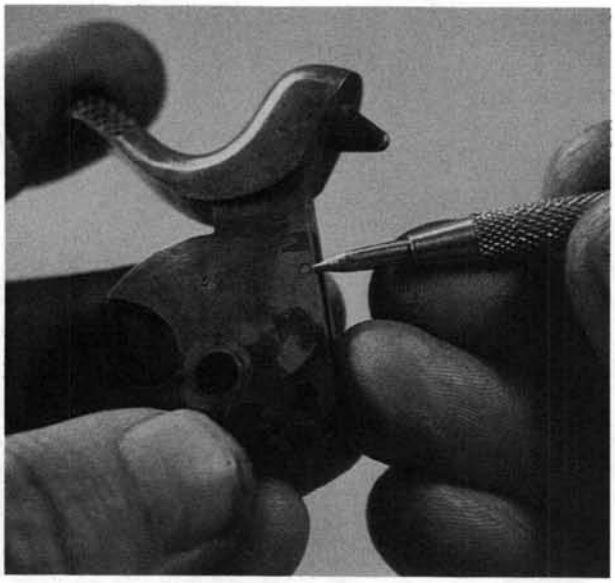
14. Disengage the hooks from the stirrup on the hammer, and remove the spring toward the left.

15. Tip the cylinder hand over to the rear.

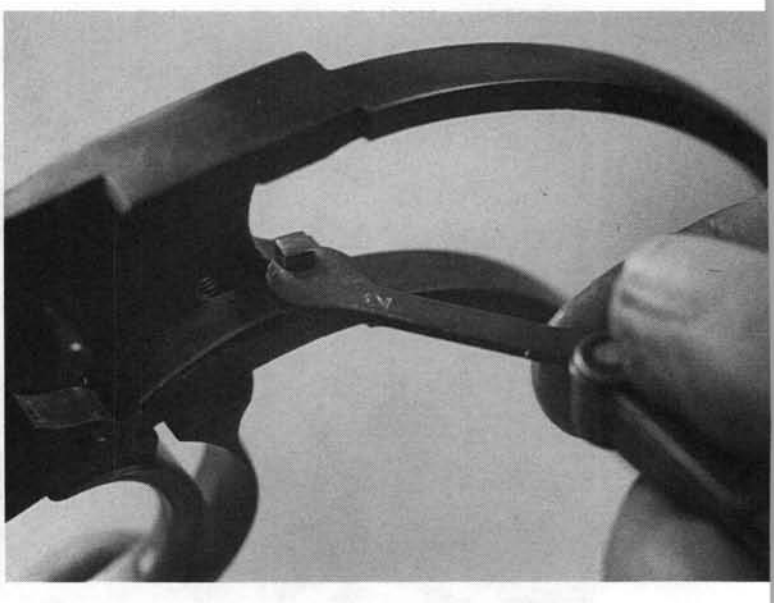
16. Depress the trigger, and remove the hammer toward the left.

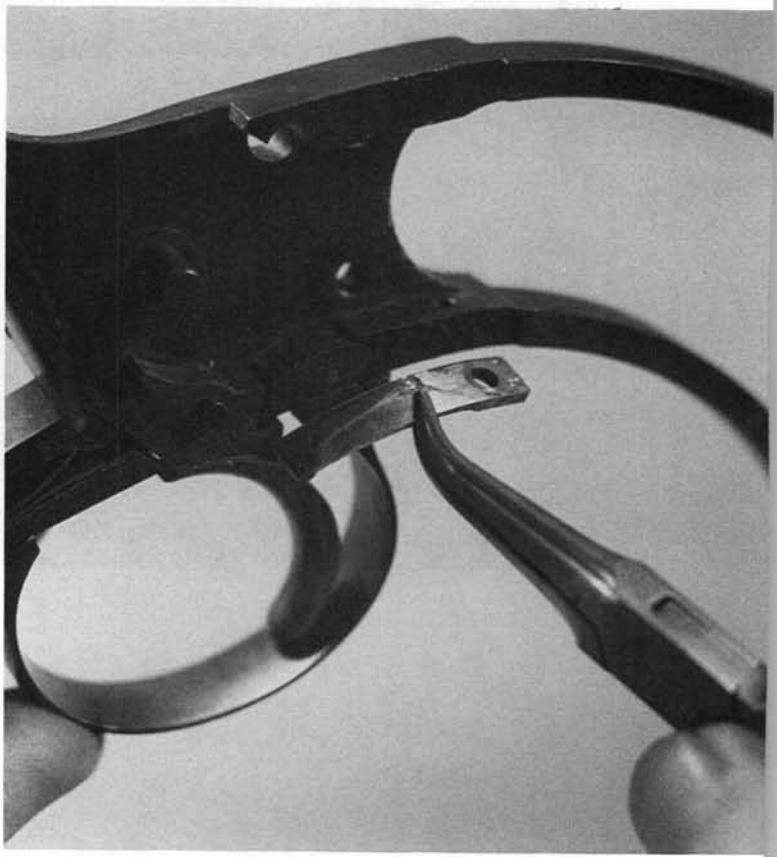
17. Turn the cylinder hand to the position shown, and remove it from the hammer.

18. The cylinder hand spring is retained in the hammer by a cross-pin. If removal is not necessary for repair, this assembly is best left in place. This also applies to the cross-pin that retains the hammer stirrup.



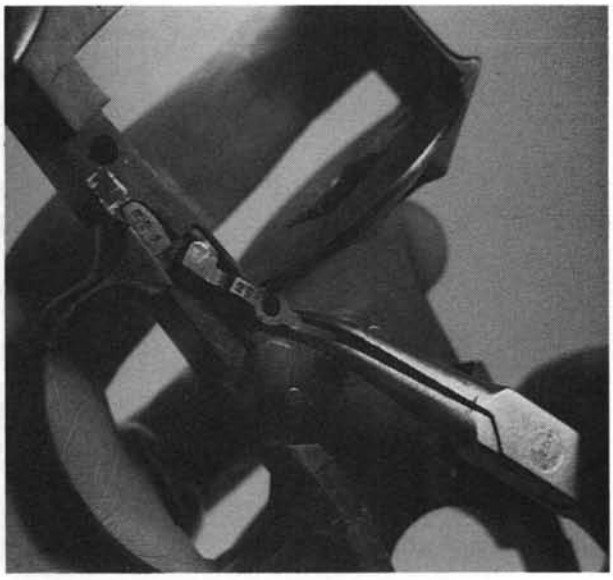
19. With a wrench of the proper size, unscrew the trigger spring retainer.

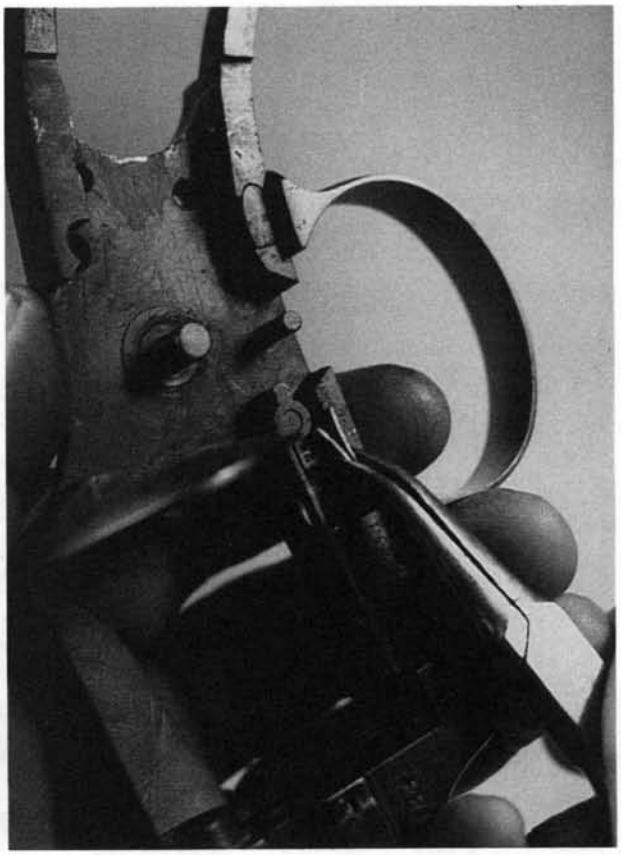




20. After the retainer is taken out, remove the trigger spring from the frame.

21. Remove the trigger toward the left.

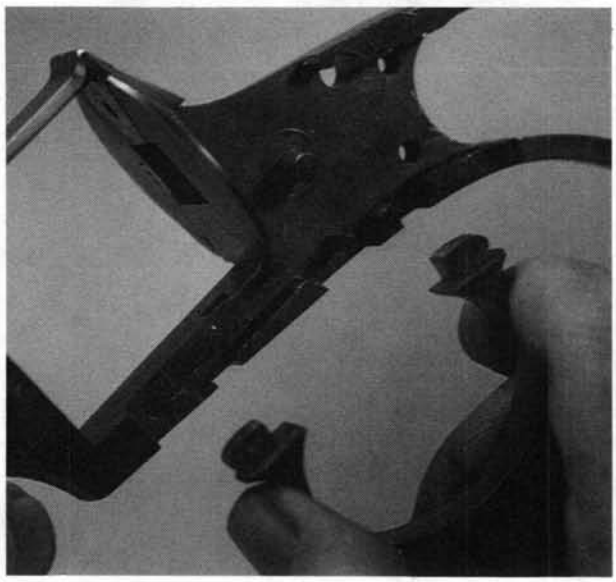




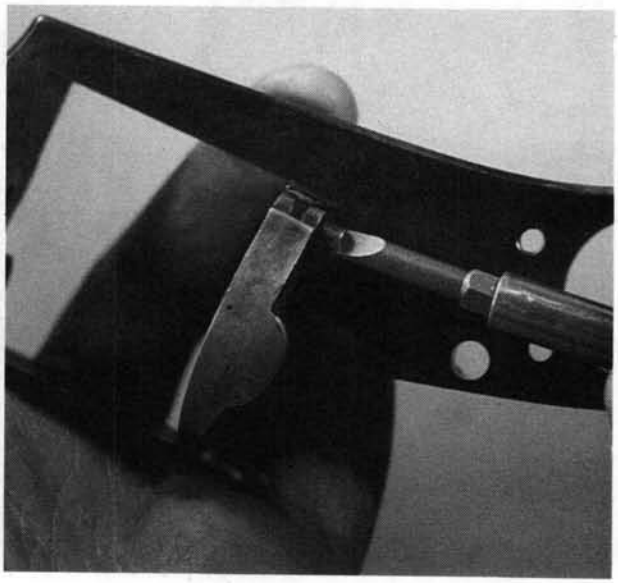
22. Carefully compress the cylinder stop spring with slim pliers, and remove it toward the left. The spring is under tension, so control it.

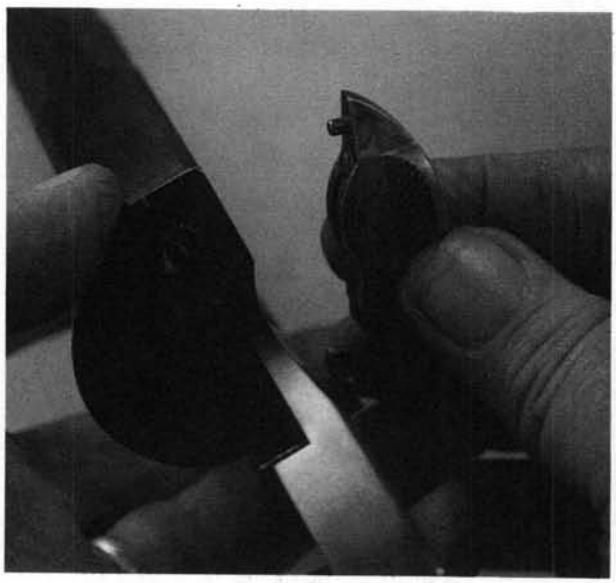
23. Tip the cylinder stop to its lowest position, and remove it toward the left.

24. Squeeze the trigger guard together slightly, and remove it toward the left. If it is very tight, it can be gently tapped leftward with a nylon hammer.

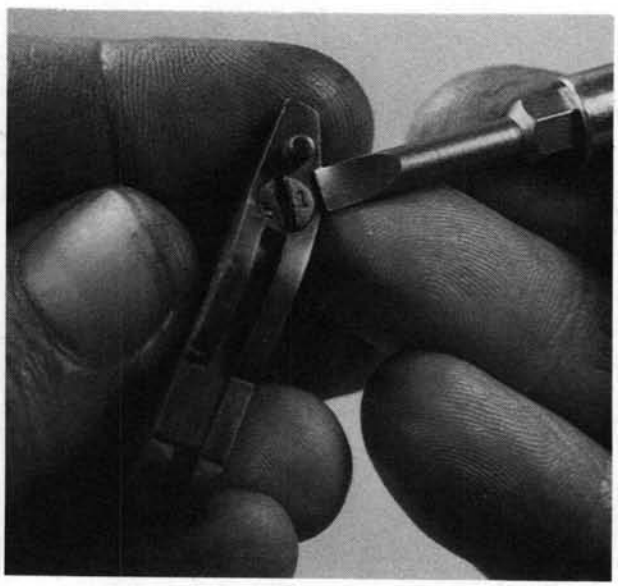


25. Remove the loading gate hinge screw.





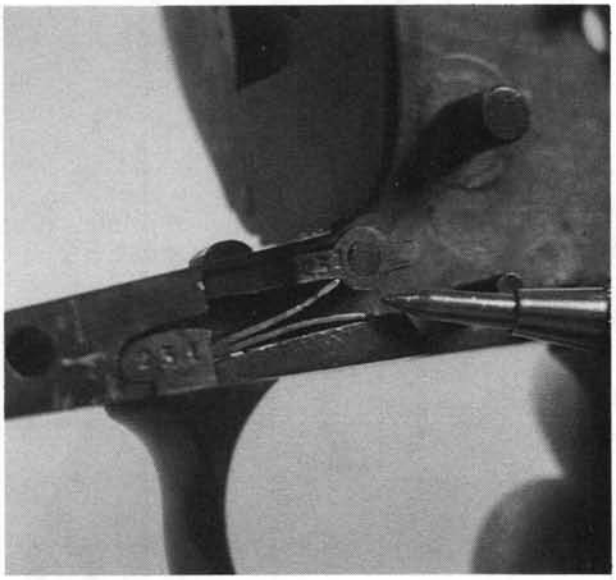
26. Open the loading gate slightly, and remove it upward.



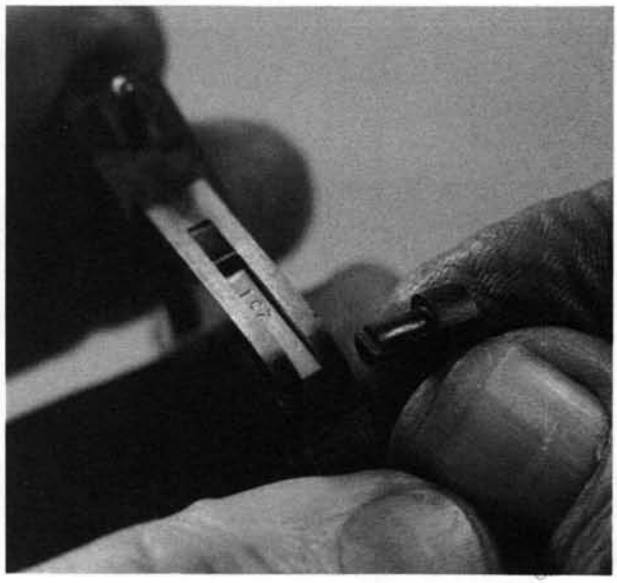
27. Removing the screw on the inside of the loading gate will allow removal of the loading gate spring. In normal takedown, this is best left in place.

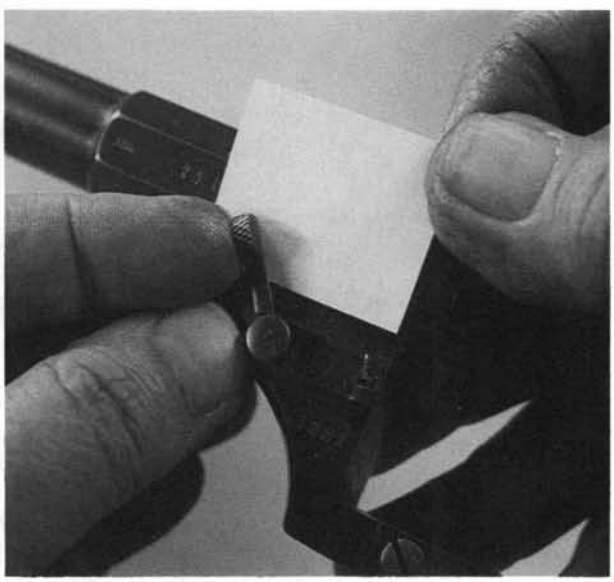
Reassembly Tips:

1. When replacing the cylinder stop spring, remember that its shorter arm goes at the top, to bear on the cylinder stop.



2. When reinstalling the cylinder hand in the hammer, note that the end of the hand cross-shaft has a shelf-cut, allowing the hand to be turned after insertion to compress the spring.





3. When replacing the base pin latch, remember to use the card shield on the final turn, to protect the frame from marring.

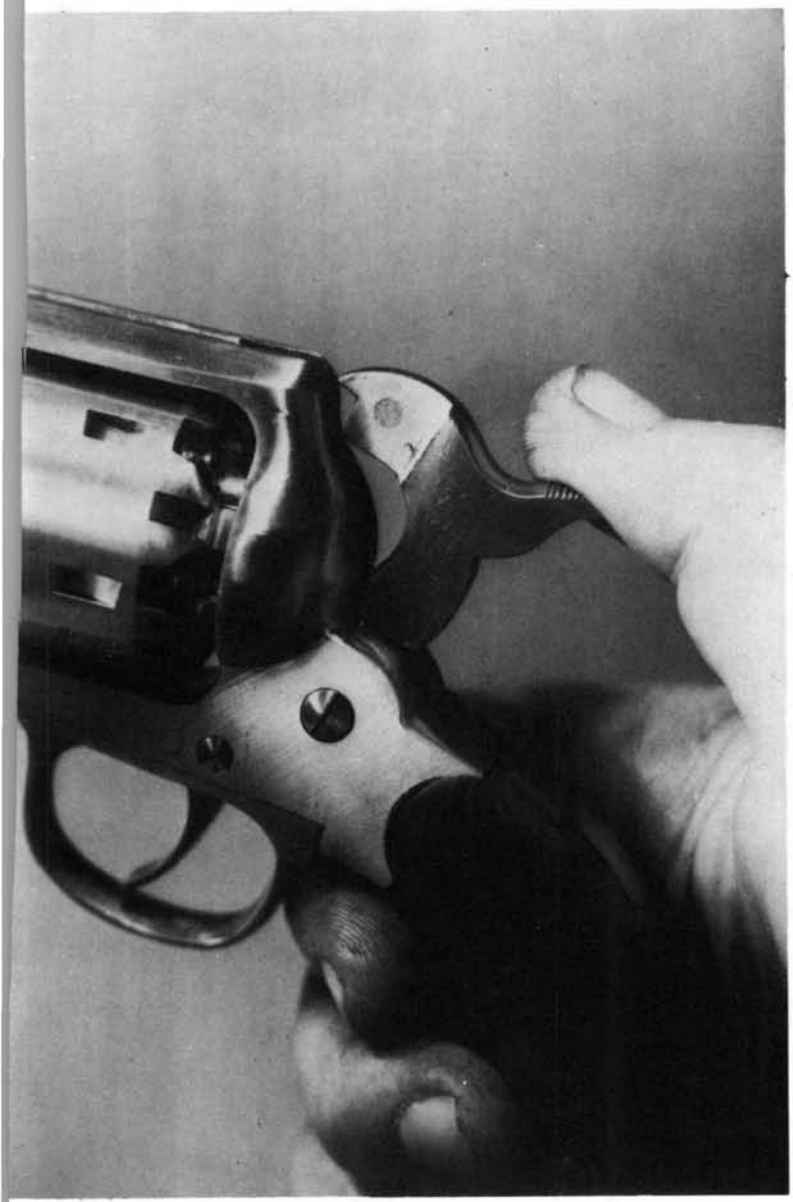
Remington Model 1863 Army Replica

Data:	Remington Model 1863 Army Replica
Origin:	Italy and Spain
Manufacturer:	Several European factories
Caliber:	44 caliber, percussion muzzleloader
Cylinder capacity:	6 shots
Overall length:	13 1/2 inches
Barrel length:	8 inches
Weight:	40 ounces

The original Remington revolver of 1858 was revised in 1863 to become the "New Army" model, and most of today's shooting reproductions follow this pattern. The modern versions closely duplicate the original design, and the instructions which follow can also be used with the antique originals. Generally speaking, the modern guns are made of better materials than the originals. This particular reproduction model has also been offered in stainless steel. The same basic model has been imported by many firms over the years, such as Dixie, Navy Arms, EMF, Euroarms, CVA, and others.

Disassembly:

1. Set the hammer on the loading step, the middle notch, to free the cylinder.



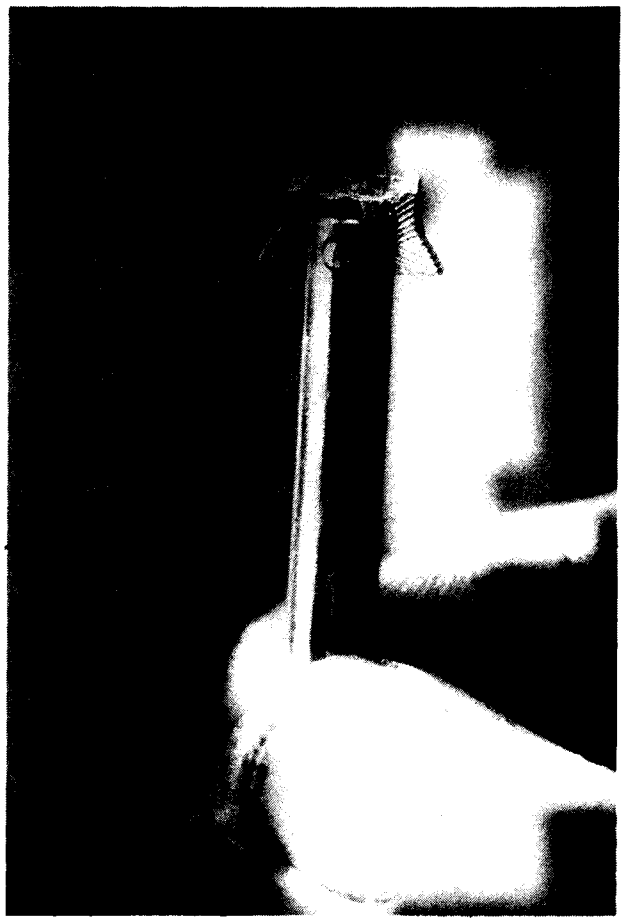
2. Swing the loading lever down and pull the cylinder base pin forward until it stops.

3. Remove the cylinder toward the right.

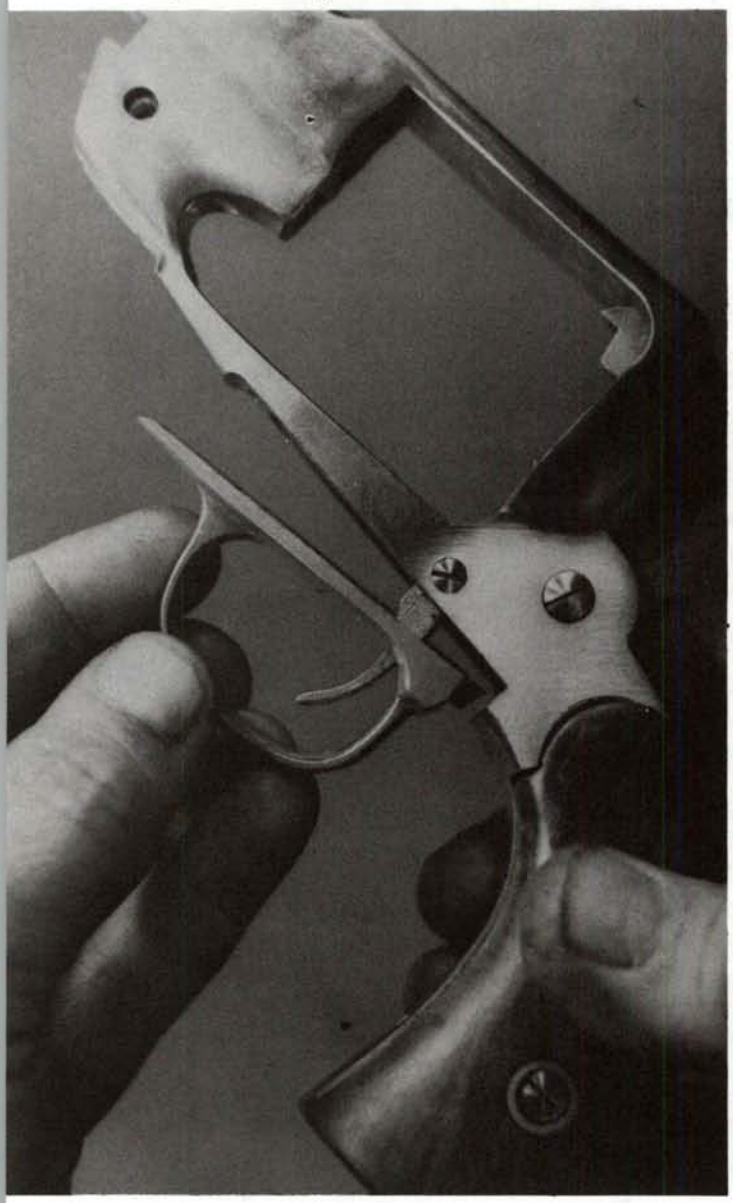
4. Remove the cross-screw at the front of the frame and take out the loading lever assembly toward the front. Drifting out the cross-pins will allow separation of the link and plunger from the lever.

5. Remove the cylinder base pin toward the front.

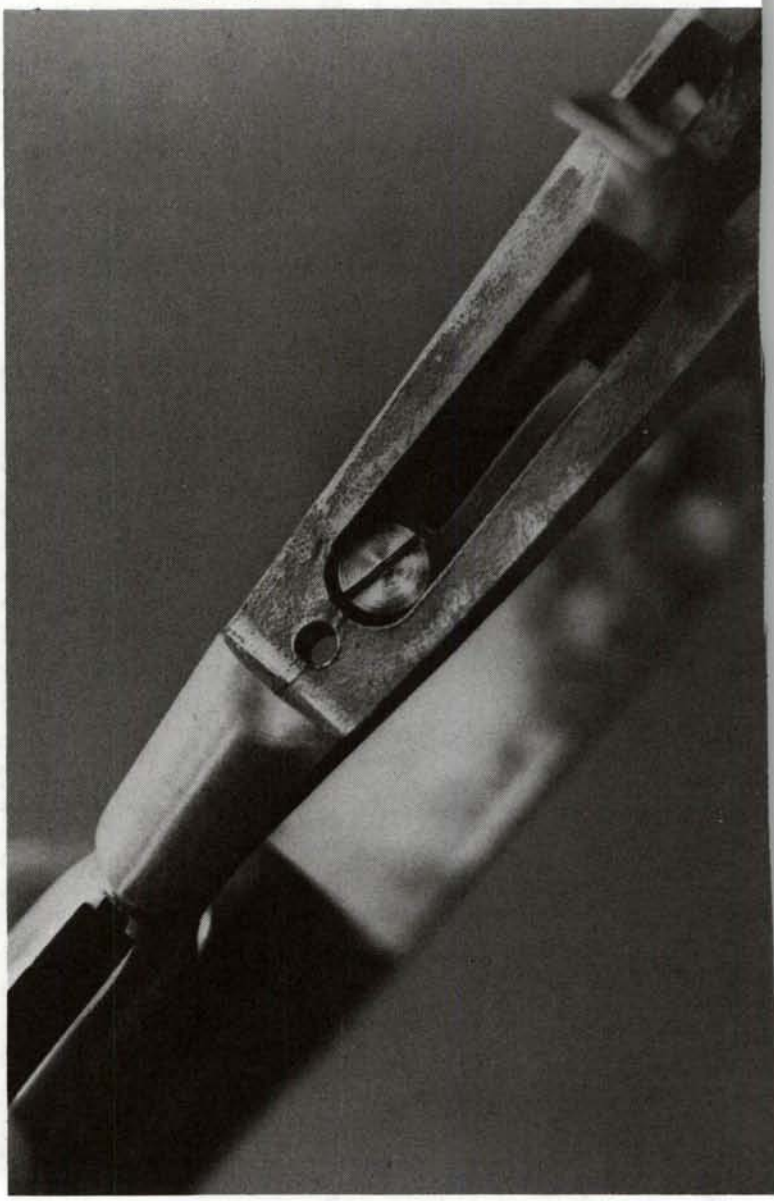
6. Drifting out the vertical pin at the forward end of the loading lever will allow removal of the lever latch and its spring toward the front.



7. The trigger guard is retained by a single screw at the front. Remove the trigger guard screw and move the guard forward, then down and off.



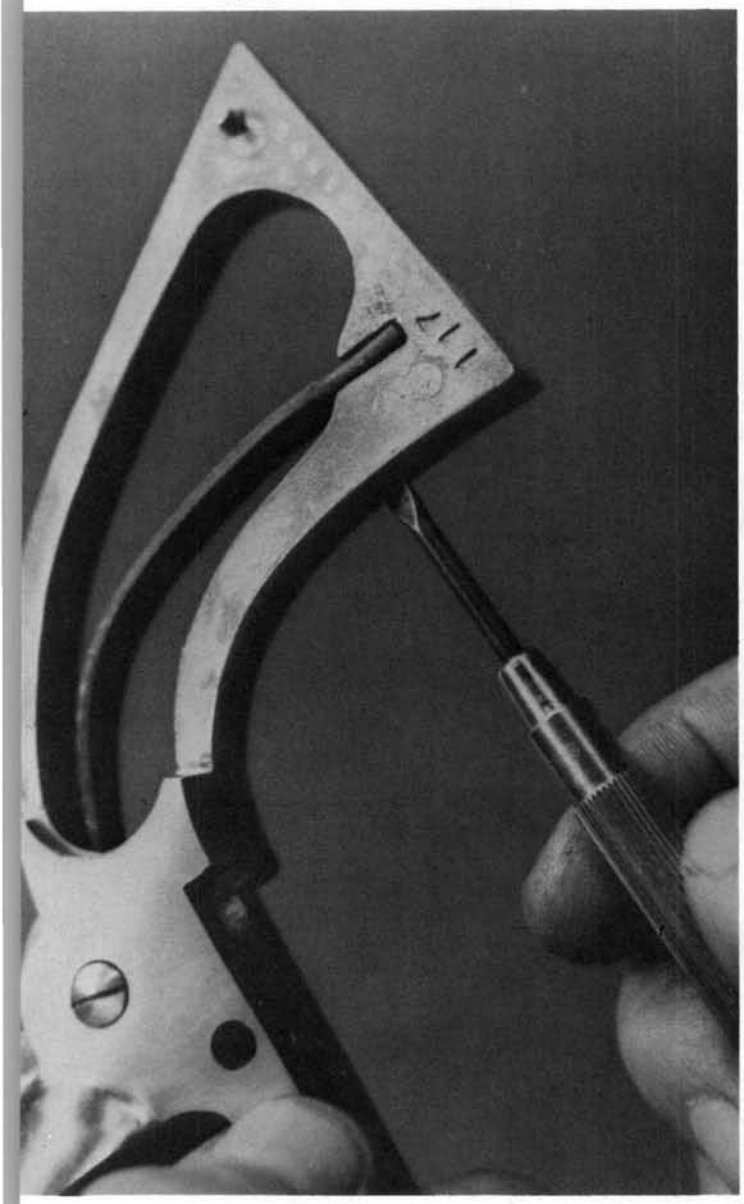
8. Remove the large screw at the front of the frame recess and take out the combination trigger and cylinder stop spring.



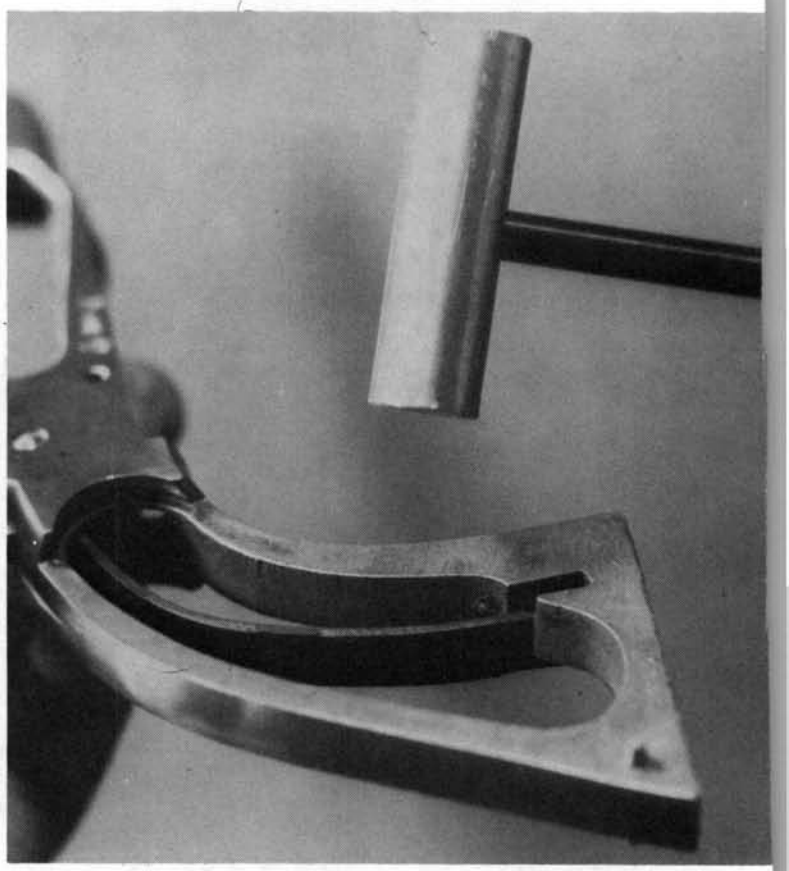
9. Take out the trigger screw and remove the trigger downward.

10. Removal of the trigger screw will also release the cylinder stop for removal from the bottom of the frame.

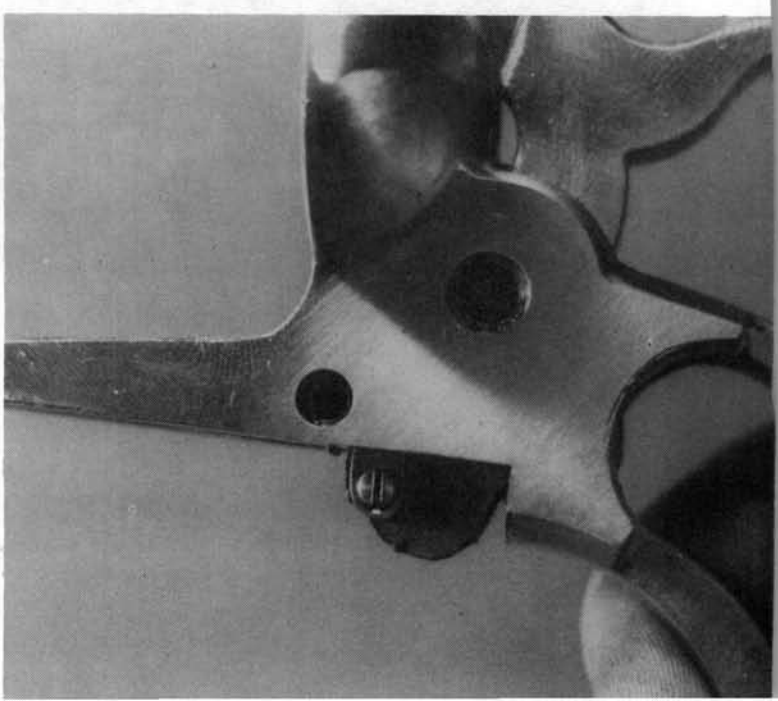
11. Back out or remove the hammer spring tension screw.



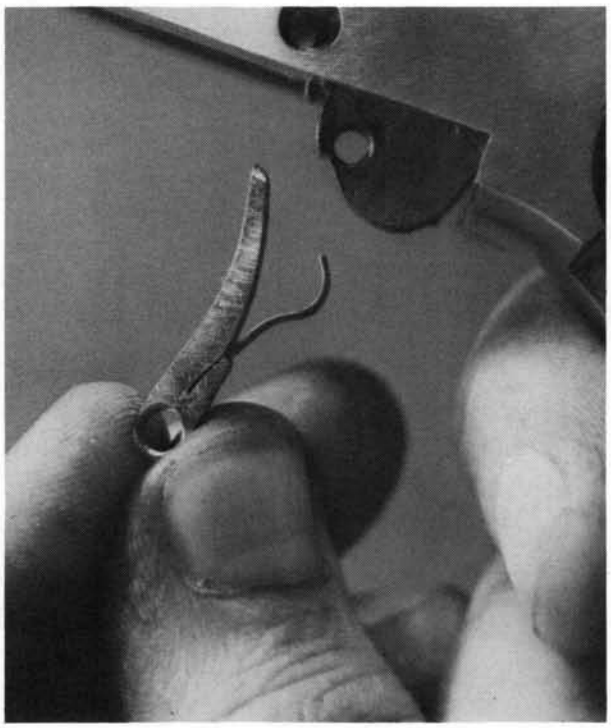
12. Use a small brass hammer, or a hammer and brass drift, to move the hammer spring out of its slot at the bottom of the grip frame, and remove the spring.



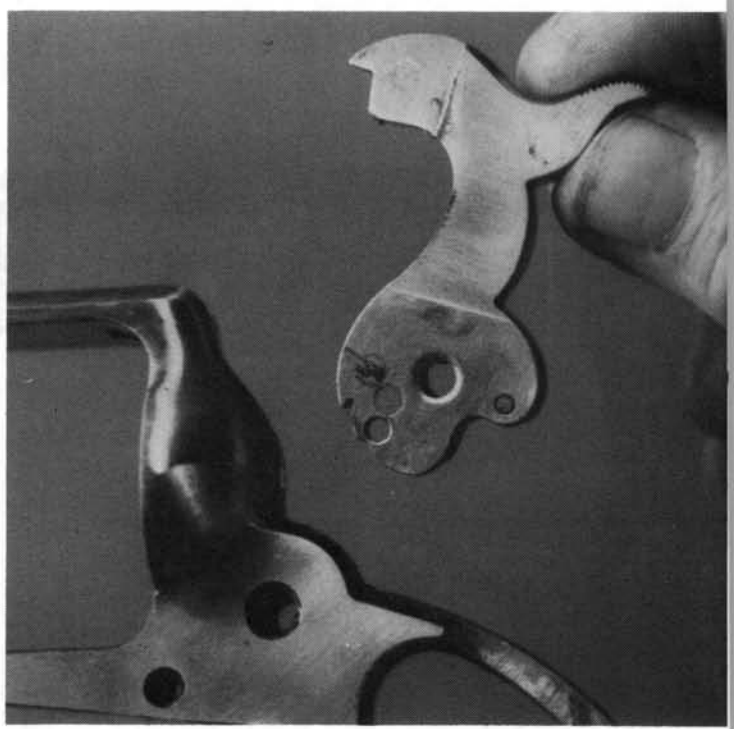
13. Take out the hammer screw and move the hammer down until the cylinder hand screw is visible at the lower edge of the frame.



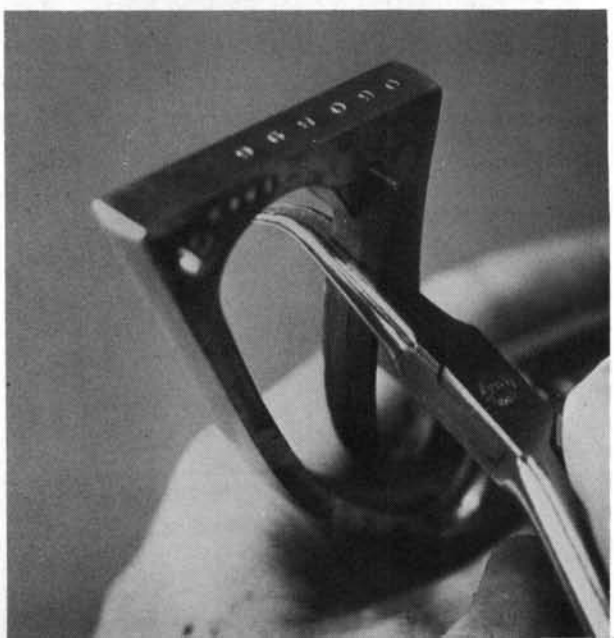
14. Remove the cylinder hand screw, and take out the hand downward. The hand spring is staked into a slot in the hand and removal is not advisable except for repair.



15. Remove the hammer from the top of the frame.



Reassembly Tips:



1. When replacing the hammer spring, grip it firmly with smooth-jawed pliers, engage the upper end with the roller at the lower rear of the hammer and flex the spring slightly to align its lower end with the slot in the grip frame. When it has partially entered the slot, use a small brass hammer to tap it into place.

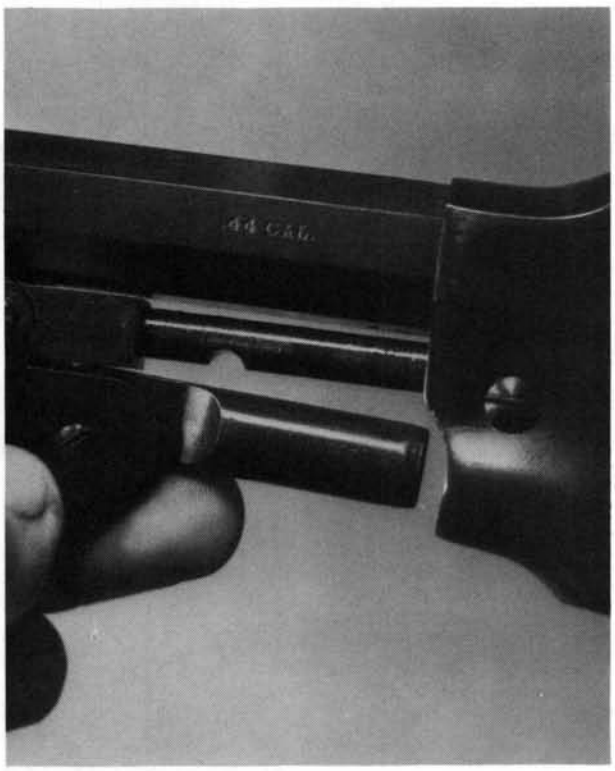
Rogers & Spencer Replica

Data:	Rogers & Spencer Replica
Origin:	Italy
Manufacturer:	Euroarms, Brescia
Cartridge:	44 caliber, percussion muzzleloader
Cylinder capacity:	6 shots
Overall length:	13 3/4 inches
Barrel length:	7 1/2 inches
Weight:	47 ounces

In 1863, the U.S. Government contracted with Rogers & Spencer of Utica, New York, for 5000 revolvers to be used by the Army during the Civil War. The guns were made, but they were completed too late to be issued during that conflict. They were stored, and later sold on the commercial market. The Rogers & Spencer is considered by many to be the best of the percussion revolvers, and mechanically it is quite different from its contemporaries. The modern Euroarms reproduction closely follows the original pattern.

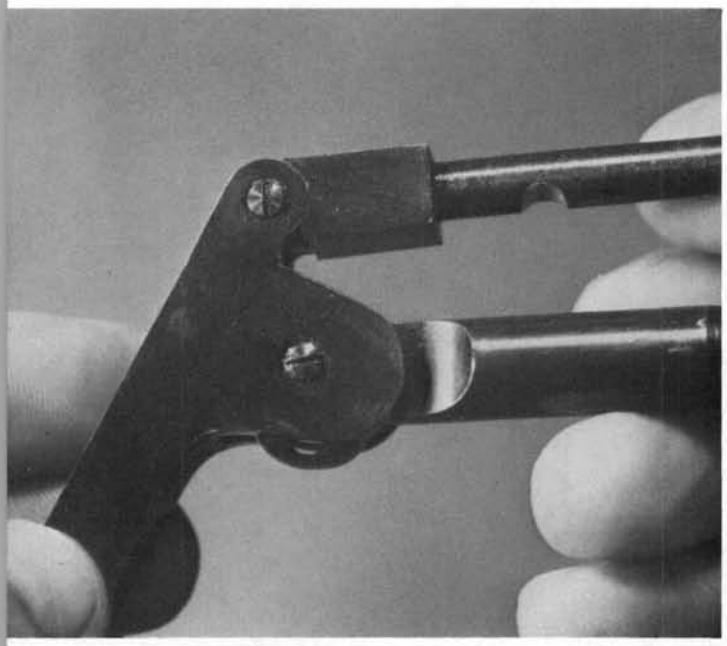
Disassembly:

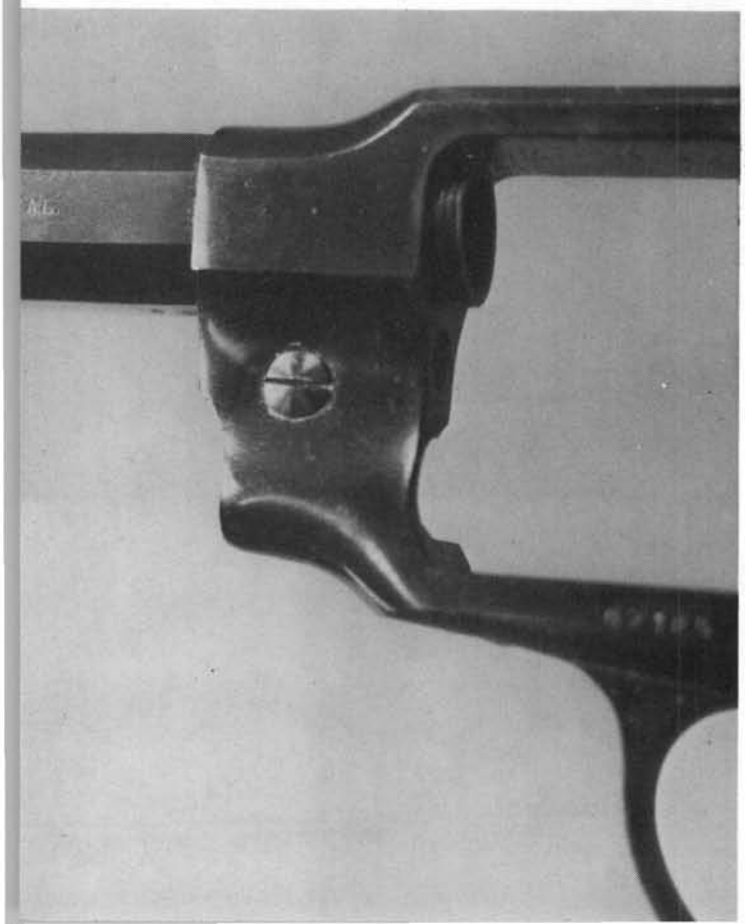
1. Set the hammer on the loading step, the middle notch, to free the cylinder. The cylinder base pin latch is controlled by a large screw on the left side of the frame, just forward of the cylinder. Turn the screw head while exerting slight forward pressure on the unlatched loading lever until the cut in the latch aligns with the base pin, and remove the base pin assembly toward the front.



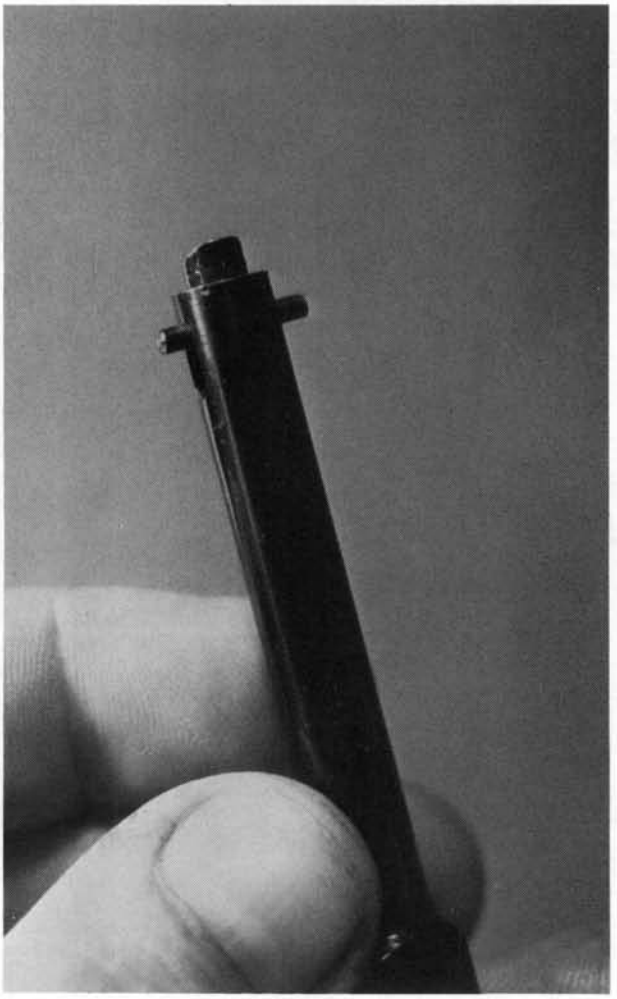
2. Remove the cylinder toward the right.

3. Removal of the upper screw will allow separation of the lever and the base pin. Taking out the lower screw will free the rammer for removal.



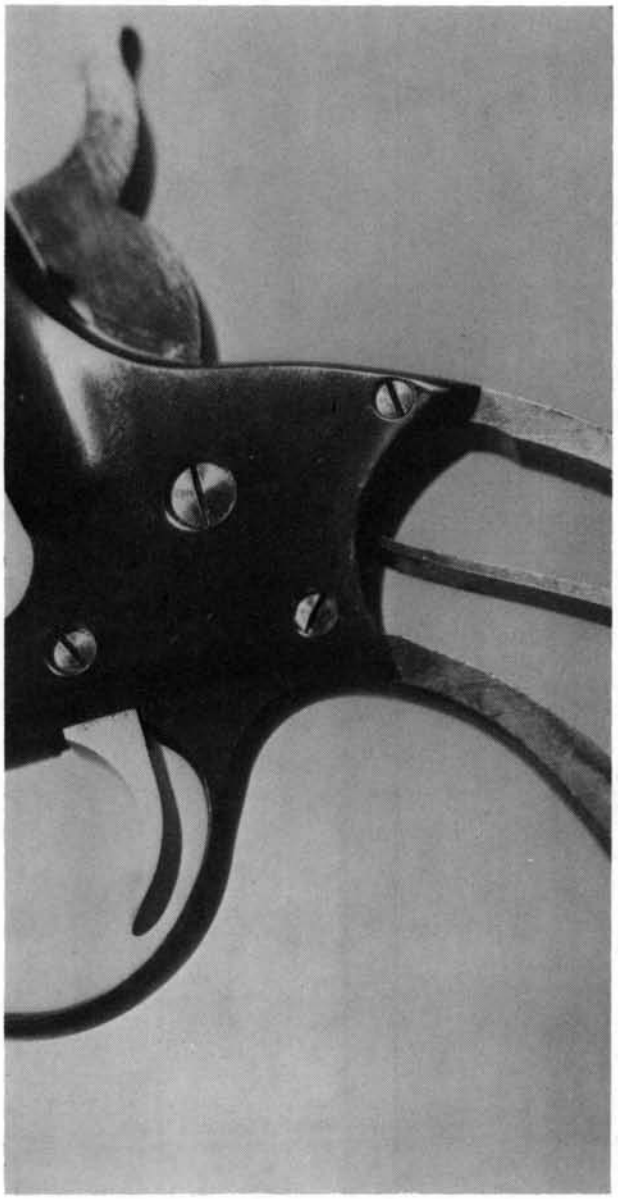


4. Drifting out the cross-pin at the end of the loading lever will allow removal of the latch plunger and spring.

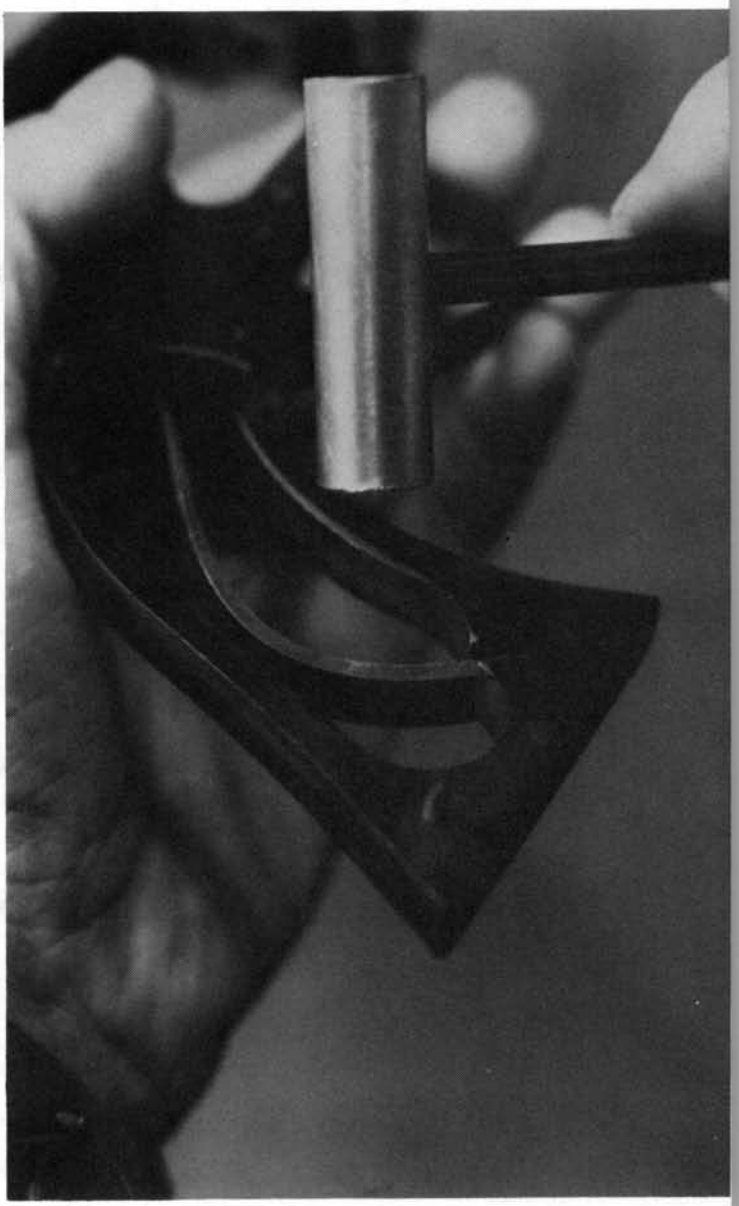


5. The base pin retainer is secured by a screw on the right side, and two screwdrivers are required for removal—one to immobilize the retainer, the other to back out the screw. The screw is removed toward the right, the retainer toward the left.

6. The grip frame/trigger guard unit is retained by two screws at the rear of the frame, and one on the underside, forward of the guard. Before these are taken out, the hammer spring must be removed.

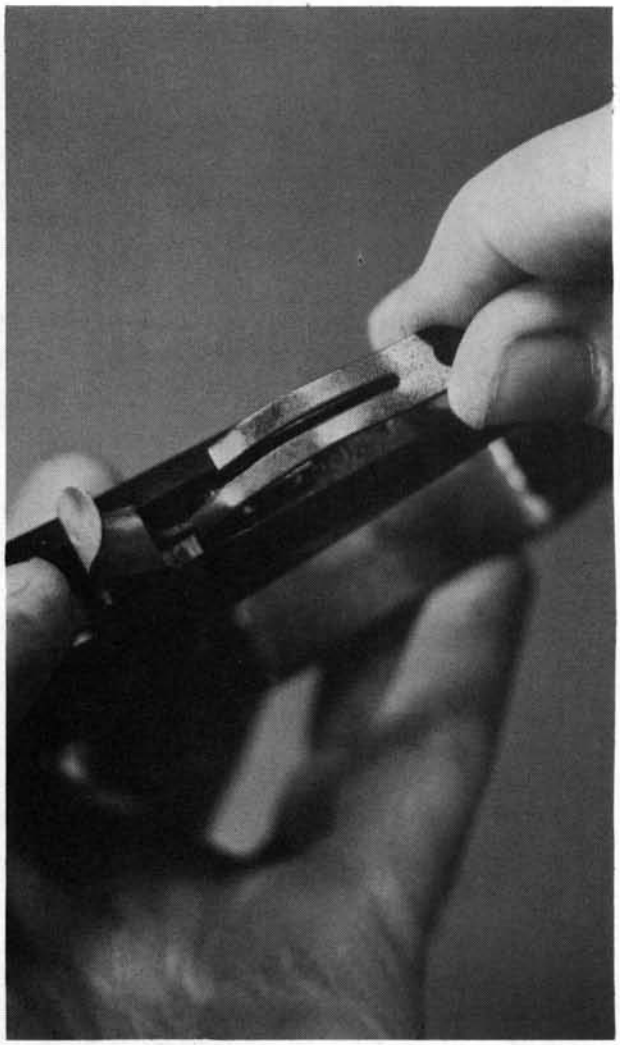


7. Use a small brass hammer, or a hammer and brass drift punch, to drive the hammer spring out of its recess in the grip frame. Strike the hammer spring as near as possible to its recess in the frame during removal.

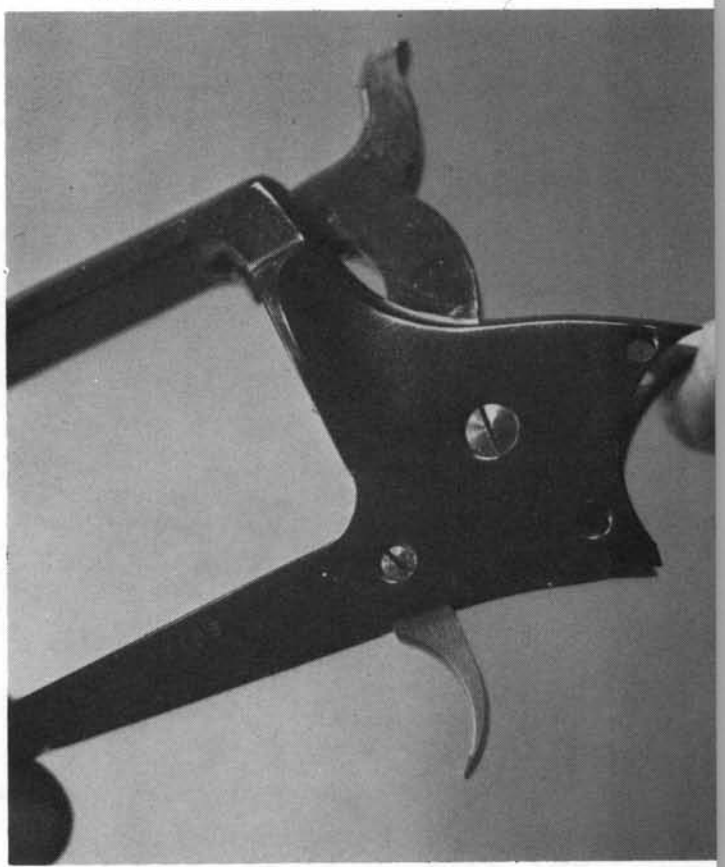


8. Remove the screw on the underside of the frame, just forward of the trigger guard. Take out the two screws at the rear of the frame, and remove the trigger guard/grip frame unit downward.

9. The combination spring which powers the trigger and cylinder stop will be released by removal of the guard screw. Remove the spring from the frame recess.



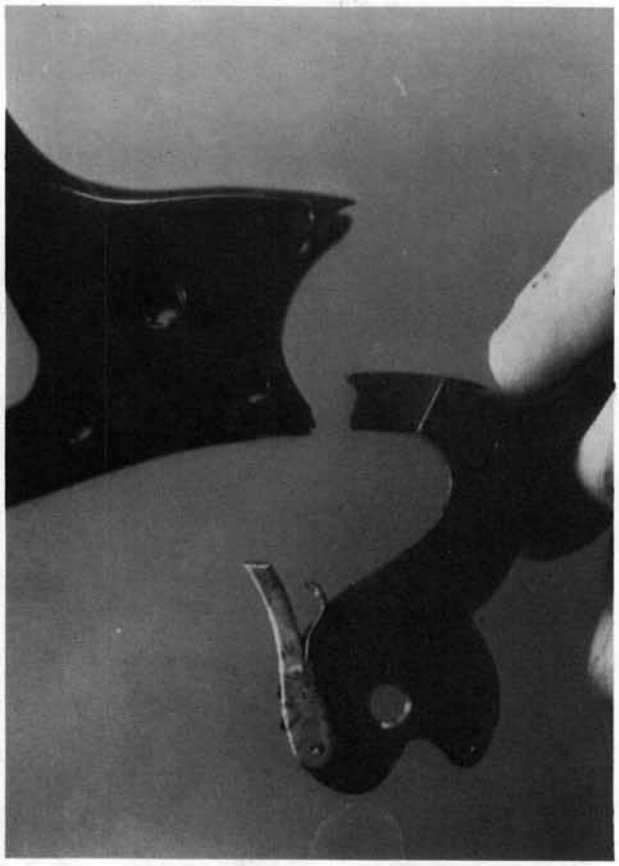
10. The smaller cross-screw in the frame retains the trigger and cylinder stop, and the larger screw is the hammer pivot.



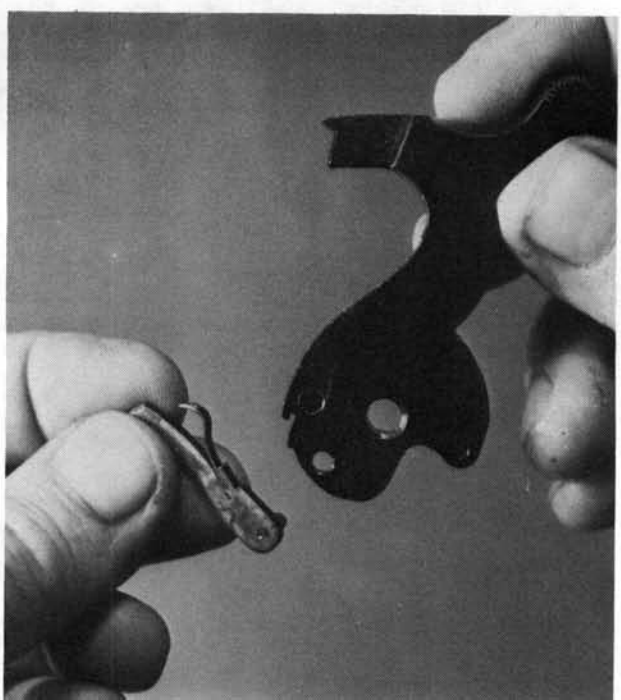
11. Take out the smaller screw, and remove the trigger from the bottom of the frame.

12. Retained by the same screw, the cylinder stop is also freed for removal from the bottom of the frame.

13. Take out the larger screw and move the hammer and cylinder hand assembly down and out of the frame.

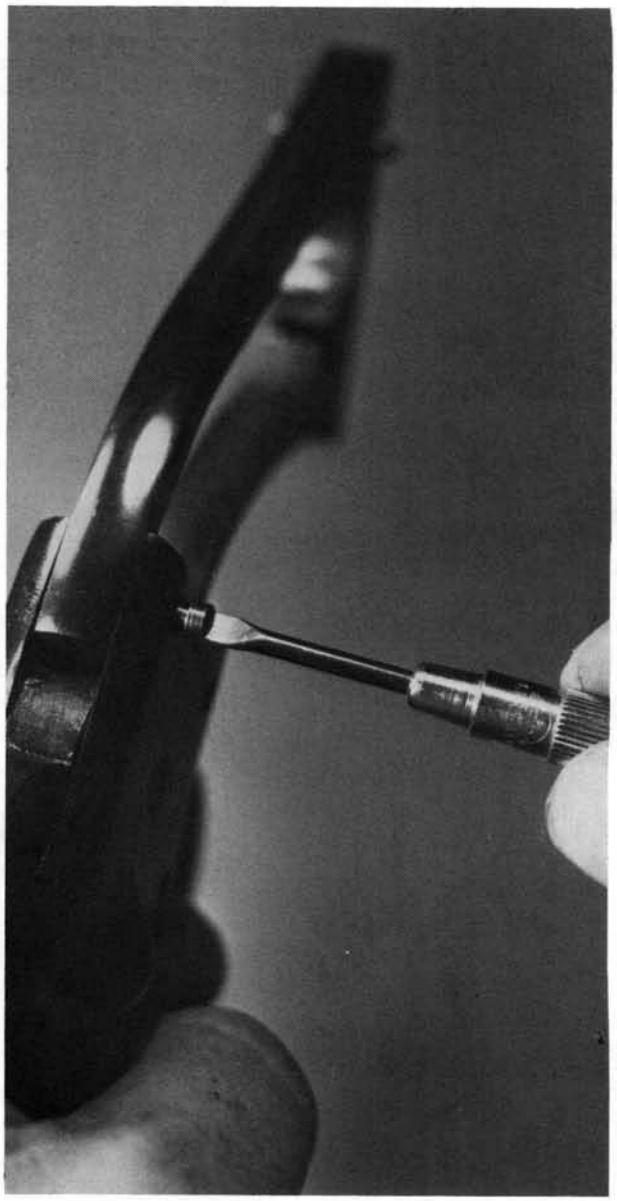


14. Remove the cylinder hand from the left side of the hammer.

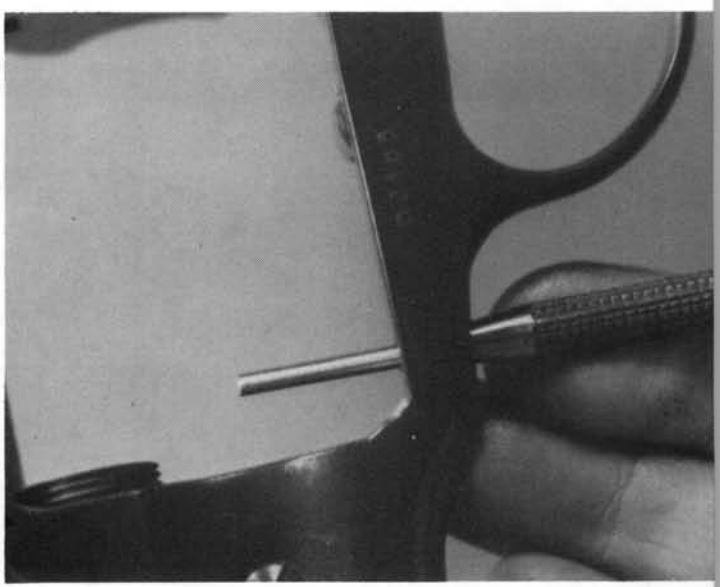


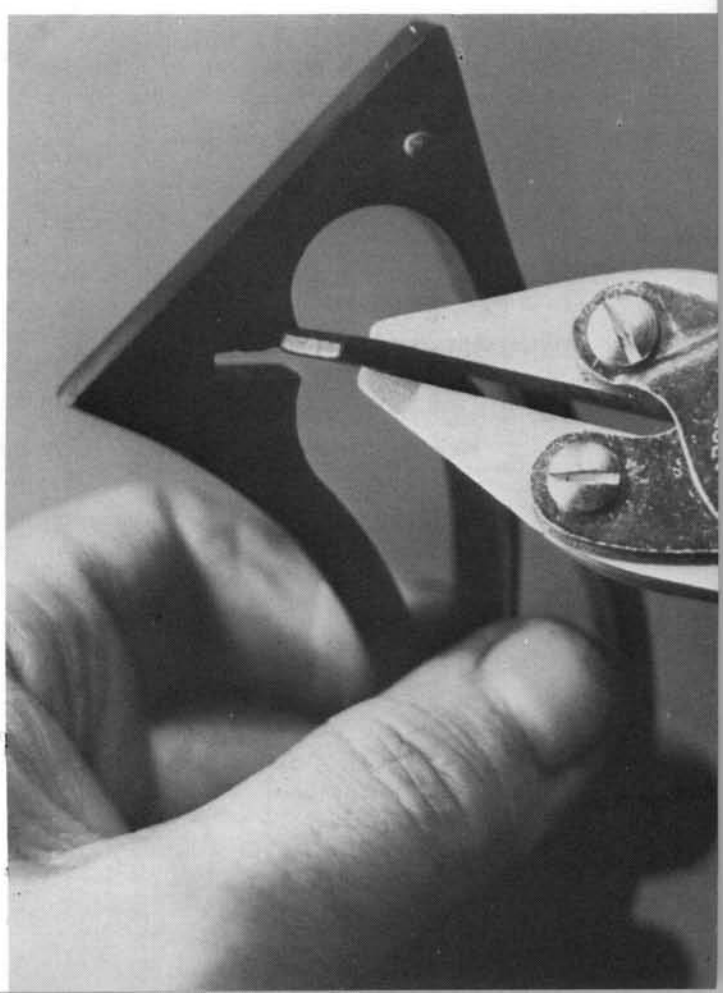
Reassembly Tips:

1. When replacing the grip frame/trigger guard unit, install the screw at the upper rear first, the one in front of the guard second, and the lower rear screw last.



2. Before installing the front guard screw, use a tapered tool to center the hole in the combination trigger and cylinder stop spring.





3. When replacing the hammer spring, be sure its top is properly engaged with the back of the hammer, then grip the lower portion with smooth-jawed pliers and flex the spring slightly until its lower end can be started into its slot in the grip frame. When it is started well, tap it into place with a small brass hammer.

Röhm RG14S

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Röhm RG14S also apply to the following gun.

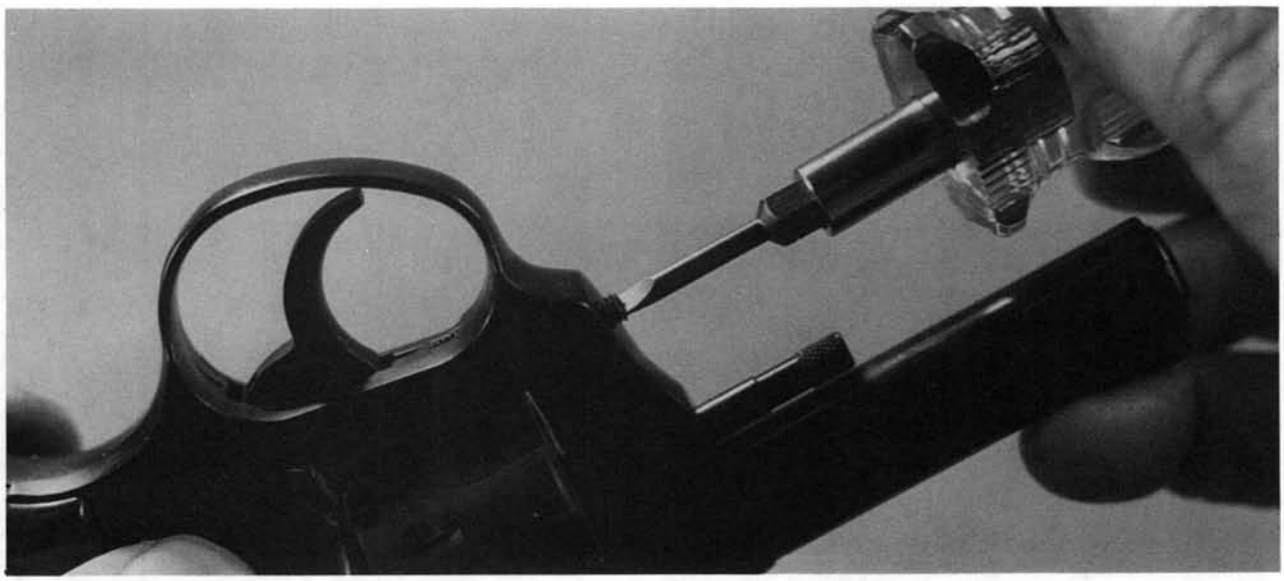
Röhm RG14

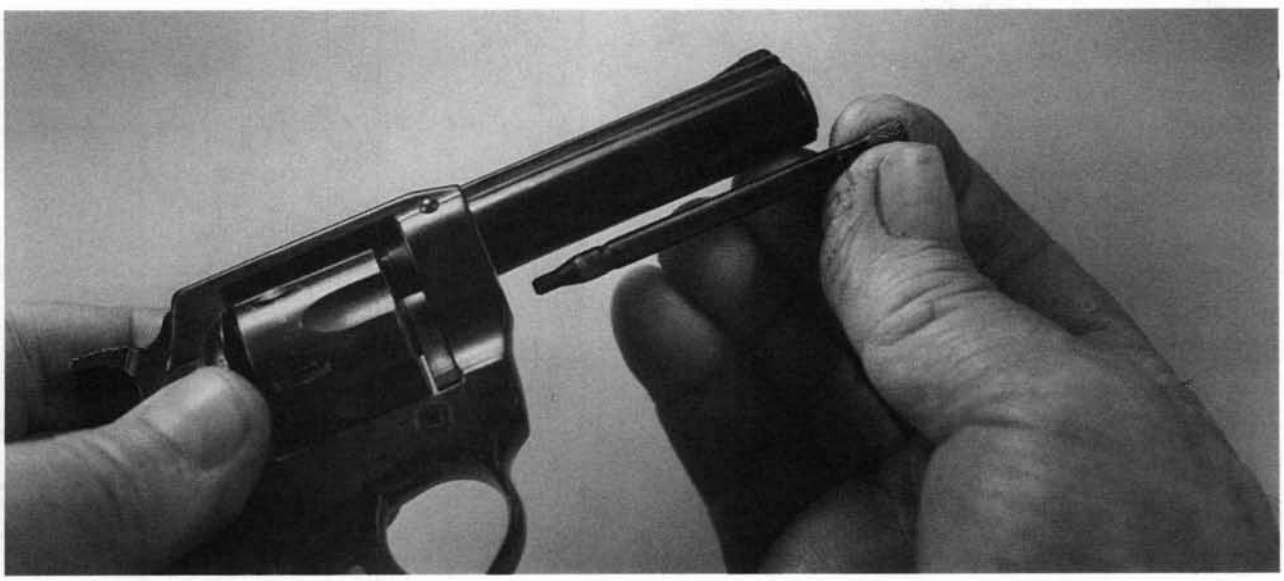
Data:	Röhm RG14S
Origin:	West Germany United States
Manufacturer:	Röhm Gesellschaft, Sontheim, RG Industries, Miami
Cartridge:	22 LR
Cylinder capacity:	6 rounds
Overall length:	$6^{7}/_{8}$ inches (3-inch barrel)
Barrel lengths:	$1^{3}/_{4}$ and 3 inches
Weight:	15 ounces (3-inch barrel)

In earlier times, Röhm Gesellschaft was the recipient of some "bad press" because of their minimal RG10 revolver. However, in the last years of their marketing in the U.S., the West German firm and their importer/manufacturer, RG industries, offered some really good handguns. One of these was the RG14S revolver. I designed for them the spring-retained cylinder base pin, which replaced the earlier screw-in type of the RG14.

Disassembly:

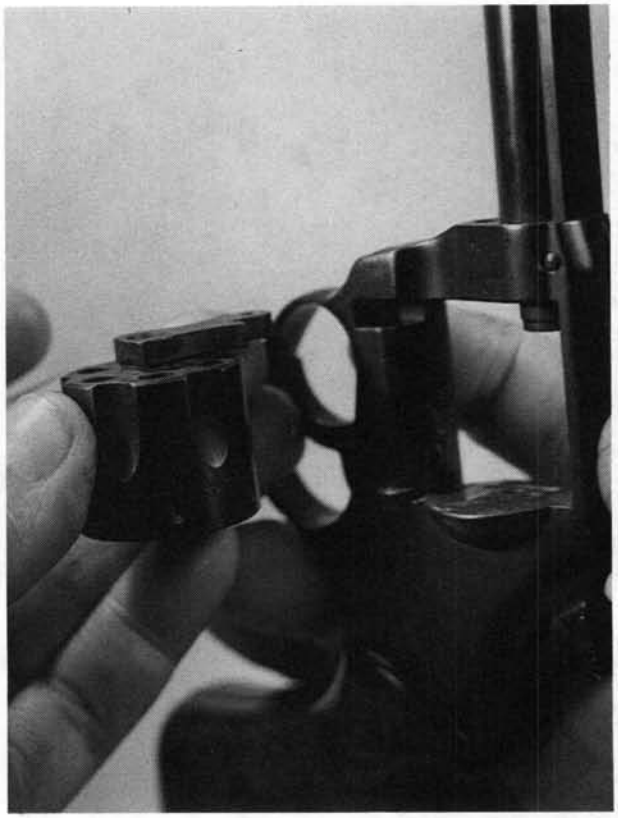
1. Remove the crane pivot screw at the front of the frame.



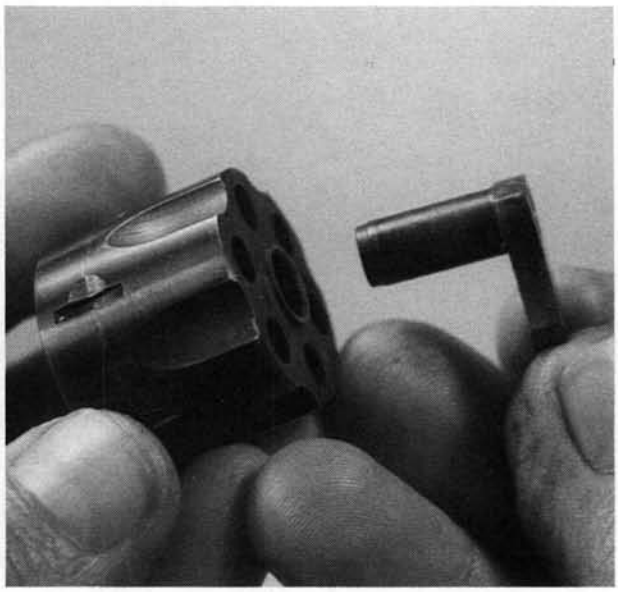


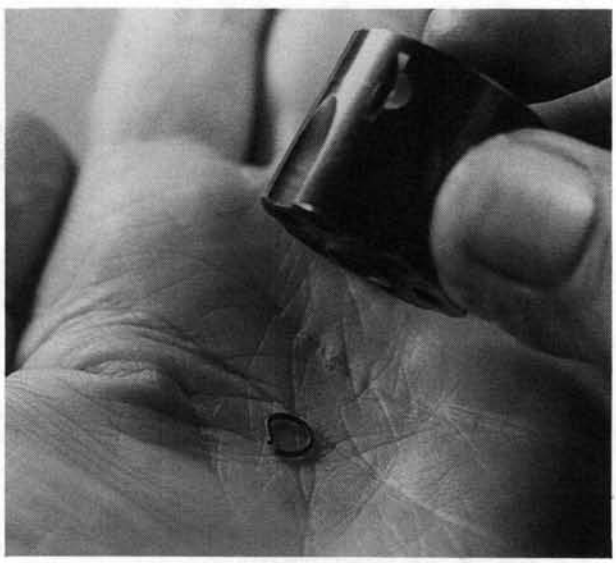
2. Pull the cylinder base pin out toward the front.

3. Remove the cylinder and crane assembly toward the left.



4. Remove the crane from the front of the cylinder.

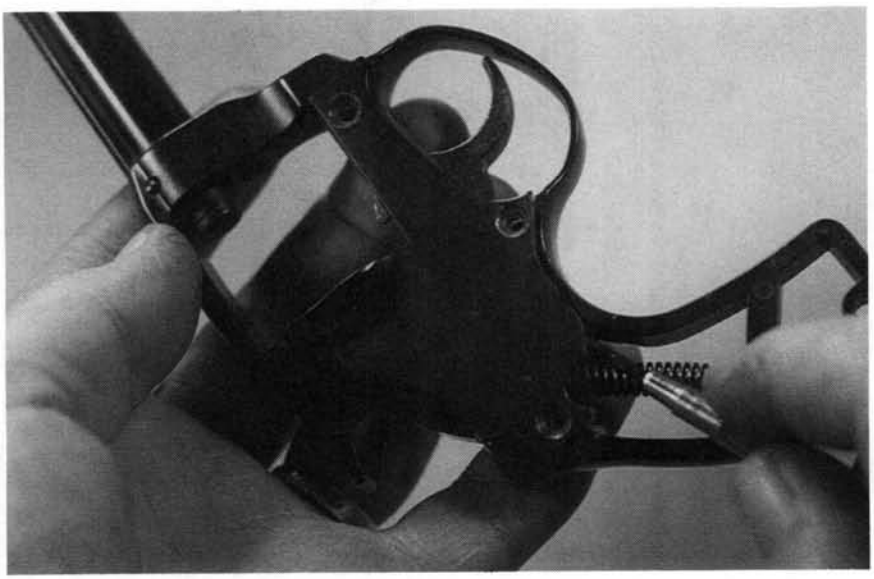




5. Take out or shake out the spring ring from inside the cylinder.

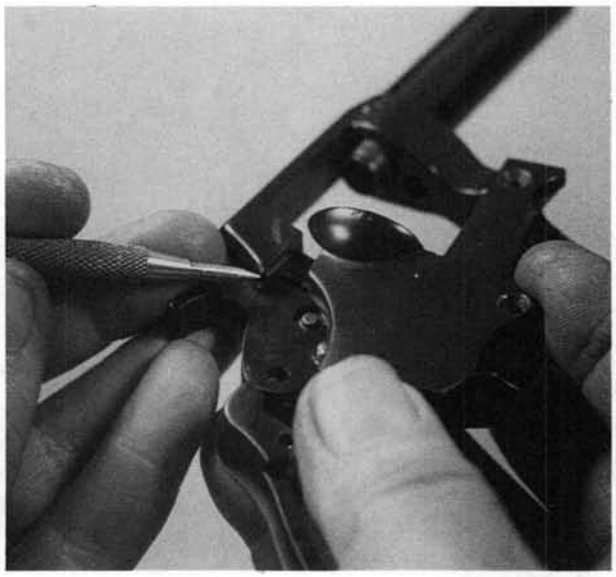
6. Use a small Phillips screwdriver to take out the grip screws, and remove the grips.

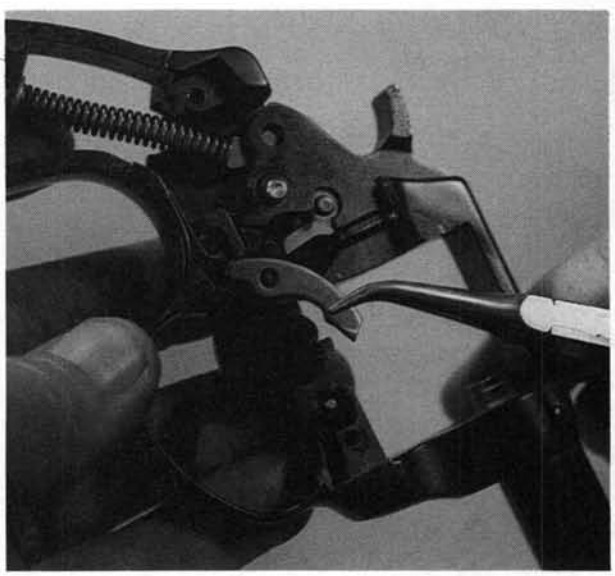
7. Use the same Phillips screwdriver to remove the three sideplate screws on the right side, two as shown, and one at upper rear.



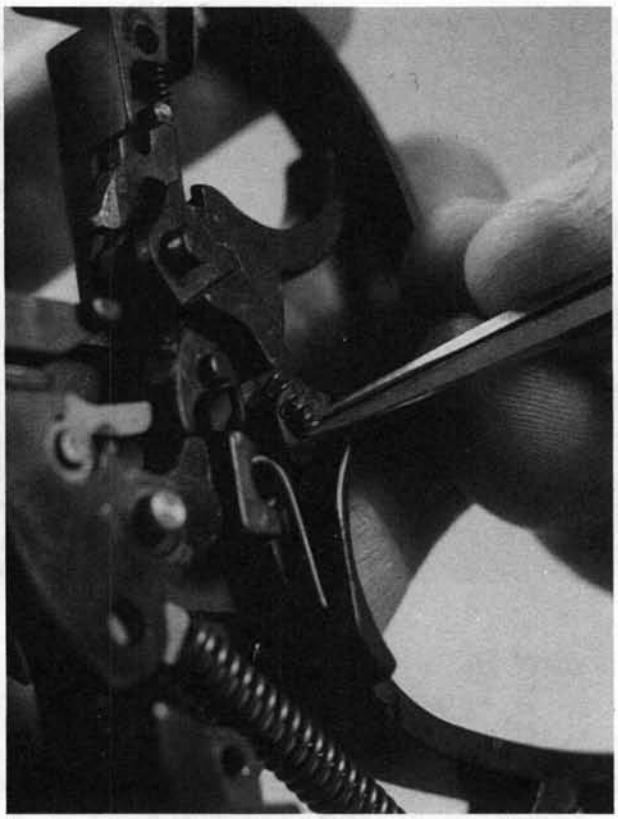
8. Pry the sideplate gently at its lower edges, being careful to avoid marring the frame. Remove the sideplate toward the right.

9. Remove the stabilizer pin from its groove at the top of the sideplate.



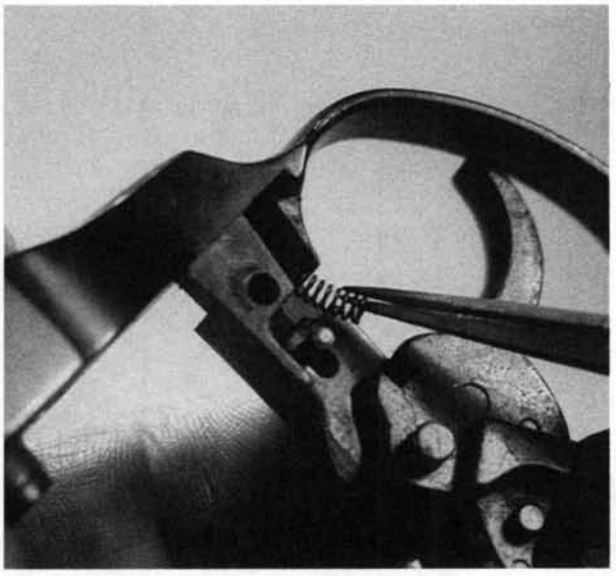


10. Tip the cylinder hand over forward, and remove it from its post on the trigger.

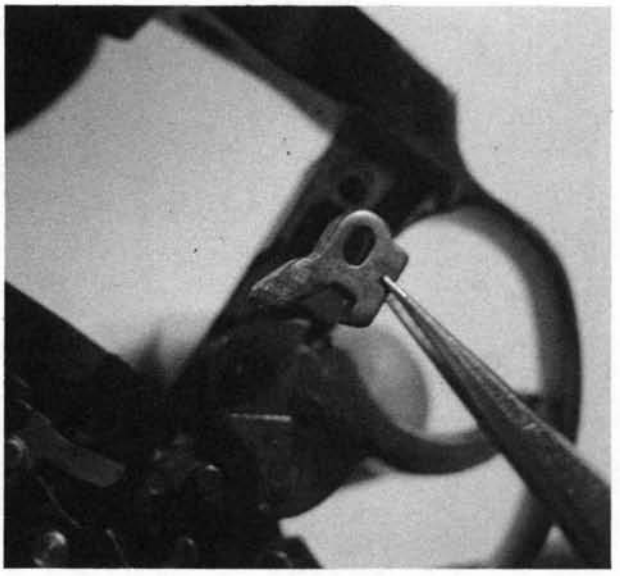


11. Remove the cylinder hand spring from its recess in the trigger.

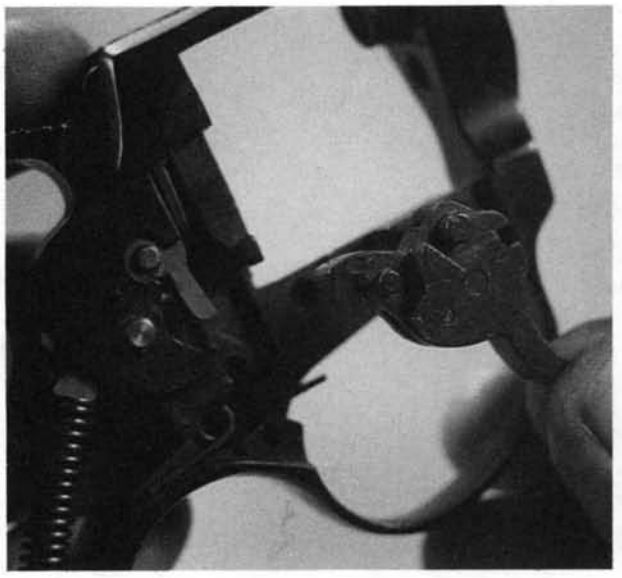
12. Remove the cylinder stop spring from its recess in the frame. **Caution:** *This little spring is under tension, so restrain it as it is taken out.*

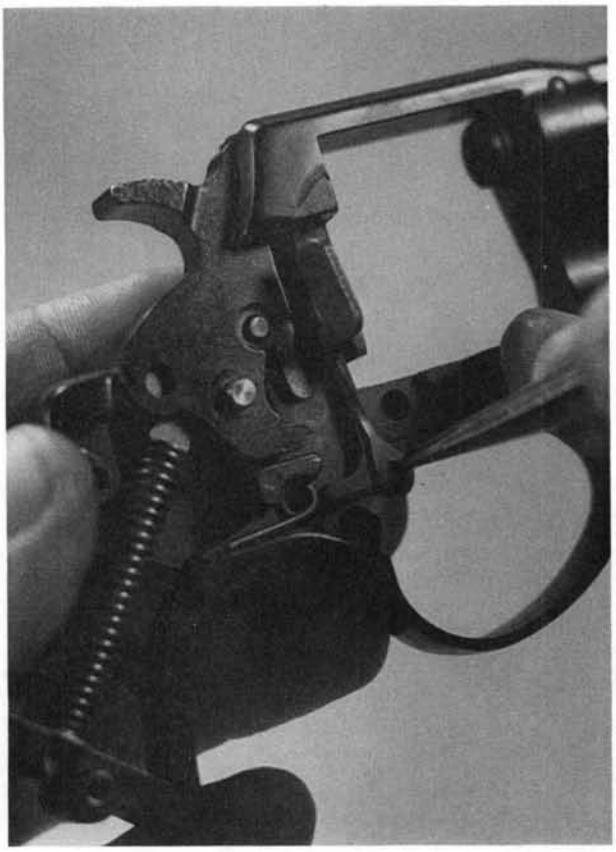


13. Remove the cylinder stop toward the right.



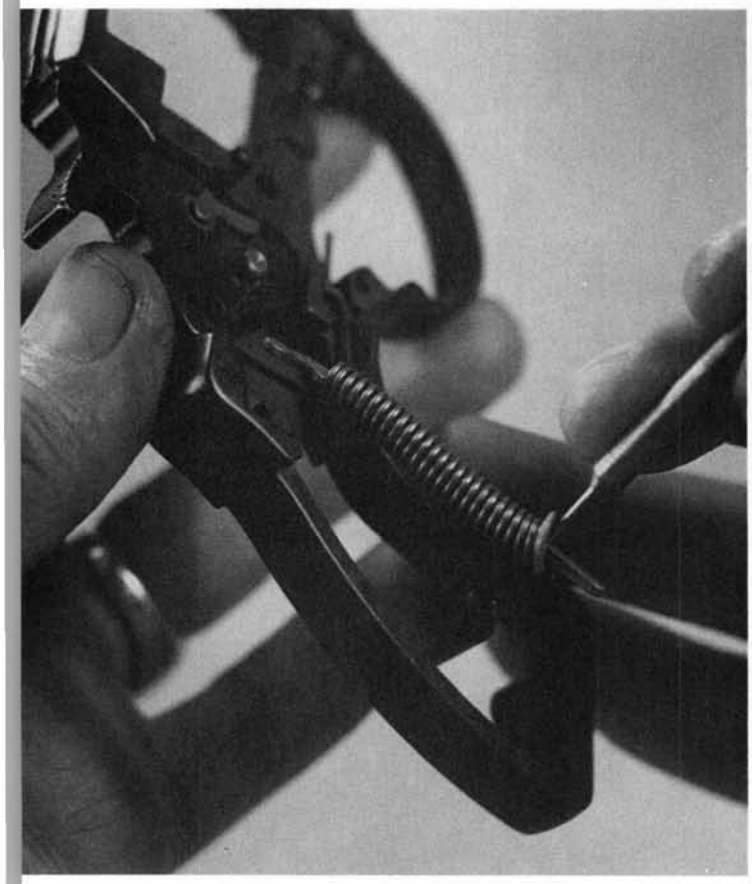
14. Move the trigger slightly to the right and forward, and take it out toward the right. The cross-pin in the trigger retains no part, it is the bearing point for the trigger spring.





15. Remove the transfer bar toward the right.

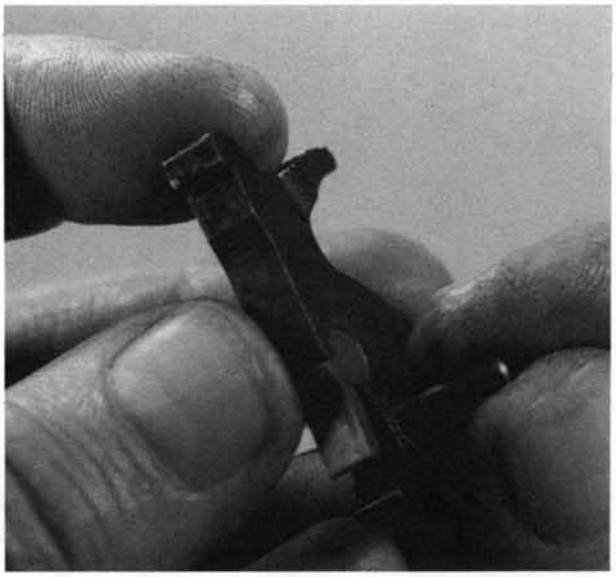
16. Move the hammer back until the hole is visible in the hammer spring strut, and insert a small drift or an opened paper clip end. Ease the hammer forward to trap the spring on the strut.

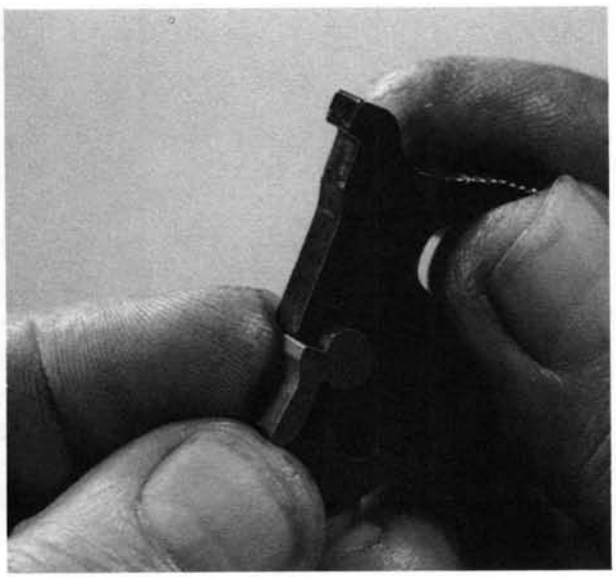


17. Remove the hammer spring assembly toward the right. If separation of the parts is necessary, wrap the unit in a heavy shop cloth and withdraw the drift.

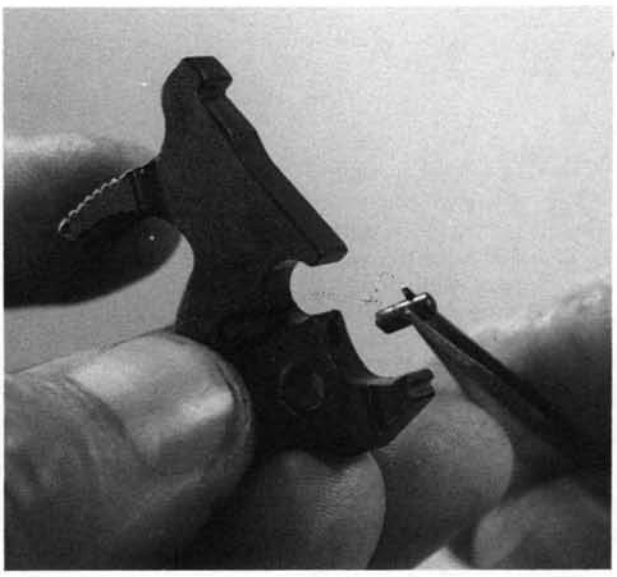
18. Tip the hammer back to clear its frame recess at the top, and remove the hammer and its pivot toward the right.

19. The pivot is easily removed from the hammer, toward either side.



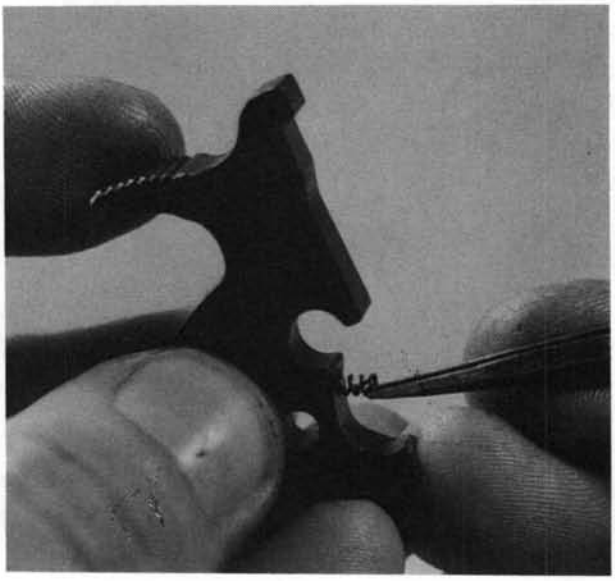


20. Push the double-action lever out of the hammer toward the left. **Caution:** *Let the fingertip follow the part across, to arrest the plunger and spring as they are released.*

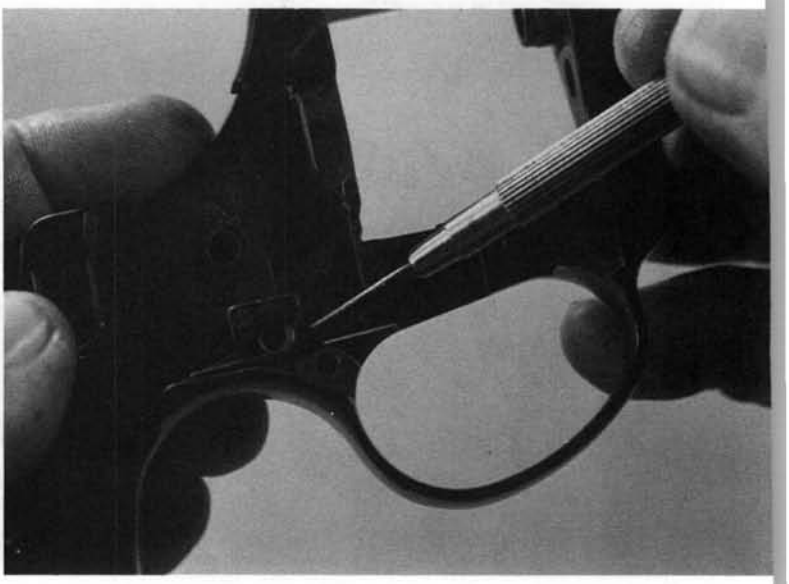


21. Remove the lever plunger from the front of the hammer.

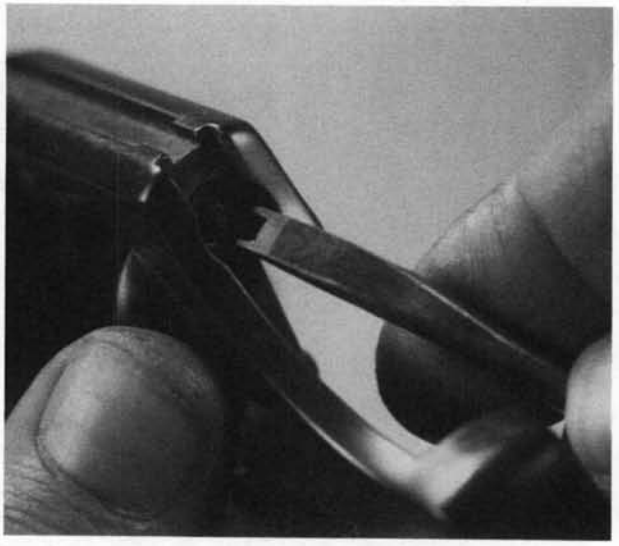
22. Remove the lever spring from its recess.



23. If removal of the trigger spring is necessary, insert a tool as shown, and pry it gently out of its recess. **Caution:** *This torsion-type spring is under tension. Control it as it comes out.*

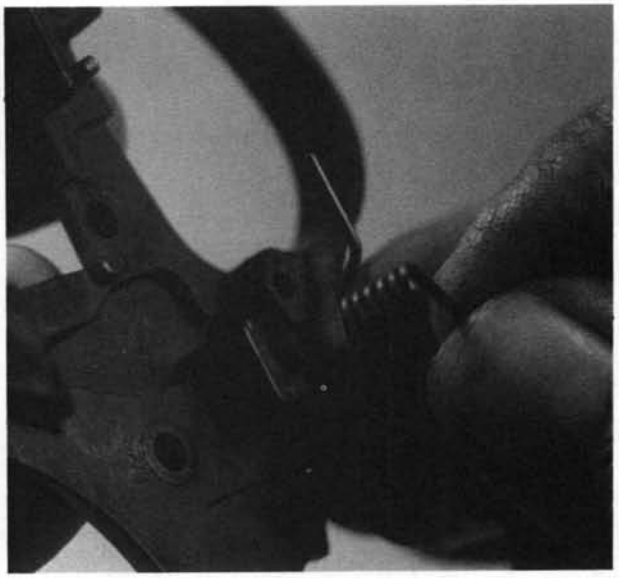


24. Removal of the firing pin requires a special two-point wrench, easily made from an old screwdriver. The firing pin retainer unscrews counterclockwise (rear view), and the retainer nut, firing pin, and spring are taken out rearward. This unit is often staked to prevent loosening. If removal is not necessary for repair, it is best left in place.



Reassembly Tips:

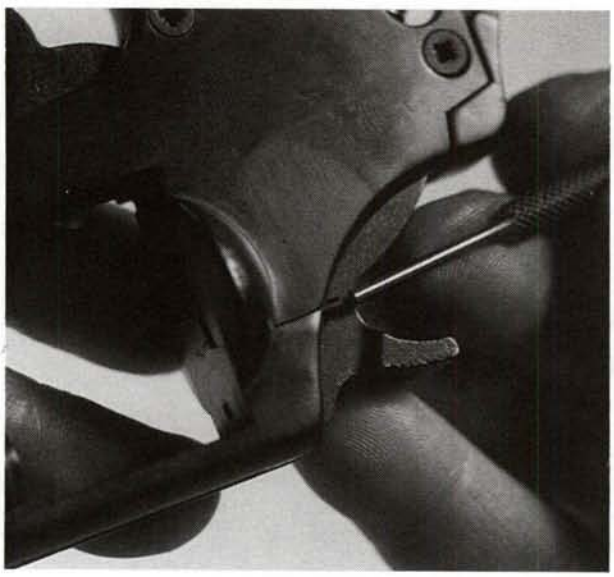
1. If the trigger spring has been removed, reinsert it as shown, with the "crooked" arm of the spring toward the front.



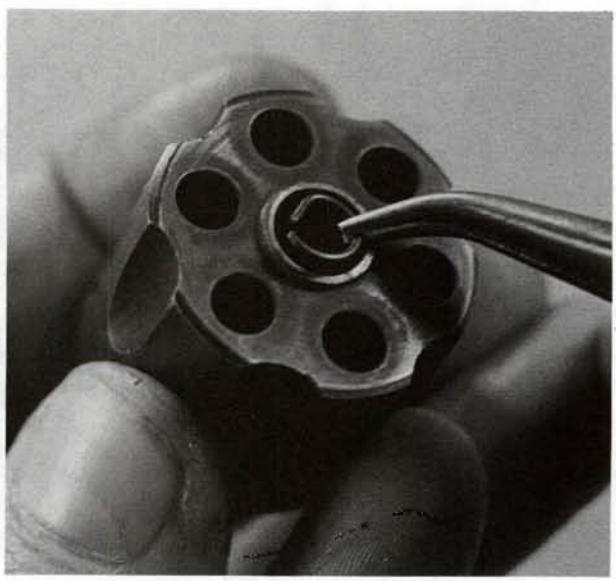
2. Use slim pliers to turn the rear arm of the trigger spring up onto the frame as the spring is pushed into its recess.

3. As the trigger is reinstalled, be sure the stud at left rear engages the hole in the transfer bar. Also, as shown here, be sure the front arm of the trigger spring bears on the cross-pin in the trigger.

4. The internal parts are shown here in the proper arrangement, ready for replacement of the sideplate.



5. With the sideplate in place, and the screws installed, the stabilizer pin is pushed back into its recess.



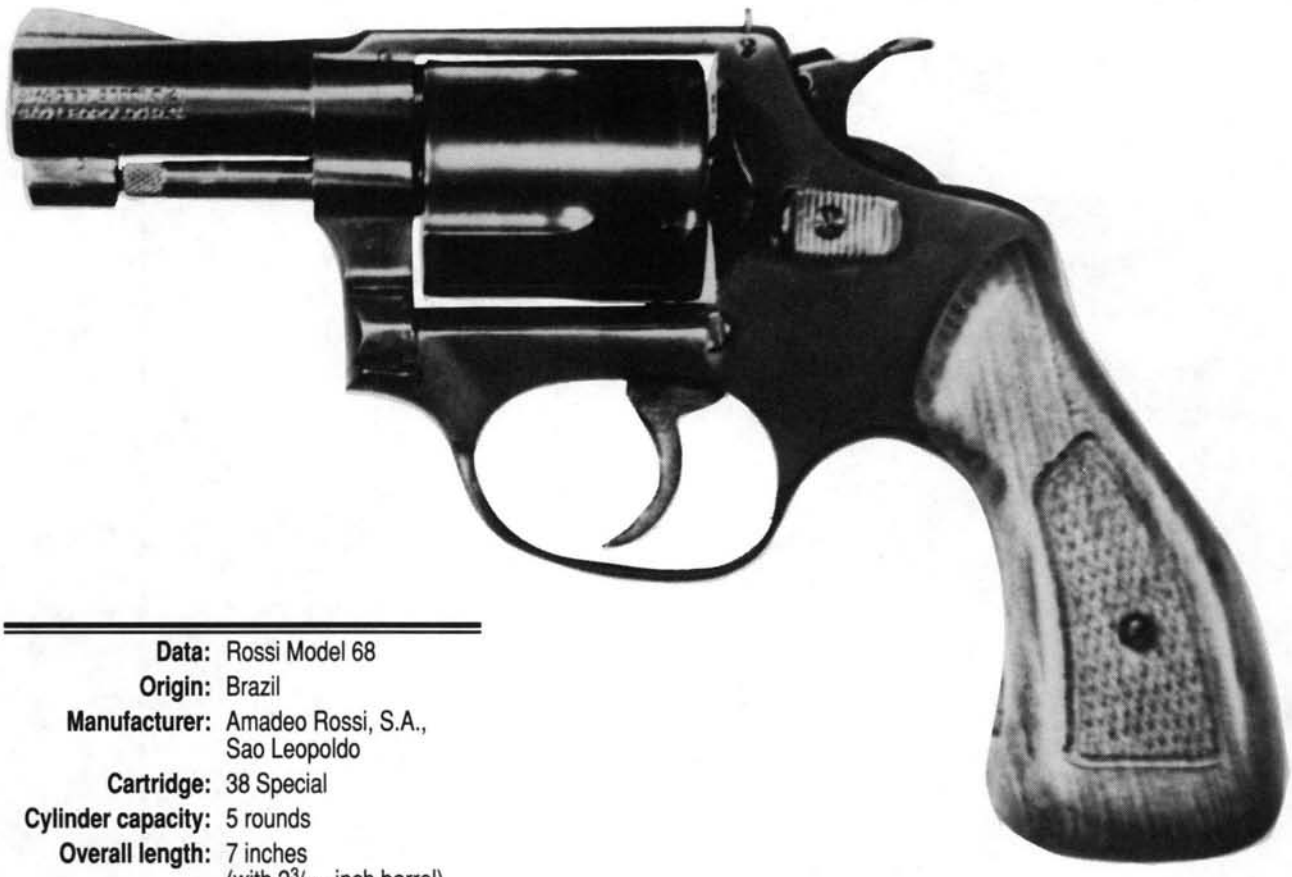
6. Before the crane is put back into the cylinder, remember to drop the spring ring back into the arbor tunnel, and be sure it is lying flat.

Rossi Model 68

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Rossi Model 68 also apply to the following guns.

