

Variations of the “Remington Navy Rifle, Model 1870”

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The Remington Navy Rifle, Model 1870 is a controversial arm. It cannot compete in history with the “Hall Carbine Affair” but the fact that the government made a profit on the sale of 10,000 of these arms before they were issued will forever put them in a niche that commands attention.

On March 24, 1869 Rear Admiral John A. Dahlgren ordered a Board of Officers to convene at Washington to “make an examination of the best systems of breech-loading, and test them fully in respect to endurance, convenience and general efficiency.” After an exhaustive series of tests, which included the most popular breech-loaders of the day, a report was issued on August 2, 1869 in which the Board made the following recommendation: “While each system of breech-loading examined or tested by this Board has its own peculiar merits, the Board is unanimous in preferring the Remington system for naval use in the service of the United States, and therefore recommended that it be adopted for the naval service.” Arms inspected by the Board included the various Allin alterations of the Springfield, the Berdan, Burton, Maynard, Millbank, Needham, Roberts, Sharps and various Remingtons.

In accordance with the above determination, ten thousand rifles were ordered constructed at the Springfield Armory, but this was not done before the findings of the Commission had been repeatedly confirmed, by a personal inspection of the several small arms factories of the country and of a number of systems not entered during the session of the Board.

As mentioned above, the Navy Bureau of Ordnance contracted with Springfield Armory to manufacture 10,000 of these rifles according to a model arm. The model arm had two positions for the rear sight, which caused some confusion. By the time 2,500 rifles had been completed, arrangements had been made to sell the entire 10,000 to the firm of Poultney & Trimble of Baltimore. The story is that the rear sight was in the wrong place, i.e., too close to the breech. The rear position of the model arm had been picked. If this story is true, one wonders why the change in sight position wasn't acted upon immediately and only the “defective” arms sold to the Baltimore firm. (Later records showed that the arms were too far advanced in production.) The 10,000 arms sold soon appeared on French soil, though too late to see service in the Franco-Prussian War. In any event, the Navy sold the 10,000 rifles for enough of a profit to manufacture 12,000 more. This “profit” of 2,000 rifles has to be one of the few instances where the government didn't sell their manufactures at a loss. A royalty of \$1.00 was paid to E. Remington & Sons for each of the arms manufactured on their system.