Rossi Model 88 **Rossi Model 511** **Rossi Model 951**
Rossi Model 971

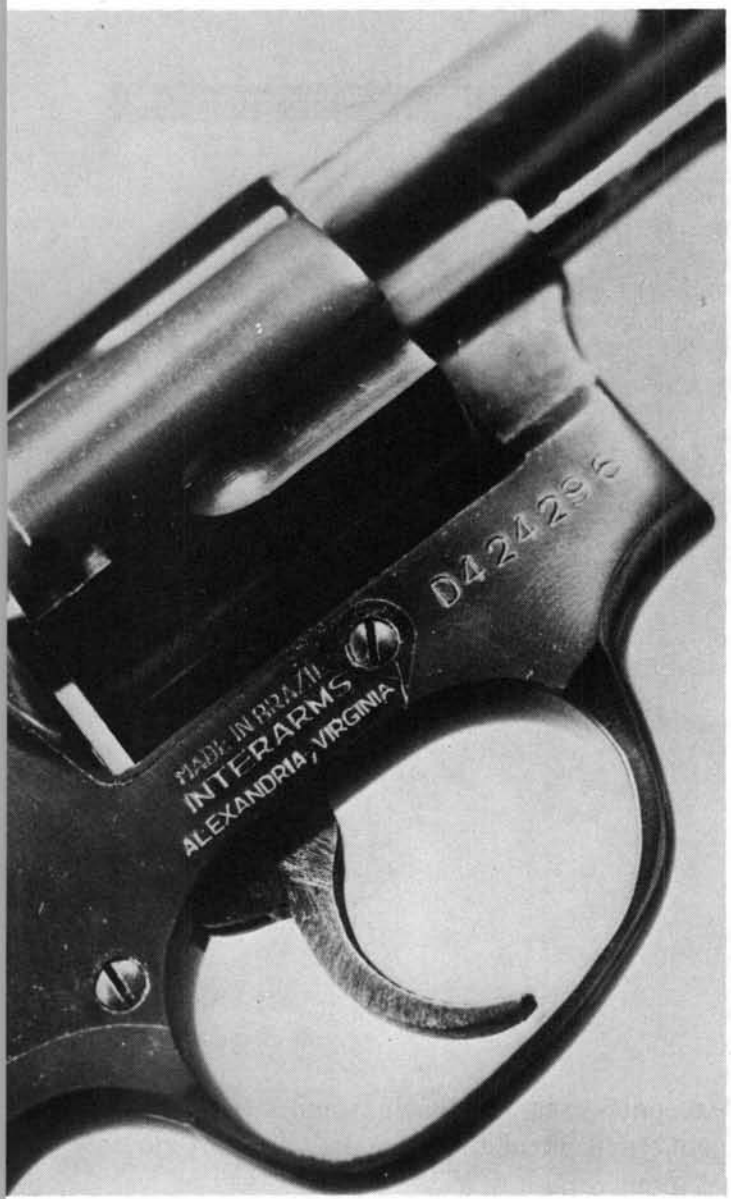


Data:	Rossi Model 68
Origin:	Brazil
Manufacturer:	Amadeo Rossi, S.A., Sao Leopoldo
Cartridge:	38 Special
Cylinder capacity:	5 rounds
Overall length:	7 inches (with $2^{3}/_{16}$ -inch barrel)
Barrel length:	$2^{3}/_{16}$ inches (3-inch available)
Weight:	22 ounces

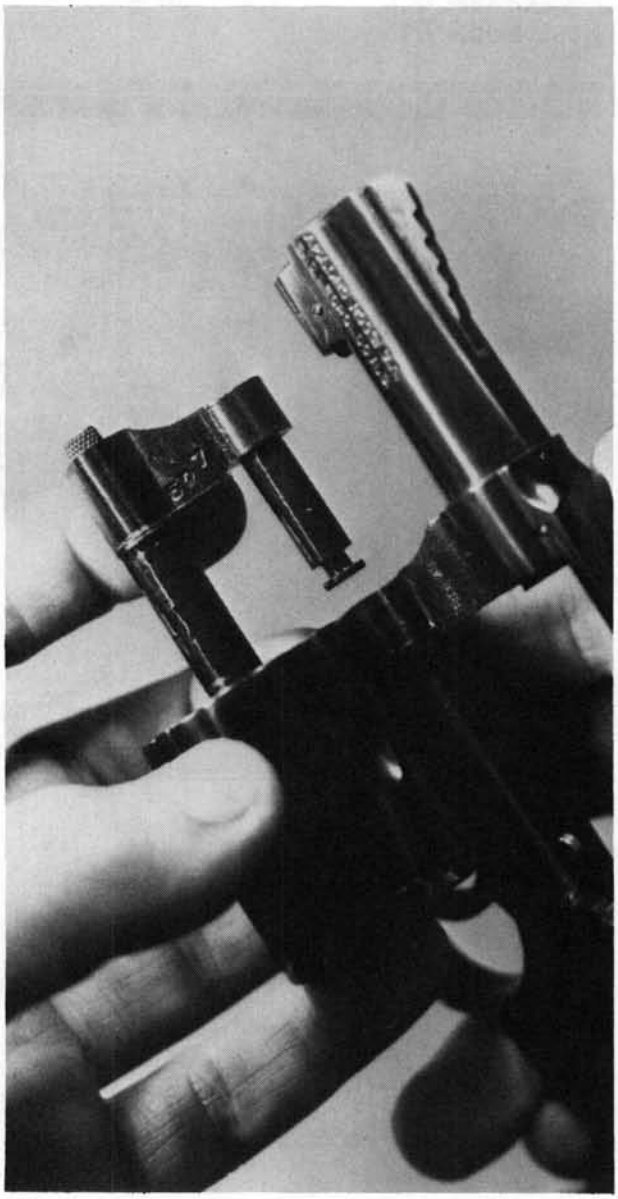
With the exception of its removable hammer spring base and rear sight arrangement, the Rossi design is very close to the small-frame Smith & Wesson. The Model 68 was introduced in 1978, is still in production, and is imported by Interarms. The other models of the Rossi, listed in the cross-references, differ only in construction material, sights, or other features that do not relate to takedown.

Disassembly:

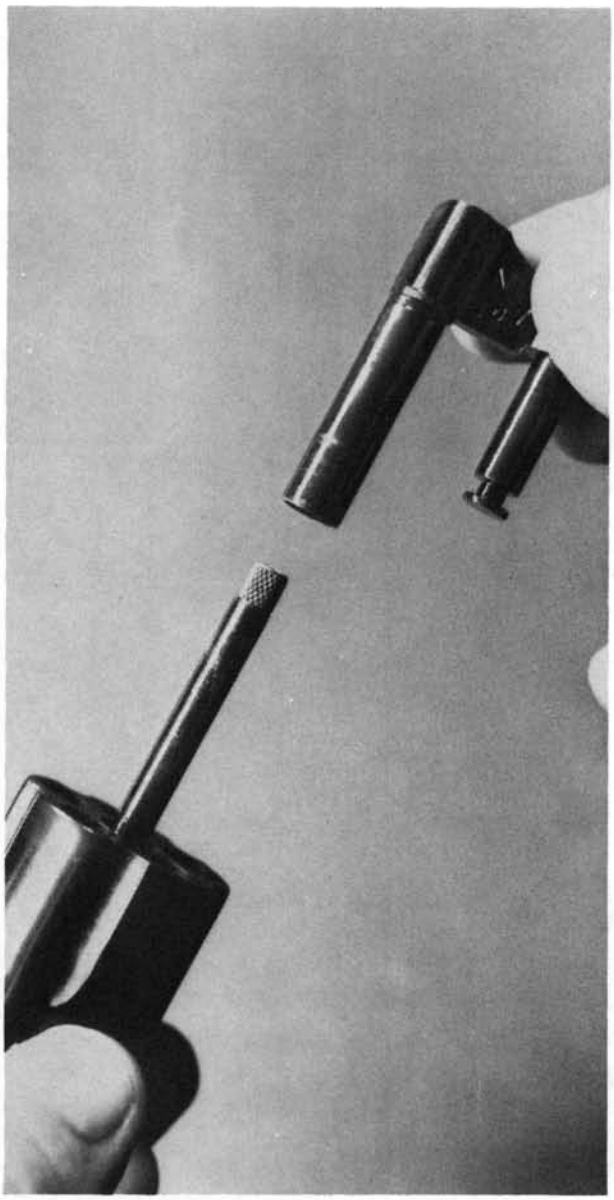
1. Remove the front sideplate screw, located just forward of the trigger on the right side.



2. Move the crane forward out of the frame and remove the cylinder and crane assembly toward the left.

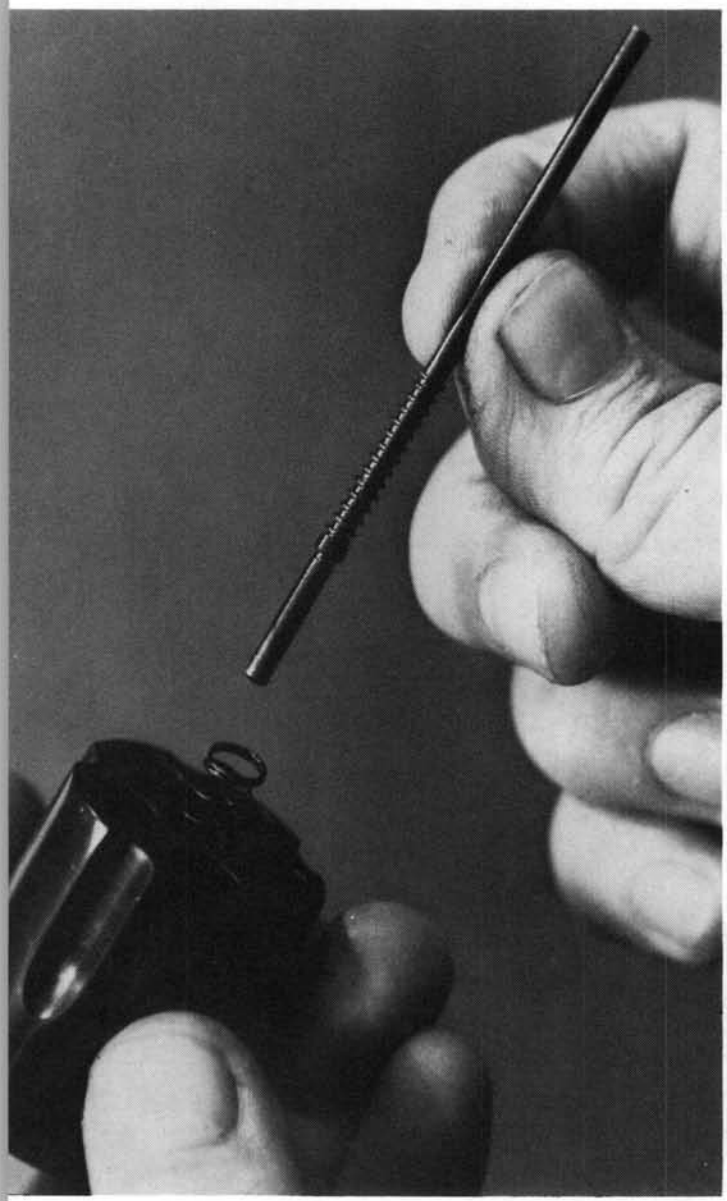


3. Remove the crane from the front of the cylinder.

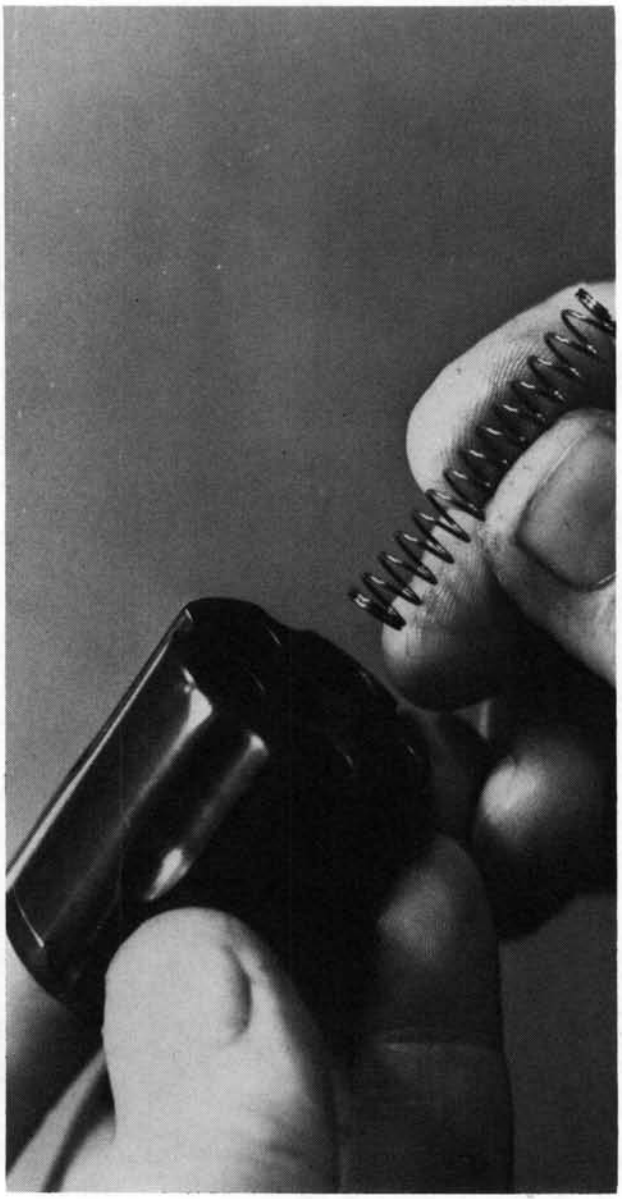


4. Grip the ejector rod with leather-padded smooth-jawed pliers, and unscrew it counterclockwise (front view). Remove the ejector rod from the front of the cylinder.

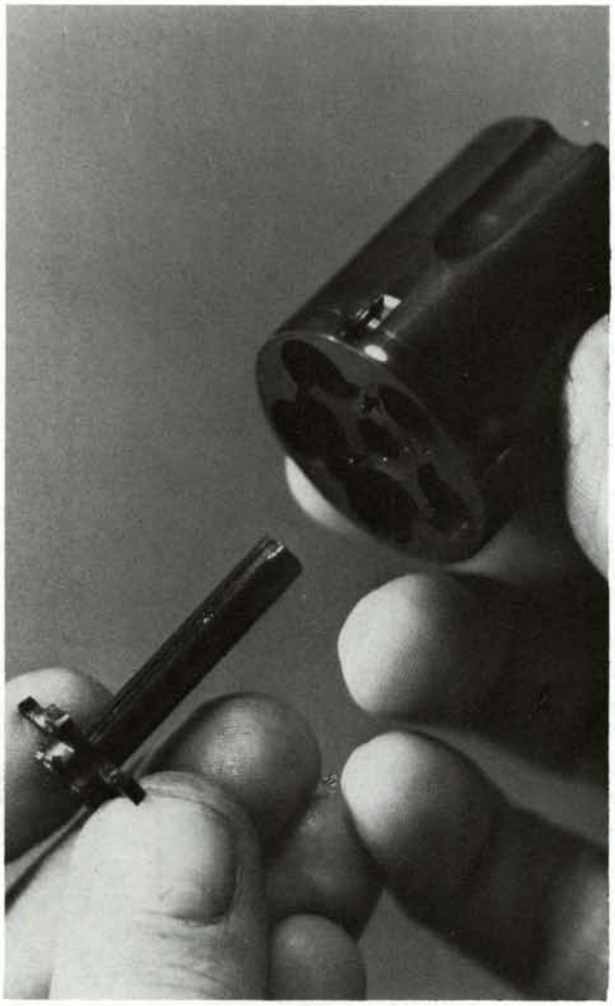
5. Remove the cylinder lock pin from the front of the cylinder, along with its spring.



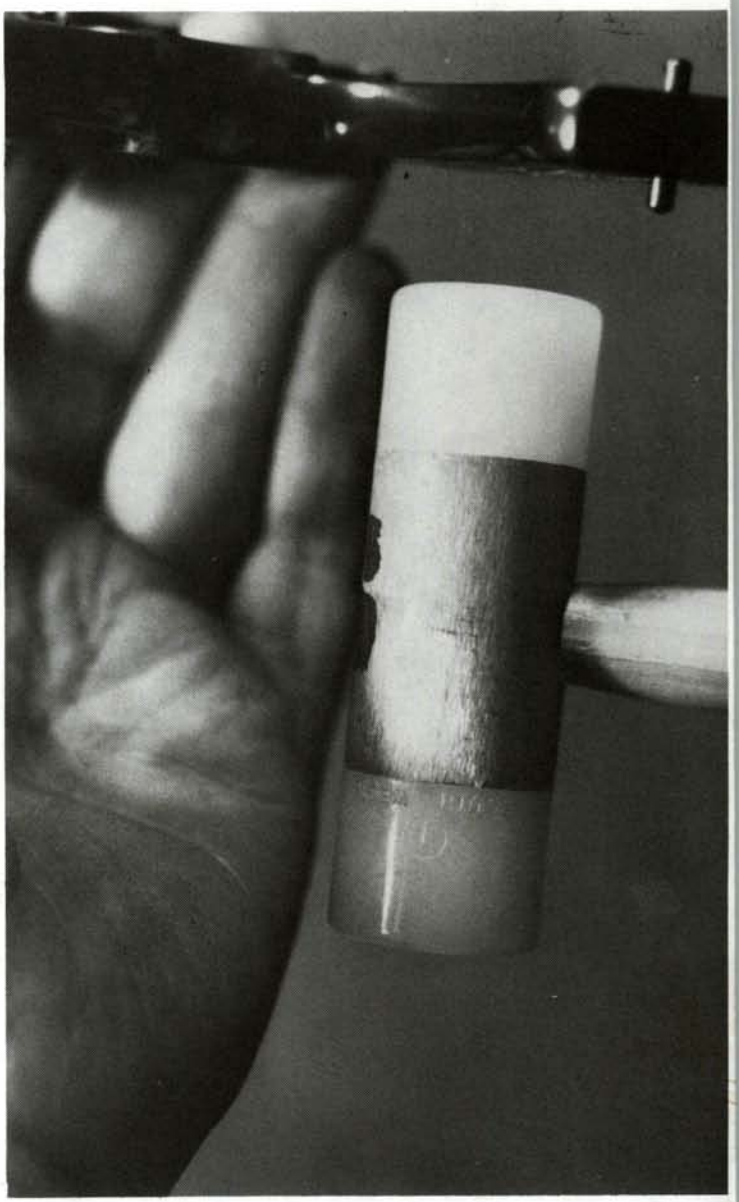
6. Remove the ejector spring from the front of the cylinder.



7. Remove the ejector/ratchet from the rear of the cylinder.



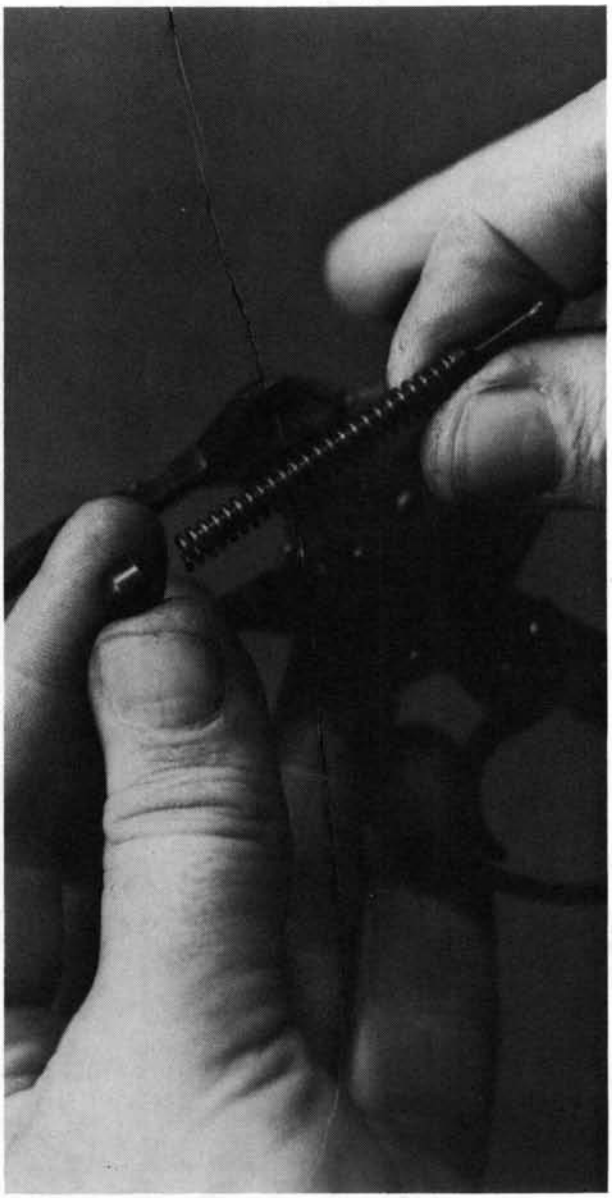
8. Remove the two remaining sideplate screws on the right side of the frame. Hold the gun as shown, and tap the grip frame with a nylon or plastic mallet until the sideplate falls into the palm of the hand.



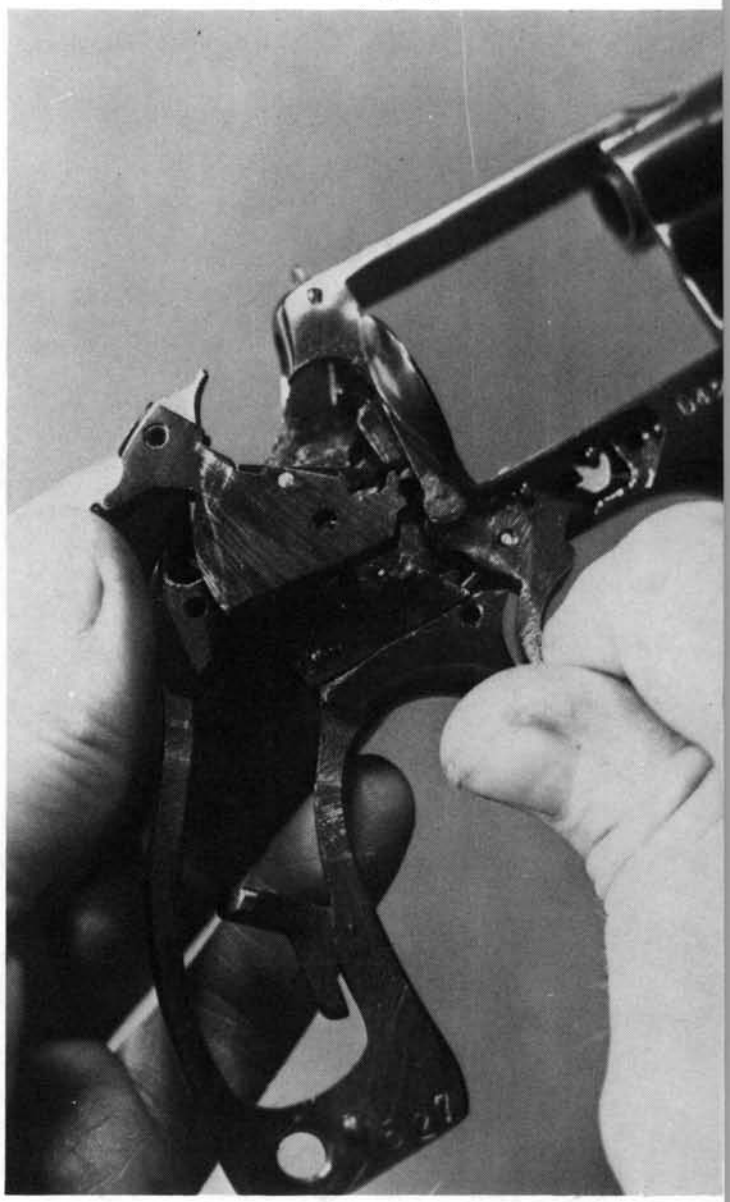
9. The hammer block will likely come off with the sideplate, but it is shown here in the proper position for reassembly, along with the other internal parts.

10. Grip the upper neck of the hammer strut with smooth-jawed sharp-nosed pliers, and move it slightly downward against the tension of the hammer spring, then ease it out toward the right and upward for removal.

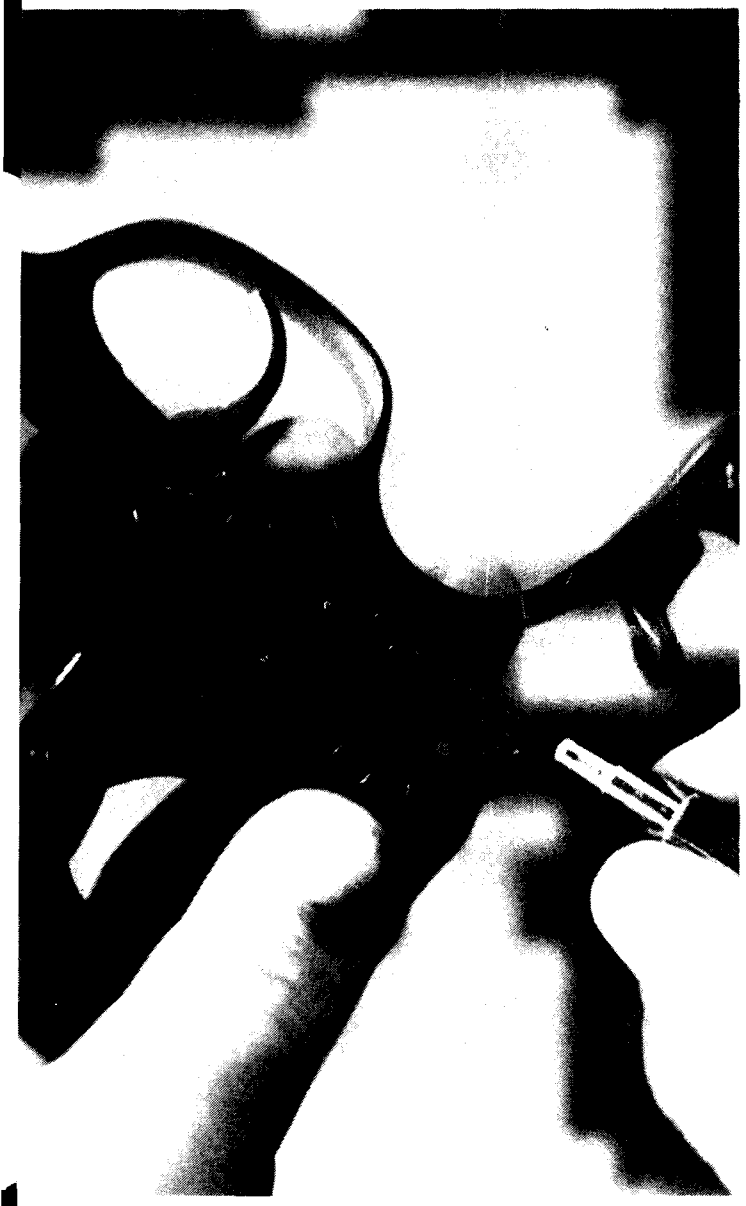
11. Take care not to lose the hammer spring cup, as it will be freed when the spring and strut are removed.



12. Move the cylinder latch to the rear, hold it there, and pull the trigger to tip the hammer back. Remove the hammer toward the right. Drifting out the small pin at the front of the hammer will allow removal of the double-action lever and its spring.

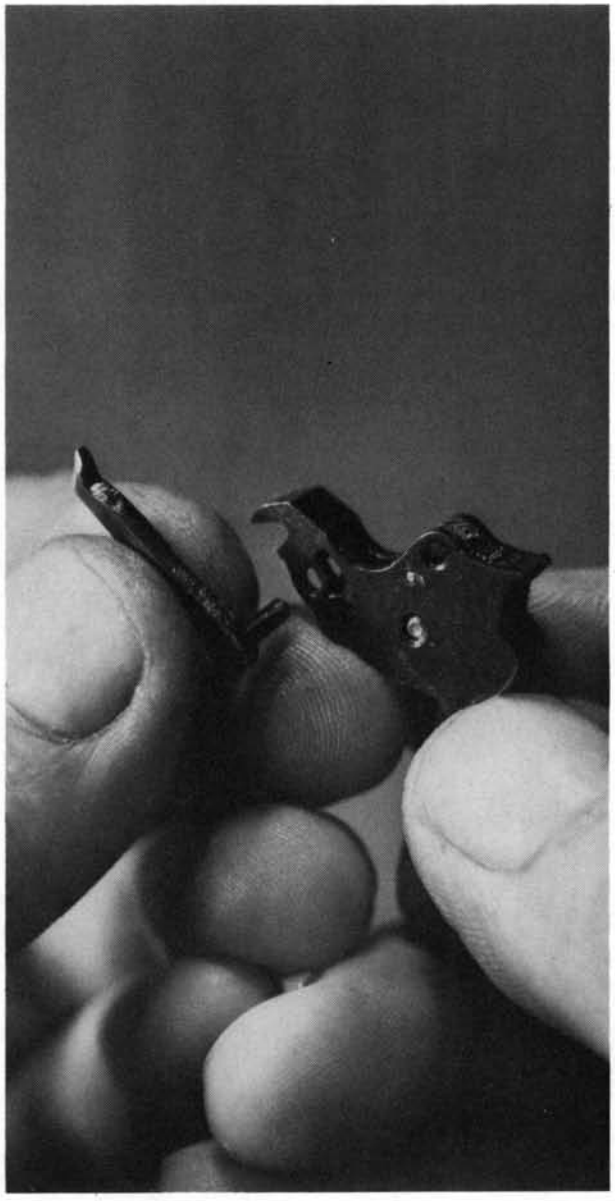


13. Insert a small screwdriver into the rear of the rebound slide, and lift it outward off its post in the frame. The released spring will be caught on the shaft of the screwdriver. Remove the rebound slide and spring toward the rear.

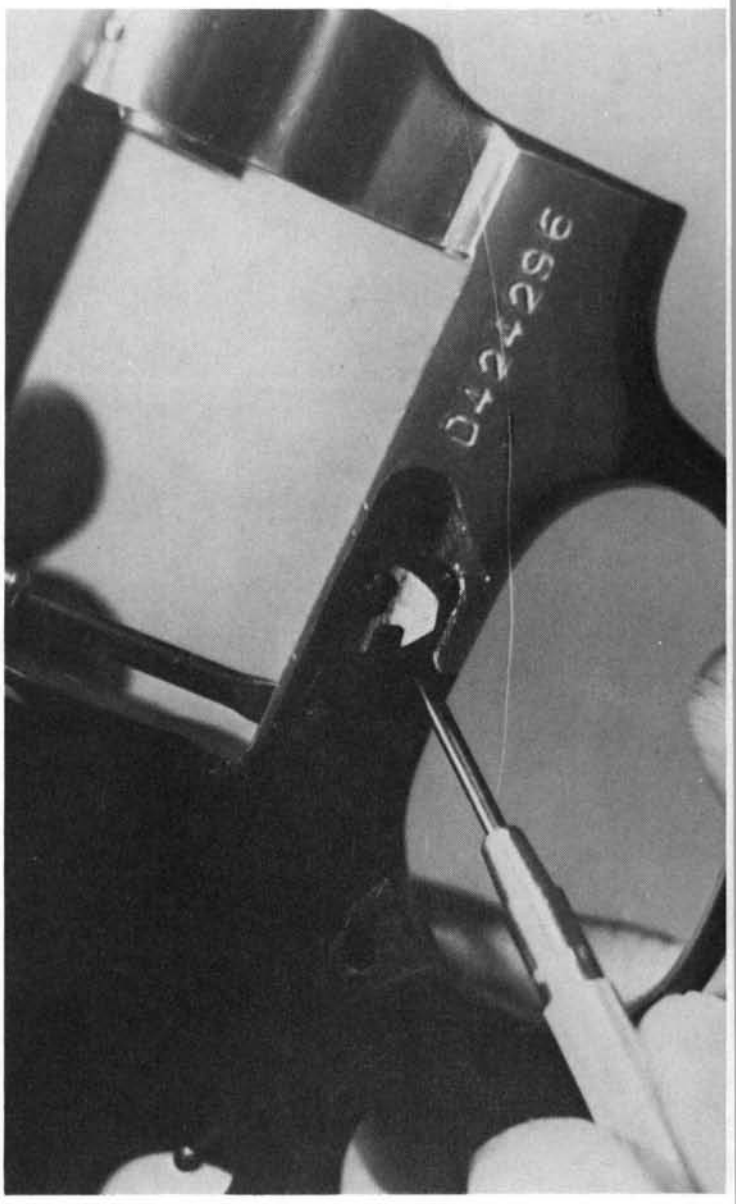


14. Tip the cylinder hand out of its slot toward the rear, and remove the trigger toward the right.

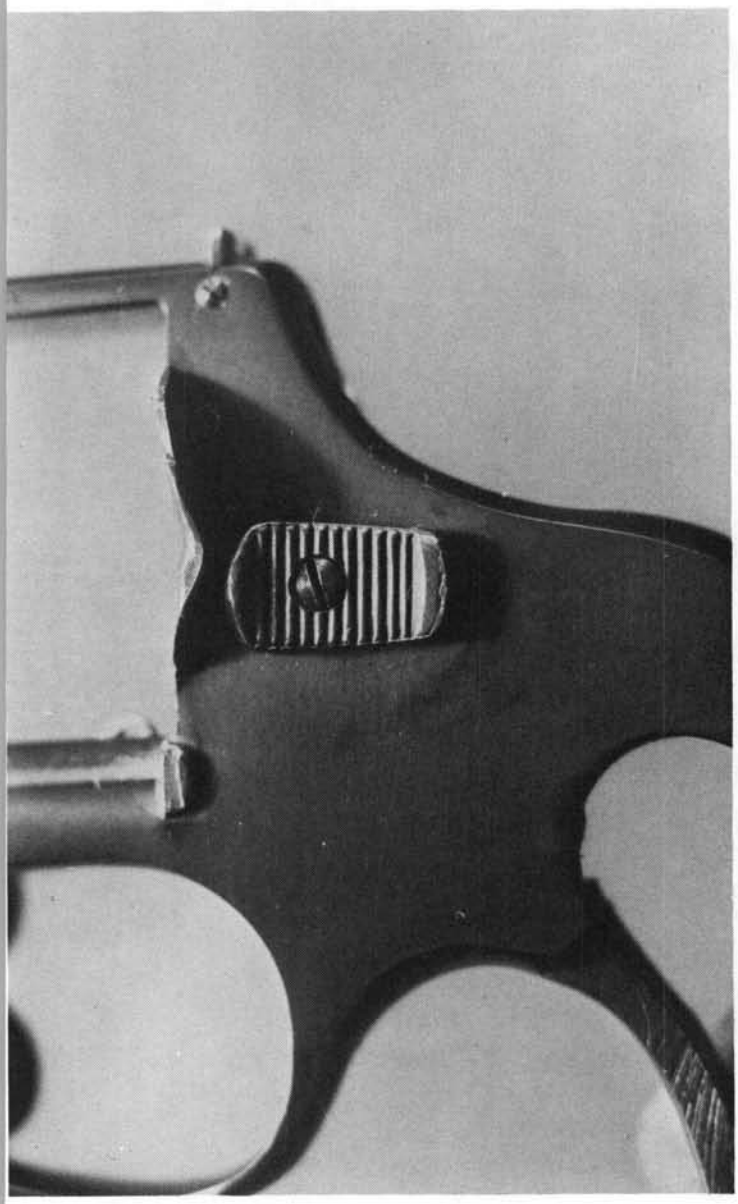
15. Remove the cylinder hand from the right side of the trigger. Drifting out the small pin at the top of the trigger will release the cylinder hand spring for removal. The larger pin at the center of the trigger retains the trigger strut.



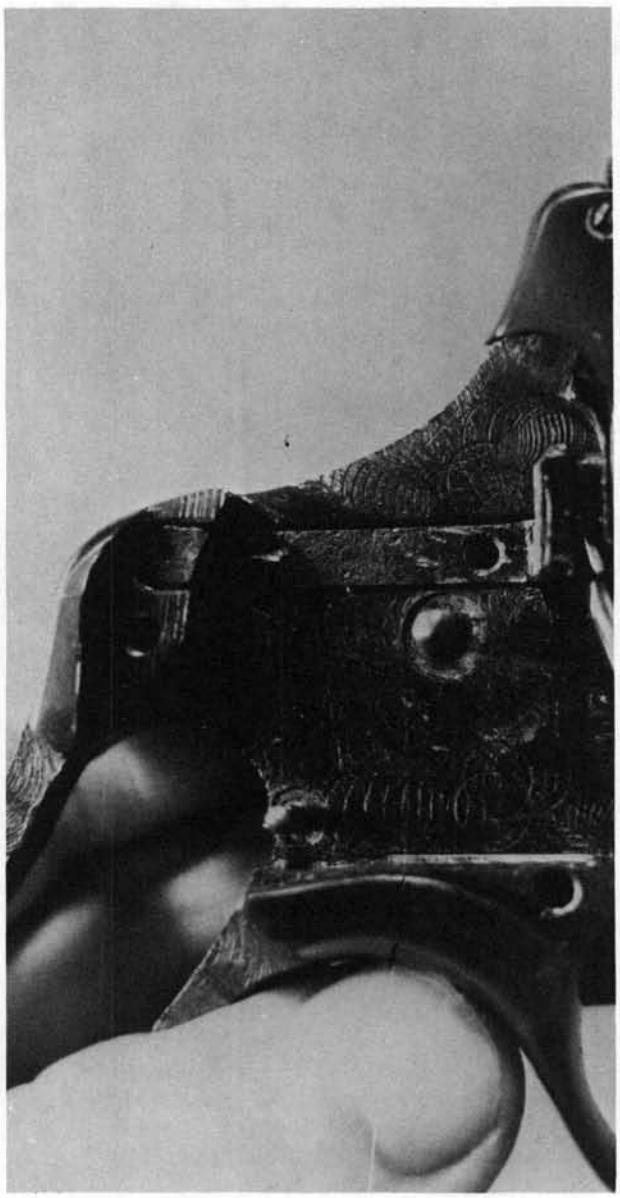
16. Use a screwdriver to depress the cylinder stop below its slot in the frame, and a smaller one to nudge the stop out toward the right. Take care to restrain the cylinder stop spring at the front, as it will be released as the spring clears the edge of the recess in the frame.



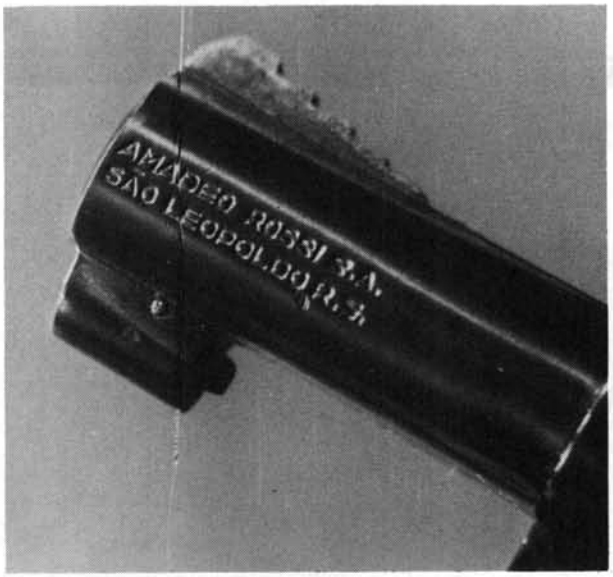
17. Remove the screw which retains the cylinder latch thumbpiece, and take off the thumbpiece toward the left.



18. Move the internal portion of the cylinder latch all the way to the rear, then remove it toward the right. Take care to restrain the small spring and plunger at the rear of the latch, as these parts will be released as they clear the edge of the frame recess. Removal of the two small screws on each side at the top of the frame will allow removal of the rear sight blade.

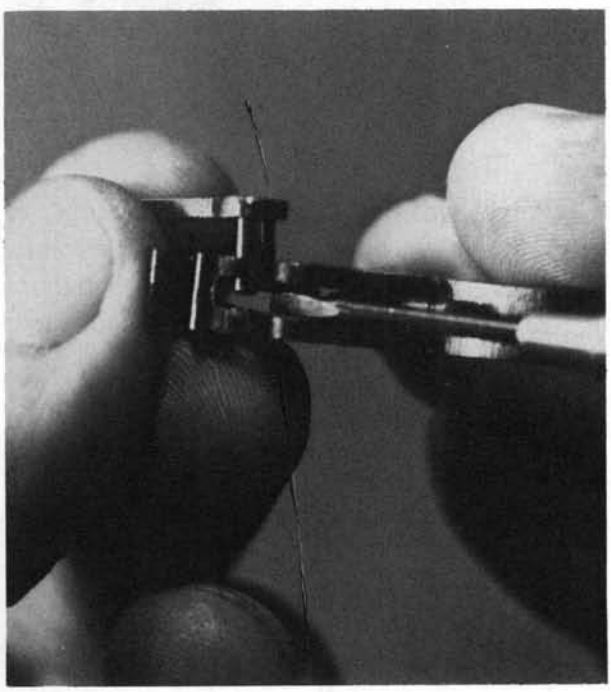


19. Drifting out the cross-pin in the barrel underlug will release the front latch plunger and spring for removal toward the rear.



20. The hammer spring base is retained by a cross-pin in the frontstrap of the grip frame.

Reassembly Tips:



1. When replacing the cylinder hand on the trigger, insert a small screwdriver into the rear of the trigger and lift the rear arm of the cylinder hand spring as the hand is moved into the trigger. The rear arm of the spring must rest on top of the smaller forward pin on the inside of the hand.

Ruger GP100

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Ruger GP100 also apply to the following gun.

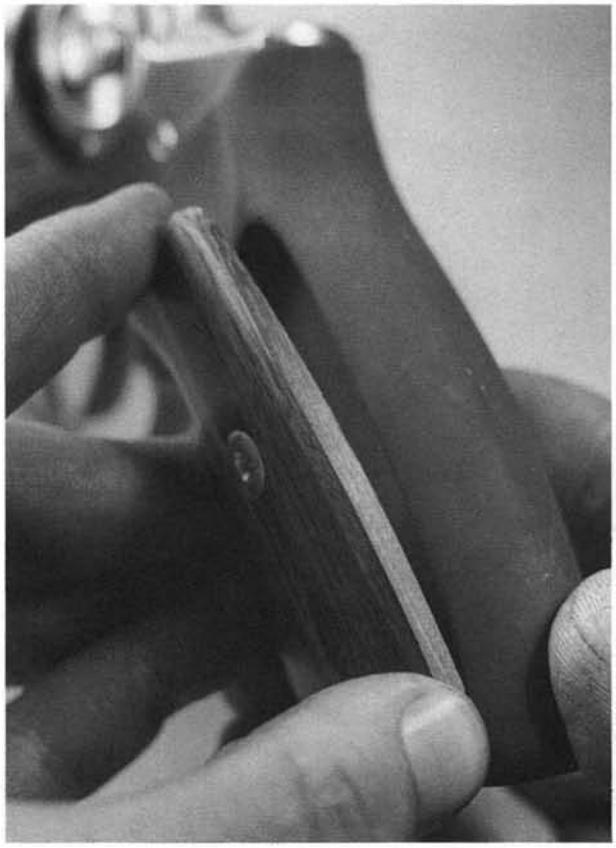
Ruger Super Redhawk

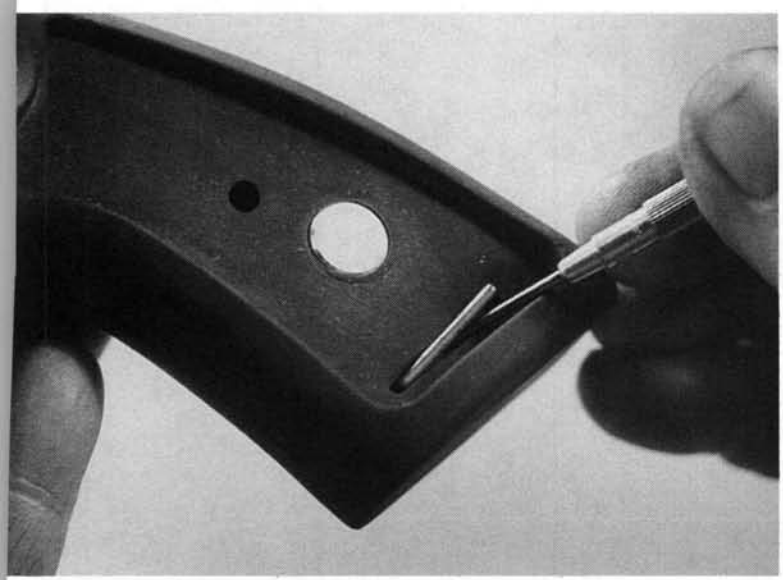
Data:	Ruger GP100
Origin:	United States
Manufacturer:	Sturm, Ruger & Company, Southport, Connecticut
Cartridges:	38 Special, 357 Magnum
Cylinder capacity:	6 rounds
Overall length:	11 1/2 inches (6-inch barrel)
Barrel lengths:	3, 4 and 6 inches
Weight:	37 ounces (4-inch barrel)

The GP100 revolver was introduced by Sturm, Ruger & Company in 1986, to replace the Security-Six in their line. Its design is a blending of the features of that gun and those of their large-frame revolver, the Redhawk. The Super Redhawk is mechanically similar to the GP100 and these instructions can be used. A friend traded his Security-Six for the GP100 shown here. I still have my own well-worn Security-Six. Both of us are pleased.

Disassembly:

1. Back out the grip screw, and push the screw to detach the left grip panel.





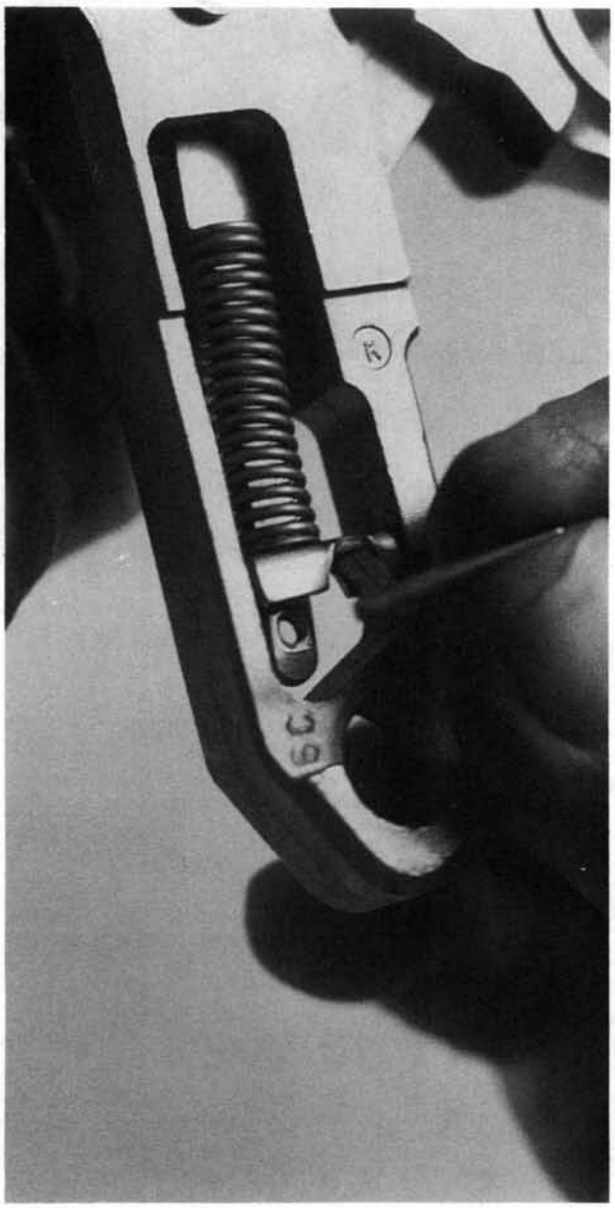
2. Remove the disassembly pin from its recess.

3. Push the grip locator to detach the right grip panel.

4. Remove the grip locator toward the right.

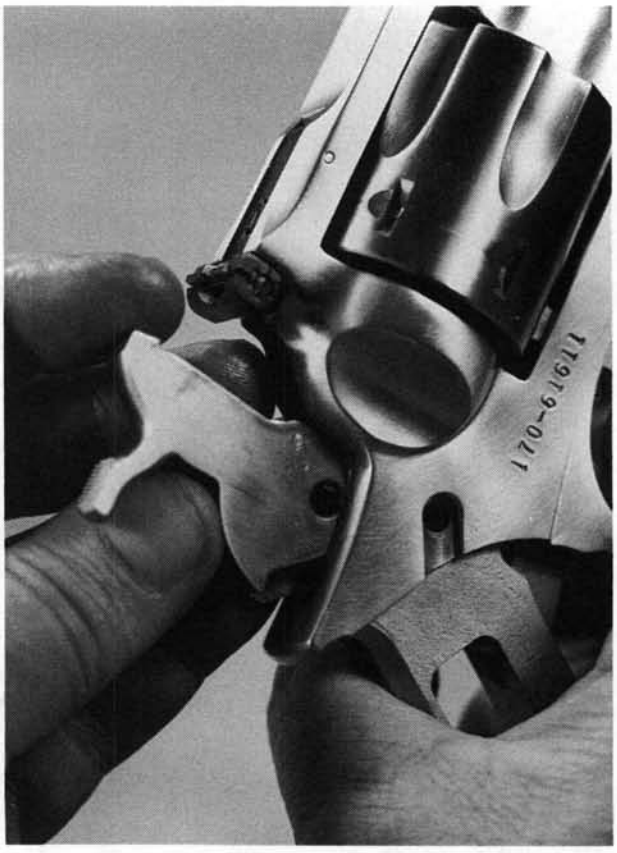
5. Take off the grip piece downward

6. Cock the hammer, and insert the disassembly pin in the hole in the hammer strut.

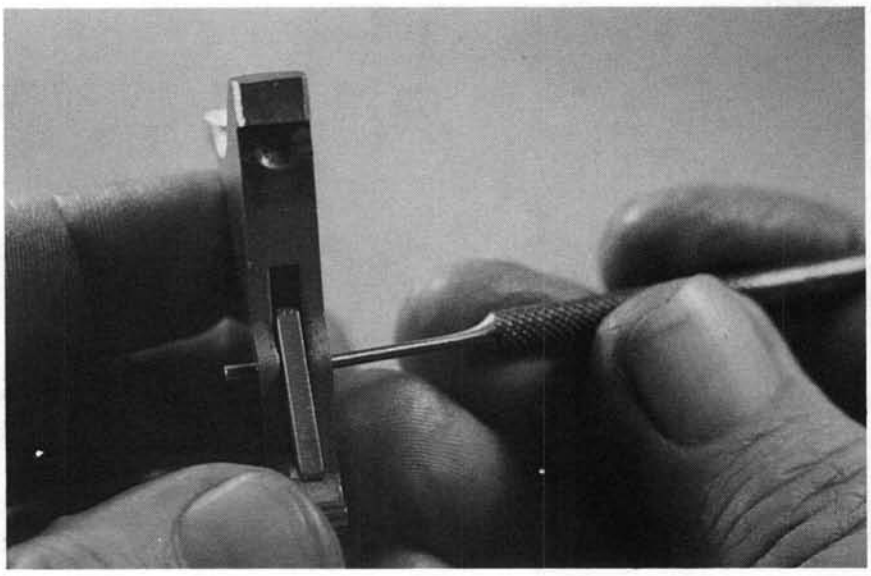


7. Pull the trigger and ease the hammer down. Move the spring assembly upward, tip it outward at the bottom, and remove it. If the spring assembly is to be taken apart, use caution and control the powerful compressed spring.

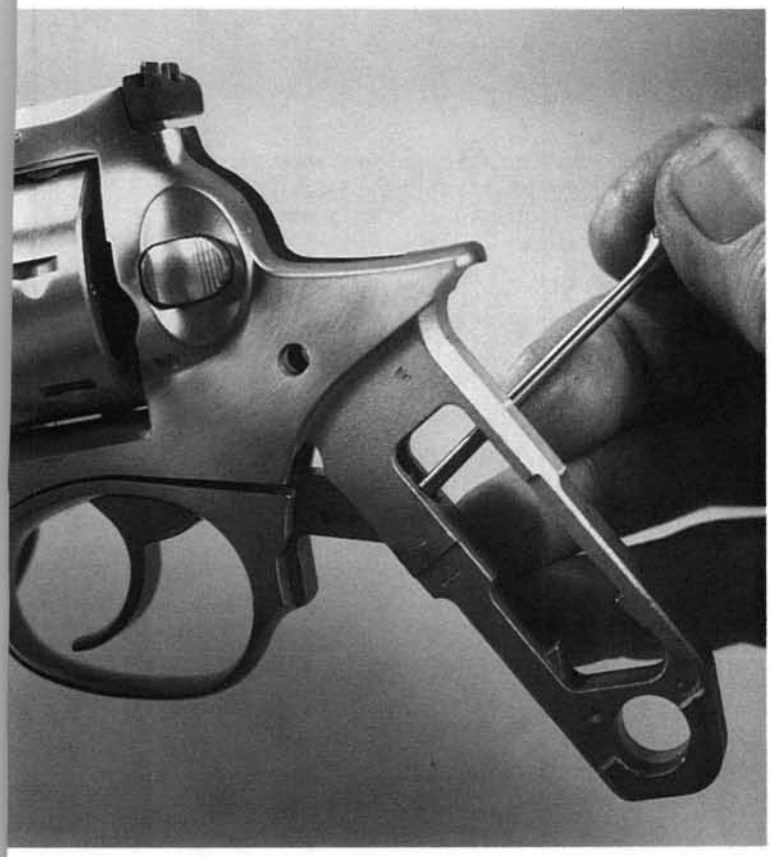
8. Push out the hammer pivot toward the right and remove it.



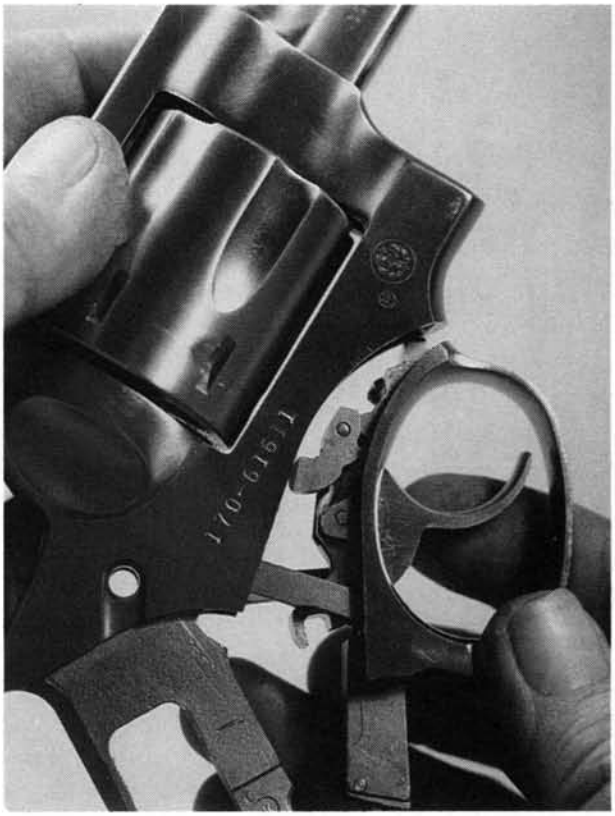
9. Pull the trigger, and remove the hammer upward.



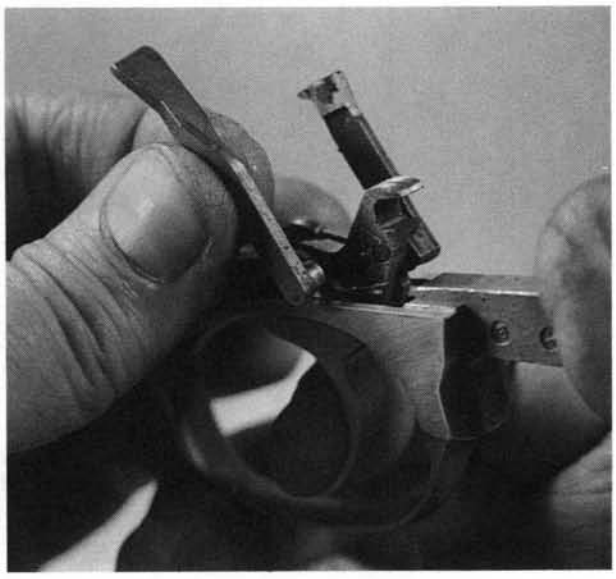
10. The cross-pin at the front of the hammer can be pushed out to allow removal of the double-action lever and its spring and plunger toward the front.



11. Use a tool to depress the trigger guard latch, and move the rear of the guard downward.

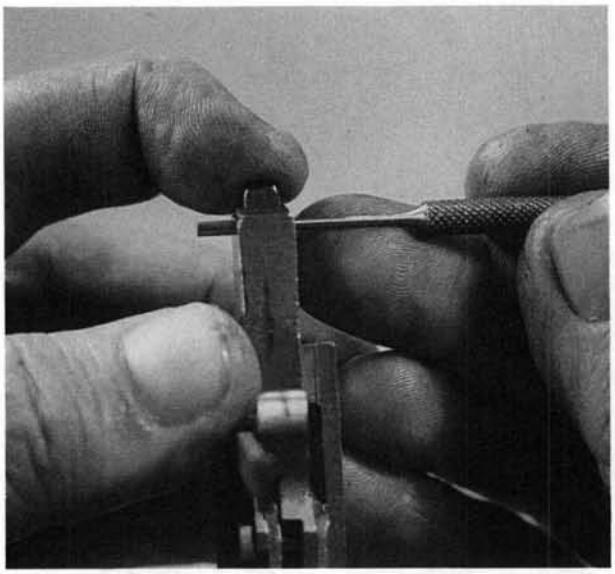


12. When the latch has cleared the frame, move the guard unit slightly rearward, to disengage its front projection, and take it off downward.

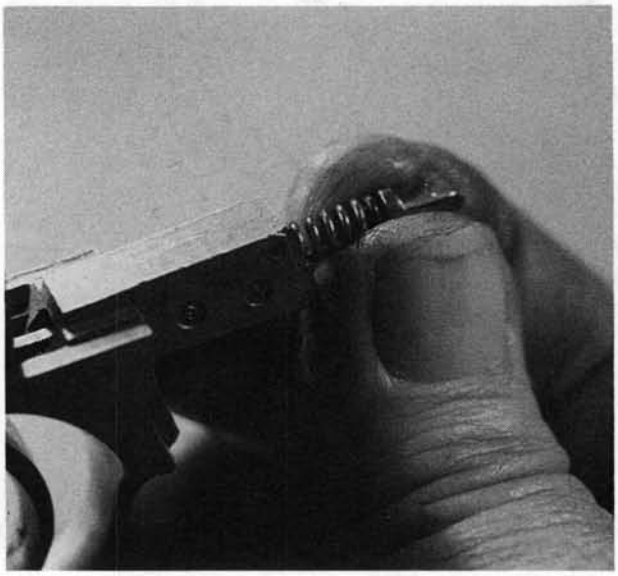


13. Depress the trigger slightly, and remove the transfer bar from the left side.

14. Slightly depress the trigger guard latch, and push out the cross-pin.



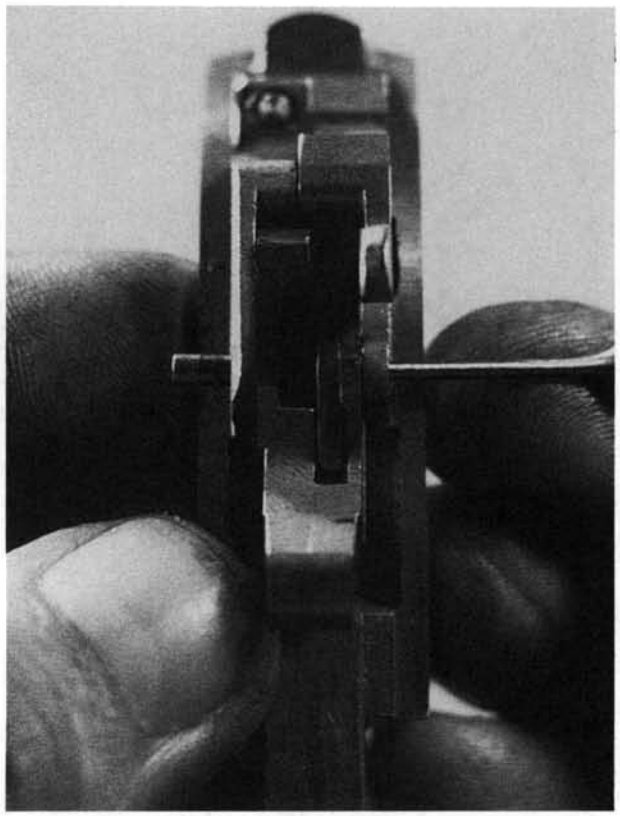
15. Remove the guard latch and the combination latch and trigger spring toward the rear. The trigger plunger will probably stay in the guard, and it can be removed later.



16. Keep a fingertip at the rear to restrain the plunger and spring, and take off the cylinder hand toward the right.

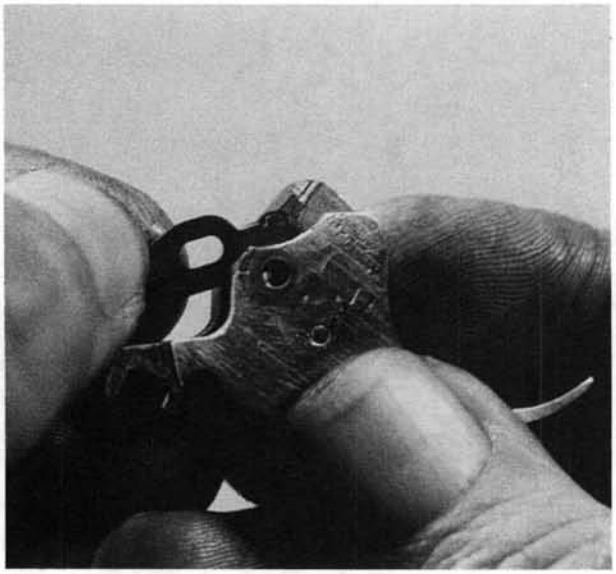
17. Remove the cylinder hand spring and plunger toward the rear.

18. Push out the trigger cross-pin.

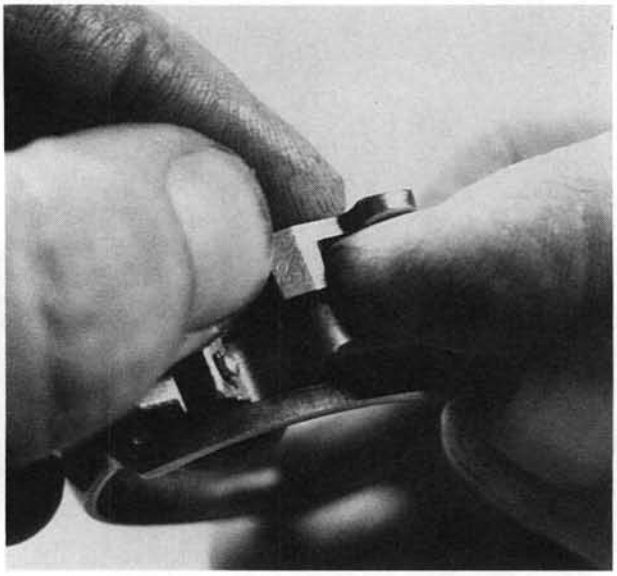


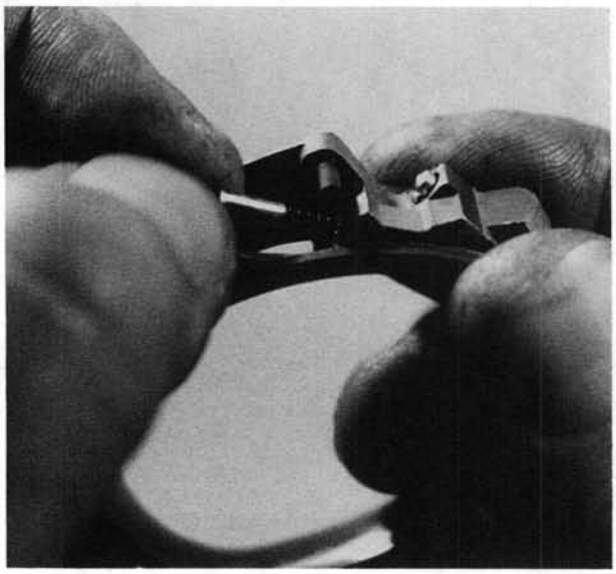
19. Remove the trigger upward and toward the rear.

20. Remove the cylinder stop trip from the top of the trigger. Unless necessary for repair, the cross-pinned trigger spring strut is not removed.

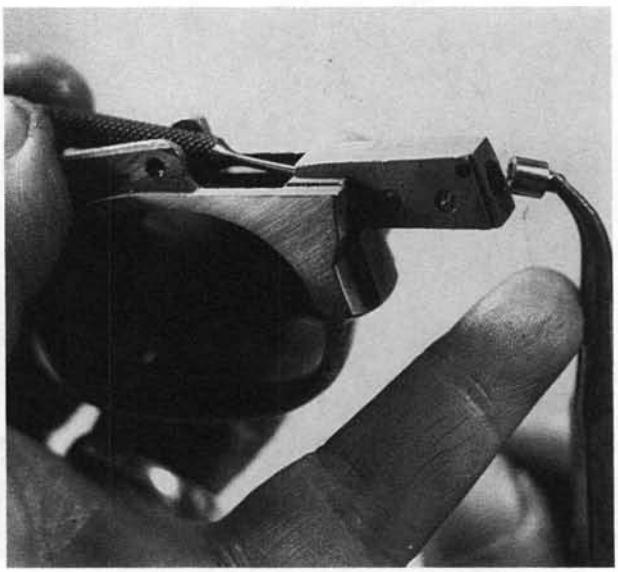


21. With a fingertip behind the part to arrest the plunger and spring, push the cylinder stop off its post toward the right.



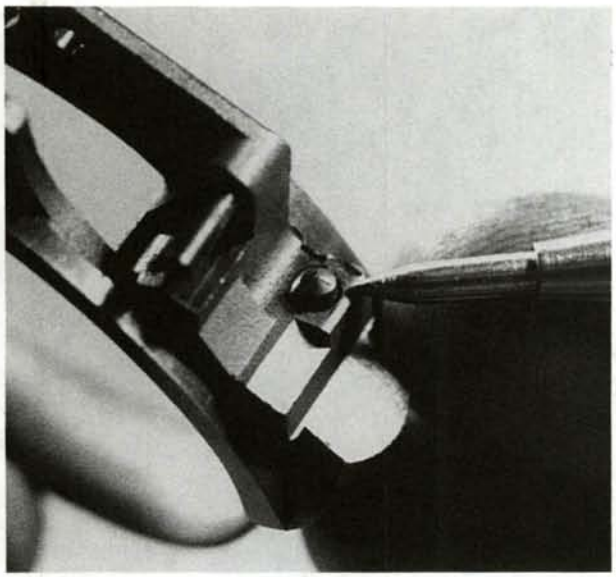


22. Remove the cylinder stop plunger and spring.

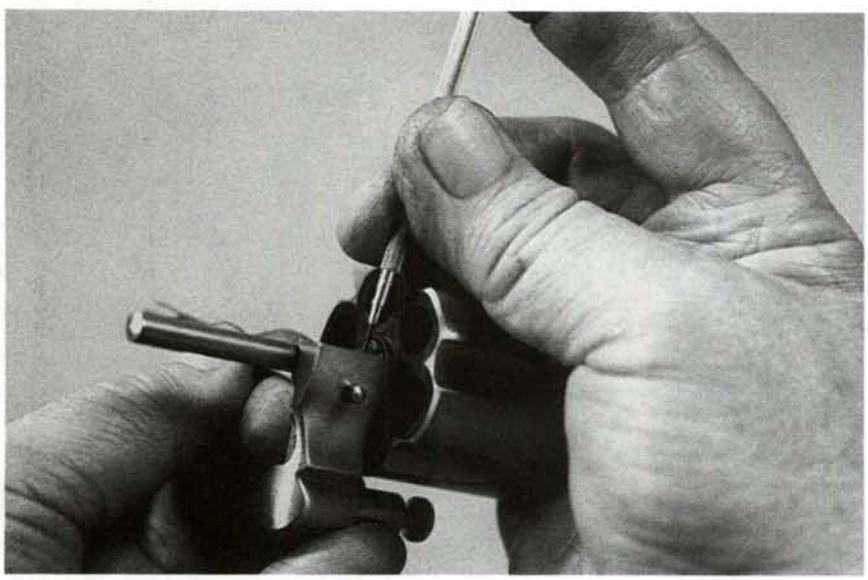


23. Push out the trigger spring plunger toward the rear, and remove it.

24. The crane pivot plunger and spring are staked in place at the factory, and they are not routinely removable.

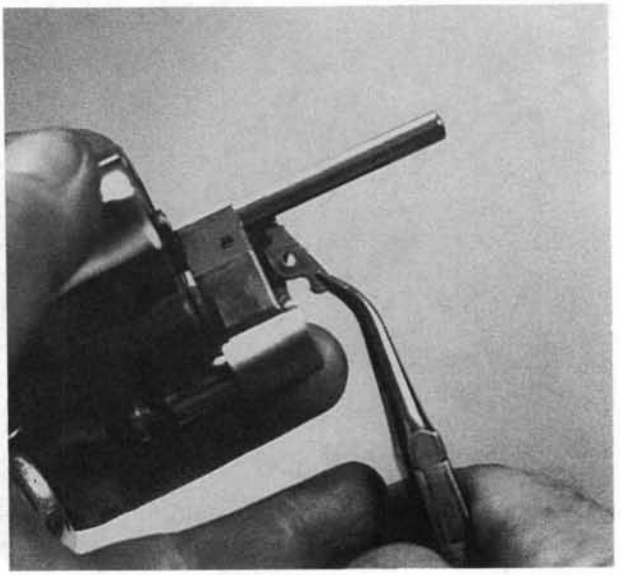


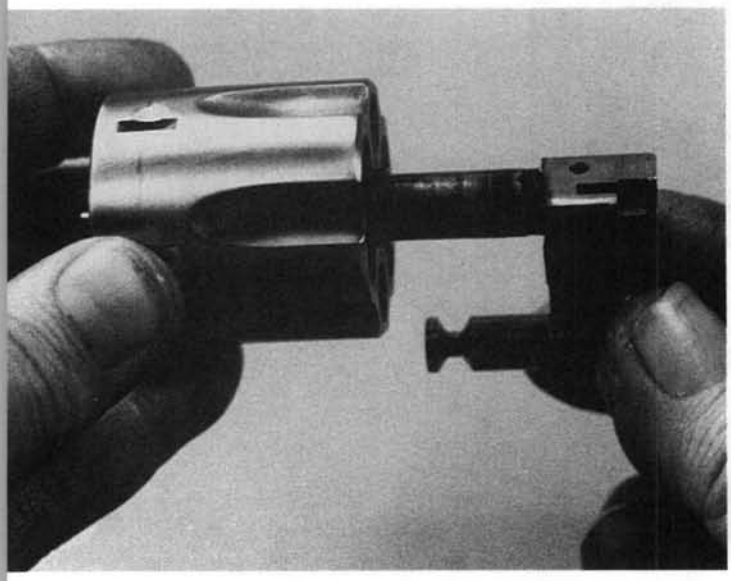
25. Operate the cylinder latch, open the cylinder, and remove the cylinder and crane assembly toward the front.



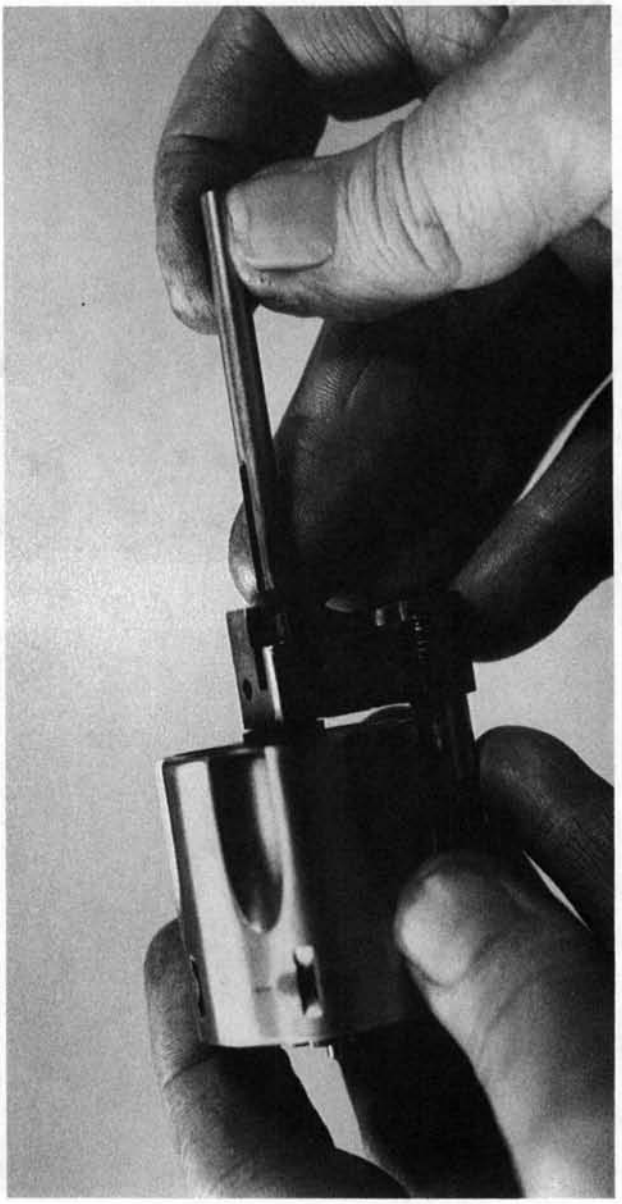
26. Insert a very slim tool in the hole in the top of the crane to depress the lock plunger, and push out the front latch pivot toward the left.

27. Remove the front latch downward and toward the front. If necessary, tweezers can be used to remove the front latch plunger and spring from the recess.



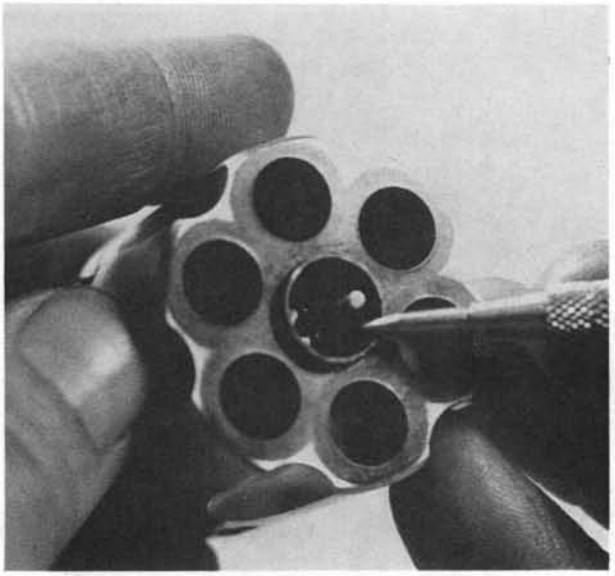


28. Remove the ejector rod toward the front.

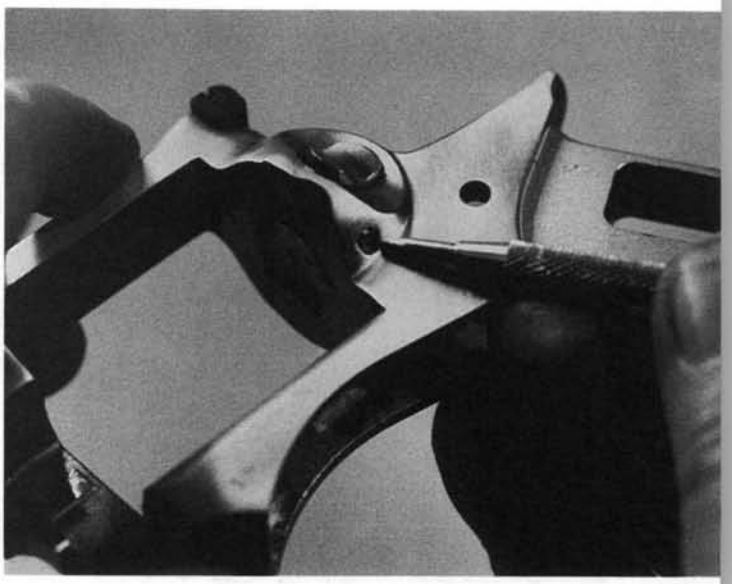


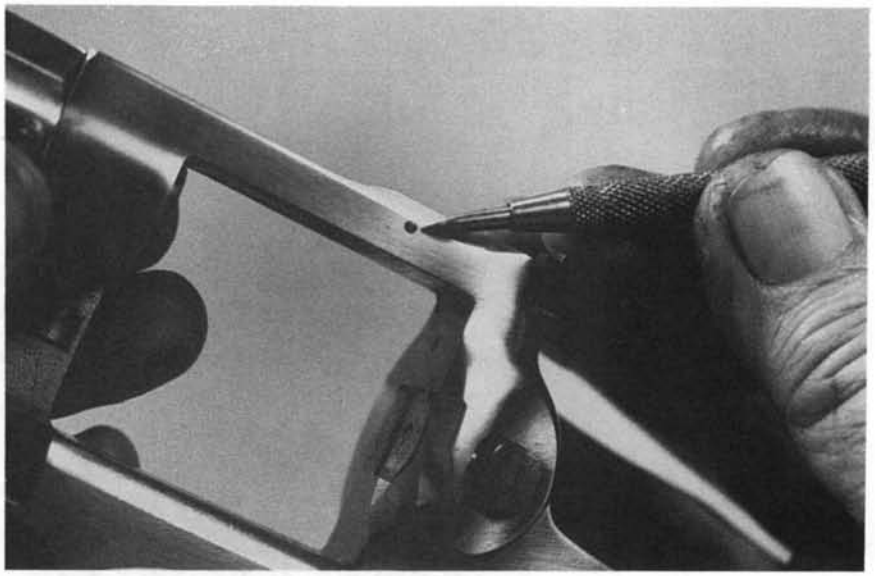
29. Remove the crane toward the front.

30. The ejector system is retained in the cylinder by a recessed nut that requires a special factory two-point wrench, and any attempt to disassemble it without the special tool would be certain to damage the parts. This unit is not routinely dismountable.



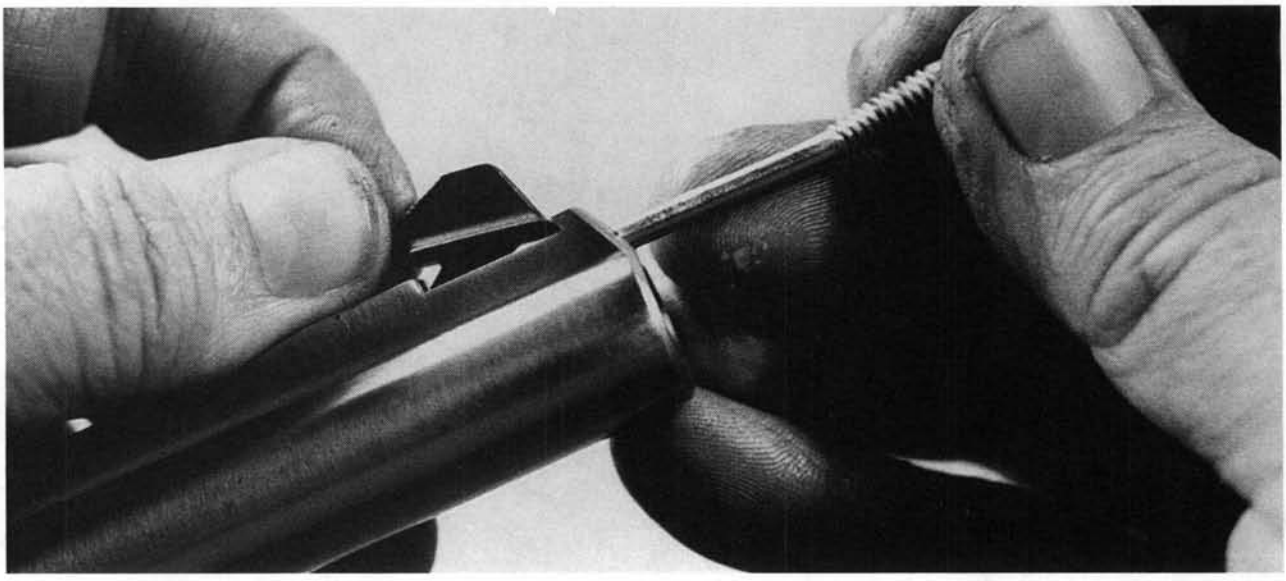
31. The vertical screw on the left side that pivots and retains the cylinder latch is staked in place, and removal is not advisable unless repair is necessary. For details on removing the latch, if needed, see the Ruger SP101 or Security-Six instructions in this book.



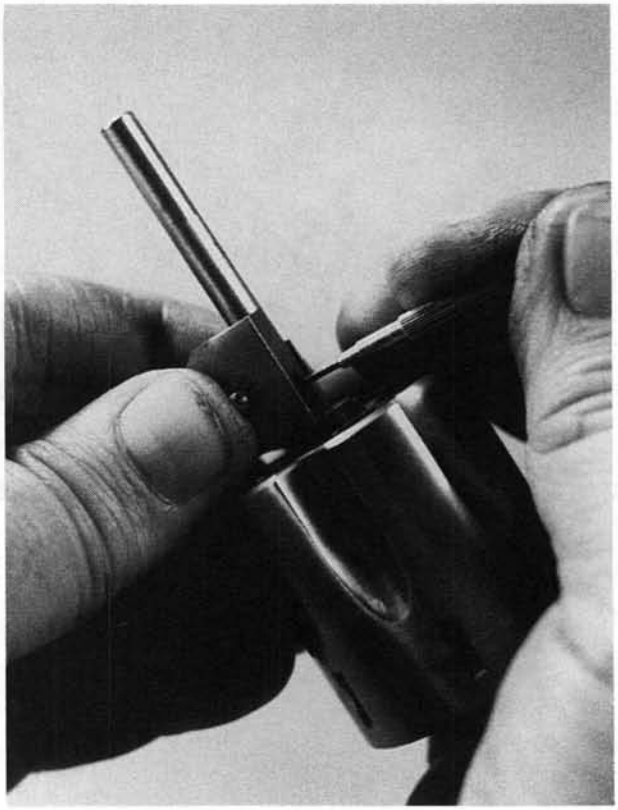


32. The rear sight is retained by a cross-pin, and by the elevation screw. If the sight is removed, note that there are two small springs under it.

33. To remove the front sight, depress the plunger at the muzzle and tip the sight upward at the rear.

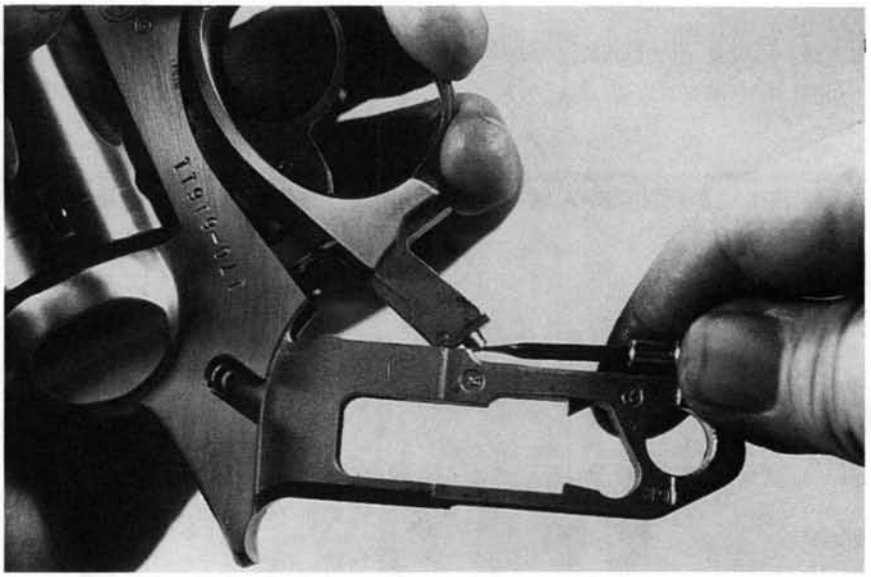


Reassembly Tips:



1. When reinstalling the front latch pivot, it is again necessary to insert a slim tool to depress the lock plunger as the pivot is pushed into place.

2. When replacing the trigger guard unit in the frame, it may be necessary to adjust the position of the cylinder hand and transfer bar inside the frame. Also, the operation is easier if a tool is used to slightly depress the latch as the guard is moved into place.



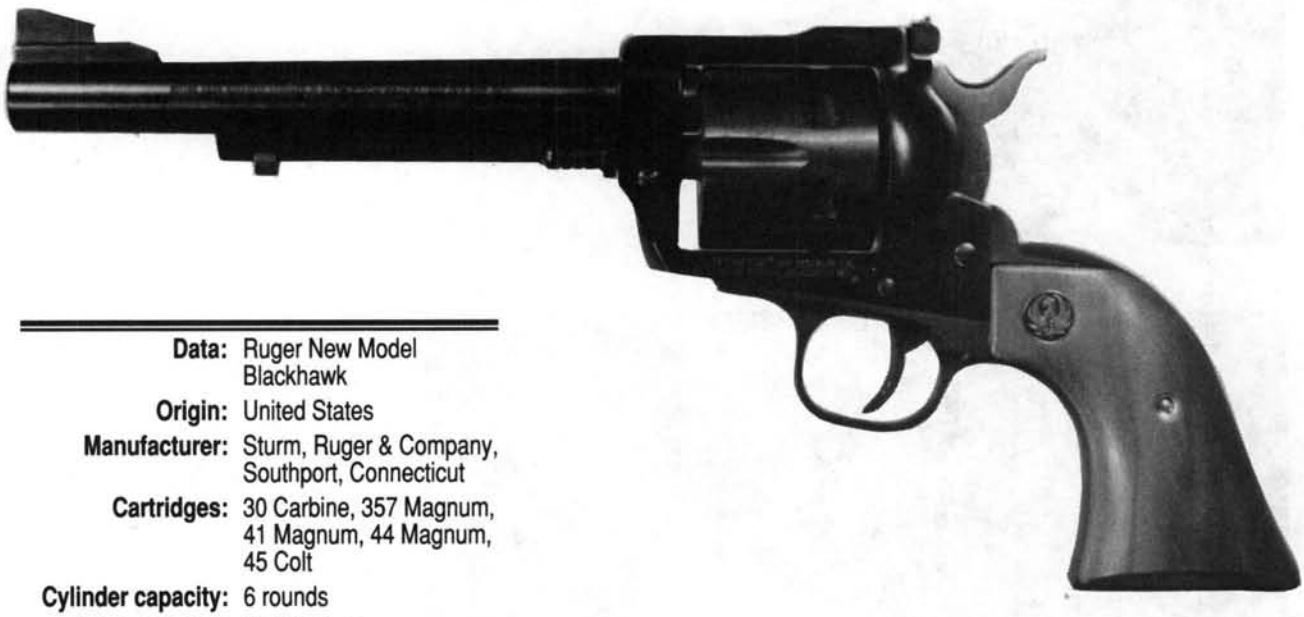
3. Remember that the trigger must be pulled before the hammer can be reinserted.

Ruger New Model Blackhawk

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Ruger New Model Blackhawk also apply to the following guns.

Ruger Bisley
Ruger New Model Single-Six
Ruger New Model Super Blackhawk
Ruger New Model Super Single-Six

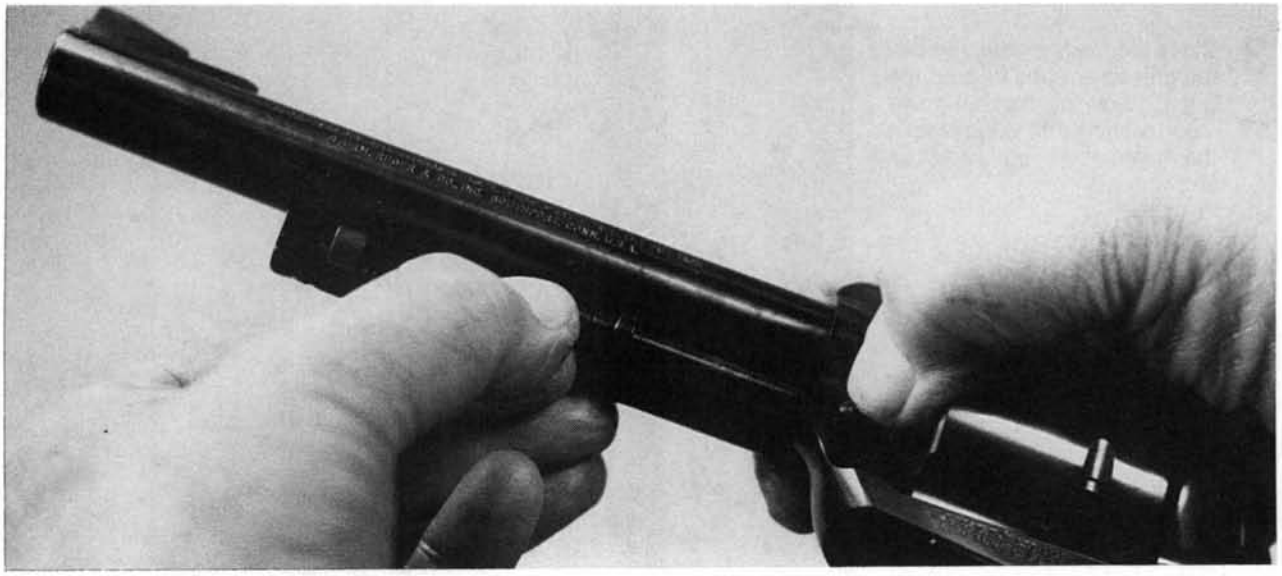


Data:	Ruger New Model Blackhawk
Origin:	United States
Manufacturer:	Sturm, Ruger & Company, Southport, Connecticut
Cartridges:	30 Carbine, 357 Magnum, 41 Magnum, 44 Magnum, 45 Colt
Cylinder capacity:	6 rounds
Overall length:	12 1/4 inches (6 1/2-inch barrel)
Barrel lengths:	4 5/8, 5 1/2, 6 1/2, and 7 1/2 inches
Weight:	42 ounces (6 1/2-inch barrel)

In 1973, Sturm, Ruger & Company revised the design of their single-action revolvers to include a transfer-bar firing system. Doing this with a single-action mechanism was quite a feat of engineering. The change separated the guns into "Old Model" and "New Model" categories. The gun shown here is a New Model Blackhawk in 357 Magnum chambering. The instructions apply to all of the New Model guns.

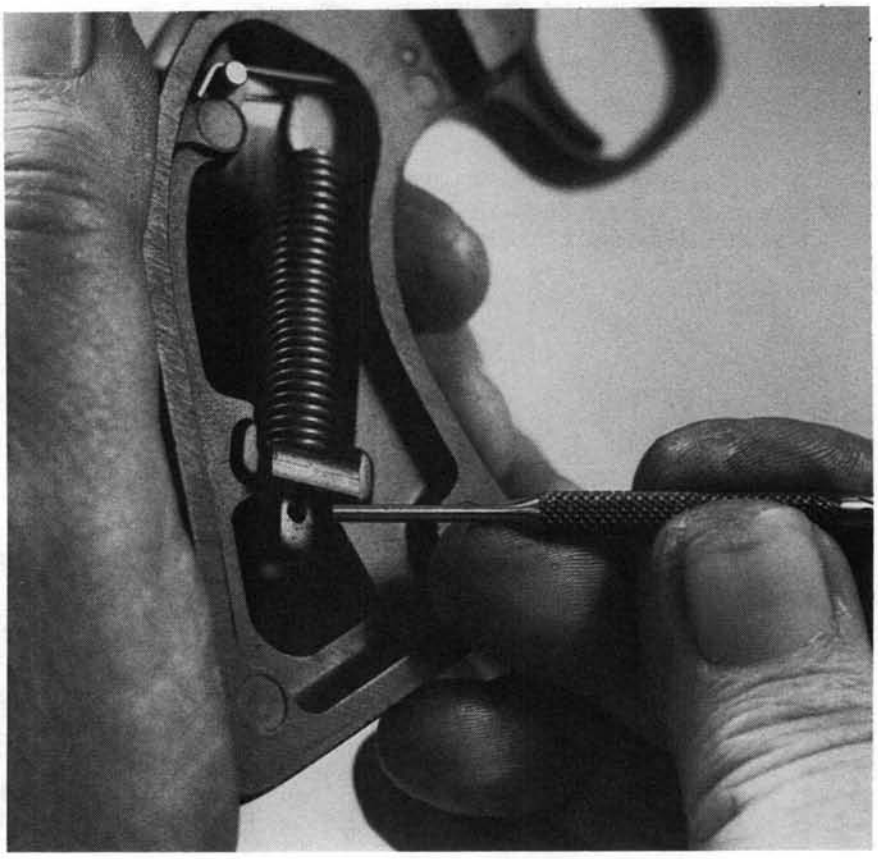
Disassembly:

1. Open the loading gate to free the cylinder, depress the base pin latch, and move the base pin forward until it is stopped by the ejector handle.



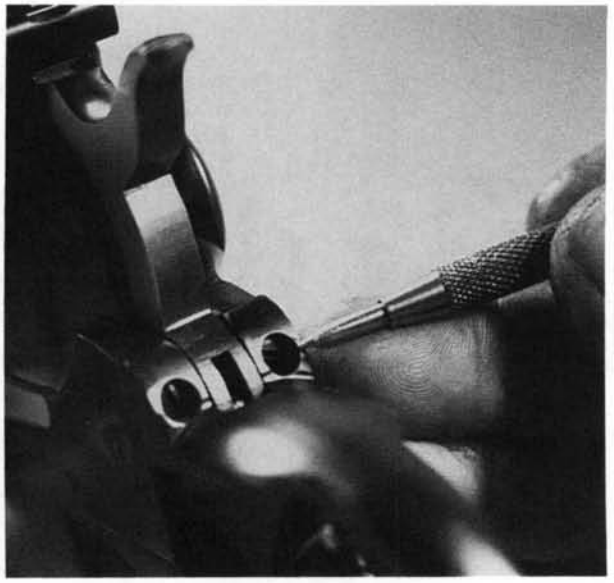
2. Remove the cylinder toward the right.

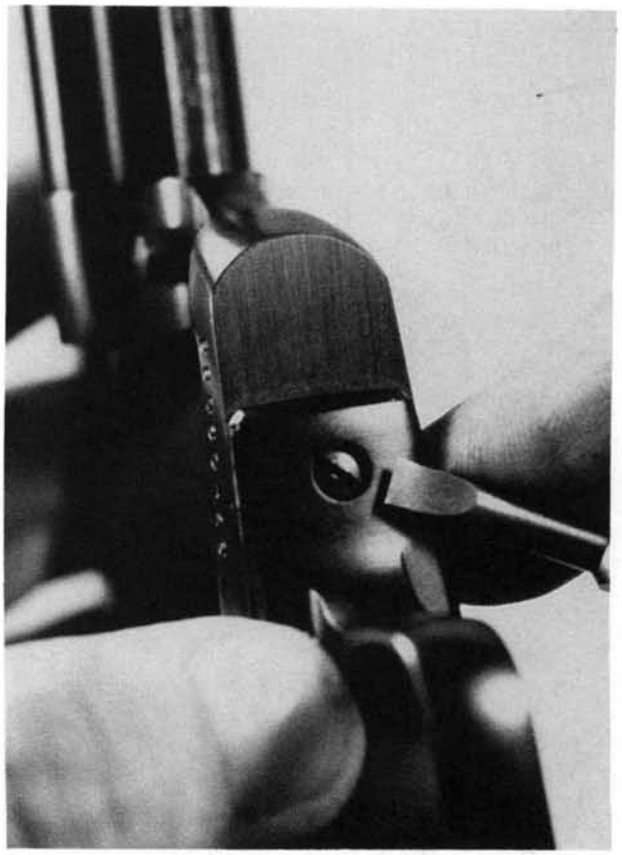
3. Close the loading gate, remove the grip screw, and take off the grips. Cock the hammer, and insert a small drift in the hole in the hammer spring guide, as shown.



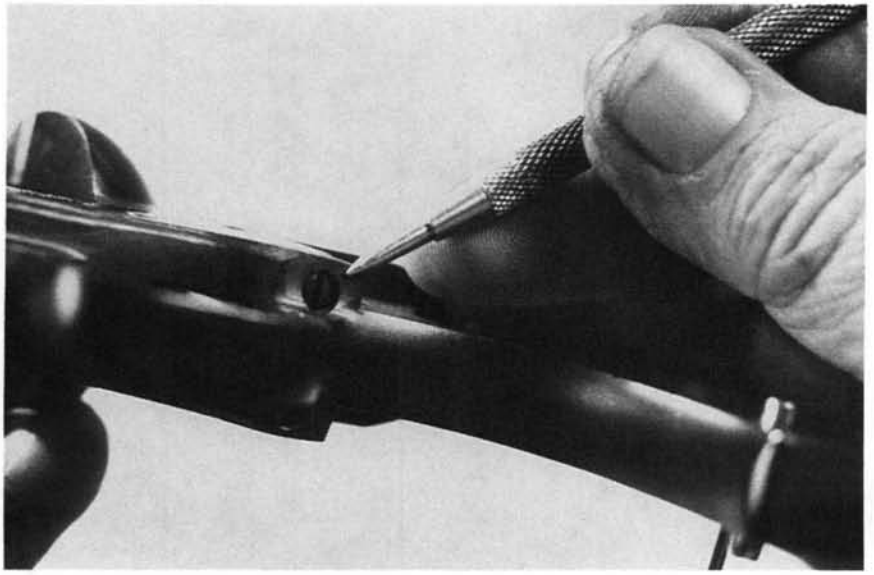
4. Pull the trigger and ease the hammer down. The spring will be trapped on the guide. It is not removed at this time.

5. Remove the two screws at the top of the grip frame.



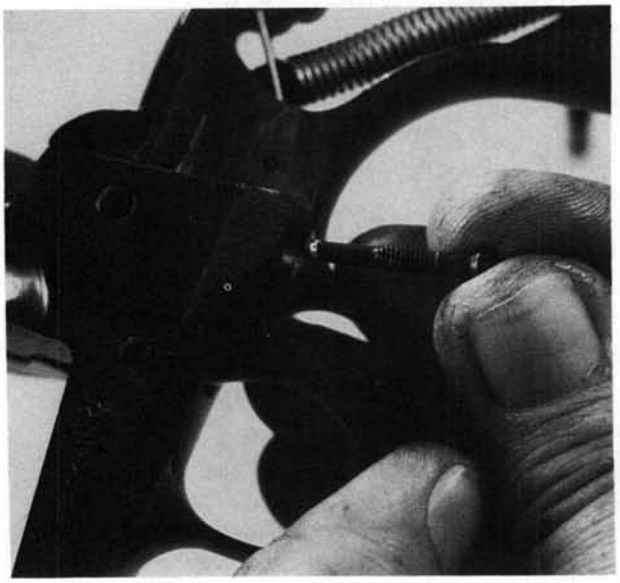


6. Remove the screw at the front of the grip frame on the underside.

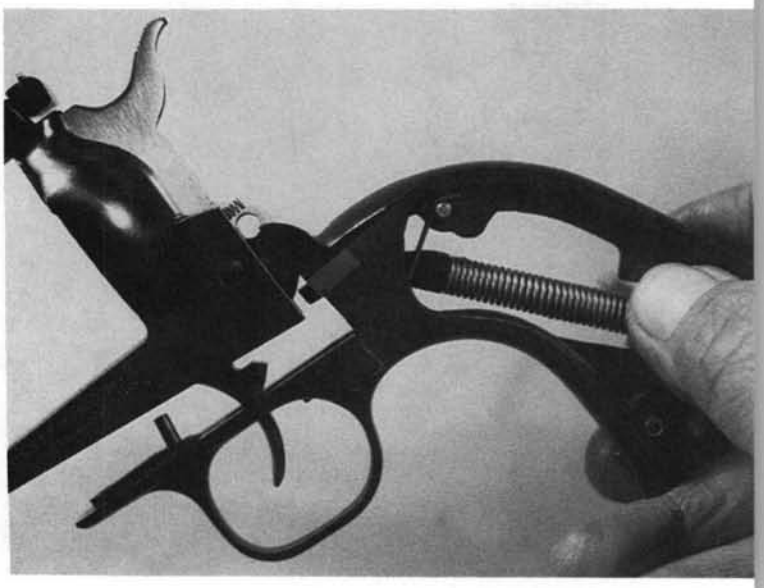


7. Remove the two screws on the underside of the grip frame at the rear of the trigger guard.

8. Note that the underside screw on the left side has an extension that mates with a groove in the hammer pivot. It must be reinstalled in the same location.

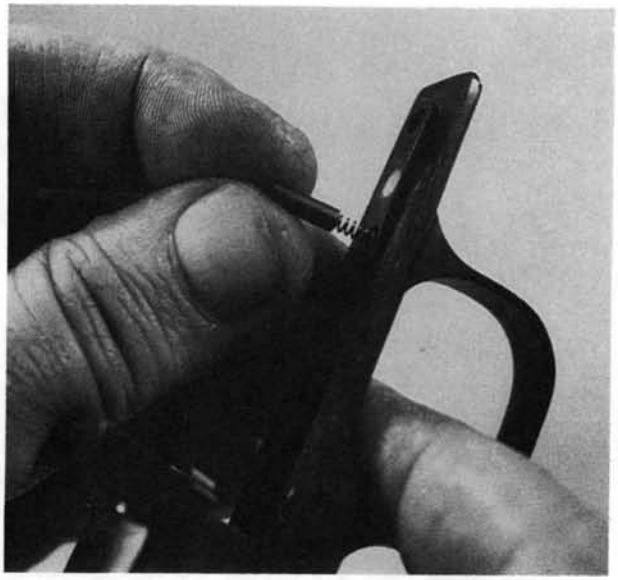


9. Move the hammer back slightly, move the grip frame slightly toward the rear, and take it off downward.

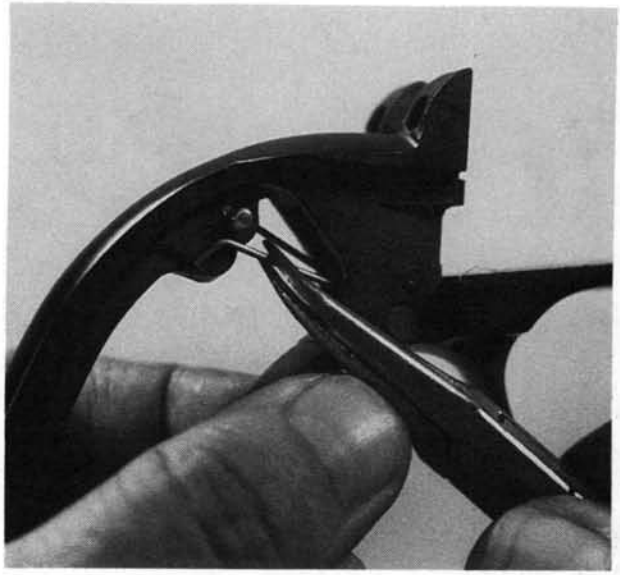


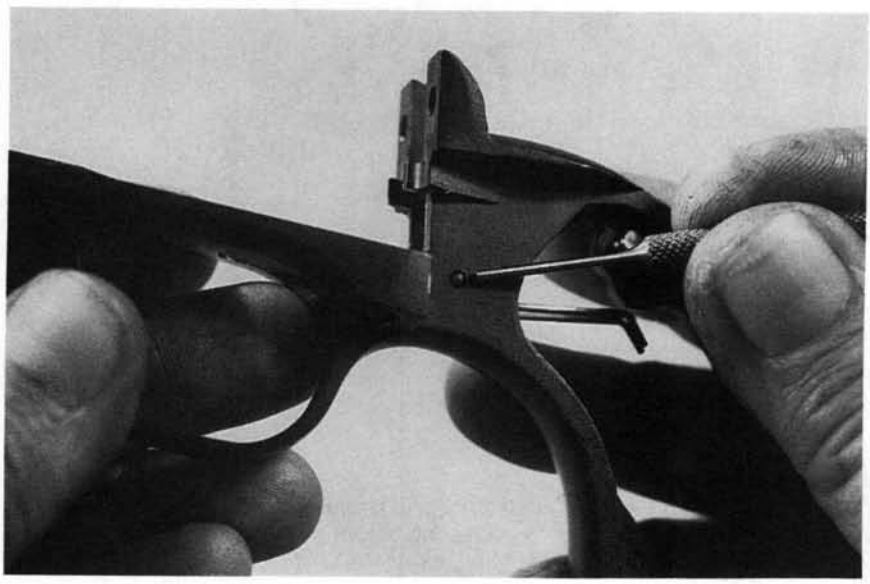
10. The hammer spring unit can now be removed from the grip frame. The unit can be disassembled, but if this is done, use caution and control the strong and compressed spring.

11. Remove the cylinder stop plunger and spring from the top of the grip frame.



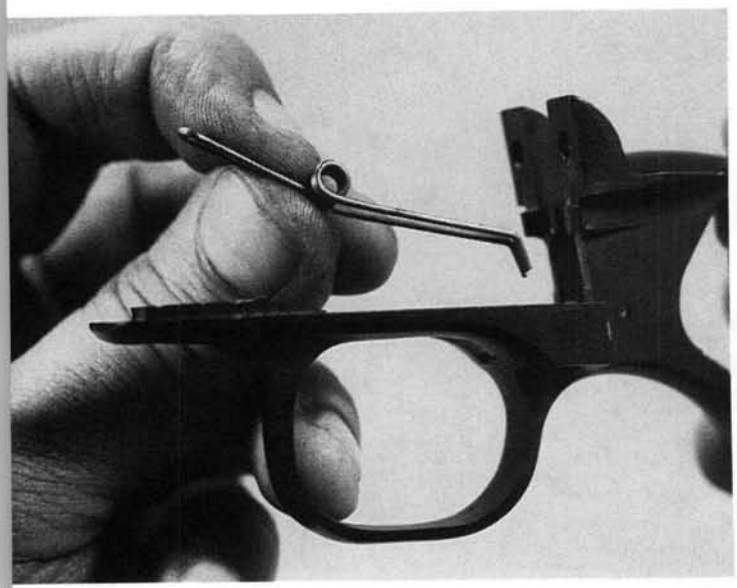
12. Unhook the rear arms of the trigger spring from the grooves in the cross-pin.

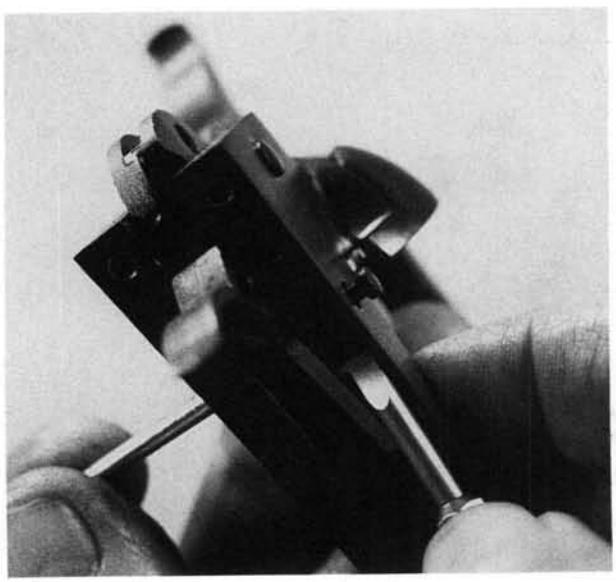




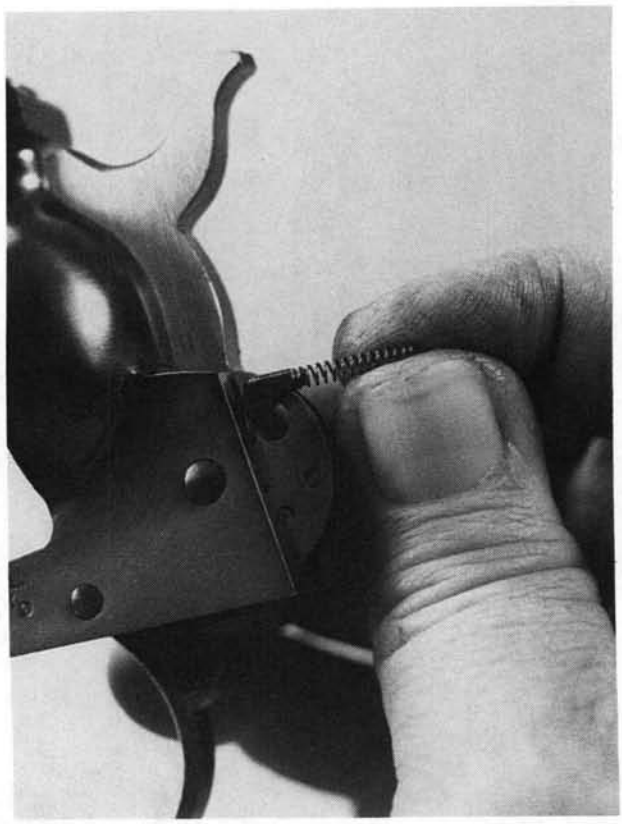
13. Push out the trigger spring retaining cross-pin.

14. Remove the trigger spring.



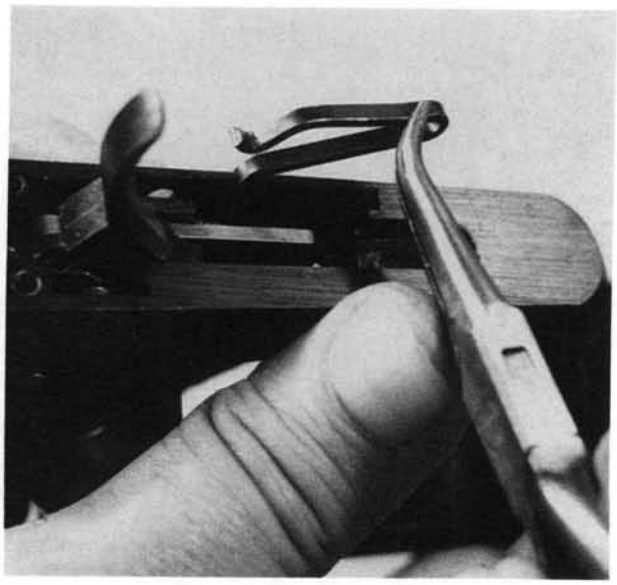


15. Remove the cylinder hand spring and plunger from the rear of the main frame.



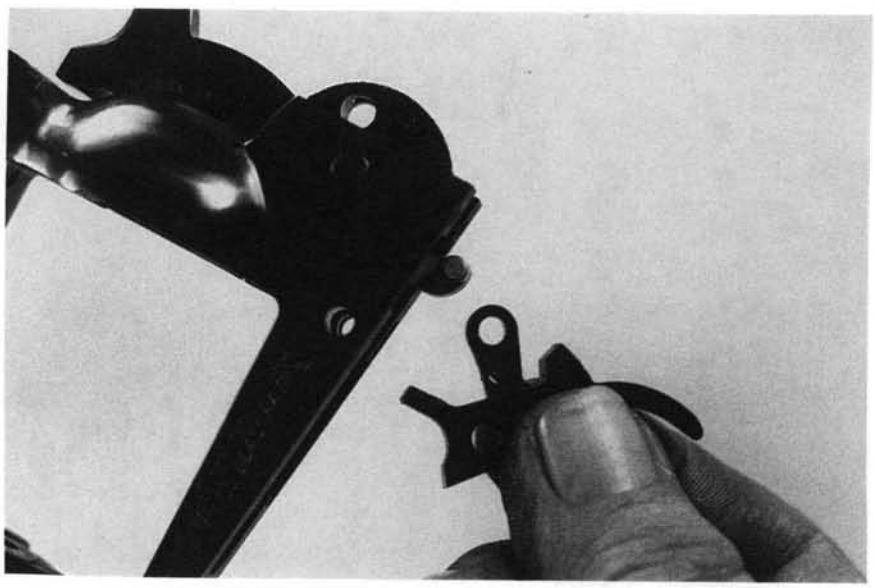
16. Use a tool to depress the lower arm of the loading gate spring, and push the trigger pin out toward the right.

17. Remove the loading gate spring.

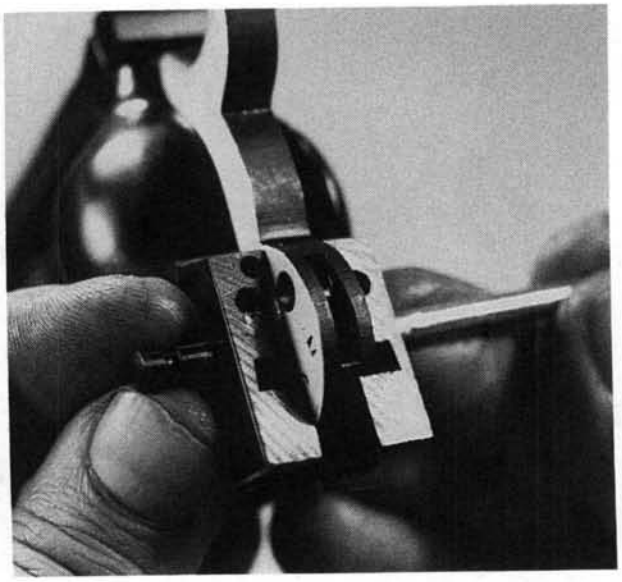


18. Remove the cylinder stop.

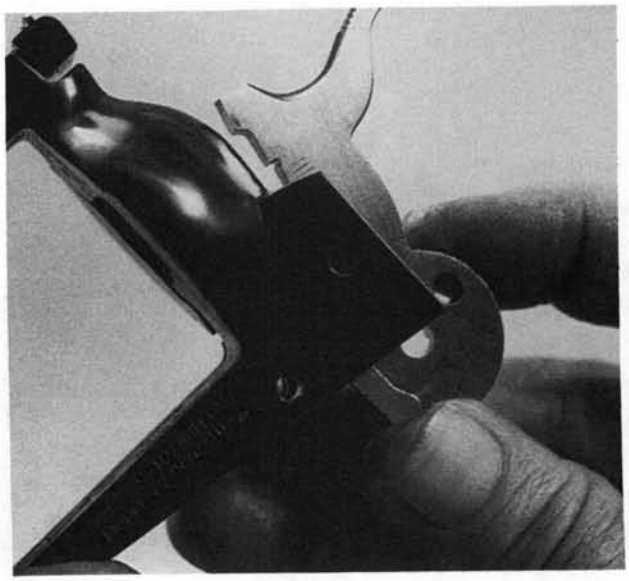
19. Move the trigger out until it can be detached from the transfer bar and removed.

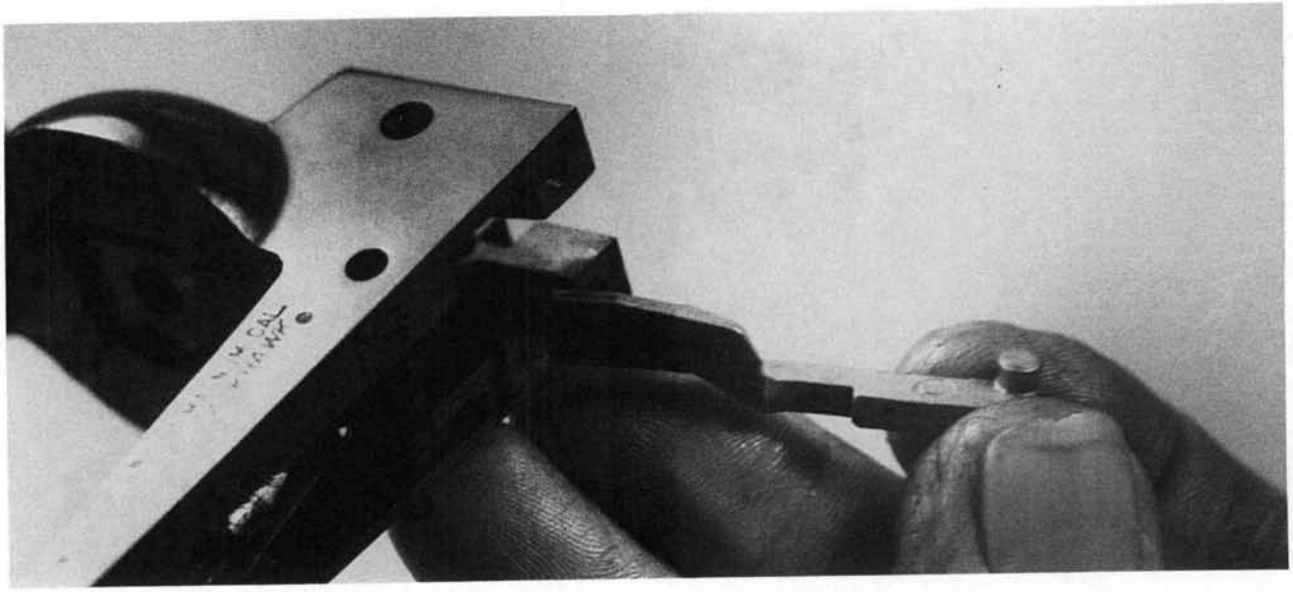


20. Push out the hammer pivot.

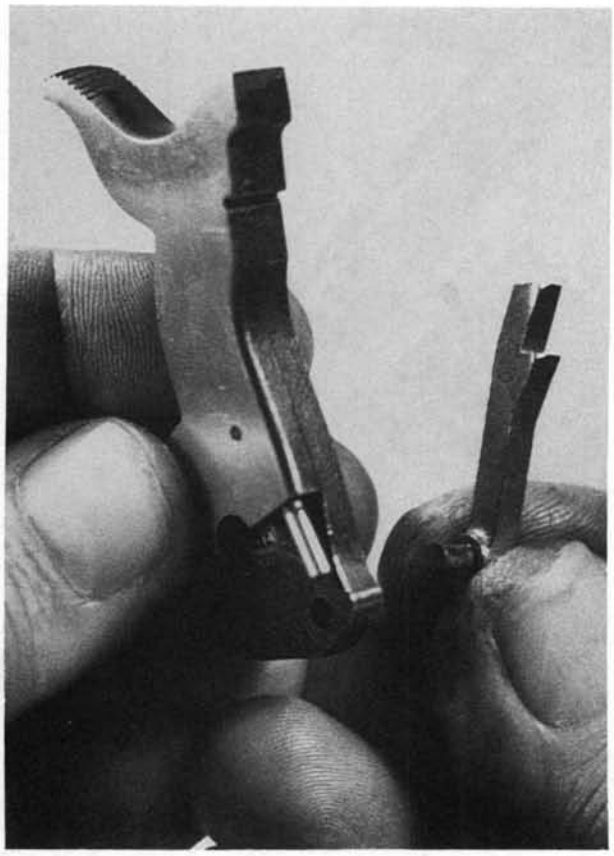


21. Remove the hammer and the attached cylinder hand downward.

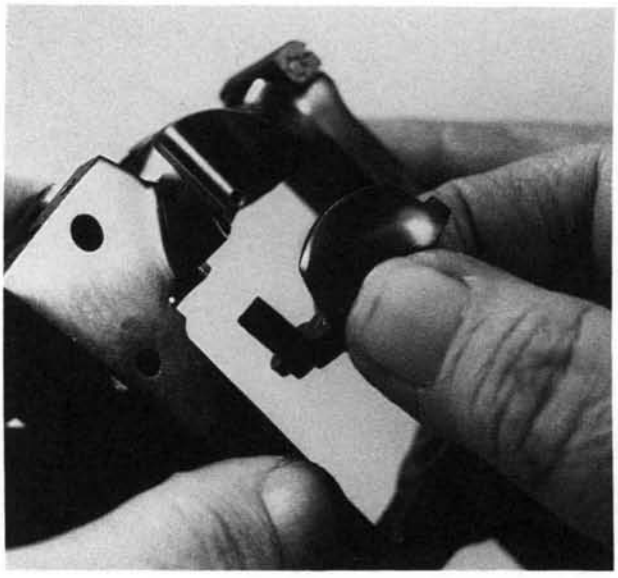




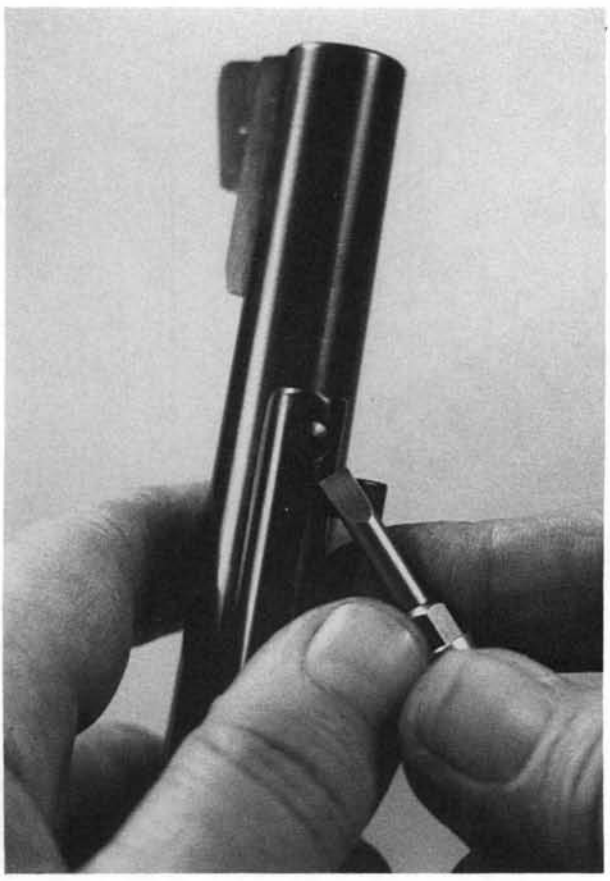
22. The transfer bar will be freed by removal of the hammer, and it can be taken out downward.



23. The cylinder hand is easily detached from the hammer. Pushing out the cross-pin will release the cylinder stop trip plunger and its spring for removal.

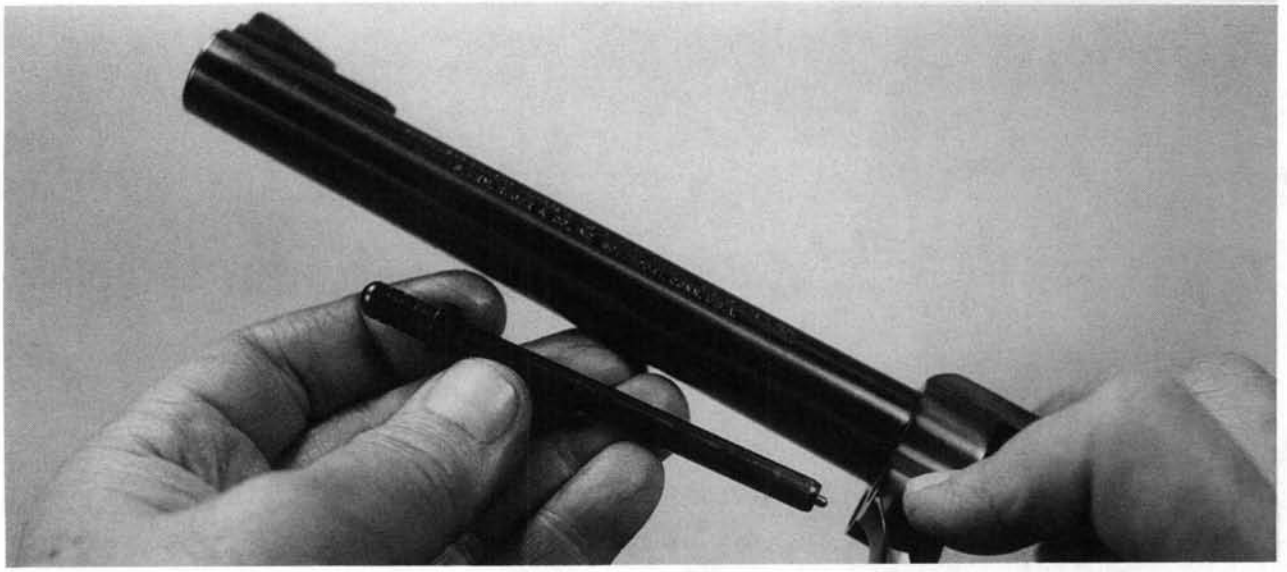


24. Open the loading gate and remove it toward the front.



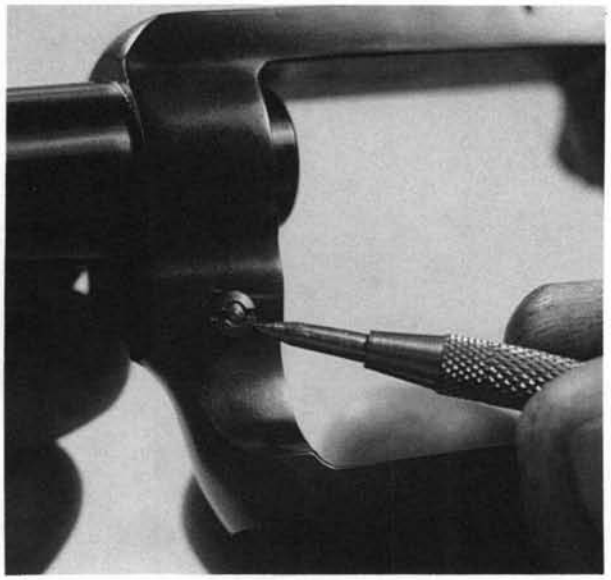
25. Remove the screw at the forward end of the ejector housing on the right side.

26. Remove the ejector assembly toward the front. The ejector and its spring are easily taken out of the housing toward the rear.

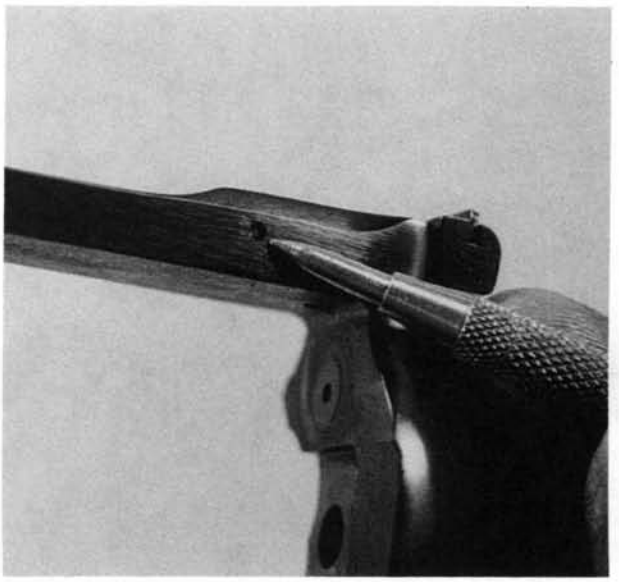


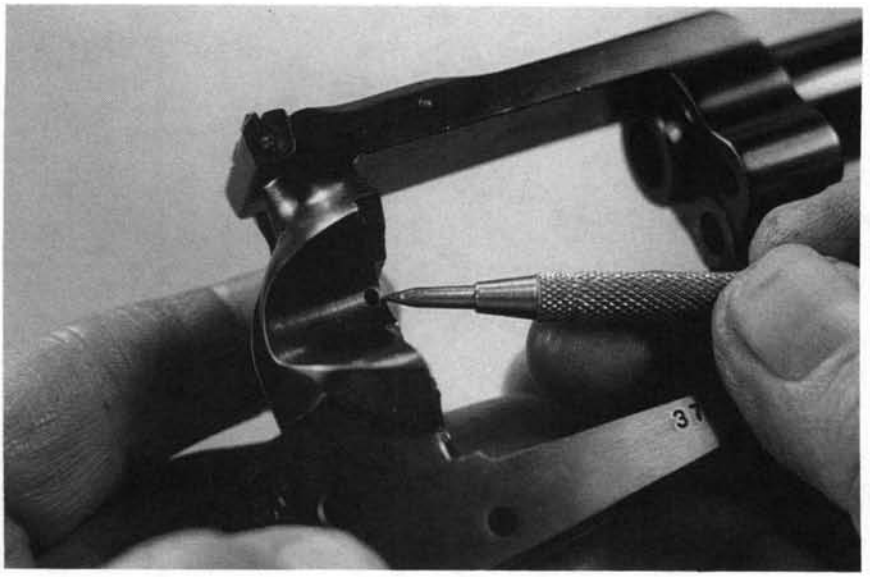
27. The cylinder base pin can now be removed. Note that the base pin has a small plunger and spring mounted in its rear tip, to bear on the transfer bar. This is factory-staked in place, and is not routinely removable.

28. The base pin latch has a nut on the left side that requires a special two-point wrench, and the lock-piece on the opposite side has a slot for a regular screwdriver. To remove the latch, the two tools are used together. The nut and spring are taken off toward the left, and the latch piece toward the right.



29. The rear sight has a cross-pin at the front, and it is also retained by the elevation screw. It is taken off upward. Note that there are two small springs under the sight.

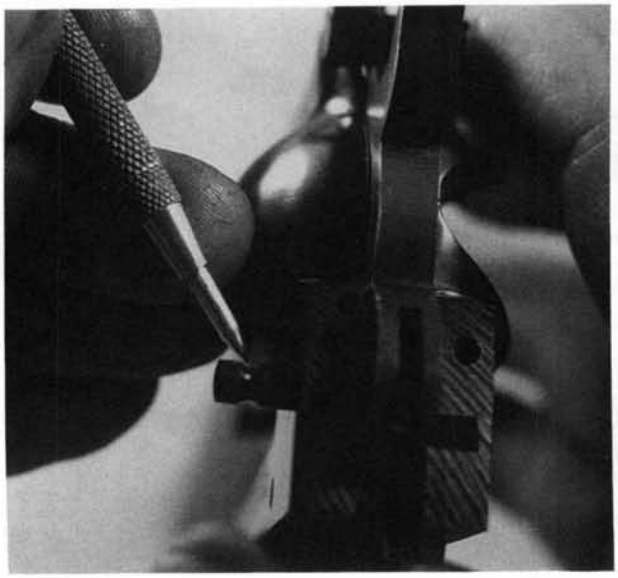




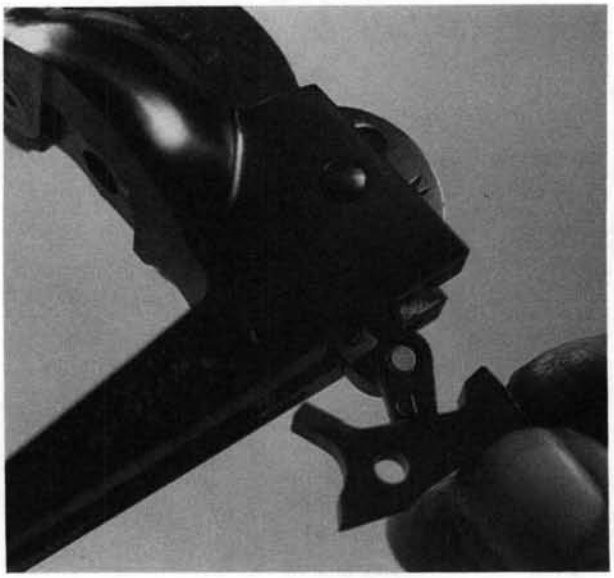
30. The left tip of the angled pin that retains the firing pin housing, firing pin, and spring, is "finished over" at the factory. Removal will inevitably mar the finish of the gun. If it must be taken out, there is an access hole on the right side in the loading groove. The pin is driven out upward and toward the left, and the firing pin assembly is taken out forward, into the cylinder space.

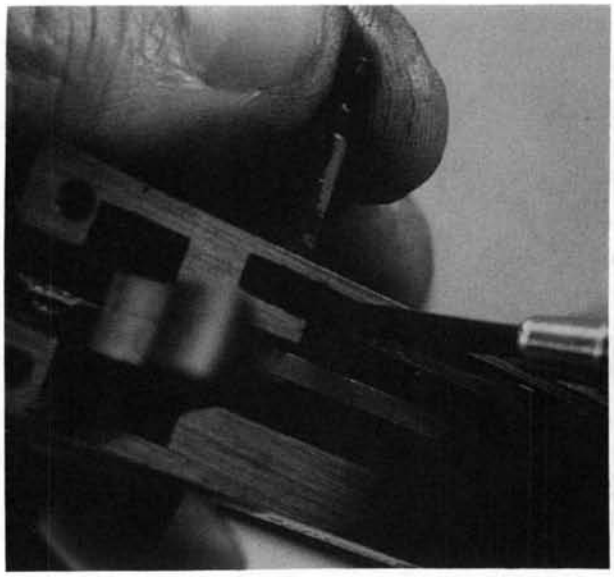
Reassembly Tips:

1. When replacing the hammer pivot, remember that the grooved end must be on the left side of the frame, to mate with the extension of the left grip frame screw.

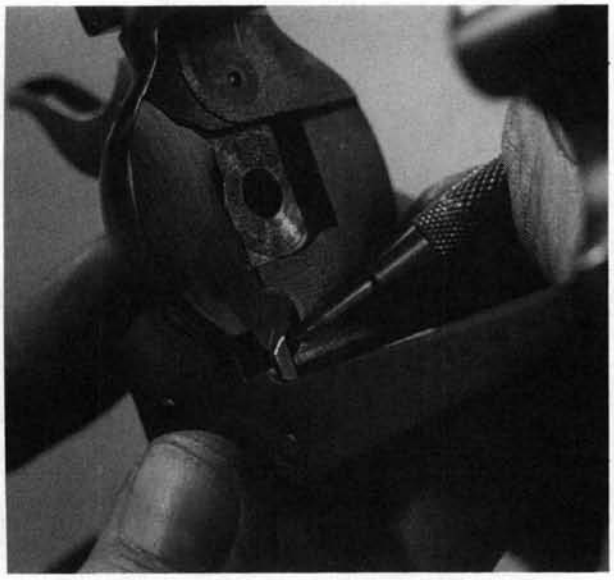


2. When installing the trigger, its rear arm must be hooked onto the transfer bar, as shown.



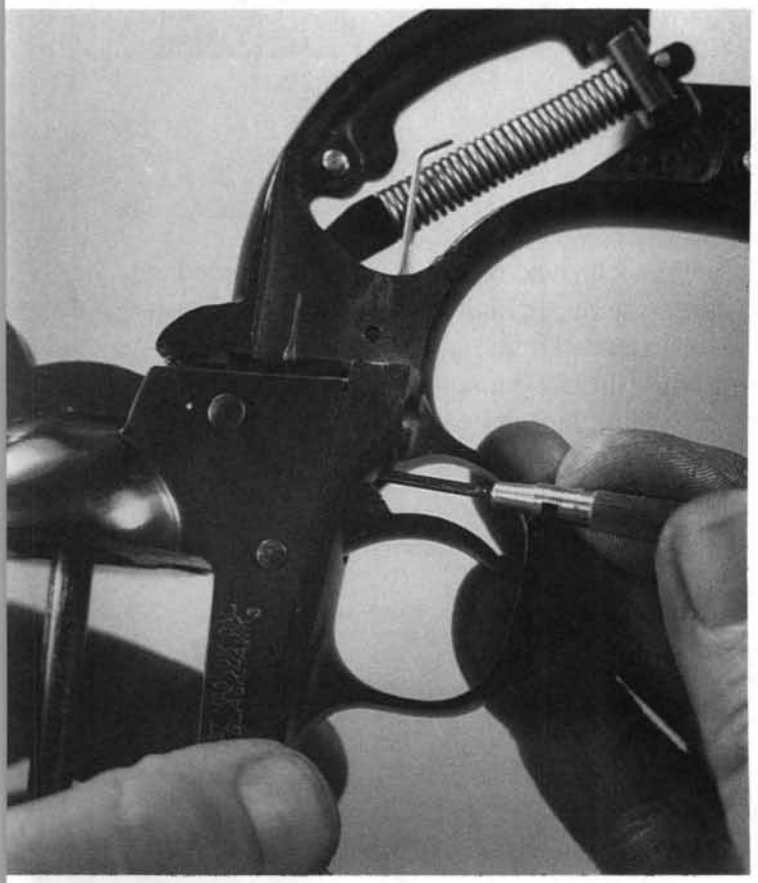


3. When replacing the trigger cross-pin, the gate spring must again be depressed. This time, put the end of a slim tool in the "hook" of the spring, and keep pressure rearward as well as downward, to ensure that the inside L-tip of the spring stays in its shelf on the gate.

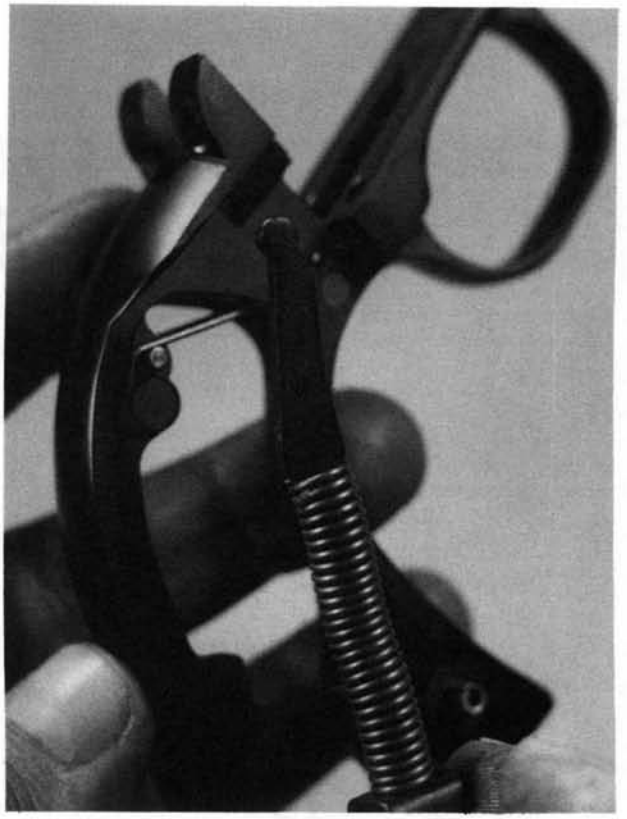


4. When the gate spring is properly installed, its engagement with the shelf on the gate will be as shown.

5. When replacing the cylinder hand plunger and spring, be sure the unit goes in the correct hole in the back of the frame, and not the one for the screw.

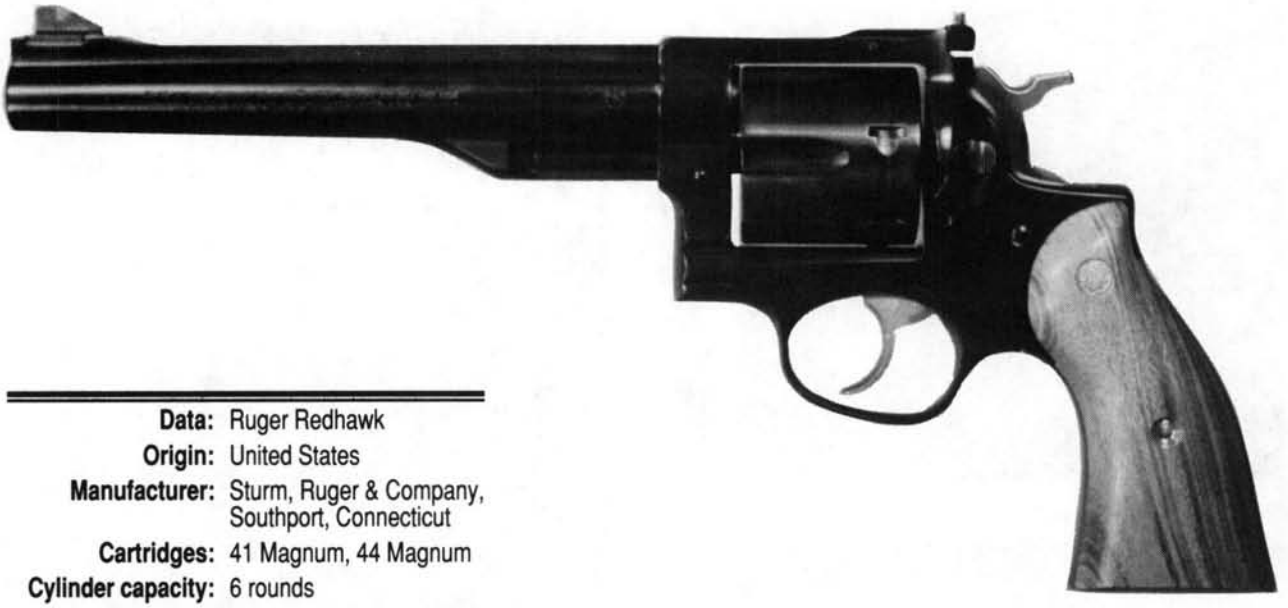


6. Remember to put the hammer spring unit in the grip frame before it is reinstalled. Note that the unit must be oriented as shown.



7. When the grip frame is being reinstalled, be sure the hammer spring strut, cylinder hand spring, and cylinder stop plunger are bearing on their proper locations. Leave the rear arms of the trigger spring unhooked, and use a small tool behind the trigger to lift the forward end of the spring and guide it onto the trigger shelf. After the grip frame is in place and the screws are installed, remember to rehook the rear arms of the trigger spring on the pin.

Ruger Redhawk

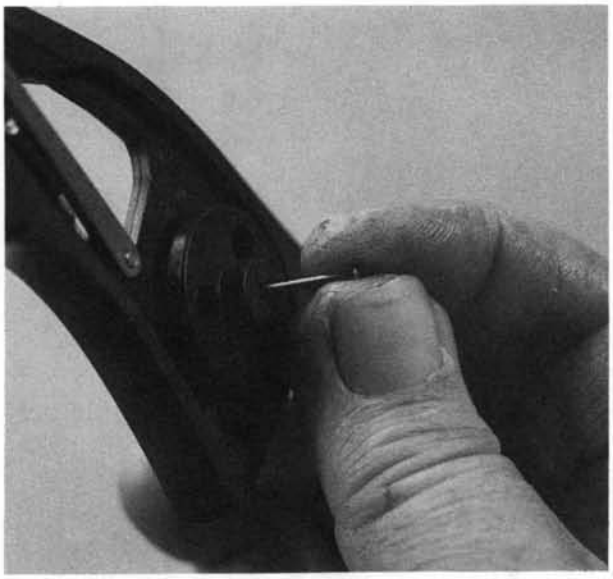


Data:	Ruger Redhawk
Origin:	United States
Manufacturer:	Sturm, Ruger & Company, Southport, Connecticut
Cartridges:	41 Magnum, 44 Magnum
Cylinder capacity:	6 rounds
Overall length:	13 inches ($7^1/_2$-inch barrel)
Barrel lengths:	$5^1/_2$ and $7^1/_2$ inches
Weight:	54 ounces ($7^1/_2$-inch barrel)

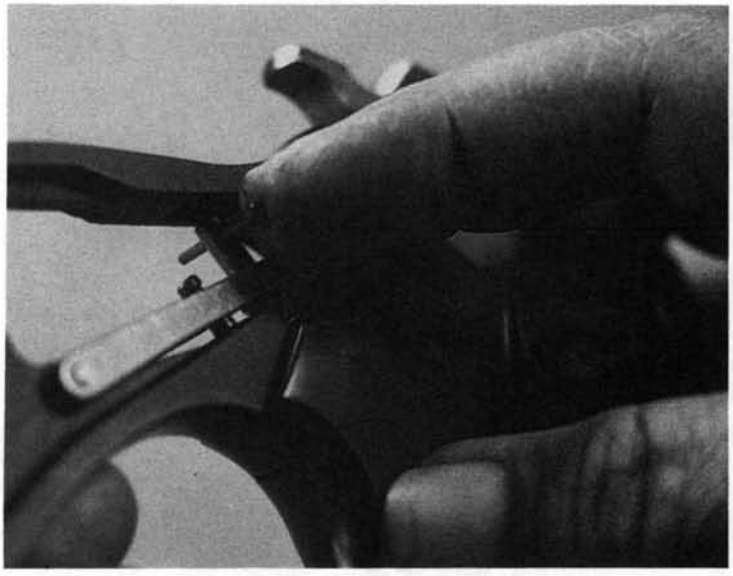
The Ruger Redhawk arrived in 1979, and it was joined in the Ruger line by the Super Redhawk in 1987. The Super Redhawk has an extended frame and integral scope-mounting facilities. While the two guns are much alike externally, the Super Redhawk is mechanically closer to the GP100 Ruger, and these instructions do not apply.

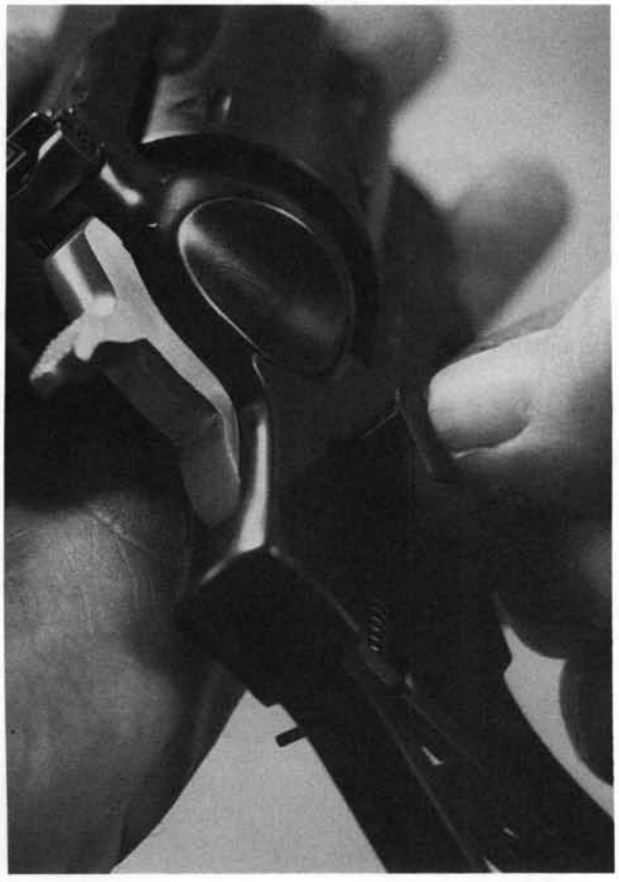
Disassembly:

1. Remove the grip screw, and take off the grips. Take out the disassembly pin from the center of the grip panel locator



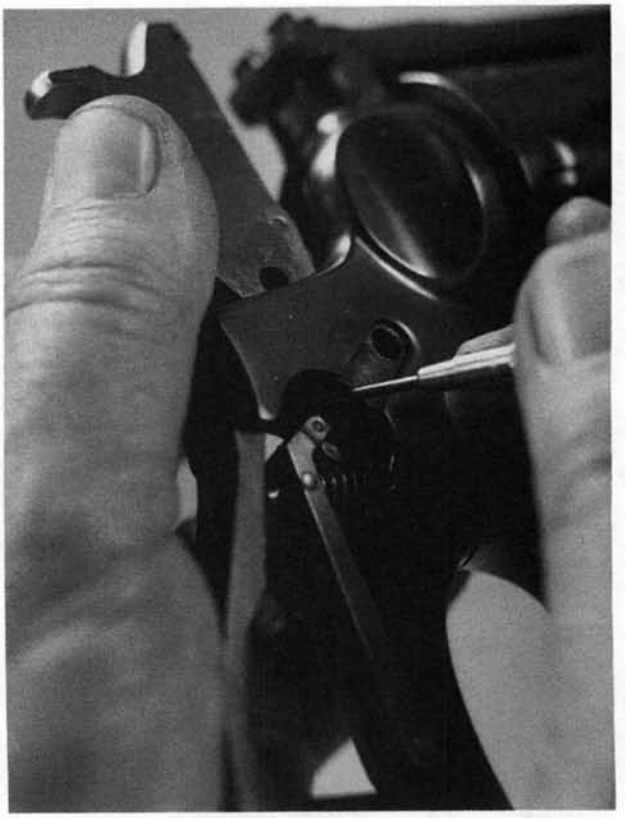
2. Cock the hammer, and insert the disassembly pin in the hole in the mainspring guide rod.



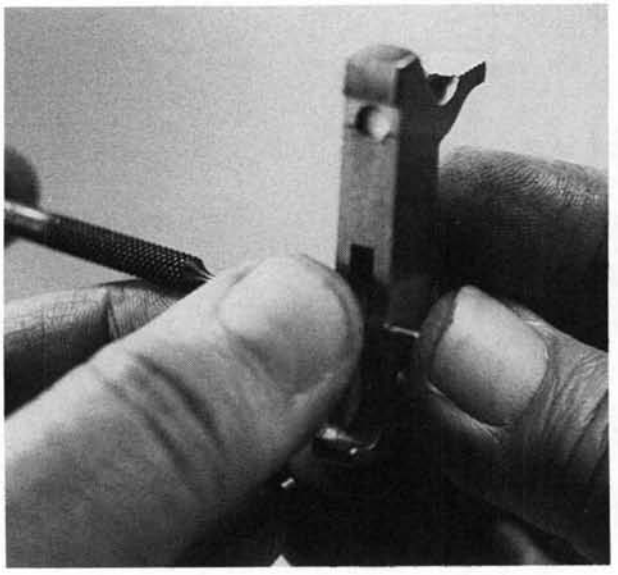


3. Pull the trigger and ease the hammer down. Push out the hammer pivot, and remove it toward the right.

4. With the gun pointed downward, move the hammer outward toward the top of the frame.



5. If the hammer link does not unhook from the mainspring lever, it may be necessary to insert a tool to disengage it. To give room for detachment, the trigger and mainspring lever may have to be moved slightly forward.



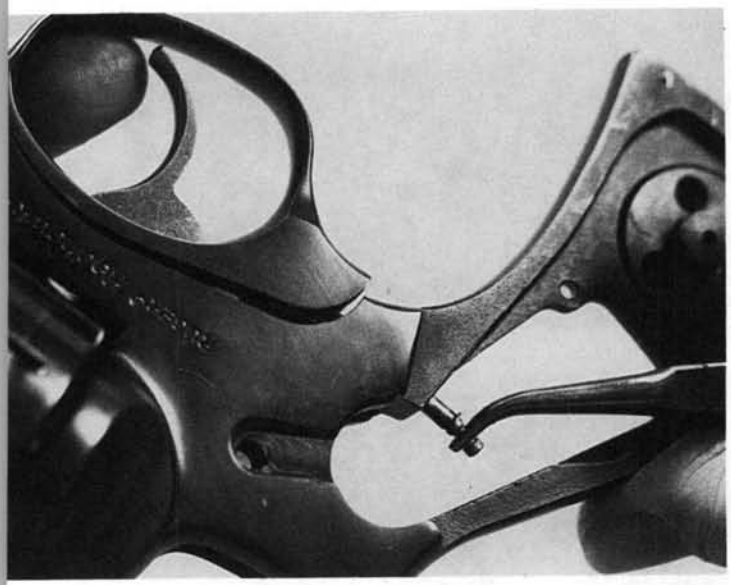
6. The double-action lever cross-pin is easily pushed out of the hammer for removal of the lever and its plunger and spring.

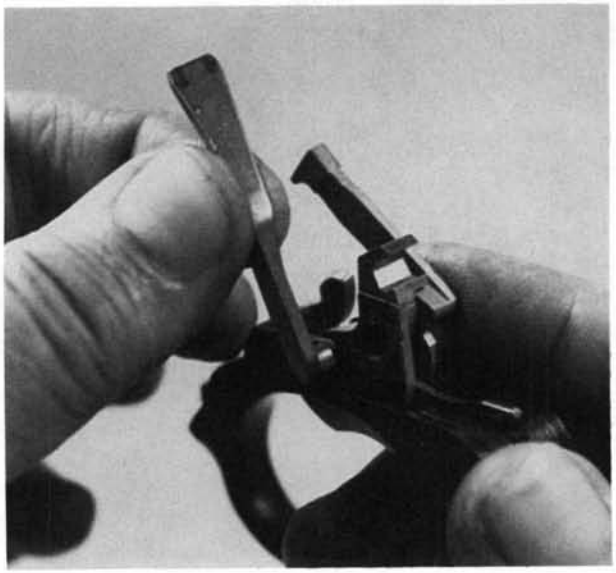
7. Remove the lever toward the front. The plunger and spring are easily removed from their recess. The hammer link is also retained by a cross-pin, but it is staked in place, and is removed only in cases of repair.

8. Push out the mainspring lever pivot pin toward either side.

9. Move the lower end of the lever and spring assembly rearward, and turn it to the position shown for removal. The trigger must be forward during this operation. The mainspring unit can be disassembled if necessary. If this is done, control the powerful and compressed mainspring as the disassembly pin is removed.

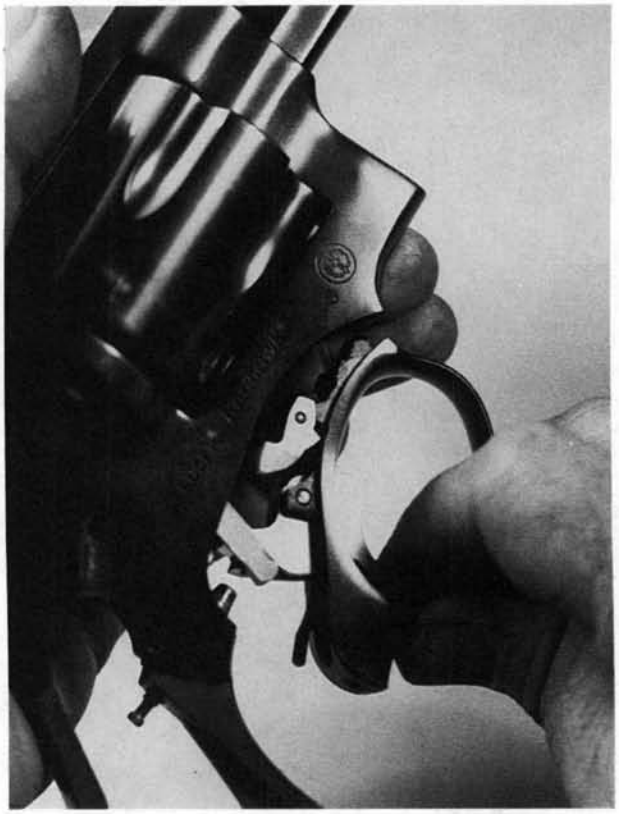
10. The lower end of the mainspring lever is slotted to serve as a tool to pull the trigger guard latch, but it can also be done with pliers, as shown. Pull the latch rearward, and move the rear of the guard unit downward.



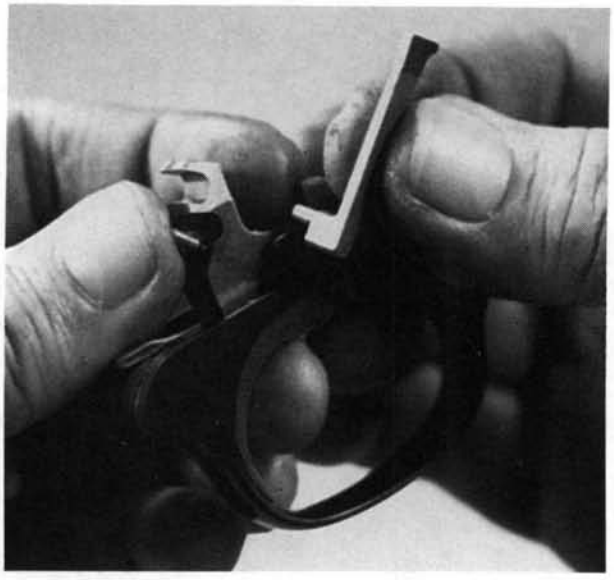


12. The transfer bar may drop free as the guard unit clears the frame. If not, pull the trigger slightly and detach the bar from the left side.

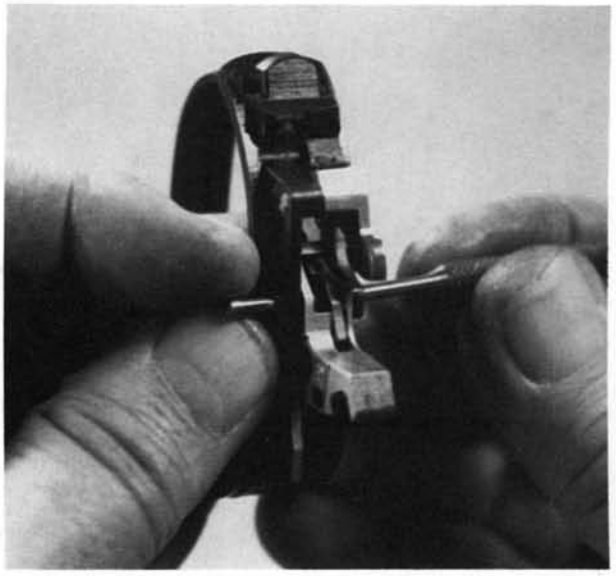
11. Pull the trigger, and remove the trigger guard assembly downward.

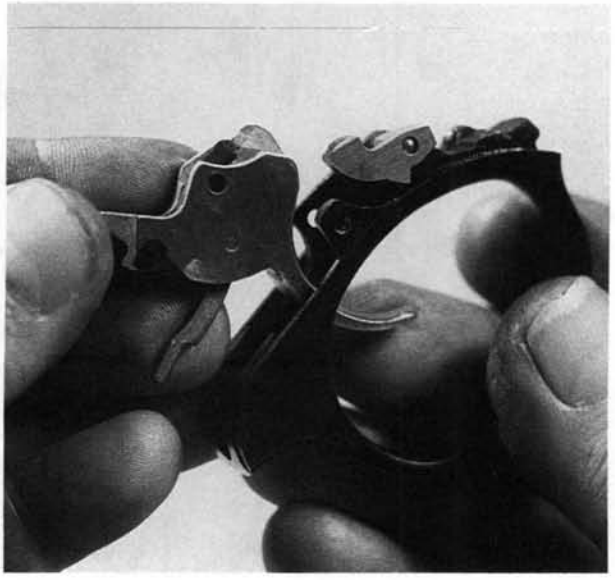


13. Restrain the plunger and spring at the rear, and remove the cylinder hand toward the right. The plunger and spring are easily removed toward the rear.

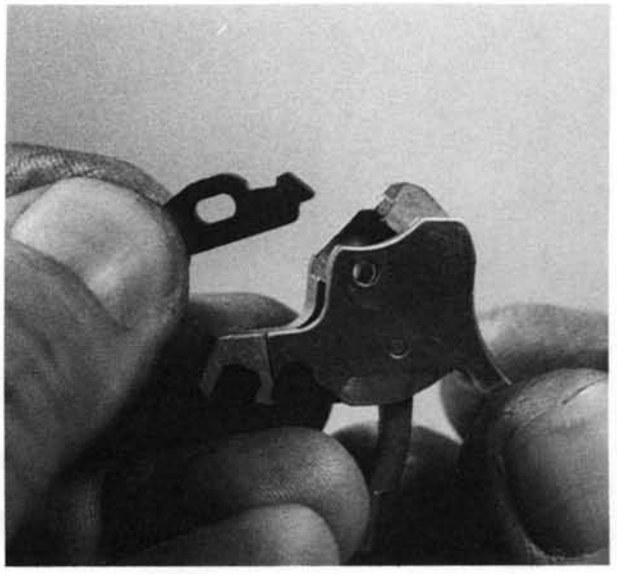


14. Push out the trigger cross-pin.



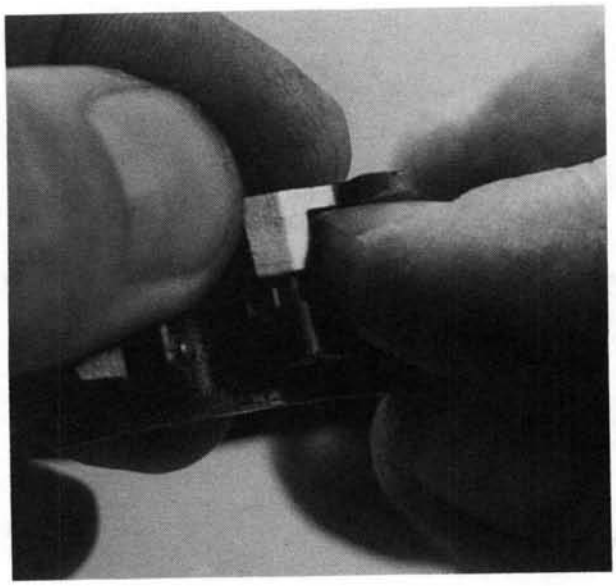


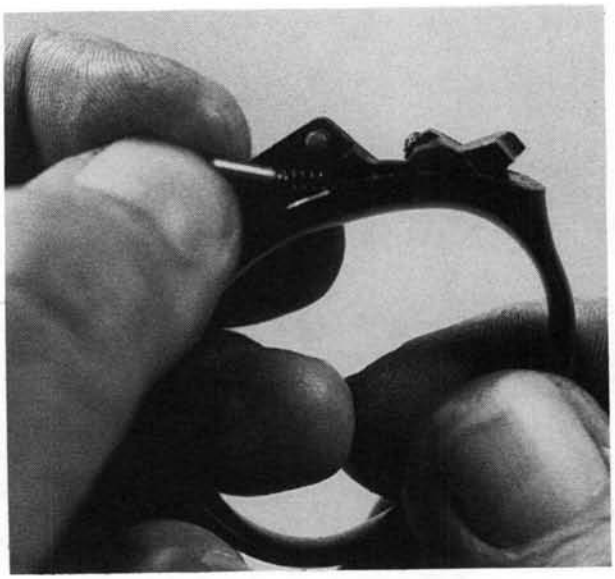
15. Remove the trigger upward and toward the rear.



16. Remove the cylinder stop trip from its recess in the top of the trigger. The trigger spring strut is cross-pinned in the trigger. In normal takedown this is left in place.

17. Push the cylinder stop off its post toward the right. Do this as shown, so the fingertip will catch the plunger and spring as it is cleared.

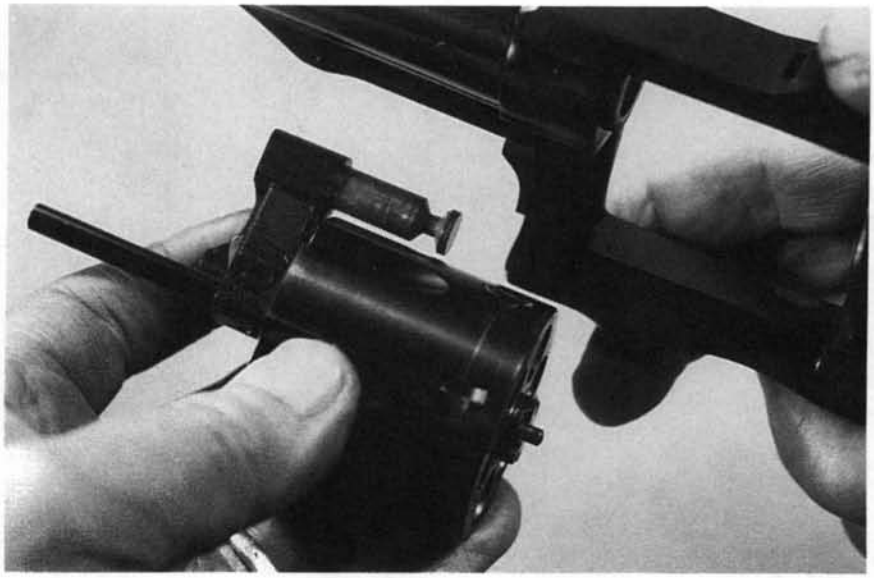




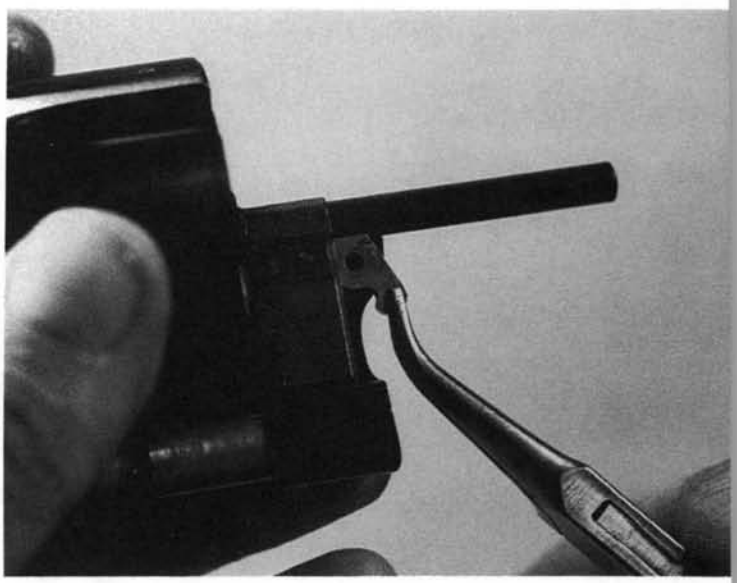
18. Remove the cylinder stop plunger and spring.

19. The crane pivot lock plunger and spring are staked in place at the factory, and they are not routinely removable.

20. Operate the cylinder latch, open the cylinder, and move the cylinder and crane assembly out of the frame toward the front.

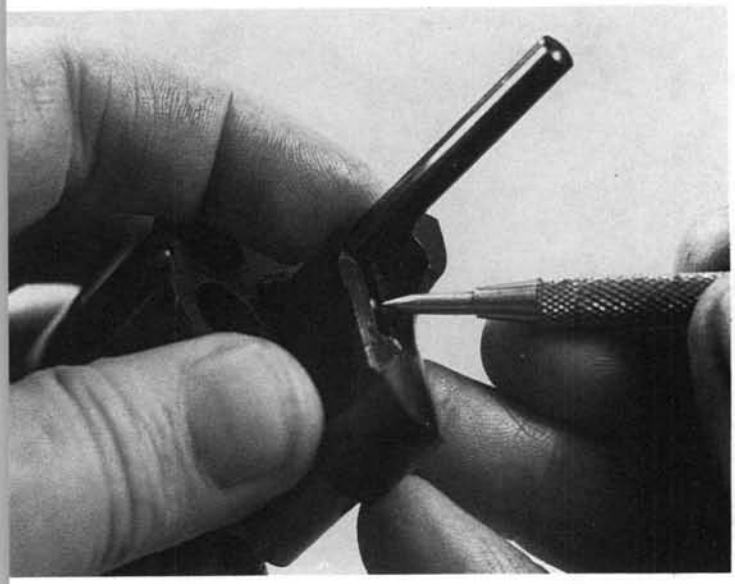


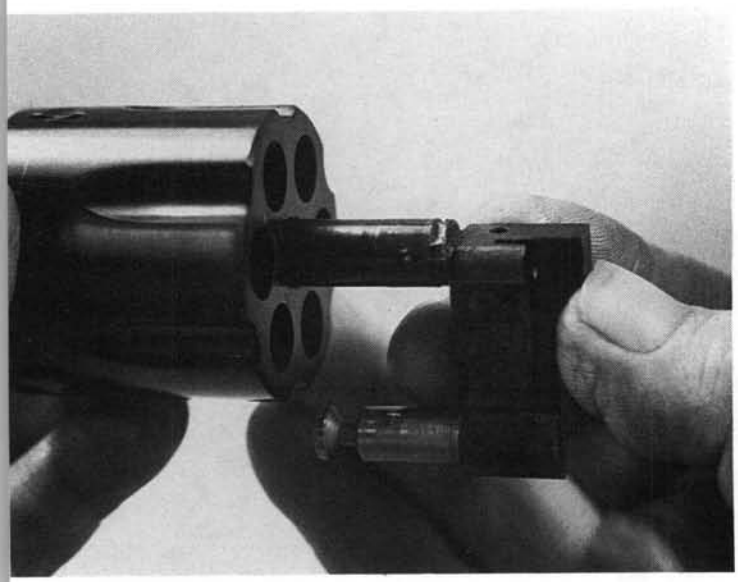
21. Insert a very slim tool in the hole in the top of the crane to depress the lock plunger, and push out the front latch pivot toward the left.



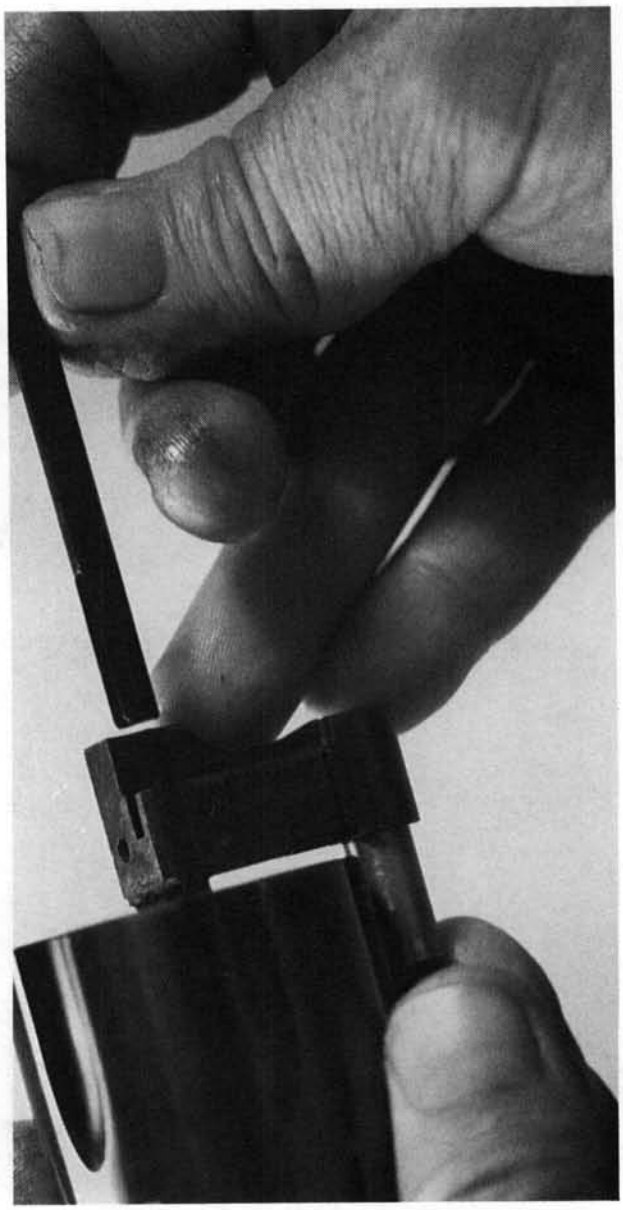
22. Remove the front latch downward and toward the front.

23. If necessary, the front latch plunger and spring can be removed from their recess in the front of the crane, with very slim pliers or tweezers.



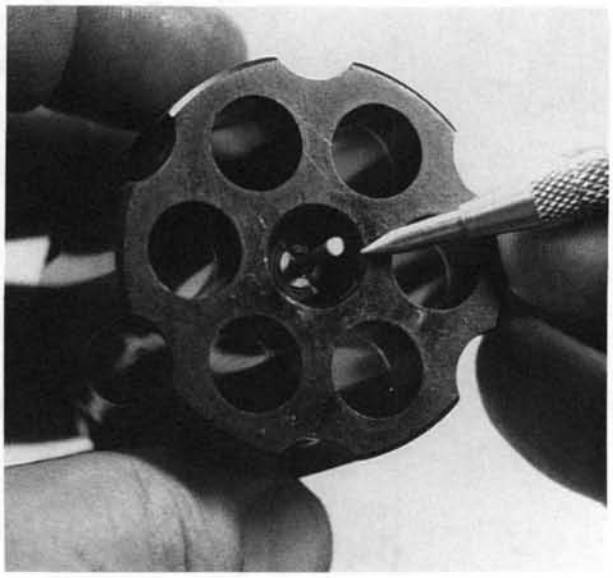


24. Remove the ejector rod toward the front.

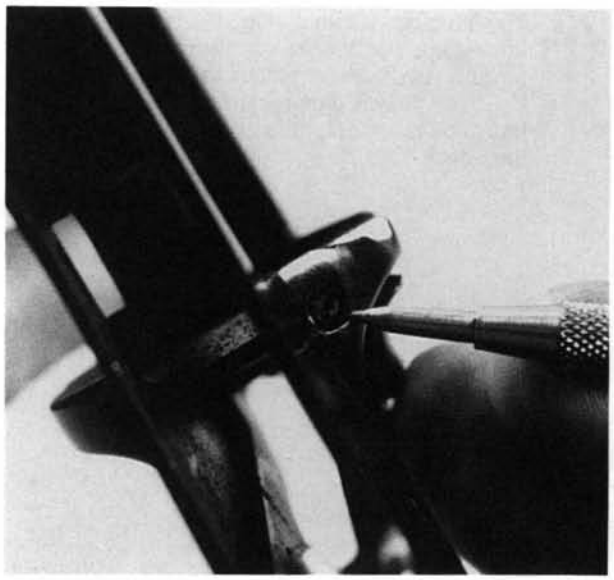


25. Remove the crane toward the front.

26. The ejector and ratchet system is retained in the cylinder by a recessed nut that requires a special two-point wrench with a hollow center. Any attempt to disassemble the system without this factory tool is likely to damage the parts. So, this assembly should be considered non-dismountable.

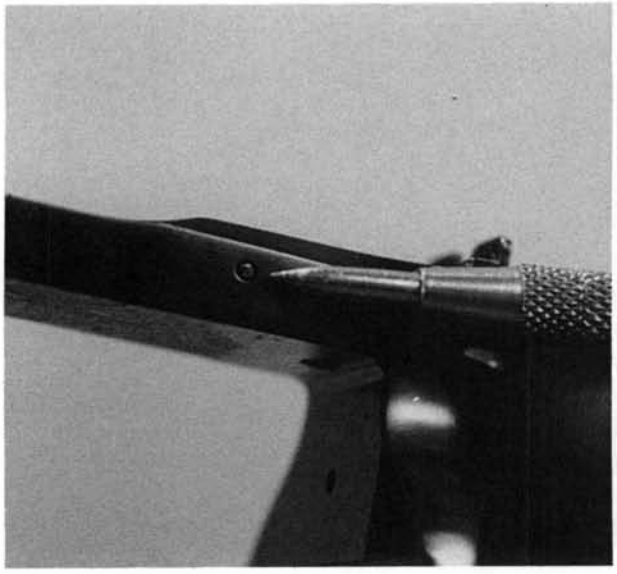


27. The vertical screw that retains and pivots the cylinder latch is staked in place at the factory to prevent loosening and loss. Some are staked more securely than others. This one is quite firm. For details on disassembly of the Ruger cylinder latch, see the instructions for the SP101 or the Security-Six.

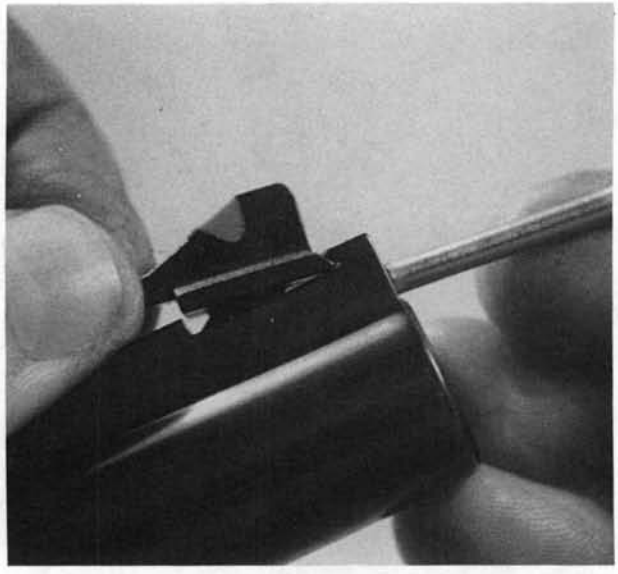


28. The trigger guard latch is retained in the frame by a C-clip at the rear. If removal is necessary, taking off the C-clip will allow the latch and its spring to be taken out toward the front.

29. The firing pin, return spring, and firing pin housing are retained in the frame by a cross-pin that is "finished over" and is difficult to locate. Removal of the cross-pin will damage the finish of the gun. If it has to be taken out, the parts are removed toward the front.

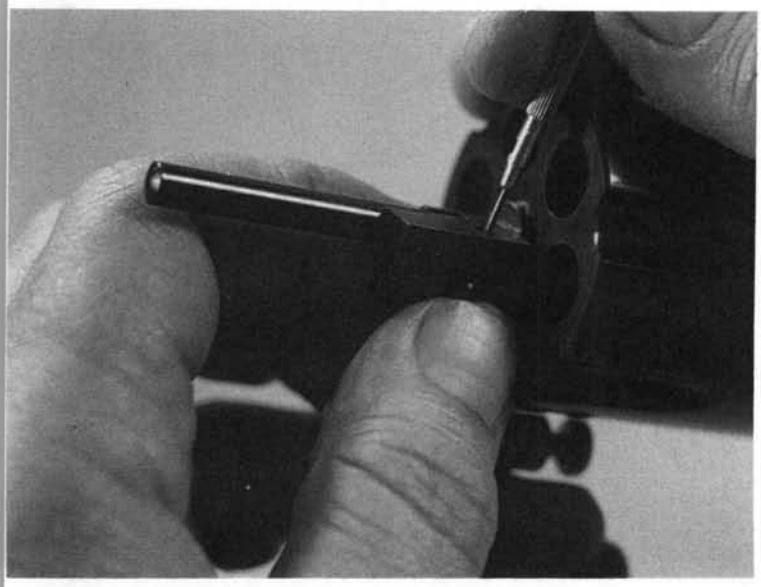


30. The rear sight is removable by drifting out its cross-pin and by unscrewing the elevation screw. If the sight is removed, note that there are two small springs under it.

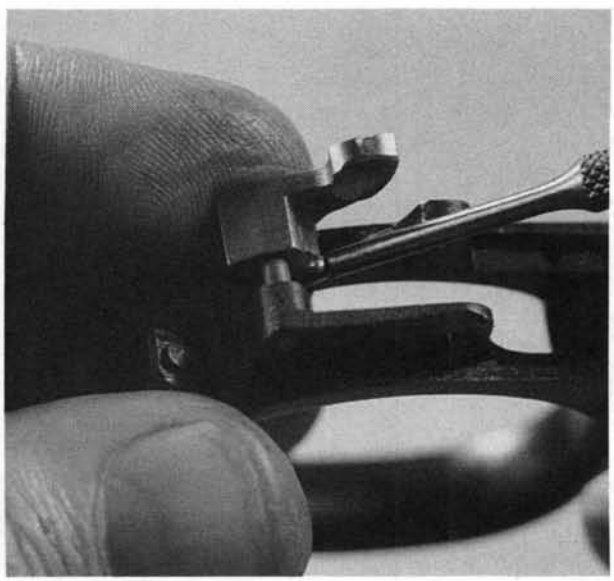


31. To remove the front sight, depress its plunger rearward, and tip the rear of the sight upward. If necessary, a tool can be inserted at the top to nudge the plunger and spring out toward the front.

Reassembly Tips:



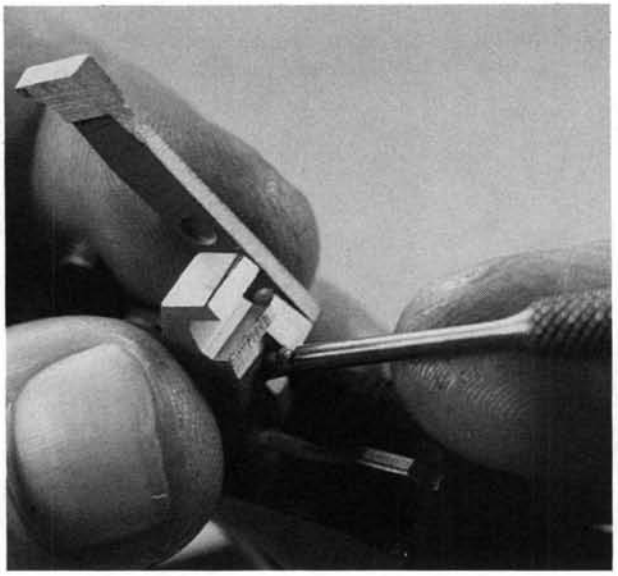
1. When replacing the front latch pivot, the lock plunger must again be depressed, as shown, while the latch pivot is pushed into place.



2. The cylinder stop plunger and spring must be depressed as the cylinder stop is pushed into place.

3. The cylinder stop trip goes back into its slot in the top of the trigger as shown.

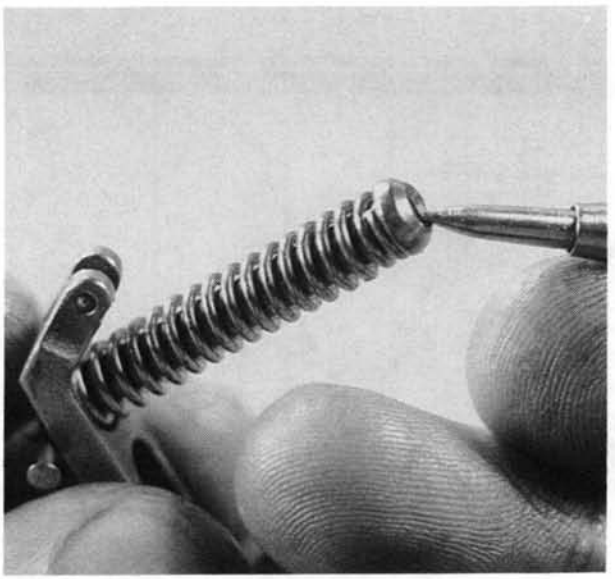
4. The cylinder hand plunger and spring must be depressed as the cylinder hand is pushed into place.



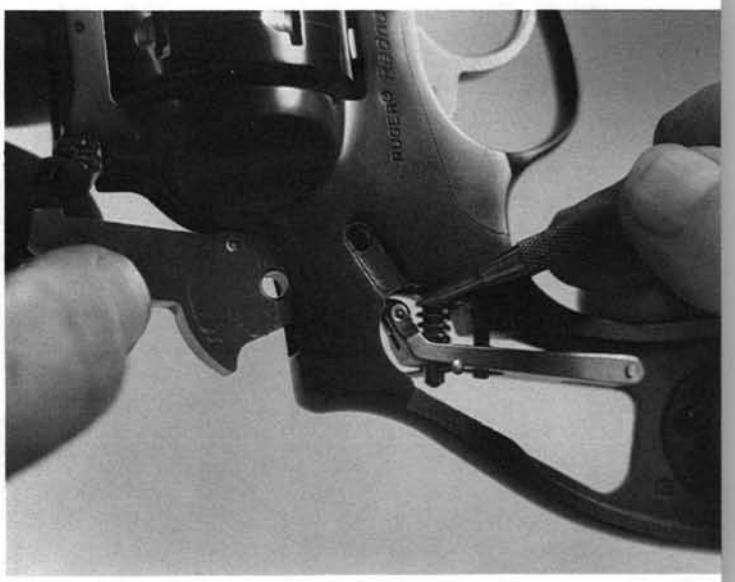
5. Retract the guard latch as the guard is swung into place. Be sure the transfer bar and cylinder hand are properly located inside the frame.

6. When the guard unit is in place, pull the trigger a few times (it must be returned manually) to be sure the cylinder is rotating and locking properly.

7. As the mainspring unit is put back in the gun, be sure the trigger strut engages the recess in the end of the spring guide rod, shown here. The engagement is visible through the hammer slot.



8. With the gun pointed upward, and the trigger in forward position, insert the hammer and be sure the hook on the link engages the cross-pin at the top of the hammer lever. It may be necessary to nudge it with a tool.



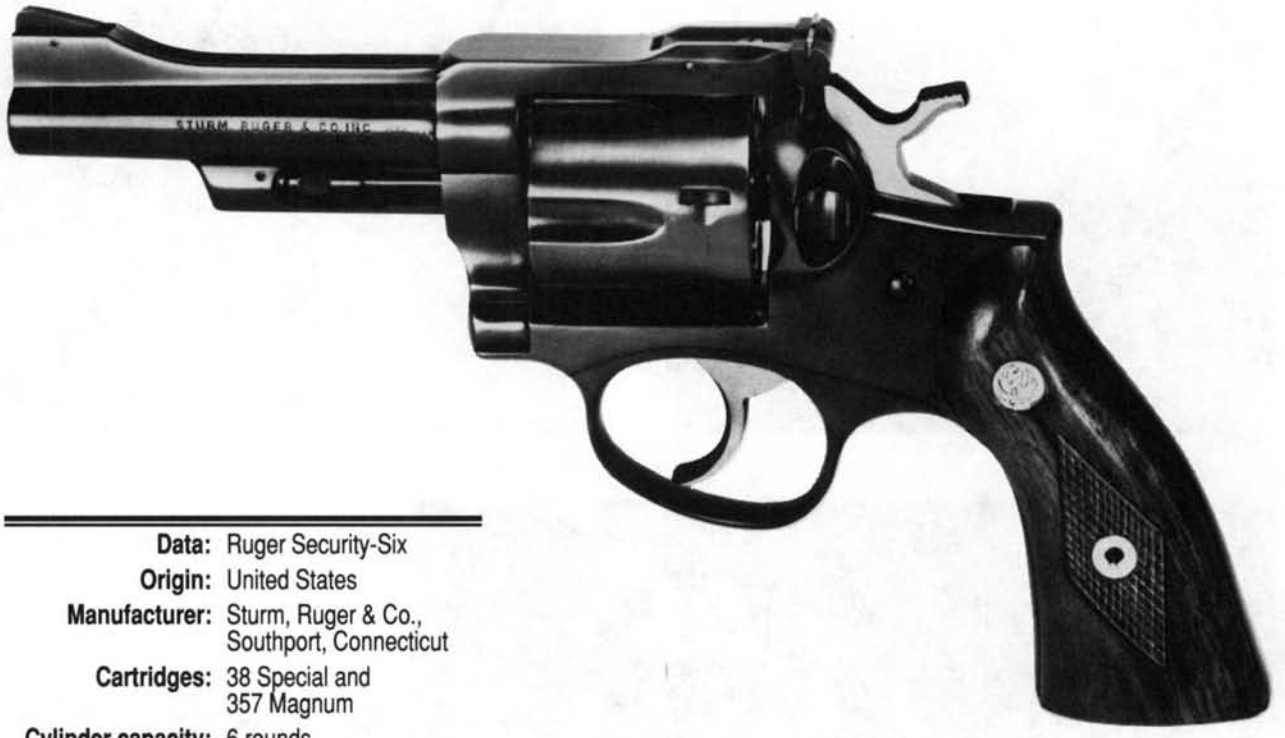
9. Cock the hammer, and remove the disassembly pin.

Ruger Security-Six

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Ruger Security-Six also apply to the following guns.

Ruger Police Service-Six **Ruger Speed-Six**



Data:	Ruger Security-Six
Origin:	United States
Manufacturer:	Sturm, Ruger & Co., Southport, Connecticut
Cartridges:	38 Special and 357 Magnum
Cylinder capacity:	6 rounds
Overall length:	9 1/2 inches (with 4-inch barrel)
Barrel lengths:	2 3/4, 4, and 6 inches
Weight:	33 ounces (with 4-inch barrel)

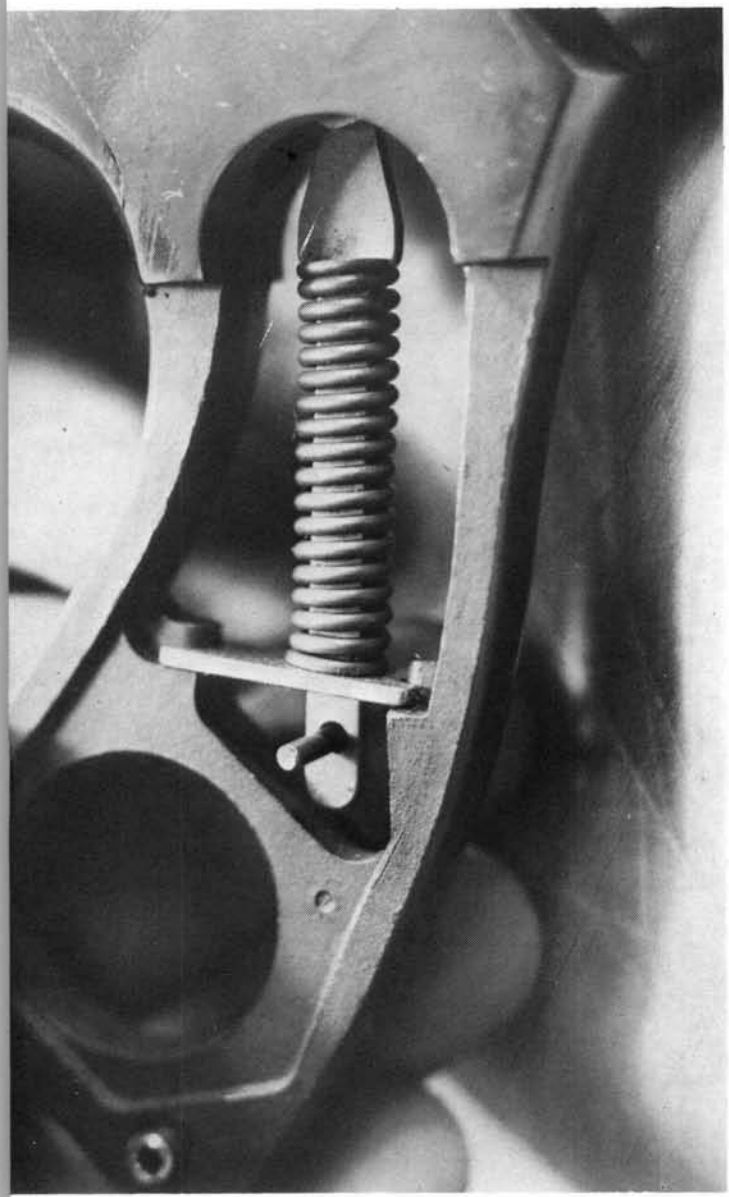
The Security-Six was introduced in 1971, the Speed-Six in 1974. The Speed-Six is identical mechanically, but has a rounded lower grip frame and an optional spurless hammer. The basic design of these guns is very strong, with a solid frame and no sideplate. The trigger housing subframe and other design points make this one of the few revolvers that can be taken apart without tools, provided you have a coin to remove the grip screw. As with all Ruger arms, the quality of materials and workmanship is excellent. There is also a Police Service-Six version which is mechanically identical.

Disassembly:

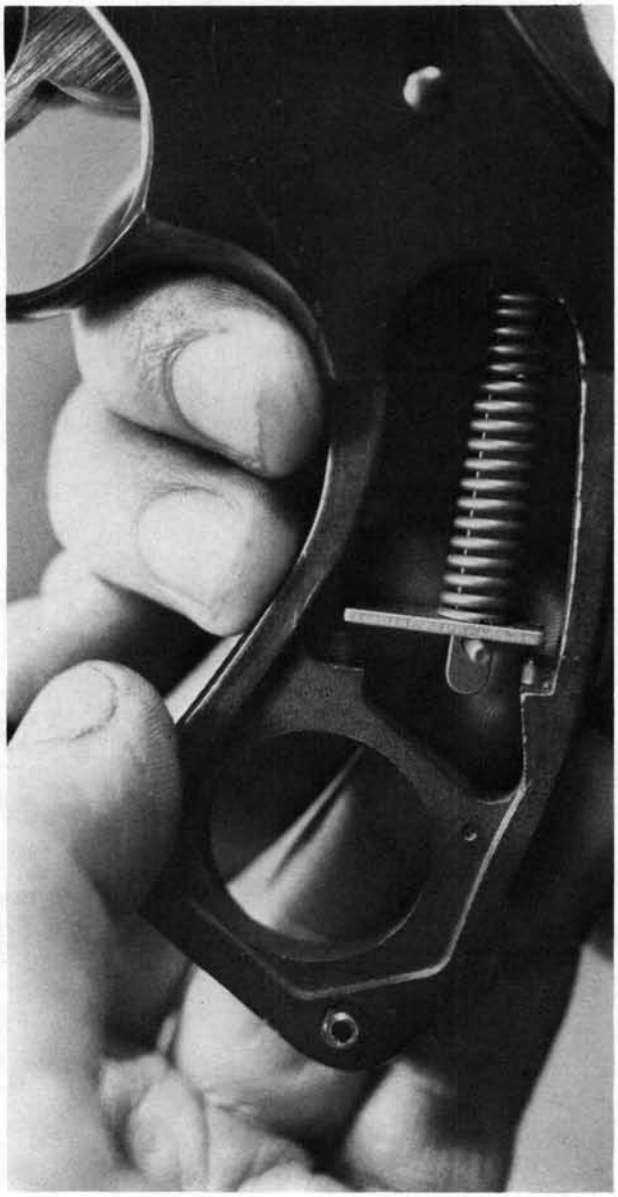
1. The grip screw is coin-slotted and is easily removed by using a dime or a penny in place of a screwdriver.

2. On the inside of the left grip is a hole which contains a small disassembly pin. When removing the grips, take care that this pin isn't lost.

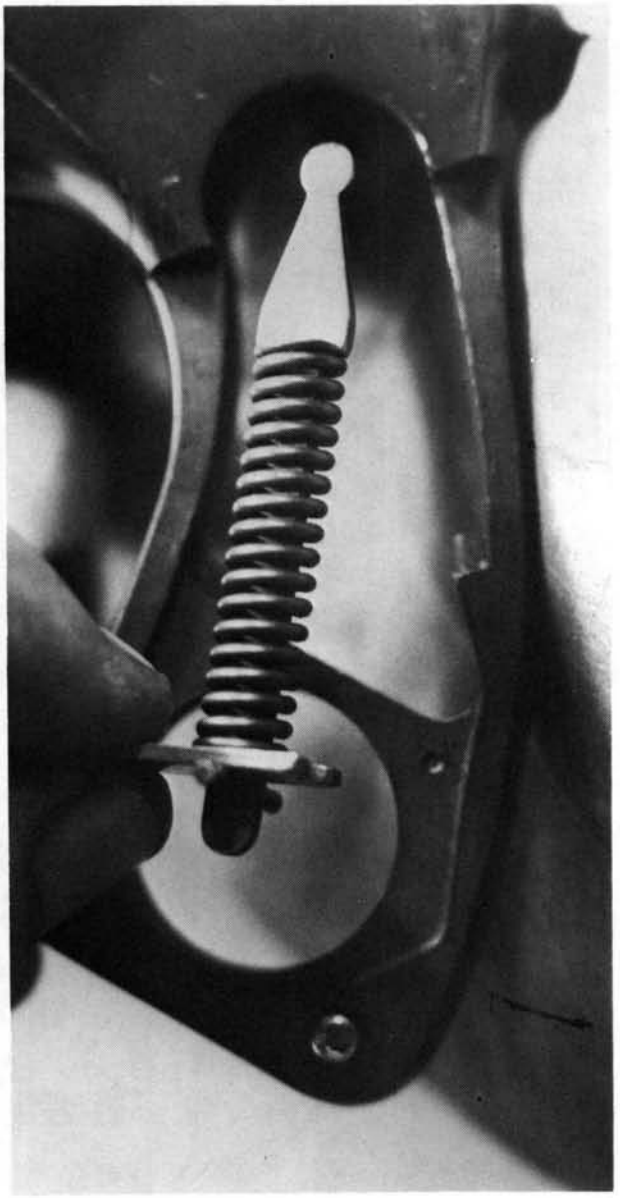
3. Cock the hammer and insert the disassembly pin through the hole in the lower end of the hammer strut, as shown.



4. Let the hammer down slowly and the pin will come to rest against the underside of the hammer spring base, capturing the spring.



5. Remove the strut, spring, and base unit toward the left and downward. If these parts are to be separated, place the baseplate against the side of a slightly opened bench vise, and exert pressure to compress the spring while taking out the pin. Keep a firm grip on the top of the strut, and release the spring tension slowly.

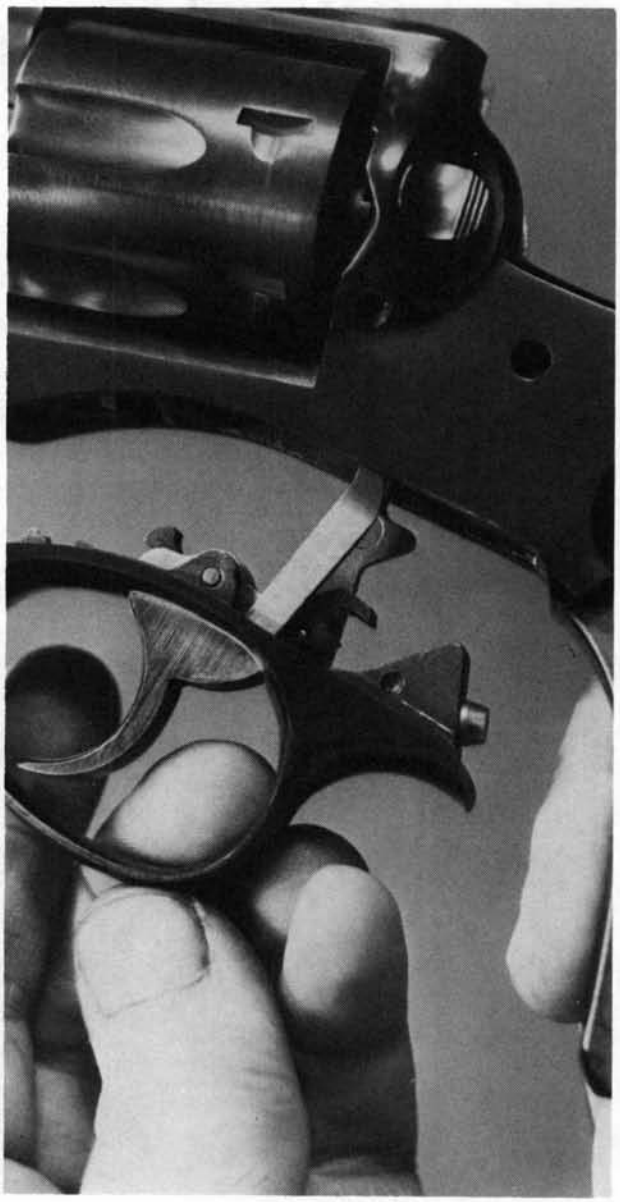


6. Push the hammer pivot from the left until its tab can be grasped, then remove the pivot toward the right.

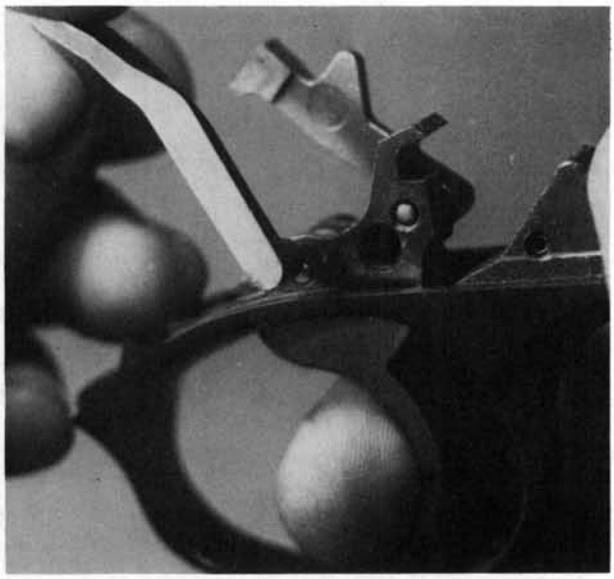
7. Pull the trigger to the rear, and remove the hammer from the top of the frame. Pushing out the cross-pin at the front of the hammer will release the double- action lever and its plunger and spring for removal.

8. Looking down into the frame through the hammer slot, the plunger which retains the trigger guard can be seen, at the rear of the guard. Use a small screwdriver to lever the plunger toward the front, allowing the guard unit to move down at the rear. In an emergency, the hammer strut can be used for this, but a screwdriver gives better leverage.

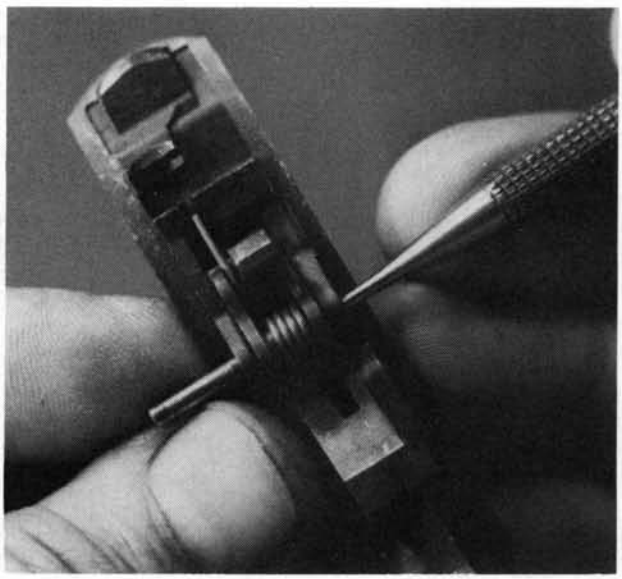
9. When the plunger has cleared the frame at the rear, move the trigger guard unit down and remove it from the frame.



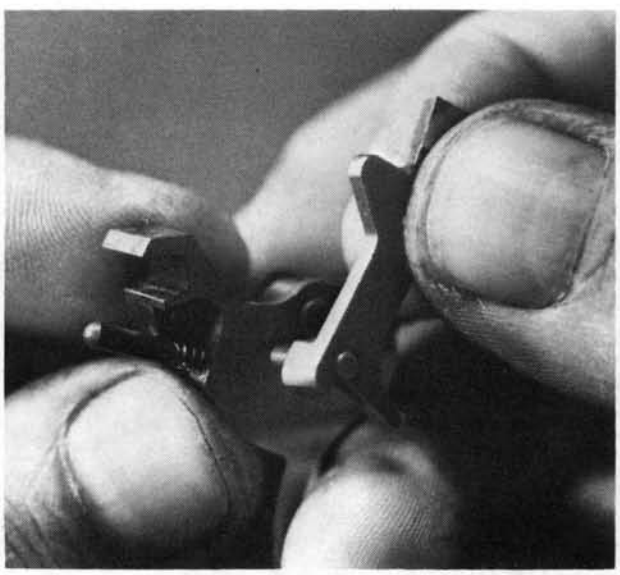
10. Pull the trigger slightly toward the rear and remove the transfer bar toward the left.



11. Push out the trigger pin toward either side.



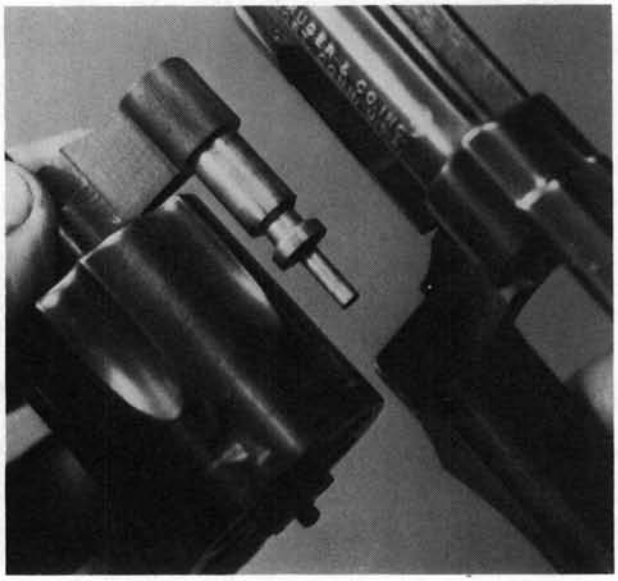
12. Remove the trigger assembly from the top of the guard.

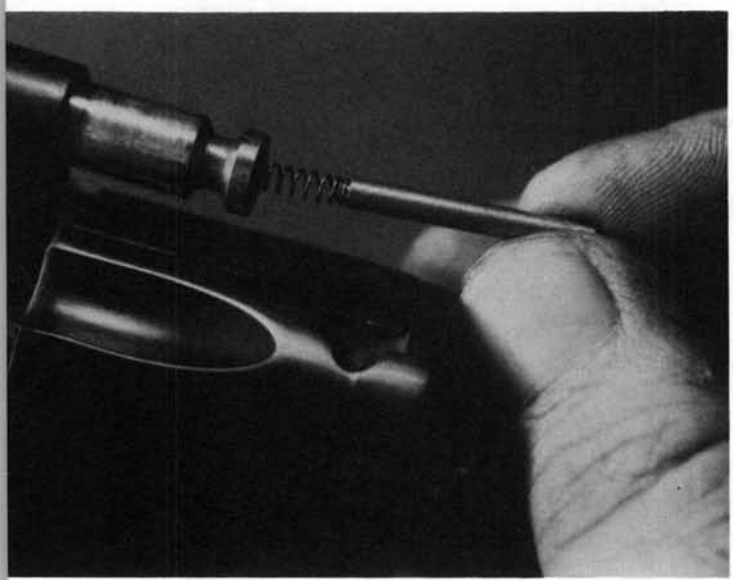


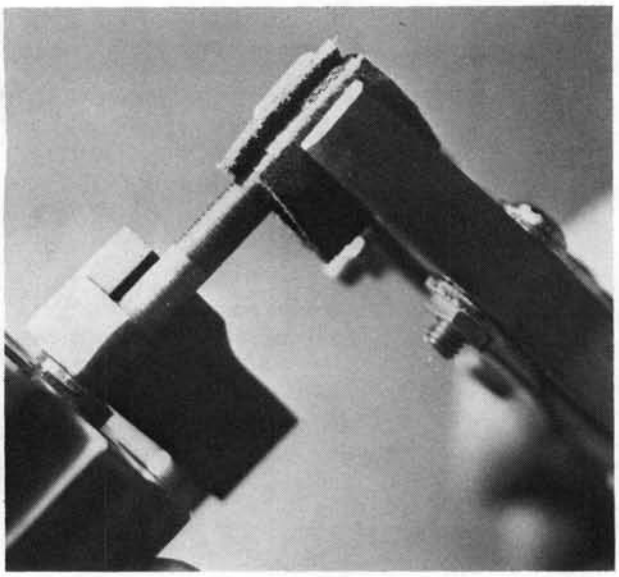
13. Restrain the cylinder hand plunger and spring, and remove the cylinder hand from the right side of the trigger. Remove the plunger and spring toward the rear.

14. Use a roll pin punch of the same diameter as the bushing, and push out the trigger bushing to release the trigger spring for removal.

15. Removal of the trigger guard unit will free the crane assembly for removal toward the front.



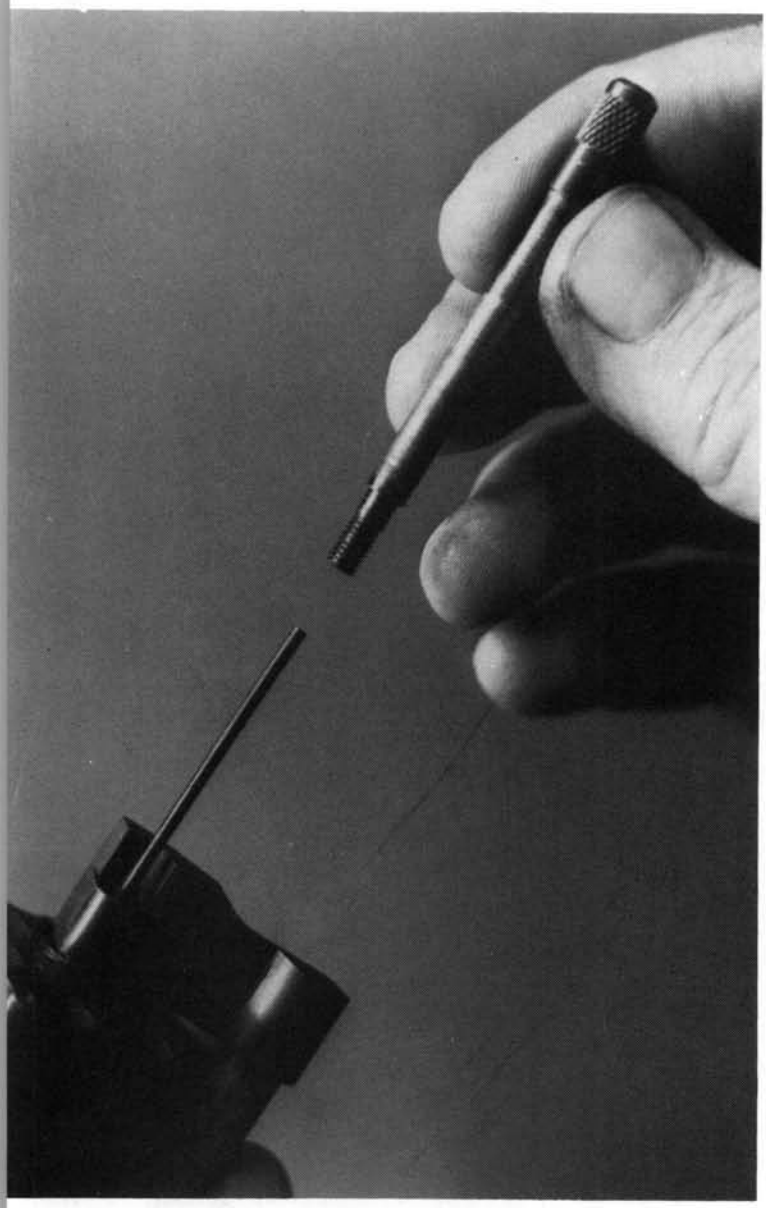




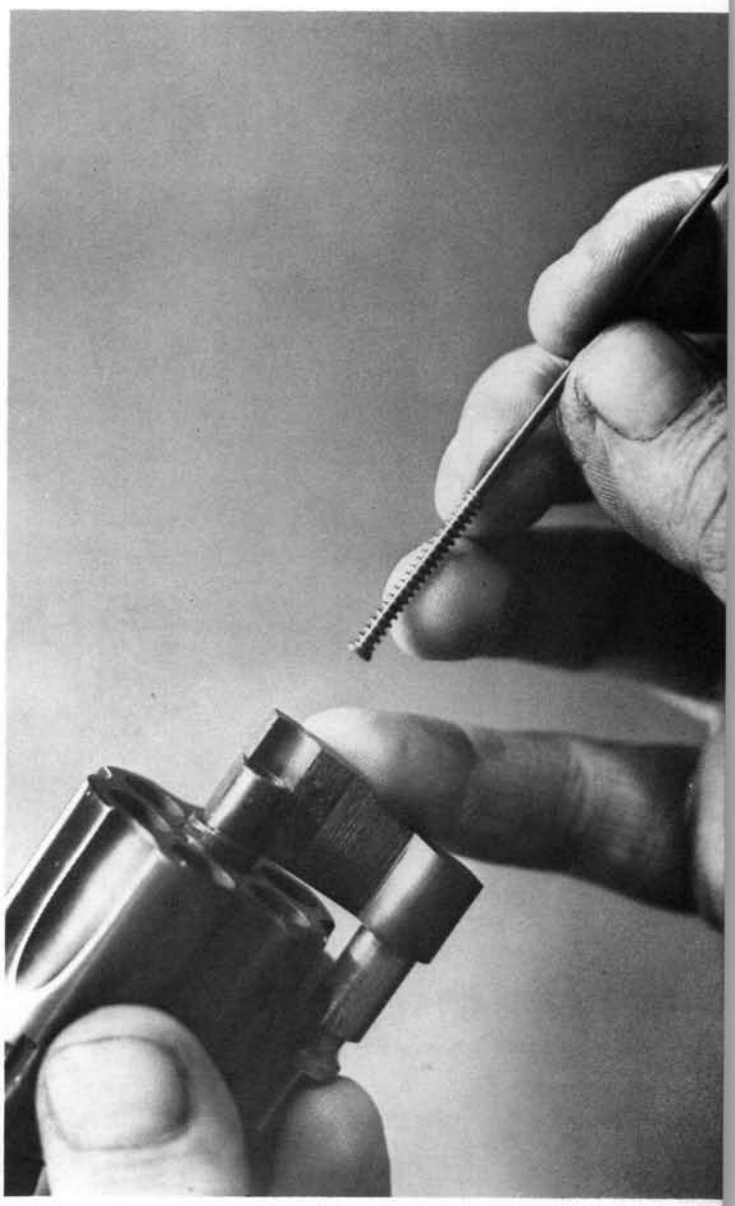
16. Remove the cylinder stop plunger and spring from the rear of the crane pivot.

17. Grip the ejector rod with leather-padded smooth-jawed pliers, and unscrew it *clockwise* (front view). Note that this is a reverse thread, and any attempt to force it in the "normal" direction will cause damage. If the rod is very tight, grip the end of the rod in a leather-padded vise, insert two empty cartridge cases in opposed chambers, and turn the cylinder to free it.

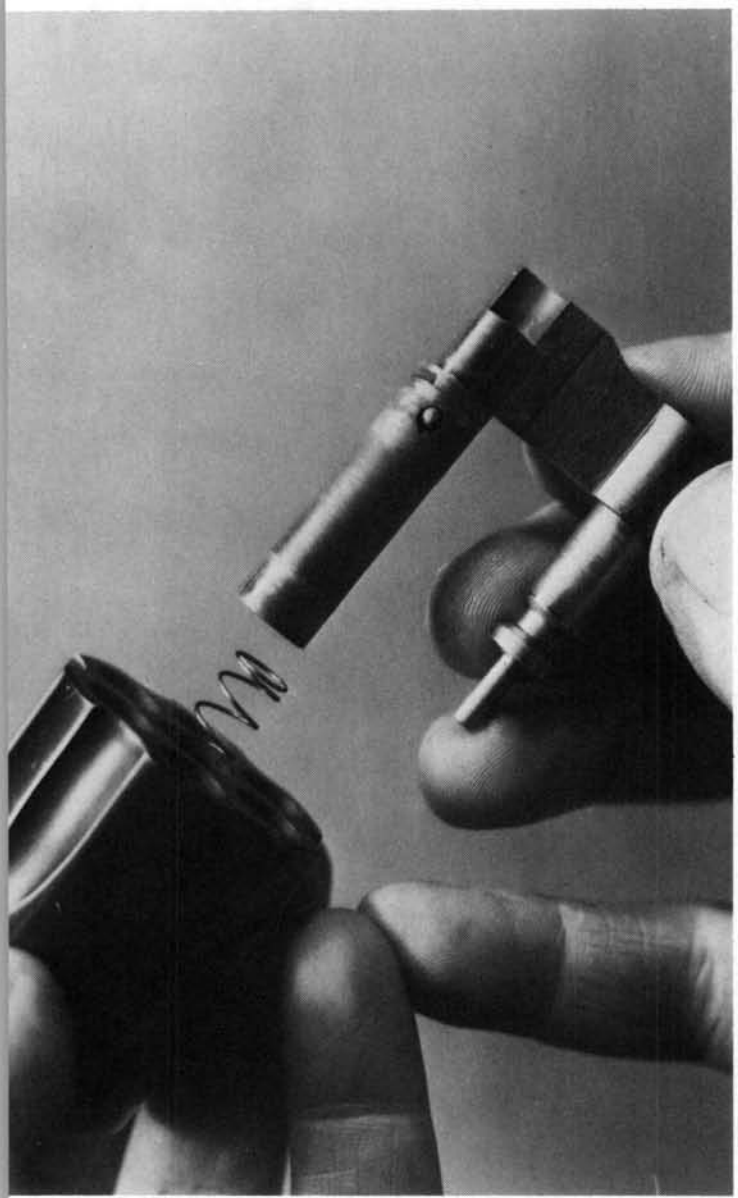
18. Remove the ejector rod toward the front.



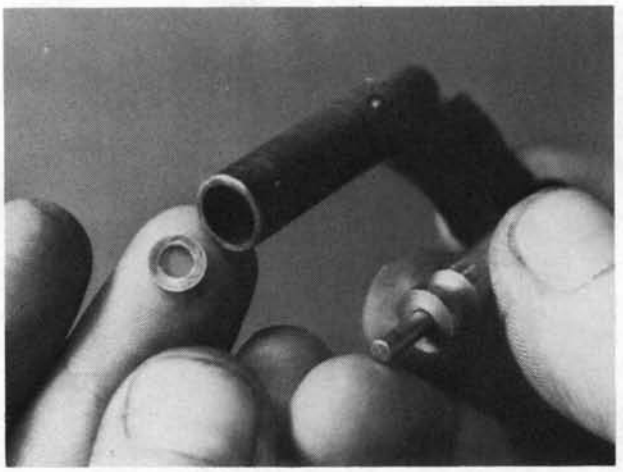
19. Remove the center pin and its spring toward the front.

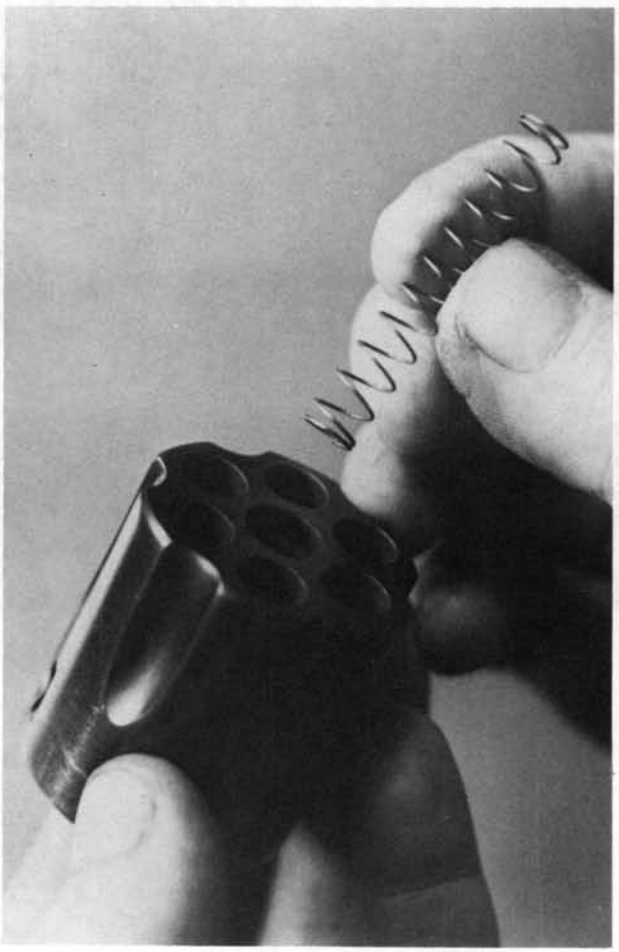


20. Remove the crane toward the front. The small ball bearing in the side of the cylinder arbor on the crane is staked in place, and removal is not advisable.



21. The small washer which acts as a compressor for the ejector spring will likely stay inside the cylinder arbor when the crane is removed. Tap the arbor on the workbench, and the washer will fall out. Take care that it isn't lost. The factory recommends replacement of the washer when it is removed. However, the gun shown here has been used for several years since this disassembly and reassembly, with no problems.

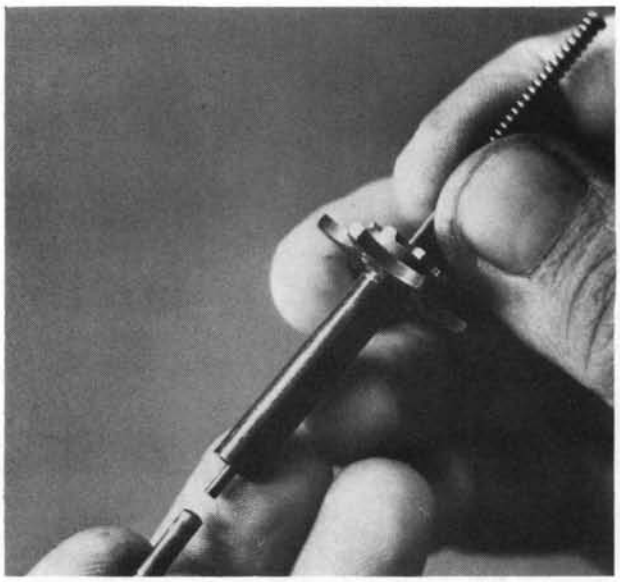




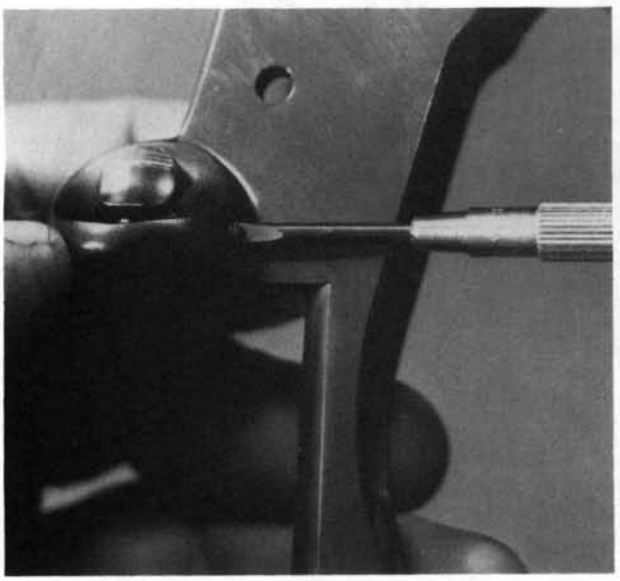
22. Remove the ejector spring from the front of the cylinder.

23. Remove the ejector/ratchet from the rear of the cylinder.

24. Use the front tip of the center pin to push the cylinder lock pin out of the front of the ejector.

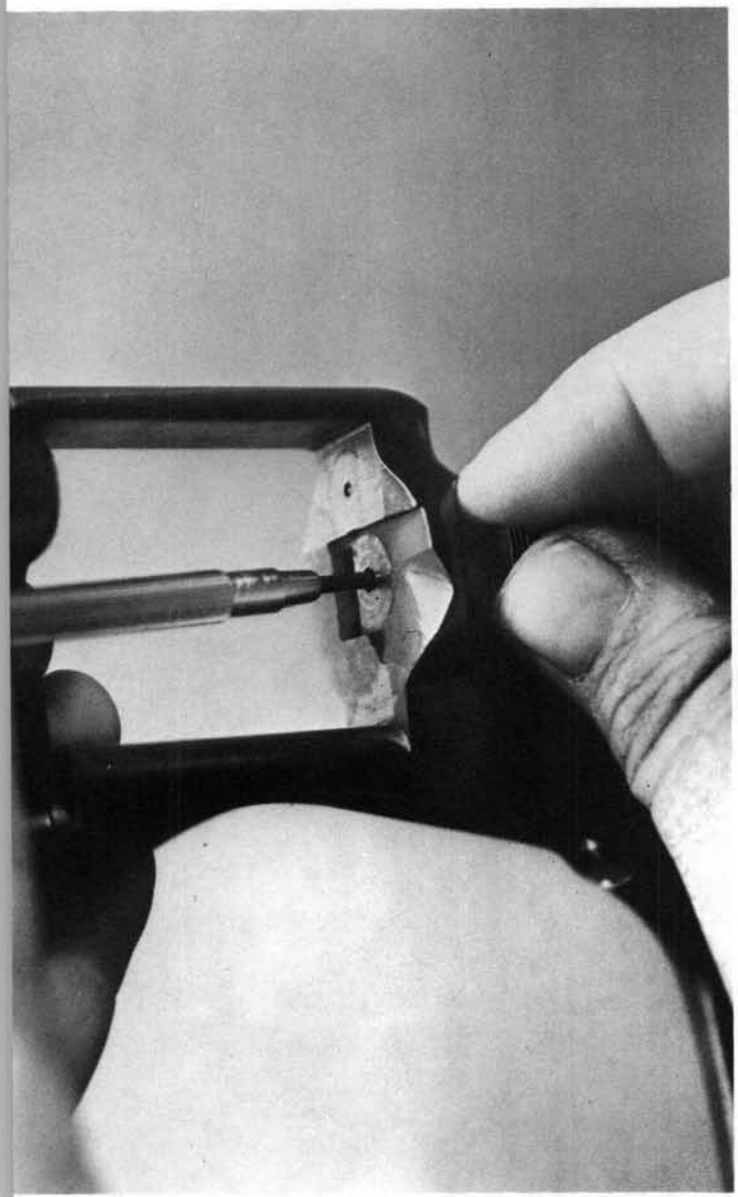


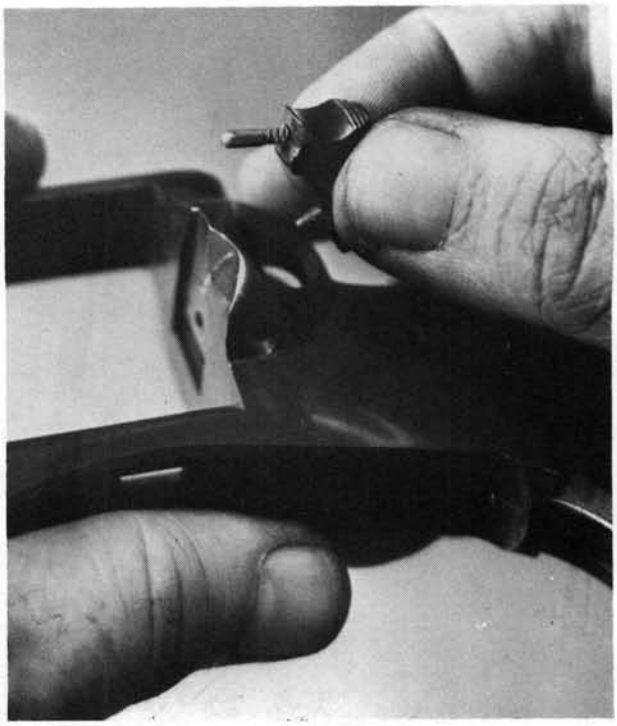
25. Remove the cylinder stop from the underside of the frame.



26. Use a small screwdriver to remove the vertical screw on the left side which retains the crane latch.

27. Push the nose of the crane latch toward the rear while moving the latch out toward the left.

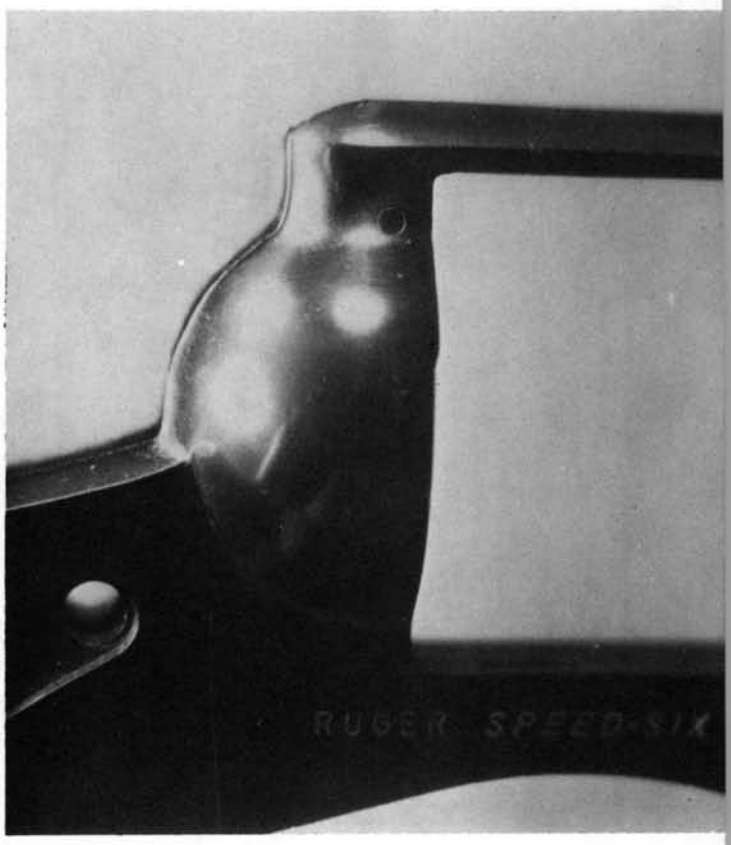




28. Remove the latch toward the left, and take care that the small plunger and spring in its front face are not released and lost.

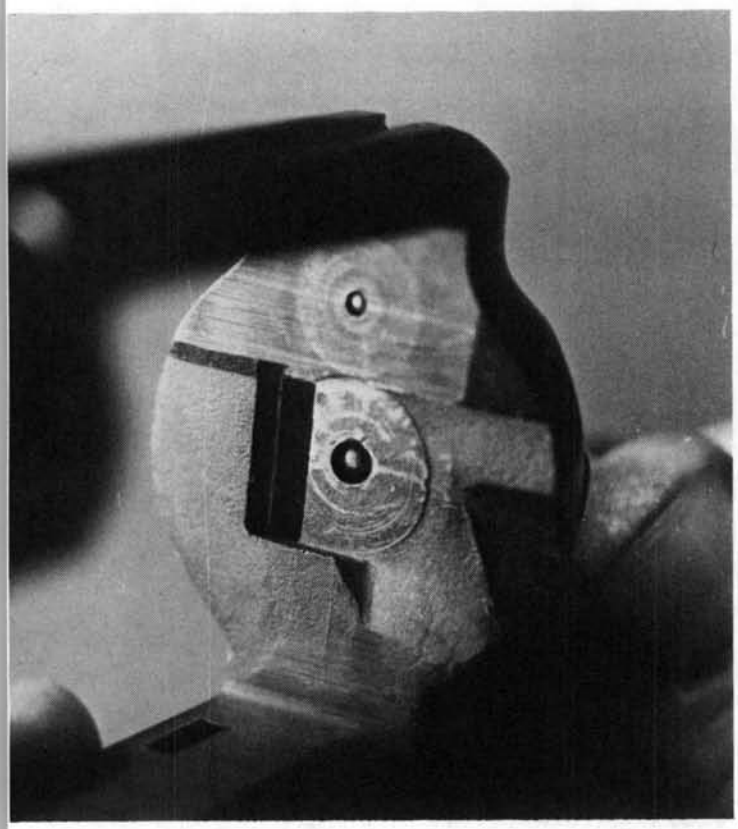
29. Drifting out the small roll pin in the ejector shroud will release the front latch plunger and its spring for removal toward the rear. The front sight blade is also retained by a small roll pin.

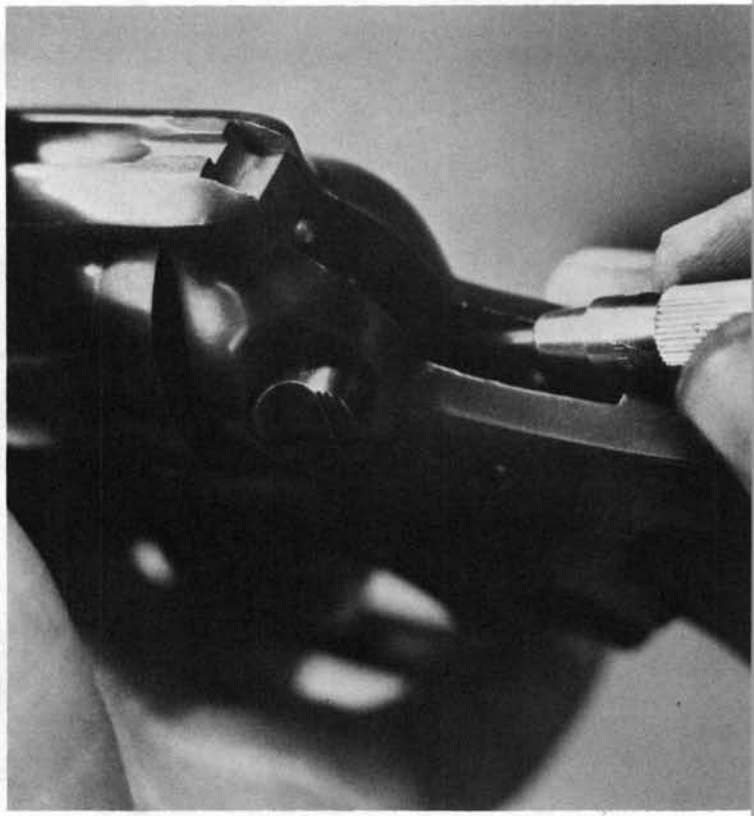
30. The firing pin housing, firing pin, and spring are removed toward the front after the cross-pin is drifted out. This cross-pin, near the top of the frame, has ends that are contoured with the sides of the frame, and removal and replacement will usually cause some damage to the ends. In normal disassembly, this system is best left in place.



Reassembly Tips:

1. When replacing the crane latch in the frame, be sure the nose of the latch is visible in its hole at the center of the breech face before inserting the retaining screw.





2. When moving the trigger guard unit back into the frame, insert a small screwdriver to bear against the cylinder hand, keeping it pushed toward the right as the guard is snapped into place. Otherwise, the lobe on the back of the hand will jam against the rear edge of its channel.

When replacing the ejector rod, remember that it must be turned into place counterclockwise (front view).

When replacing the cylinder lock pin in the ejector, note that its collared end goes toward the front.

Before replacing the crane in the cylinder, be sure the ejector spring washer is inserted into the arbor.

When replacing the hammer spring unit, note that the longer tab of the base plate goes toward the front of the grip frame.

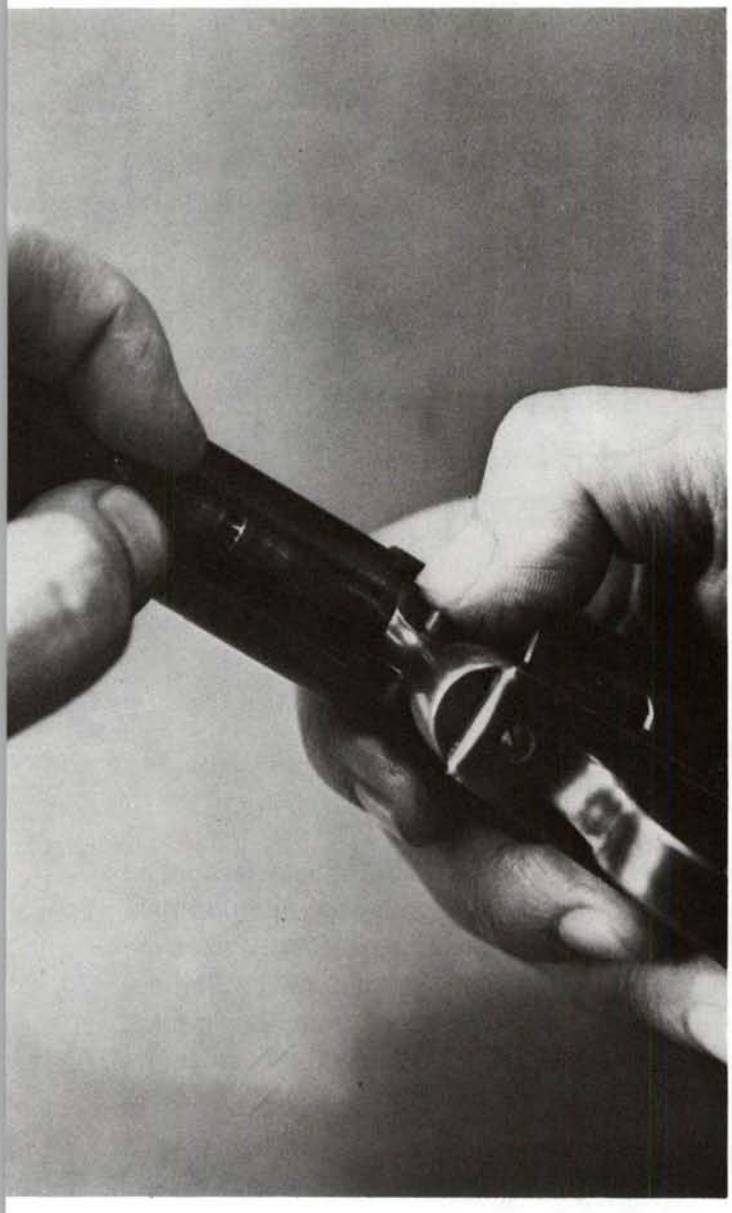
Ruger Single-Six

Data:	Ruger Single-Six
Origin:	United States
Manufacturer:	Sturm, Ruger & Co., Southport, Connecticut
Cartridge:	22 Long Rifle
Cylinder capacity:	6 rounds
Overall length:	$10^{7}/_{8}$ inches
Barrel length:	$5^{1}/_{2}$ inches (other lengths made)
Weight:	36 ounces

The original Single-Six, introduced in 1953, underwent an extensive redesign in 1973, including the addition of a transfer bar which allows firing pin contact only when the trigger is fully to the rear. Another change was the elimination of the loading step on the hammer. In the new model, opening the loading gate frees the cylinder for loading. The Single-Six covered here is the old model, made prior to 1973.

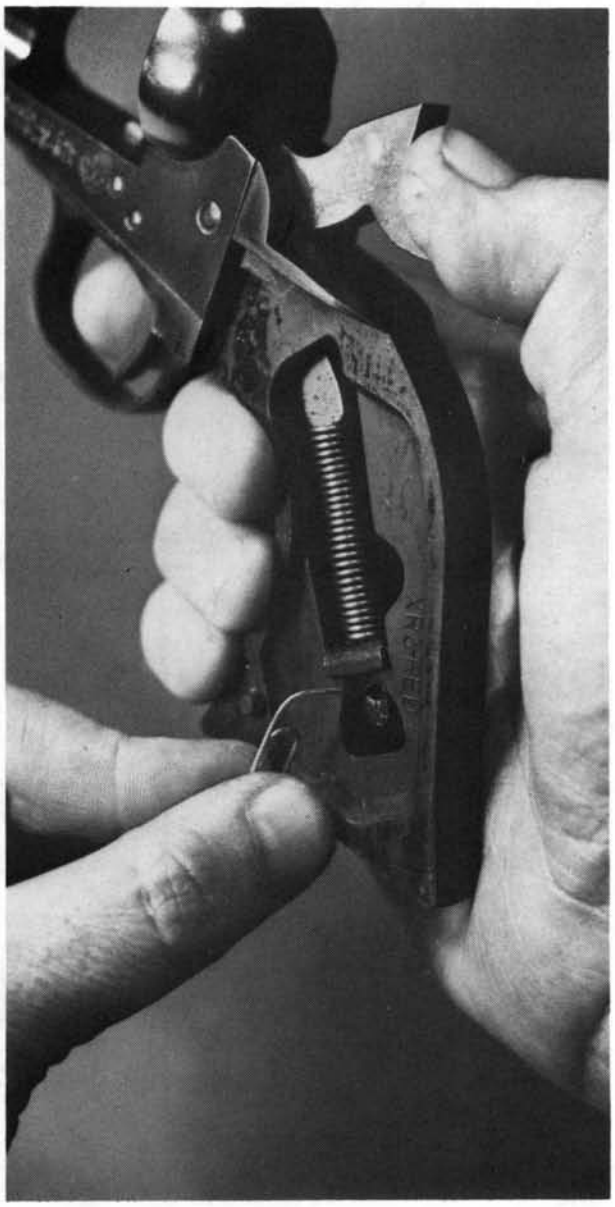
Disassembly:

1. Set the hammer on the loading step, the middle notch, to free the cylinder. Depress the cylinder base pin latch and remove the base pin toward the front.



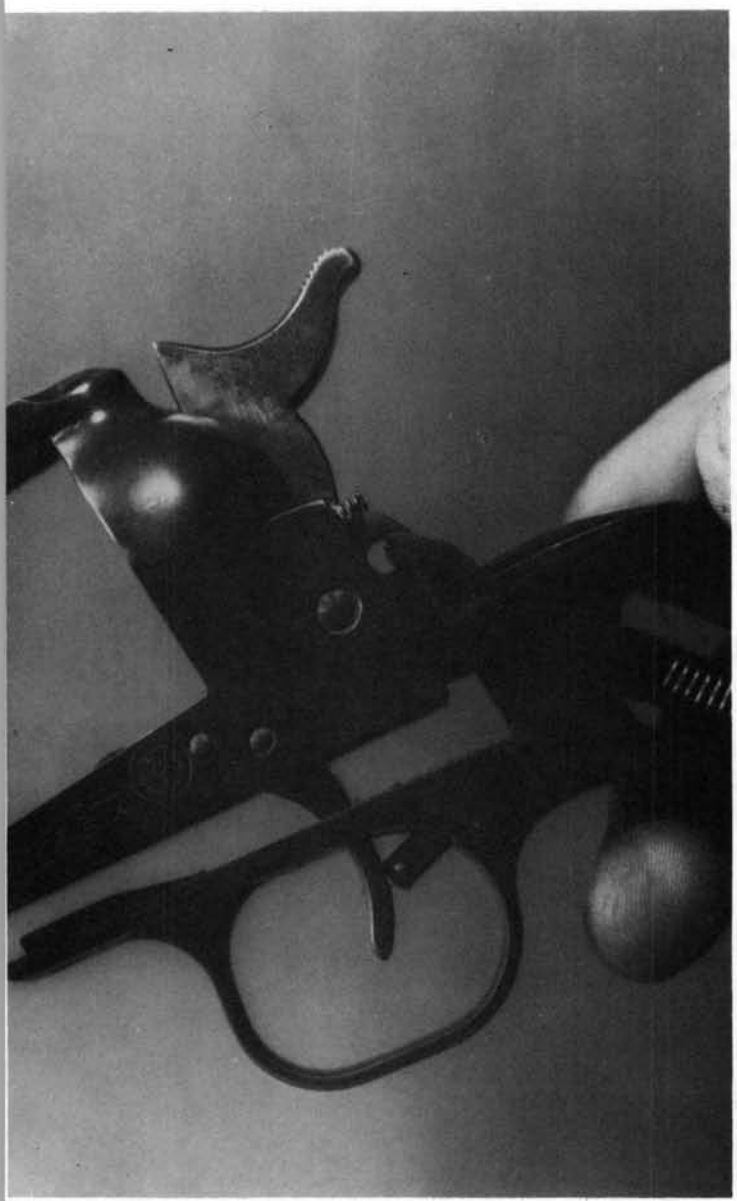
2. Open the loading gate and remove the cylinder toward the right.

3. After removing the grips, cock the hammer, and insert an opened paper clip or a small nail through the transverse hole in the lower end of the hammer strut.



4. Release the hammer slowly, and the hammer spring, strut, and spring base will be trapped as a unit.

5. Remove the two screws at the upper rear of the grip frame, then the three screws in the underside of the grip frame, taking the forward screw out first. Move the grip frame slightly toward the rear, then remove it downward.

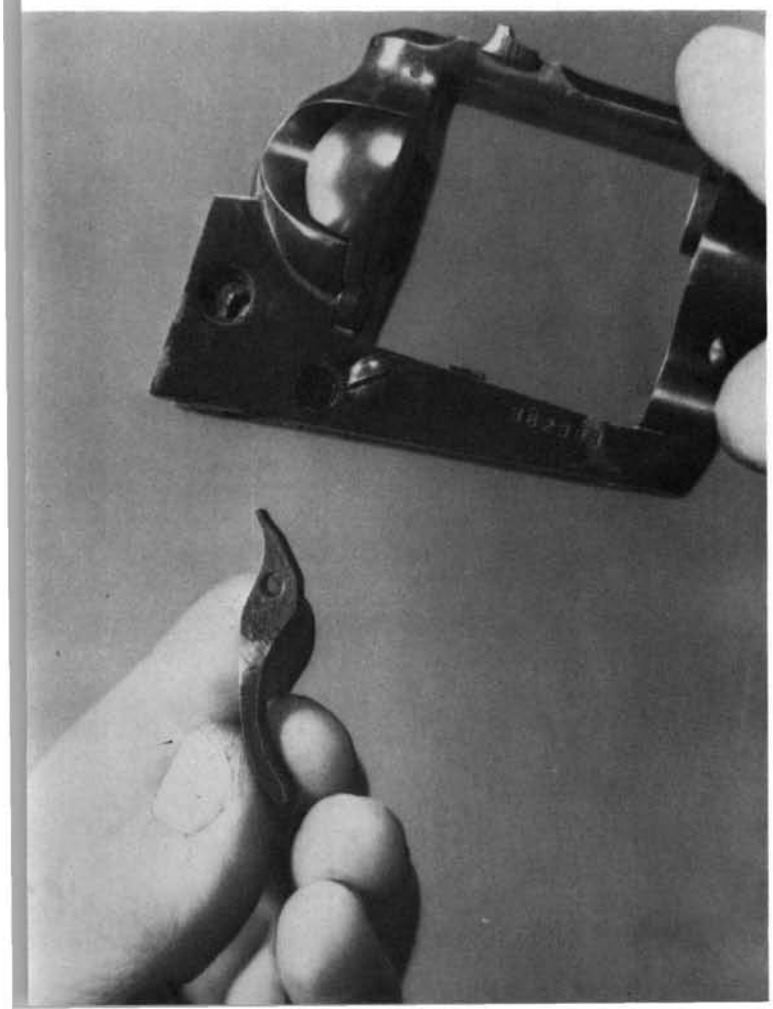


6. The trigger spring and plunger can now be taken out toward the front. Lift the hammer spring unit upward, then remove it to the side. If the spring unit is to be taken apart, grip the upper end of the hammer strut tightly, and press the spring base against a slightly opened bench vise, compressing the spring. Remove the paper clip, and carefully and slowly release the spring tension.

7. Remove the cylinder hand spring and plunger from the hole in the rear upper left of the main frame.

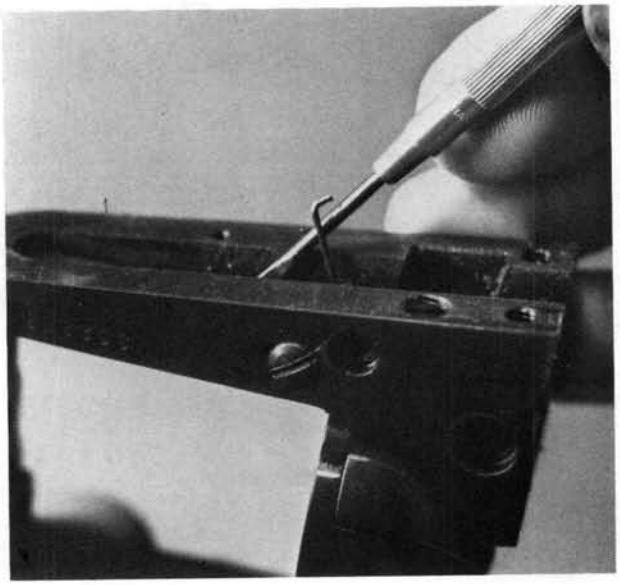
8. The hammer, trigger, and cylinder stop are retained by cross-screws, removable toward the right. Take out the hammer screw, and remove the hammer and the attached cylinder hand downward.

9. Drifting out the cross-pin at the middle front of the hammer will release the cylinder stop trip plunger and spring for removal downward.

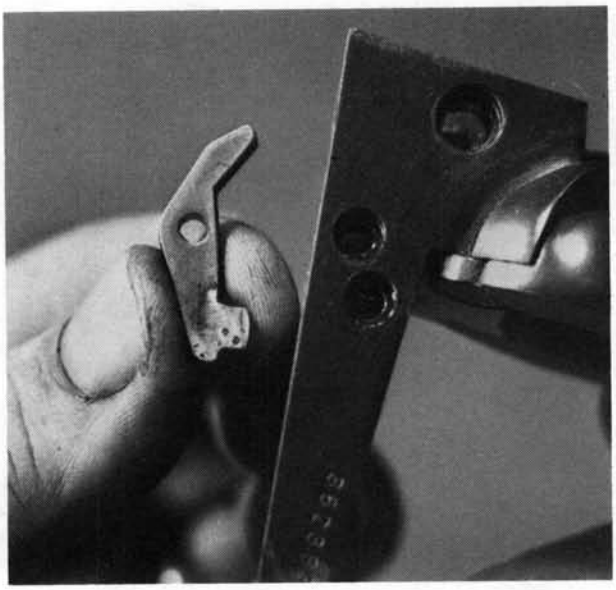


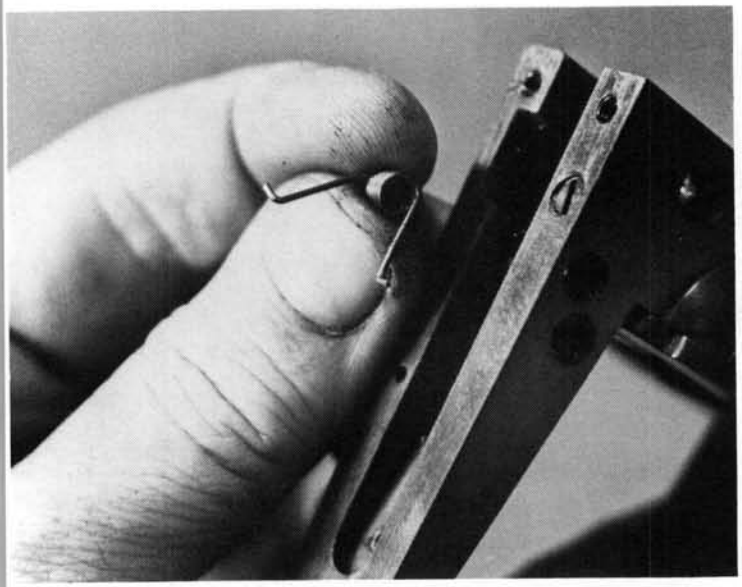
10. Take out the trigger screw and remove the trigger downward.

11. Use a small screwdriver to detach the outer arm of the cylinder stop spring from its hole in the frame recess.

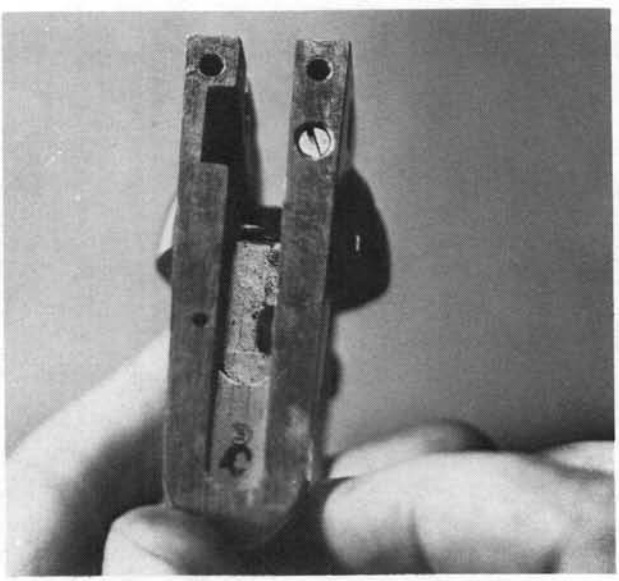


12. Remove the cylinder stop screw and take out the cylinder stop.



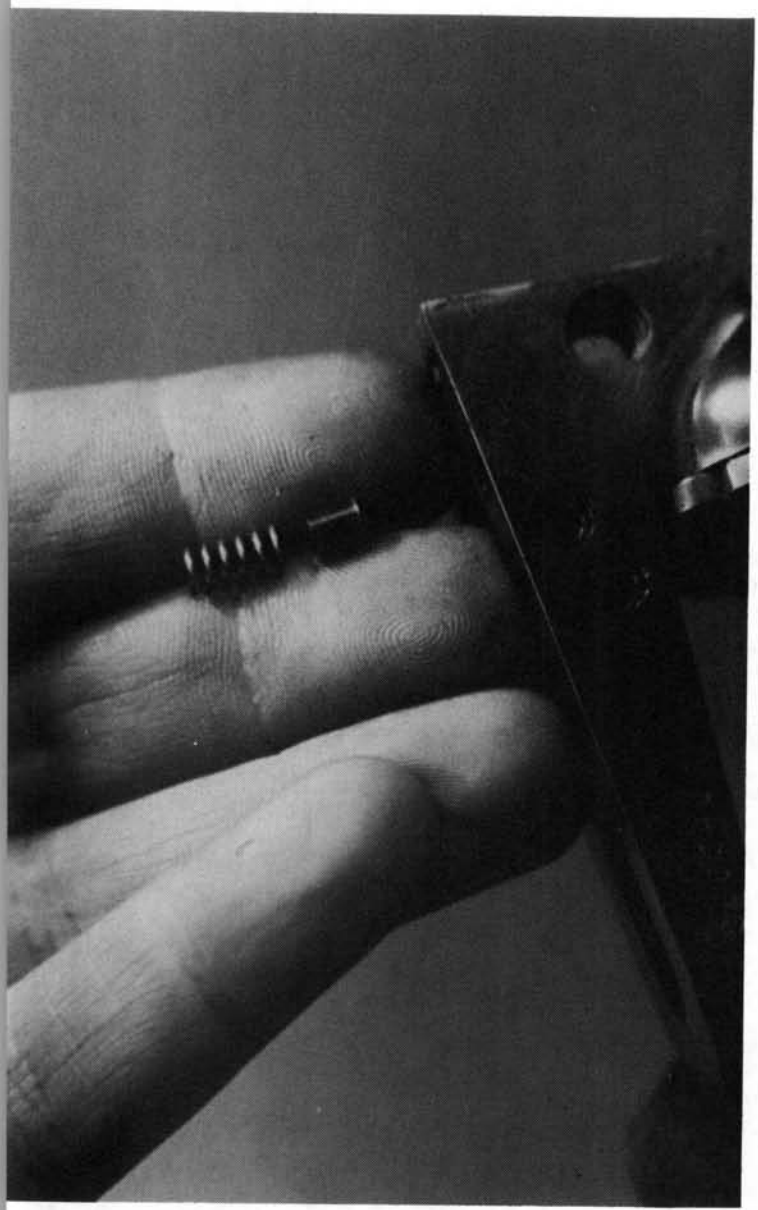


13. Remove the cylinder stop spring from the frame.

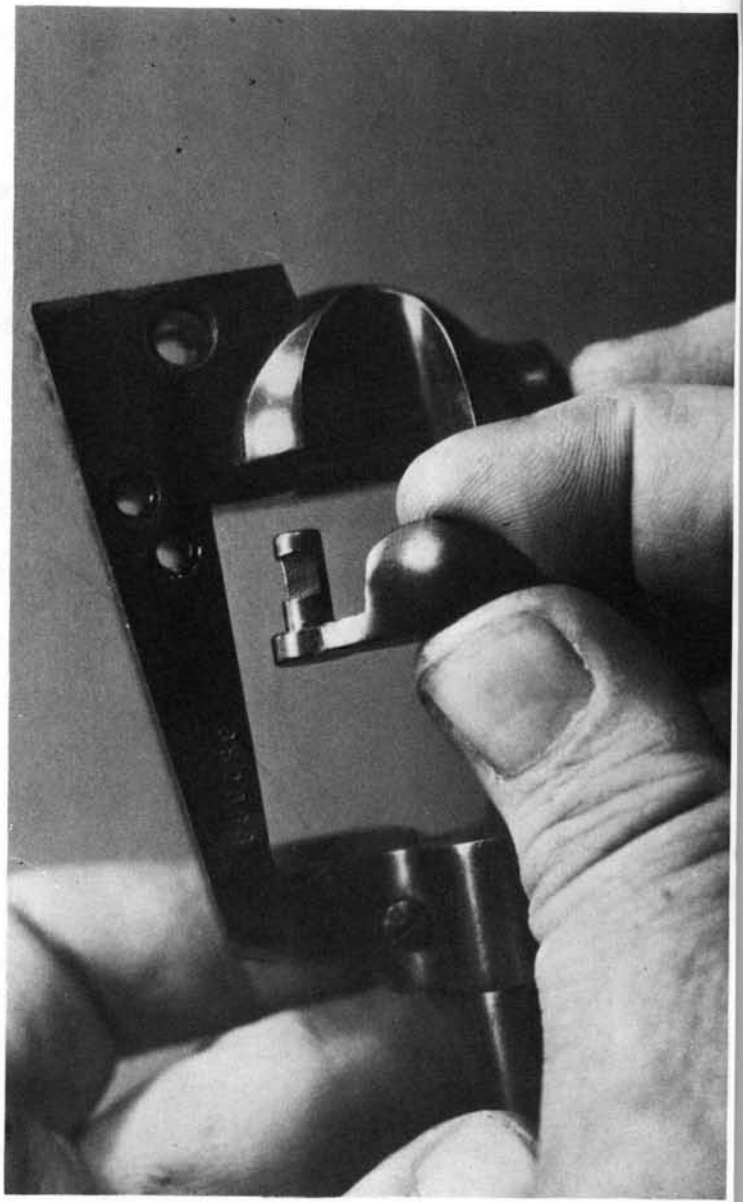


14. Remove the small screw in the right underside of the frame.

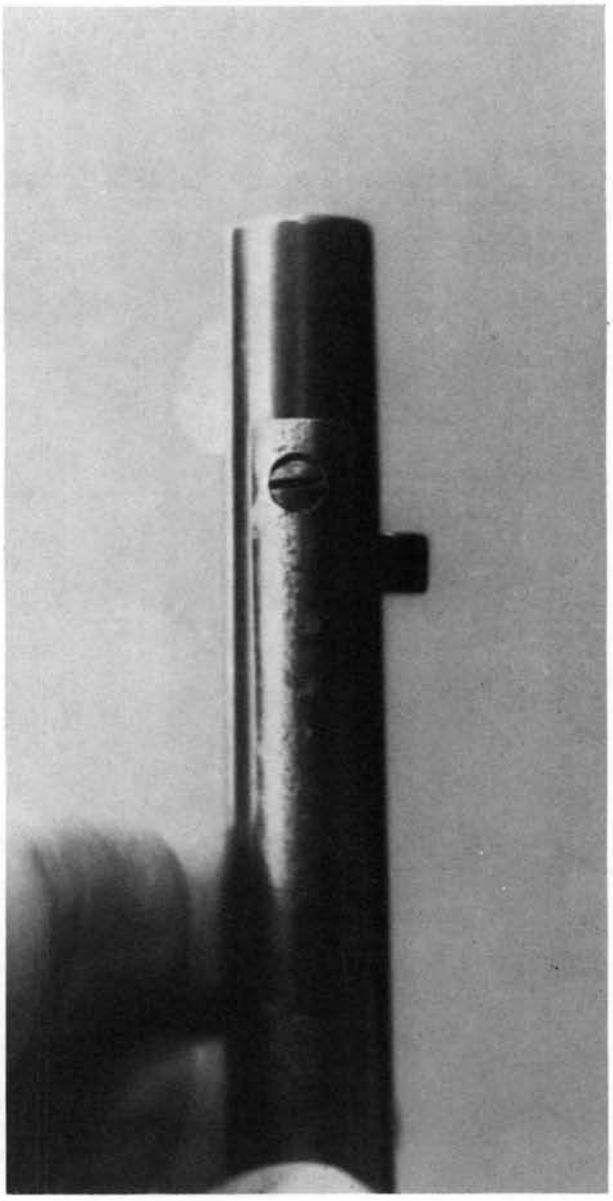
15. Remove the loading gate plunger and spring.



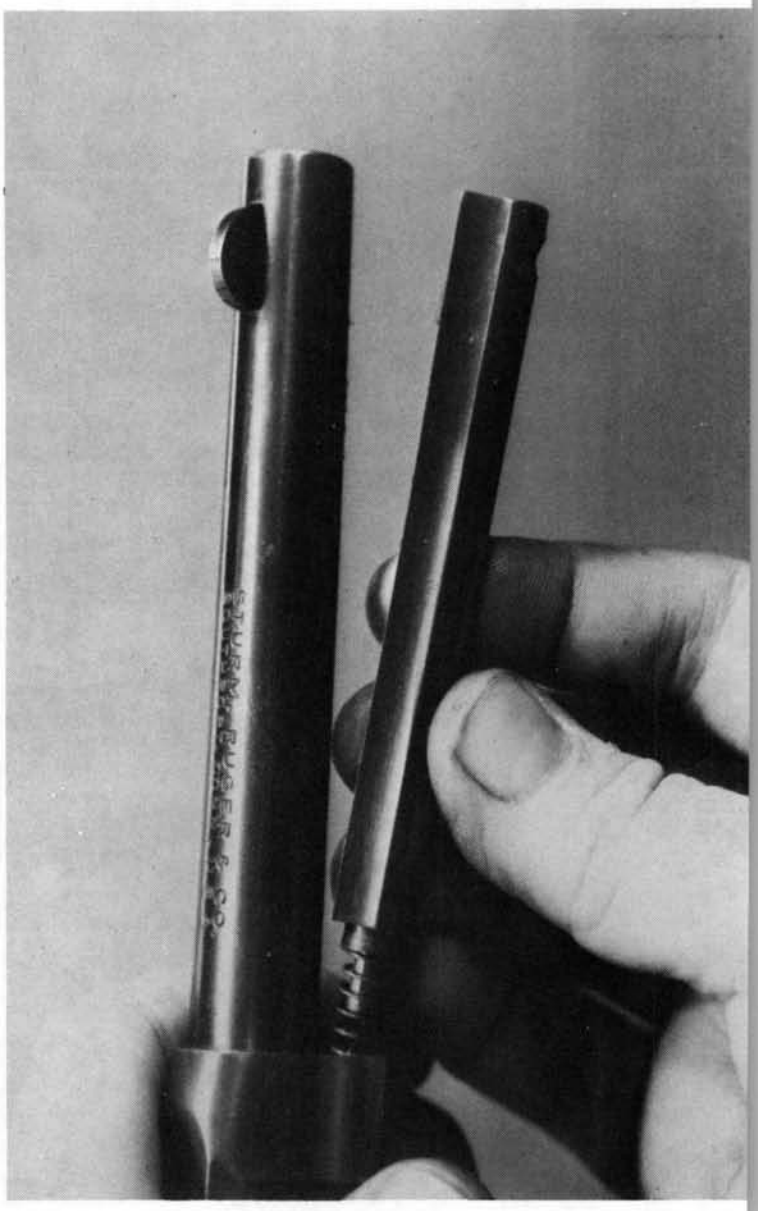
16. Remove the loading gate toward the front.



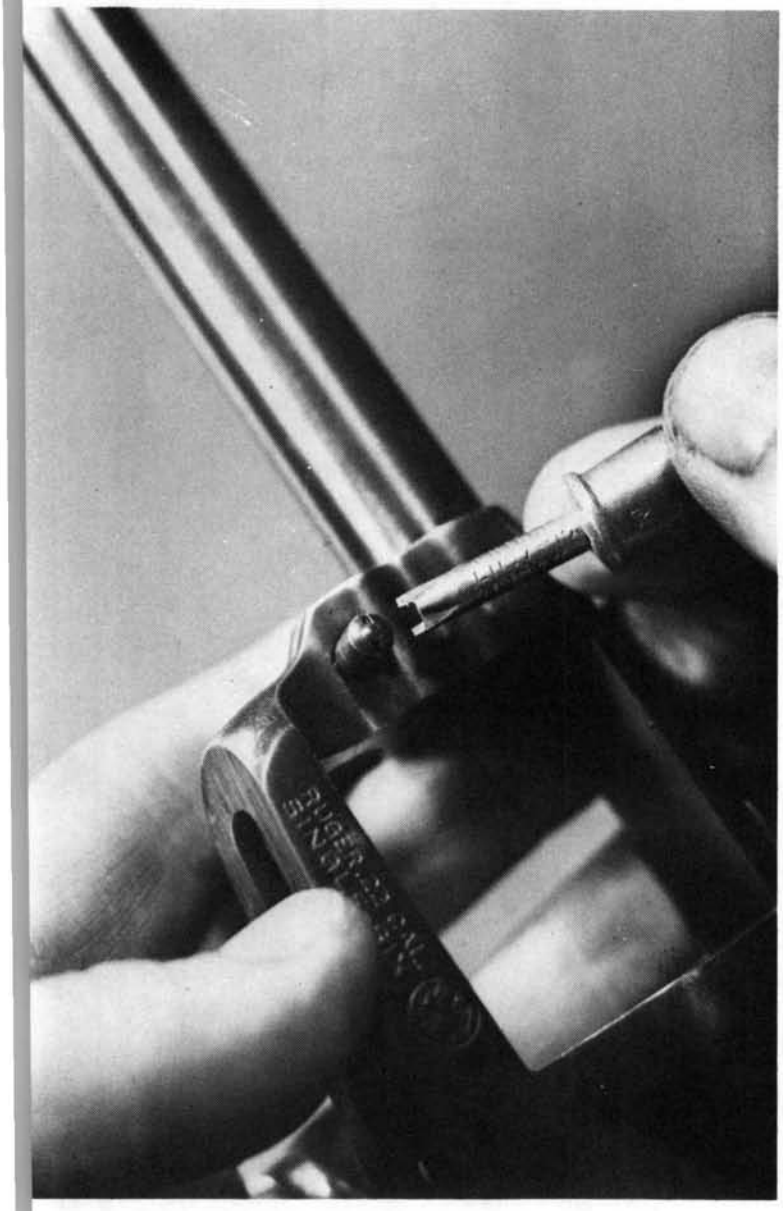
17. Remove the screw near the forward end of the ejector housing.



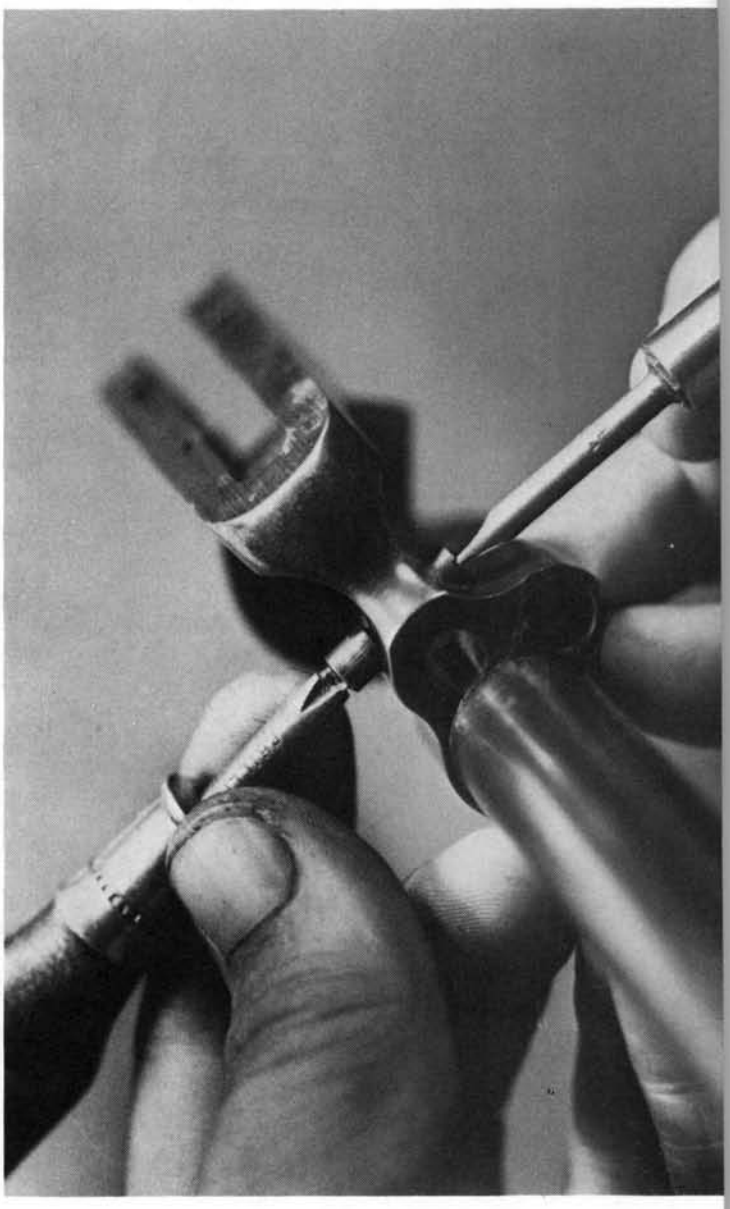
18. Tip the forward end of the ejector housing away from the barrel, and remove the housing toward the front. Remove the ejector rod and spring from the housing toward the rear.



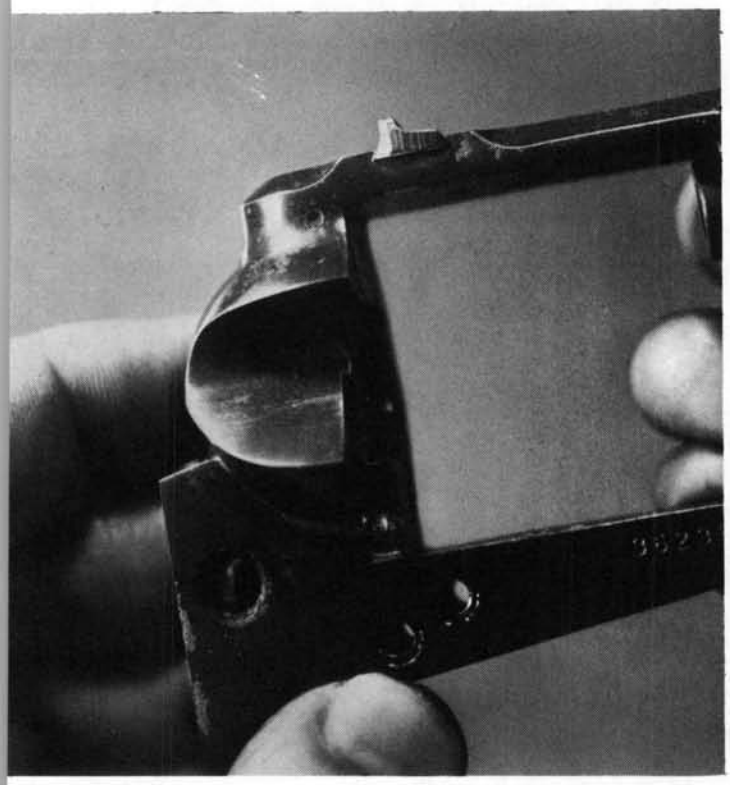
19. A twin-pointed tool is necessary to remove the cylinder base pin latch. The one shown was made by grinding the tip of an old Phillips screwdriver.



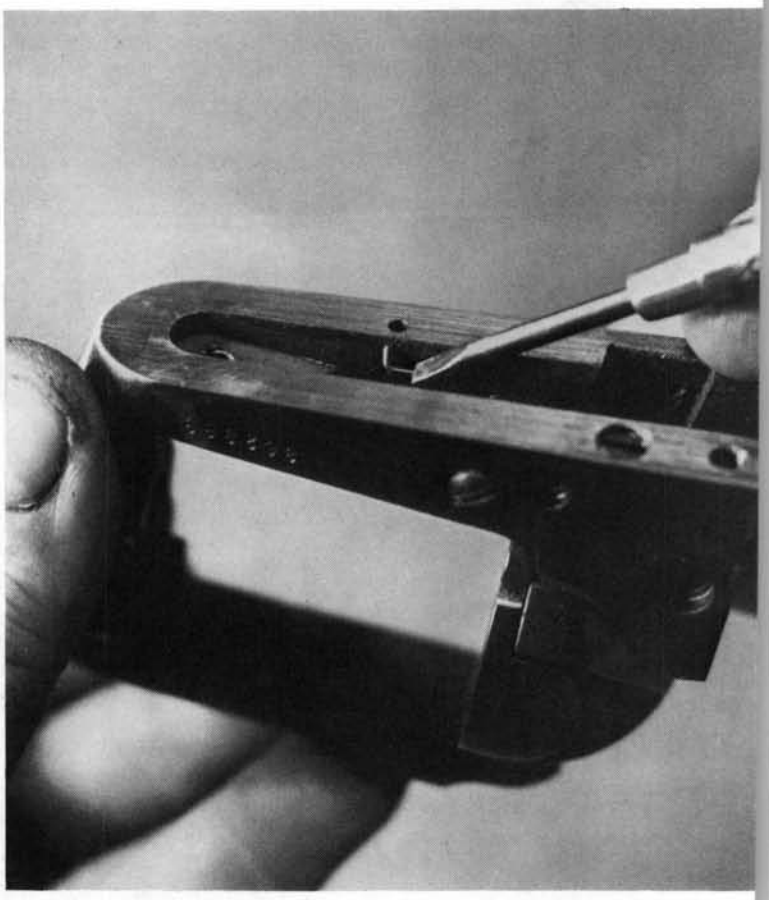
20. Use the twin-pointed tool on the left, and a regular screwdriver on the right, and unscrew the base pin latch. The latch piece is removed toward the right, the cap nut and spring toward the left.



21. Drifting out the cross-pin at the top of the frame, just below and to the rear of the rear sight, will free the firing pin housing for removal toward the front. After the pin is removed, exert pressure on the firing pin to push the firing pin, spring, and housing out forward. The ends of the retaining cross-pin are usually contoured with the sides of the frame, and may be difficult to locate. Some marring of the ends will be inevitable during removal. Except for repair, the firing pin unit is best left in place.



Reassembly Tips:

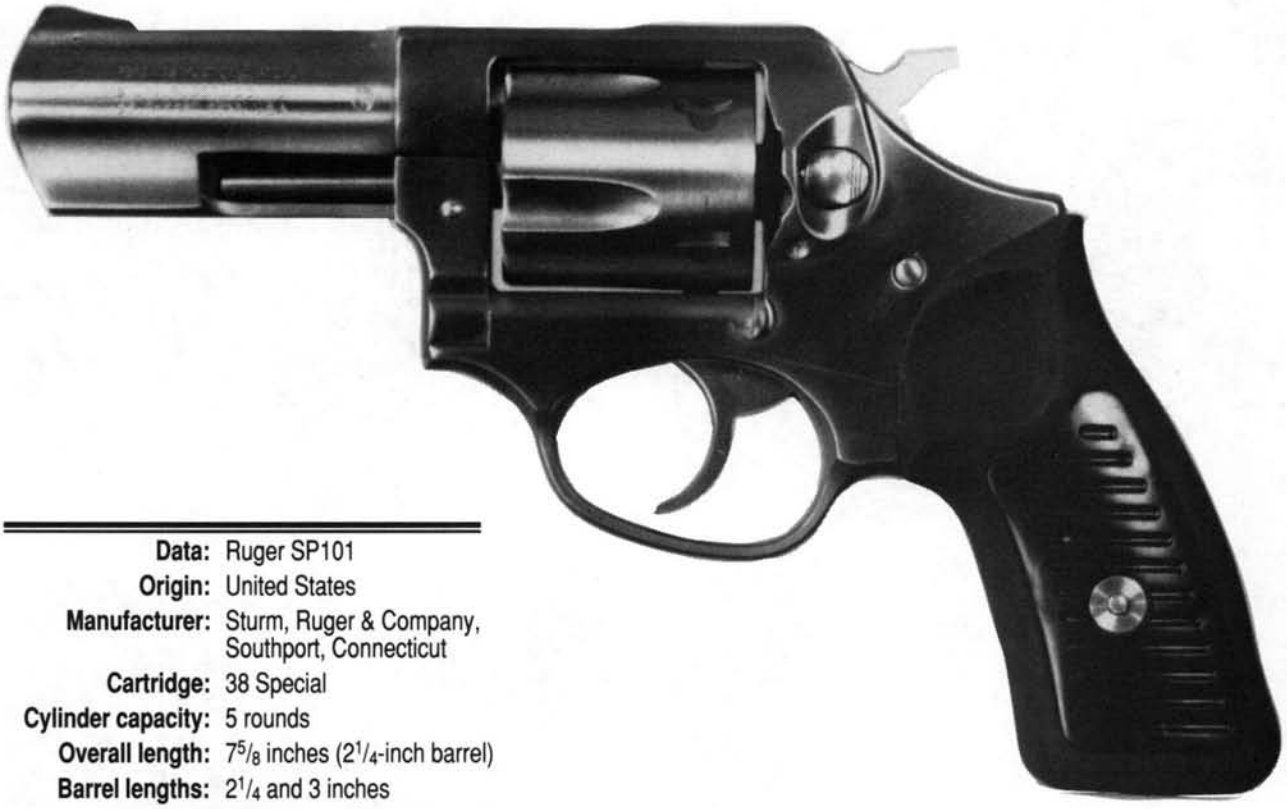


1. After reinstalling the cylinder stop and spring, use a small screwdriver to reinsert the angled tip of the spring into its hole in the frame recess.

When replacing the cylinder hand plunger and spring, be sure they are inserted into the proper hole in the left upper rear of the frame, and not into the screw hole just below it (see #7).

When replacing the grip frame, take care that the cylinder hand spring is not deformed as the grip frame is moved into place. Move the grip frame up, then straight forward. Be sure the top of the hammer strut engages the slot at the lower rear of the hammer.

Ruger SP101

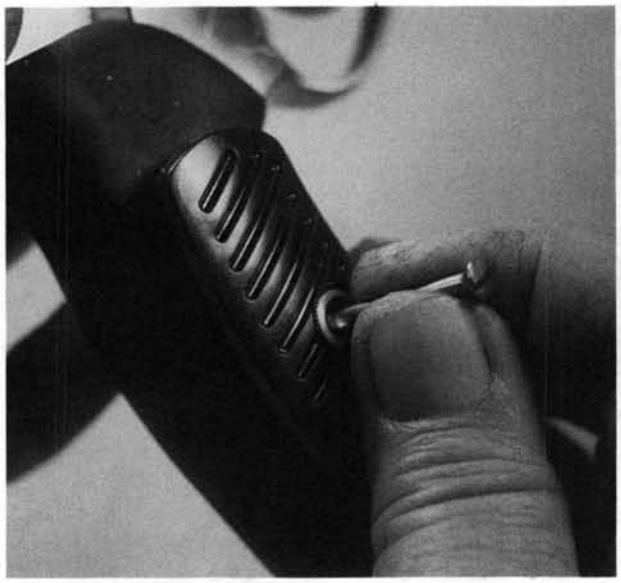


Data:	Ruger SP101
Origin:	United States
Manufacturer:	Sturm, Ruger & Company, Southport, Connecticut
Cartridge:	38 Special
Cylinder capacity:	5 rounds
Overall length:	$7\frac{5}{8}$ inches ($2\frac{1}{4}$-inch barrel)
Barrel lengths:	$2\frac{1}{4}$ and 3 inches
Weight:	25 ounces ($2\frac{1}{4}$-inch barrel)

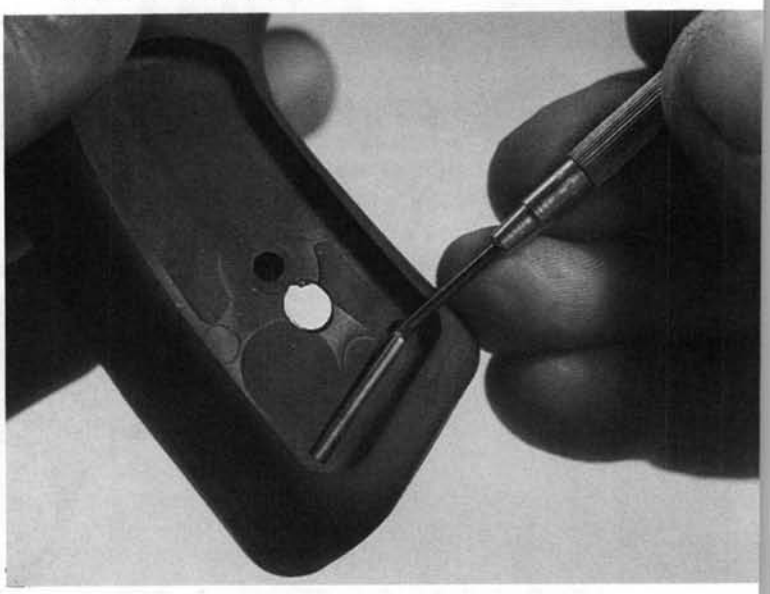
The "small" revolver from Sturm, Ruger & Company, introduced in 1988, is a heavily-built little 38 Special that is designed to handle Plus-P loads. Mechanically, it incorporates many of the features of the Ruger GP100. It is available only in stainless steel, in two barrel lengths, and it has a five-shot cylinder.

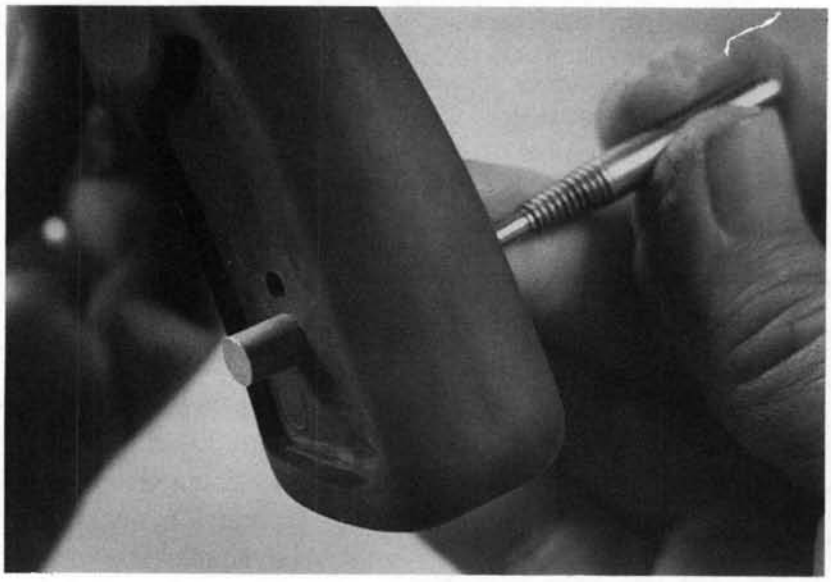
Disassembly:

1. Remove the grip screw, and use the screw to tip the center panels out of their recesses.



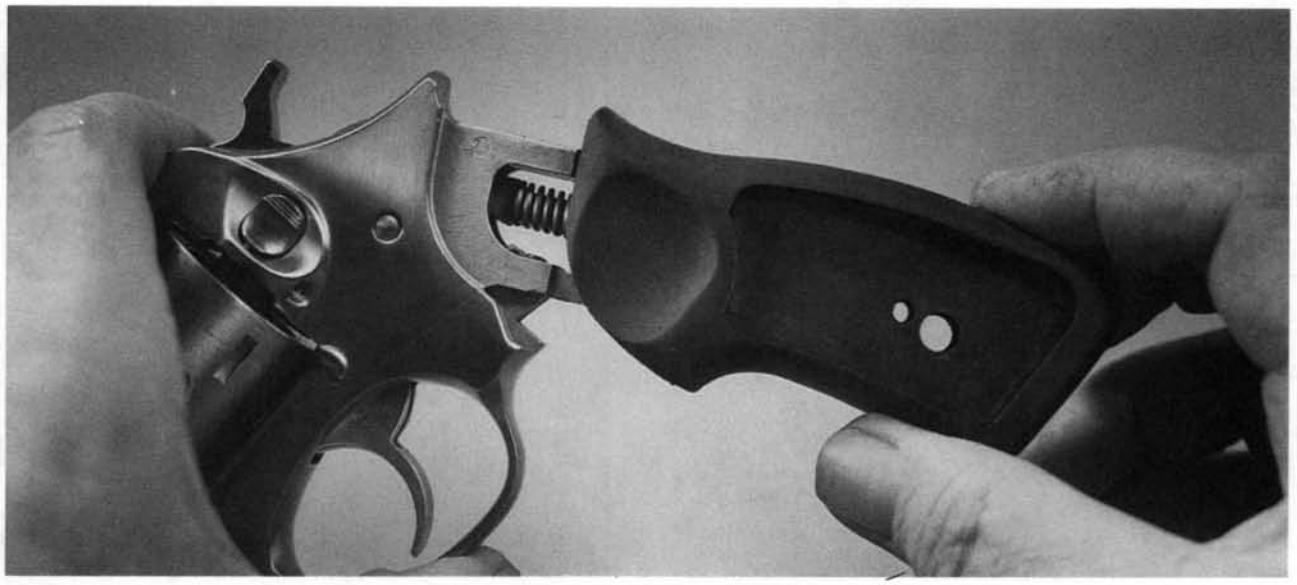
2. Remove the disassembly pin from its recess in the right side of the grip piece.



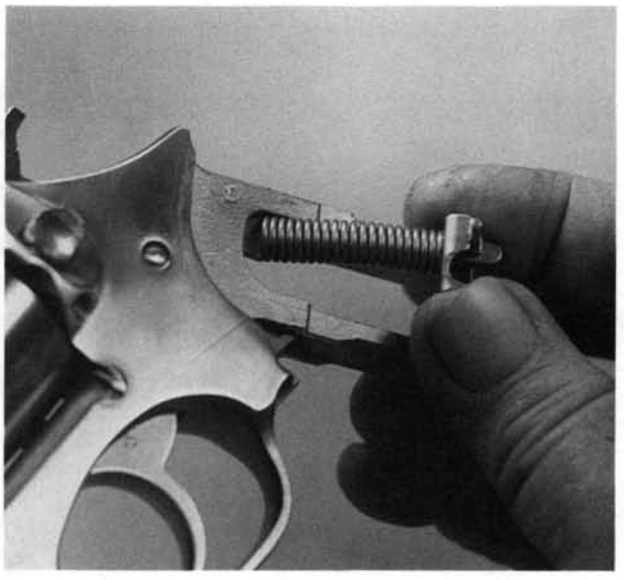


3. Push out the grip panel locator toward either side.

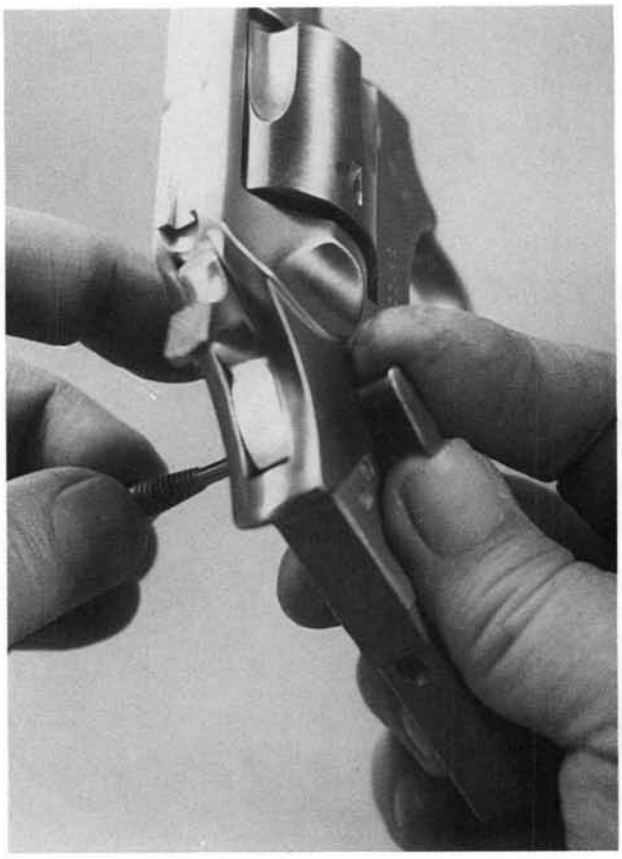
4. Remove the grip piece downward.



5. Cock the hammer, and insert the disassembly pin through the hole in the hammer strut.

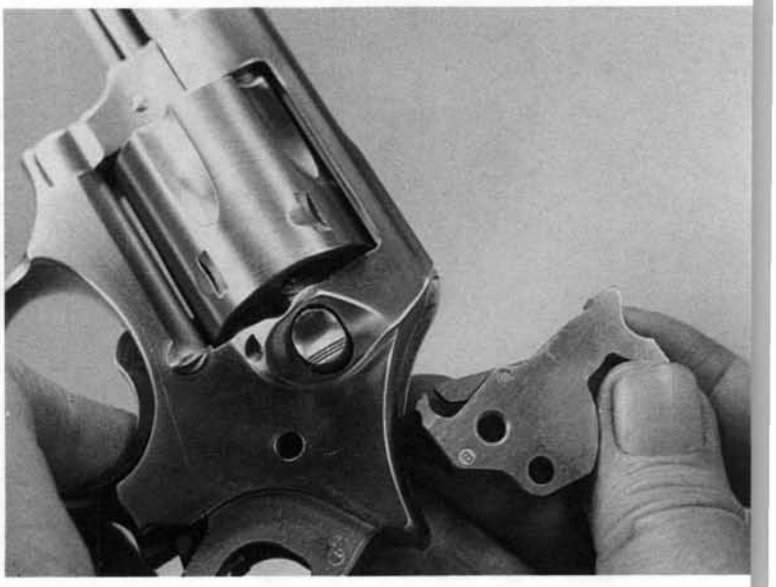


6. Ease the hammer down, and remove the hammer spring assembly toward either side. If these parts are to be separated, place the baseplate against the side of a slightly opened bench vise, and exert pressure to compress the spring while taking out the pin. Keep a firm grip on the top of the strut, and release the spring tension slowly.



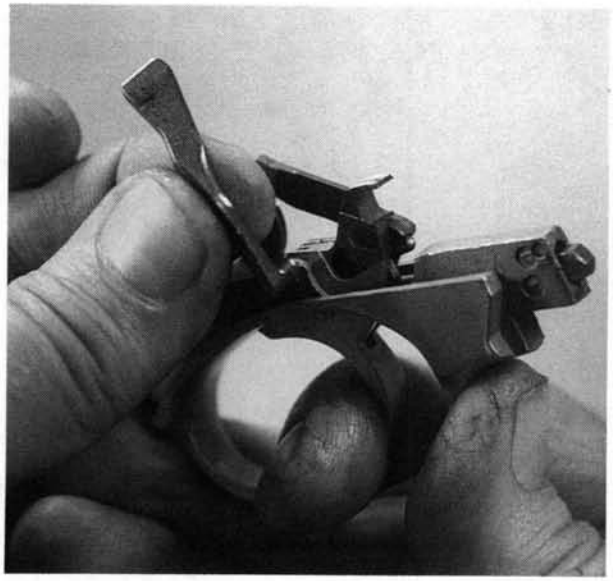
7. Push out the hammer pivot toward the right.

8. Pull the trigger, and remove the hammer upward. Drifting out the cross-pin will allow removal of the double-action lever and its plunger and spring. **Caution:** *The spring is under tension. Unless removal is necessary for repair, these parts are best left in place.*

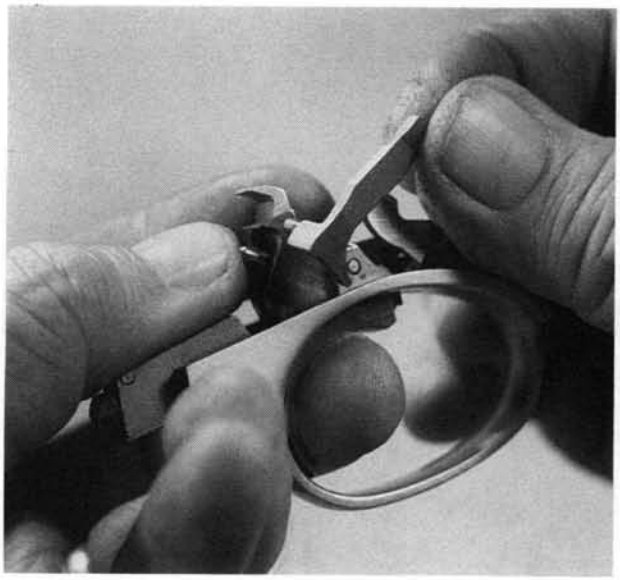


9. Insert a tool through the hole in the back of the grip frame to depress the trigger guard latch, and move the rear of the guard downward.

10. Pull the trigger, and remove the guard unit downward.

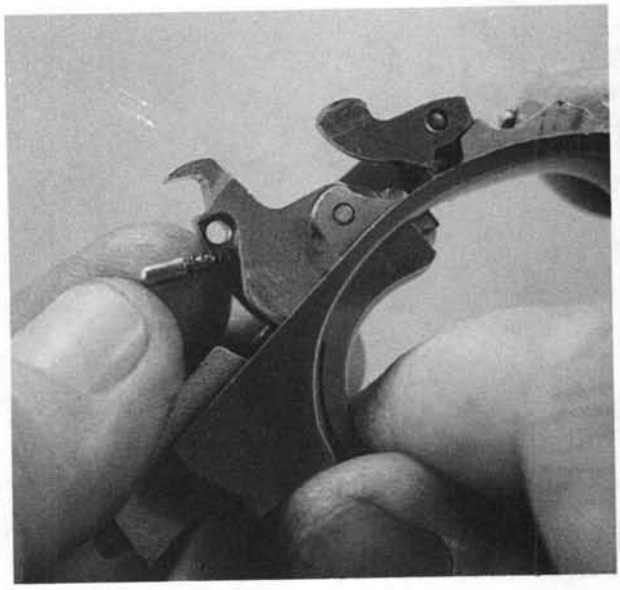


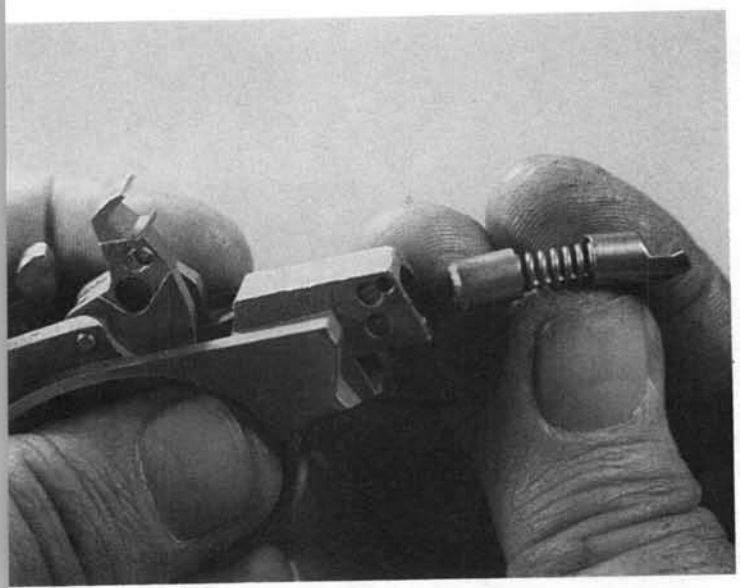
11. With the trigger slightly depressed, remove the transfer bar from the left side of the trigger.



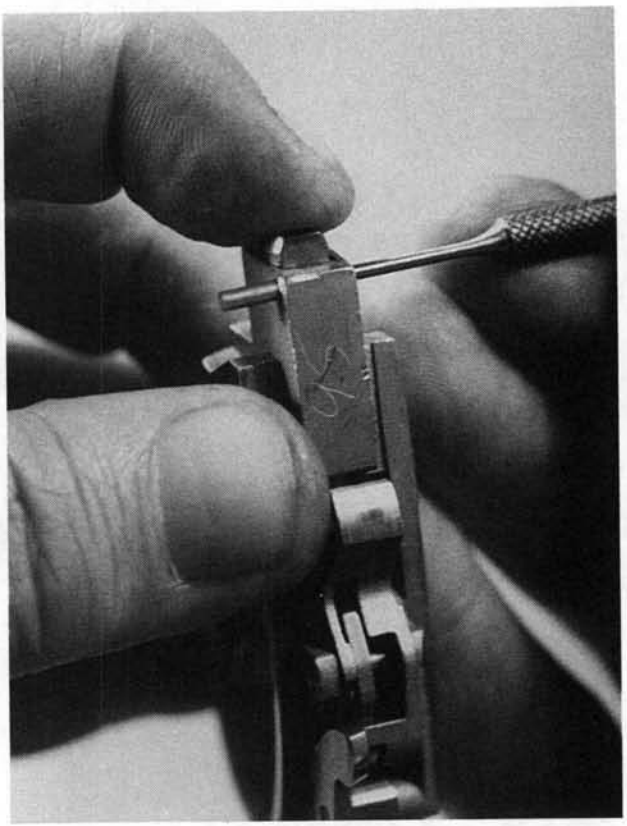
12. Control the plunger and spring, and remove the cylinder hand toward the right.

13. Remove the cylinder hand plunger and spring from the trigger.



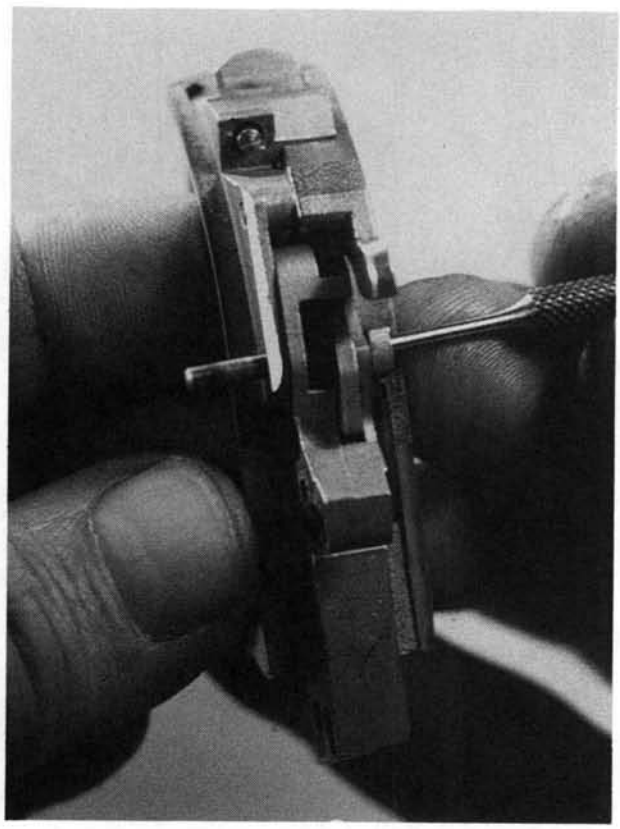


14. Slightly depress the trigger guard latch, and push out the cross-pin at the rear of the guard unit.

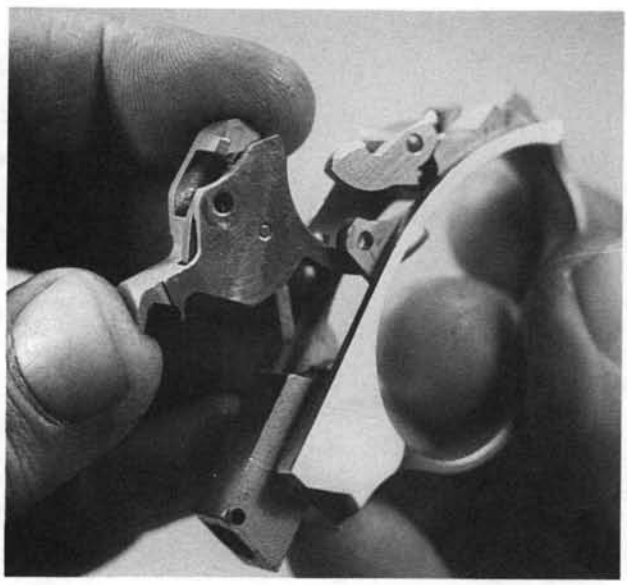


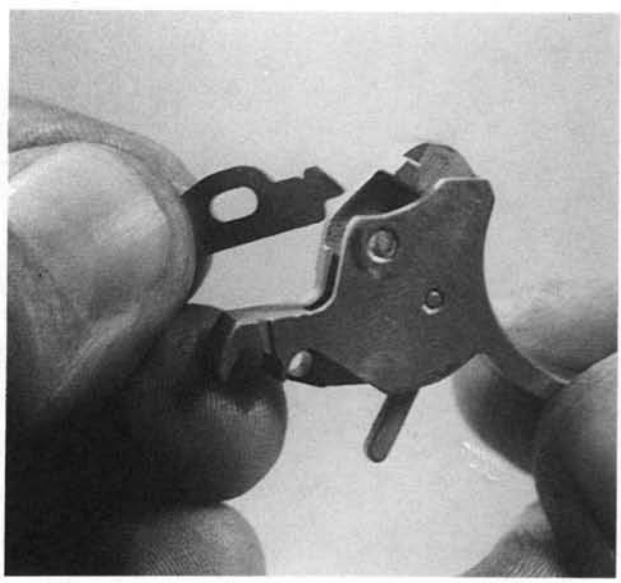
15. Remove the guard latch and the combination latch and trigger spring toward the rear. The trigger link plunger can also be taken out at this time.

16. Push out the trigger cross-pin.



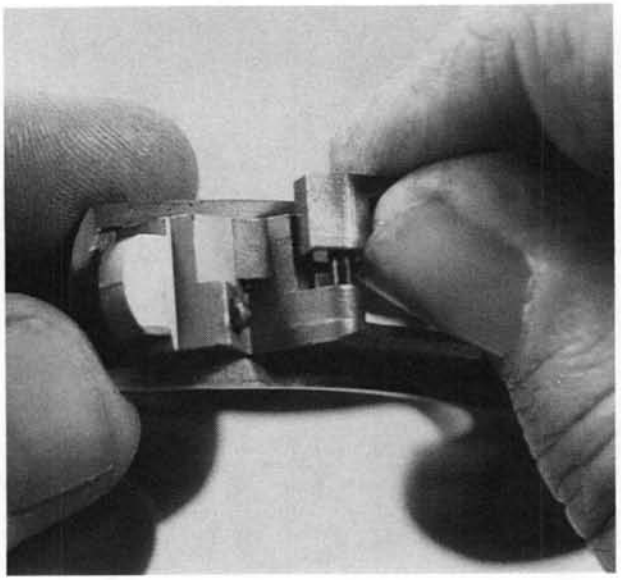
17. Remove the trigger upward and toward the rear.

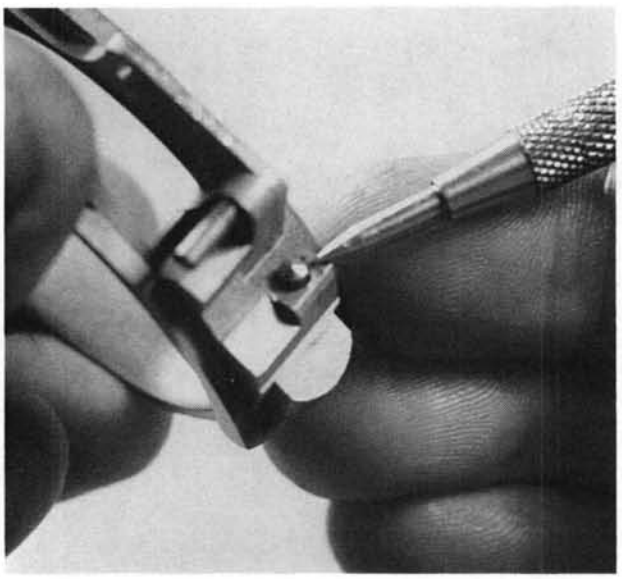




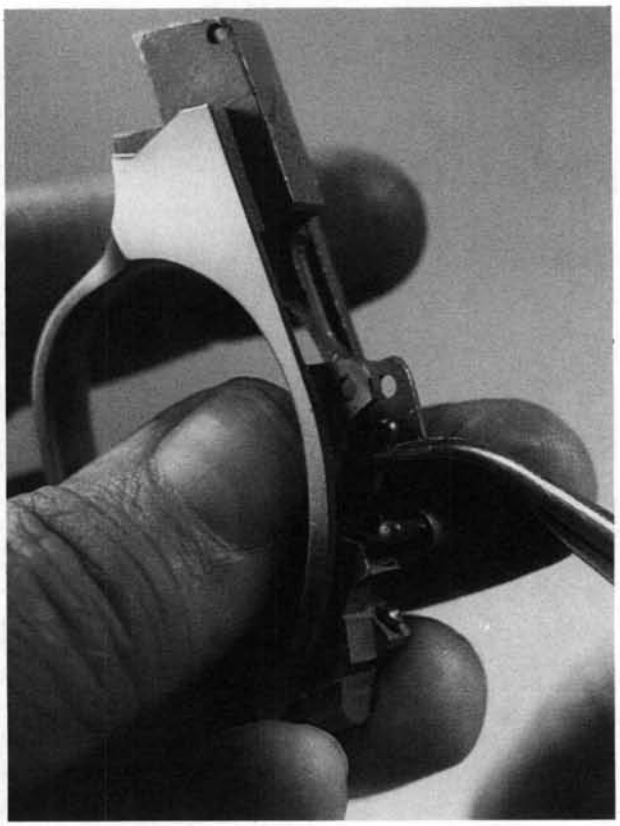
18. Remove the cylinder stop trip from the top of the trigger. The trigger spring link can be taken out by drifting out the cross-pin, but in normal takedown it is left in place.

19. Holding it as shown, use a thumbnail to nudge the cylinder stop off its post toward the right. The plunger and spring will be caught by the thumb as the stop clears its post.



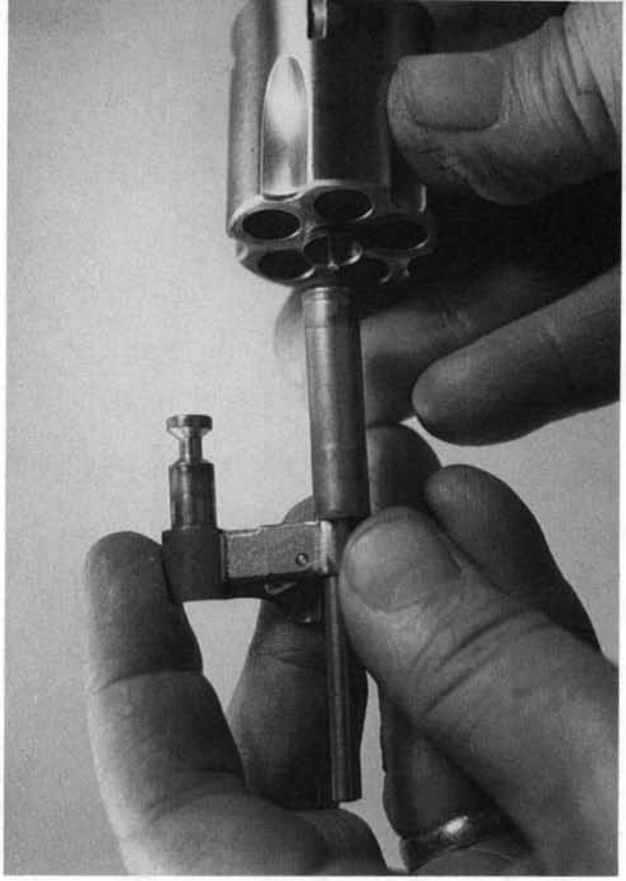


20. Remove the cylinder stop plunger and spring.

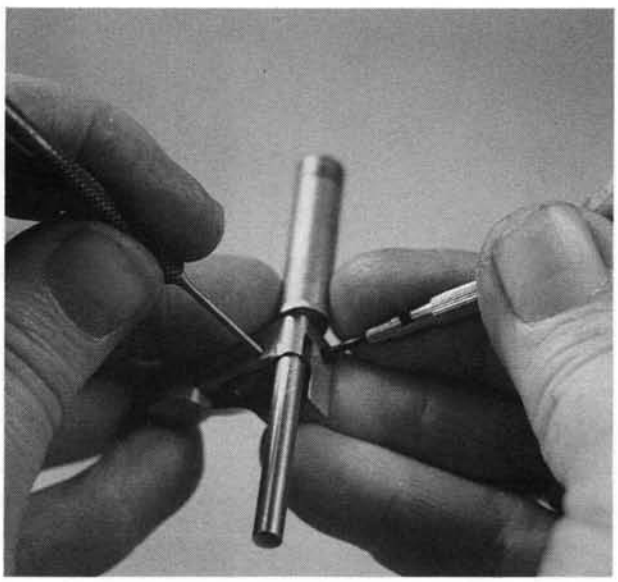


21. The crane lock plunger and spring are staked in place in the guard unit, and they are not routinely removable.

22. Operate the cylinder latch, open the cylinder, and move the crane out of the frame toward the front.

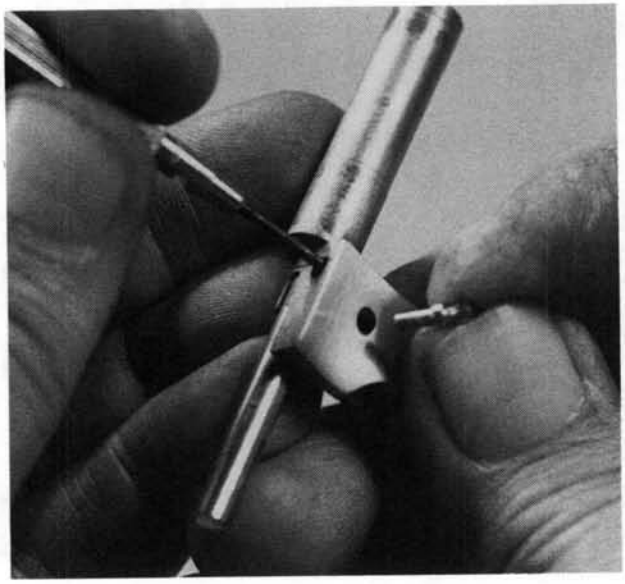


23. Remove the crane from the cylinder

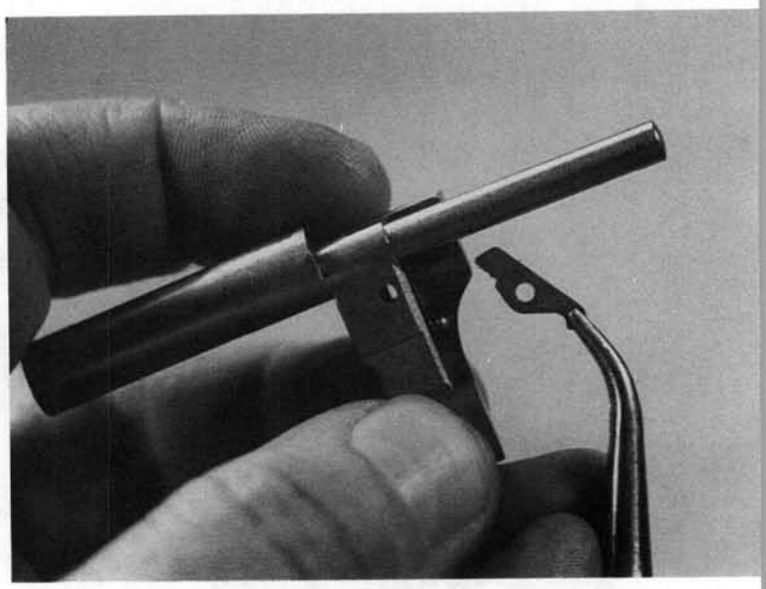


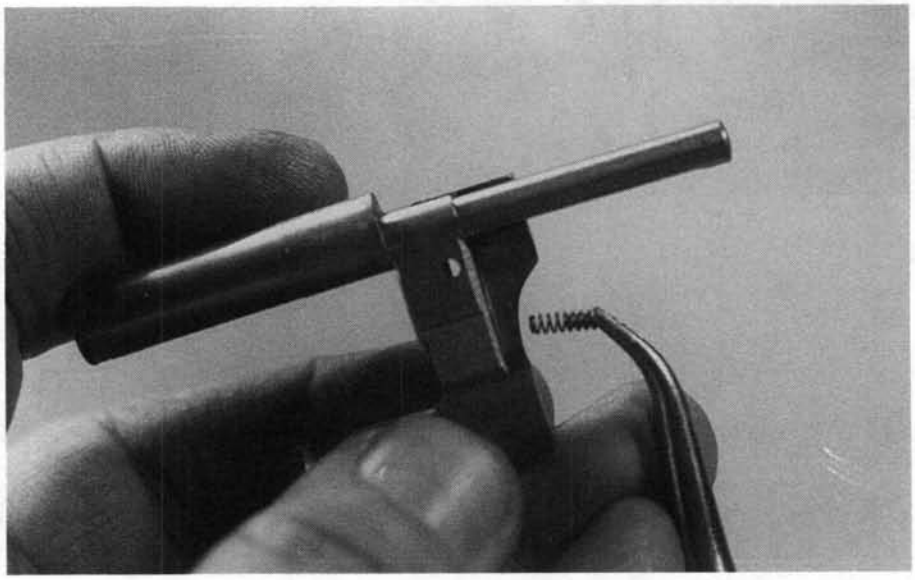
24. Insert a very slim tool in the hole in the top of the crane to depress the locking plunger, and push out the front latch pivot lock toward the left.

25. Remove the pivot toward the left.



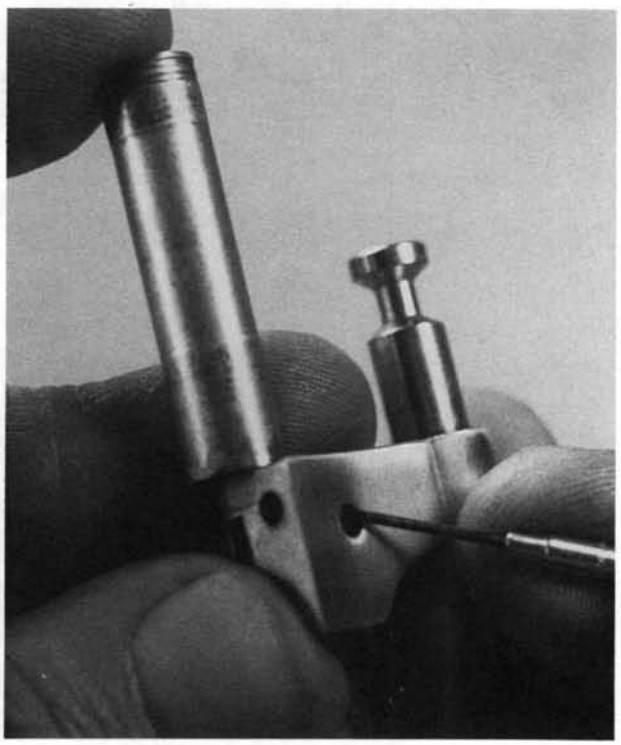
26. Remove the front latch downward and toward the front.



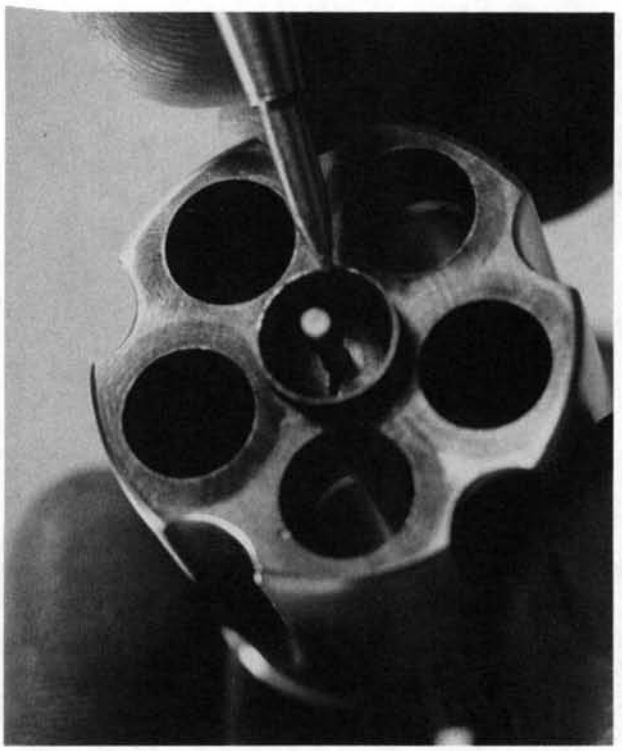


27. Remove the latch plunger and spring toward the front.

28. Remove the ejector rod toward the rear.

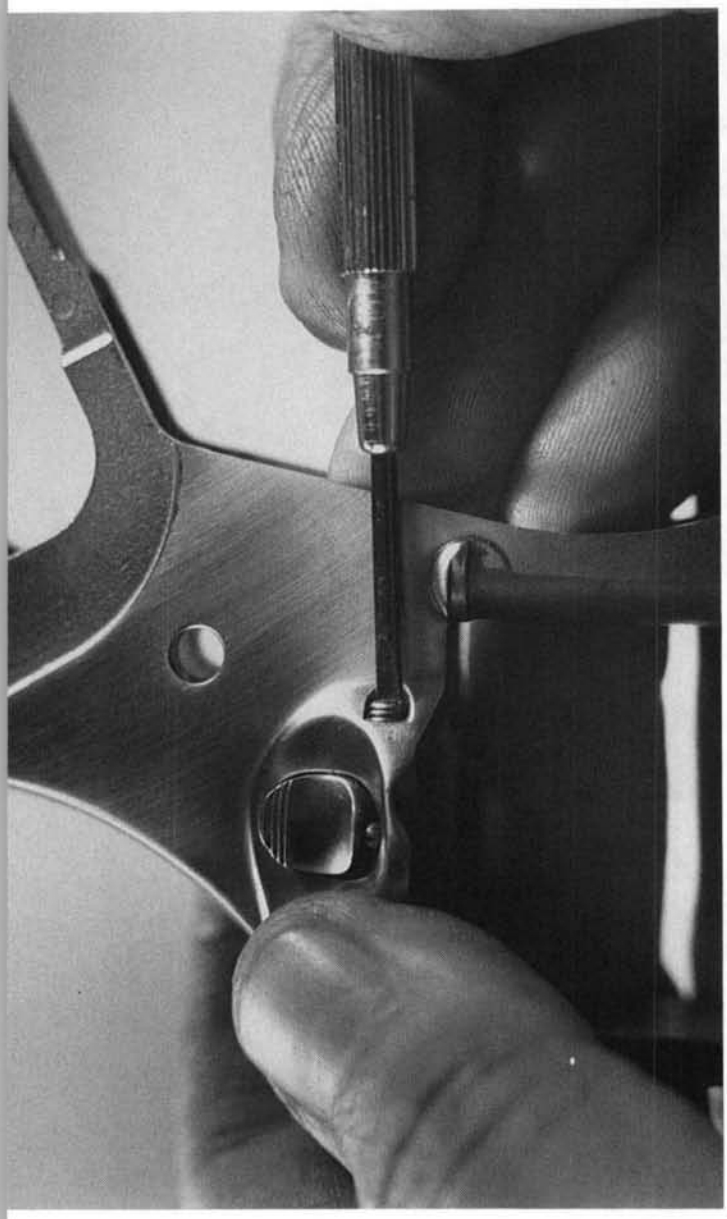


29. If necessary, a small tool can be inserted to nudge the locking plunger and spring upward for removal.

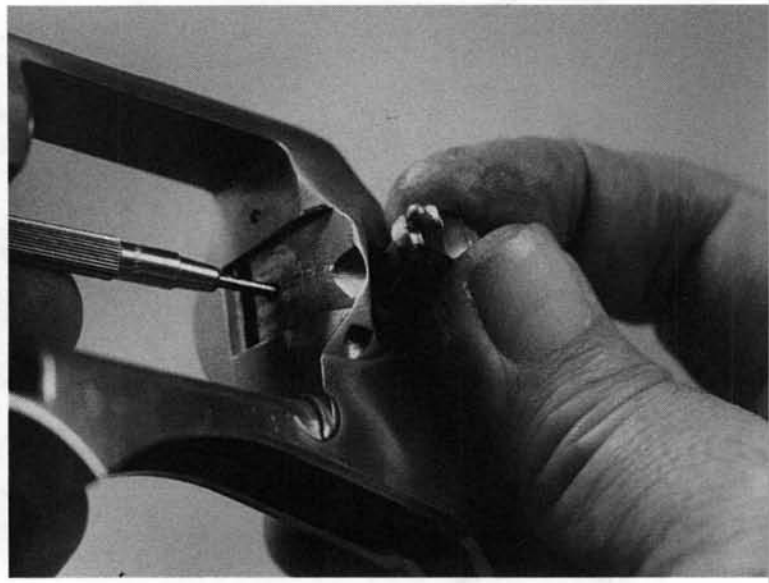


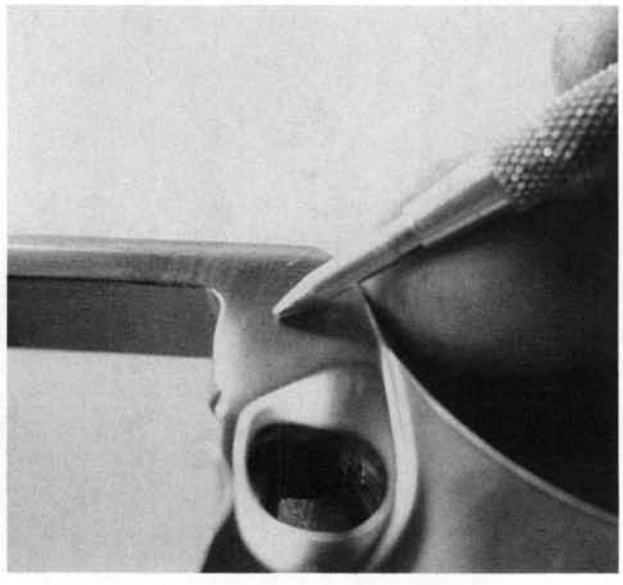
30. The ejector system is designed to require a special twin-point wrench with a hollow center. Since the ejector/ratchet unit is not available separately from the factory, it's best to consider this unit as not routinely dismountable.

31. Remove the vertical screw on the left side that pivots and retains the crane latch. Note that this screw is staked to prevent loosening, and should be re-staked if removed.



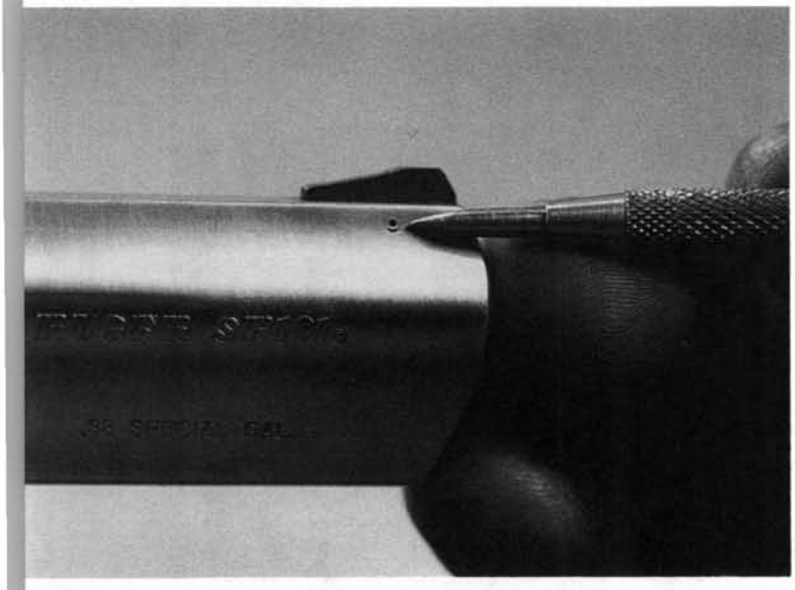
32. Insert a small tool and push the center nose of the crane latch toward the rear. This will nudge the latch out toward the left for removal. The plunger and spring can be removed from the latch.





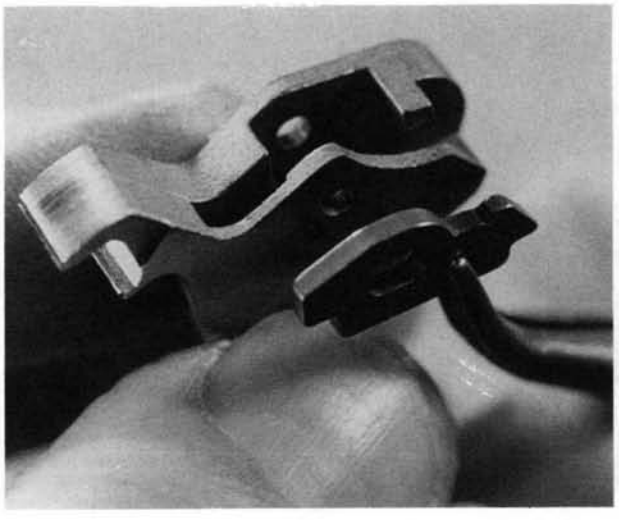
33. The firing pin housing ("recoil plate"), firing pin, and spring are retained in the frame by a cross-pin which is finished over at the factory. Even if it can be located and driven out, the finish will be badly marred. It's best to consider this a return-to-factory item.

34. The front sight blade is retained by a roll cross-pin that is also finished over. If it has to be taken out, the blade comes off upward.

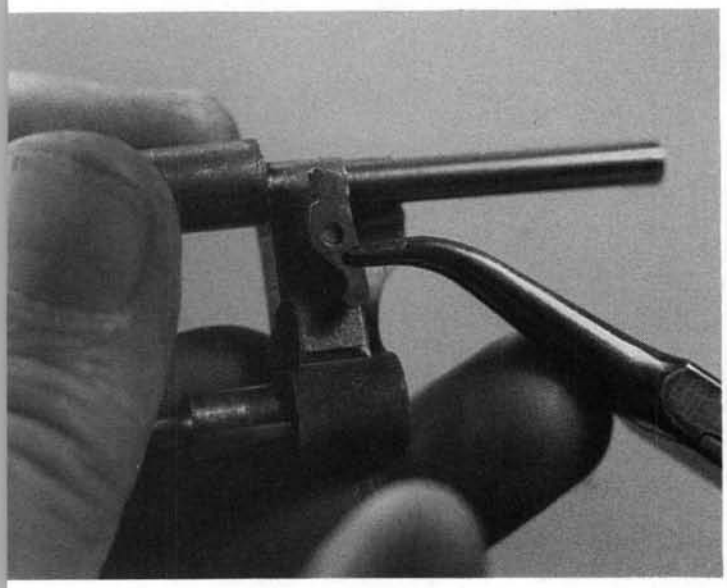


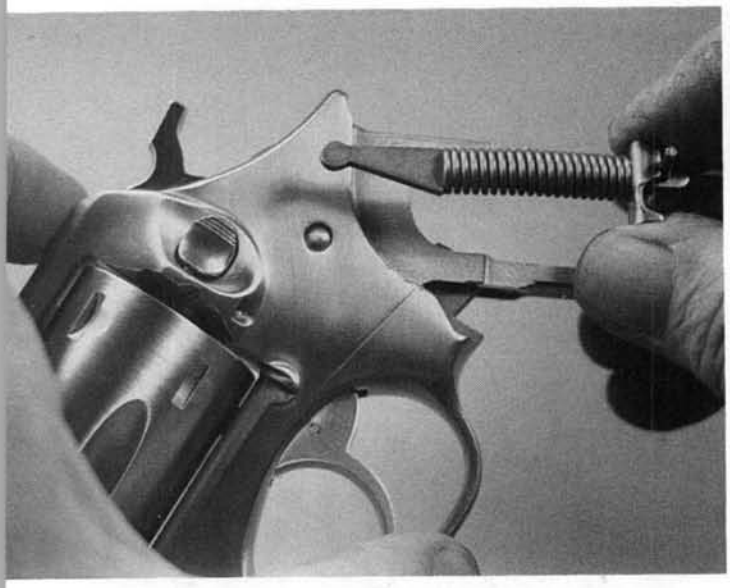
Reassembly Tips:

1. The cylinder stop trip is shown here outside the trigger in the proper orientation for insertion in its slot in the top of the trigger.



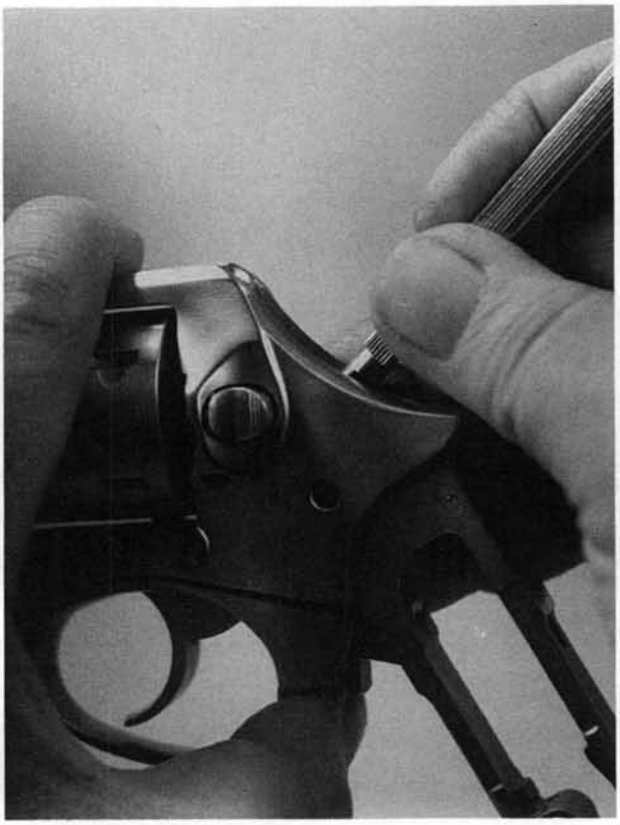
2. The front latch is shown here outside the crane in proper orientation for installation.





4. The hammer spring assembly is shown here in the proper orientation for installation.

3. As the guard unit is pushed into place, it may be necessary to insert a tool to guide the cylinder hand and transfer bar into place in the frame. Pull the trigger a few times to check operation.



Smith & Wesson New Departure

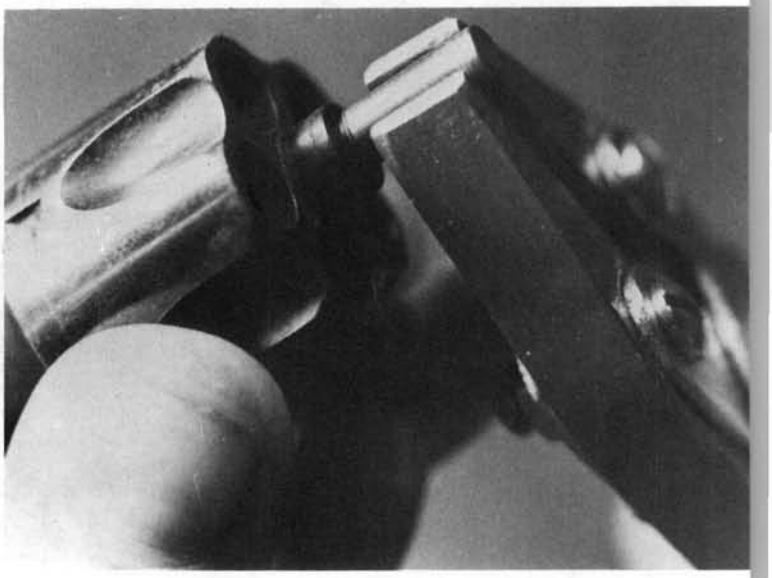
Data:	Smith & Wesson New Departure
Origin:	United States
Manufacturer:	Smith & Wesson, Springfield, Massachusetts
Cartridges:	32 S&W and 38 S&W
Cylinder capacity:	5 rounds
Overall length:	$6^{5}/_{8}$ inches (with 3-inch barrel)
Barrel length:	3 inches (other lengths were made)
Weight:	18 ounces

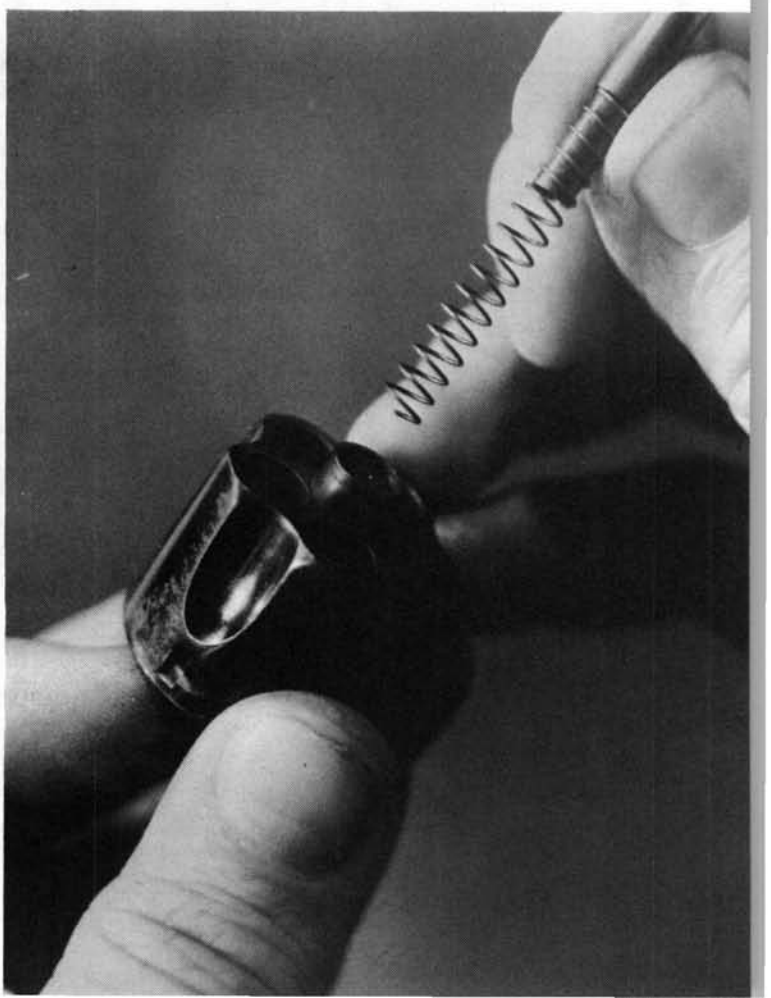
Often called the "lemon-squeezer," in reference to its grip safety, the enclosed-hammer New Departure was made by Smith & Wesson for 53 years, from 1887 to 1940. Its double-action-only firing system and enclosed rebounding hammer made it a favorite as a self-defense pocket gun, and even though its cartridges are weak by today's standards, many of these revolvers are still in use. The internal mechanism is not trouble-prone, but it is rather intricate and precisely fitted, and total disassembly can be difficult for the amateur.

Disassembly:

1. With the barrel tipped open, hold the barrel latch in raised position, and turn the cylinder counterclockwise (viewed from the rear) while exerting slight rearward pressure to engage the helical track on the cylinder arbor. Remove the cylinder toward the rear.

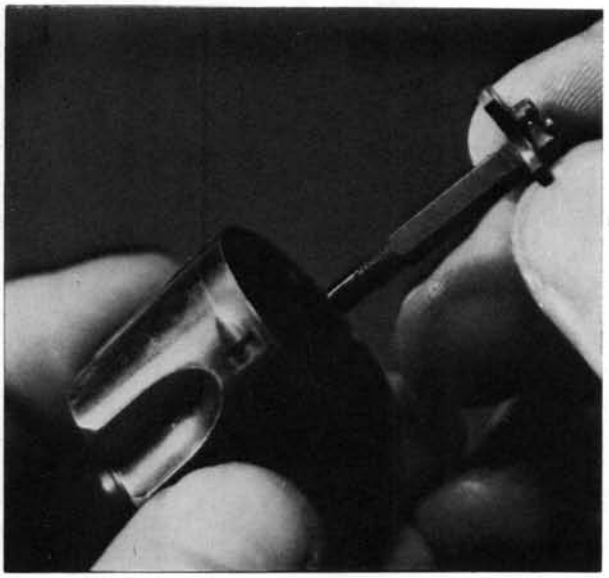
2. Using smooth-jawed pliers, grip the ejector post and turn it toward the left (front view). Unscrew the post from the ejector shaft.



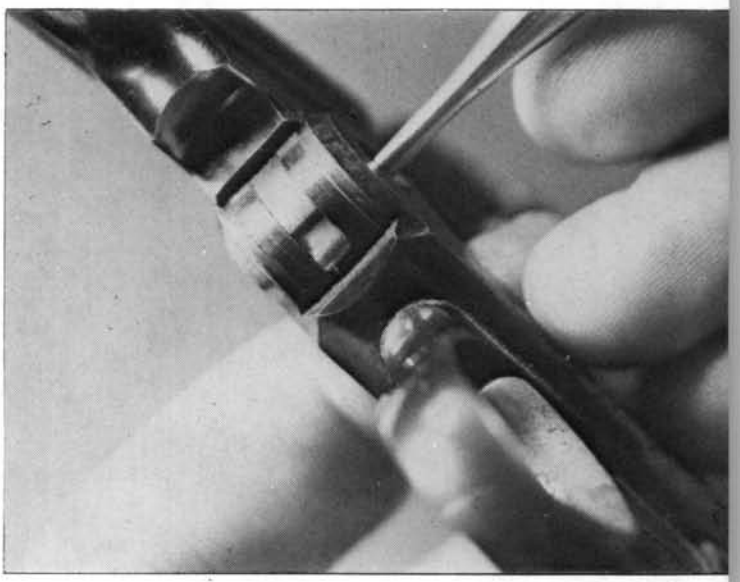


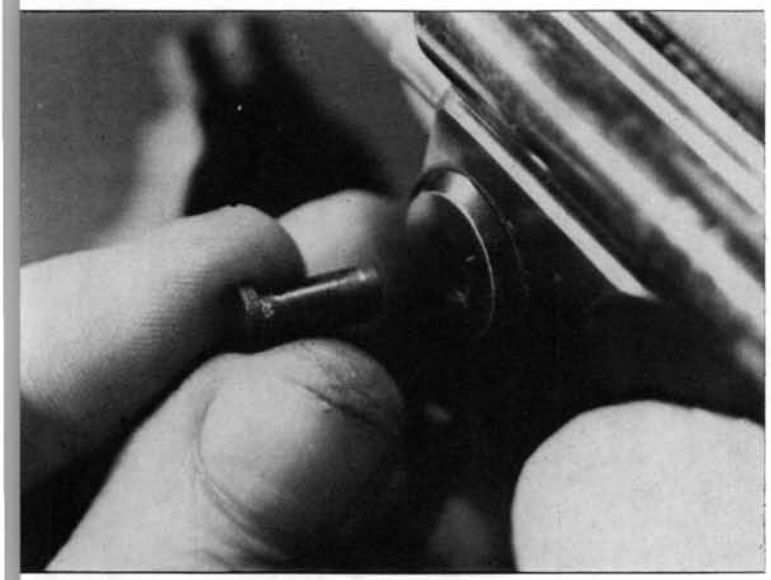
3. Remove the ejector post and ejector spring toward the front.

4. Remove the ejector/ratchet toward the rear. By using a twin-pointed tool, it is possible to unscrew the center stud and separate the ratchet from the ejector shaft, but this is not advisable in normal takedown.



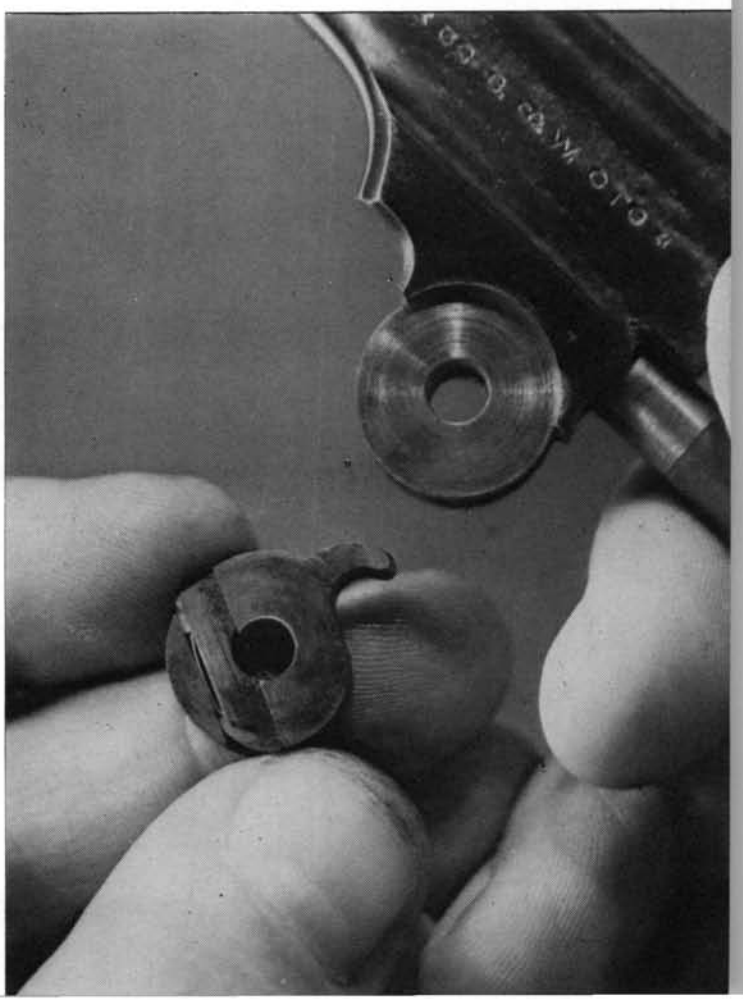
5. Remove the cap screw on the left side of the barrel hinge. Use a drift punch that is small enough to freely enter the screw hole, and push the barrel hinge out toward the right.



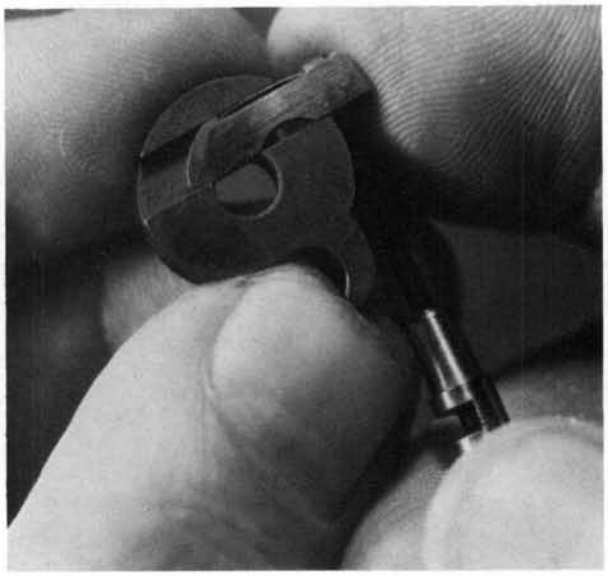


6. Remove the barrel hinge pin from the right side and remove the barrel assembly from the frame.

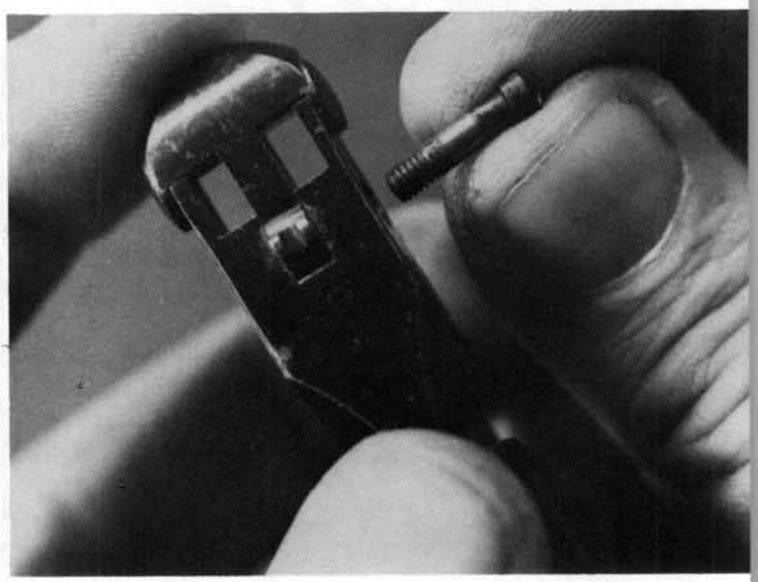
7. Remove the ejector cam downward from the barrel.

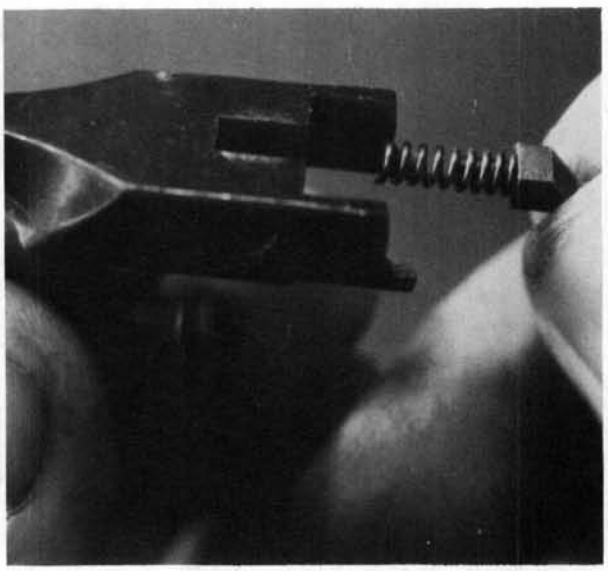


8. Slide the ejector cam trip out of its recess in the ejector cam. Take care not to lose the small blade spring.

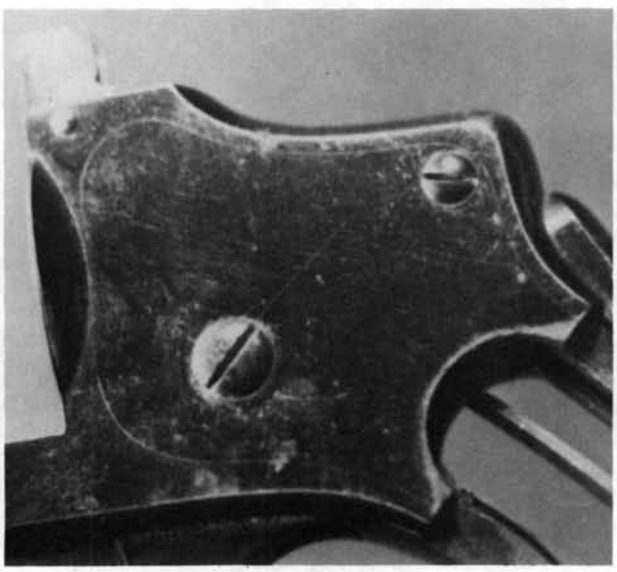


9. The barrel latch is retained by a cross-screw in the barrel extension. Remove the screw and pull the barrel latch toward the rear.





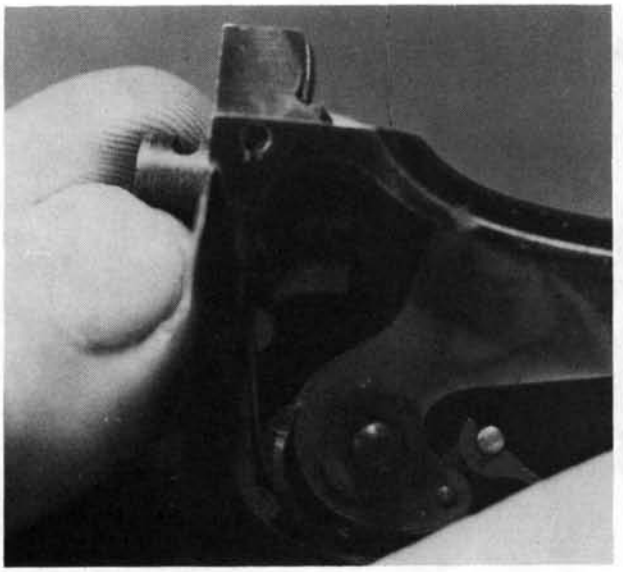
10. Remove the barrel latch plunger and spring toward the rear.

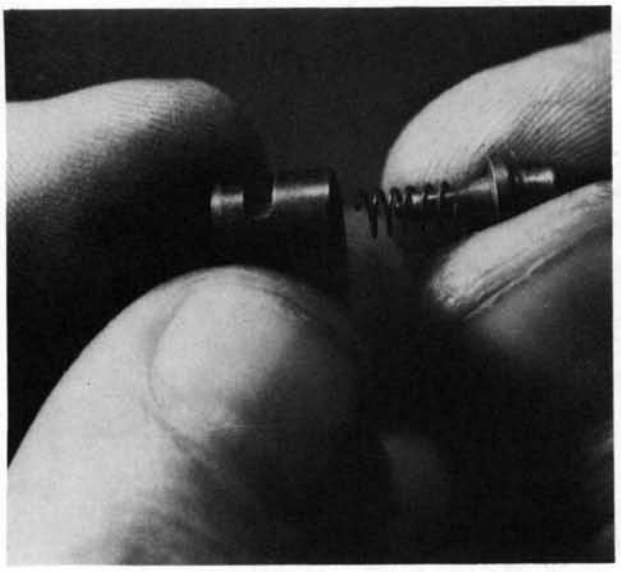


11. Remove the large and small screws that retain the sideplate. The large screw is actually an internally threaded cap nut.

12. Hold the frame as shown, and tap the grip frame with a nylon mallet. A few taps will release the sideplate, and it will fall into the palm of your hand.

13. Remove the cross-pin at the top of the frame, just below the barrel latch posts, and cover the breech face with a shop cloth to arrest the firing pin in case it comes out freely. Pull the trigger several times to drop the hammer, and the firing pin impact will move the firing pin housing out of its well in the breech face. If it doesn't come all the way out, it will be extruded enough for easy removal.

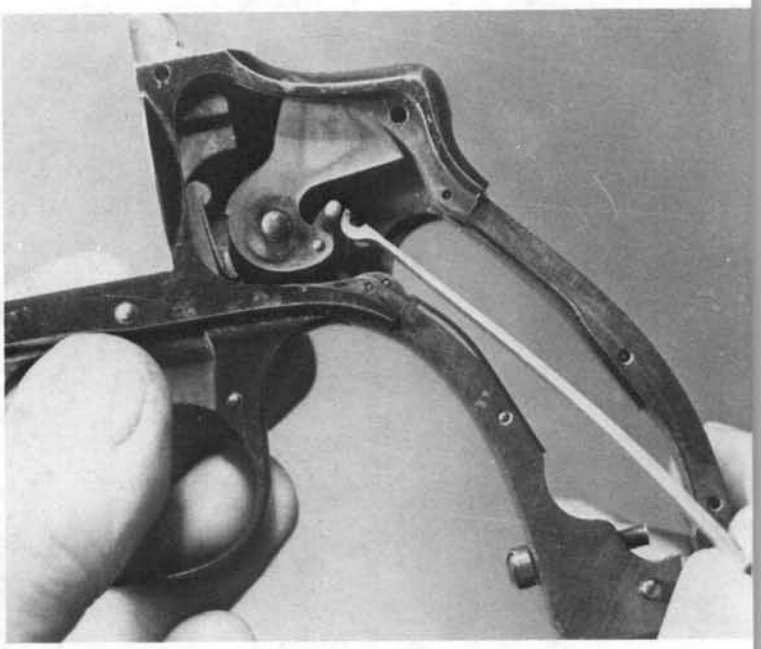




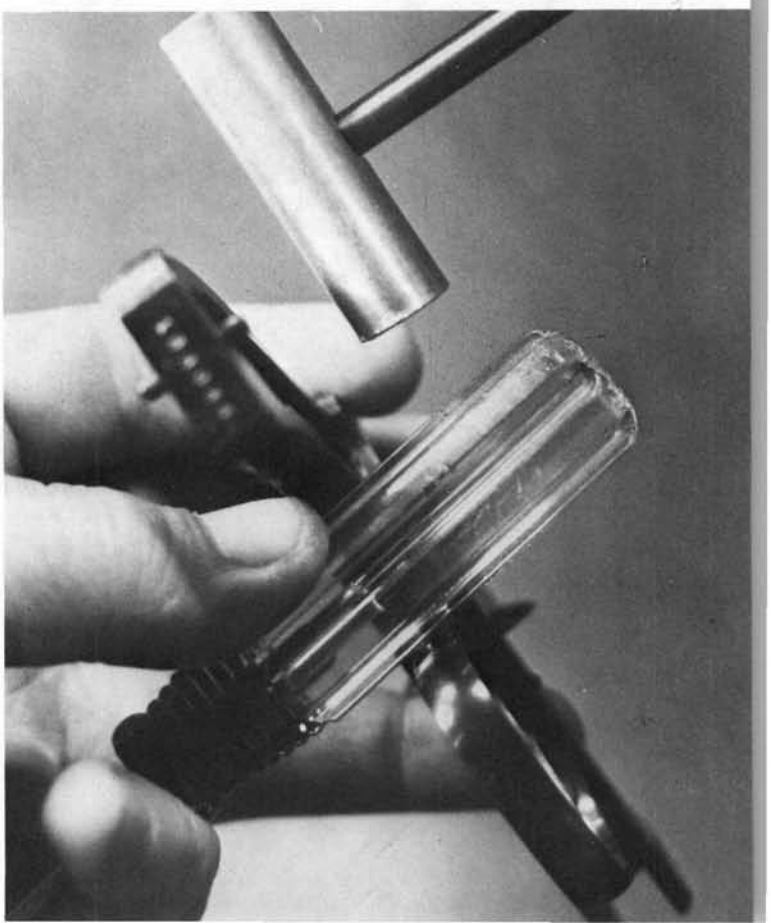
14. Remove the firing pin and its spring from the housing.

15. Remove the small cross-pin at the lower rear of the grip frame and pull the grip safety off toward the rear.

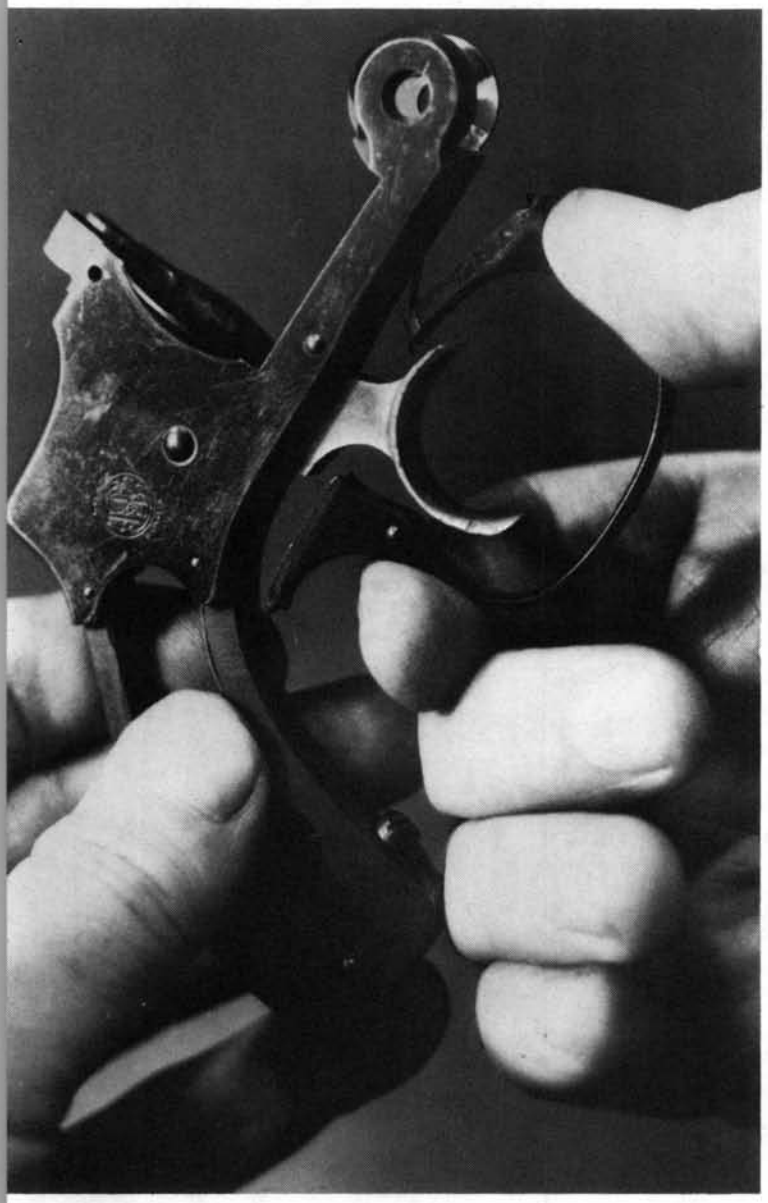
16. Back out the hammer spring screw, located at the lower front of the grip frame. Move the lower end of the hammer spring out toward the left, detach the spring hooks from the hammer stirrup, and remove the spring downward.



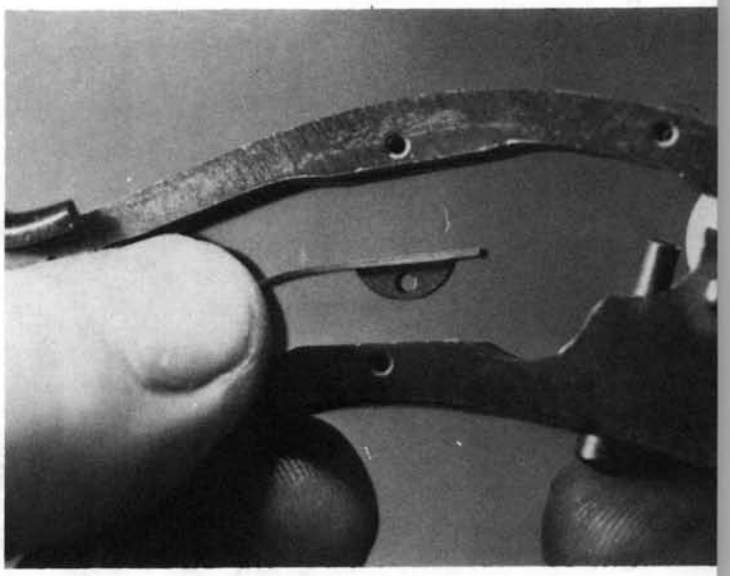
17. With the trigger pulled about halfway toward the rear, squeeze the rear of the trigger guard forward, and move it downward as soon as its rear lip clears its recess in the frame. If the guard is very tight, it may be necessary to bump it out as shown, using a screwdriver handle and a small hammer. Remember to keep the trigger partially depressed, as a bearing pin in the guard prevents its forward movement when the trigger is at rest. The stop pin can be removed, of course, but it is often tightly fitted and there is a chance that the guard will be marred.



18. When the rear of the guard is free, move the front of the guard toward the rear to clear its lip from the frame. Turn the guard to clear the trigger and remove it from the frame.

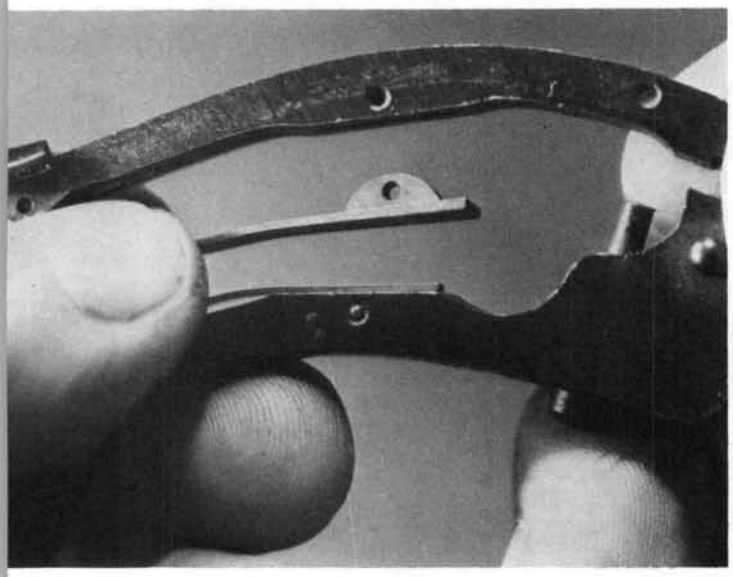


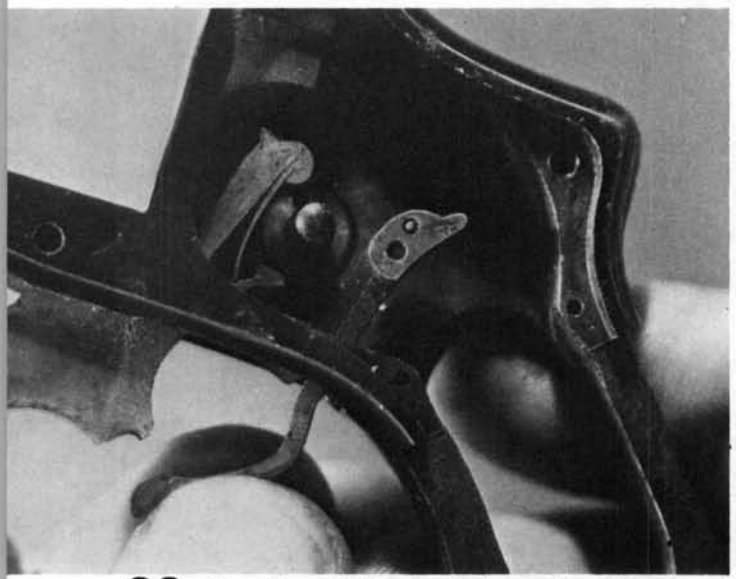
19. Remove the trigger spring from the lower front of the frame.



20. Drift out the small cross-pin at the center of the backstrap and remove the grip safety spring toward the front. Drifting out the small cross-pin at the top of the backstrap will allow removal of the grip safety lever.

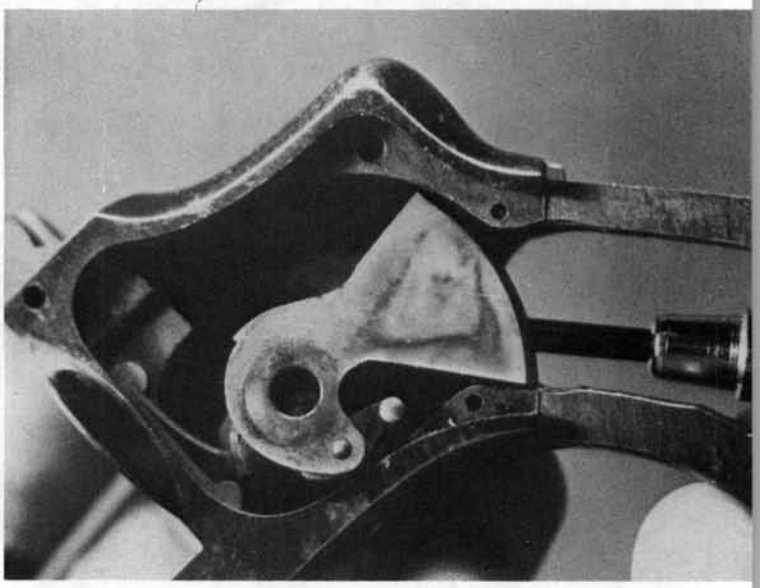
21. Drift out the small cross-pin at the center of the frontstrap and remove the cylinder stop spring toward the rear.

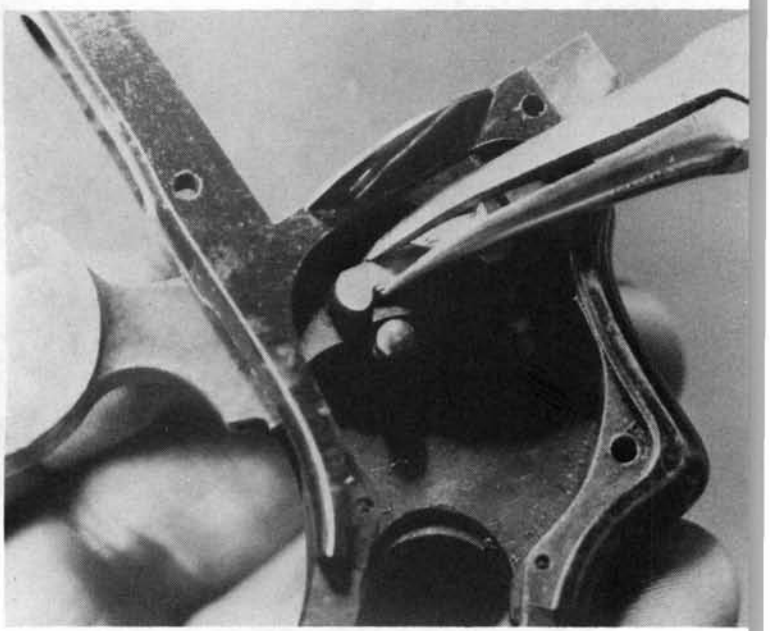




23. Move the cylinder stop to the position shown, and remove it downward. Removal of the small cross-pin will allow the trip spring to be separated from the cylinder stop, but this should be done very carefully, as this part is easily broken.

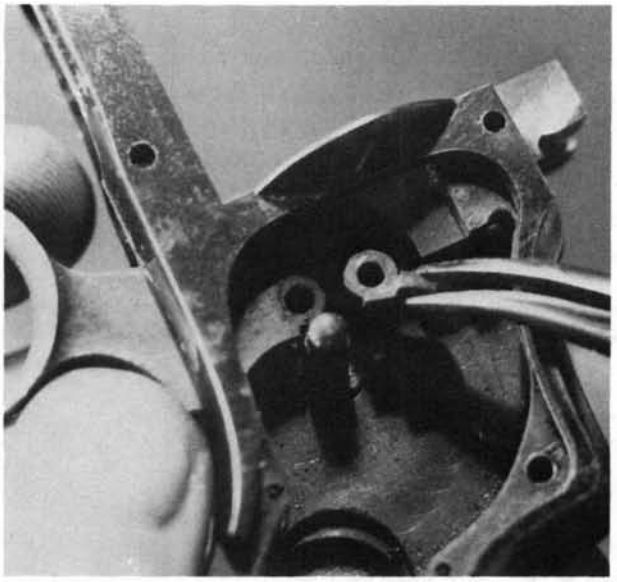
22. Drift out the small cross-pin at the top of the frontstrap and move the cylinder stop slightly downward. Tip the hammer back as shown, until it touches the frame at the rear. Use a small screwdriver to lever the hammer gently toward the left, inserting the screwdriver blade between the right side of the hammer and the inner wall of the frame. Keep the hammer stirrup in the position shown, to clear the frame recesses. Remove the hammer toward the left. Drifting out the cross-pin at the lower rear of the hammer will allow removal of the stirrup.



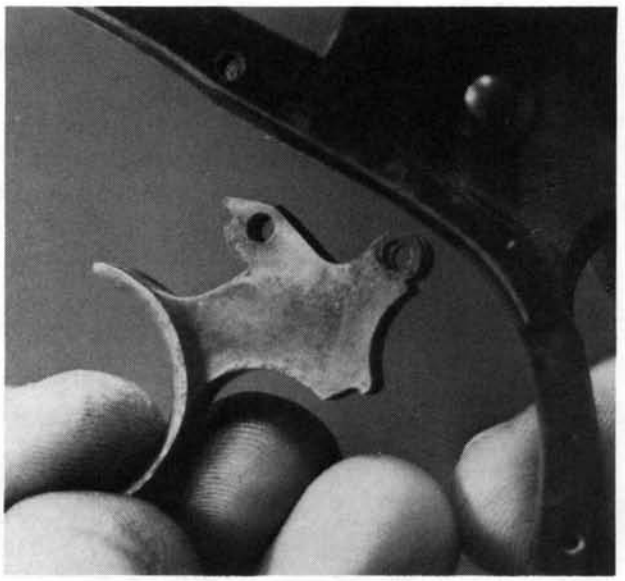


24. Drift out the trigger pin and move the trigger toward the rear, against the hammer post. Using sharp-nosed smooth-jawed pliers, grip the cylinder hand, compressing its attached spring, and lift the hand out toward the left.

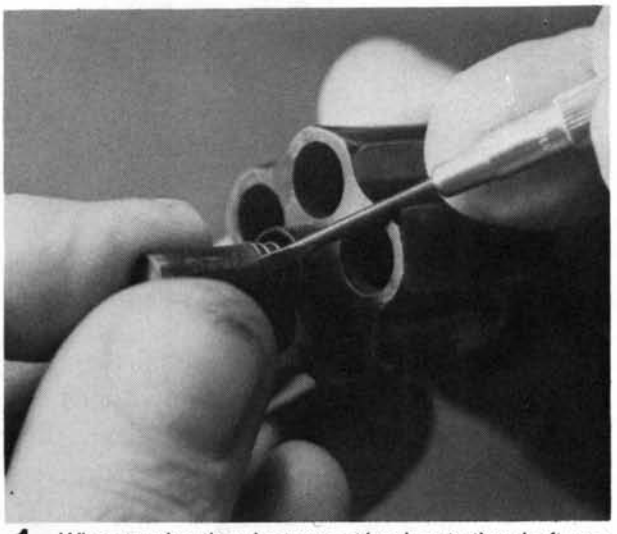
25. Move the hammer lever upward, out of the trigger loops, and remove the lever toward the left.



26. Remove the trigger downward.



Reassembly Tips:



1. When turning the ejector post back onto the shaft, use a small screwdriver to arrest the tip of the ejector spring as the post is screwed into place. Otherwise, the spring may grip the post and become deformed.

When replacing the trigger spring, be sure that its upper arm engages the compression lobe at the top front of the trigger. Take care that the spring doesn't slip forward as the guard is being replaced.

When replacing all cross-pinned parts, use a tapered tool to ensure that the parts are properly centered before inserting the original pins.

When replacing the barrel hinge pin, note that it has a small lug beside its head which must enter a keyway on the left side of the frame. A line is stamped on the edge of the head, and also on the frame, to help alignment.

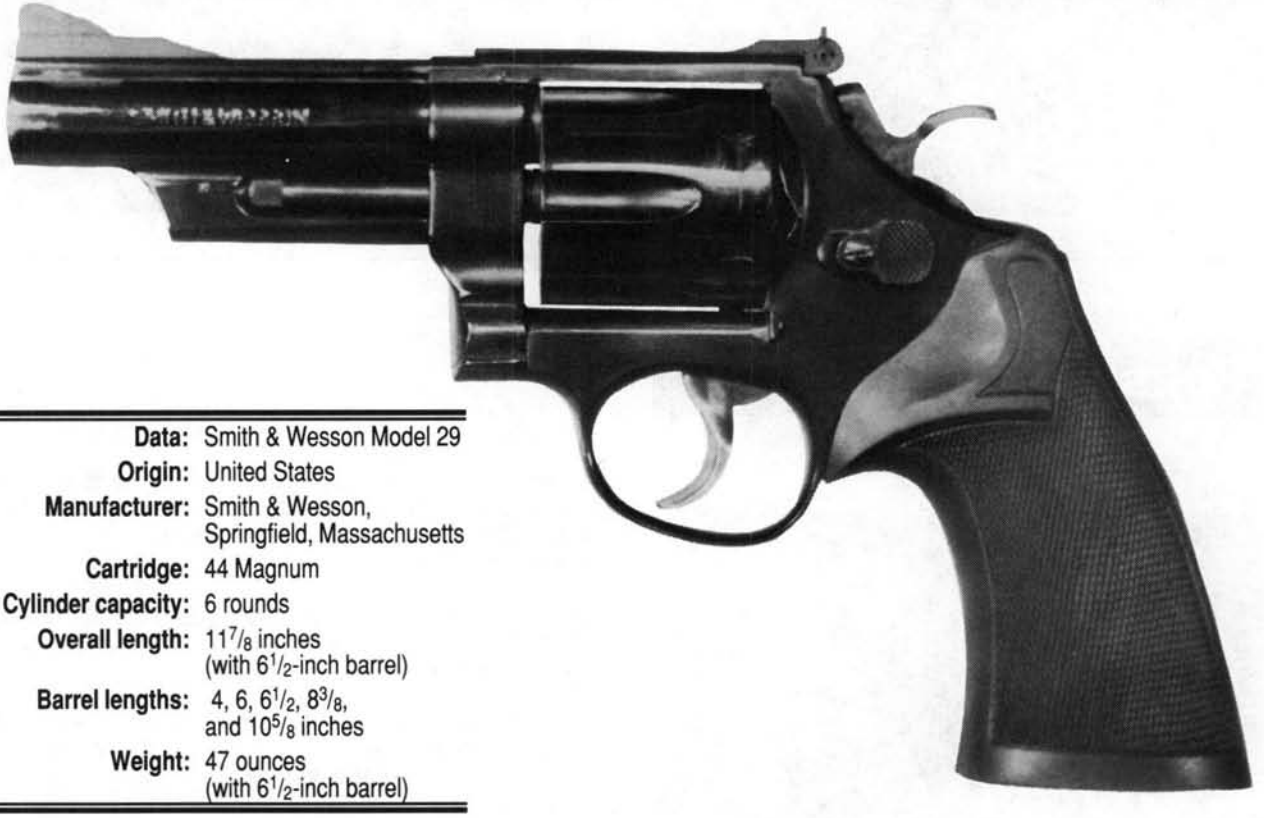
When replacing the ejector/ratchet in the cylinder, note that one of the arms of the ejector is stamped with a small dot. This dot should be aligned with the serial number on the rear face of the cylinder.

Smith & Wesson Model 29

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson Model 29 also apply to the following guns.

Smith & Wesson Model 10
Smith & Wesson Model 12
Smith & Wesson Model 13
Smith & Wesson Model 15
Smith & Wesson Model 17
Smith & Wesson Model 19
Smith & Wesson Model 25
Smith & Wesson Model 27
Smith & Wesson Model 57
Smith & Wesson Model 64
Smith & Wesson Model 65
Smith & Wesson Model 66
Smith & Wesson Model 586
Smith & Wesson Model 625
Smith & Wesson Model 629
Smith & Wesson Model 657
Smith & Wesson Model 686

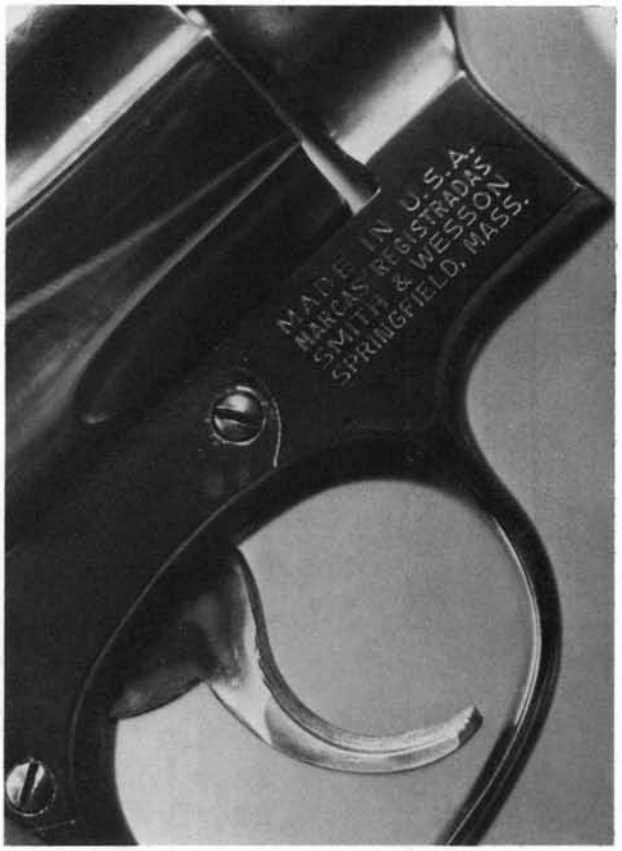


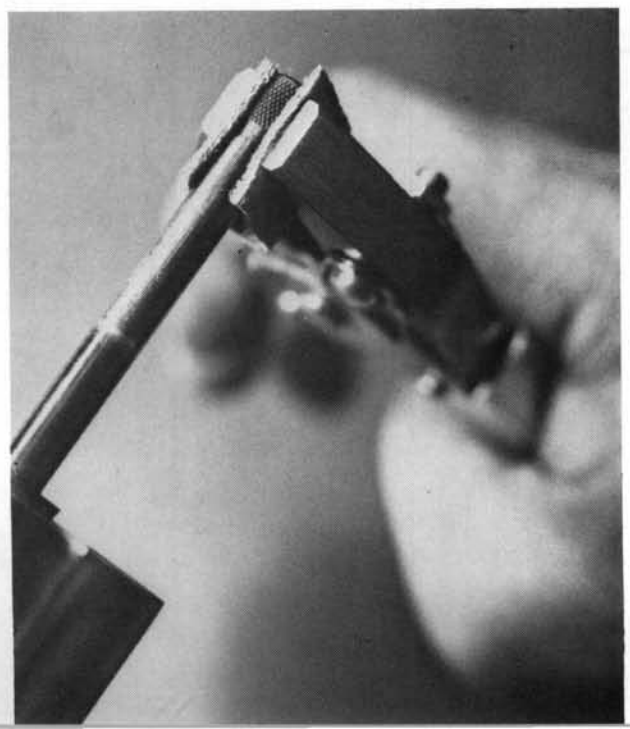
Data: Smith & Wesson Model 29
Origin: United States
Manufacturer: Smith & Wesson, Springfield, Massachusetts
Cartridge: 44 Magnum
Cylinder capacity: 6 rounds
Overall length: $11\frac{7}{8}$ inches (with $6\frac{1}{2}$-inch barrel)
Barrel lengths: 4, 6, $6\frac{1}{2}$, $8\frac{3}{8}$, and $10\frac{5}{8}$ inches
Weight: 47 ounces (with $6\frac{1}{2}$-inch barrel)

Over the past 20 years, the Smith & Wesson factory has never managed to produce enough Model 29 revolvers to meet the great demand for this gun. It was already wanted as the biggest, most powerful revolver made, and Clint Eastwood's film portrayal of "Dirty Harry" just accelerated its popularity. Made on the massive N frame, the 44 Magnum Model 29 is also available in stainless steel as the Model 629, and several special versions. The takedown and reassembly instructions apply to all of them. They also apply to all of the Smith & Wesson revolvers keyed to the Model 29 in the cross-reference list. The Model 29 is mechanically typical of all of the large-frame Smith & Wesson revolvers.

Disassembly:

1. Remove the front sideplate screw, located on the right side, just forward of the trigger.

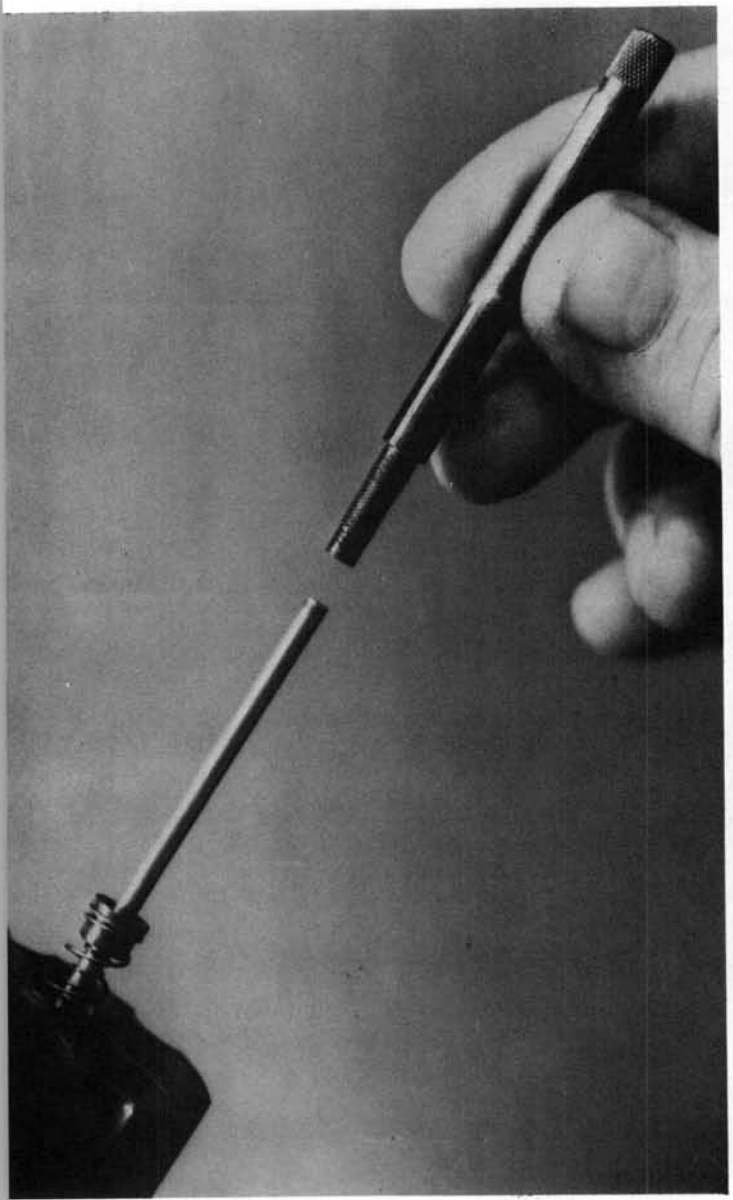




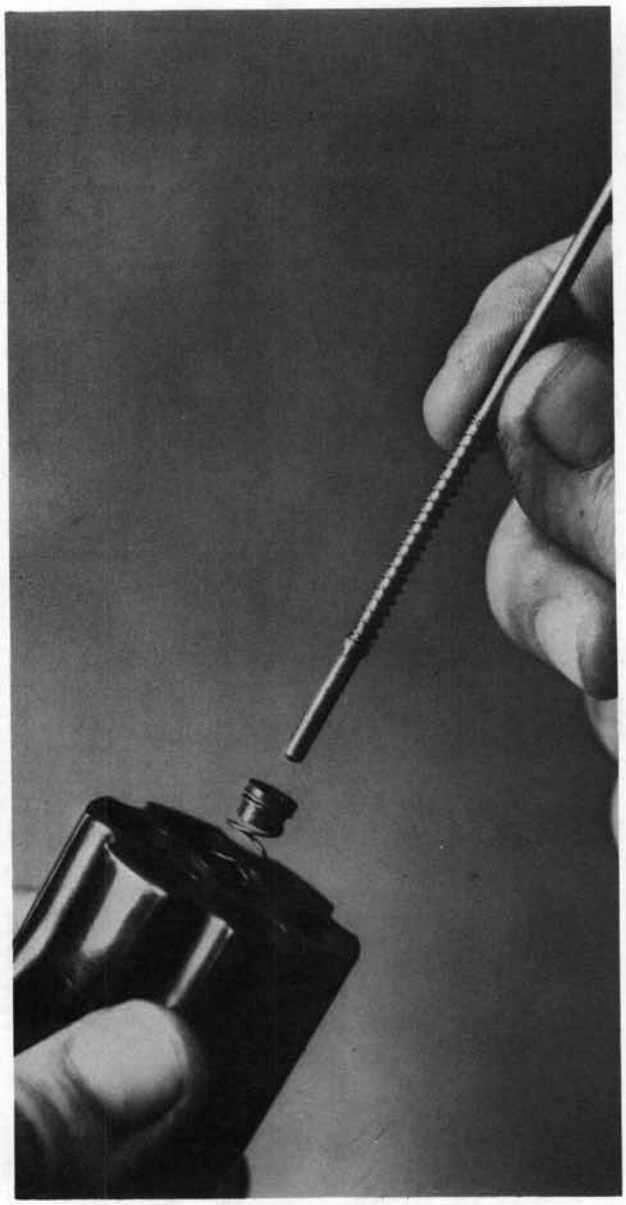
2. Move the crane forward out of the frame, then remove the crane and cylinder assembly toward the left.

3. Remove the crane from the front of the cylinder. Grip the head of the ejector rod with leather-padded smooth-jawed pliers, and unscrew it *clockwise* (front view). Note that this is a reverse thread. If the rod is very tight, clamp the head of the rod in a padded vise, insert empty cartridge cases in two opposed chambers, and turn the cylinder to free the rod.

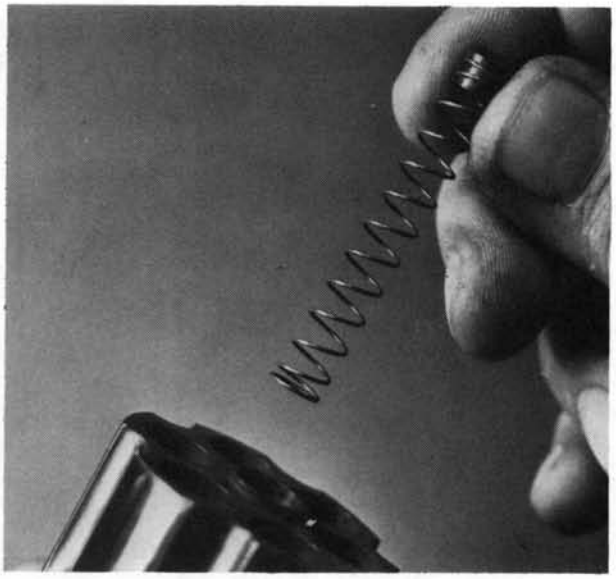
4. Remove the ejector rod from the front of the cylinder.



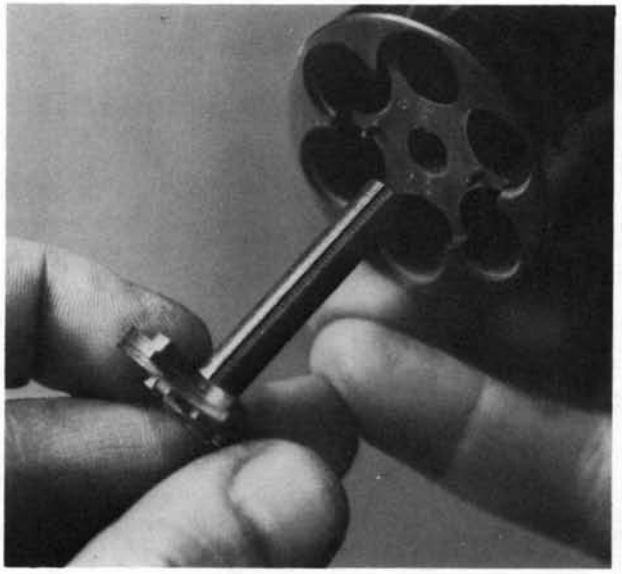
5. Remove the center pin and its spring from the front of the cylinder.

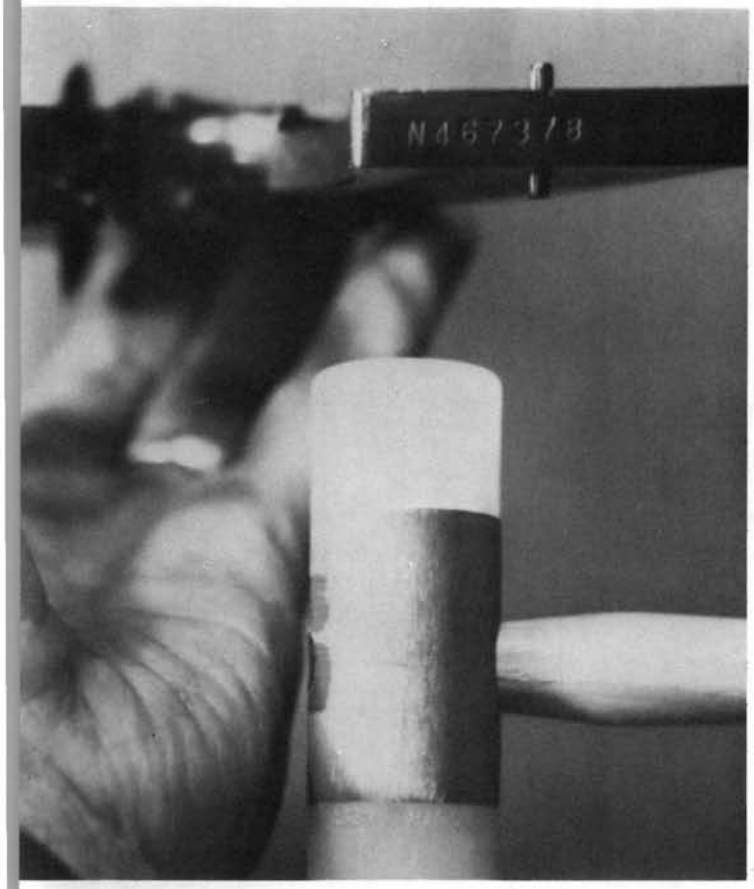


6. Remove the ejector spring and its bushing from the front of the cylinder.



7. Remove the ejector/ratchet from the rear of the cylinder.

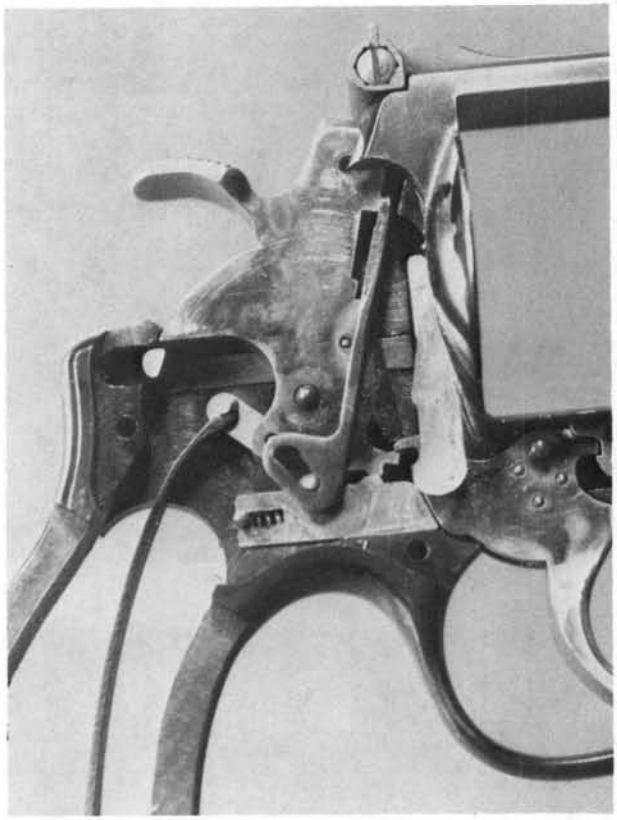




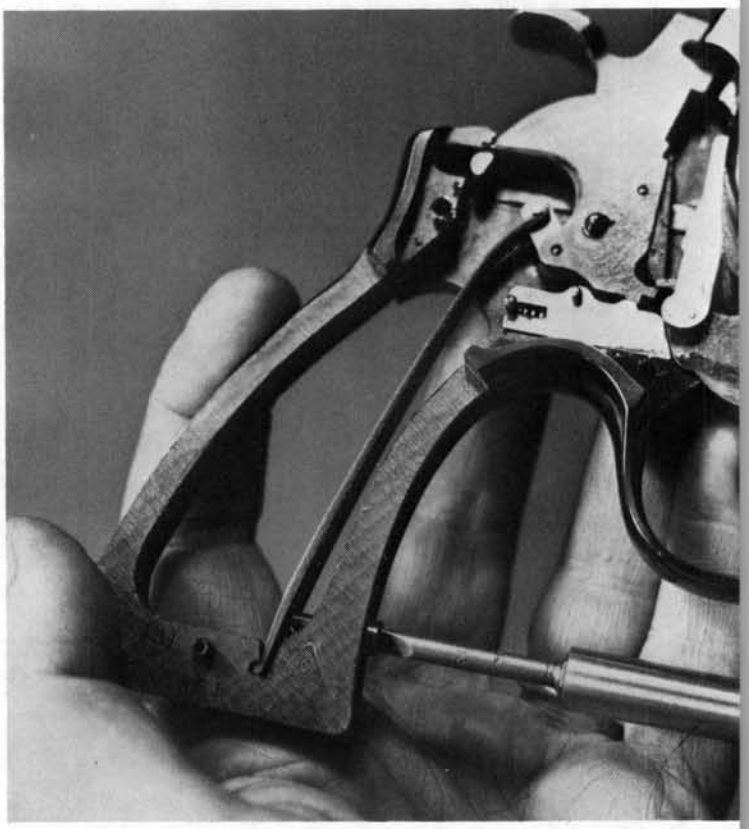
9. The hammer block will likely come off with the sideplate, and can be lifted from its recess.

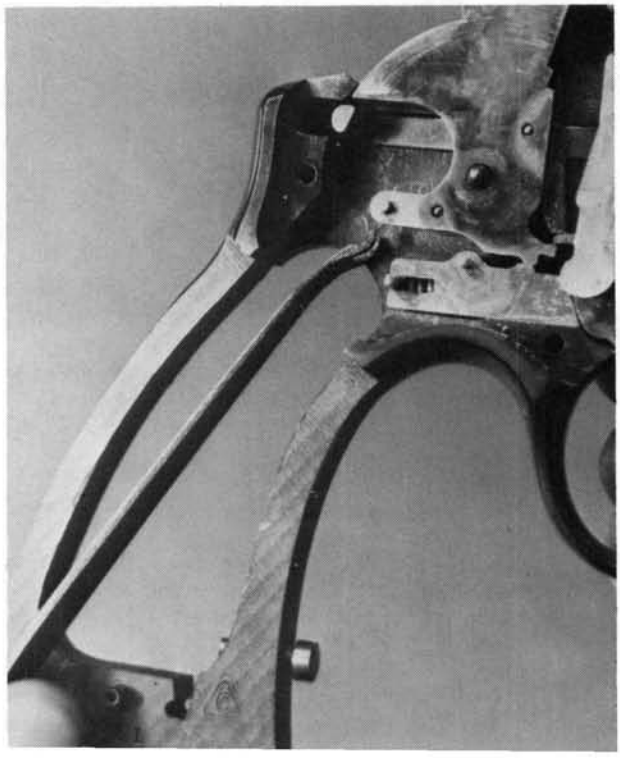
8. Remove the two remaining sideplate screws. Hold the gun as shown, and tap the grip frame with a nylon hammer until the sideplate falls into the hand.

10. In this view of the internal parts, the hammer block has been placed on its stud on the rebound slide in the proper position for reassembly.



11. Back out or remove the hammer spring strain screw, located at the lower front of the grip frame.

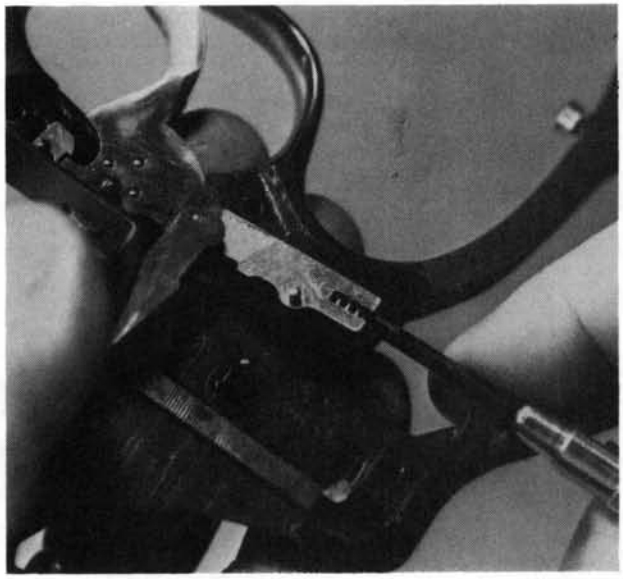


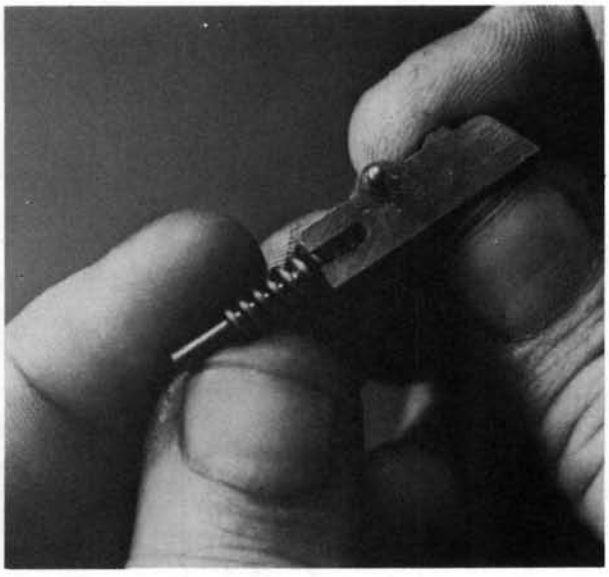


12. Disengage the spring hooks from the hammer stirrup and remove the spring toward the left and downward.

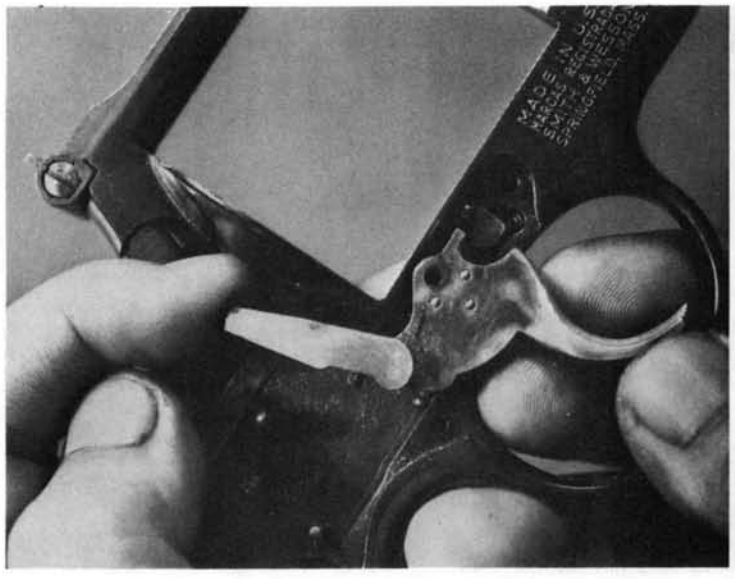
13. Hold the cylinder latch to the rear and pull the trigger to tip the hammer back. Remove the hammer to the right. Drifting out the small pin at the front of the hammer will release the double-action lever and its spring for removal. A cross-pin at the lower rear of the hammer retains the stirrup. The firing pin is retained by a cross-pin which is riveted into coned areas on each side. Removal is not advisable in normal takedown.

14. Use a small screwdriver to lift the rear of the rebound slide off its post, and ease out the spring. Remove the rebound slide assembly rearward and toward the right.



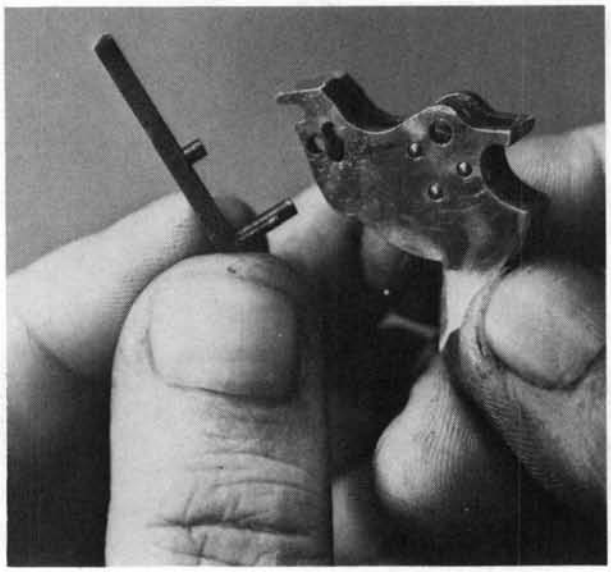


15. Remove the spring from the rear of the rebound slide, and take care not to lose the trigger limit pin inside it.

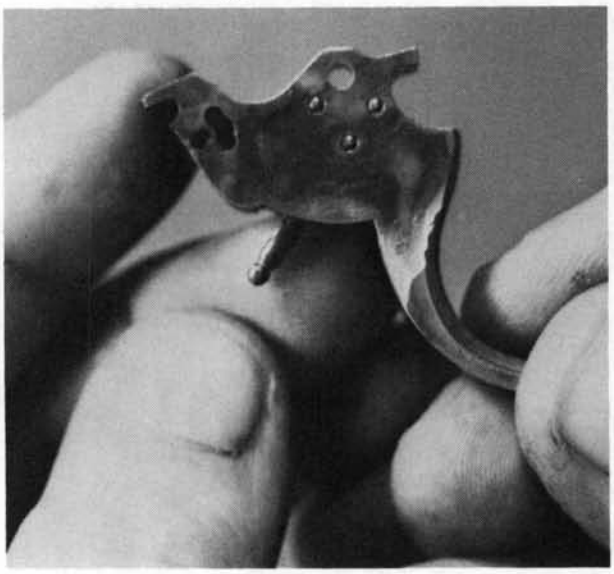


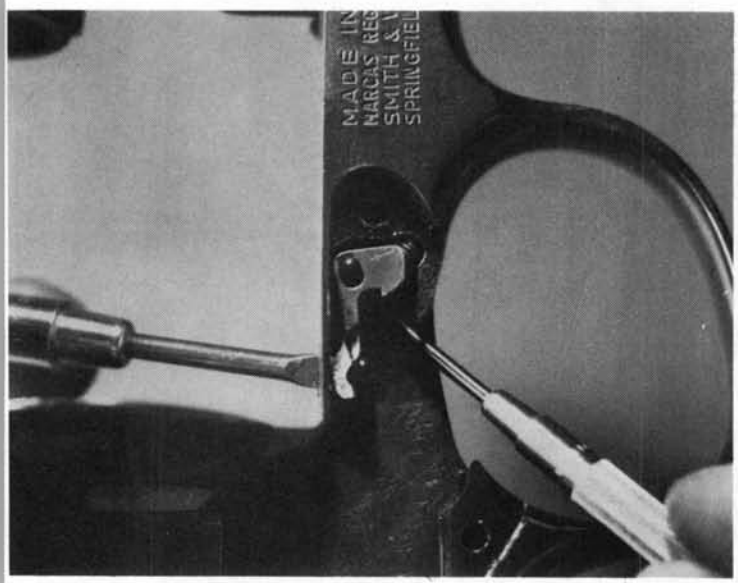
16. Tip the cylinder hand rearward out of its slot in the frame, and remove the trigger toward the right.

17. Remove the cylinder hand from the right side of the trigger.

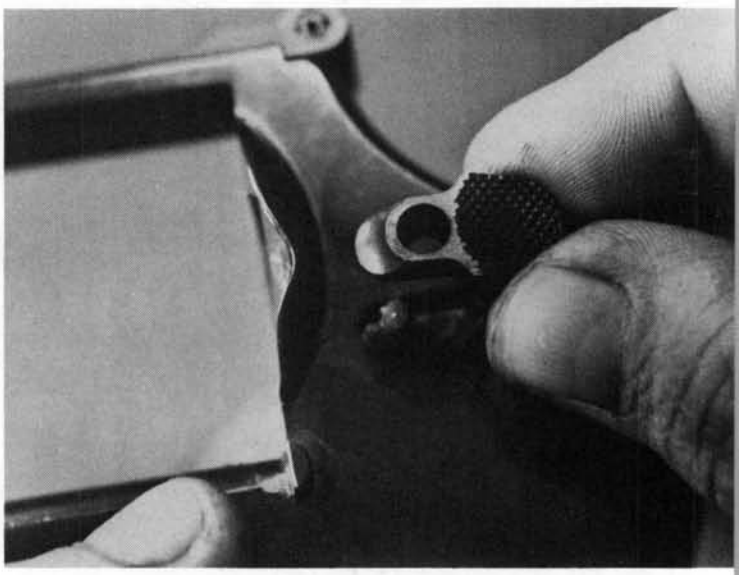


18. Drifting out the cross-pin at the upper rear of the trigger will release the cylinder hand spring for removal. The front pin is a bearing pin for the spring, and need not be removed. The lower pin retains the trigger strut.



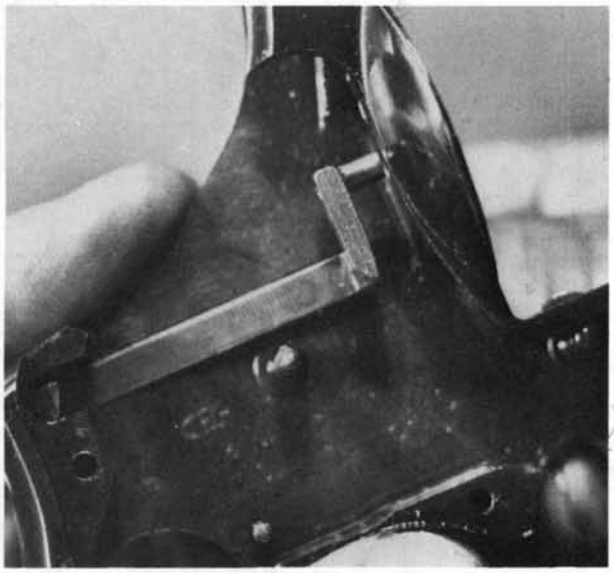


19. Depress the cylinder stop below its slot in the frame, and use a small screwdriver to nudge it out toward the right. When its spring, mounted at lower front, nears the edge of the recess, restrain it from escaping, and ease it out.

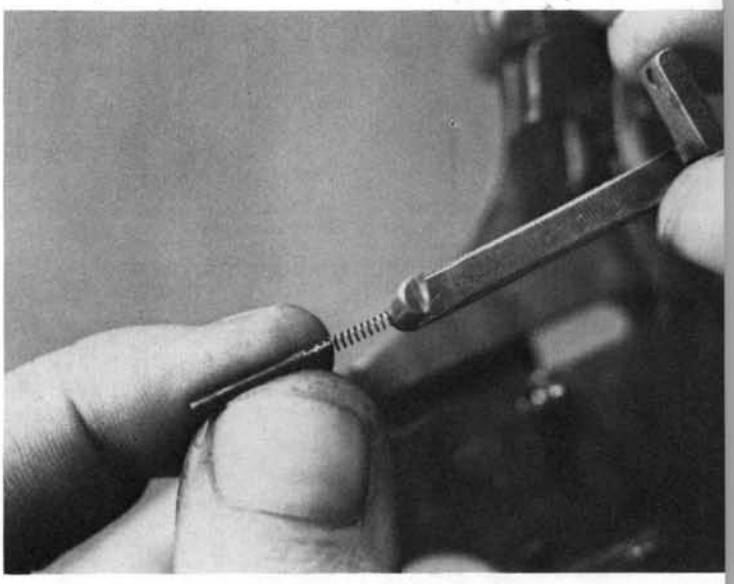


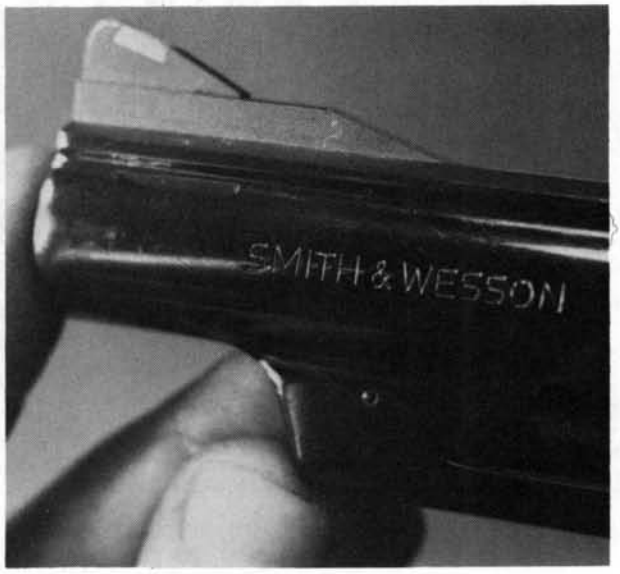
20. Remove the screw-slotted cap nut that retains the thumbpiece of the cylinder latch, and remove the thumbpiece toward the left.

21. Move the cylinder latch toward the rear until its front post clears the interior of the frame, then remove it toward the right. As its rear portion is taken out of the frame, restrain the plunger and spring at the rear to prevent their escape.

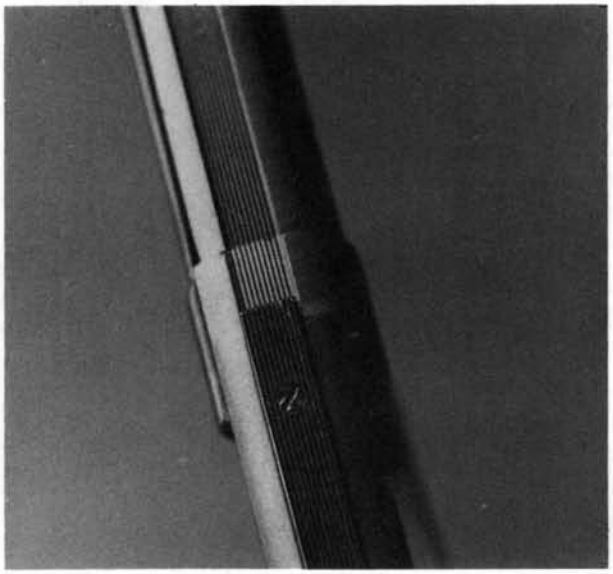


22. Remove the plunger and spring from the rear of the cylinder latch.



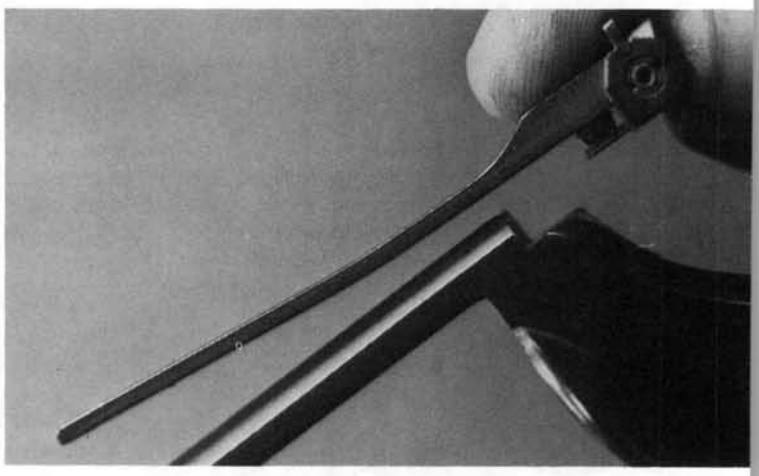


23. Drifting out the small cross-pin at the front of the ejector shroud will release the front latch and its spring for removal toward the rear.

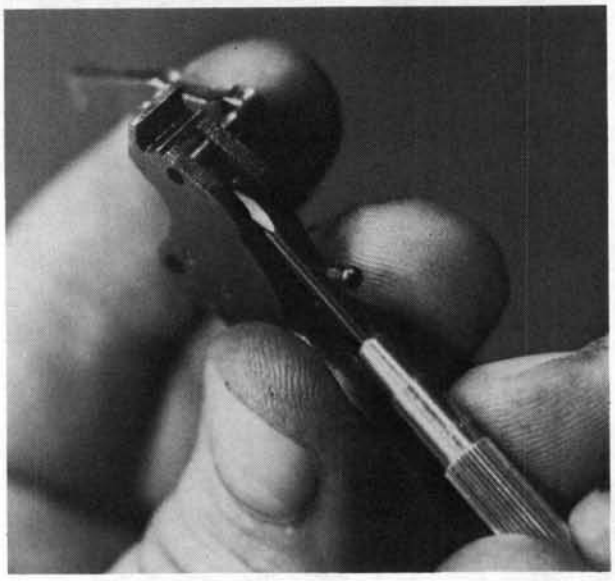


24. The rear sight is retained by a small screw near its forward end, on top of the frame.

25. After the screw is removed, move the sight to the rear, then lift it off.



Reassembly Tips:



1. When replacing the cylinder hand on the trigger, insert a small tool at the rear of the trigger to lift the rear arm of the cylinder hand spring, and be sure that it is engaged with the top of the smaller internal pin on the hand.

2. When replacing the sideplate, place the hammer block on its stud on the rebound slide, and move it to its upper position (see photo #10). Align the upper edge of the sideplate so the track on the inside of the plate encloses the top of the hammer block, then insert the upper lip of the plate and move the lower portion into place.

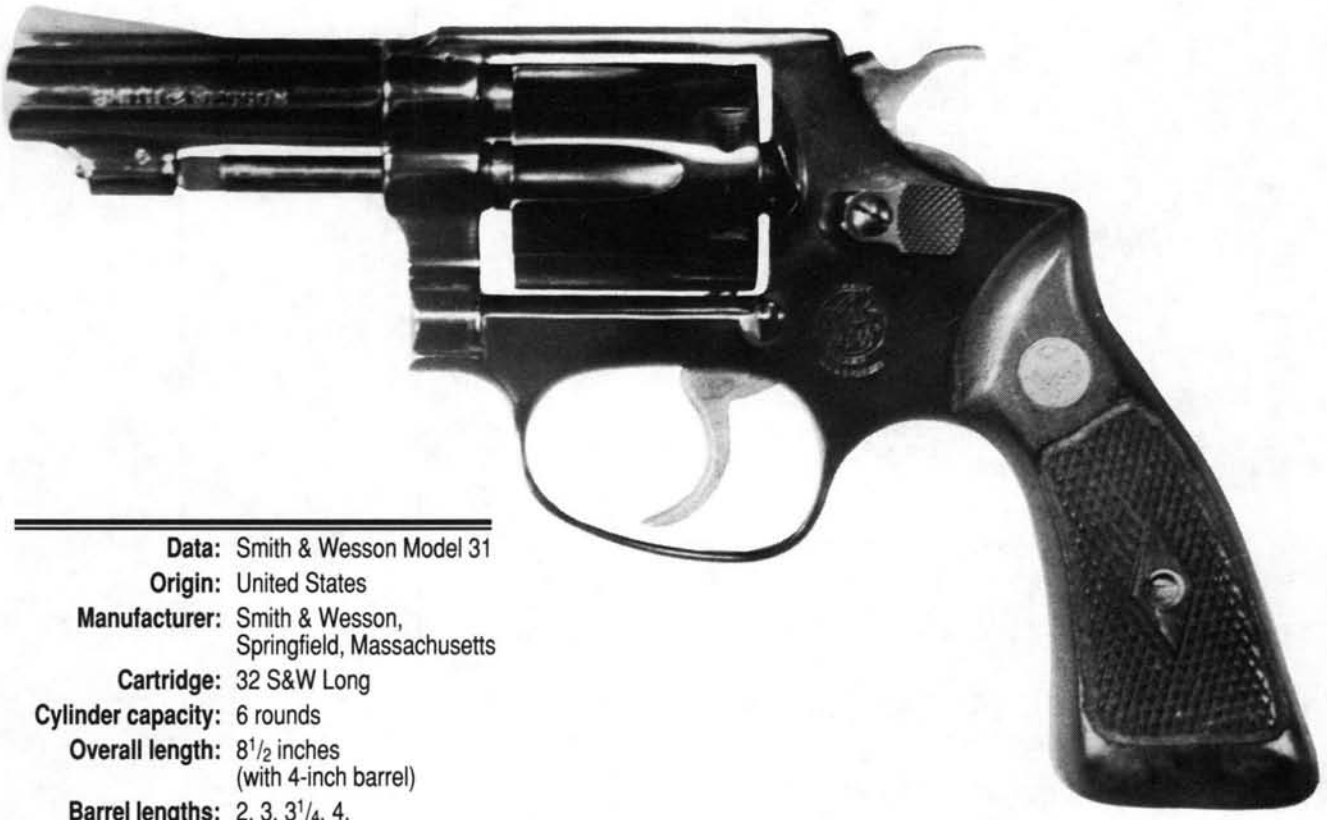
When replacing the ejector rod, remember that it must be turned into place counterclockwise (front view). Screw it in snugly, but do not over-tighten, or the fine threads may be stripped.

Smith & Wesson Model 31

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson Model 31 also apply to the following guns.

Smith & Wesson Model 34
Smith & Wesson Model 36
Smith & Wesson Model 37
Smith & Wesson Model 38
Smith & Wesson Model 49
Smith & Wesson Model 60
Smith & Wesson Model 63
Smith & Wesson Model 649

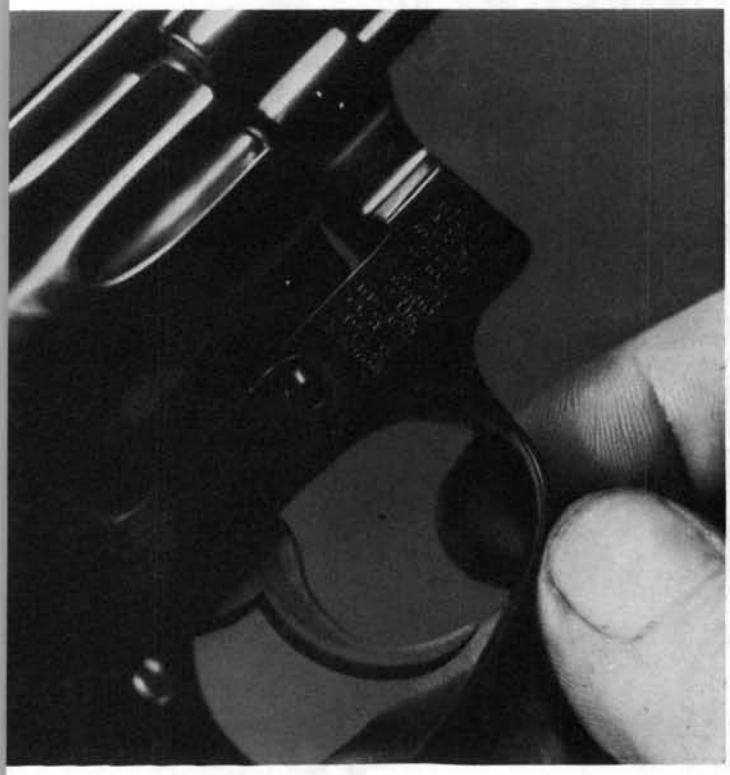


Data:	Smith & Wesson Model 31
Origin:	United States
Manufacturer:	Smith & Wesson, Springfield, Massachusetts
Cartridge:	32 S&W Long
Cylinder capacity:	6 rounds
Overall length:	$8\frac{1}{2}$ inches (with 4-inch barrel)
Barrel lengths:	2, 3, $3\frac{1}{4}$, 4, $4\frac{1}{4}$, and 6 inches
Weight:	$18\frac{3}{4}$ ounces (with 4-inch barrel)

Although the Model 31 is chambered for a cartridge that has marginal power by today's standards, it has long been popular as a personal defense gun, especially for the ladies. Its light weight and low recoil make it ideal for carrying and casual plinking. It has been included here because the internal mechanism is representative of the small-frame Smith & Wessons of current manufacture, and differs in several respects from the larger models.

Disassembly:

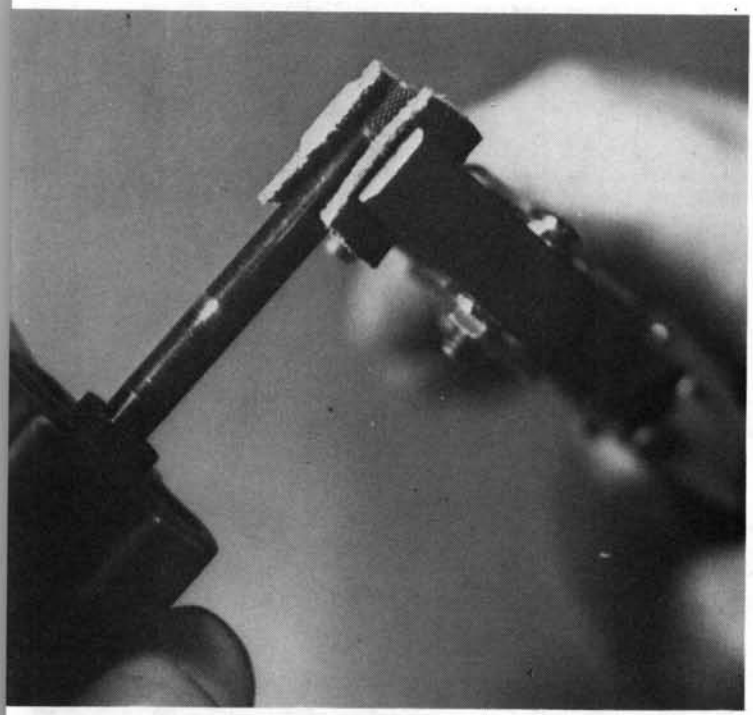
1. Remove the forward sideplate screw, on the right side of the frame just forward of the trigger.

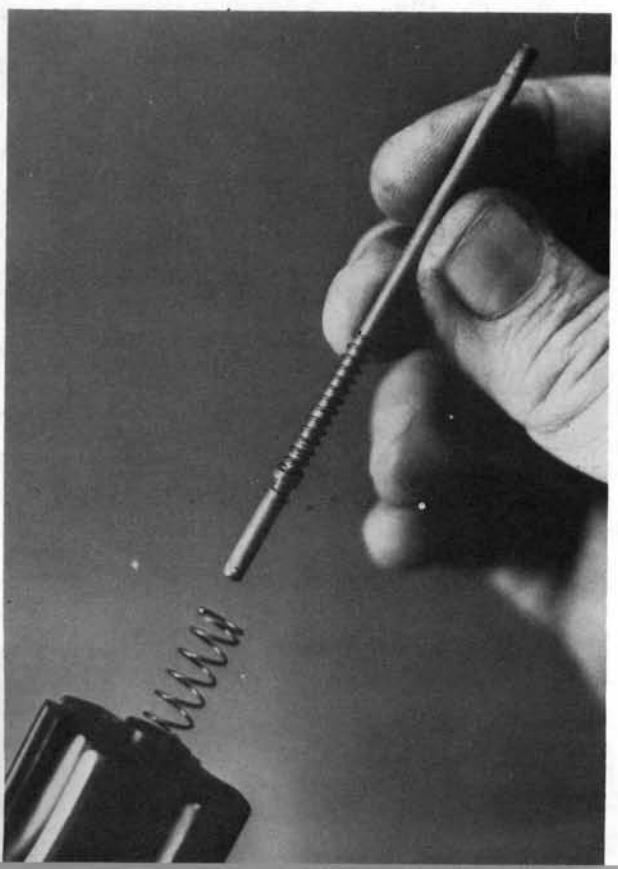


2. Move the crane forward out of the frame, and remove the cylinder and crane assembly toward the left.

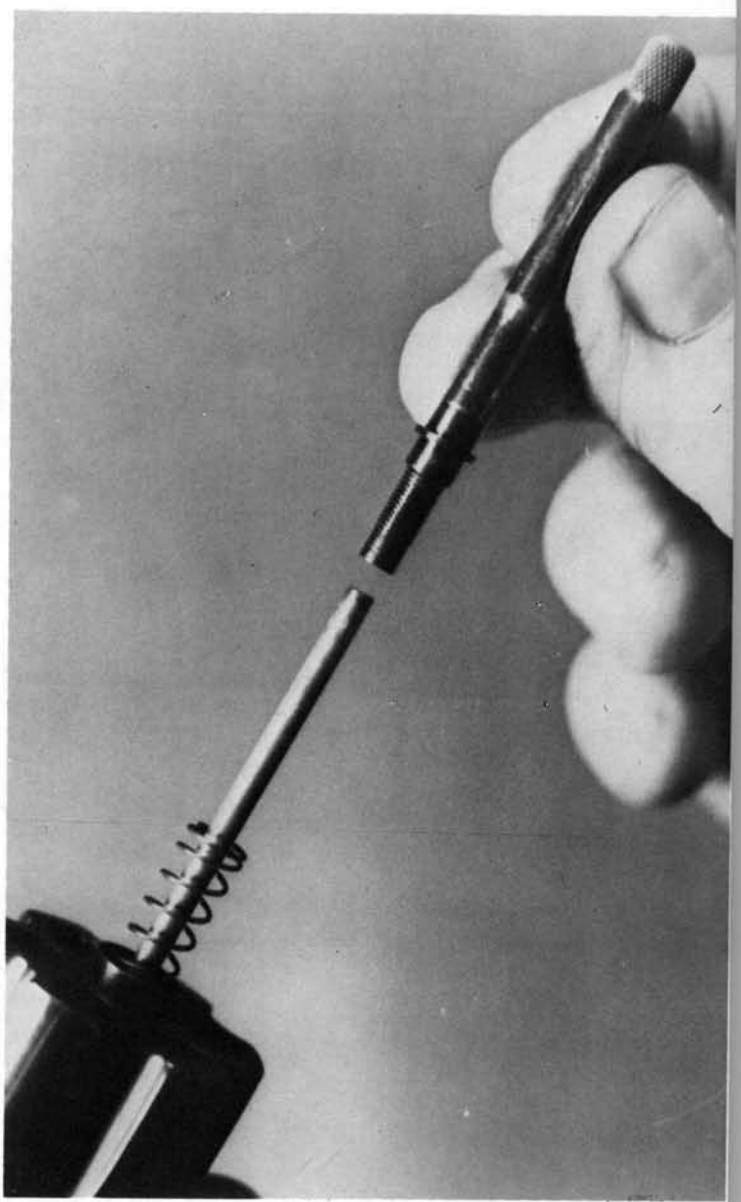
3. Remove the crane from the front of the cylinder.

4. Grip the ejector rod head with leather-padded smooth-jawed pliers, and unscrew the ejector rod clockwise (front view).



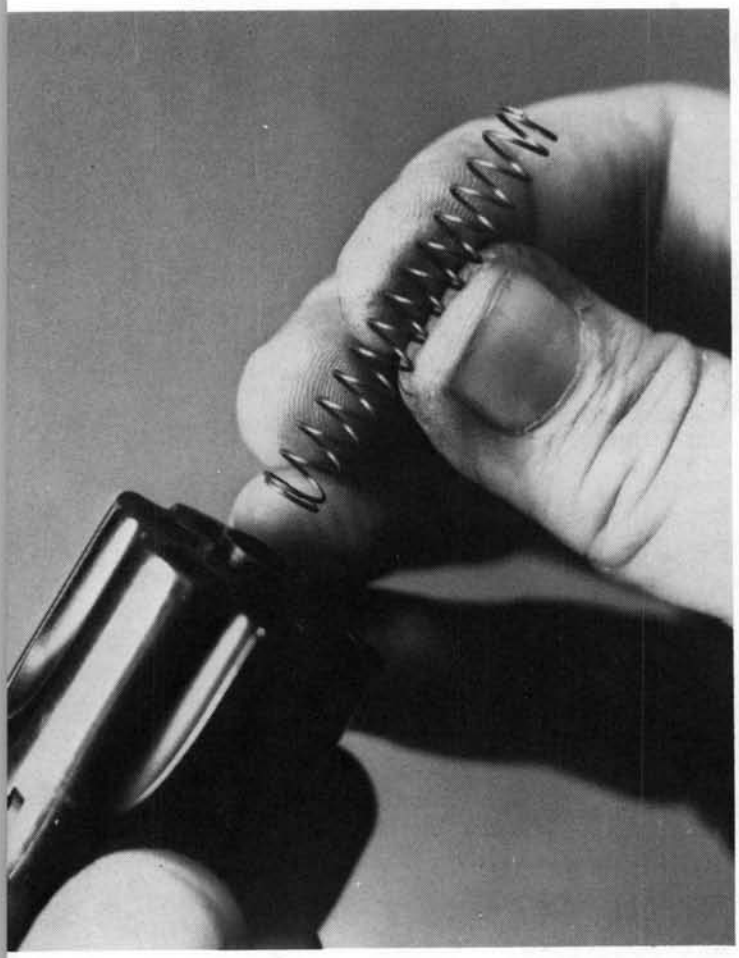


5. Remove the ejector rod from the front of the cylinder.

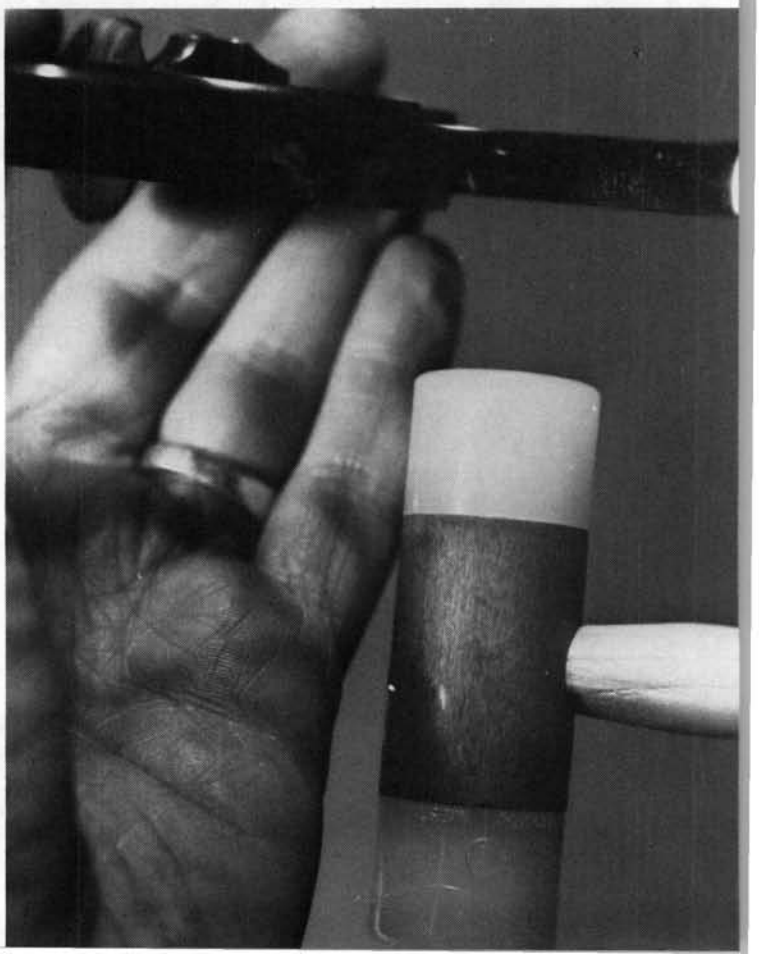


6. Remove the cylinder lock pin and its spring from the front of the cylinder.

7. Remove the ejector spring from the front of the cylinder.

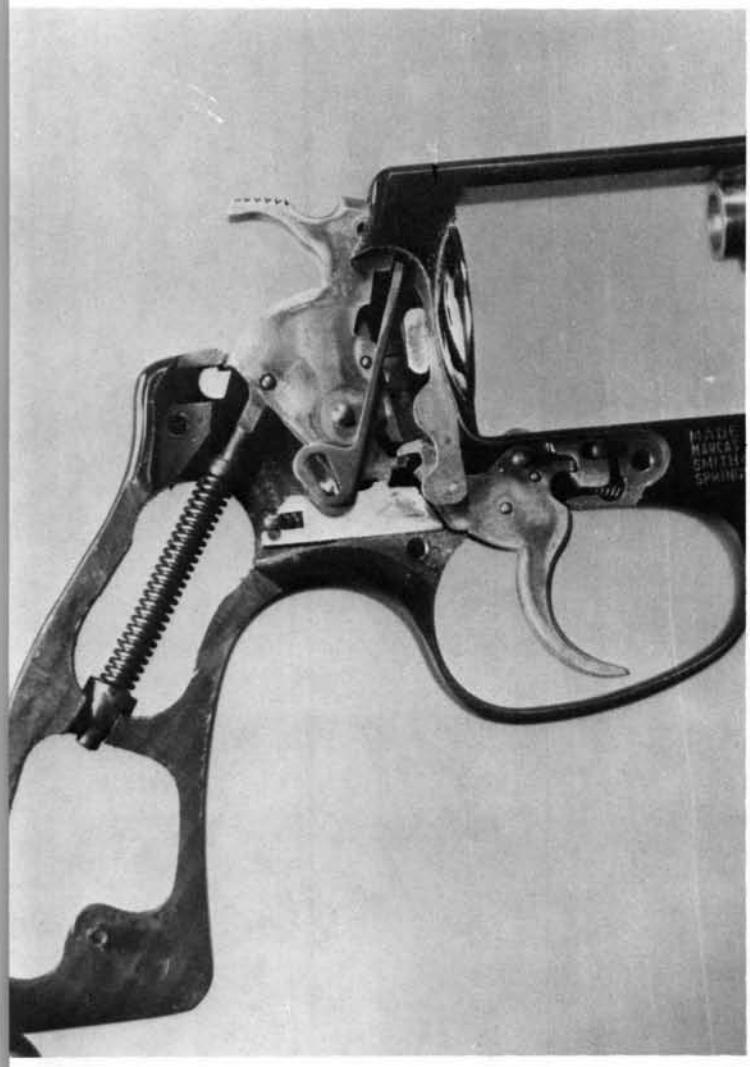


8. Remove the ejector/ratchet from the rear of the cylinder.

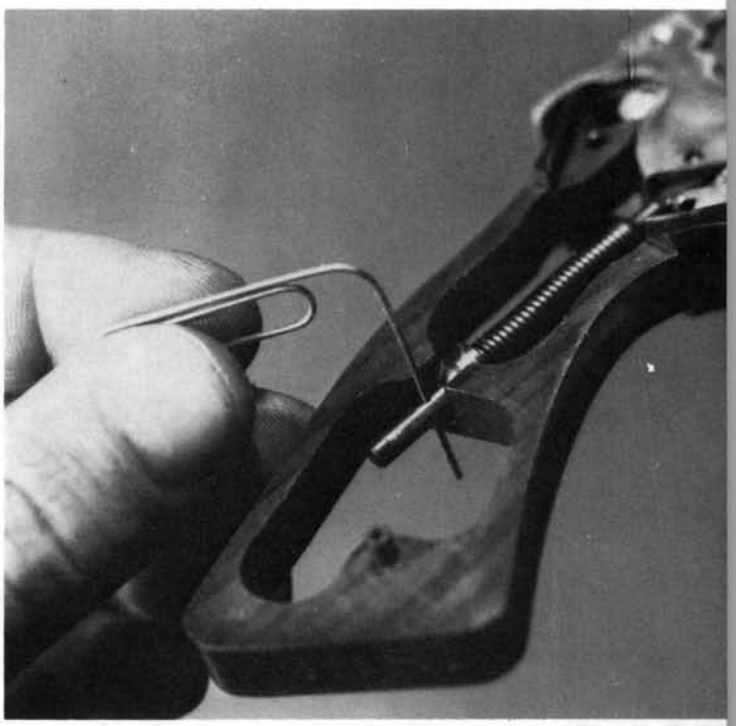


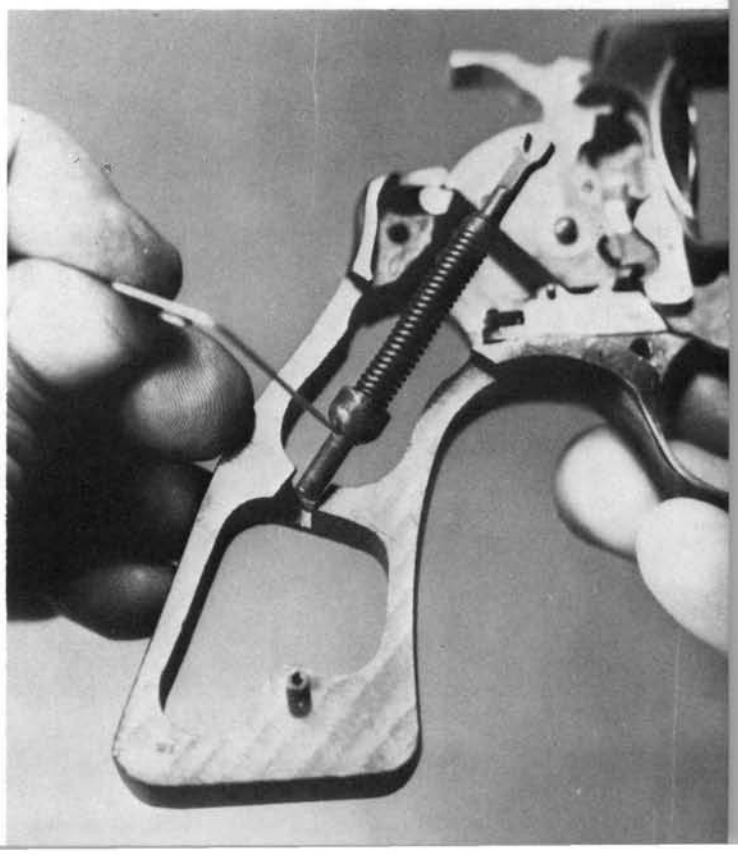
9. Remove the two remaining sideplate screws, hold the gun as shown, and tap the grip frame with a nylon mallet until the sideplate falls into the palm of the hand.

10. The hammer safety block will probably come off with the sideplate, but it is shown here in the proper position for reassembly, along with the other internal parts.



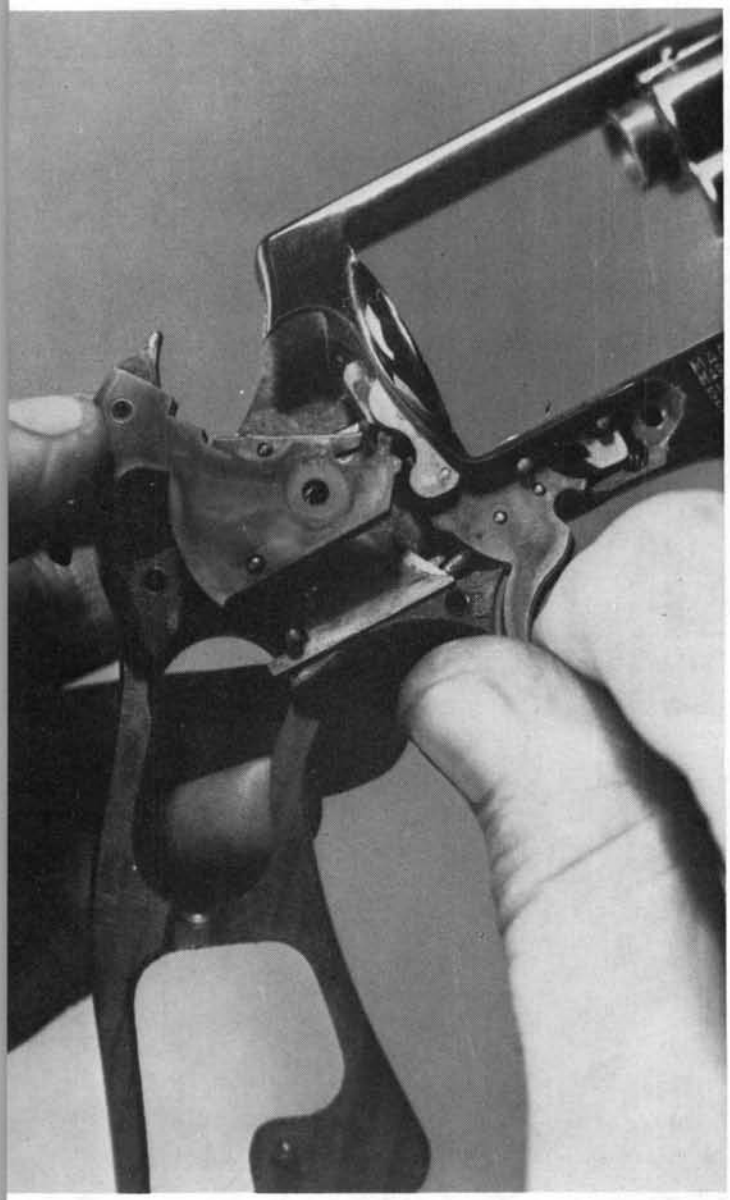
11. Cock the hammer and insert an opened paper clip through the transverse hole in the lower end of the hammer strut.



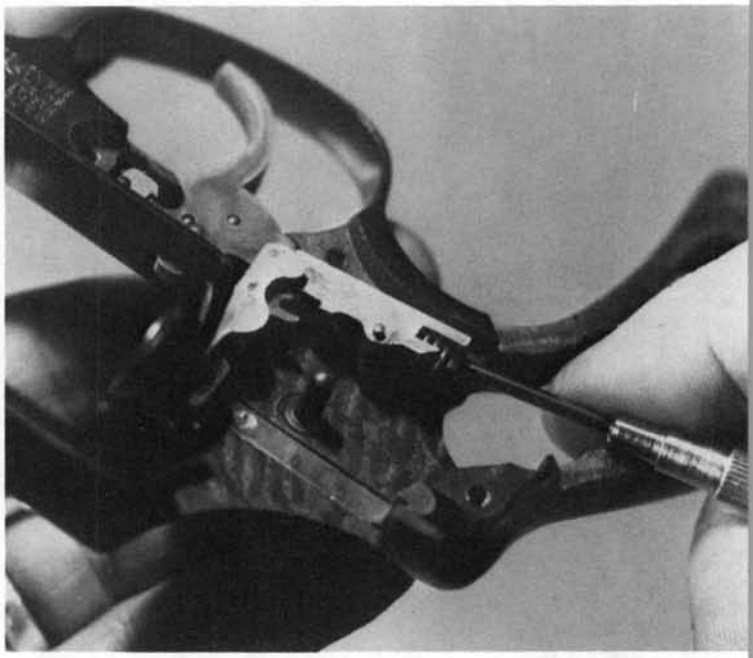


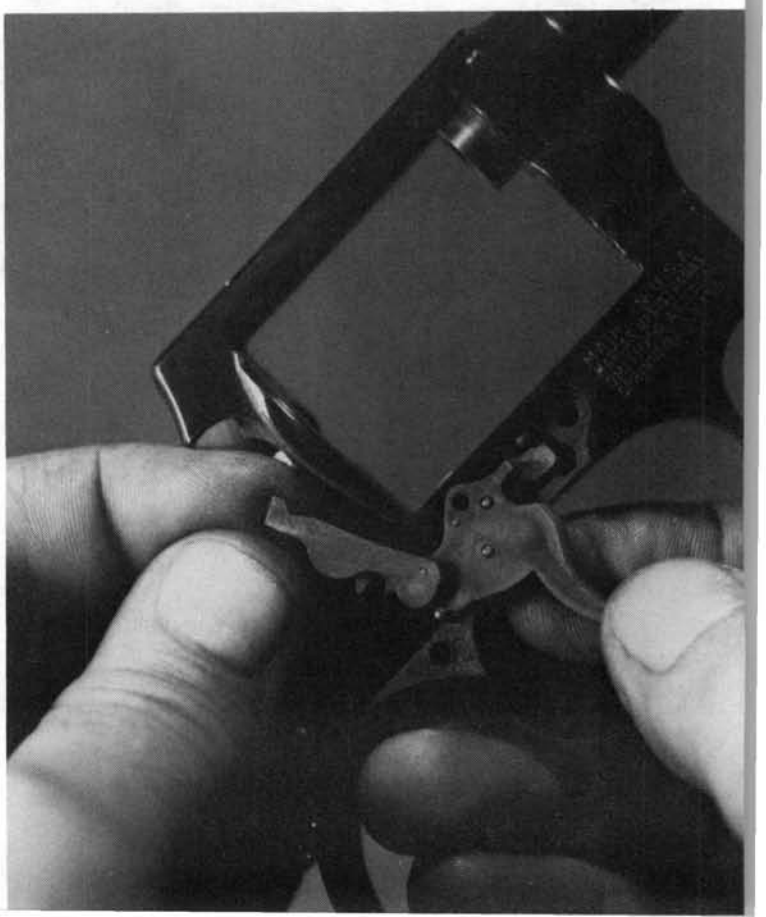
12. Release the hammer slowly, and remove the hammer spring assembly toward the left. To disassemble the spring unit, grip the head of the hammer strut firmly and press the spring cup against a slightly opened bench vise to compress the spring. Then remove the paper clip from the hole and slowly release the tension of the spring.

13. Push the cylinder release to the rear, hold it there, and pull the trigger to tip the hammer back. Remove the hammer toward the right.



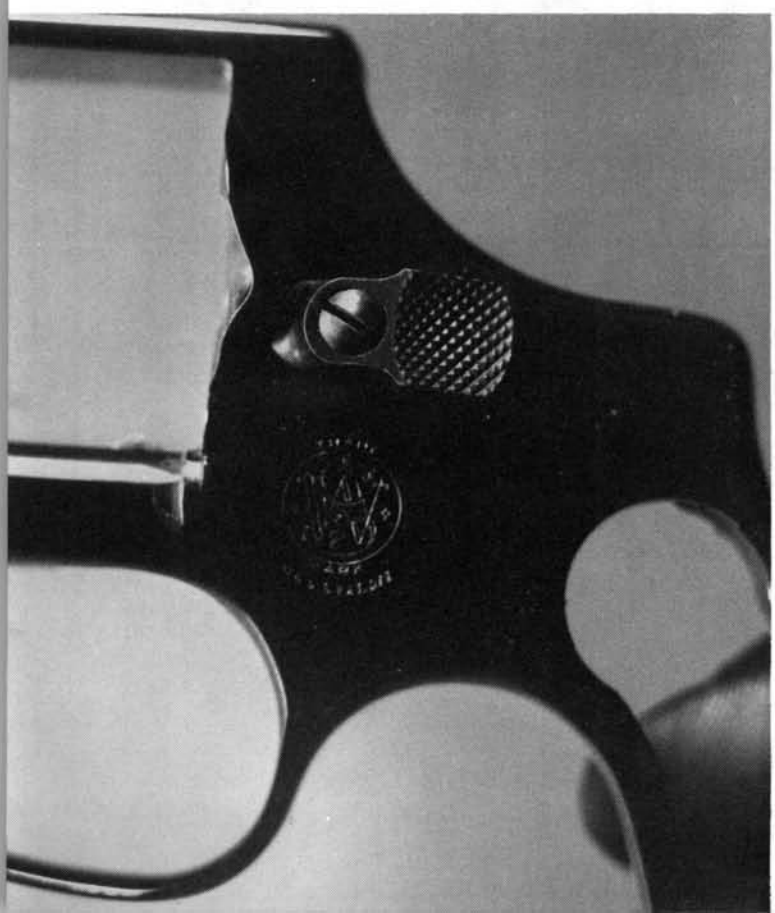
14. Insert a small screwdriver into the rear of the rebound slide and lift it outward off its post in the frame. The screwdriver shaft will catch the spring as it is released. Remove the rebound slide and its spring rearward and to the right.



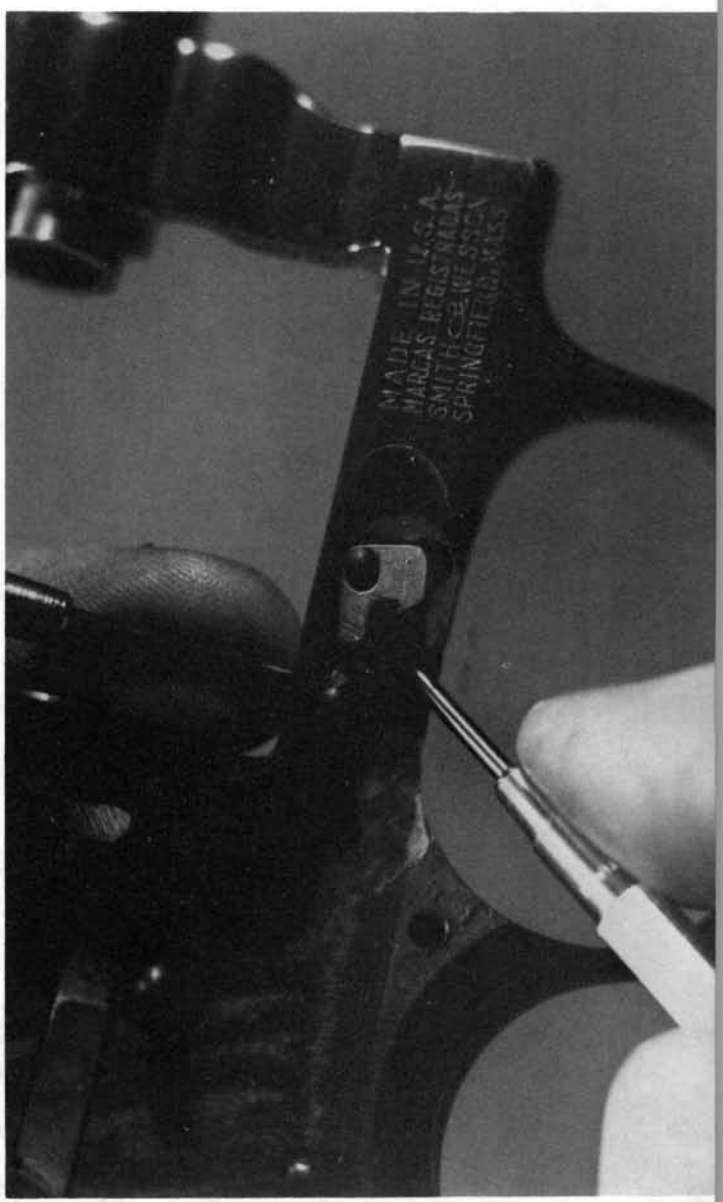


15. Tip the cylinder hand back out of its frame slot, and remove the trigger toward the right.

16. Remove the cylinder hand toward the right. The front cross-pin in the trigger is a bearing pin for the cylinder hand spring and need not be removed in normal disassembly. Drifting out the small pin at the top of the trigger will release the cylinder hand spring for removal. The larger lower pin retains the trigger strut.

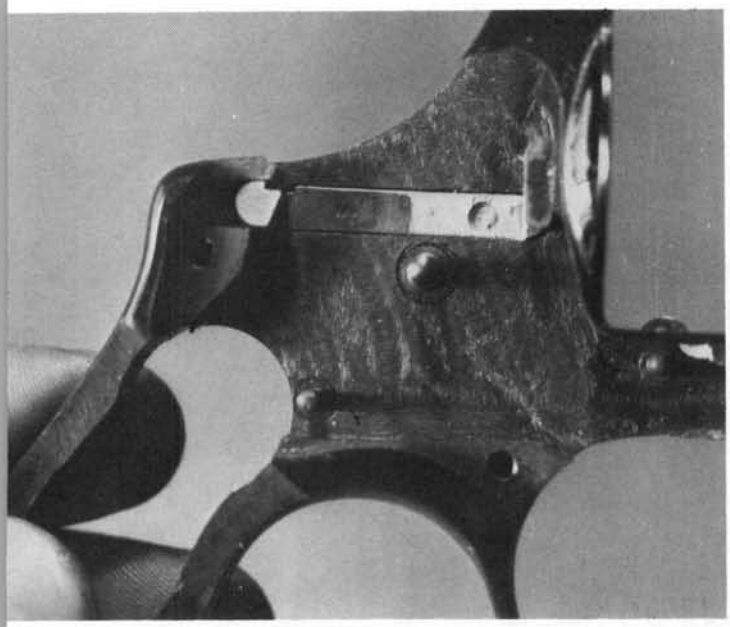


17. Use a small screwdriver to depress the cylinder stop at the top, and insert another small screwdriver behind the stop to nudge it out toward the right. As the spring at the front of the stop nears the edge of the frame recess, control it and ease it out.



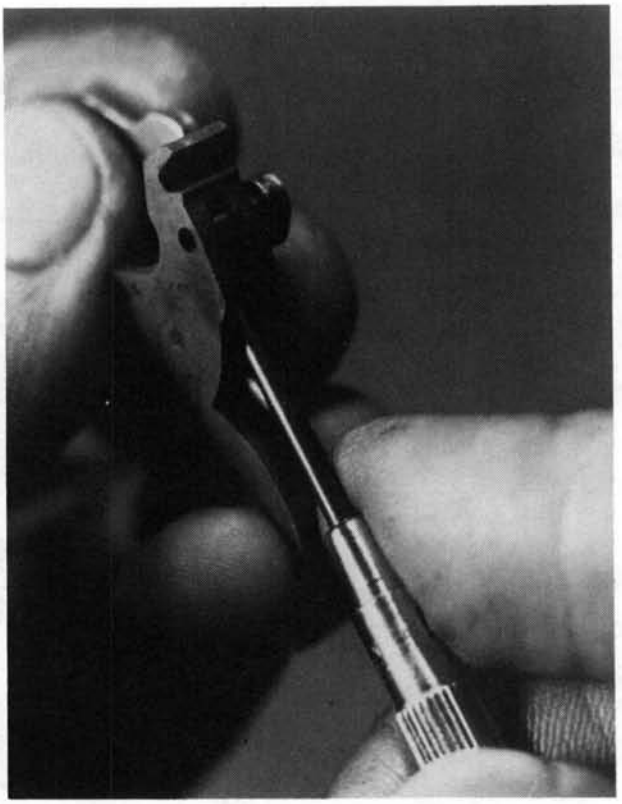
18. Remove the large cap nut from the cylinder latch, and remove the latch piece toward the left.

19. Move the internal portion of the cylinder latch all the way to the rear, then remove it toward the right. Take care not to lose the small plunger and spring at the rear of the latch, as they will be released as the rear of the latch clears the frame recess.



20. Drifting out the cross-pin in the underlug of the barrel will allow removal of the front latch plunger and its spring toward the rear.

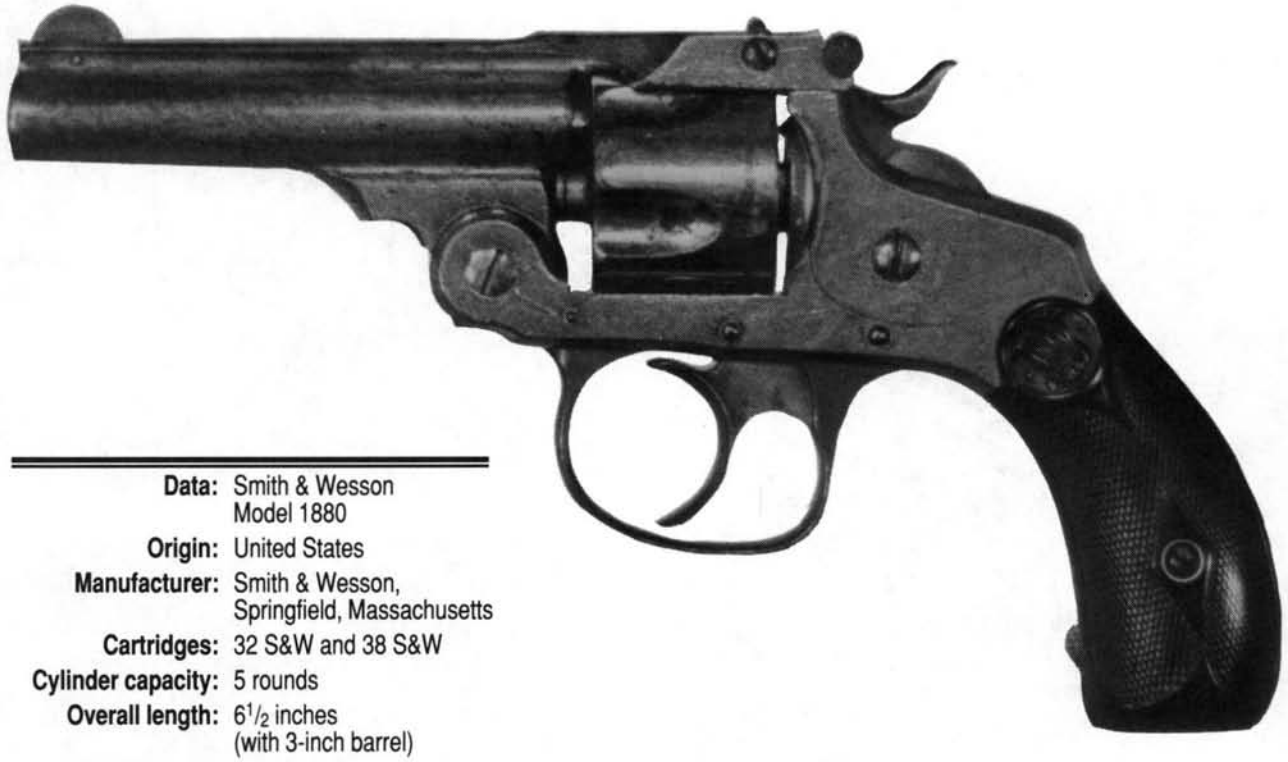
Reassembly Tips:



1. When replacing the cylinder hand on the trigger, insert a small screwdriver at the rear of the trigger to lift the rear arm of the cylinder hand spring as the hand is pushed into place. Be sure the rear arm of the spring rests on top of the smaller forward pin on the inside of the hand.

When replacing the ejector rod in the cylinder, remember that it has a reverse thread, and is screwed in counterclockwise (front view).

Smith & Wesson Model 1880

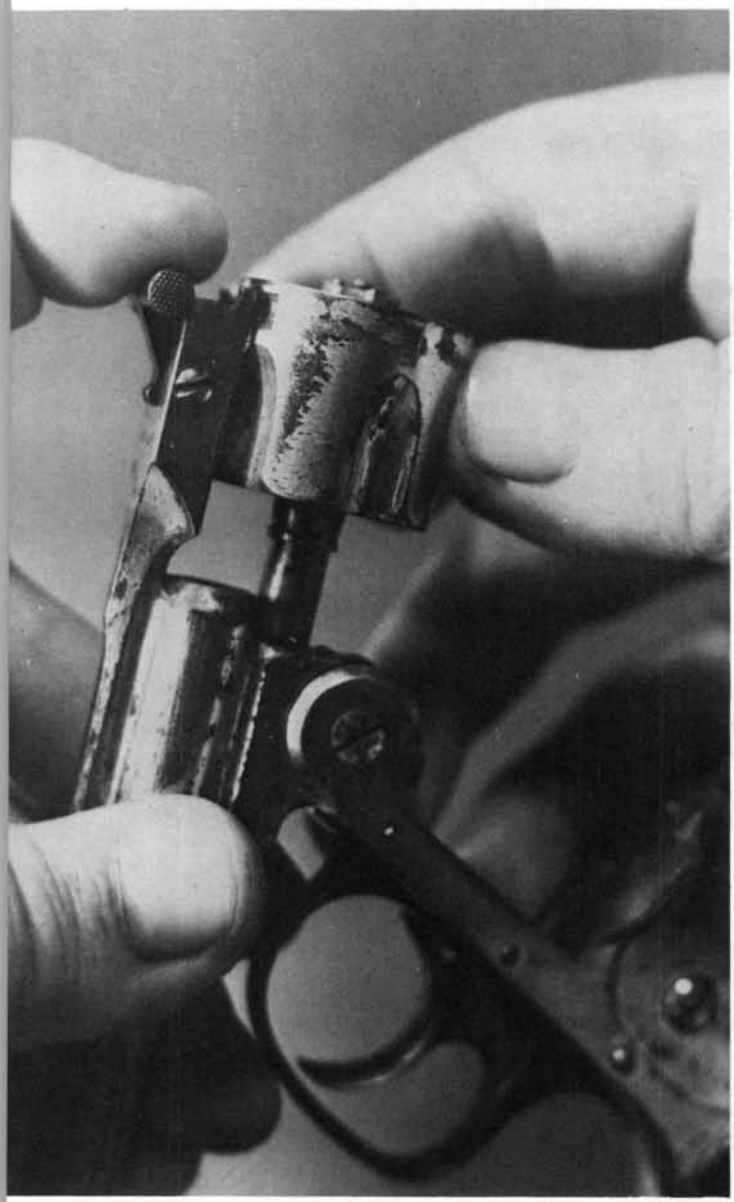


Data:	Smith & Wesson Model 1880
Origin:	United States
Manufacturer:	Smith & Wesson, Springfield, Massachusetts
Cartridges:	32 S&W and 38 S&W
Cylinder capacity:	5 rounds
Overall length:	$6^1/_2$ inches (with 3-inch barrel)
Barrel length:	3 inches standard, other lengths made
Weight:	13 ounces (32-cal.), 18 ounces (38-cal.)

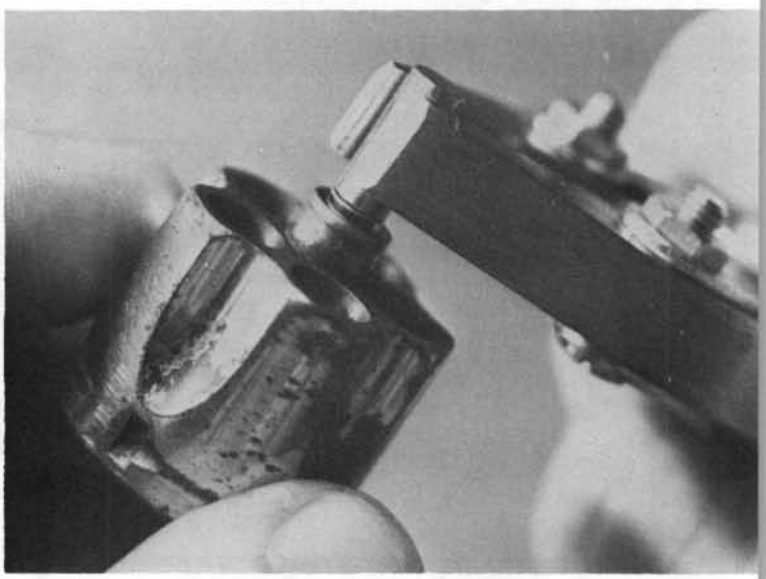
In the era of top-break revolvers, Smith & Wesson made them best. Their double-action model was introduced in 1880, and production of the 32-caliber version continued until 1919 (the 38 was dropped in 1911). The internal mechanism of these guns was somewhat more complicated than other contemporary designs, and their price was about triple the average of that time. Quality sells, though, and they were very popular. Many of them are still in everyday use, even though the cartridges they fire are of marginal power by today's standards.

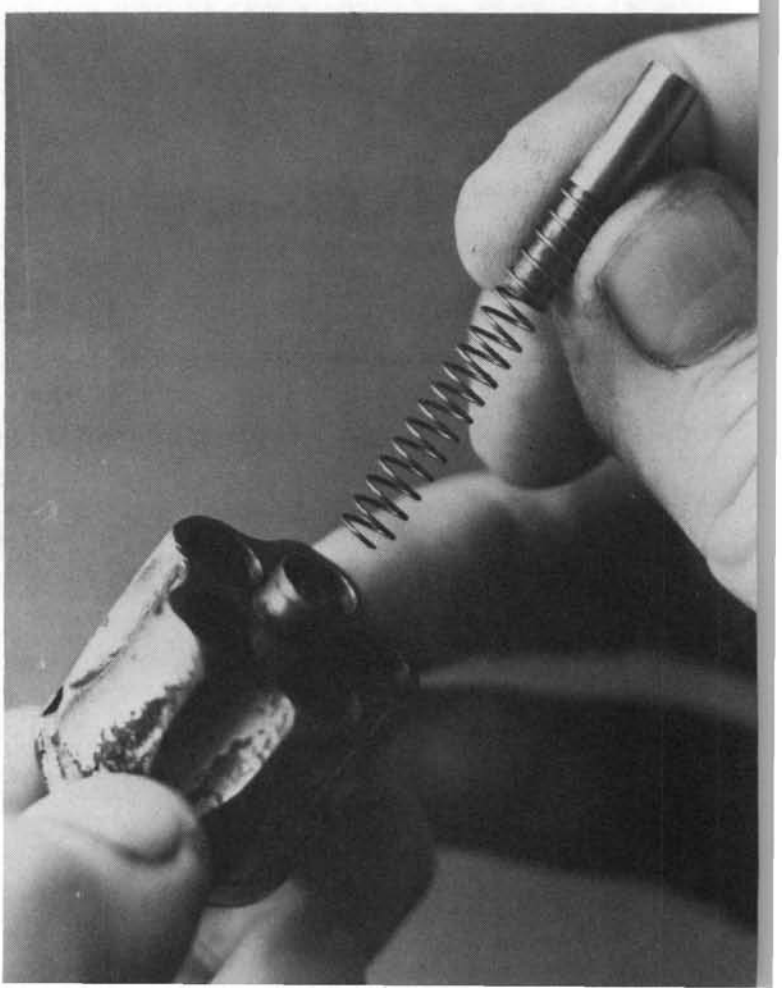
Disassembly:

1. With the barrel tipped open and holding the barrel latch in raised position, turn the cylinder counterclockwise (rear view) while exerting slight rearward pressure. When the internal helical track on the arbor is cleared, remove the cylinder assembly toward the rear.



2. Grip the ejector post with smooth-jawed pliers and unscrew it from the ejector shaft, counterclockwise (front view).

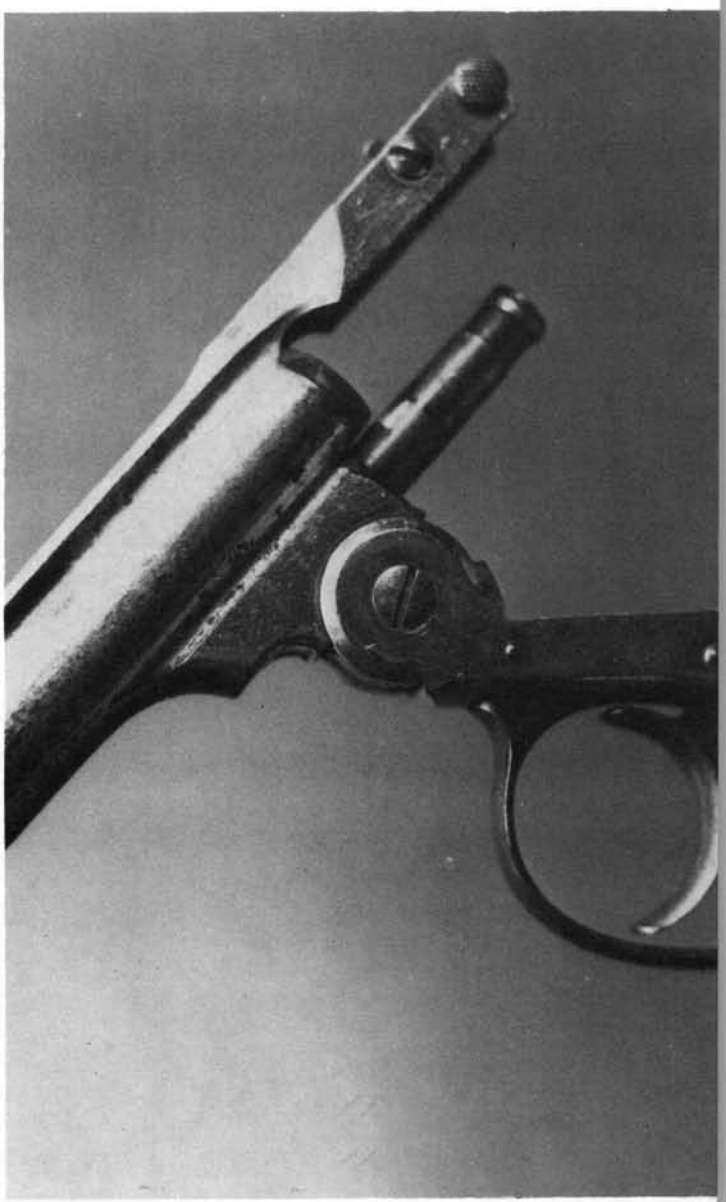




3. Remove the ejector post and the attached spring from the front of the cylinder.

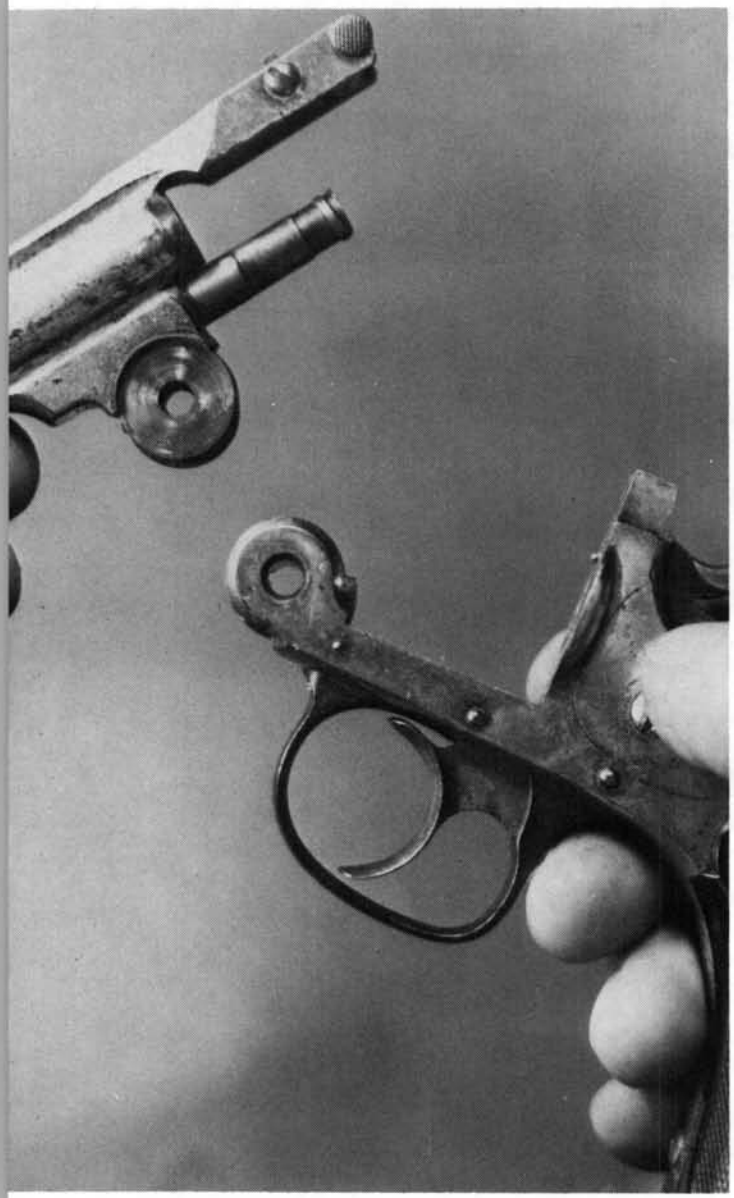
4. Remove the ejector/ratchet from the rear of the cylinder.

5. Remove the barrel hinge cap screw from the left side of the frame.

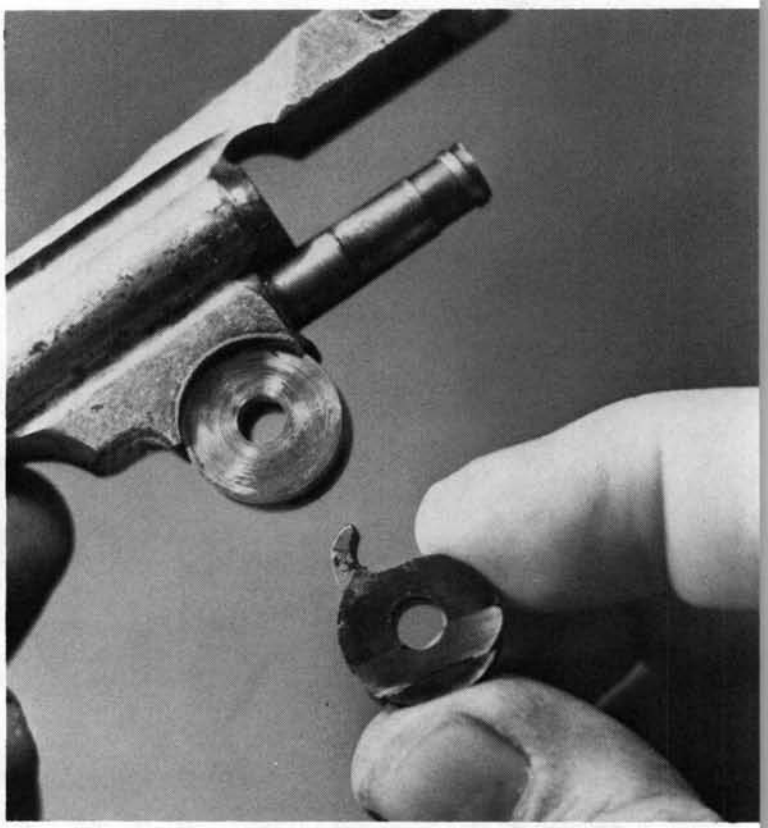


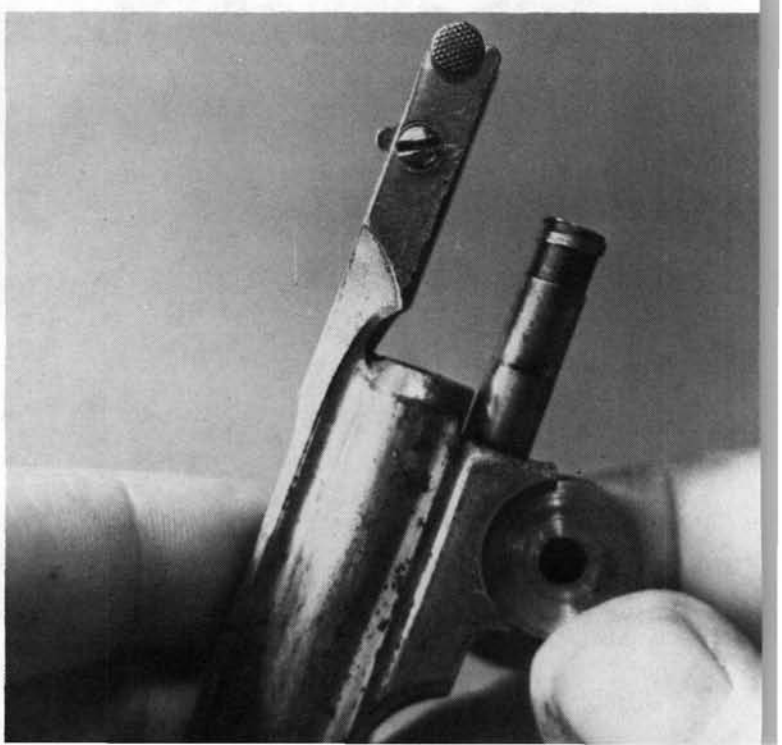
6. Select a drift punch that will easily enter the hole in the barrel hinge, and push the hinge out toward the right side.

7. Remove the barrel assembly from the frame.



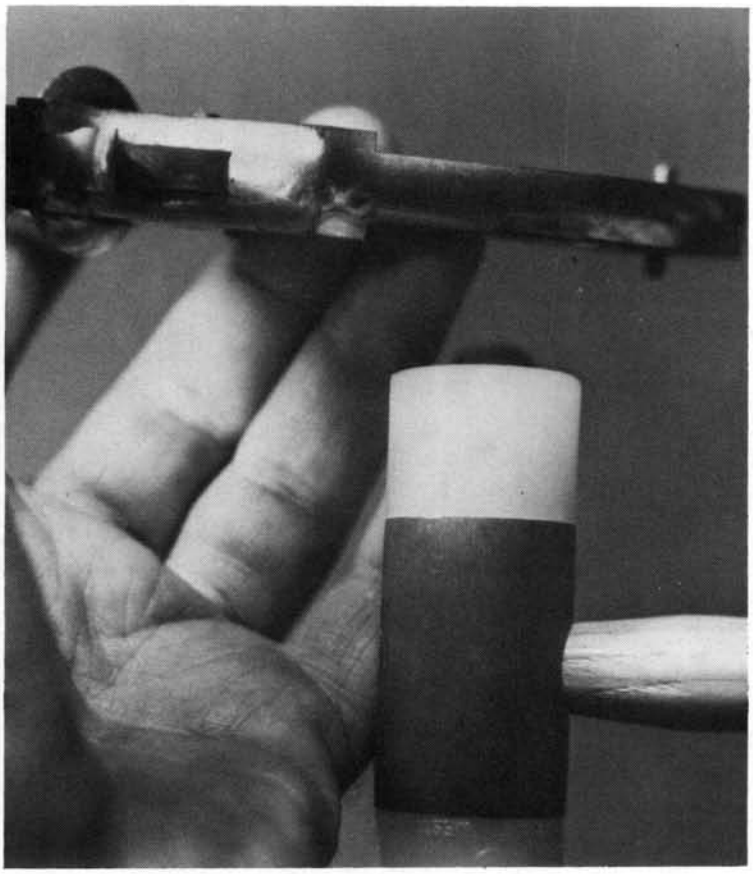
8. Remove the ejector cam from between the barrel hinge loops on the barrel. The cam trip is easily removed from its recess in the side of the cam. Take care not to lose the small blade spring beside the cam trip.





9. Taking out the cross-screw in the barrel extension will release the barrel latch and its plunger and spring for removal toward the rear.

10. Remove the cap screw at the center of the sideplate. Hold the gun as shown, and tap the grip frame with a nylon hammer until the sideplate drops into the hand.

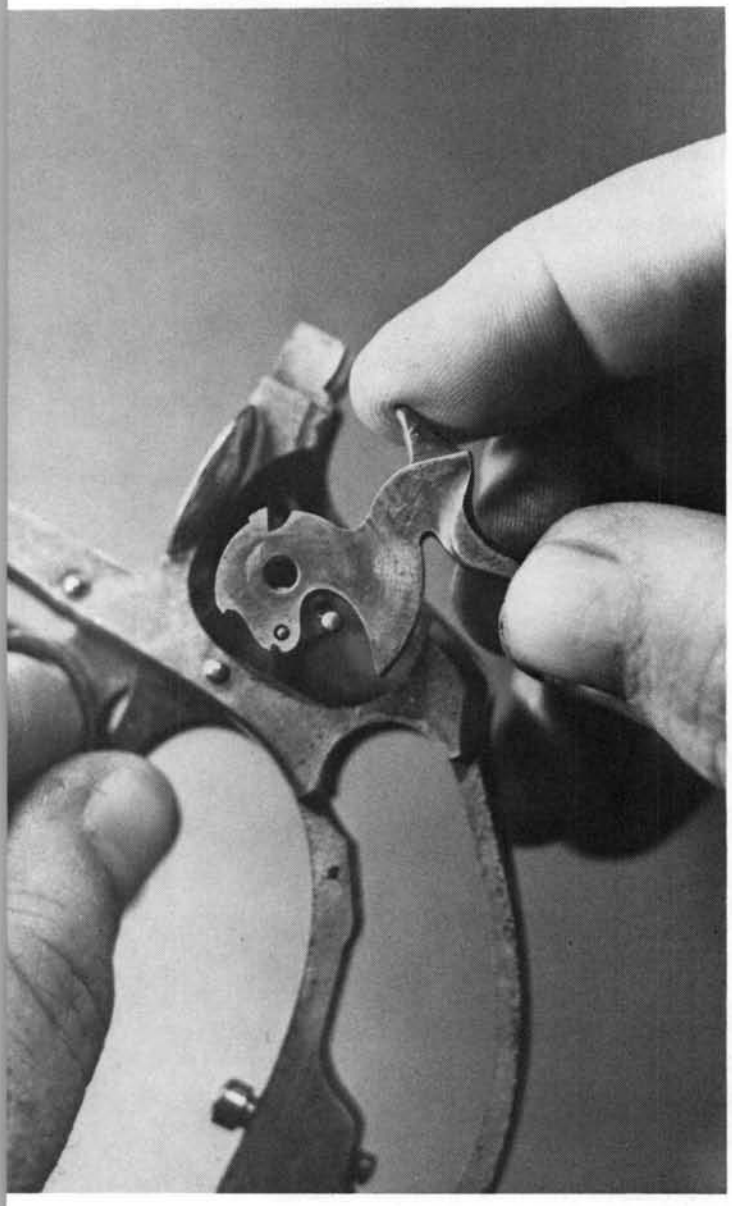


11. With the sideplate removed, the internal parts are shown in proper order, prior to disassembly.

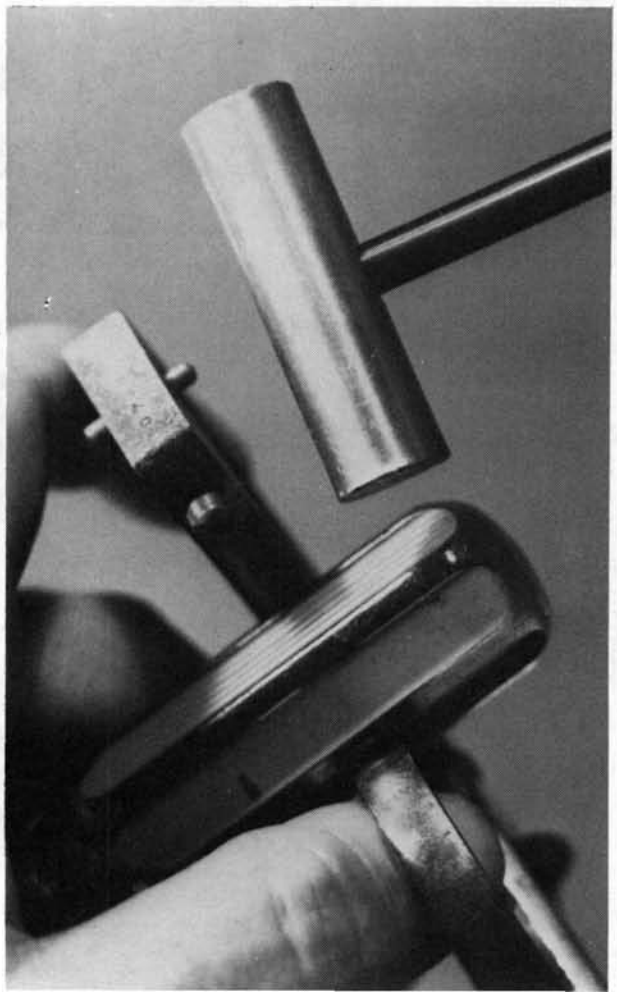
13. Drift out the small pin at the upper front of the grip frame and remove the sear spring toward the rear.

12. Back out or remove the hammer spring tension screw, located at the lower front of the grip frame. Disengage the spring hooks from the hammer stirrup and remove the spring toward the left and downward.

14. Pull the trigger to tip the hammer to the rear, and remove the hammer toward the left. Drifting out the small pin at the lower rear of the hammer will release the stirrup for removal.



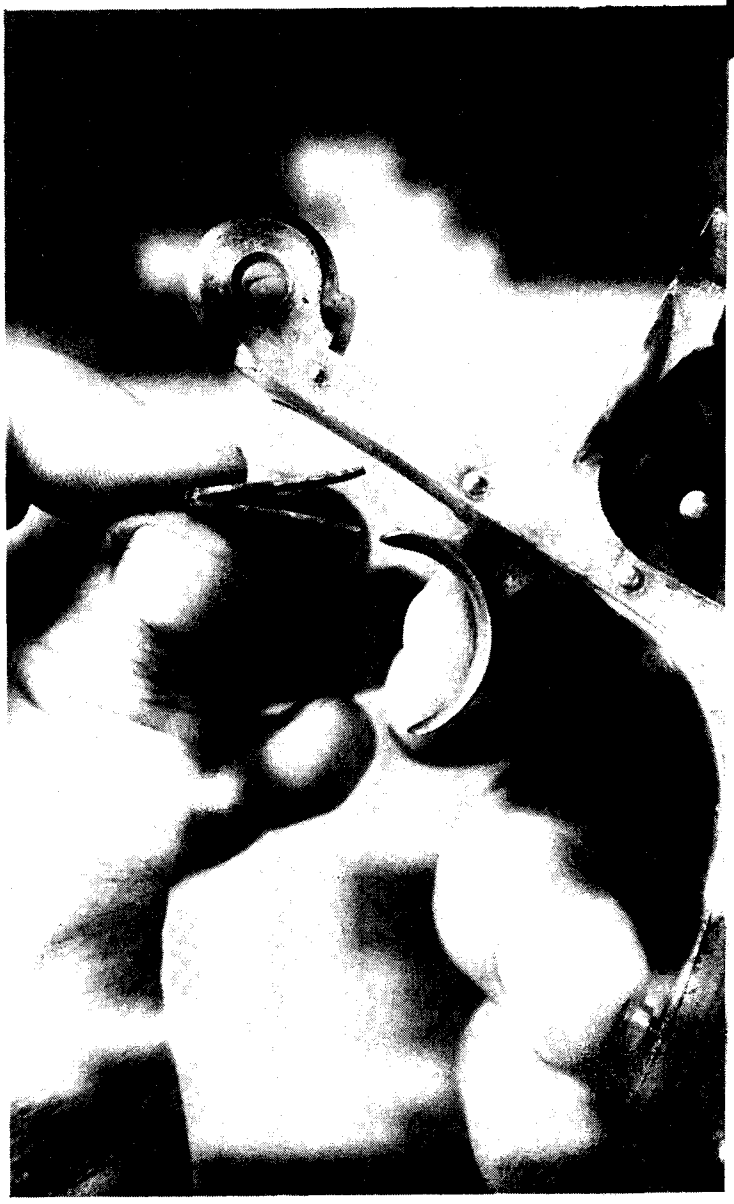
15. Pull the trigger slightly toward the rear, and squeeze the rear of the trigger guard toward the front. When its rear lip has cleared the frame recess, swing it downward.



16. If the guard is very tight, it may be necessary to tap it forward, as shown, to jump it out of the frame recess.

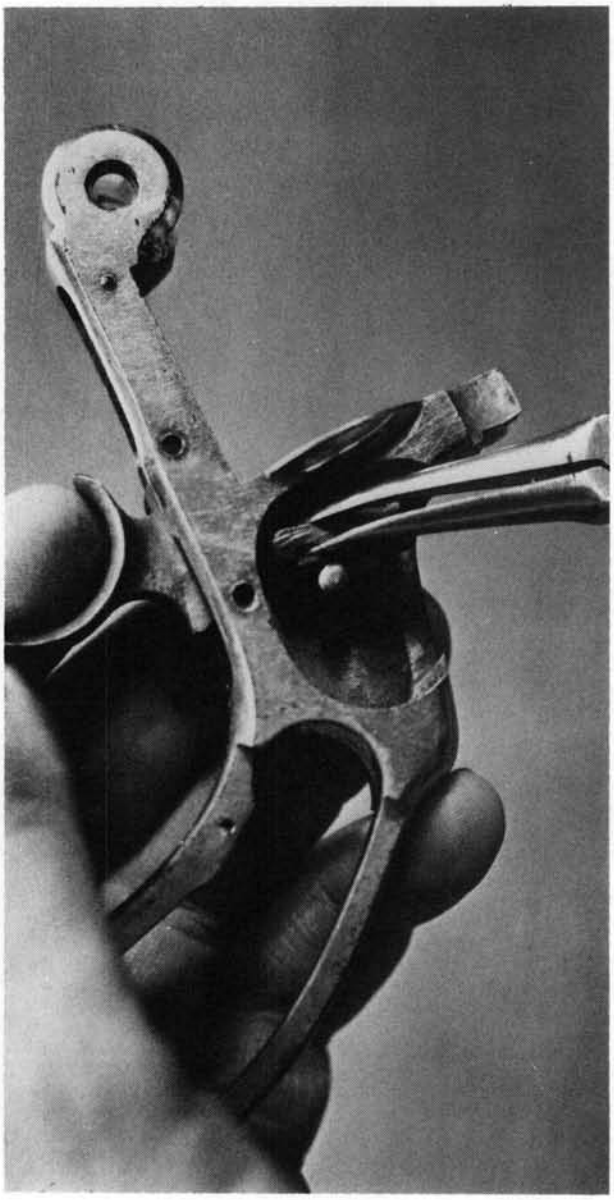
17. After swinging down the rear of the guard, move the front portion slightly toward the rear to clear the front lip, then remove the guard down and forward.

18. Remove the trigger spring from the frame well in front of the trigger.

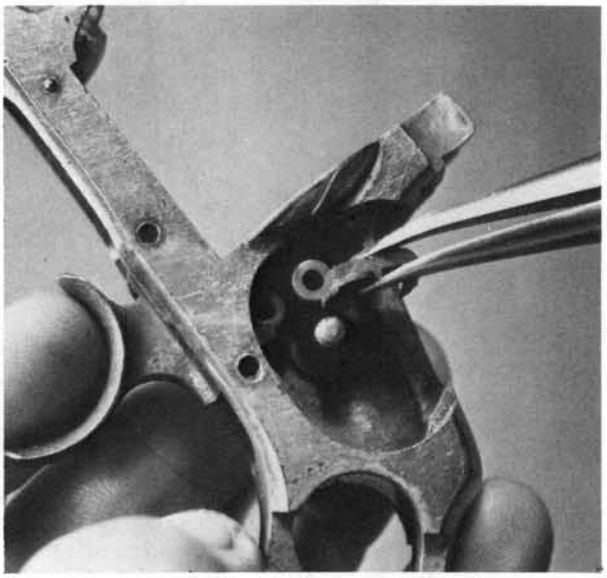


19. The cylinder stop, trigger, and sear are retained by cross-pins in the frame. Drift out the trigger pin and the sear pin, and move the sear toward the rear, then remove it downward.

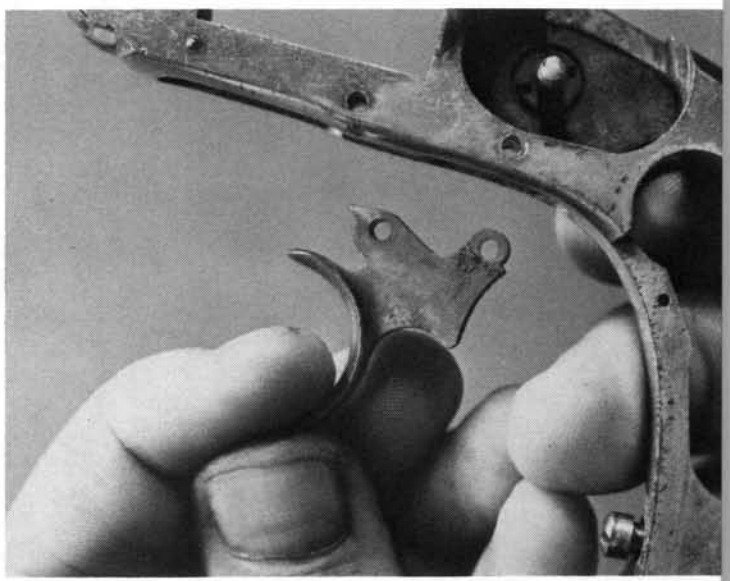
20. Move the trigger toward the rear until the hand and lever are against the hammer post, and use sharp-nosed smooth-jawed pliers to grip the cylinder hand, compressing the hand spring. Remove the cylinder hand toward the left.

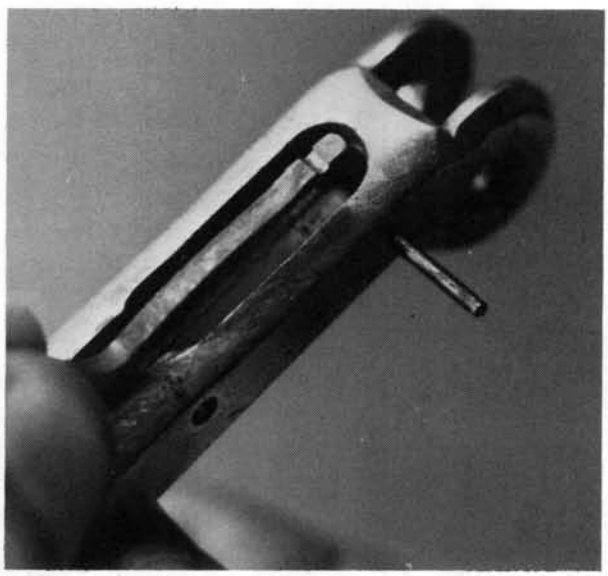


21. Move the hammer lever up out of its loops on the trigger, and remove it toward the left.



22. Remove the trigger from the bottom of the frame.



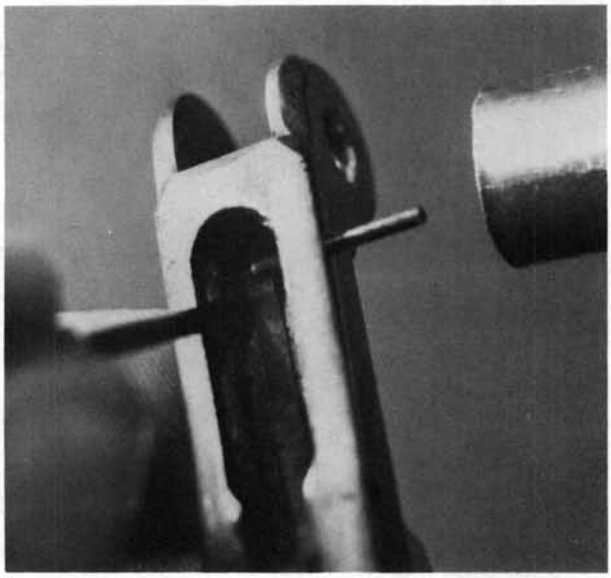


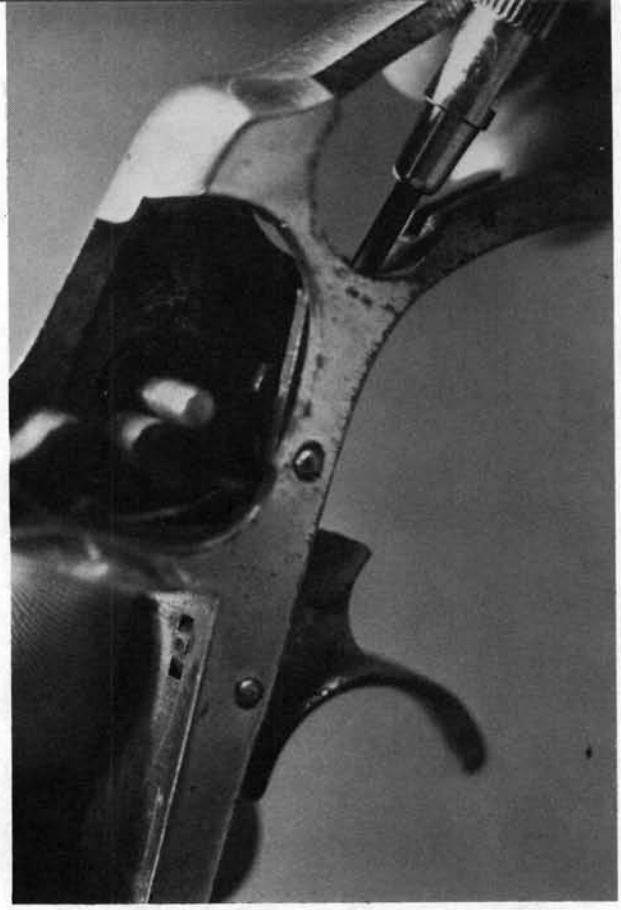
23. Drift out the small pin at the front of the frame to release the cylinder stop.

24. Remove the cylinder stop from the frame recess.

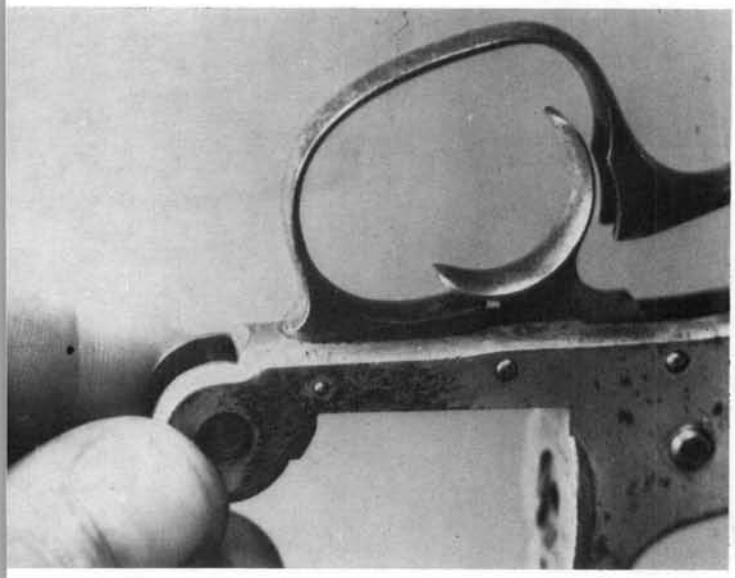
Reassembly Tips:

1. When replacing the cylinder stop, use a small screwdriver to hold it at the center of the recess while driving in the cross-pin. Otherwise, the stop may be shifted toward the side, bending the pin or breaking the stop.





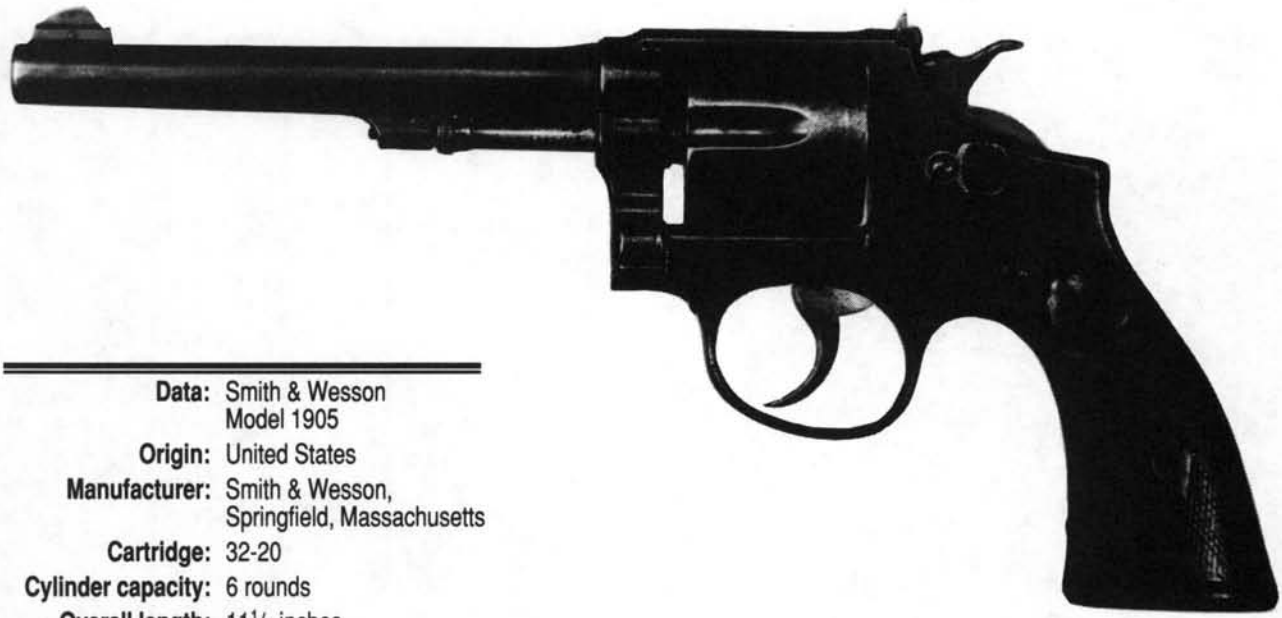
2. When installing the sear, be sure its forward beak is correctly positioned above the lower rear projection of the cylinder stop. To check proper engagement, use a small screwdriver to slightly lift the rear of the sear. The cylinder stop should then move downward into its slot in the frame.



3. When replacing the trigger guard, set the front of the guard against the lower arm of the trigger spring, move it toward the rear, then push it in and forward to engage the front lip with its recess in the frame. Remember to keep the trigger pulled partially to the rear while springing the rear of the guard into place.

4. When installing the barrel hinge, note that the head of the hinge has a mark which must be aligned with a corresponding mark on the frame loop. This insures that the side lug on the hinge will enter its recess in the frame.

Smith & Wesson Model 1905

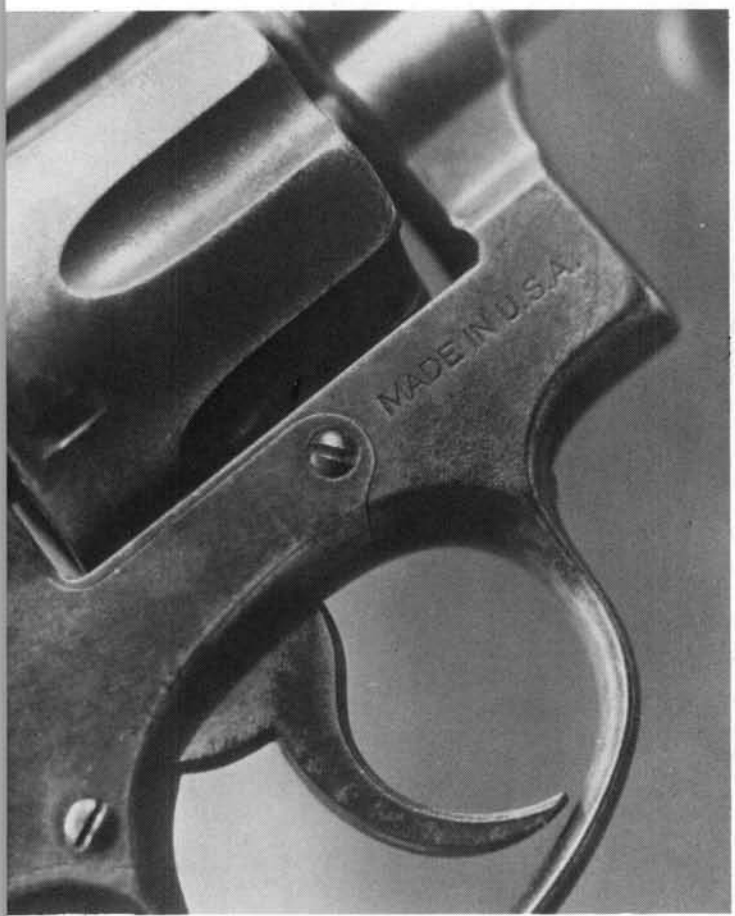


Data:	Smith & Wesson Model 1905
Origin:	United States
Manufacturer:	Smith & Wesson, Springfield, Massachusetts
Cartridge:	32-20
Cylinder capacity:	6 rounds
Overall length:	$11\frac{1}{8}$ inches (with 6-inch barrel)
Barrel length:	4, 5, 6, and $6\frac{1}{2}$ inches
Weight:	32 ounces

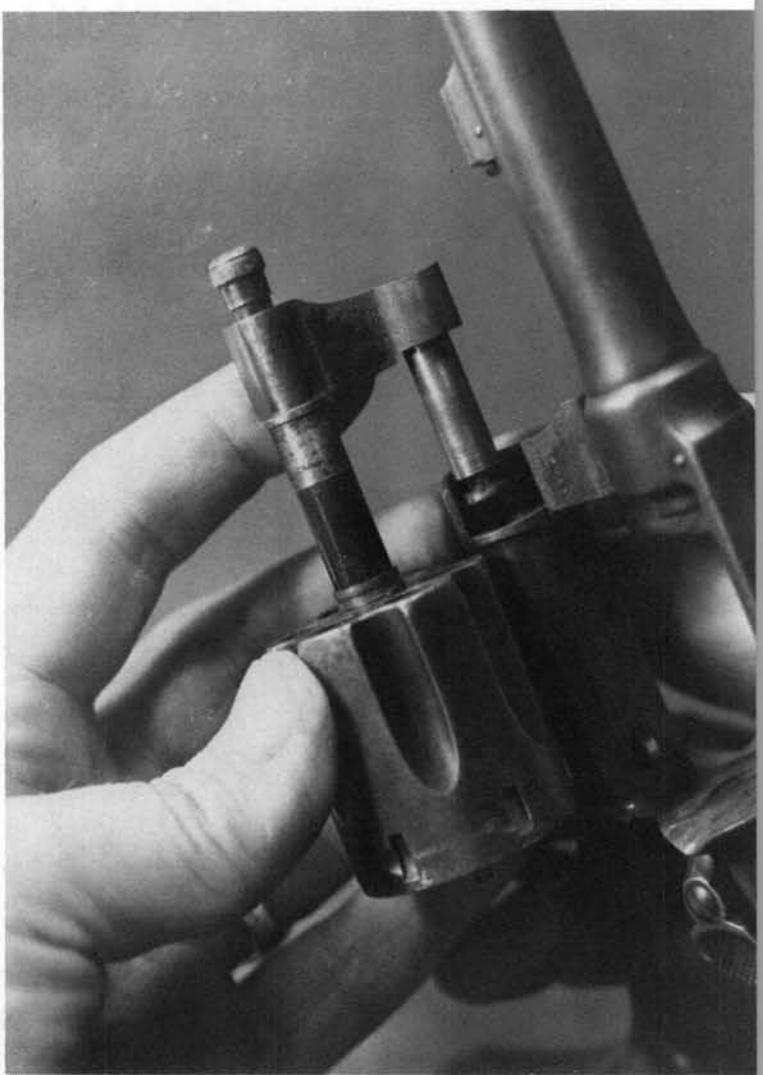
During the long production life of this revolver, from 1905 to 1940, there were several small changes made in the design, and these are recognized by S&W collectors as separate types. The gun shown here is the final version, or Fourth Change, made from 1915 to 1940, and is the one most frequently encountered. Several points in the internal mechanisms are entirely different from the S&W revolvers of today, and it was included for this reason. Many Model 1905 revolvers are still in everyday use.

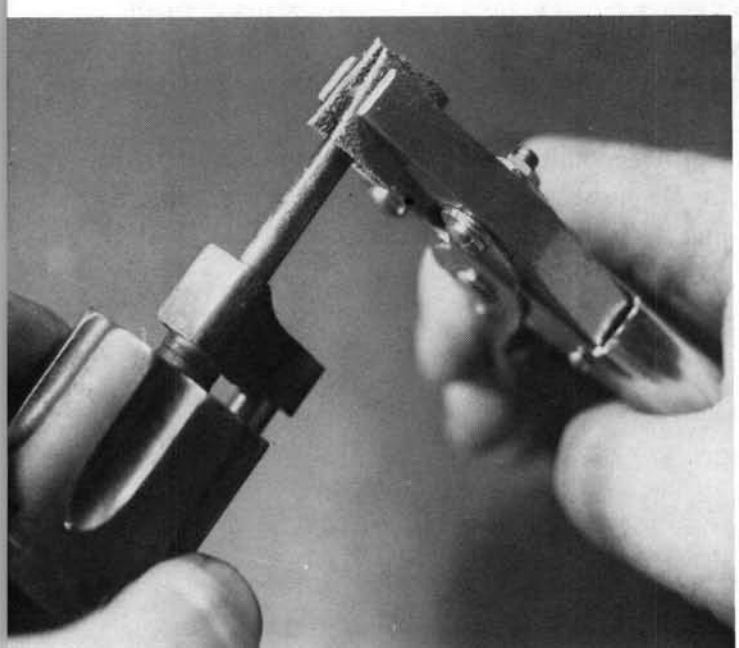
Disassembly:

1. Remove the forward sideplate screw on the right side.



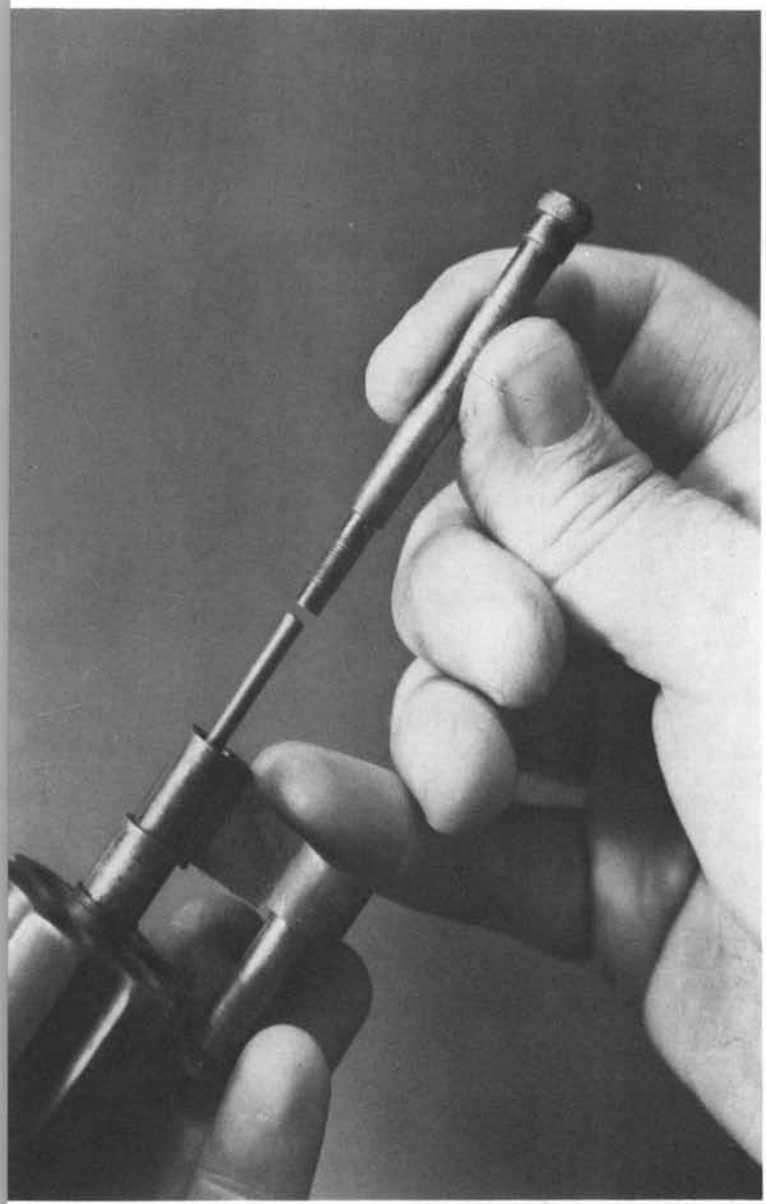
2. Move the crane forward out of the frame, and remove the crane and cylinder assembly.



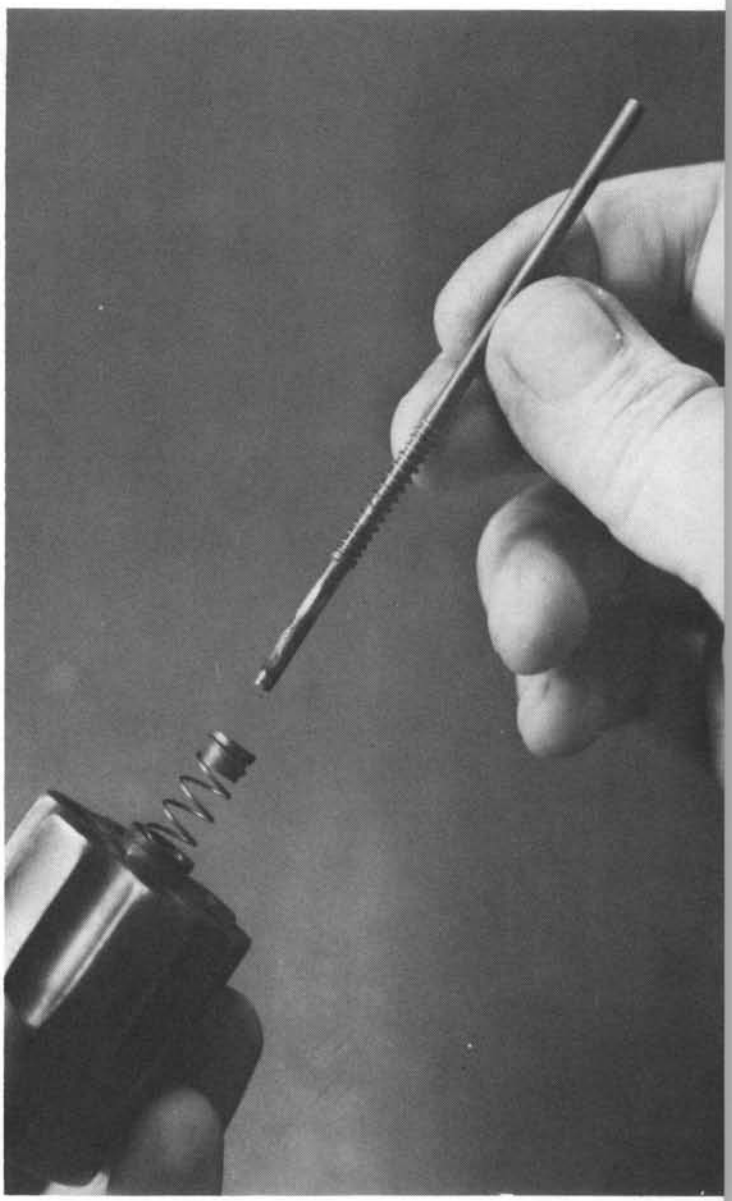


3. Grip the ejector rod head with leather-padded smooth-jawed pliers, and unscrew it counterclockwise (front view). If the rod is unusually tight, grip the rod in a leather-padded vise, insert two empty cartridge cases into the chambers to relieve ejector stress, and turn the cylinder by hand to unscrew the rod.

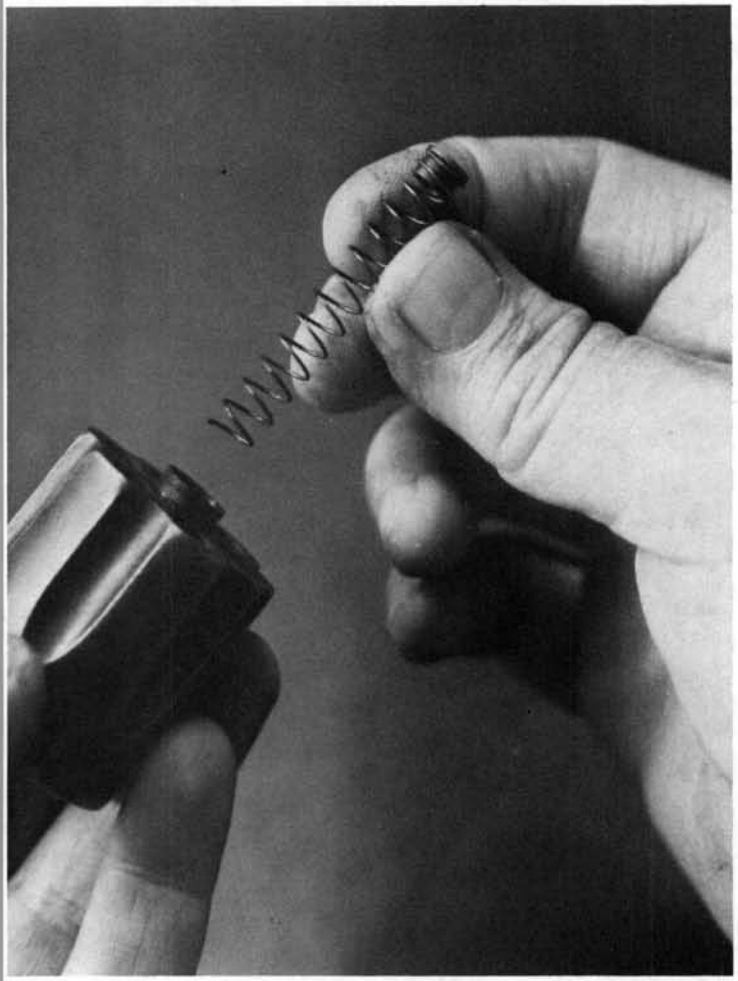
4. Remove the ejector rod toward the front and remove the crane from the cylinder.



5. Remove the locking rod and its spring from the front of the cylinder.

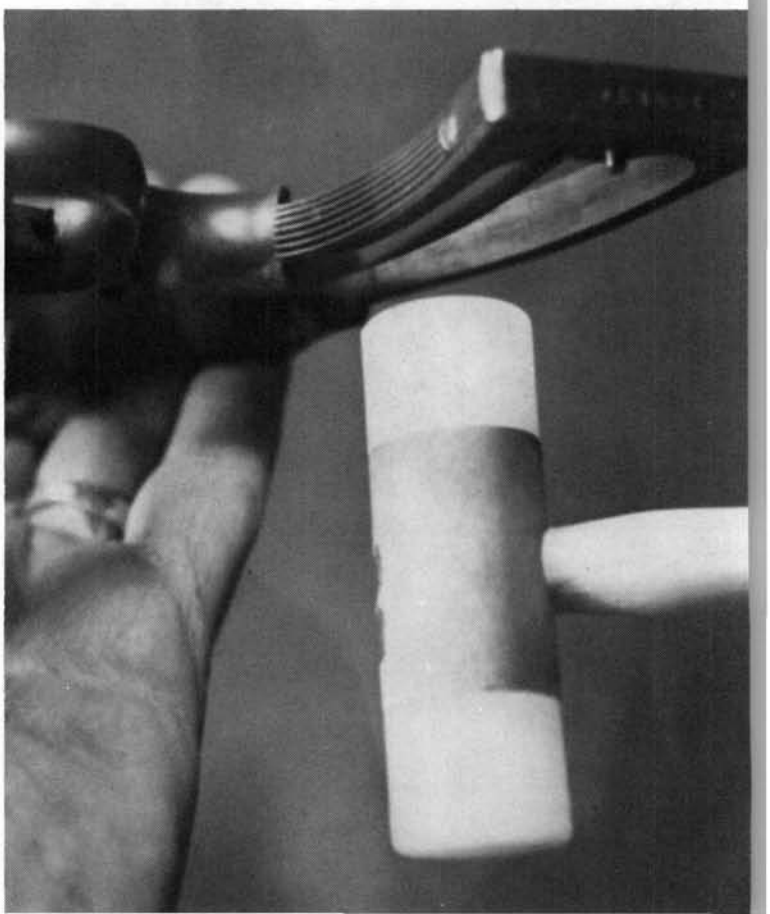


6. Remove the ejector spring and its bushing from the front of the cylinder. Remove the ejector/ratchet from the rear of the cylinder.

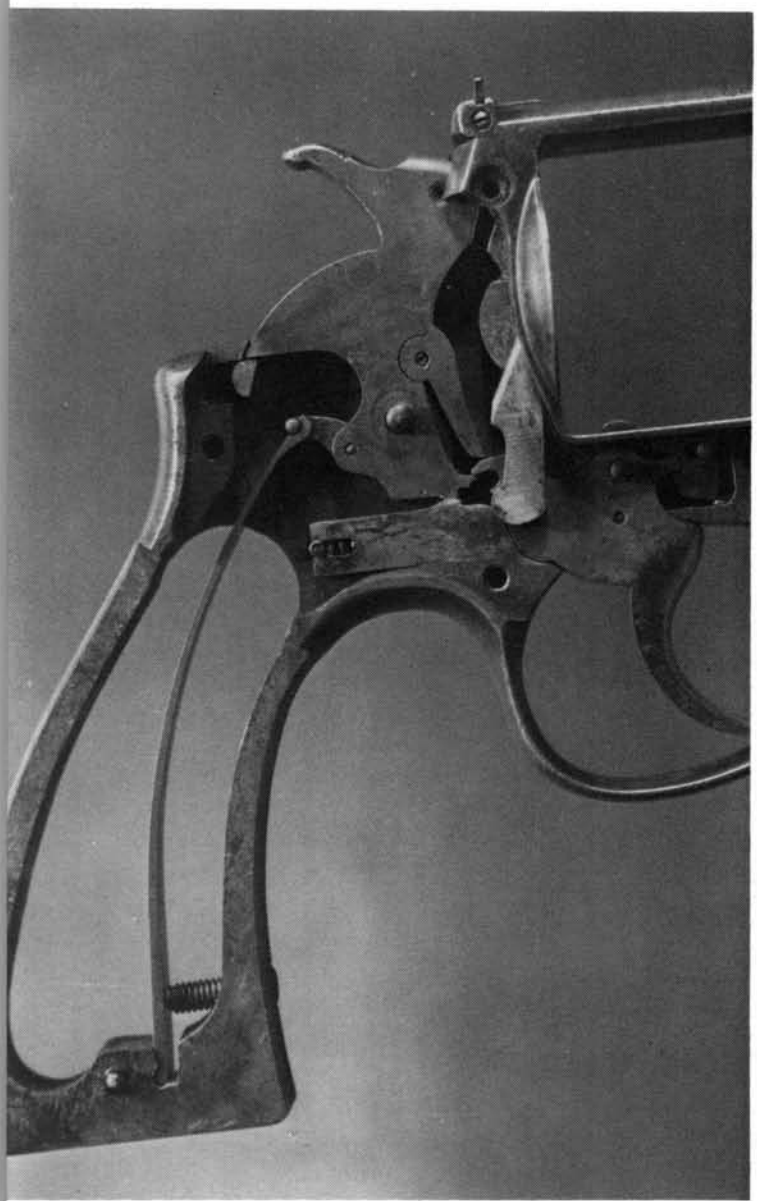


7. The ejector rod knob is removable by unscrewing it from the end of the rod, but these are usually tightly fitted, and the knurling may be damaged in removal. In normal takedown, it's best left in place.

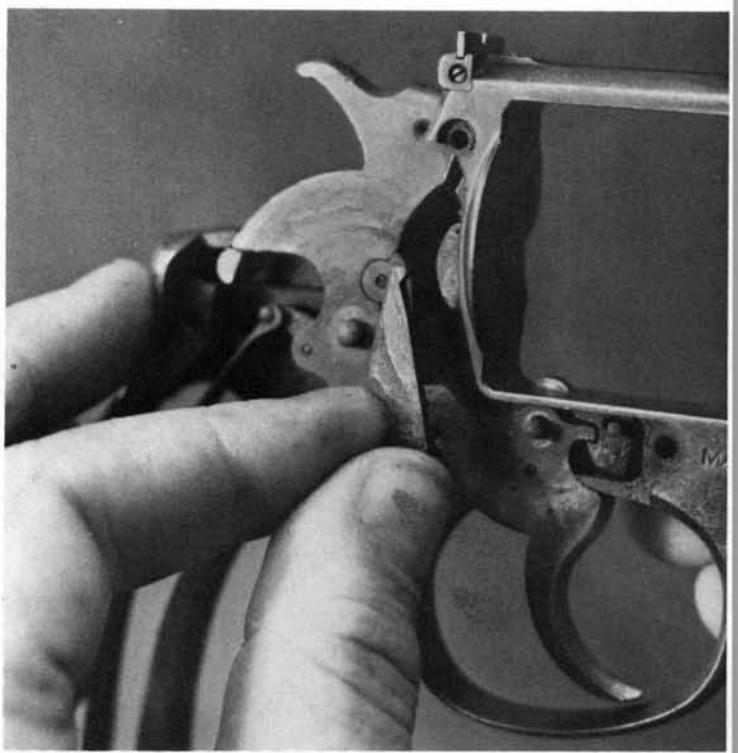
8. Remove the three remaining sideplate screws. Use a wider screwdriver tip on the upper screw. Hold the gun as shown, and tap the grip frame with a nylon mallet to free the sideplate.

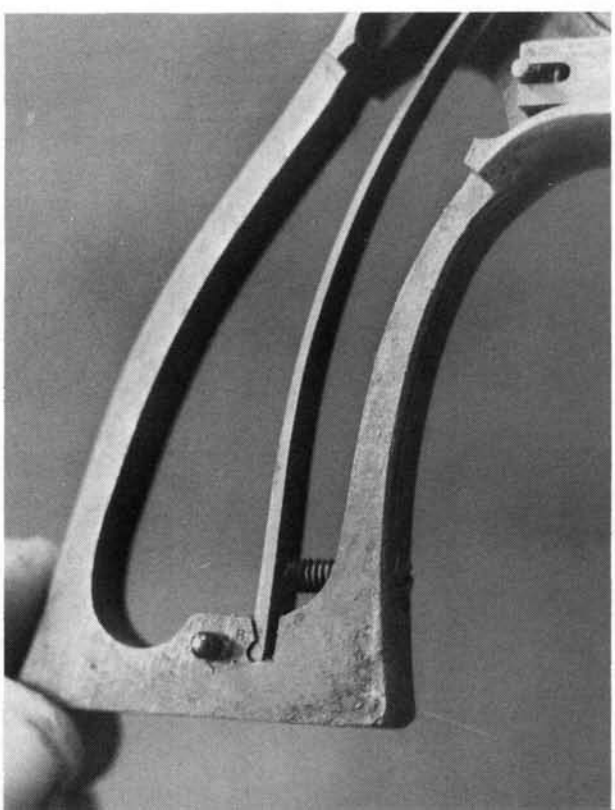


9. The internal mechanism is shown in proper assembly, before takedown.



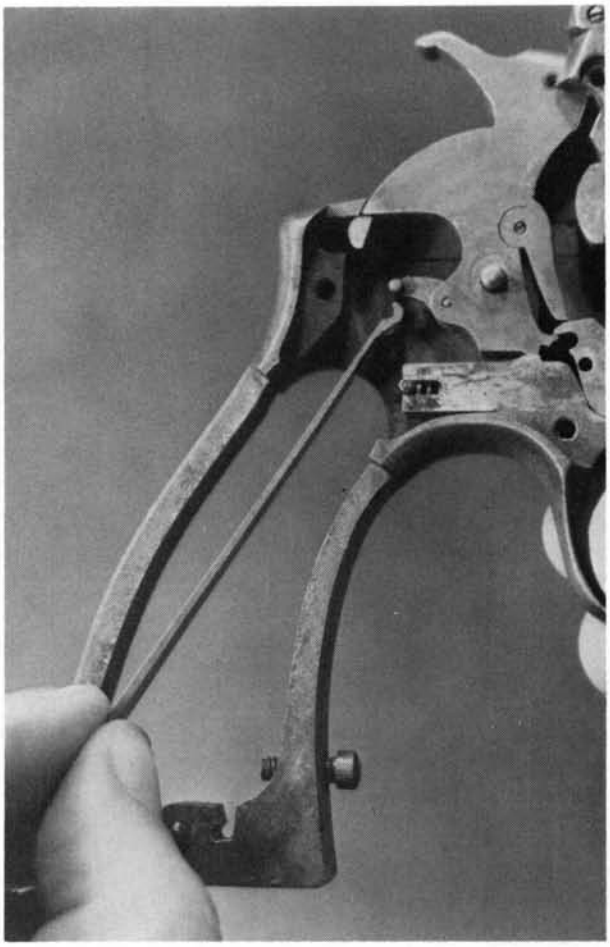
10. Pivot the cylinder hand toward the rear, and remove it toward the right.





11. Back out or remove the hammer spring screw, located at the lower front of the grip frame.

12. Disengage the spring hooks from the hammer stirrup, and remove the hammer spring down and toward the right.



13. Move the cylinder latch to the rear to free the hammer, holding it there while the hammer is tipped back by pulling the trigger to the rear. Remove the hammer toward the right.

14. Drifting out the small pin at the front of the hammer will release the double-action lever and its spring for removal. The small cross-pin at the lower rear of the hammer retains the stirrup.

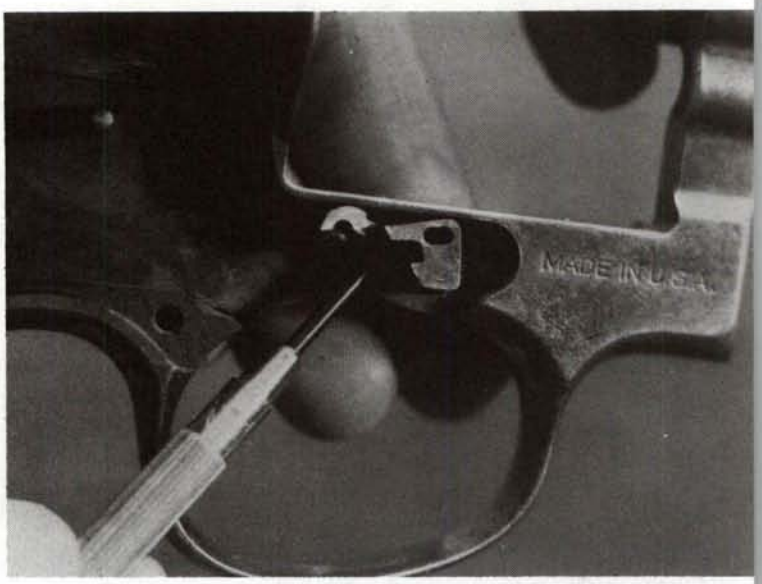
15. Insert a small screwdriver into the rear of the trigger rebound slide, and lift the slide out toward the right, off its rear post in the frame. The compressed spring will be caught by the screwdriver shaft. Remove the rebound slide and its spring toward the rear. Remove the trigger toward the right.

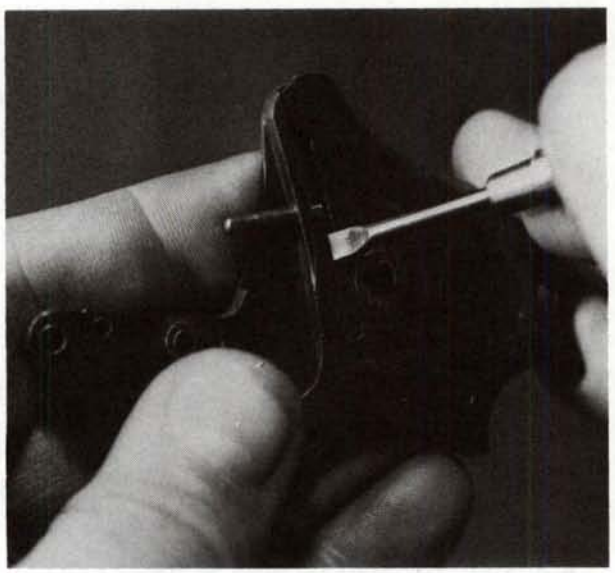
16. Drifting out the small cross-pin in the trigger will free the rebound strut for removal toward the rear.

17. Remove the screw at the front of the trigger guard.

18. Remove the cylinder stop spring and its plunger.

19. Tip the cylinder stop down out of its slot in the frame, and lift it out toward the right.

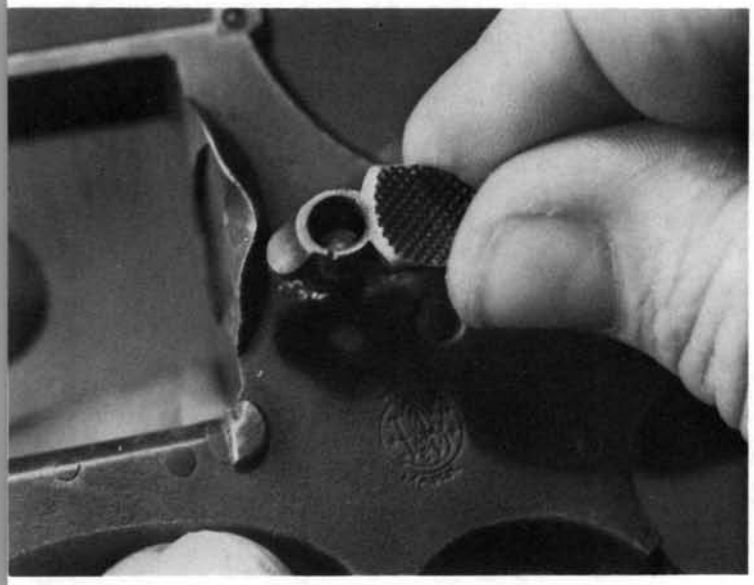




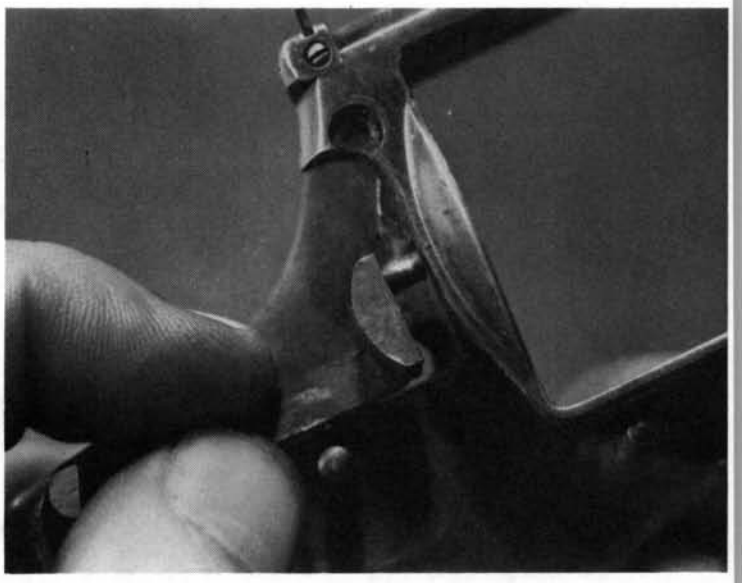
20. The hammer safety block and the cylinder hand spring and plunger are mounted inside the sideplate. Depress the hammer block until the hand spring pushes the plunger out beyond its usual reach.

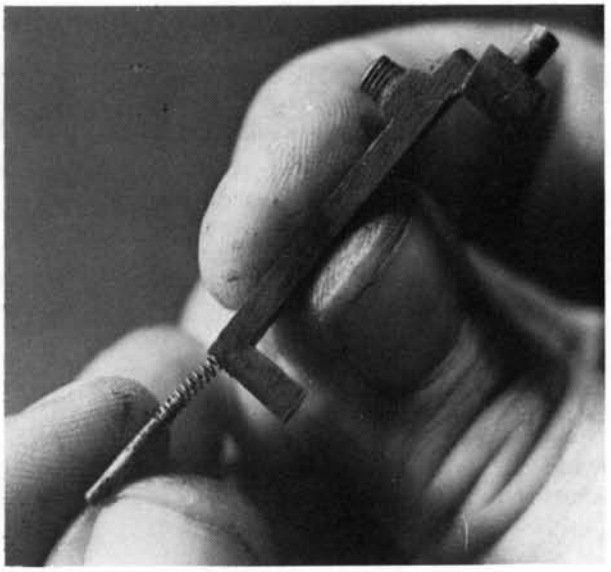
21. Remove the cylinder hand plunger from the sideplate. If the spring is not extracted with the plunger, the hammer block must be depressed again while a small tool is used to extract the spring. The hammer block is its own spring and it is staked in place at its lower end. These are often broken during removal, and are best left in place during routine takedown.

22. Remove the screw-slotted cap nut that retains the cylinder release. Remove the cylinder release toward the left.

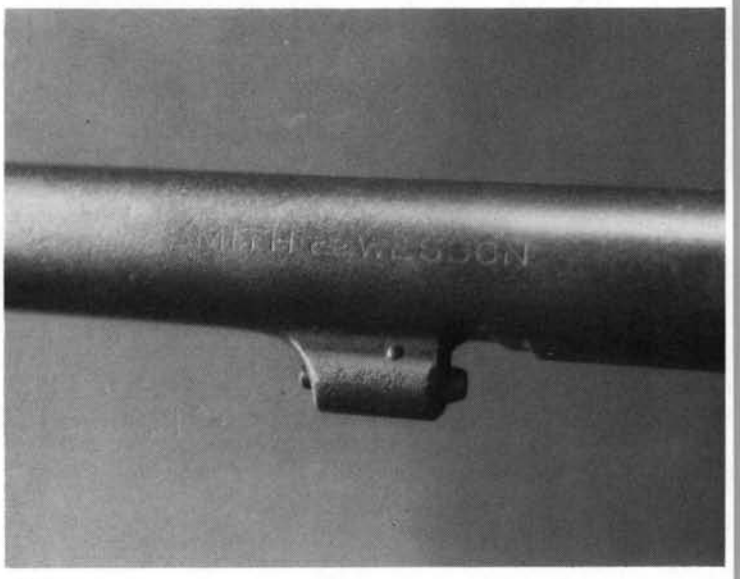


23. Move the cylinder latch assembly all the way to the rear, and turn its forward end out toward the right for removal. **Caution:** *The small spring and plunger at the rear of the latch will be released as the rear end of the latch clears the frame recess. Remove the part slowly.*



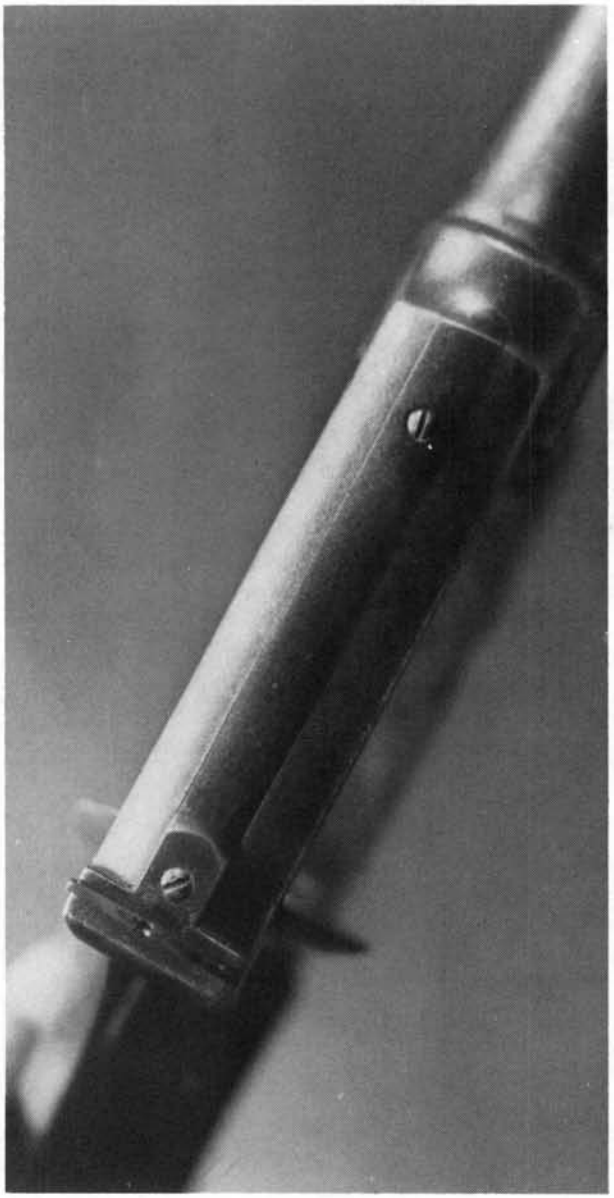


24. Remove the spring and plunger from the rear of the cylinder latch.

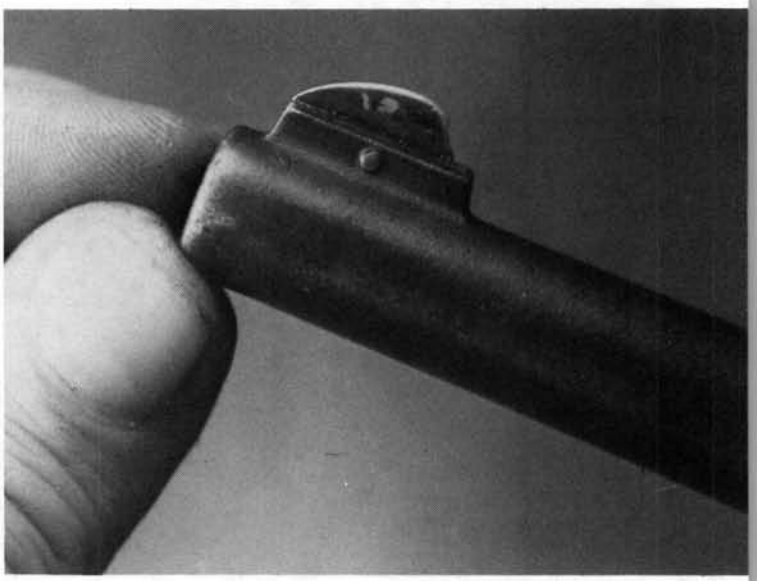


25. Drifting out the small cross-pin in the underlug of the barrel will release the forward latch and its spring for removal toward the rear.

26. The rear sight is retained only by its front screw. The screw at the rear is the elevation adjustment.



27. The front sight blade is retained by a cross-pin.



Reassembly Tips:

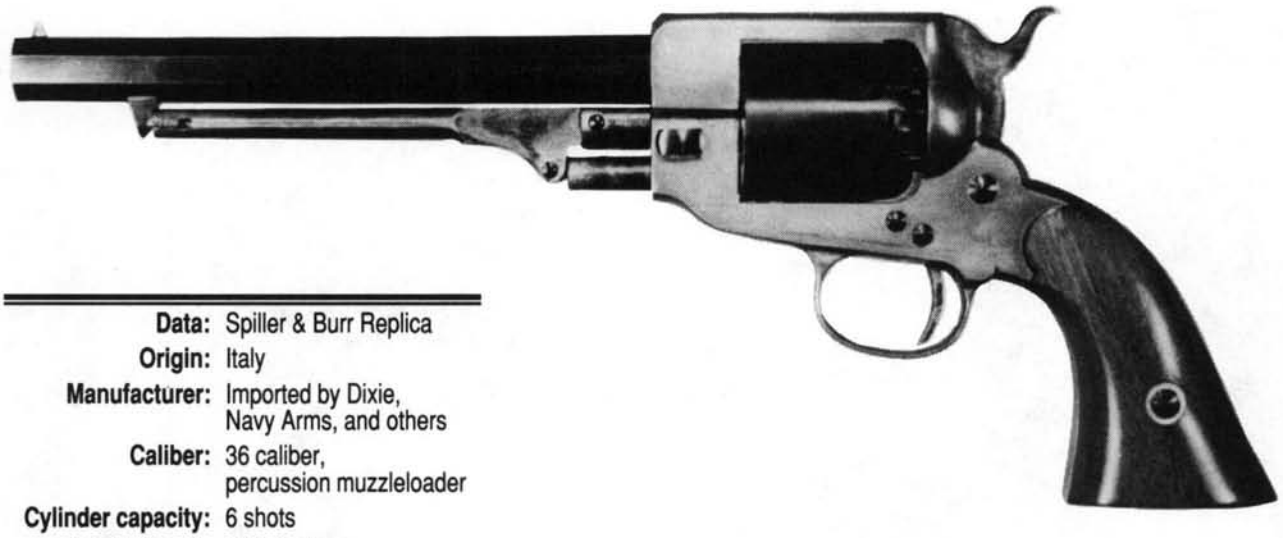
When replacing the cylinder latch in the frame, place the plunger against the frame recess and compress the spring, then move the front of the latch inward.

When replacing the cylinder hand plunger, the angled cut in its side must be toward the recess in the hammer block (see step #21).

When replacing the sideplate, be sure the cylinder hand is all the way forward, into its slot in the frame.

When replacing the ejector rod, tighten it firmly, but take care not to use too much force. The fine threads are easily stripped.

Spiller & Burr Replica

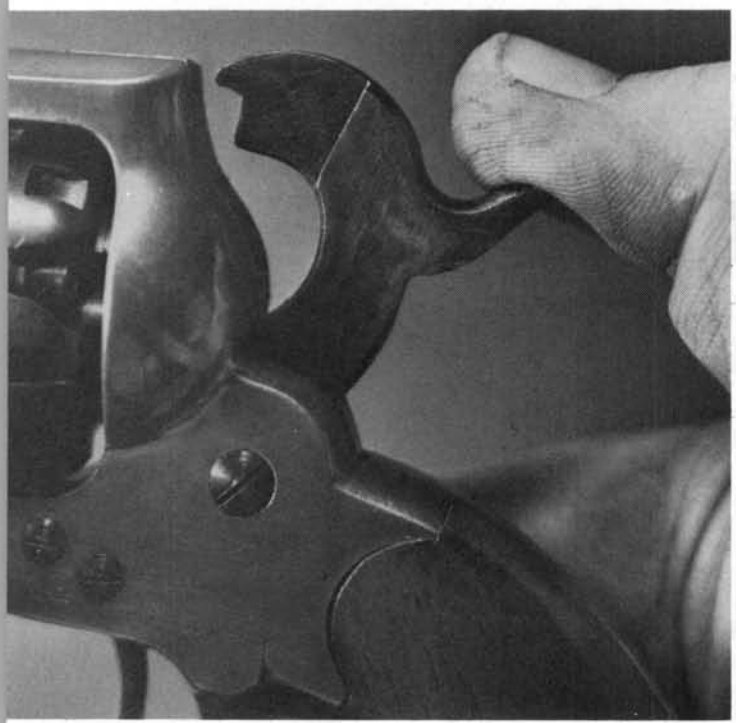


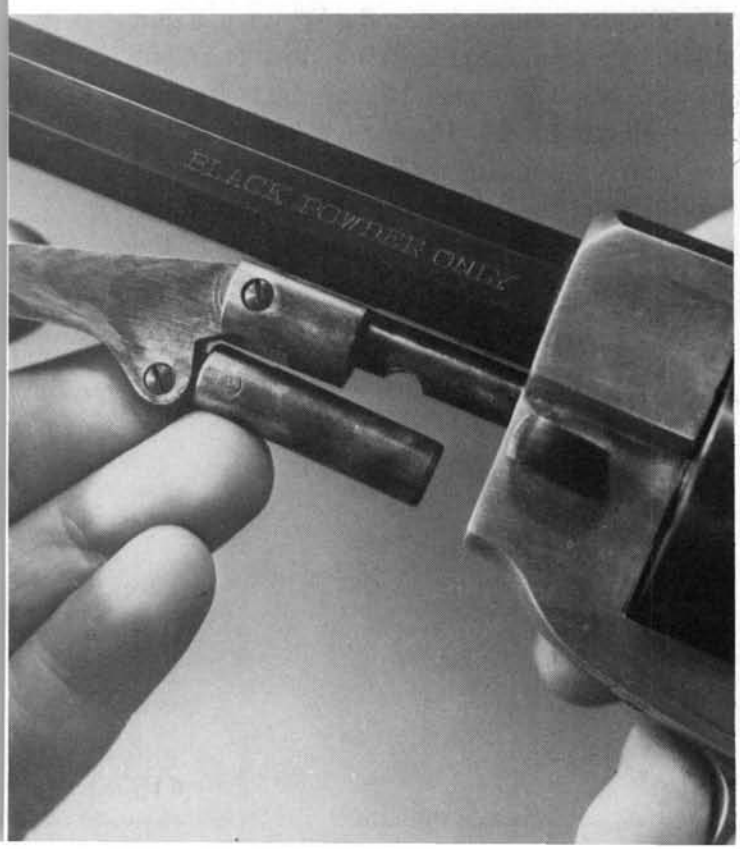
Data:	Spiller & Burr Replica
Origin:	Italy
Manufacturer:	Imported by Dixie, Navy Arms, and others
Caliber:	36 caliber, percussion muzzleloader
Cylinder capacity:	6 shots
Overall length:	12 1/2 inches
Barrel length:	7 inches
Weight:	40 ounces

During the Civil War, Spiller & Burr of Atlanta made around 1500 revolvers patterned after the Whitney, a gun that had a slight resemblance to the Remington. The Confederate guns were brass-framed and the originals are now highly valued collector pieces. The modern recreation of the Spiller & Burr is much more finely made than the originals, and of better materials. The mechanism, however, is identical, and the instructions will apply to the collector pieces as well.

Disassembly:

1. Set the hammer on the loading step, the middle notch, to free the cylinder.

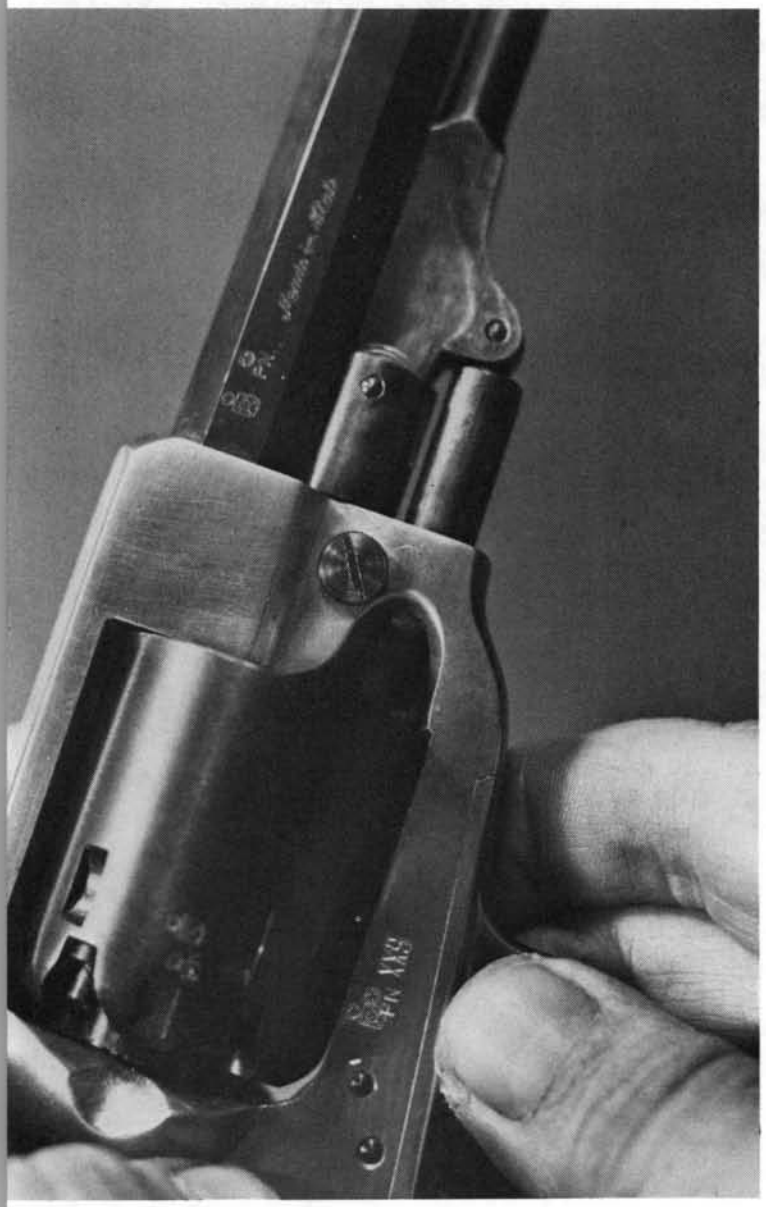




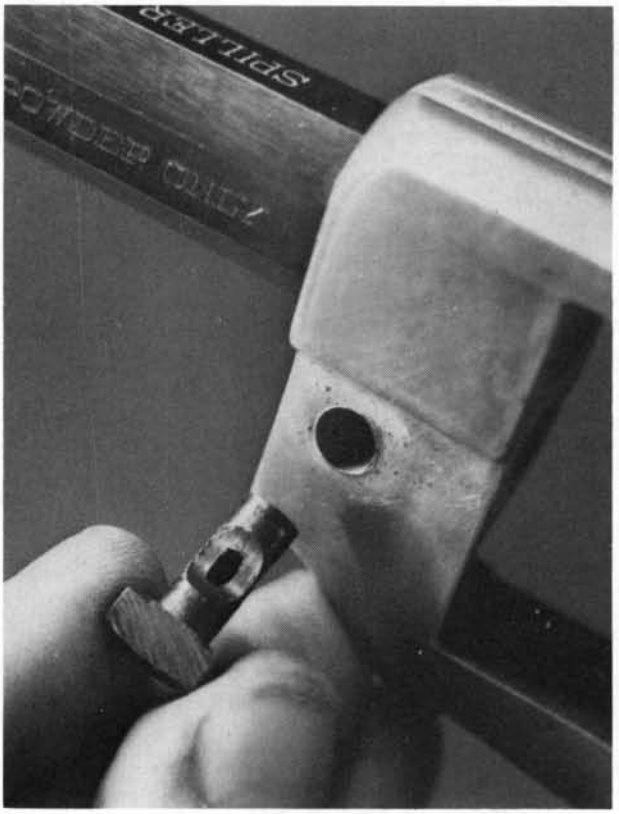
2. Give the cylinder pin retainer a half-turn. That is, turn it until its lower surface is at the top.

3. Remove the cylinder pin, and the attached loading lever assembly, toward the front.

4. If total takedown is intended, the cylinder pin retainer can be removed. Hold the retainer on the left side, and take out the large screw on the right side of the frame. Take care not to lose the spring washer that will come off with the screw.

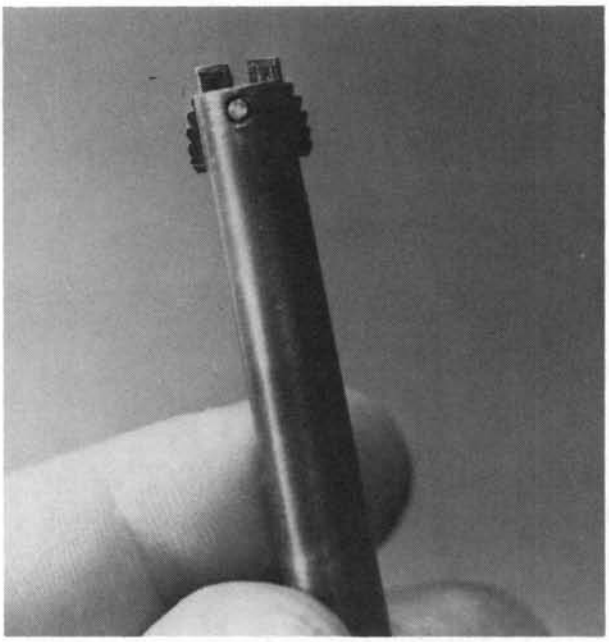


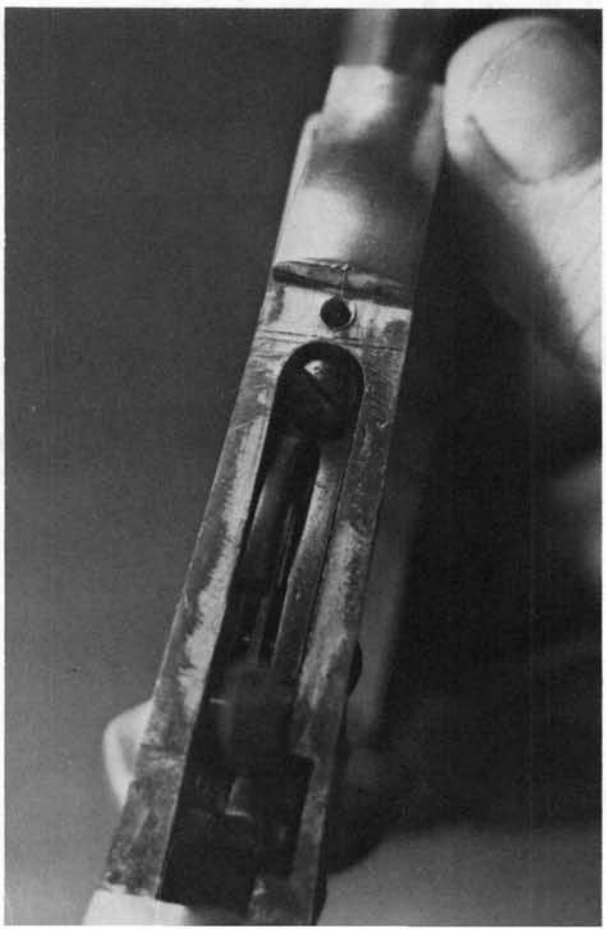
5. Remove the cylinder pin retainer toward the left.



6. After the base pin and lever assembly are taken out, remove the cylinder toward the right.

7. Drifting out the small pin at the end of the loading lever will release the lever latch and its spring for removal. Removal of the two cross-screws in the lever assembly will allow separation of the lever, rammer, and the cylinder base pin.

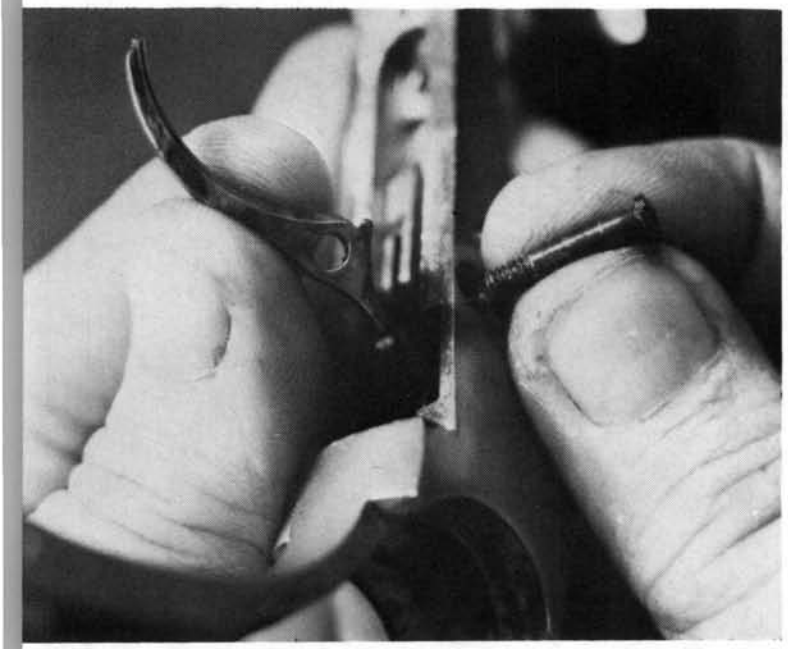


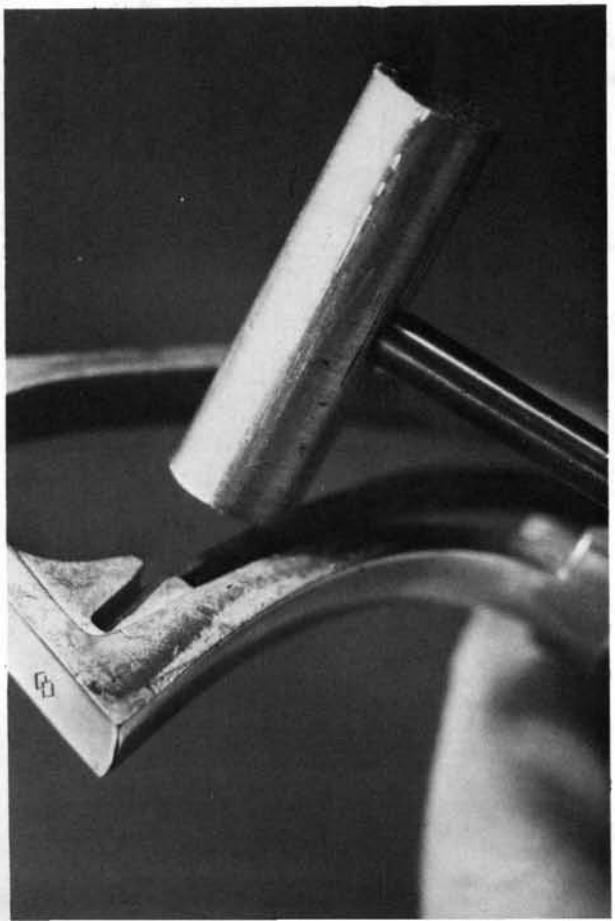


8. Remove the trigger guard screw, located on the underside of the frame. With the hammer in the loading notch, move the guard slightly forward to free its rear lug, then remove the guard downward.

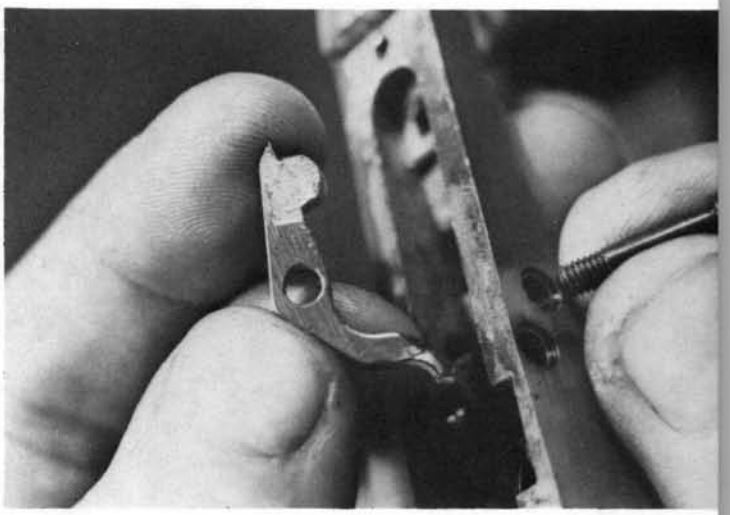
9. Remove the large screw at the front of the frame recess, and take out the combination trigger and cylinder stop spring.

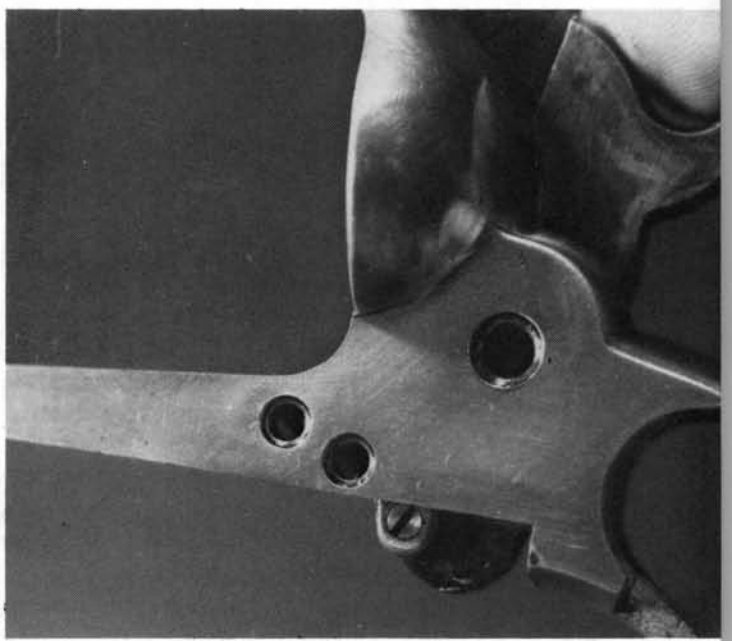
10. The cylinder stop, trigger, and hammer are retained by cross-screws in the frame. Take out the trigger screw and remove the trigger from the bottom of the frame.





11. Take out the cylinder stop screw and remove the cylinder stop from the bottom of the frame.





13. Remove the hammer screw and move the hammer downward until the cylinder hand screw is accessible at the lower edge of the frame. Remove the screw toward the left.

12. Use a small brass hammer, or a hammer and brass drift, to drive the hammer spring from its recess in the frame. Strike the side of the spring as near to the mounting recess as possible.

14. Remove the cylinder hand and its attached spring downward.

15. Remove the hammer from the top of the frame.

Reassembly Tips:

When replacing the hammer spring, engage the upper end of the spring with the roller at the lower rear of the hammer, then grip the lower end of the spring with smooth-jawed pliers and flex the spring slightly until it can be started into its recess. Use a small brass hammer to drive the spring into place, and be sure the top of the spring remains engaged properly with the hammer.

When replacing the cylinder base pin retainer, note that it must be turned with its center hollowed-out section downward to retain the pin and lever assembly. When replacing the retainer screw, do not over-tighten it, or the retainer will be immobilized.

Swamp Angel

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Forehand & Wadsworth Swamp Angel also apply to the following guns.

Forehand & Wadsworth Bulldog **Forehand & Wadsworth Terror**

Data:	Swamp Angel
Origin:	United States
Manufacturer:	Forehand & Wadsworth, Worcester, Massachusetts
Cartridge:	41 Rimfire
Cylinder capacity:	5 rounds
Overall length:	$5\frac{5}{8}$ inches ($1\frac{7}{8}$-inch barrel)
Barrel lengths:	$1\frac{7}{8}$, $3\frac{3}{8}$, and 4 inches
Weight:	12 ounces

Made by Forehand & Wadsworth in the 1875-1890 era, the Swamp Angel had two counterparts—the "Bulldog" in 38 Rimfire, and the "Terror" in 32 Rimfire. In a catalog published in its time period, the Swamp Angel was priced at $5.00. It has been included here as one example of the sheath-trigger revolver that was a popular pocket gun of earlier times.

Disassembly:

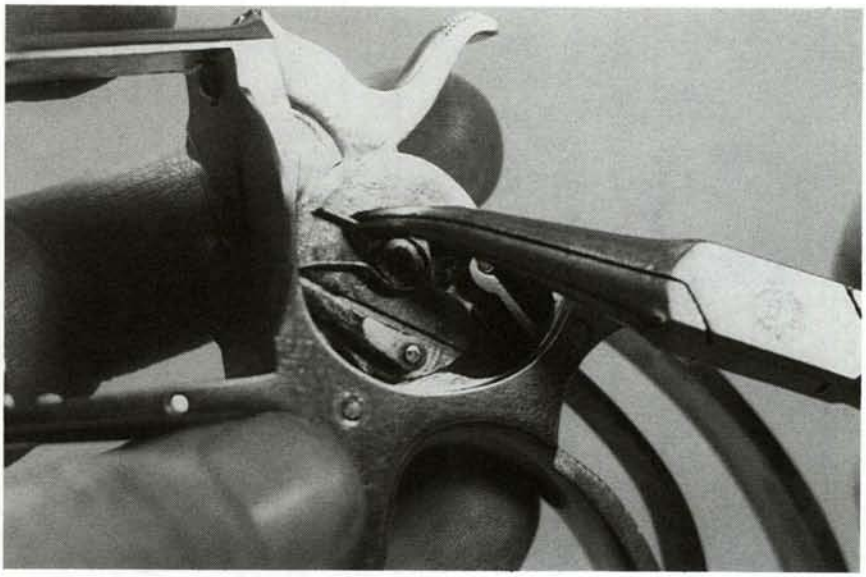
1. Depress the base pin latch, and take out the ejector rod from the center of the pin.

2. Depress the latch farther, and remove the cylinder base pin.

3. Remove the cylinder from the frame.

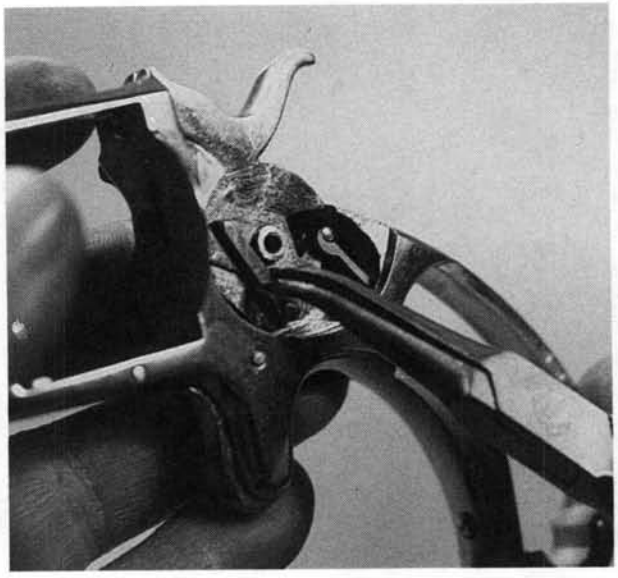
4. Remove the grip screw, and take off the grips. Remove the sideplate screw.

5. Hold the gun as shown, and tap the grip frame lightly with a non-marring mallet until the sideplate falls into the hand.

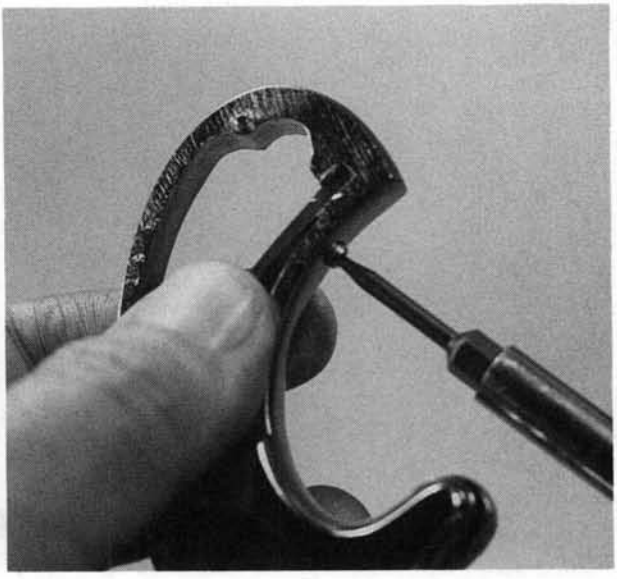


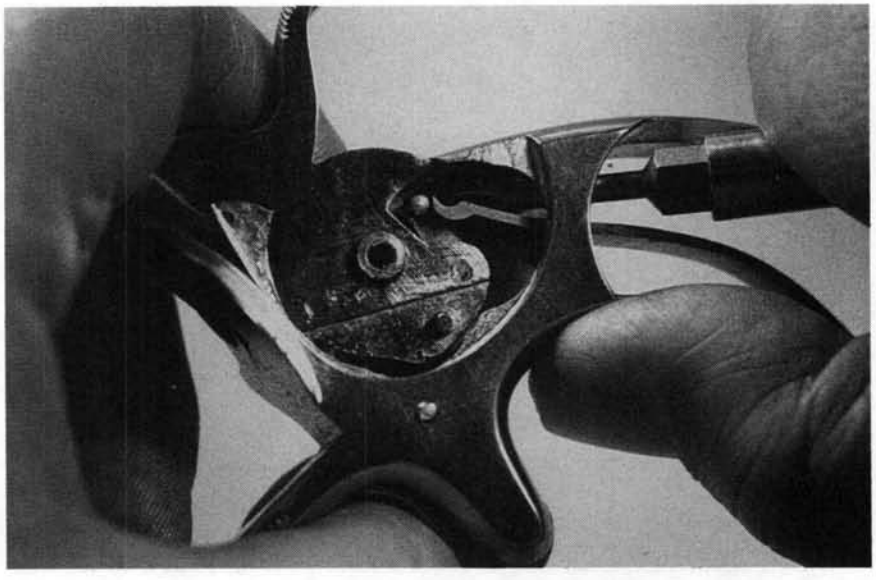
6. Remove the cylinder hand spring from the hammer post.

7. Take out the cylinder hand.



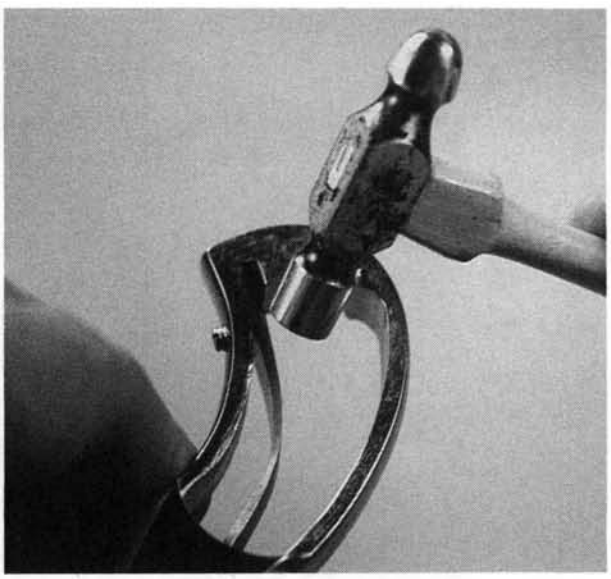
8. Back out or remove the hammer spring tension screw.





9. Insert a tool to depress the top of the hammer spring, and nudge the stirrup out of the spring hooks.

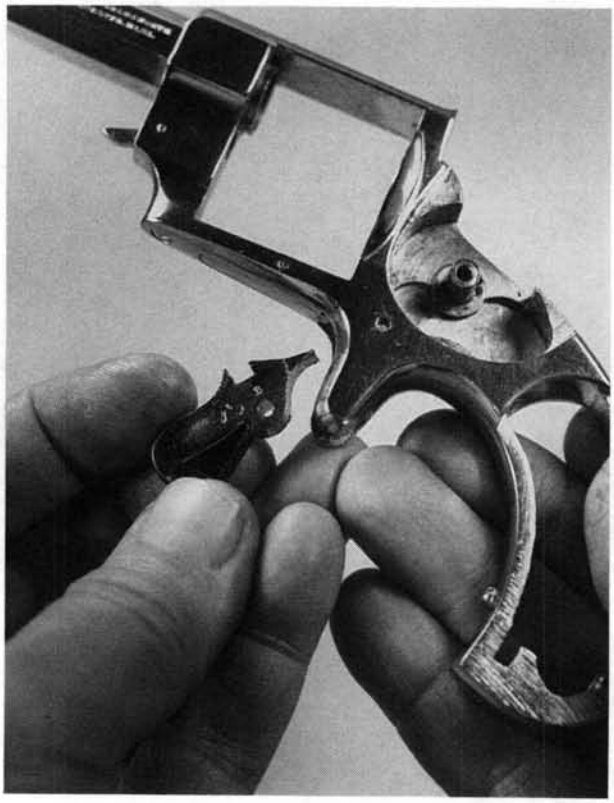
10. Tap the lower end of the hammer spring out of its recess toward the left, and remove the spring downward.



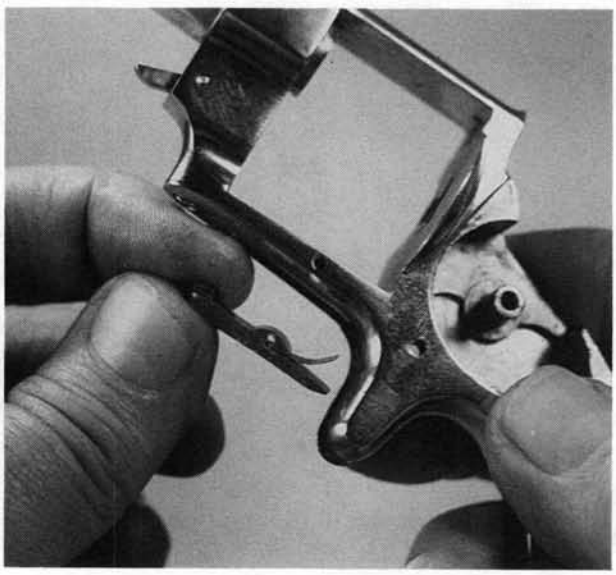
11. Depress the trigger, tip the hammer back to the position shown, move the stirrup to clear the frame and remove the hammer to the left.

12. Drift out the trigger cross-pin.

13. Remove the trigger toward the left. The V-spring is easily detached from the back of the trigger.



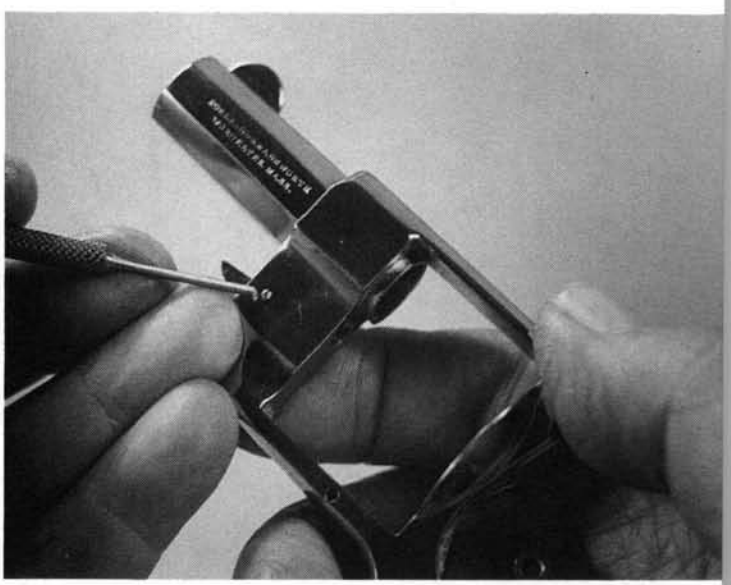
14. Drift out the cylinder stop cross-pin.

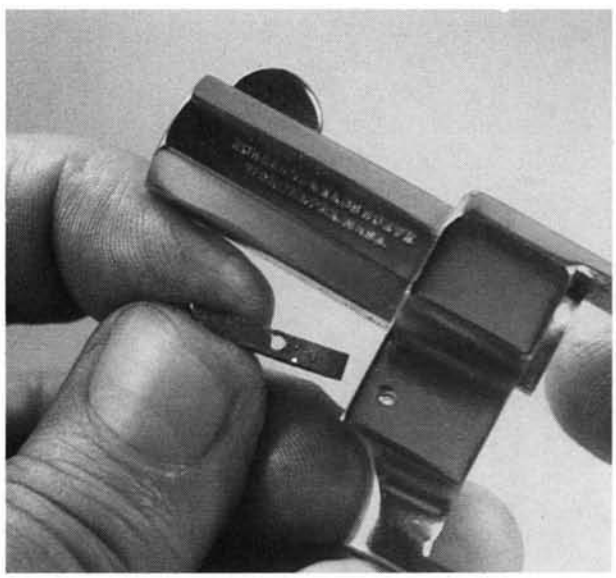


15. Remove the cylinder stop downward. The stop spring is usually tightly fitted in its slot, and unless necessary for repair, it is best left in place.

16. Remove the screw on the underside of the frame at the front and take out the base pin latch spring.

17. Drift out the base pin latch cross-pin.

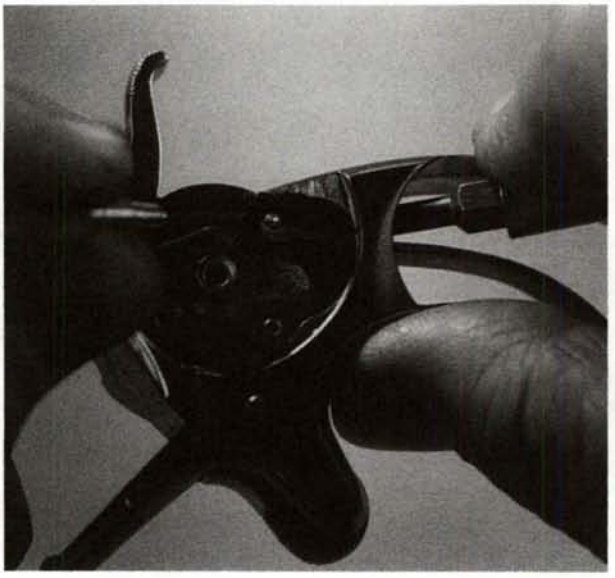


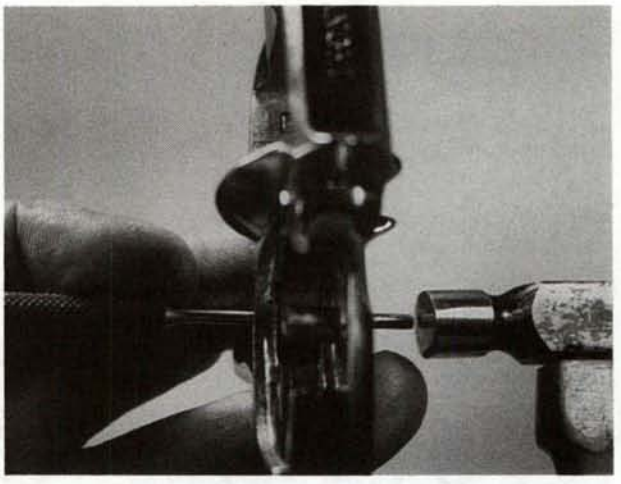


18. Remove the base pin latch toward the front.

Reassembly Tips:

1. When replacing the hammer spring, use a tool to depress the top, and another to nudge the stirrup into the hooks.





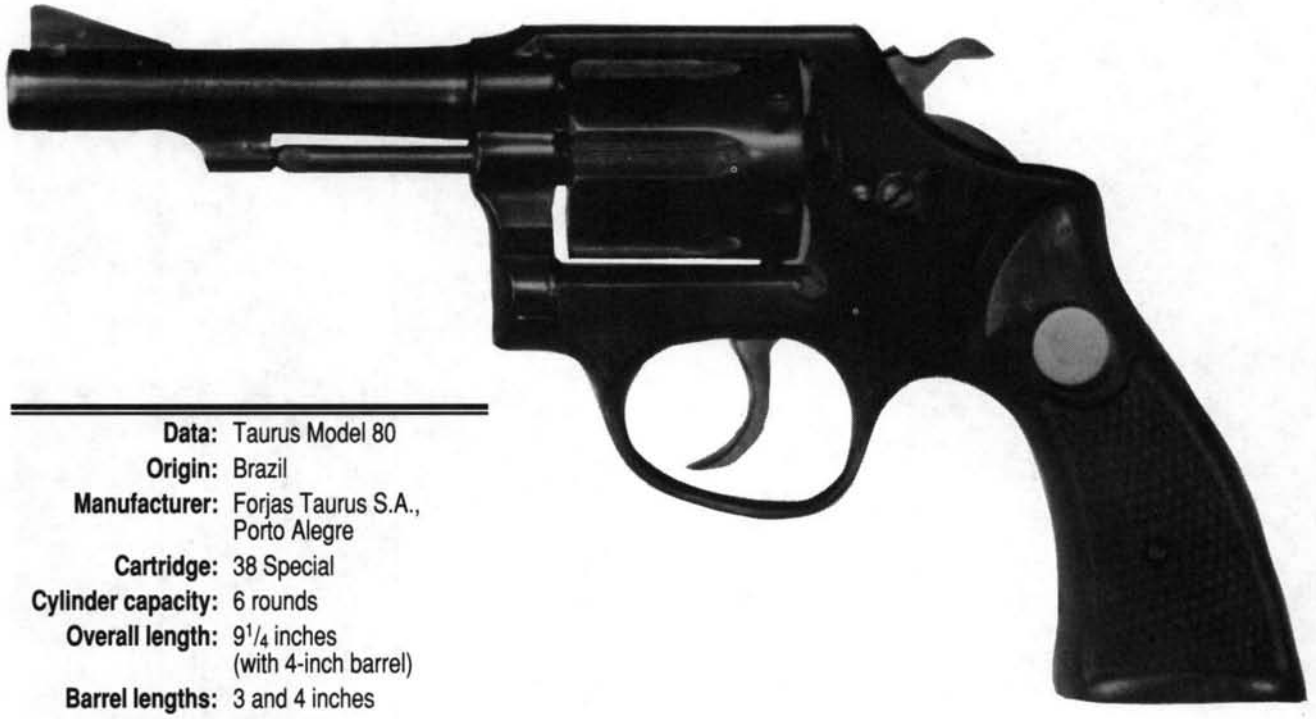
2. When replacing the cross-pinned parts, insert a drift for positioning before driving in the pins.

Taurus Model 80

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Taurus Model 80 also apply to the following guns.

Taurus Model 73
Taurus Model 82
Taurus Model 83
Taurus Model 94



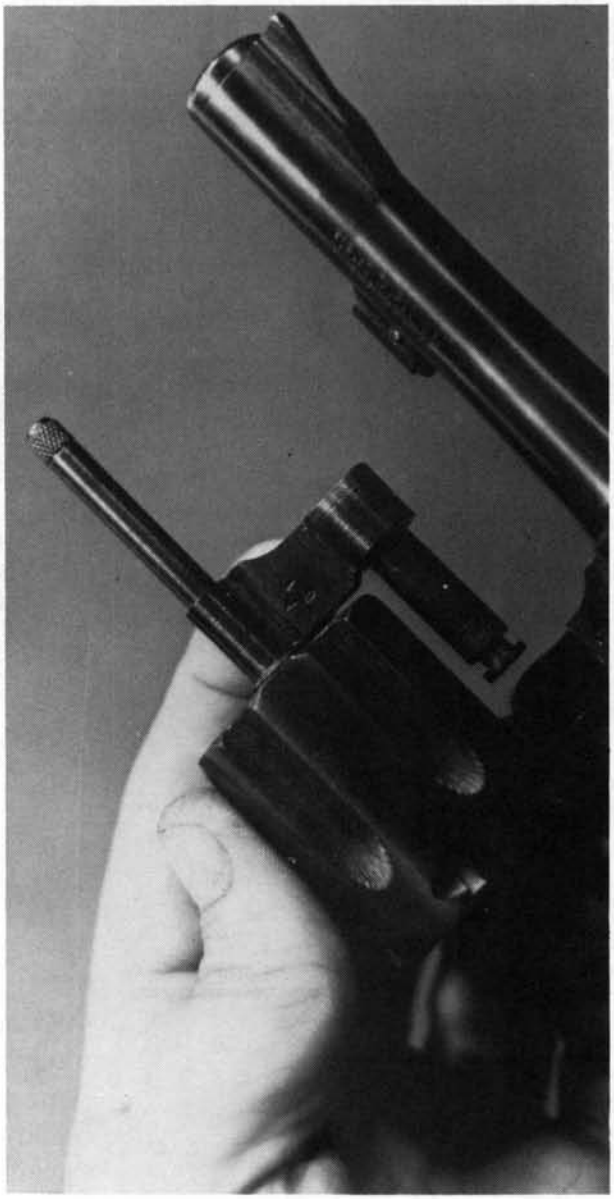
Data:	Taurus Model 80
Origin:	Brazil
Manufacturer:	Forjas Taurus S.A., Porto Alegre
Cartridge:	38 Special
Cylinder capacity:	6 rounds
Overall length:	9 1/4 inches (with 4-inch barrel)
Barrel lengths:	3 and 4 inches
Weight:	31 ounces (with 4-inch barrel)

Externally resembling the classic Smith & Wesson pattern, the Taurus is different inside in several respects. One of the most notable is the unique hammer spring base which allows tension adjustment of the coil mainspring. The hammer block system is also different, and is an excellent design. The gun shown here is an early-production piece, with the "stripes" in the cylinder flutes. Several other Taurus models are cross-referenced to the Model 80, and these differ only in non-mechanical features.

Disassembly:

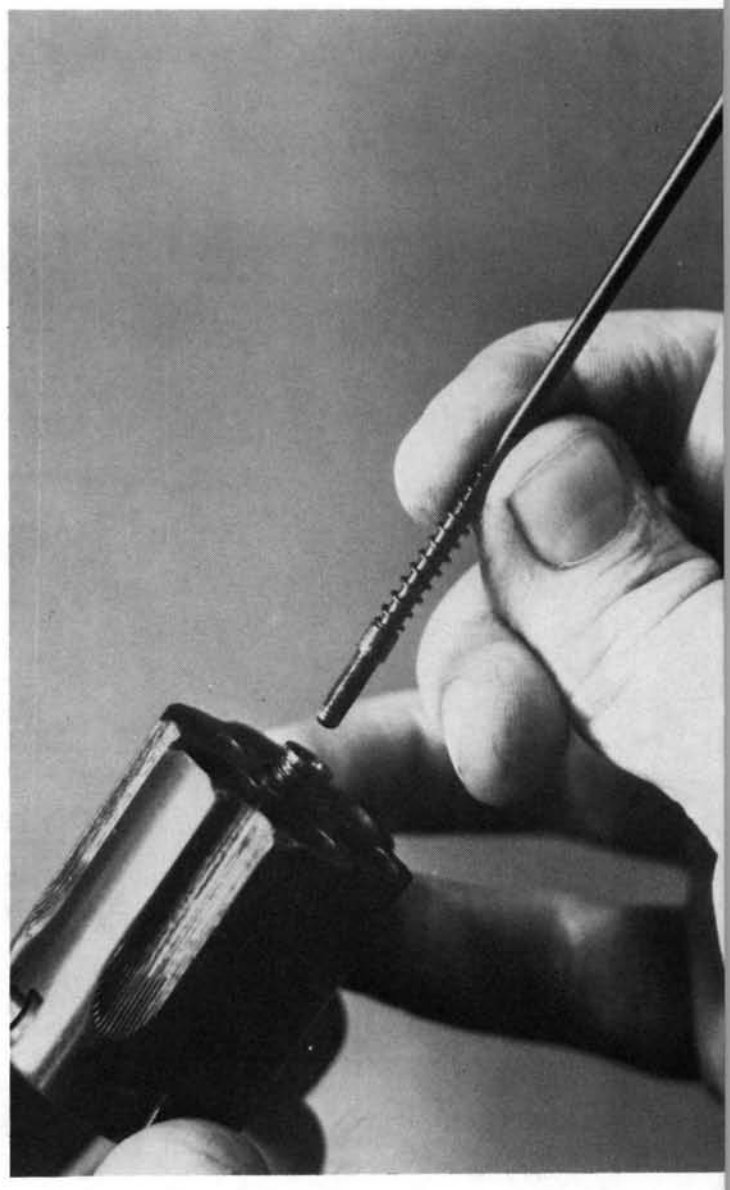
1. Remove the forward sideplate screw, on the right side of the frame just forward of the trigger.

2. Move the crane forward out of the frame, and remove the cylinder and crane assembly toward the left.

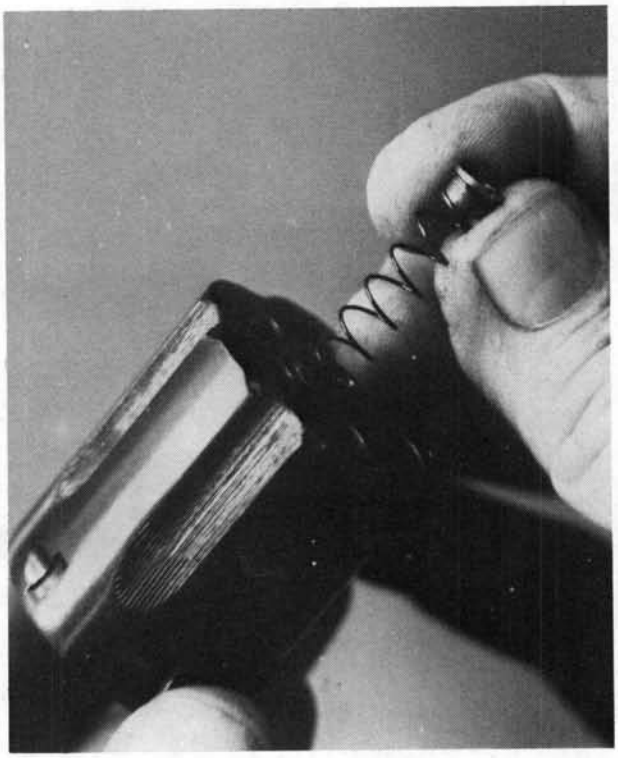


3. Remove the crane from the front of the cylinder. Grip the head of the ejector rod with leather-padded smooth-jawed pliers, and unscrew it counterclockwise (front view). Remove the ejector rod from the front of the cylinder.

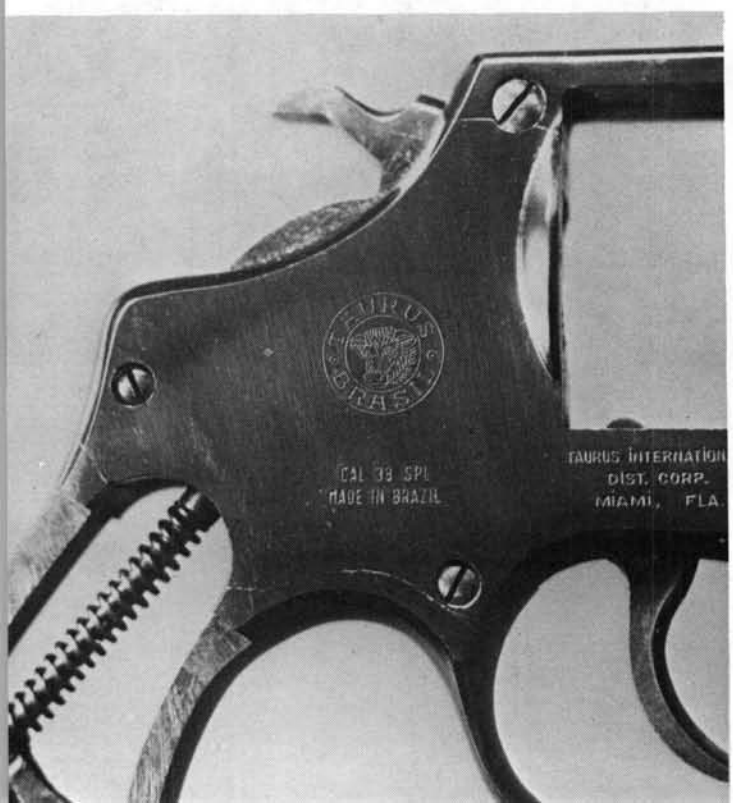
4. Remove the cylinder lock pin and its spring from the front of the cylinder.



5. Remove the ejector spring and its bushing from the front of the cylinder.

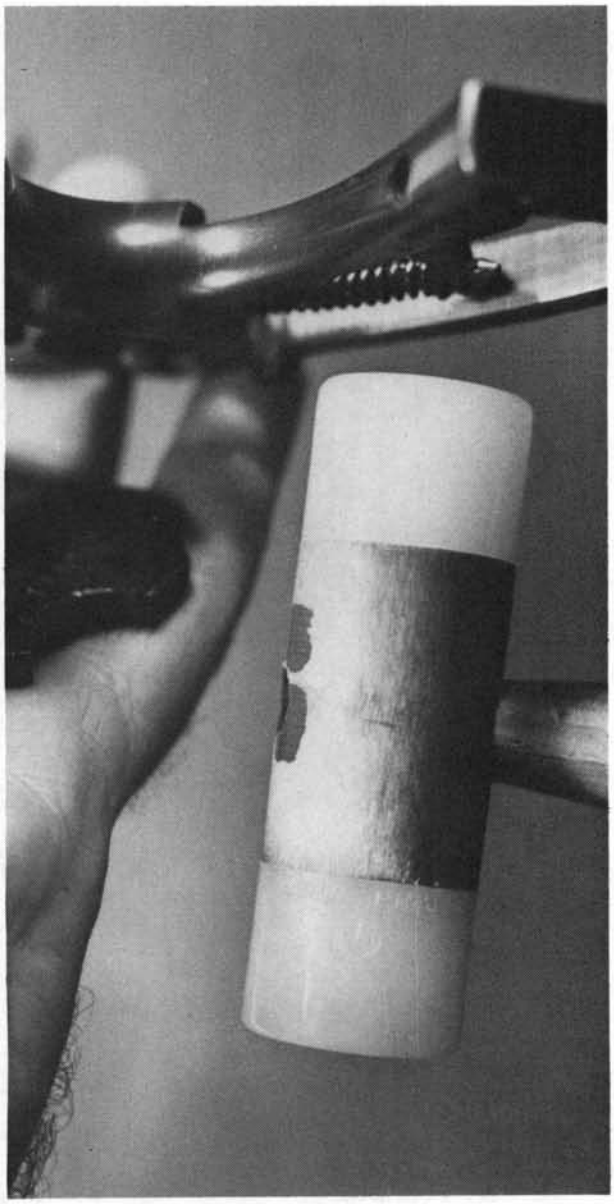


6. Remove the ejector/ratchet from the rear of the cylinder.

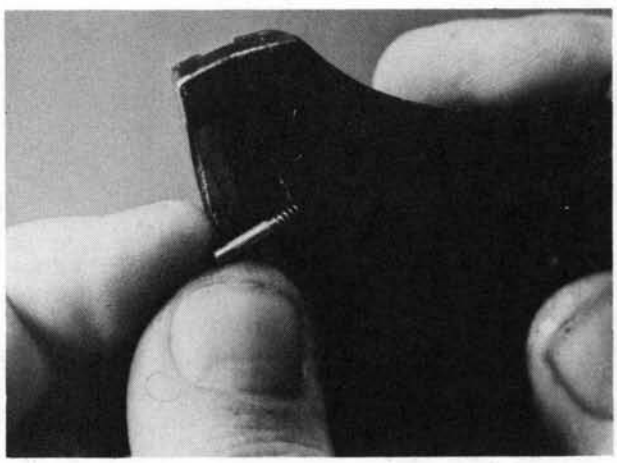


7. Remove the three remaining sideplate screws from the right side of the frame. Use a wider screwdriver on the upper plate screw.

8. Hold the gun as shown, and tap the grip frame with a nylon mallet until the sideplate drops off into the palm of the hand.

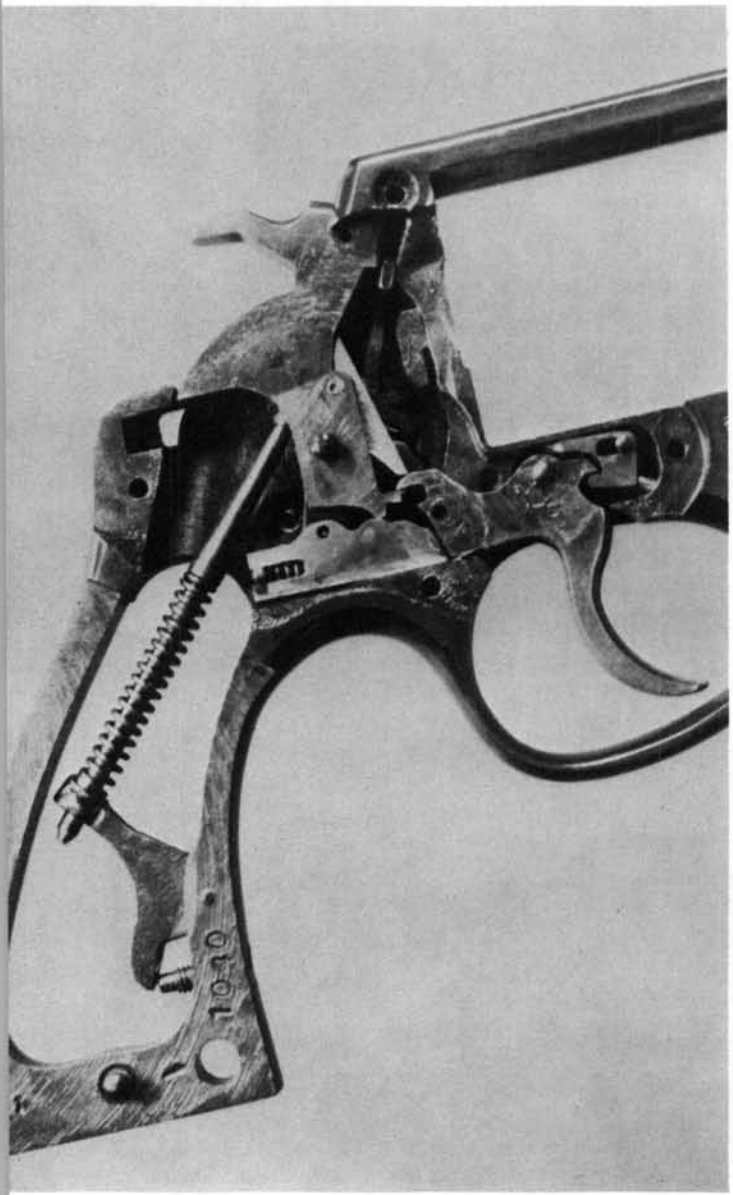


9. The cylinder hand will likely come off with the sideplate, held in place by its plunger and spring. Remove the cylinder hand from its recess.

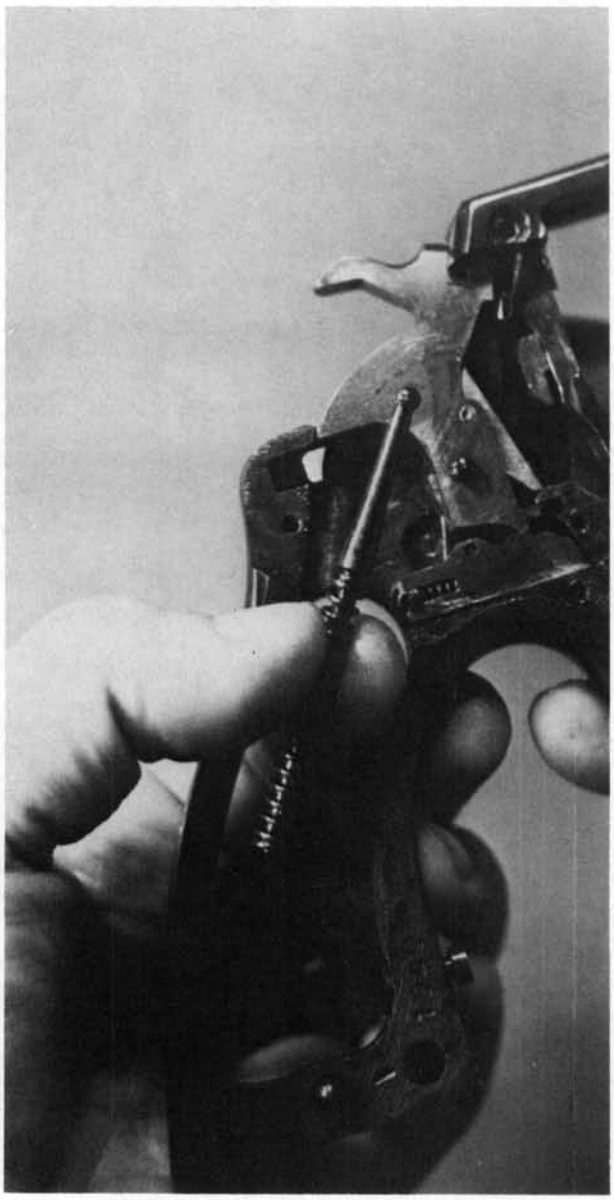


10. Remove the cylinder hand plunger and spring from the sideplate.

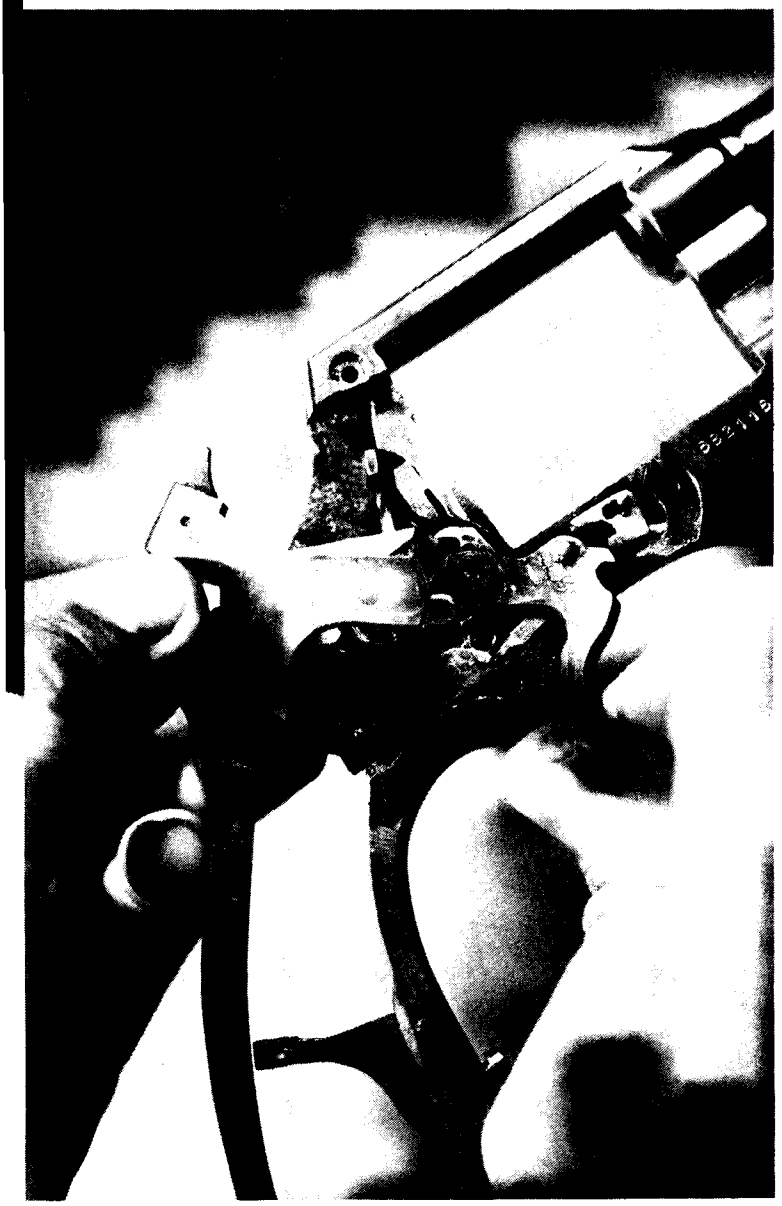
11. The internal mechanism is shown here in proper order, prior to disassembly.



12. Back out or remove the hammer spring tension screw, located at the lower front of the grip frame. Then remove the hammer spring and its guide toward the right.

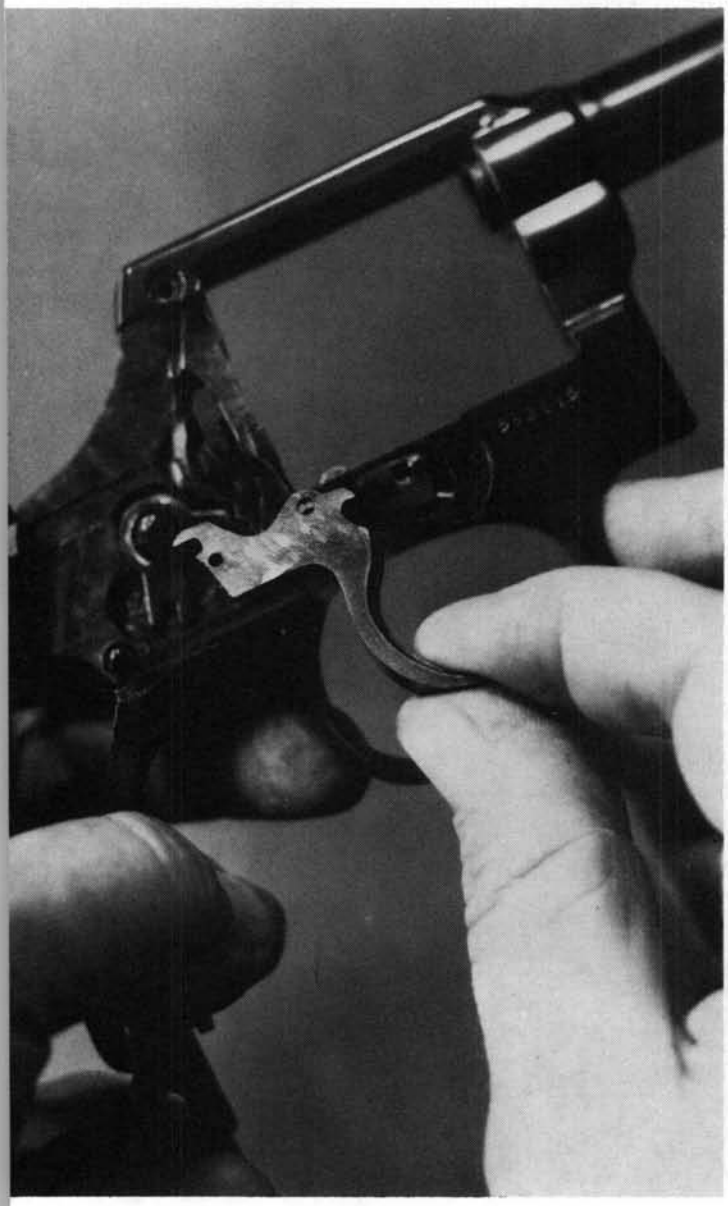


13. Move the cylinder latch to the rear, hold it there, and pull the trigger to tip the hammer back. Remove the hammer toward the right. Drifting out the cross-pin at the front of the hammer will allow removal of the double-action lever and its spring.

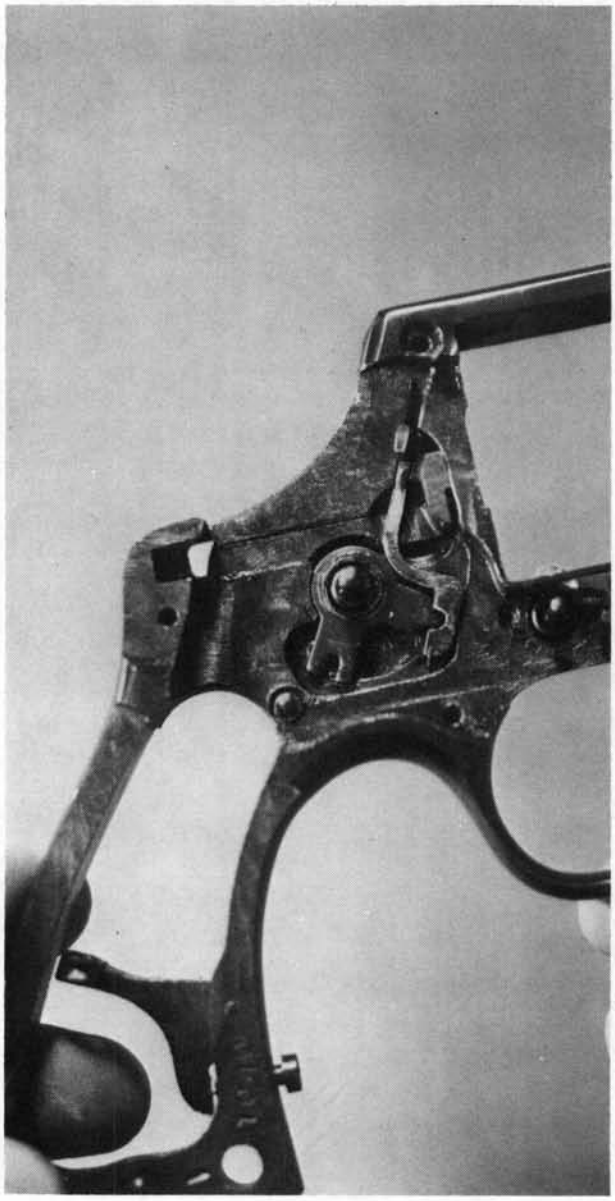


14. Insert a small screwdriver at the rear of the rebound slide and lift the slide outward off its post in the frame. The released spring will be caught on the shaft of the screwdriver. Remove the rebound slide to the right and rearward.

15. Remove the trigger toward the right.

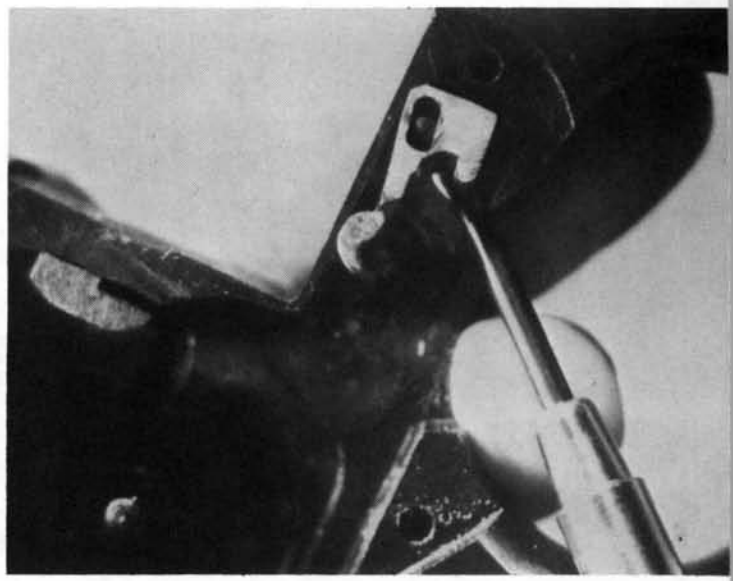


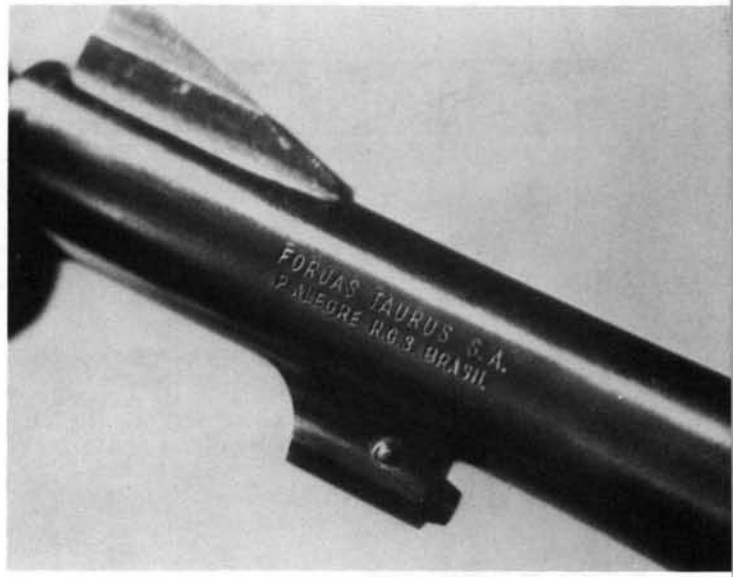
16. The hammer block system is shown in proper order, before disassembly. The two parts can simply be lifted out of the frame recess toward the right.



17. Remove the cylinder stop spring cover screw, located at the upper front of the trigger guard. Then remove the cylinder stop spring and plunger.

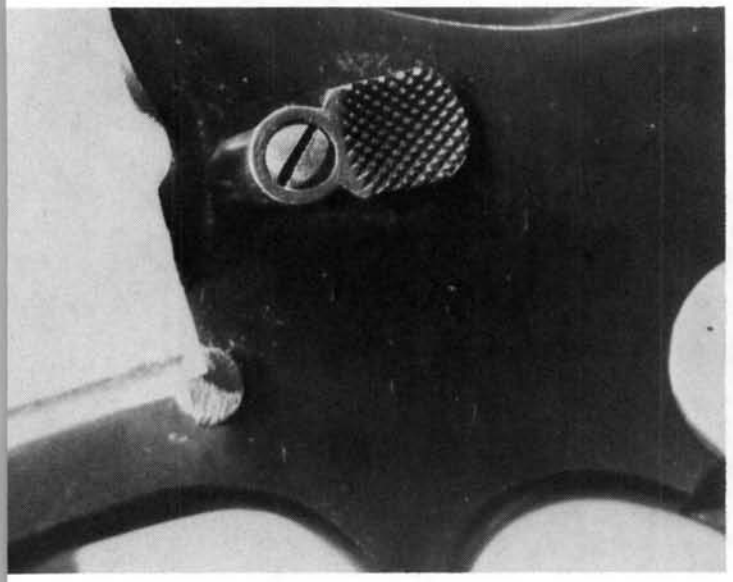
18. Tip the cylinder stop downward out of its slot in the frame, and move it out to the right for removal.



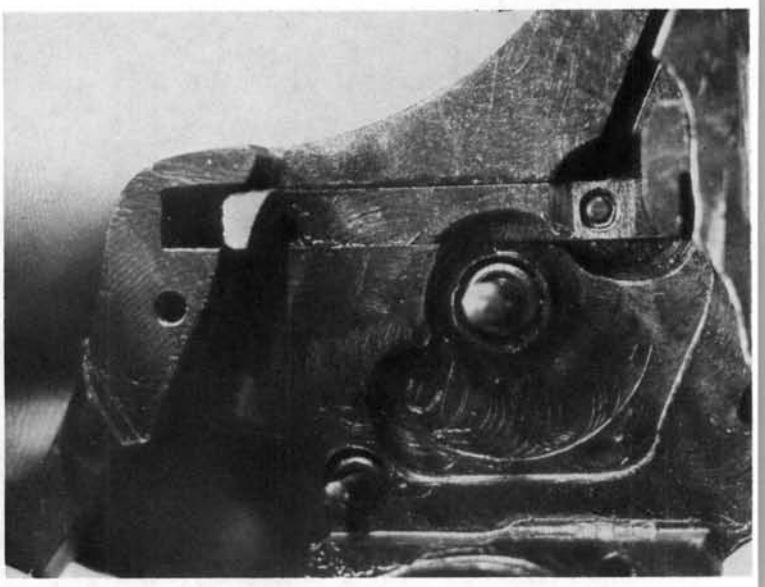


19. Drifting out the cross-pin in the barrel underlug will free the front lock and its plunger spring for removal toward the rear.

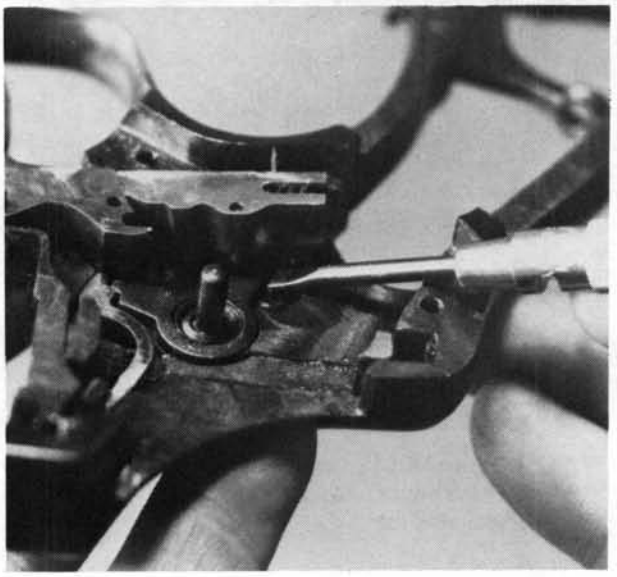
20. Remove the cylinder latch screw and take off the latch piece toward the left.



21. After removal of the screw and latch piece, move the internal portion of the cylinder latch toward the rear until its front end is clear, then remove it toward the right. Take care to restrain the small spring and plunger at the rear of the latch, as these will be released as the latch clears its recess in the frame.



Reassembly Tips:



1. When replacing the rebound slide in the frame, be sure its inside stud engages its recess in the lower arm of the hammer block lever.

2. When replacing the sideplate, place the cylinder hand in position in its recess and release its spring plunger to hold it there. Be sure the pivot stud of the hand enters its hole in the trigger as the sideplate is pushed into place.

Taurus Model 669

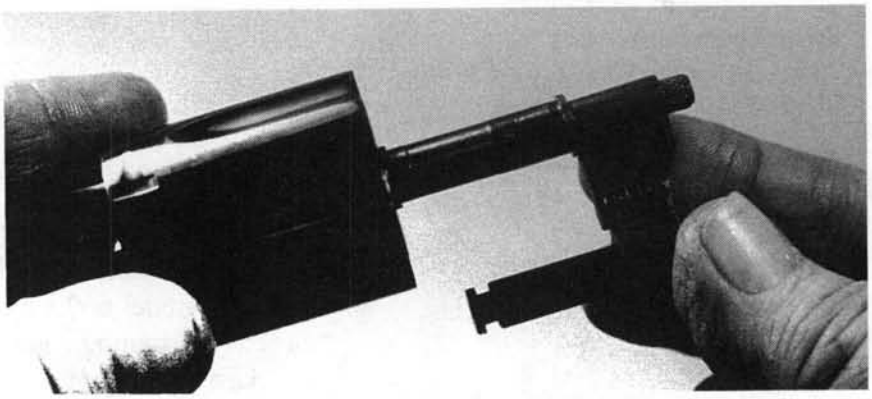
Data:	Taurus Model 669
Origin:	Brazil
Manufacturer:	Forjas Taurus S. A., Porto Alegre
Cartridge:	357 Magnum
Cylinder capacity:	6 rounds
Overall length:	9 inches (4-inch barrel)
Barrel lengths:	4 and 6 inches
Weight:	37 ounces (4-inch barrel)

Externally similar to the Smith & Wesson Model 586, the Taurus Model 669 differs in several points mechanically. It is also different internally from the earlier Taurus revolvers. The Model 669 was introduced in 1988. A wide-spur target-type hammer and a fully-adjustable rear sight are standard equipment.

Disassembly:

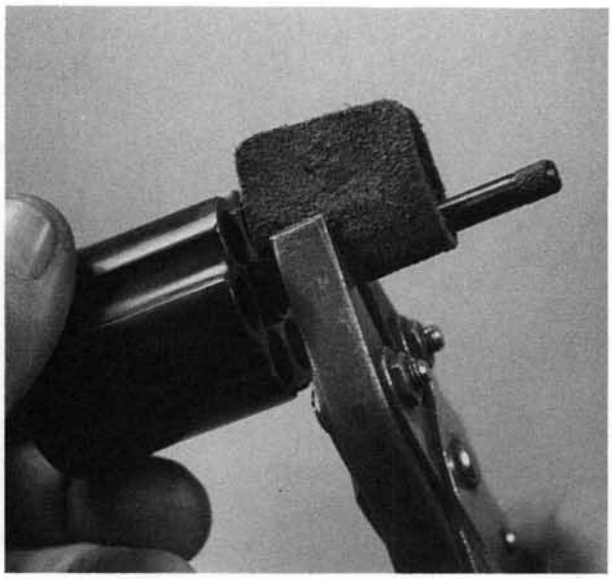
1. Remove the front sideplate screw on the right side.

2. Operate the cylinder latch, open the cylinder, and remove the crane and cylinder assembly toward the front.

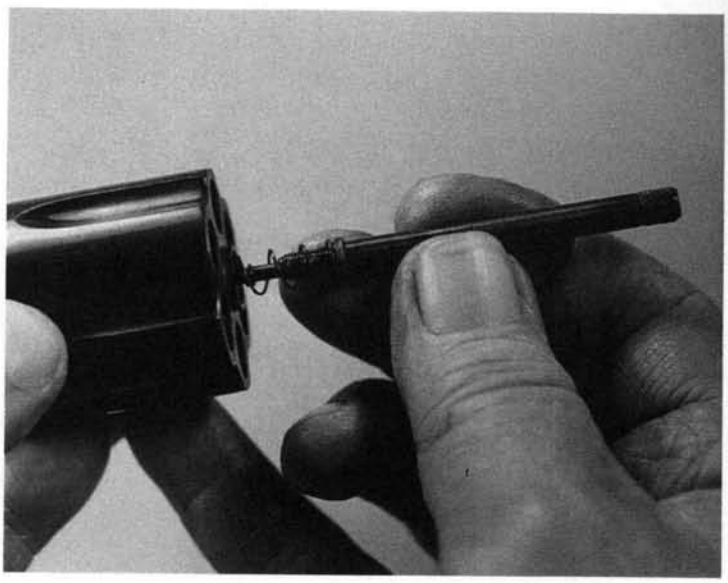


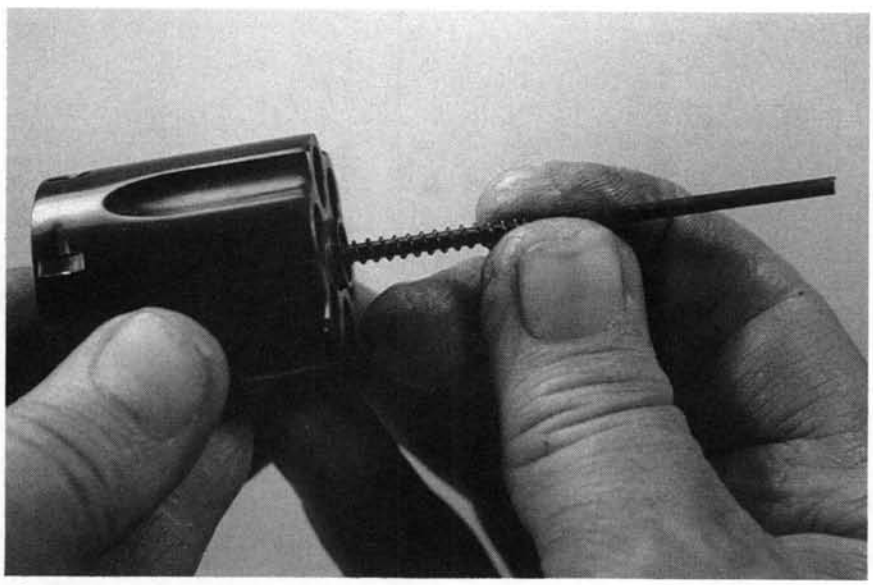
3. Remove the crane toward the front.

4. Use leather-padded pliers to unscrew the ejector rod. It has a reverse thread, and unscrews clockwise, front view.



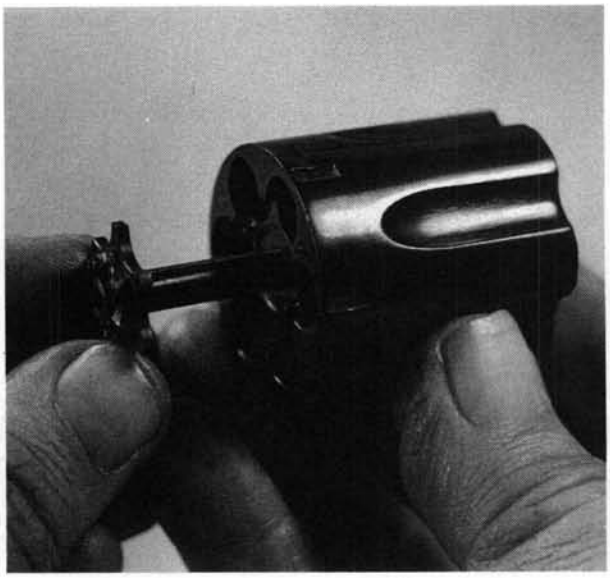
5. Remove the ejector rod and the ejector spring and collar toward the front.





6. Remove the cylinder lock pin and its spring toward the front.

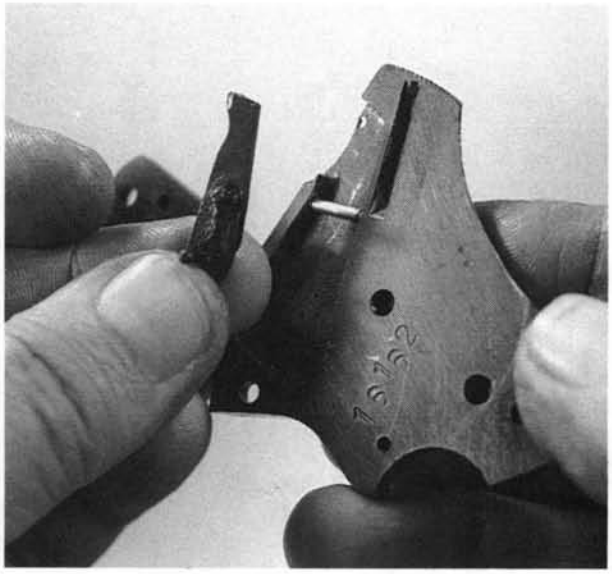
7. Remove the ejector/ratchet unit toward the rear.

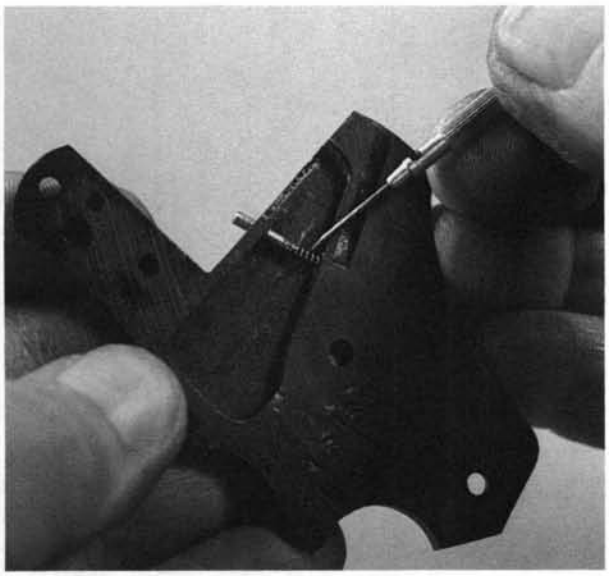


8. Remove the grip screw and take off the grips. Take out the three sideplate screws.

9. Hold the gun as shown, and tap the grip frame with a nylon hammer until the sideplate falls off into the hand.

10. The cylinder hand may come off with the sideplate, or it may stay on the trigger. Either way, it is easily detached.





11. The cylinder hand spring and plunger can be taken out through the access hole in the front edge of the sideplate.

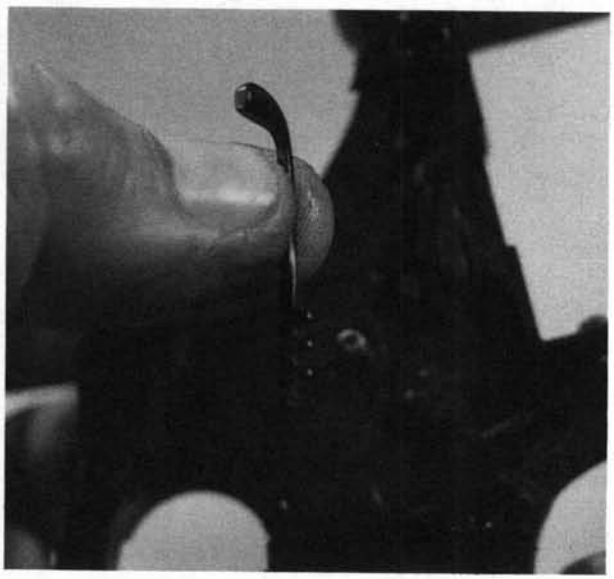
12. Push the cylinder latch to the rear so the hammer can be cocked, and insert a small drift into the hole in the spring guide. If the hole is not visible, turn the guide.

13. Pull the trigger and ease the hammer down. Take out the hammer spring assembly. If this is to be disassembled, use caution and control the compressed spring.

14. Push the cylinder latch to the rear, pull the trigger, and remove the hammer toward the right. The cross-pin at the front of the hammer can be drifted out to release the double-action lever and its spring for removal, but in normal takedown they are best left in place.

15. Use a small screwdriver at the rear of the rebound slide to slightly compress the spring and tip the rear of the unit outward, off its post. **Caution:** *This is a strong spring, under compression, so keep it under control.*

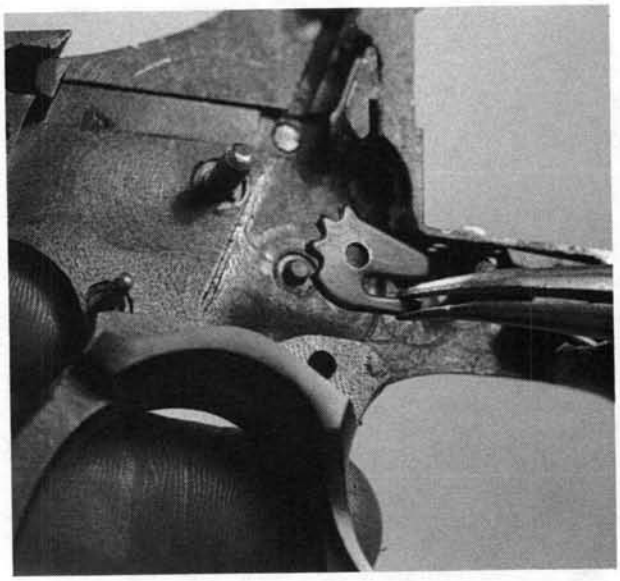
16. Remove the rebound slide, outward and toward the rear.



18. Remove the hammer block bar toward the right.

17. Remove the trigger toward the right.

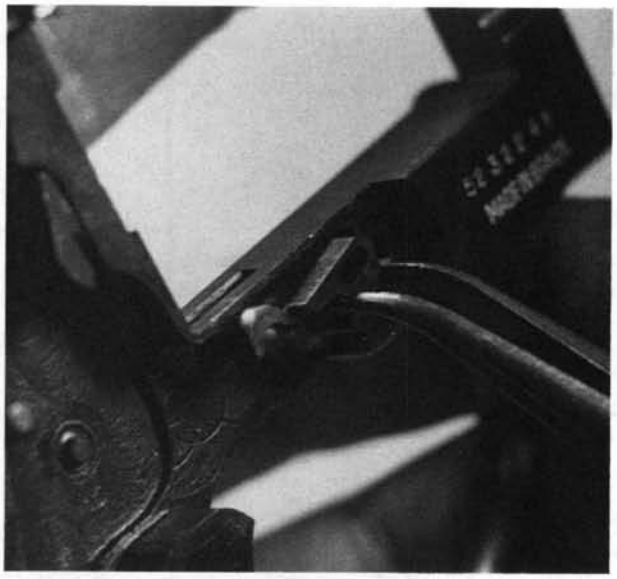
19. Remove the hammer block lever toward the right.



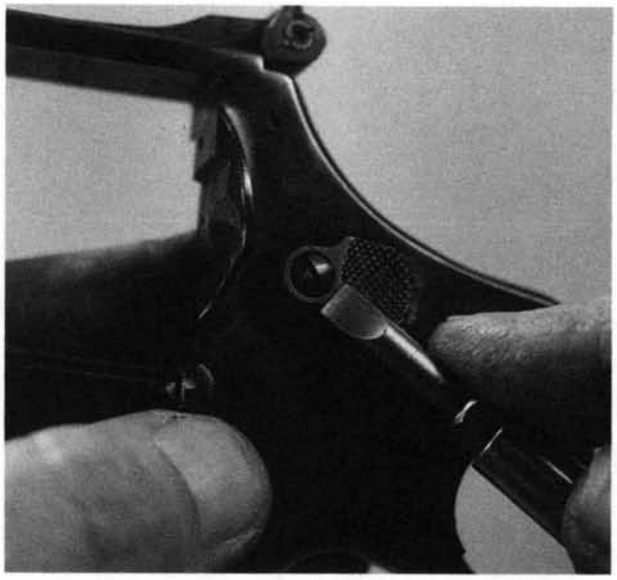
21. Remove the cylinder stop spring and plunger.

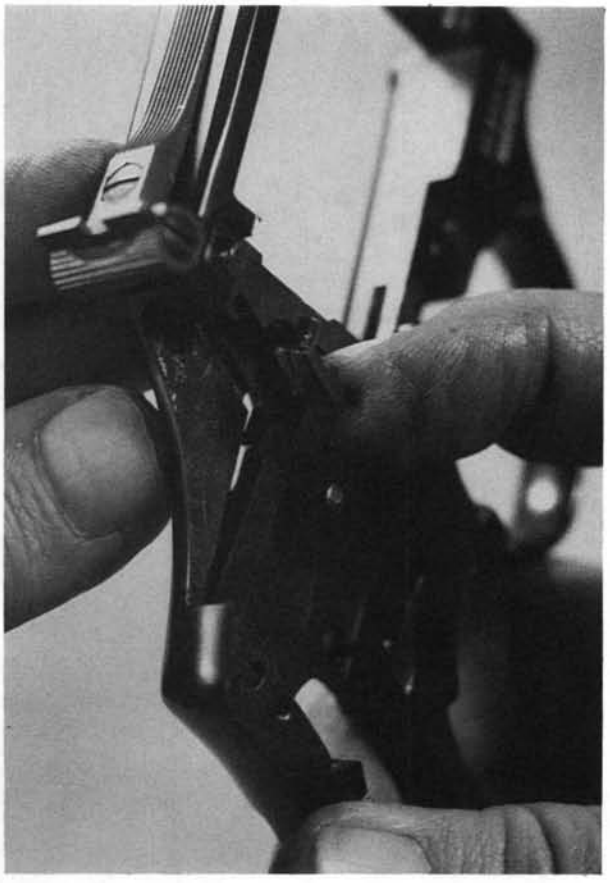
20. Remove the screw at the front of the trigger guard.

22. Move the cylinder stop to its rearmost and lowest position, and take it out toward the right.



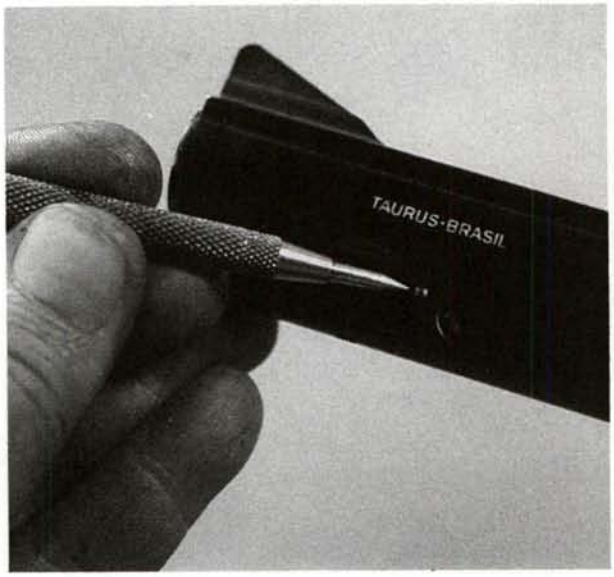
23. Remove the screw from the cylinder latch piece, and take off the latch piece toward the left.



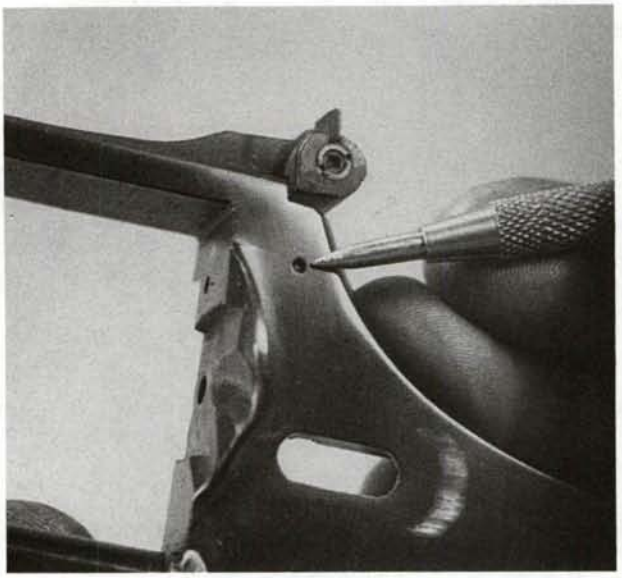


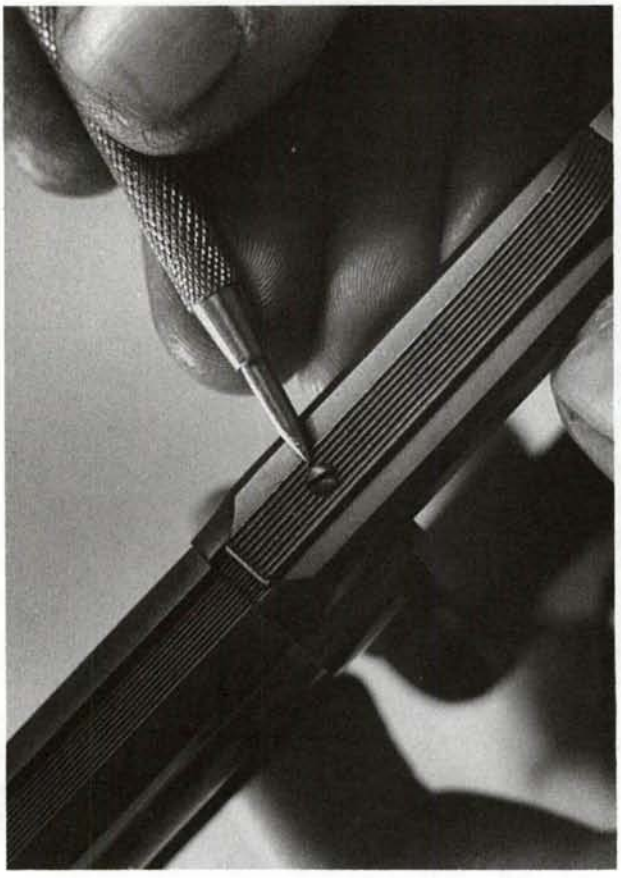
24. Move the cylinder latch assembly all the way to the rear, tip it outward at the front, and remove it. Take care that the small plunger and spring at its rear are not lost.

25. Drifting out the cross-pin in the barrel underlug will release the front latch plunger and spring for removal toward the rear.



26. The firing pin and its spring can be removed toward the rear after the cross-pin is drifted out toward the right.

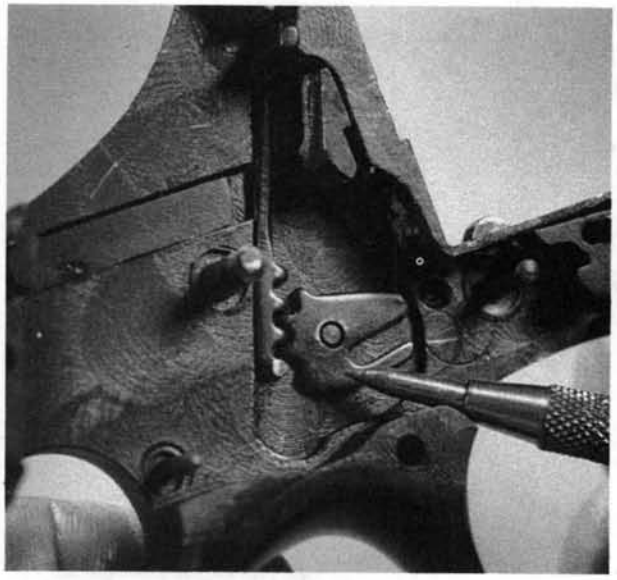




27. The rear sight is removed by taking out the small screw in its forward extension, and moving the sight toward the rear.

Reassembly Tips:

1. When installing the hammer block bar and lever, be sure the lower three teeth on the bar engage the two middle teeth on the lever, as shown.



2. When installing the cylinder hand on the trigger, be sure the inner tip of its pivot post engages the slot in the hammer block lever. To check this, pull the trigger. The hammer block bar should move down to the position shown.

3. With the trigger forward, the cross-piece of the hammer block bar should be at this position.

4. A small Allen wrench is perfect for keeping the cylinder hand plunger and spring depressed as the sideplate is moved back into place. With the short arm of the wrench, fully depress the plunger and hold it in that position while the sideplate is pushed in as far as possible. The wrench is then withdrawn, as shown here, allowing the plunger to engage the back of the cylinder hand. It is a fairly tricky operation.

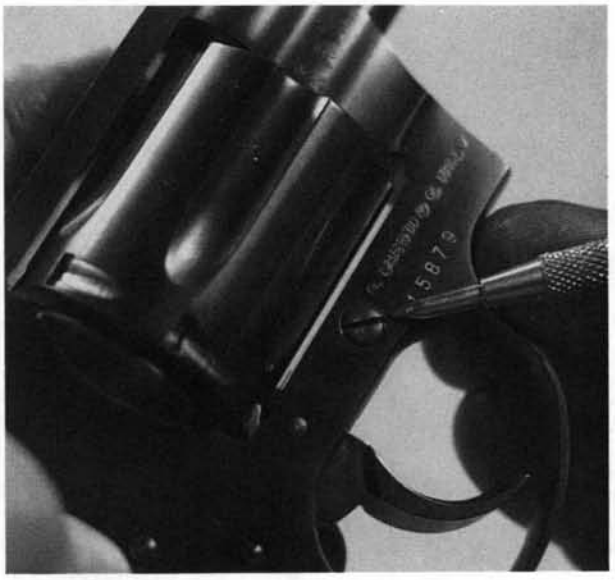
Uberti Inspector

Data:	Uberti Inspector
Origin:	Italy
Manufacturer:	Aldo Uberti, Gardone V. T. (Brescia)
Cartridge:	38 Special
Cylinder capacity:	6 rounds
Overall length:	8 inches (3-inch barrel)
Barrel lengths:	3, 4, and 6 inches
Weight:	24 ounces (3-inch barrel)

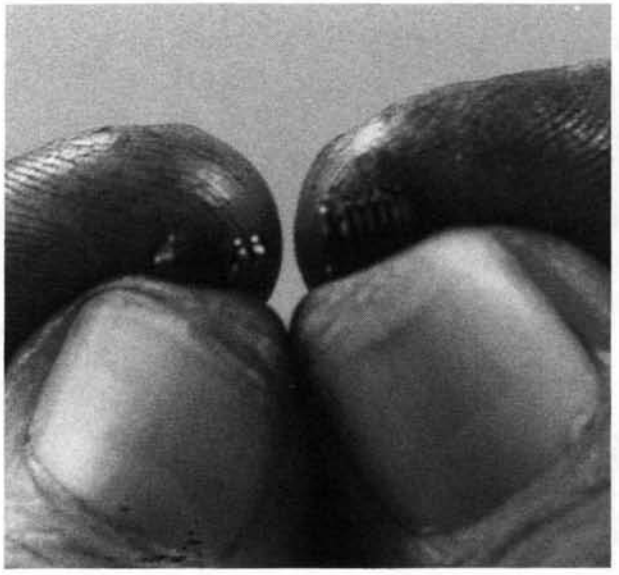
The Uberti firm of Italy is well-known for excellent reproductions of historic arms, but it also makes a very nice double-action revolver, the Inspector. It was imported earlier by Allen Firearms, but it is now marketed by Uberti USA. While many of the imported revolvers are close to Smith & Wesson design, the Inspector is styled more toward the original Colt Police Positive.

Disassembly:

1. Remove the large screw on the right side of the frame.

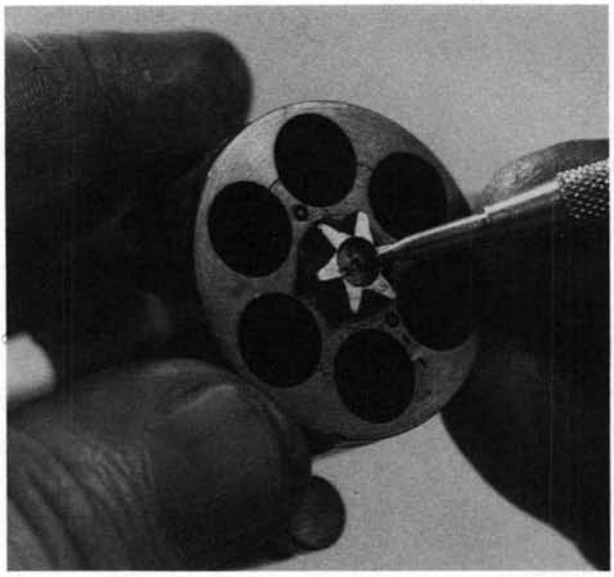


2. After the screw is removed, take out the crane retaining plunger and spring.

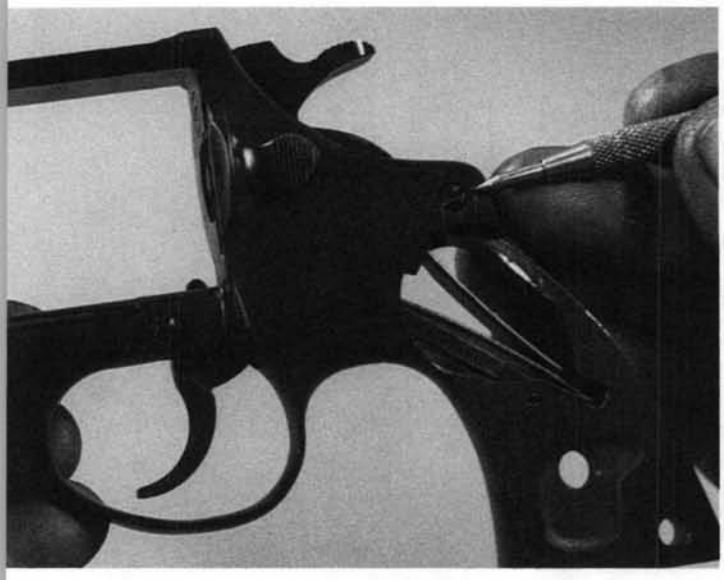


3. Operate the cylinder latch, open the cylinder, and move the cylinder and crane forward out of the frame.

4. The construction of the ejector/ratchet system is similar to the older Colt design, and requires the use of a special factory tool to unscrew the ratchet piece from the ejector shaft. Any attempt to do this without the tool would almost certainly damage the parts. So, this assembly is not routinely dismountable.

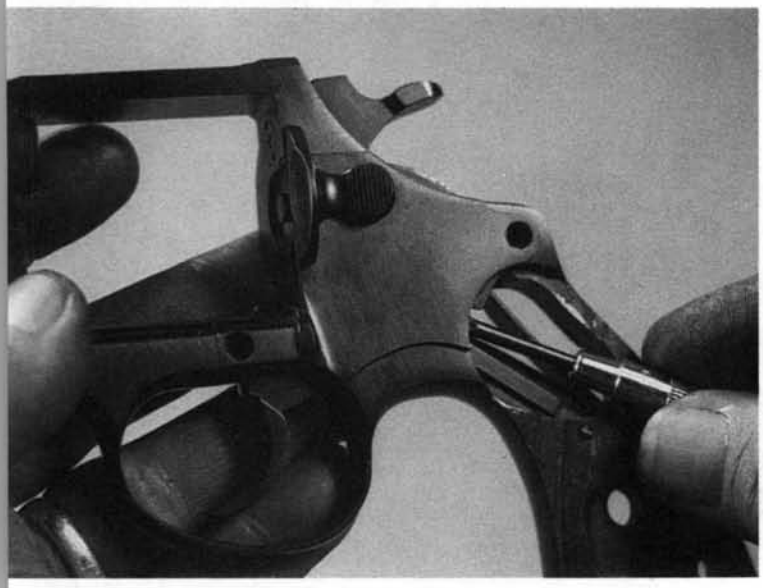


5. Remove the grip screw and take off the grips. The grip stabilizer pin will likely come off with one of the grips.

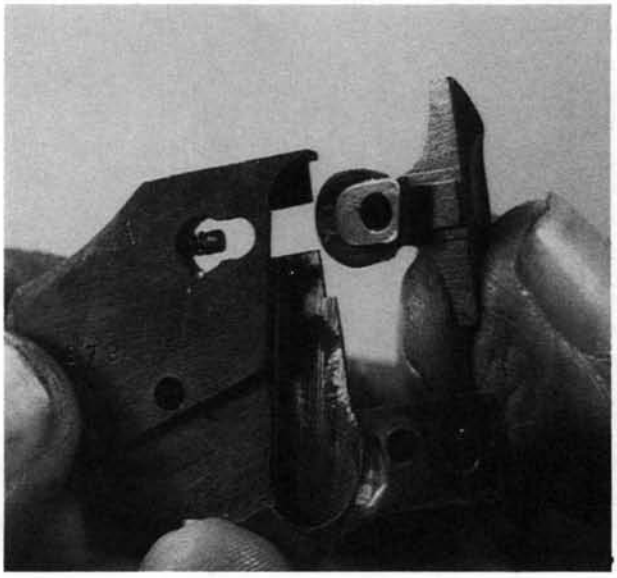


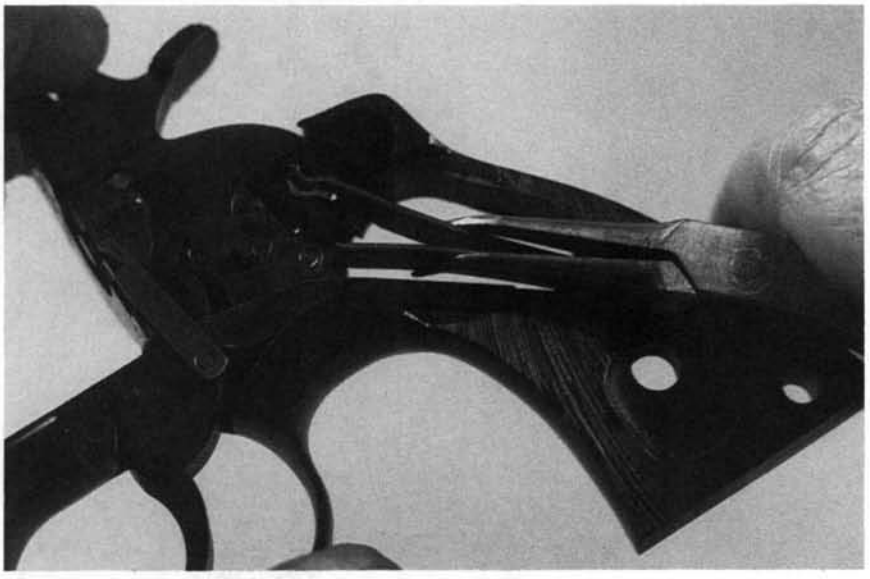
6. Remove the two sideplate screws on the left side.

7. At the rear and beside the trigger, pry the lower edge of the sideplate gently outward.



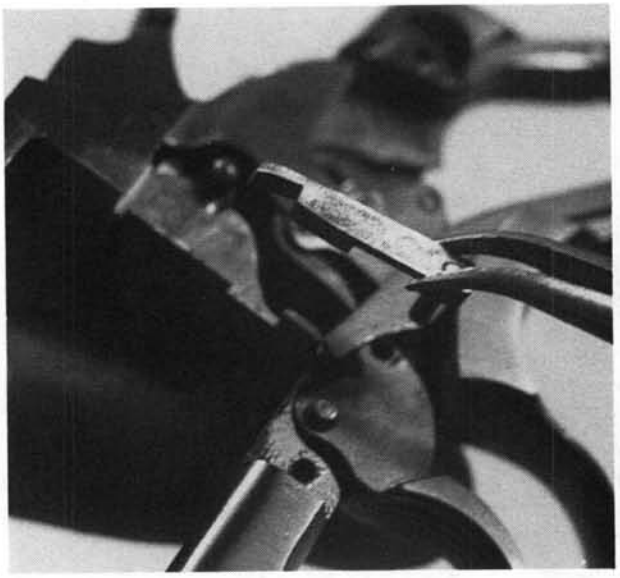
8. Remove the sideplate, and take out the cylinder latch piece toward the front. The latch piece plunger and spring are easily removed from their recess in the sideplate.





9. Use slim pliers to slightly compress the mainspring, disengage its hooks from the hammer stirrup, and remove the spring toward the left. **Caution:** *The spring is under tension, so control it.*

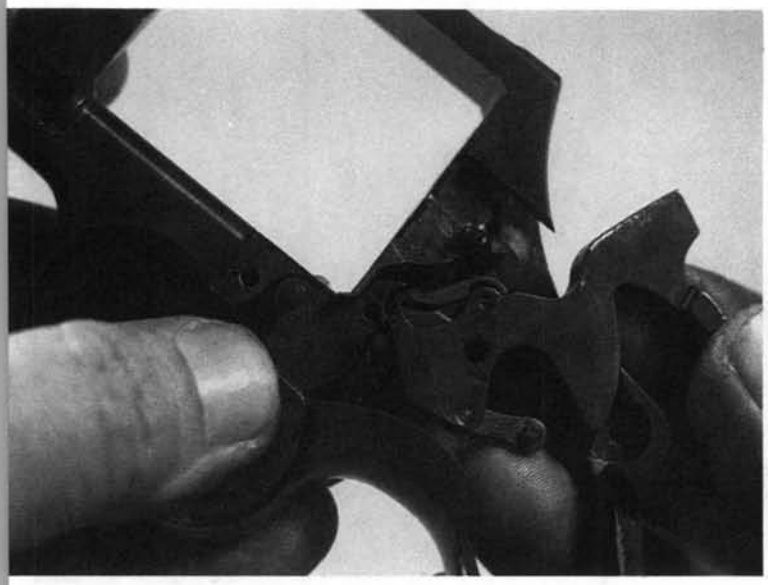
10. Remove the cylinder hand toward the left.



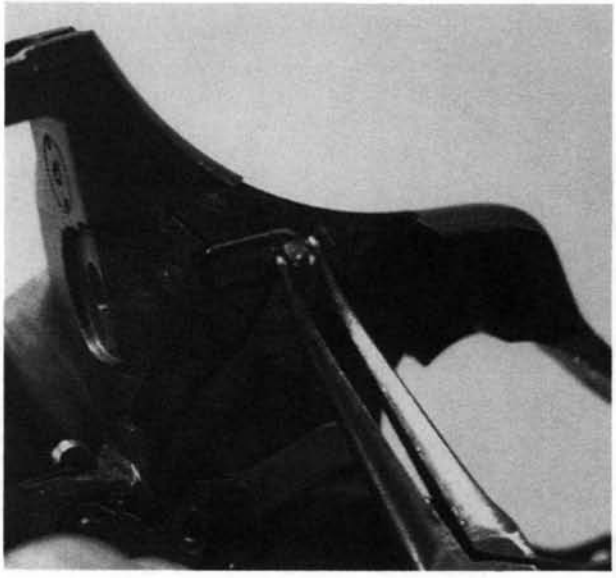
11. Push out the rebound lever cross-pin.

12. Move the rebound lever upward, out of its recess, and take it out toward the left.

13. Tip the hammer back out of its recess in the frame, and remove it toward the left. The cross-pin can be drifted out to free the double-action lever and its spring from the front of the hammer, but unless repair is necessary, it is best left in place. This also applies to the stirrup cross-pin at the rear.

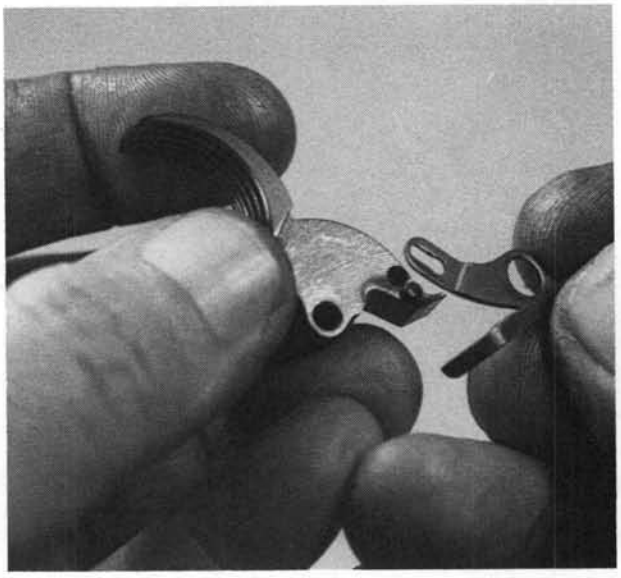


14. Remove the cylinder latch plunger toward the rear.

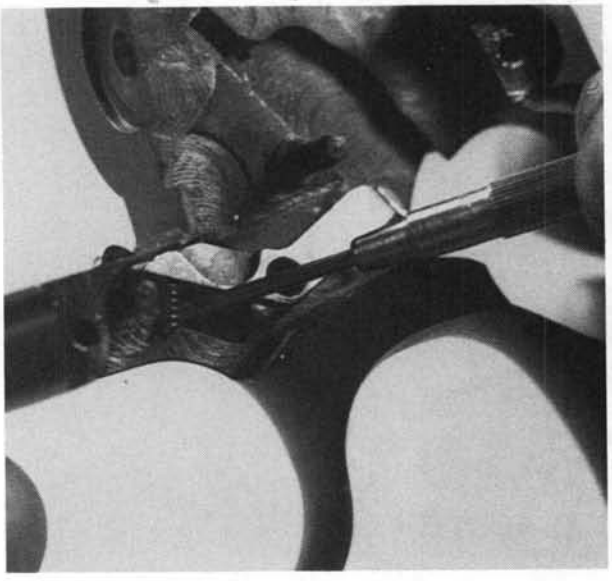


15. Remove the trigger and its attached hammer block safety system toward the left. The parts of the safety system may detach as the trigger is taken out.

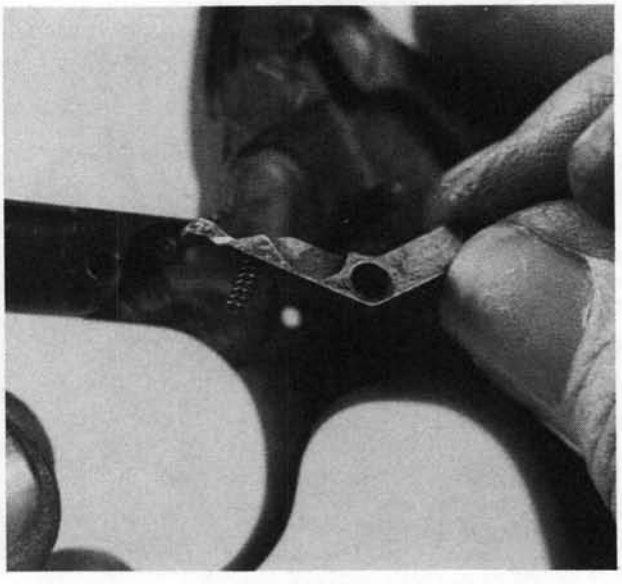
16. The safety system parts are easily detached by moving the studs to the larger opening in their guide tracks.



17. Remove the cylinder stop pivot screw.

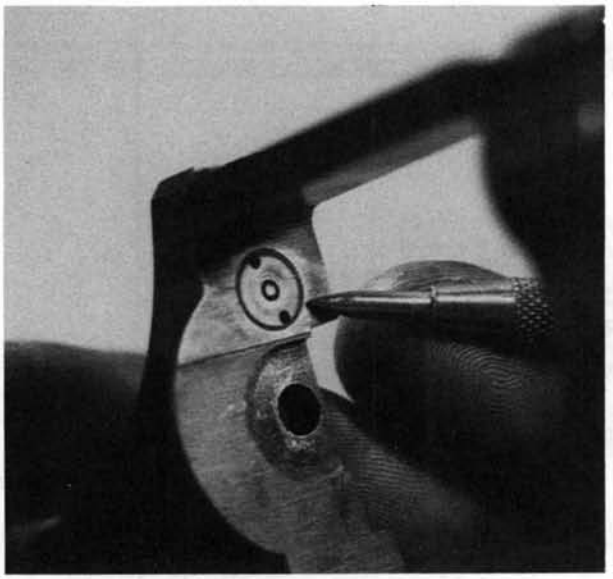


18. Use a tool to tip the lower end of the cylinder stop spring out of its recess in the frame.



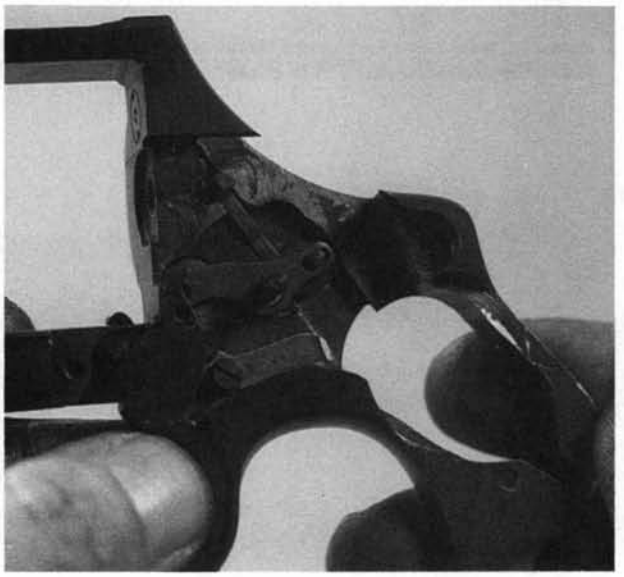
19. Move the front of the cylinder stop downward, tip its lower edge outward, and remove the cylinder stop toward the left. Take care that the small spring isn't lost.

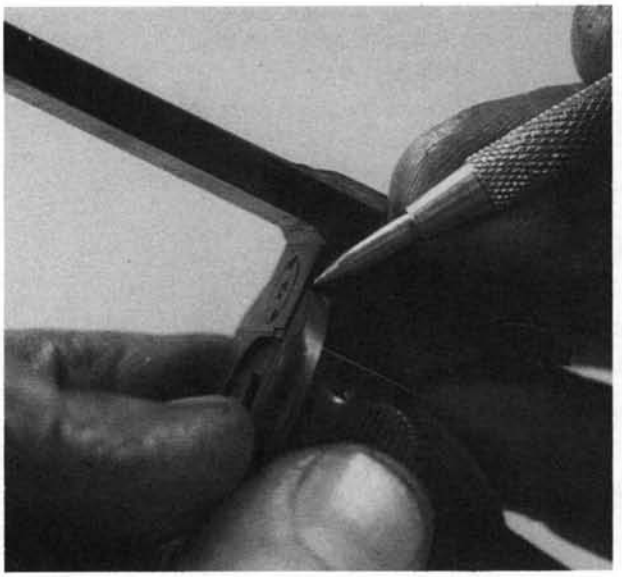
20. Removal of the firing pin and its spring requires a special two-point wrench of very precise dimensions, entering through the barrel. If the firing pin must be taken out for repair purposes, this tool would have to be carefully made. The firing pin retaining plate in the breech face unscrews counterclockwise (front view).



Reassembly Tips:

1. After the trigger and hammer block safety system are reinstalled, cycle the trigger a few times to ensure that the system moves properly.





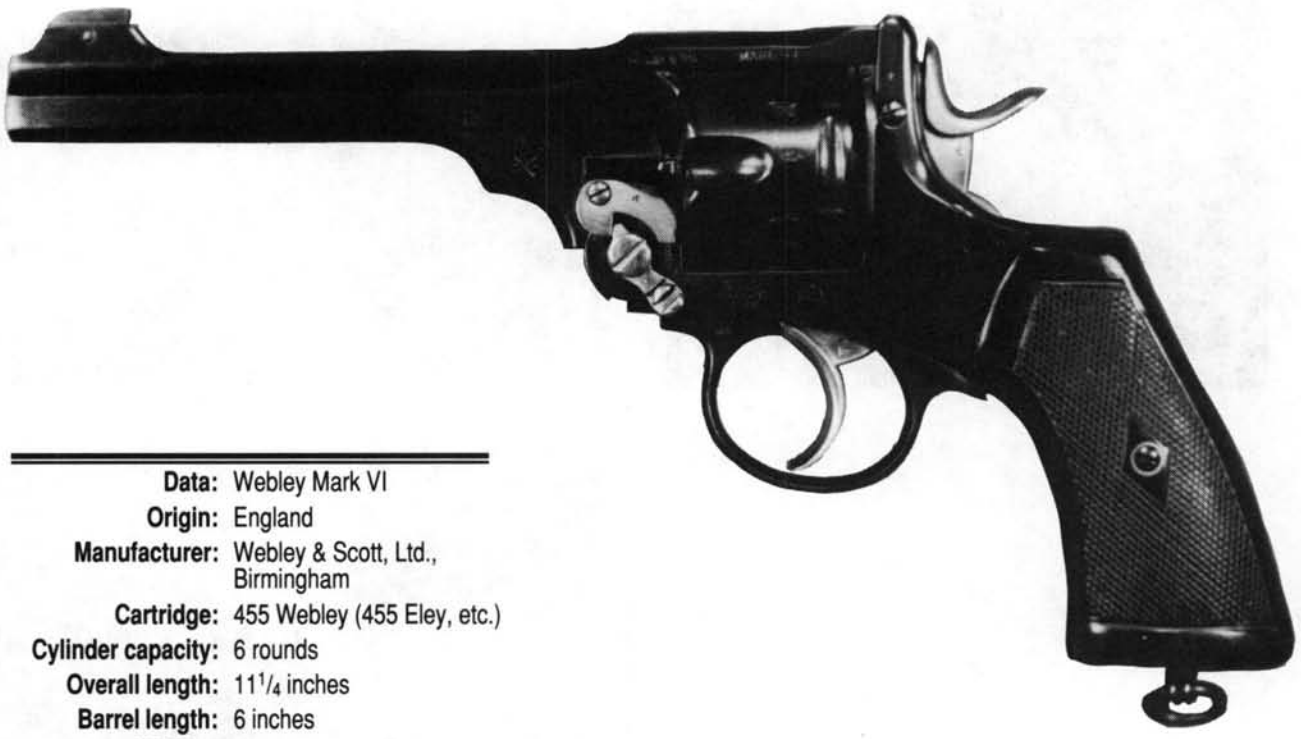
2. When replacing the sideplate, align the cylinder latch piece with the edge of the sideplate and the frame, so the stud on the latch plunger will enter the hole in the latch piece.

Webley Mark VI

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Webley Mark VI also apply to the following guns.

Webley Mark III **Webley Mark IV 38**

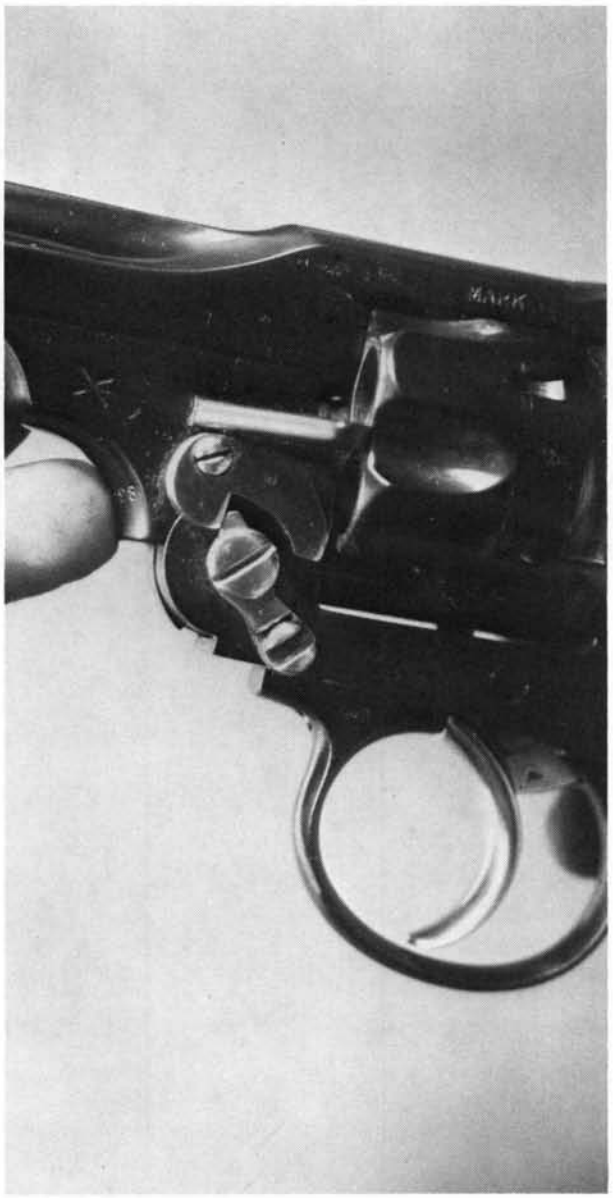


Data:	Webley Mark VI
Origin:	England
Manufacturer:	Webley & Scott, Ltd., Birmingham
Cartridge:	455 Webley (455 Eley, etc.)
Cylinder capacity:	6 rounds
Overall length:	11 1/4 inches
Barrel length:	6 inches
Weight:	38 ounces

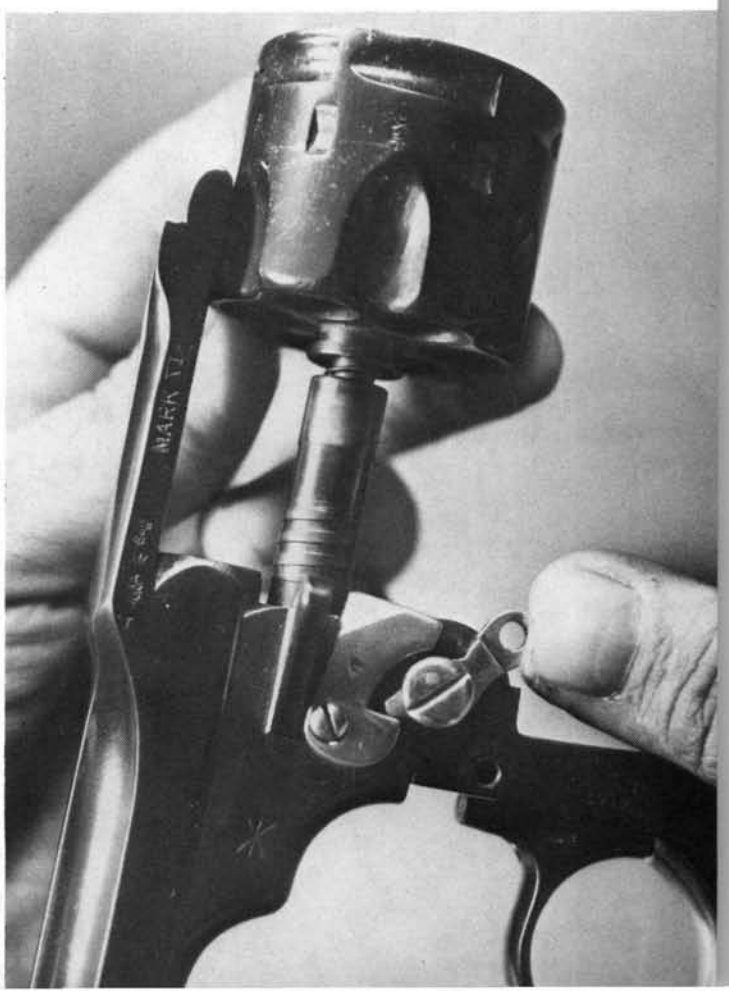
The Webley revolver, in one form or another, was the standard sidearm of the British soldier for 60 years. From the Mark I, adopted in 1887, to the Mark VI, in 1915, the design had several modifications, primarily in the barrel length and the shape of the grip frame, but the internal mechanism was essentially unchanged. The Mark VI, made from 1915 to 1947, is the one most frequently seen. Many of these guns have had the rear surface of the cylinder faced off to accept 45 ACP rounds in half-moon clips, or 45 Auto-Rim cartridges, and the one shown here is so altered. Mechanically, the Mark III and Mark IV Webley revolvers are so similar to the Mark VI that the same instructions can be used.

Disassembly:

1. The cylinder release lever is mounted at the lower front of the frame on the left side, and pivots on the left end of the barrel hinge. Its lower end is secured by a screw with a very wide slot, designed for removal with a coin.



2. A genuine British shilling is not really necessary for removal of the lock screw (actually, a 3-pence fits it best). A U.S. nickel will work nicely.



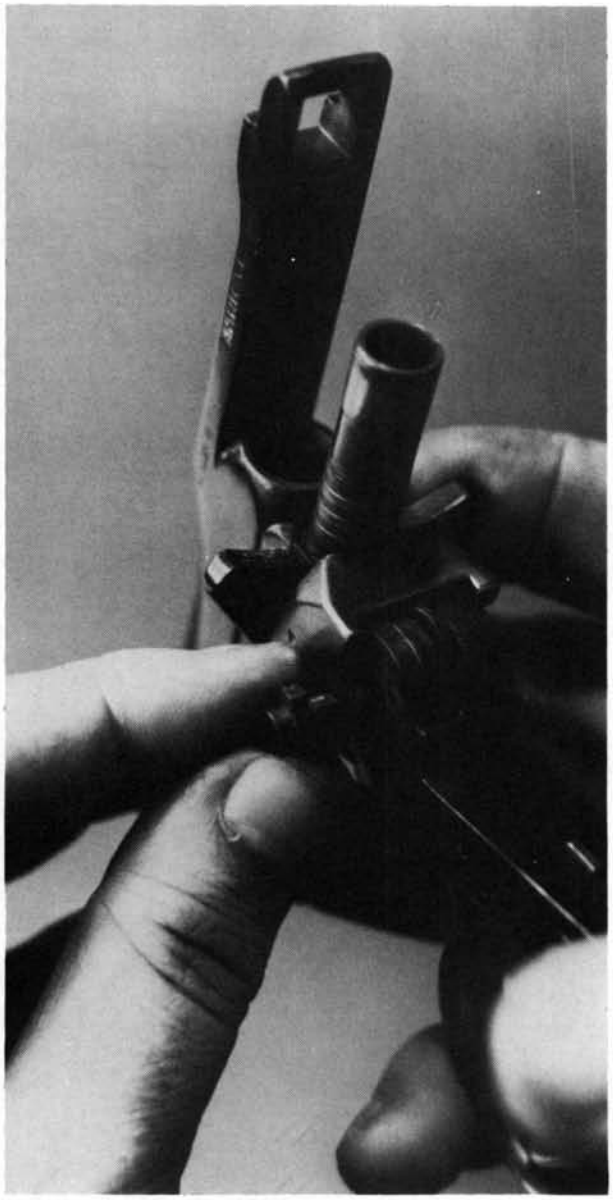
3. After removal of the screw, turn the lever upward until its short arm bears on the cylinder retainer and tips it downward. The cylinder can then be taken out toward the rear.

4. Insert a drift punch through the transverse hole in the end of the ejector rod head, and unscrew it counterclockwise (front view).

5. Remove the ejector rod head and the ejector spring toward the front. Then, remove the ejector/ratchet toward the rear.

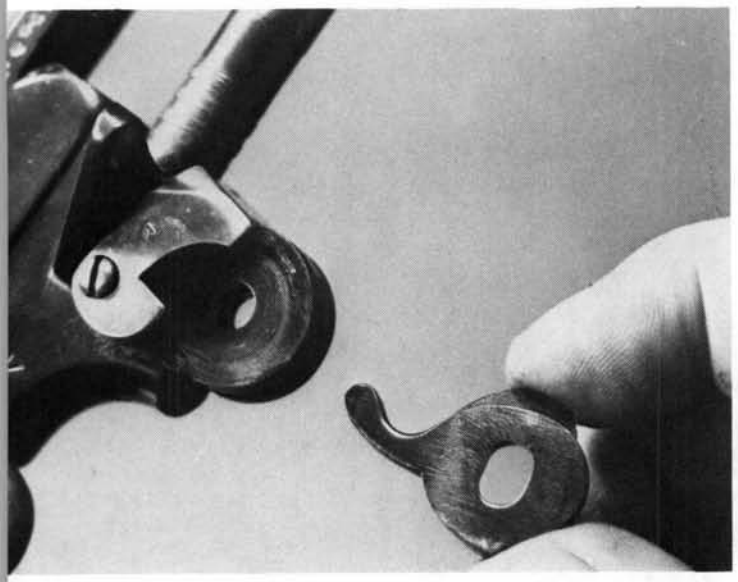
6. Remove the left cap screw and take off the cylinder release lever.

7. Remove the right cap screw, and take out the barrel hinge toward the left. Note that the hinge has a square lug at the top which mates with a recess in the frame.

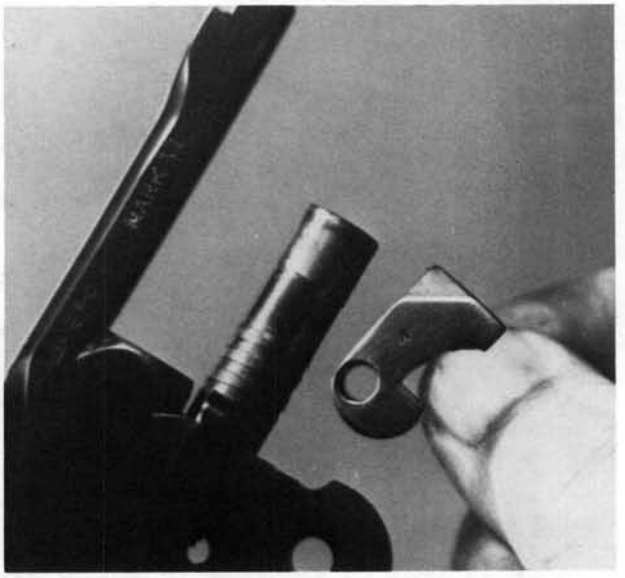


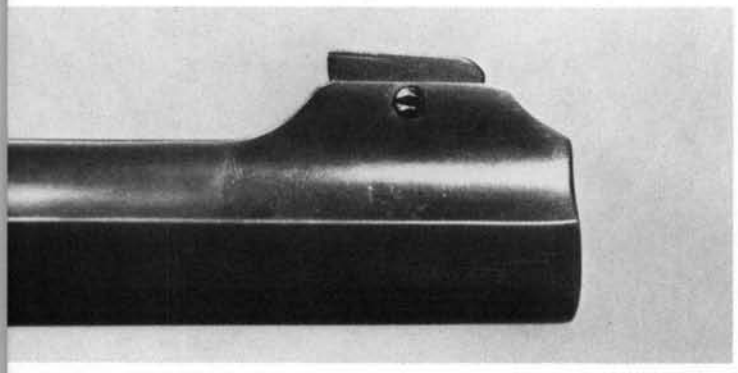
8. Remove the barrel assembly from the frame.

9. Remove the ejector cam from between the hinge loops at the bottom of the barrel unit. Drifting out a cross-pin in the cam will release the cam leaf and its spring, but this is not advisable in normal disassembly.



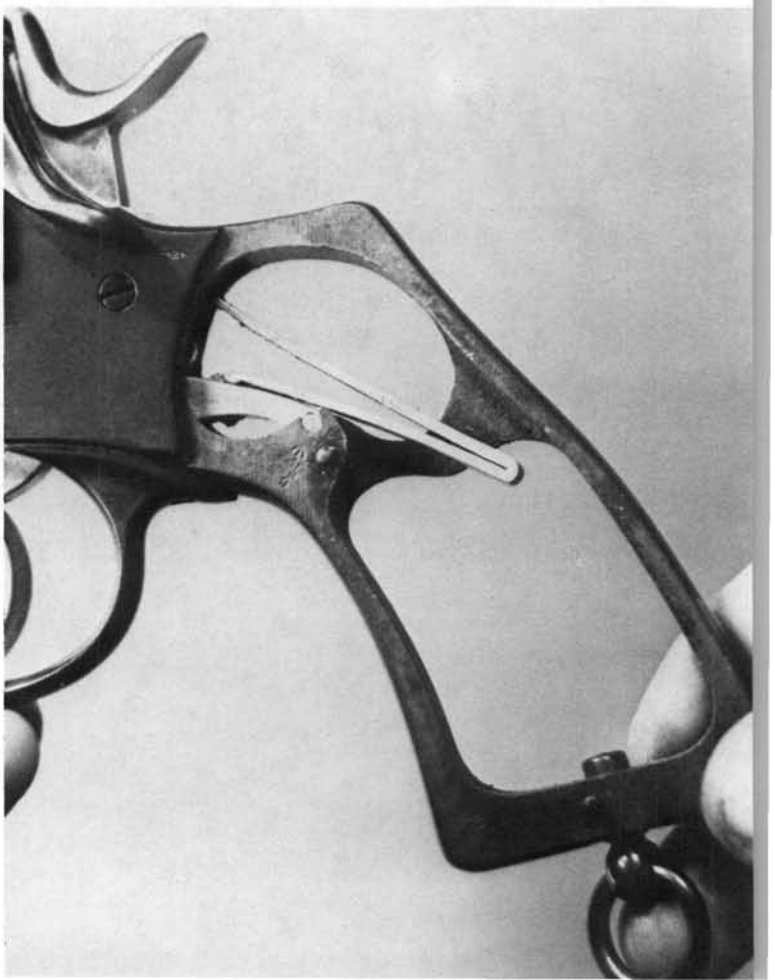
10. Remove the two pivot screws, one on each side, and take off the cylinder retainer toward the rear.



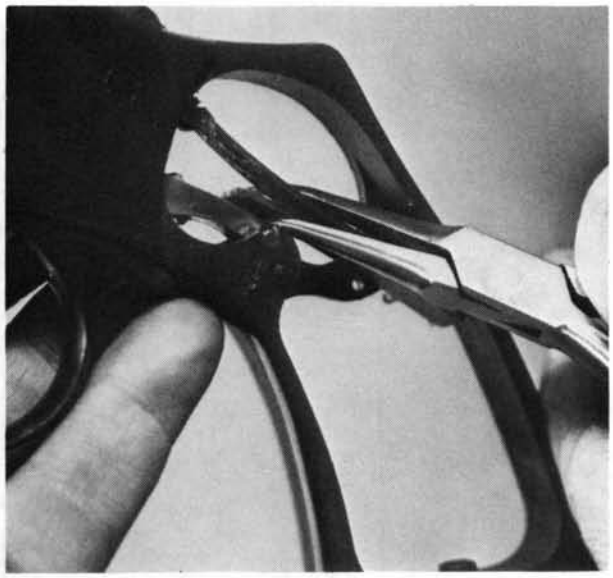


11. The front sight blade is removable by taking out the cross-screw. Be sure to use a properly-sized screwdriver as these screw heads are sometimes soft and will deform easily.

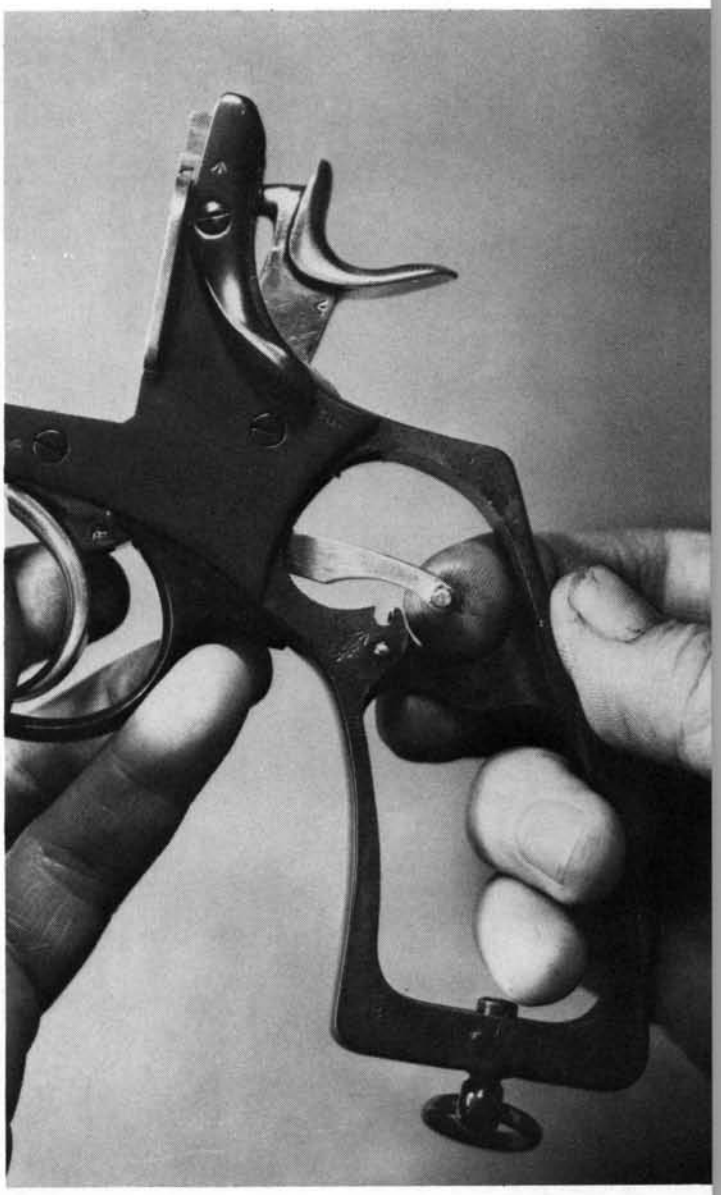
12. The V-type blade mainspring and rebound lever are shown in proper order, prior to disassembly.



13. Grip the mainspring with smooth-jawed pliers and compress it slightly. Lift its lower end out toward the left to bring its mounting stud out of its hole in the grip frame, and disengage the hooks of its upper arm from the stirrup on the hammer. Remove the spring downward and to the left.

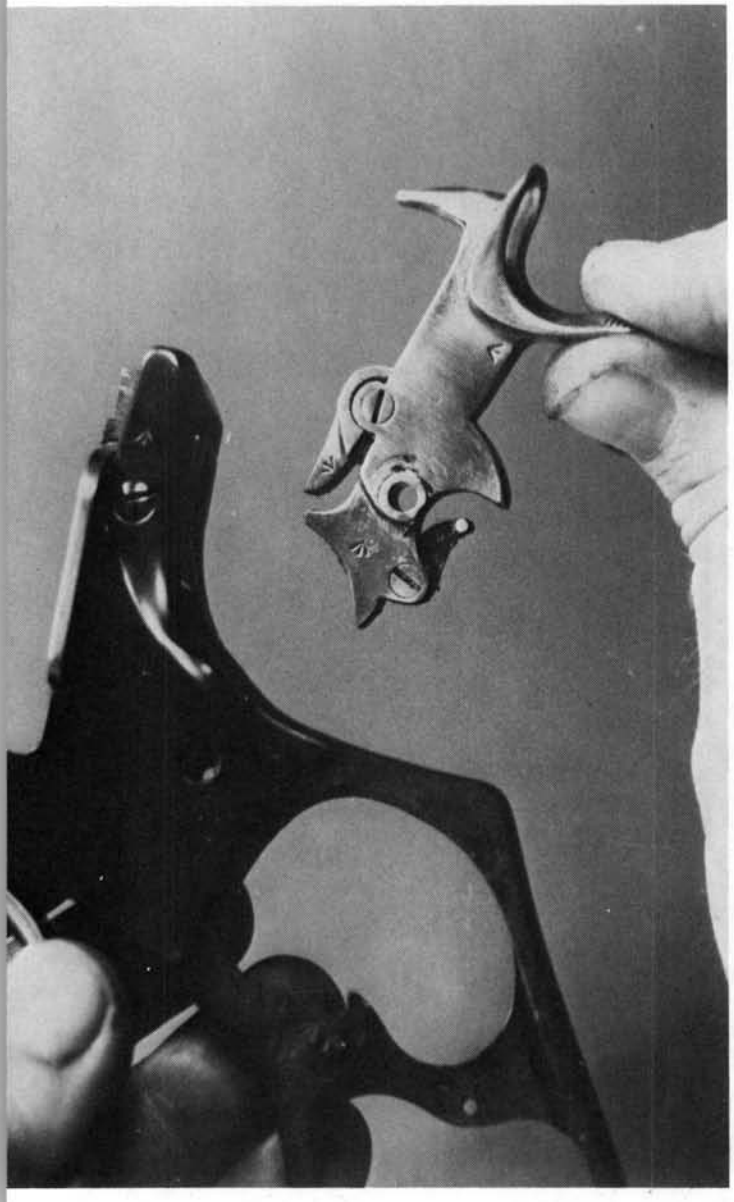


14. Lift the rebound lever from its pivot yoke in the frame and move it toward the rear and downward for removal.

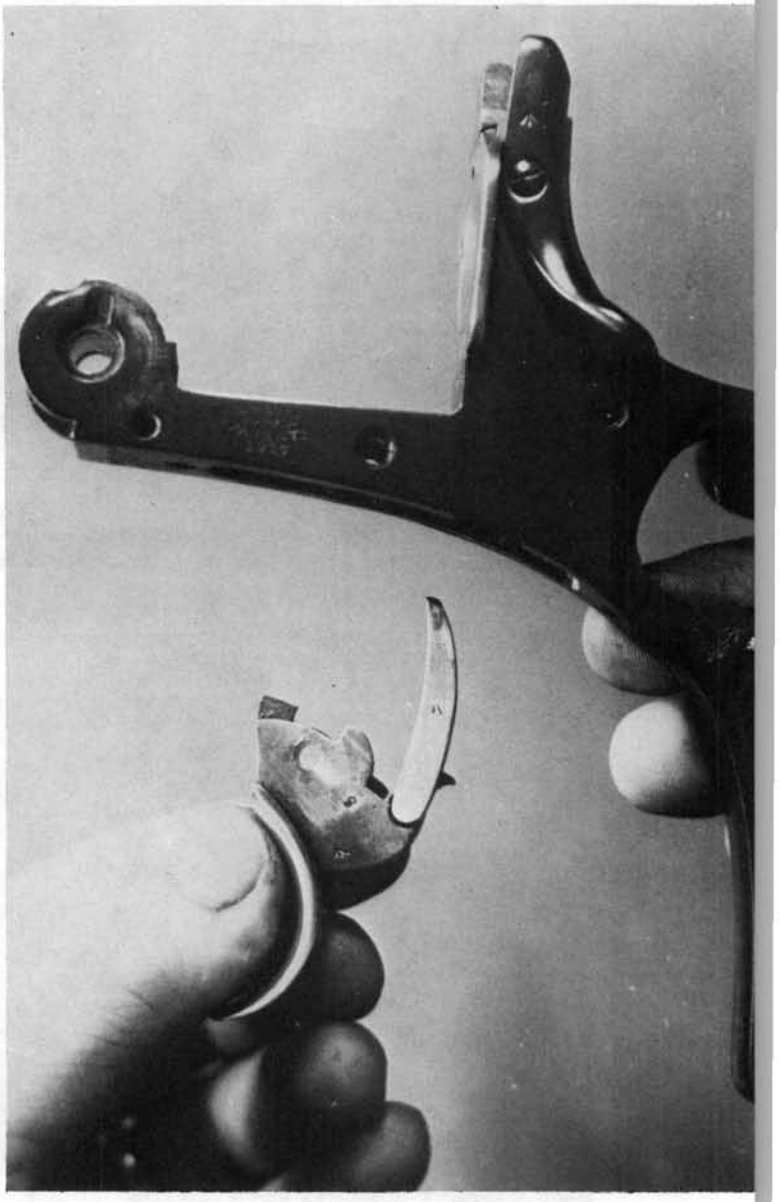


15. Remove the screws at the front and rear of the trigger guard and pull the trigger guard down and off.

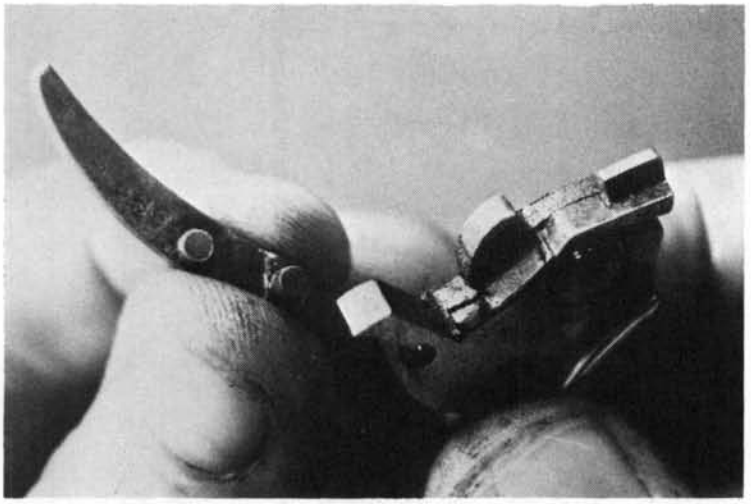
16. The hammer and trigger are retained by cross-screws. Remove the hammer screw, pull the trigger to the rear, and lift the hammer straight up out of the frame. Taking out the small cross-screw at the front of the hammer will allow removal of the double-action leaf and its spring. The screw at the lower rear of the hammer retains the stirrup.

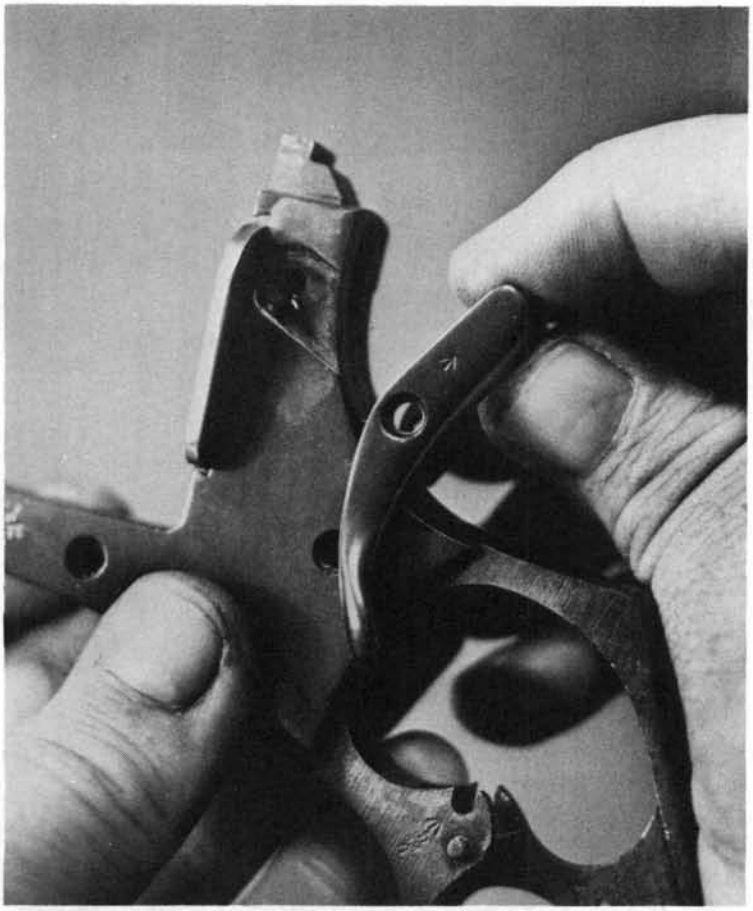


17. Remove the trigger screw and take the trigger assembly out downward.

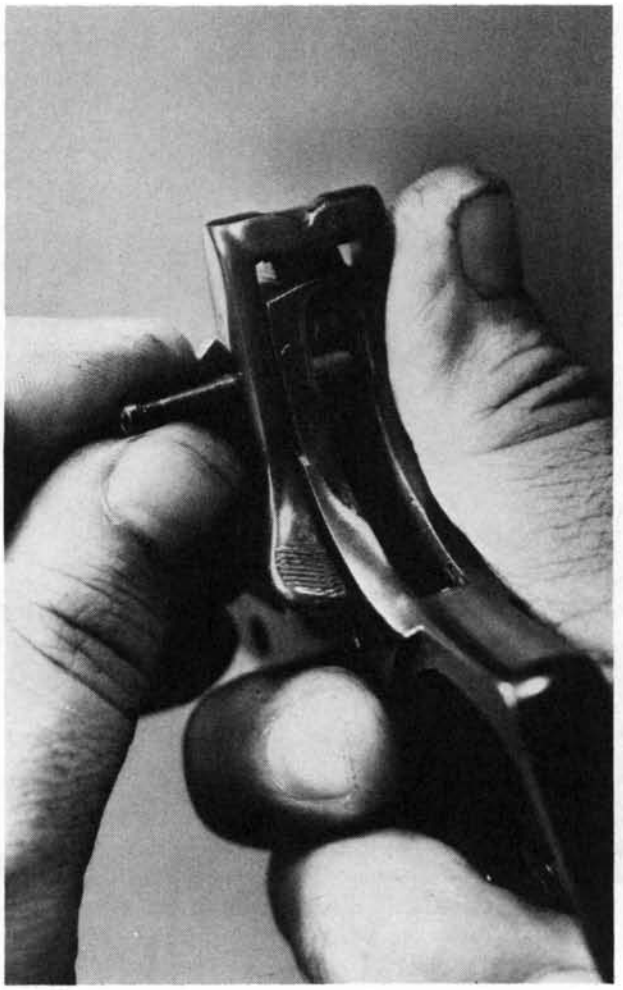


18. The cylinder hand is easily detached from the left side of the trigger. Taking out the small screw in the top of the trigger allows removal of the cylinder stop spring upward, and the secondary stop, or standing latch, toward the right.



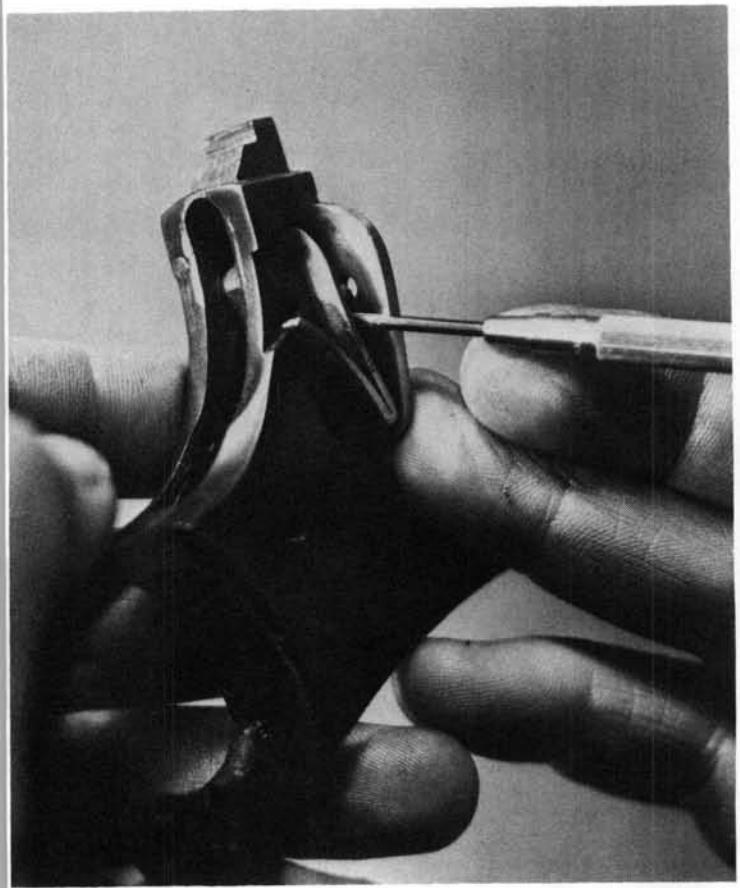


19. The barrel latch is retained by a cross-screw at the top of the frame. To make removal of the screw easier, exert some pressure on the right side of the latch with the thumb, slightly compressing the latch spring.

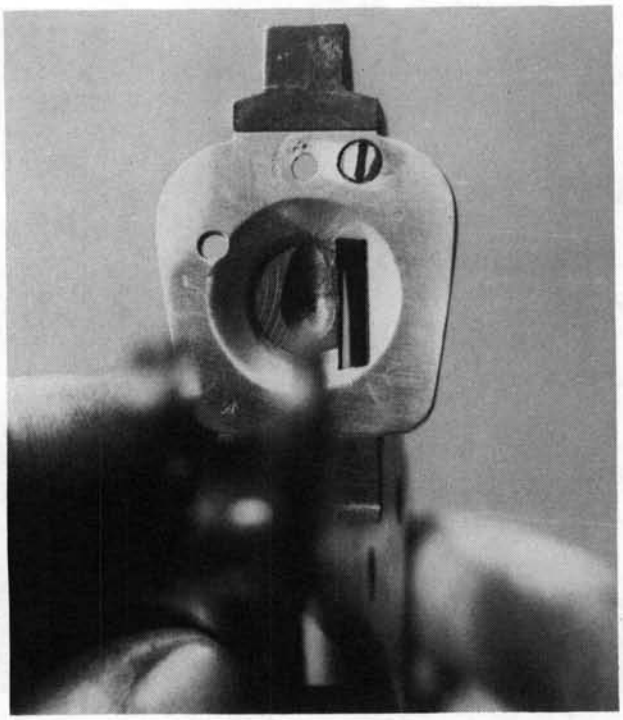


20. Tip the top of the latch toward the rear, and move it back and downward for removal.

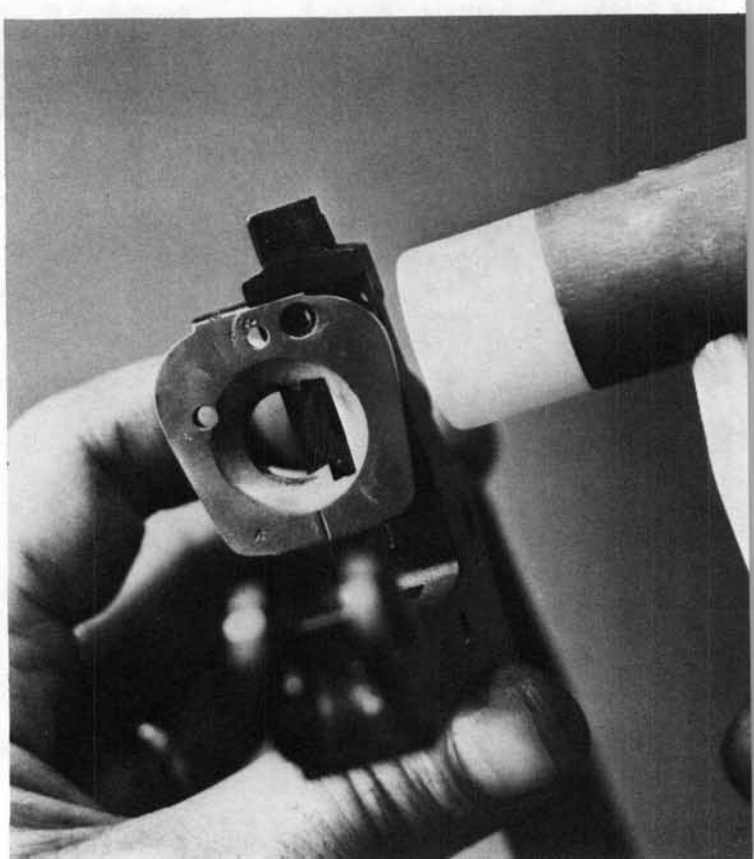
21. The latch spring on the right side is usually fitted tightly, and may have to be pried gently out of its mounting hole.



22. The breech face is retained on the frame by a single screw at the top on the left side of the gun.

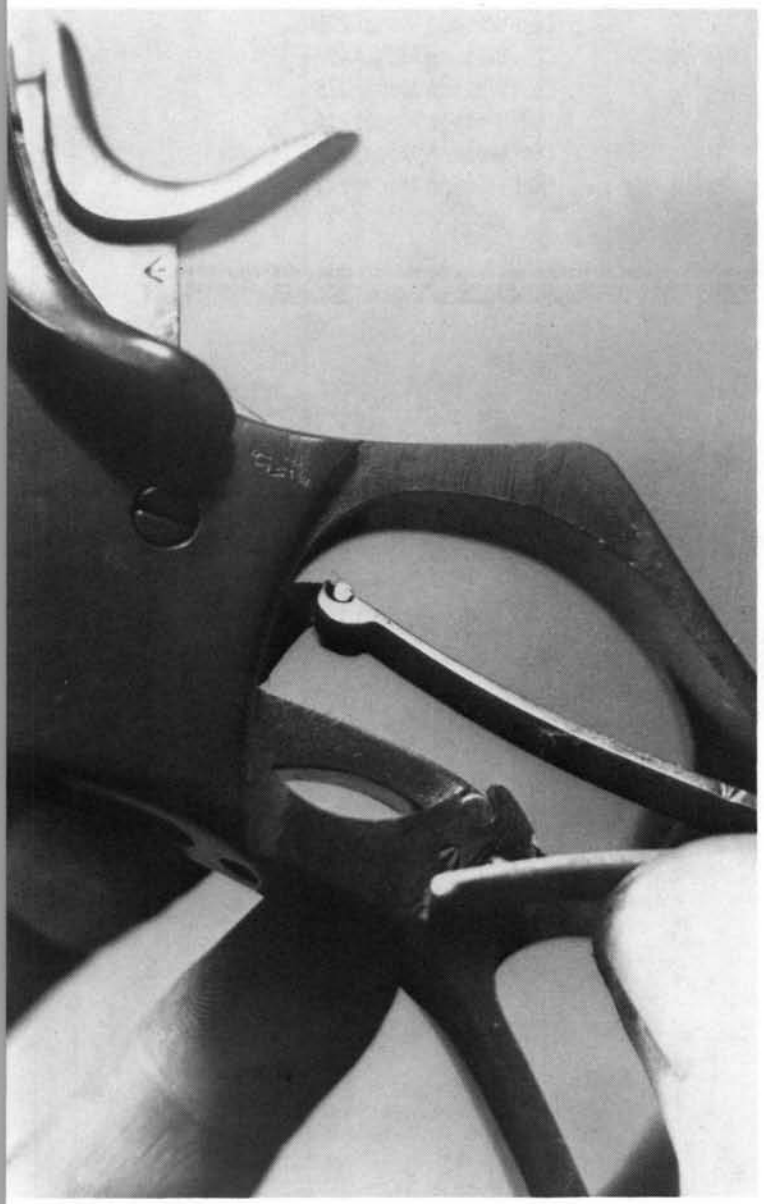


23. After removal of the screw, use a nylon or plastic mallet to tap the breech face out toward either side.

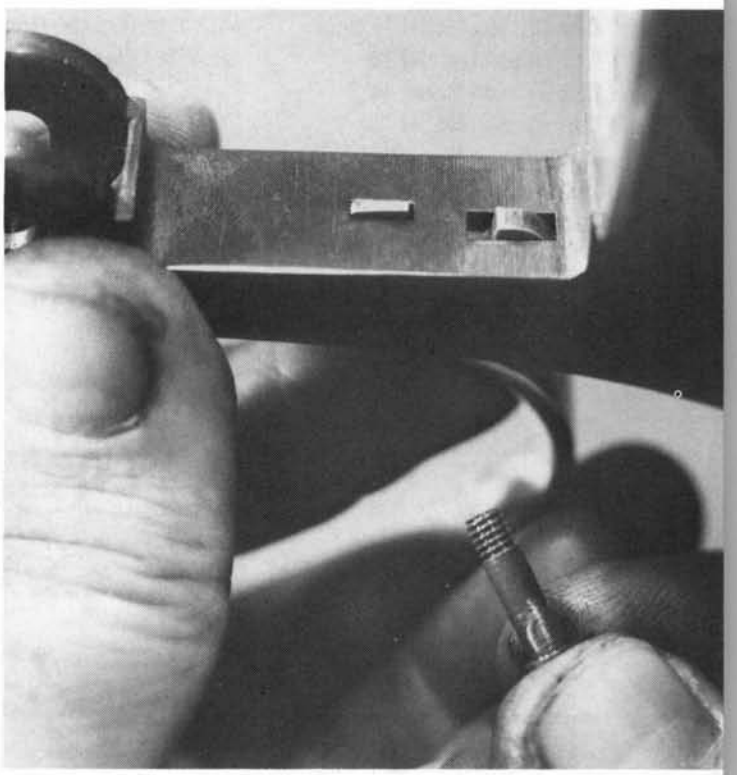


Reassembly Tips:

1. When replacing the mainspring, engage the upper hooks with the stirrup, then compress the lower arm and move the spring inward into position. Be sure the stud on its right side enters the hole in the grip frame.



2. When installing the trigger, move it into the frame so both the primary stop and standing latch are protruding from their slots before inserting the cross-screw.



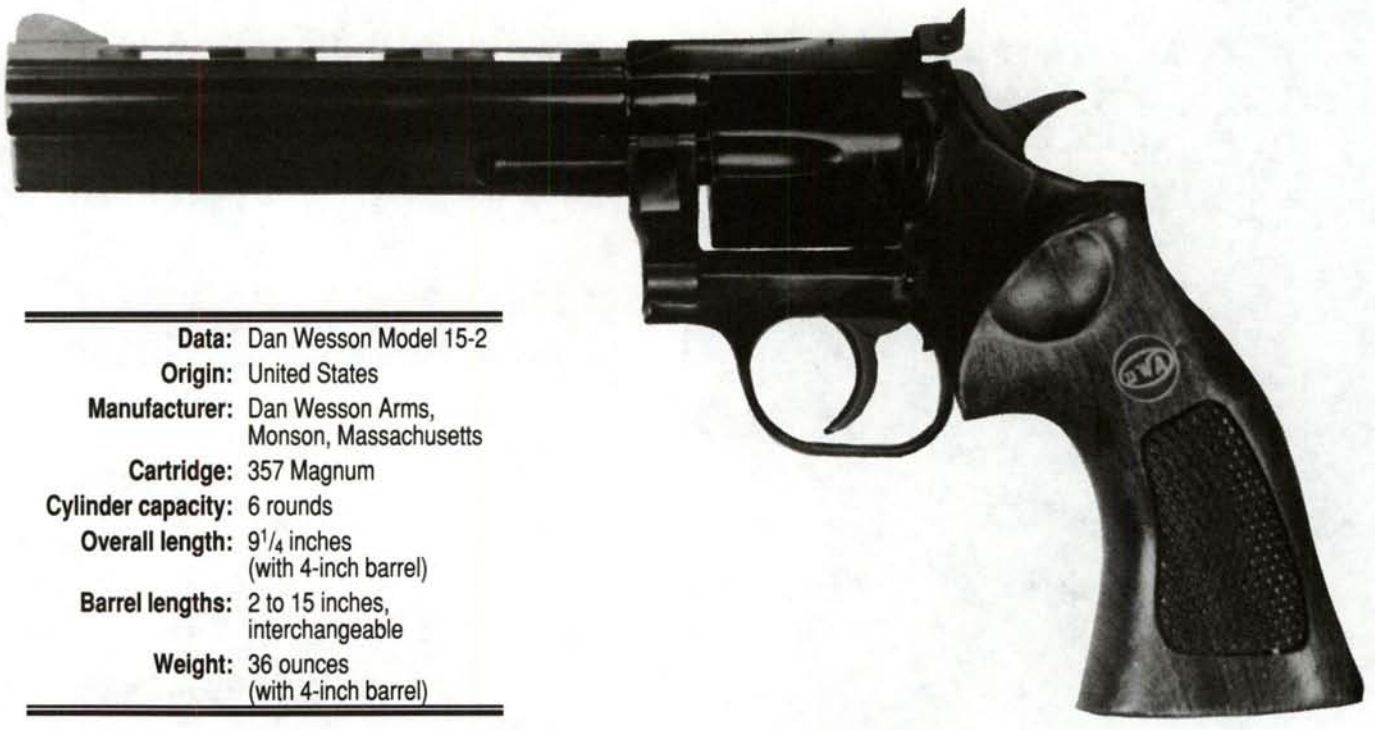
3. When installing the barrel latch, use smooth-jawed sharp-nosed pliers to compress the latch spring while moving the latch forward and upward into position.

Dan Wesson Model 15-2

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Dan Wesson Model 15-2 also apply to the following guns.

Dan Wesson Model 8-2S
Dan Wesson Model 15 Gold
Dan Wesson Model 32
Dan Wesson Model 44
Dan Wesson Model 708
Dan Wesson Model 715
Dan Wesson Model 732
Dan Wesson Model 744
Dan Wesson Model 9-2
Dan Wesson Model 22
Dan Wesson Model 40
Dan Wesson Model 45
Dan Wesson Model 709
Dan Wesson Model 722
Dan Wesson Model 740
Dan Wesson Model 745
Dan Wesson Model 14-2S
Dan Wesson Model 22M
Dan Wesson Model 41
Dan Wesson Model 375
Dan Wesson Model 714
Dan Wesson Model 722M
Dan Wesson Model 741

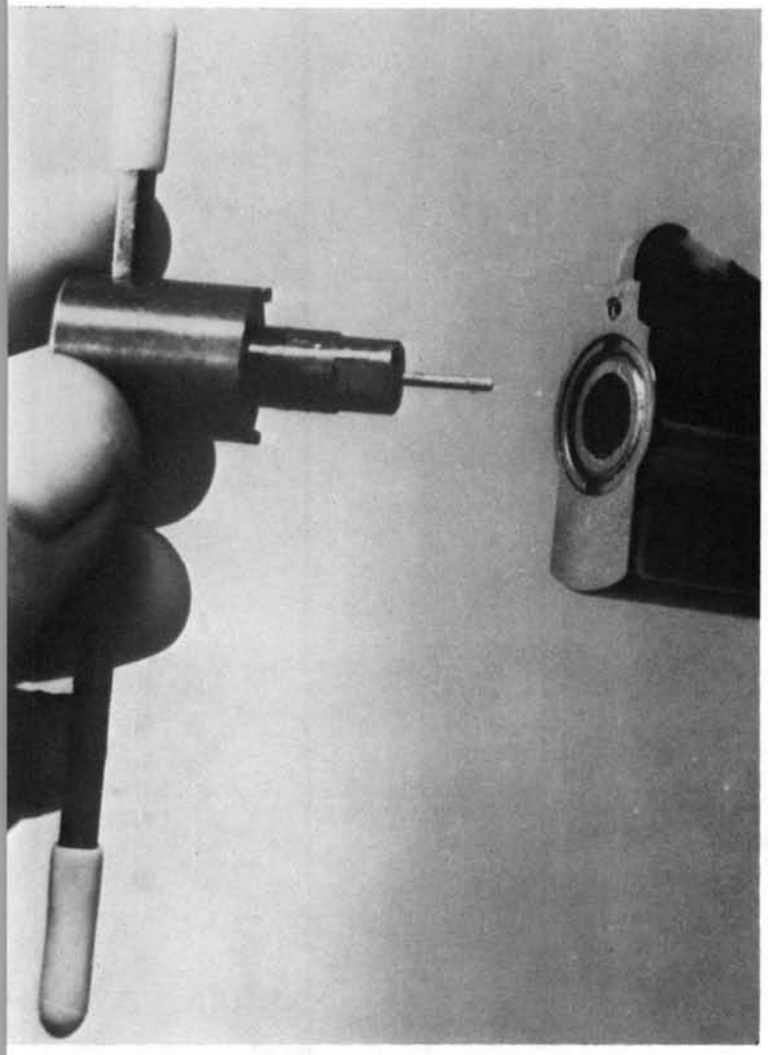


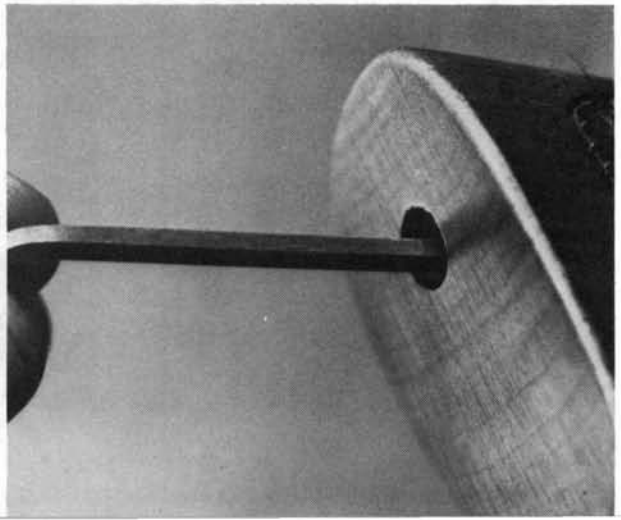
Data:	Dan Wesson Model 15-2
Origin:	United States
Manufacturer:	Dan Wesson Arms, Monson, Massachusetts
Cartridge:	357 Magnum
Cylinder capacity:	6 rounds
Overall length:	9 1/4 inches (with 4-inch barrel)
Barrel lengths:	2 to 15 inches, interchangeable
Weight:	36 ounces (with 4-inch barrel)

The early Dan Wesson guns had an exposed barrel nut at the muzzle, and used a different wrench for removal. More recent models have the nut neatly recessed, and the wrench supplied with each gun is of much more substantial design. The gun shown here is a later version, the Model 15-2VH, with a heavy barrel shroud and vent rib. The excellent interchangeable barrel feature has made this a very popular gun. The system works perfectly, as long as care is taken to properly install the barrel. In addition to the main caliber/model designations listed in the cross-reference list, there is a very long list of Dan Wesson models, with each variation based on sights, barrel lengths, and other features. All are basically the same, mechanically.

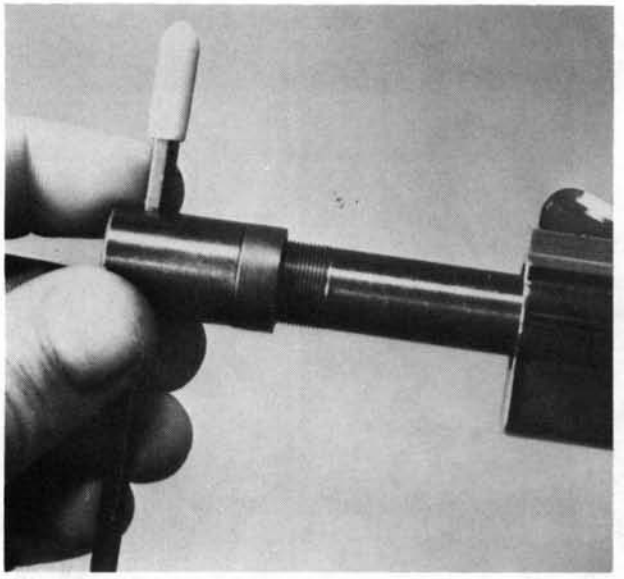
Disassembly:

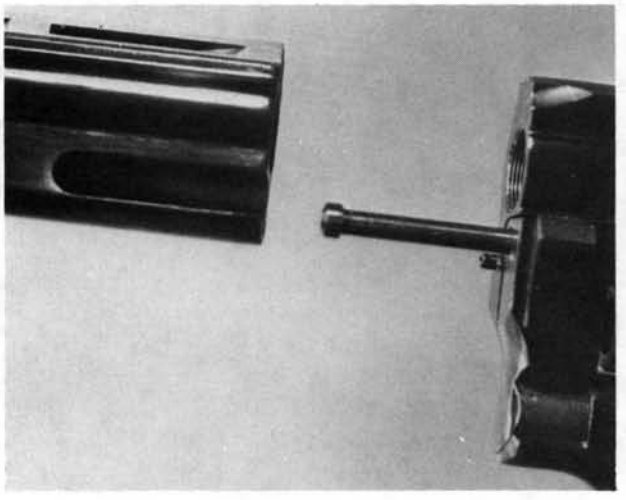
1. The special wrench supplied with each gun has a center guide post which enters the bore, and twin projections which fit into the opposed recesses in the barrel nut.





2. Fit the wrench into the muzzle, being sure the lugs are engaged with the recesses in the barrel nut. Unscrew the nut counterclockwise (front view) and remove it toward the front. In some cases, the barrel will unscrew rather than the nut, as shown, and both can be removed at this point.



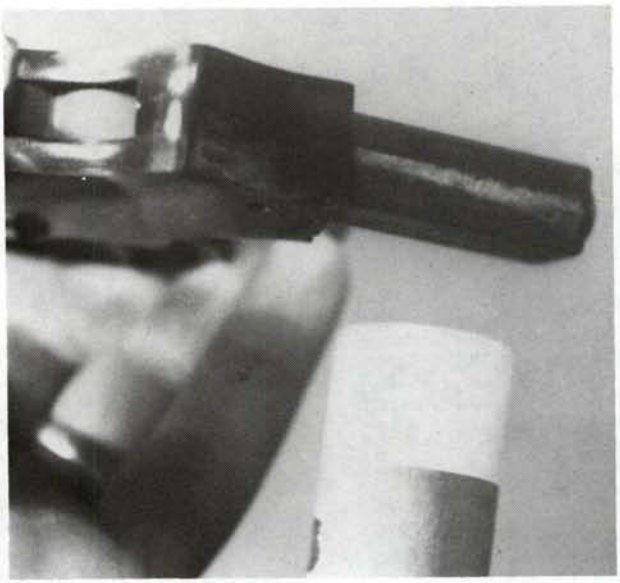


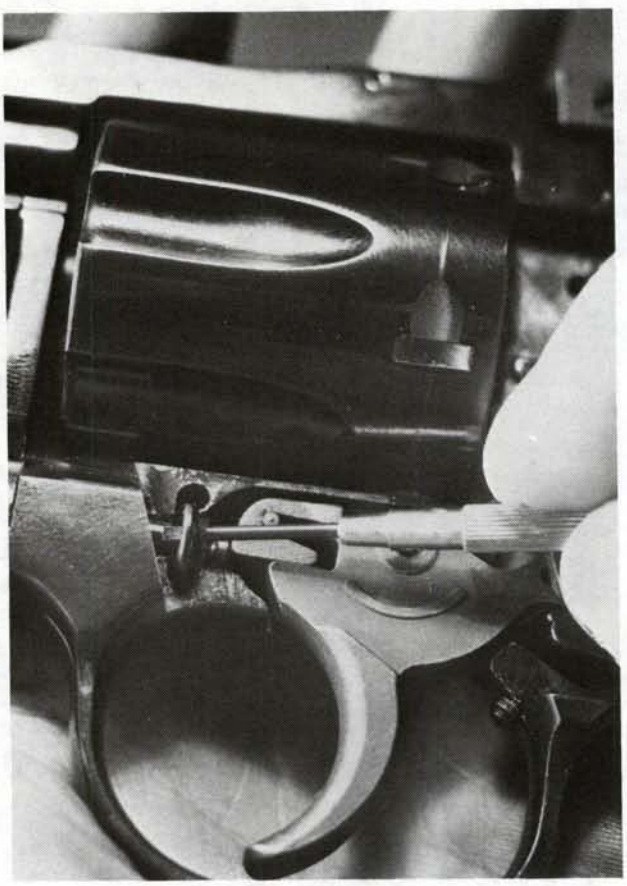
3. Remove the barrel shroud from the front of the frame. If the barrel was not removed previously, as in this photo, then unscrew the barrel counterclockwise (front view) and remove it.

4. Use an Allen wrench to remove the grip retaining screw, accessible through the hole in the bottom of the grip piece, and remove the grip downward.

5. Use a smaller Allen wrench to remove the two sideplate screws on the left side.

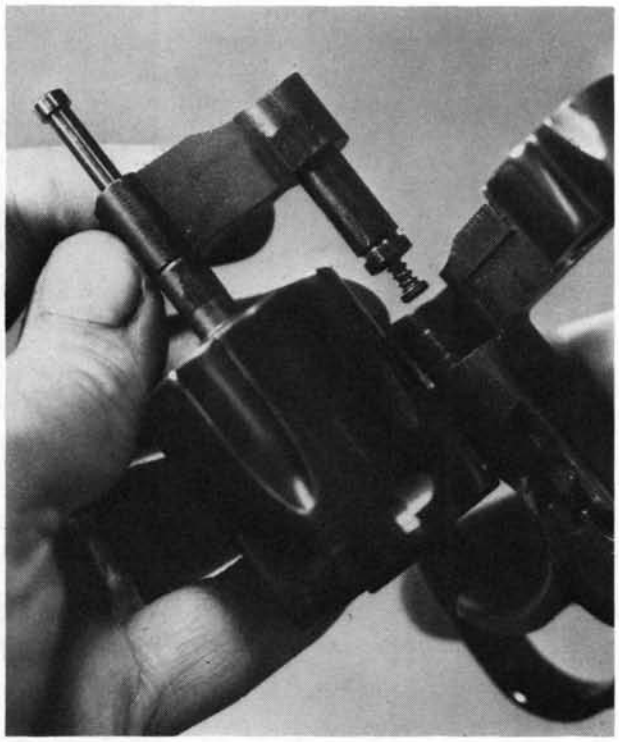
6. Hold the gun as shown and tap the grip extension with a nylon mallet until the sideplate falls into the hand.



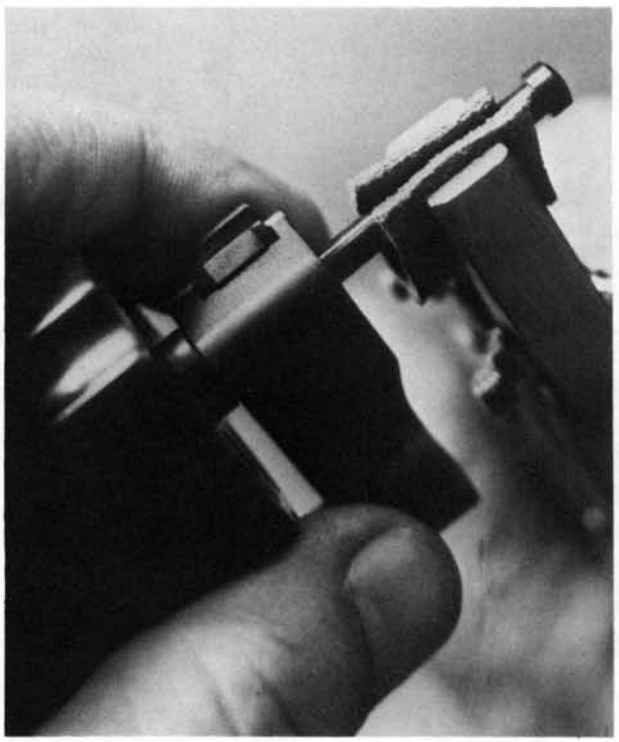


7. Use a small screwdriver to lift out and remove the U-shaped crane retainer toward the left.

8. Move the crane forward out of the frame, and remove the crane and cylinder assembly toward the left. Remove the cylinder stop plunger and its spring from the rear of the crane pivot shaft.

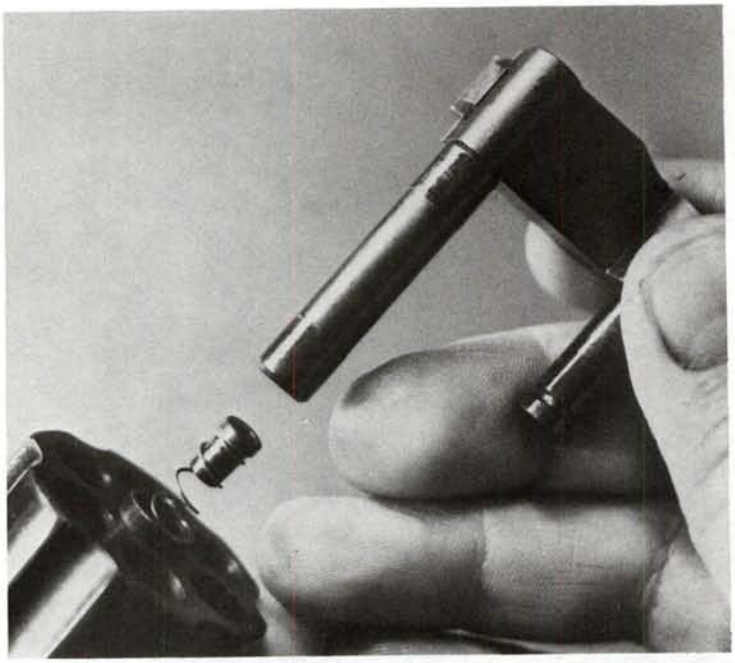


9. Grip the ejector rod with leather-padded smooth-jawed pliers, and unscrew the ejector rod counterclockwise (front view).

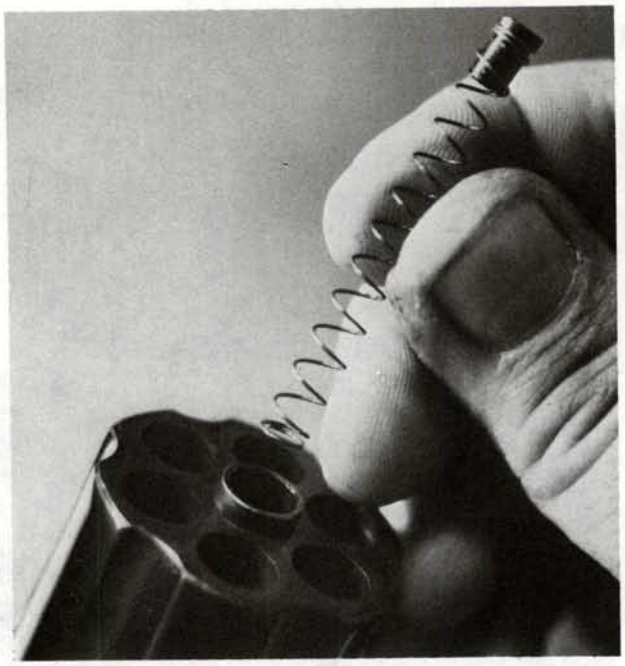


10. Remove the ejector rod from the front of the crane.

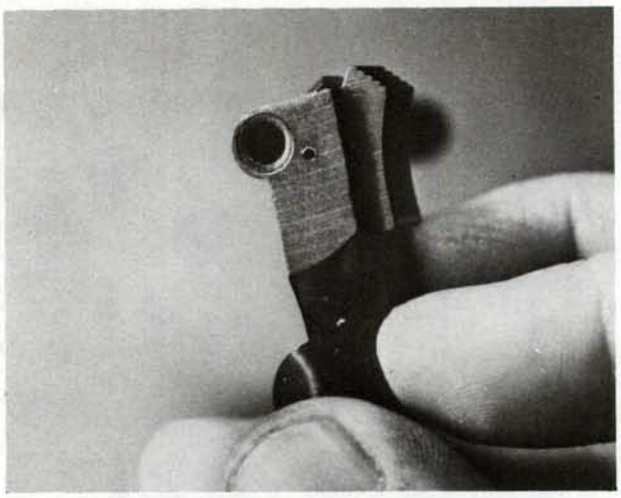
11. Remove the crane from the front of the cylinder.



12. Remove the ejector spring and its bushing from the front of the cylinder.

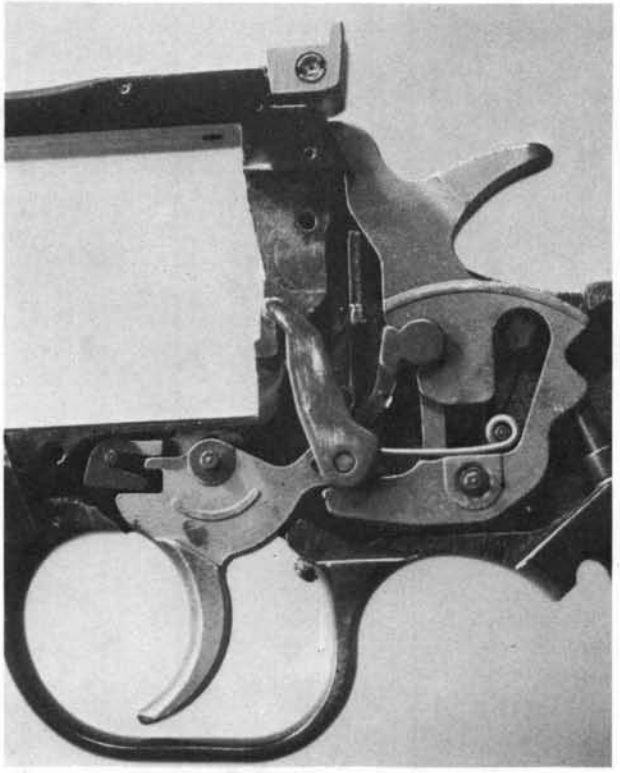


13. Remove the ejector/ratchet from the rear of the cylinder.

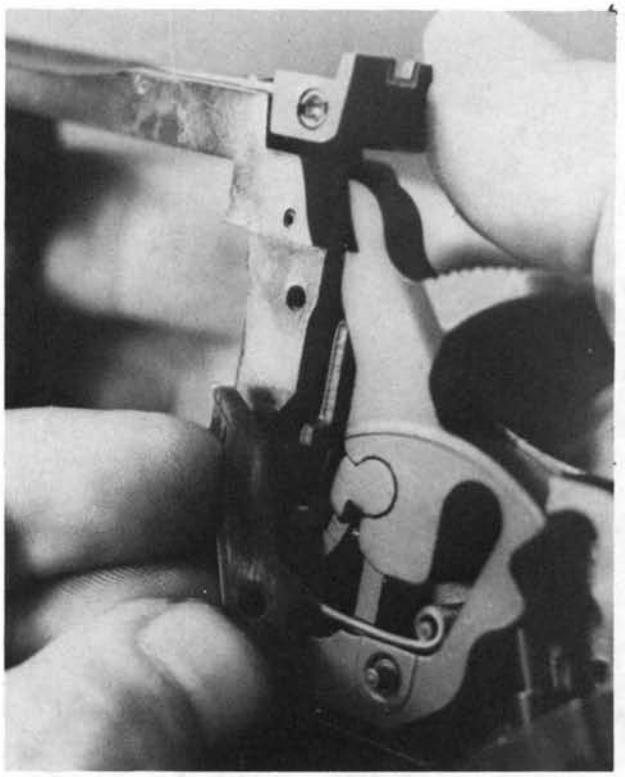


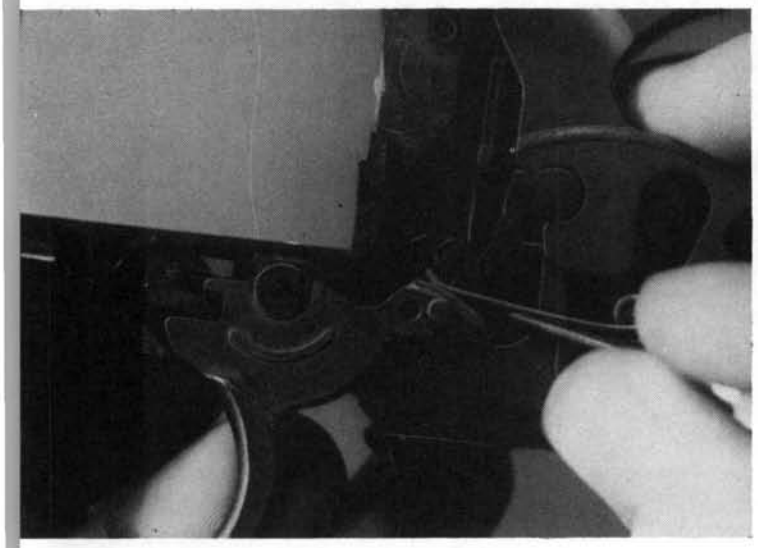
14. Drifting out the small roll pin in the crane will release the crane latch and its spring for removal upward. Use a roll pin punch to avoid deformation of the pin.

15. The internal parts are shown in proper order, before disassembly.

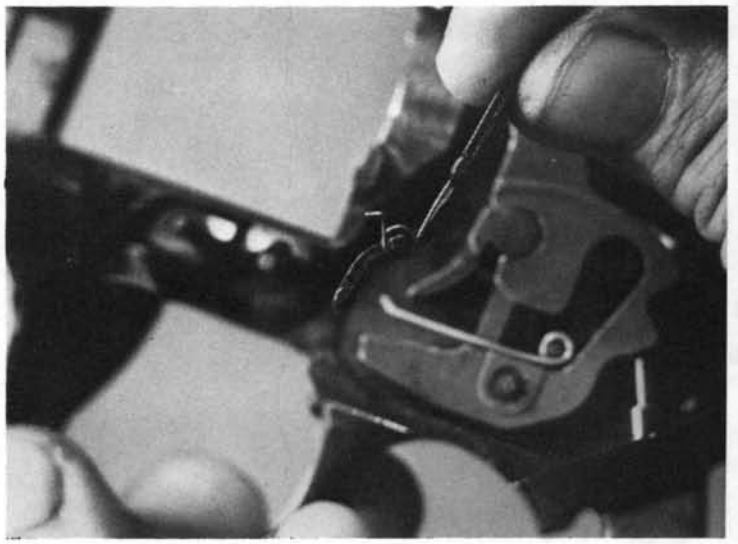


16. Move the cylinder hand off its post on the trigger, toward the left, and turn it as shown to disengage the spring tip from the groove in the back of the hand. Remove the cylinder hand toward the left.





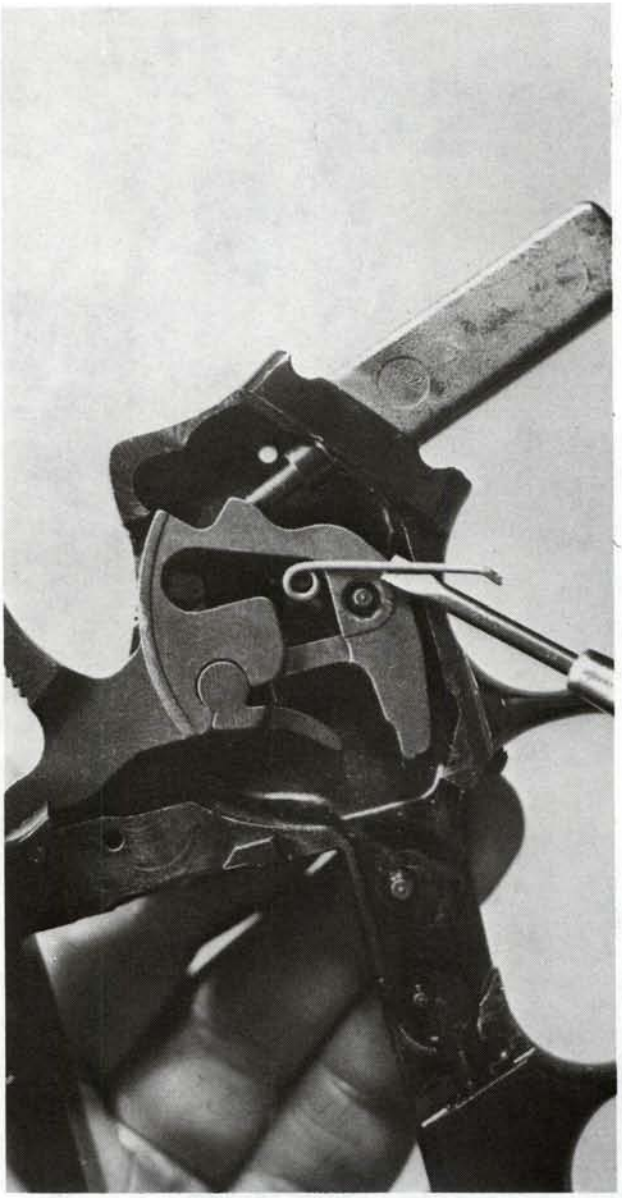
17. Use a small tool to lift the forward arm of the trigger spring from its ledge on the trigger, and remove the trigger toward the left.



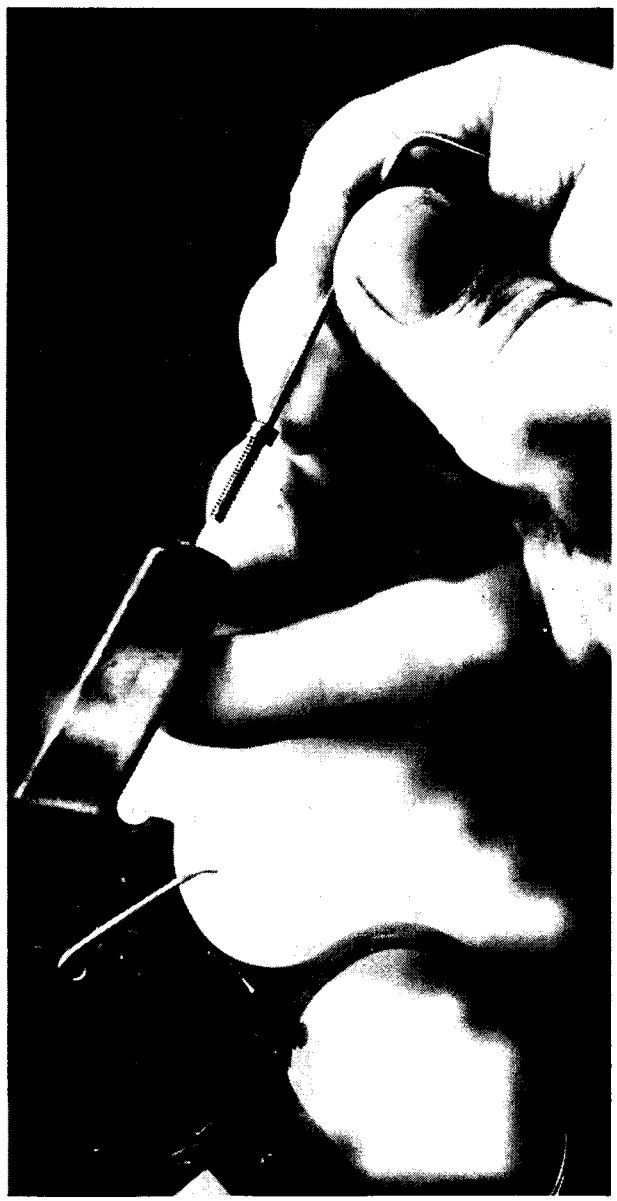
18. Removal of the trigger will leave the transfer bar and its attached spring lying in the frame recess in the front of the hammer. Remove the transfer bar toward the left.

19. Tip the cylinder stop down out of its slot in the frame, and remove it toward the left.

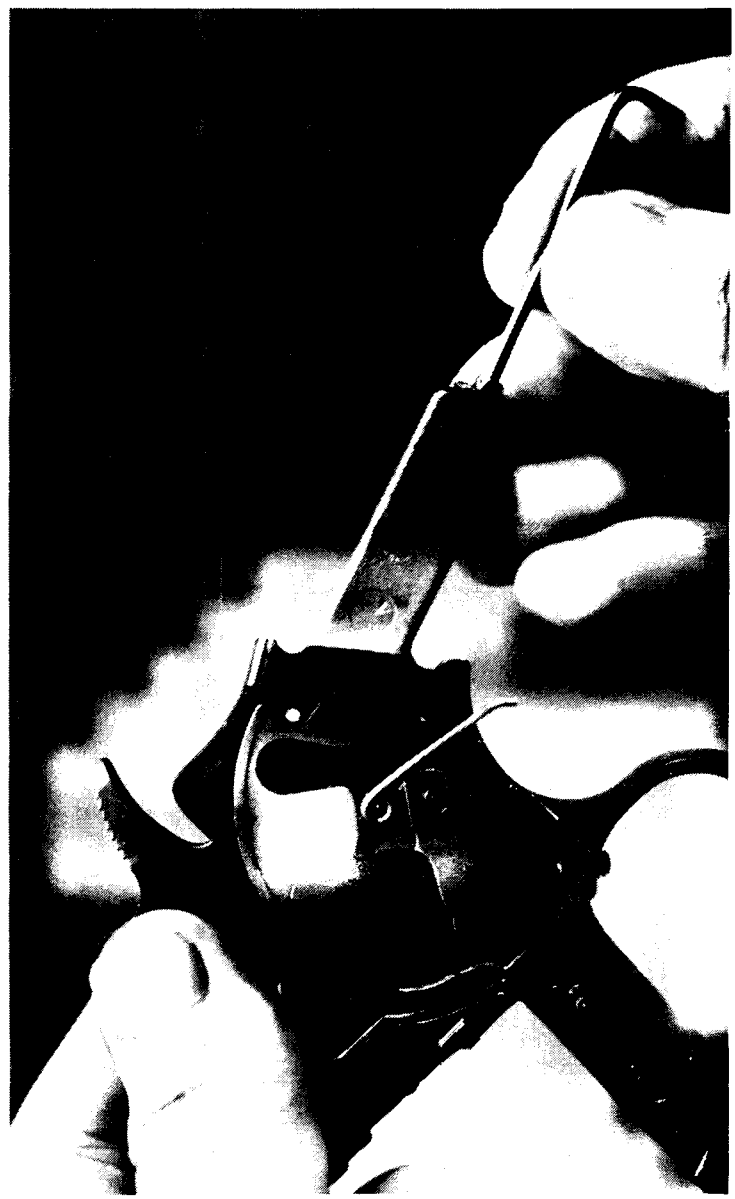
20. Lift the forward arm of the trigger spring off its shelf on the hammer and allow it to turn downward, relieving its tension.



21. Move the hammer all the way to the rear and insert the rear sideplate screw, the longer one, into the grip screw hole at the lower end of the grip extension on the frame, turning it into a threaded hole in the end of the hammer strut (mainspring guide).

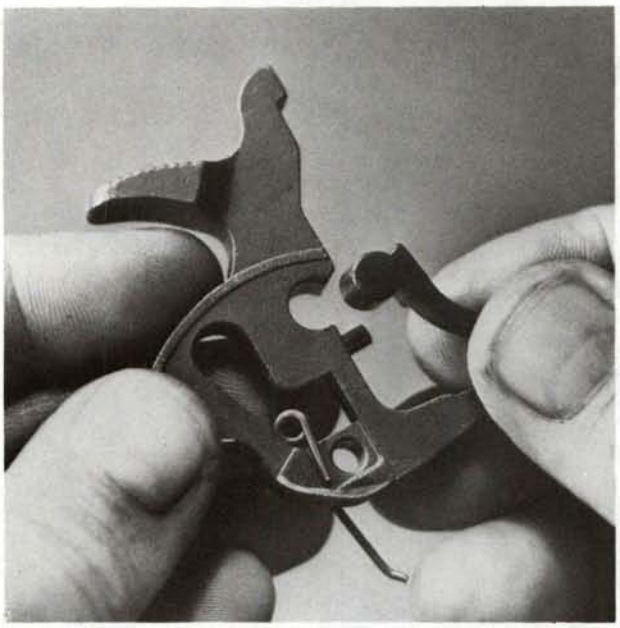


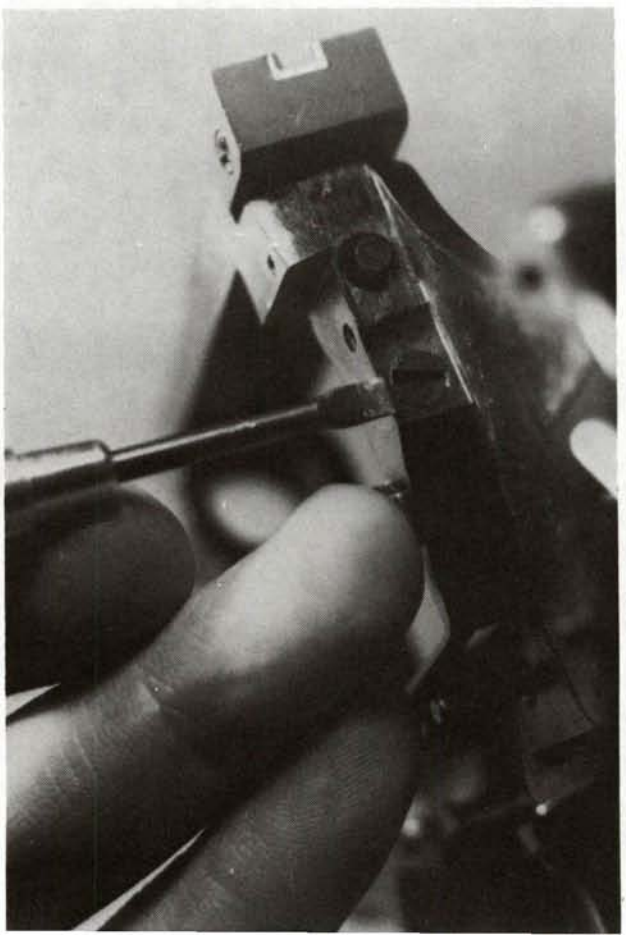
22. When turned all the way in, the screw will capture the hammer strut, detaining the hammer spring.



23. The hammer is now easily removed toward the left. If the hammer strut and spring are to be removed, use a tool to exert pressure against the upper collar of the strut while removing the screw. **Caution:** *The compressed hammer spring is powerful. Release the tension slowly, and ease out the strut and spring.*

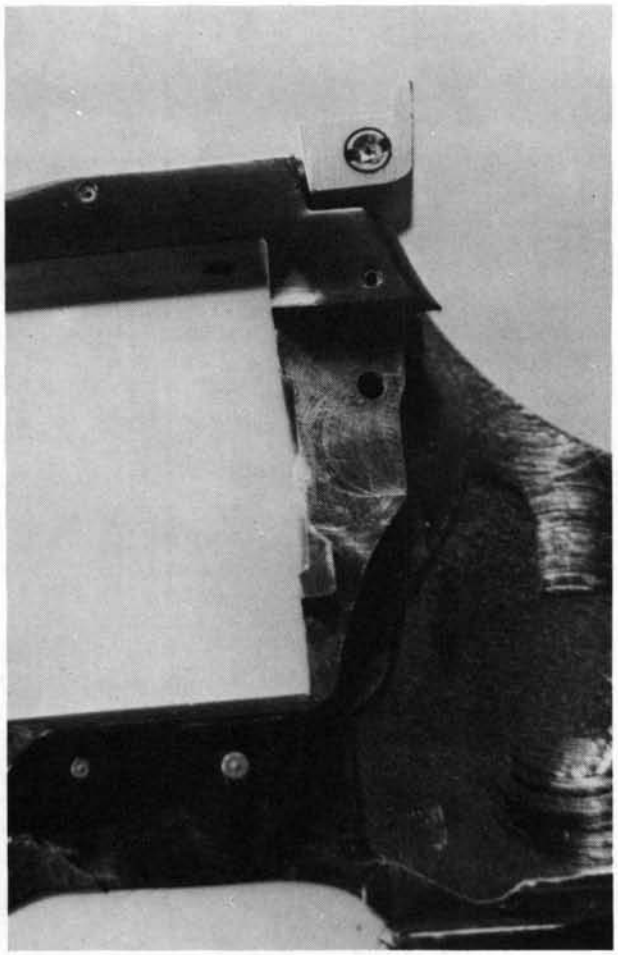
24. The double-action lever can be moved out of the hammer toward either side, and the plunger and spring removed from the front of the hammer. The trigger spring is easily unhooked from its position in the center opening of the hammer.



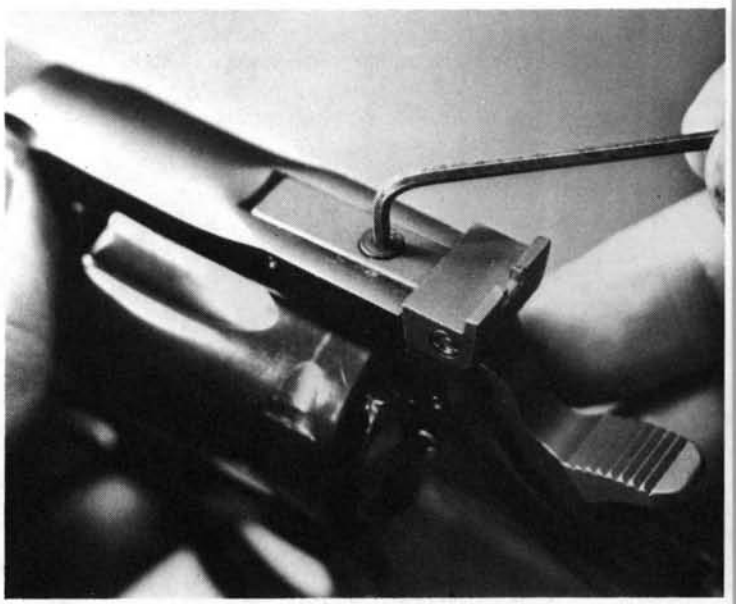


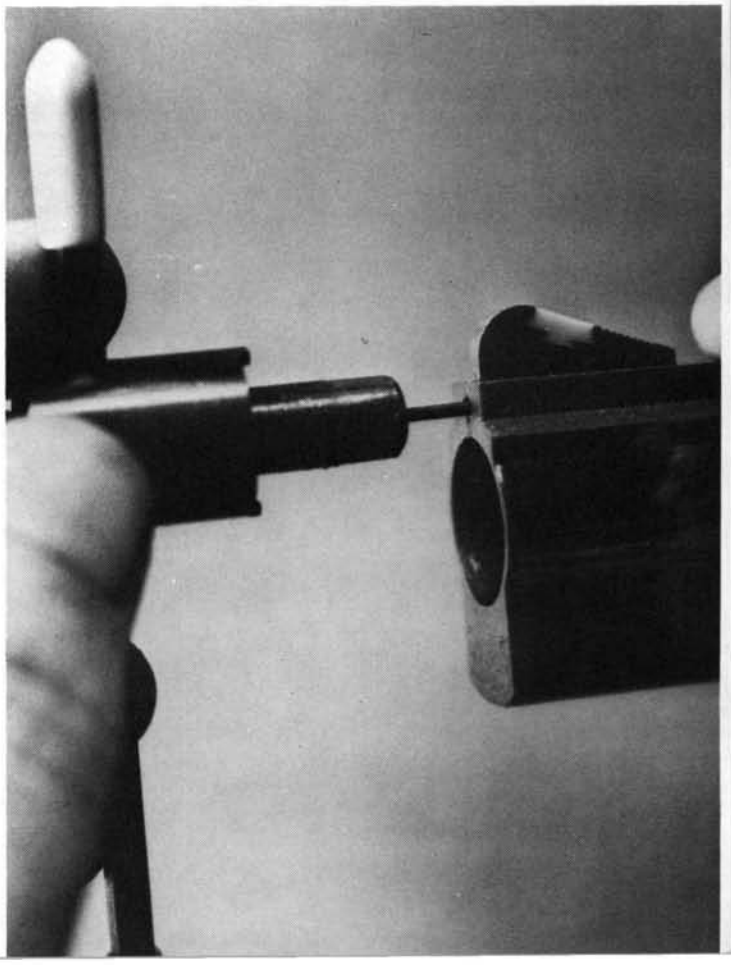
25. Taking out the screw on the inside, just below the firing pin, will release the cylinder aligning ball and its spring for removal toward the rear.

26. Drifting out the small roll pin at the upper rear of the frame will release the firing pin and its spring for removal toward the rear. Drifting out the roll pin at the top of the frame, above the cylinder opening, will partially free the rear sight.



27. After removal of the cross-pin, backing out the elevation screw will release the rear sight for removal. Take care not to lose the two small coil springs on the underside of the sight.

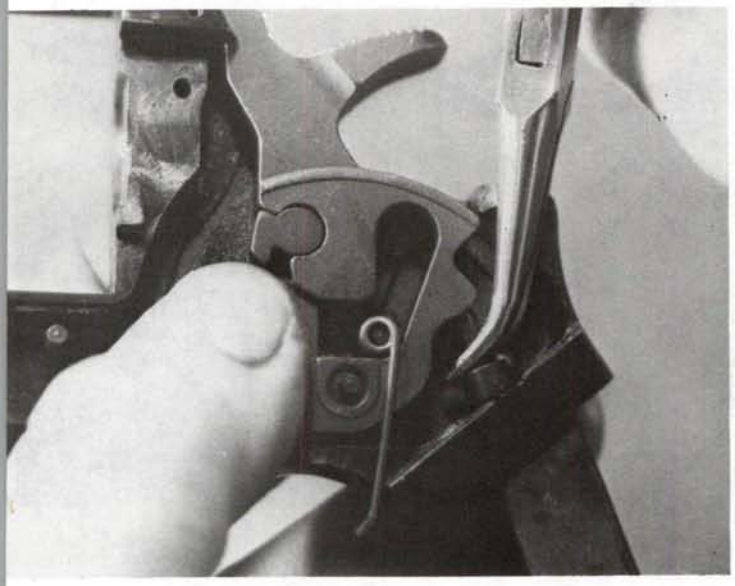




28. The small projection on the barrel removal tool is an Allen wrench which fits the screw at the front of the barrel shroud that retains the front sight.

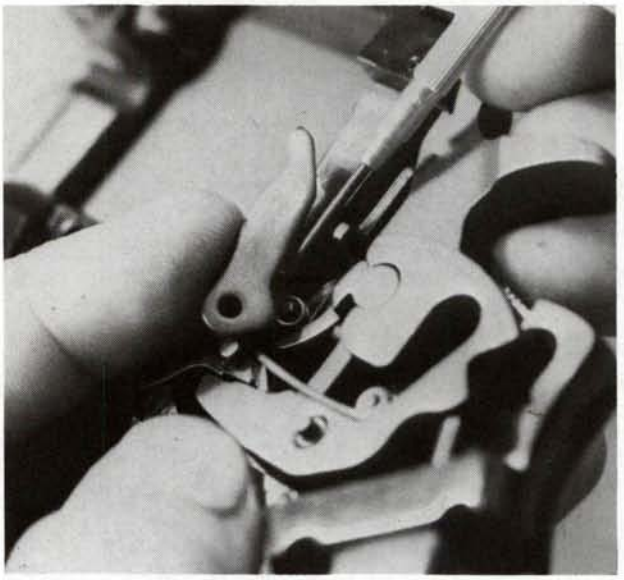
Reassembly Tips:

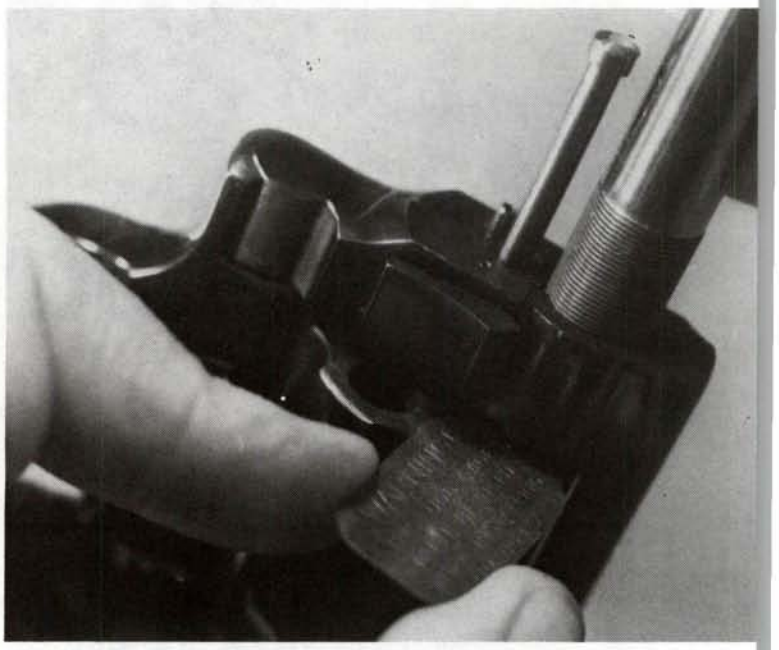
1. When replacing the hammer spring and its guide, grip the guide with pliers as shown, and force it down into its well in the frame. During this operation, it would be advisable to clamp the grip extension in a padded vise, and take care that the pliers don't slip. If you can hold it down, the hammer can be slipped back in, as shown. If not, use the sideplate screw to hold it down, as described earlier. (See steps 21 and 22.)



3. When replacing the sideplate, remember that the lip at its front edge must be put in first, then the rear of the plate moved inward.

2. When replacing the cylinder hand, be sure the angled tip of the hand spring is engaged in the groove at the back of the hand, then move the hand downward and toward the right, onto its post on the trigger.





4. When replacing the barrel, remember that the end with the longer threaded section goes toward the rear. Insert the gauge supplied with the gun between the rear face of the barrel and the front of the cylinder, and turn the barrel until it is snug, but don't over-tighten it. Leave the gauge in place while installing the barrel shroud. If the original gauge is not with the gun, any .006-inch leaf (feeler) gauge will work.

Index/Cross-Reference

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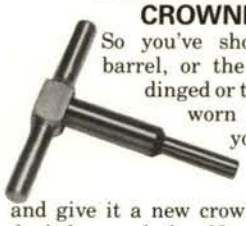

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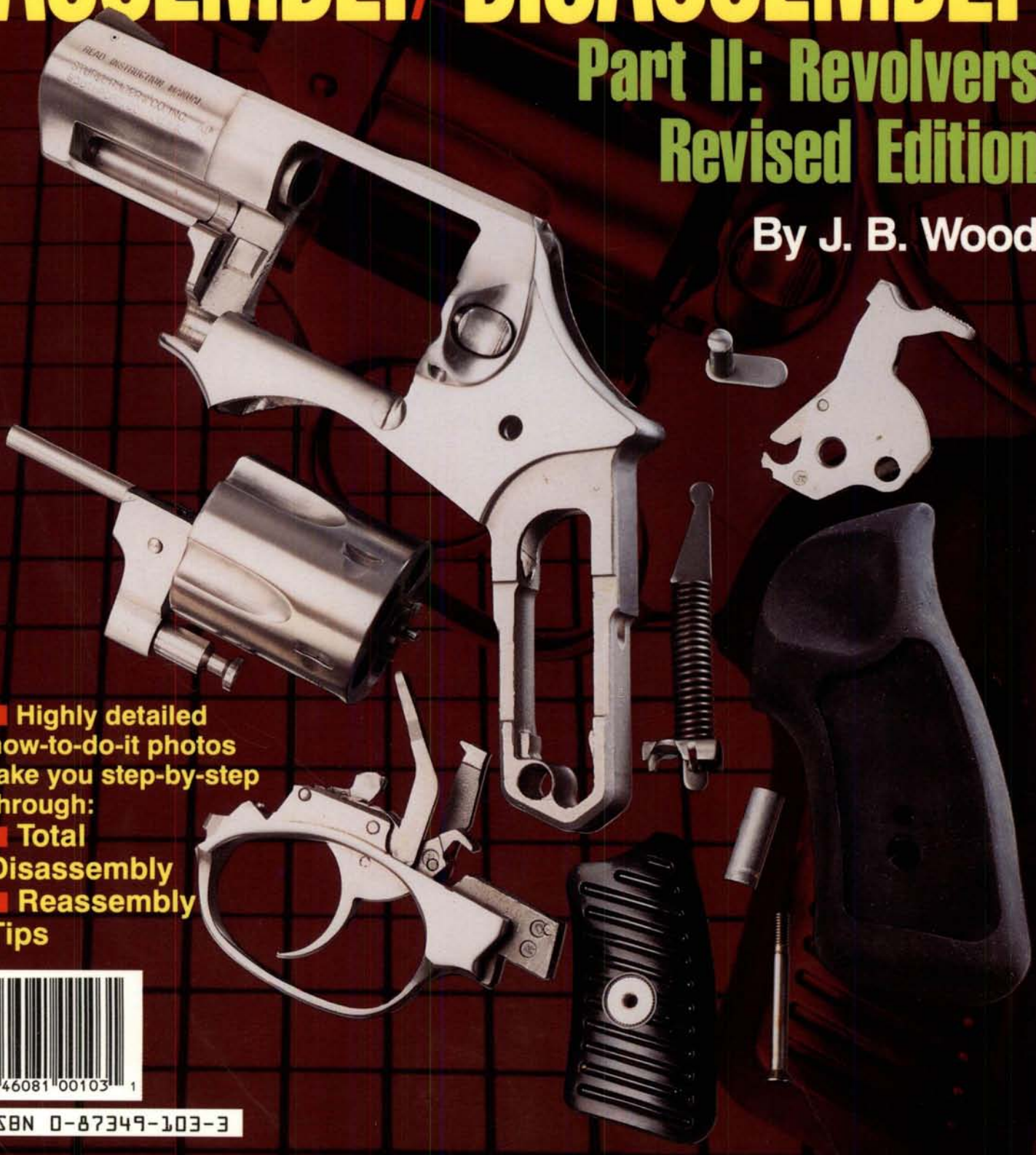

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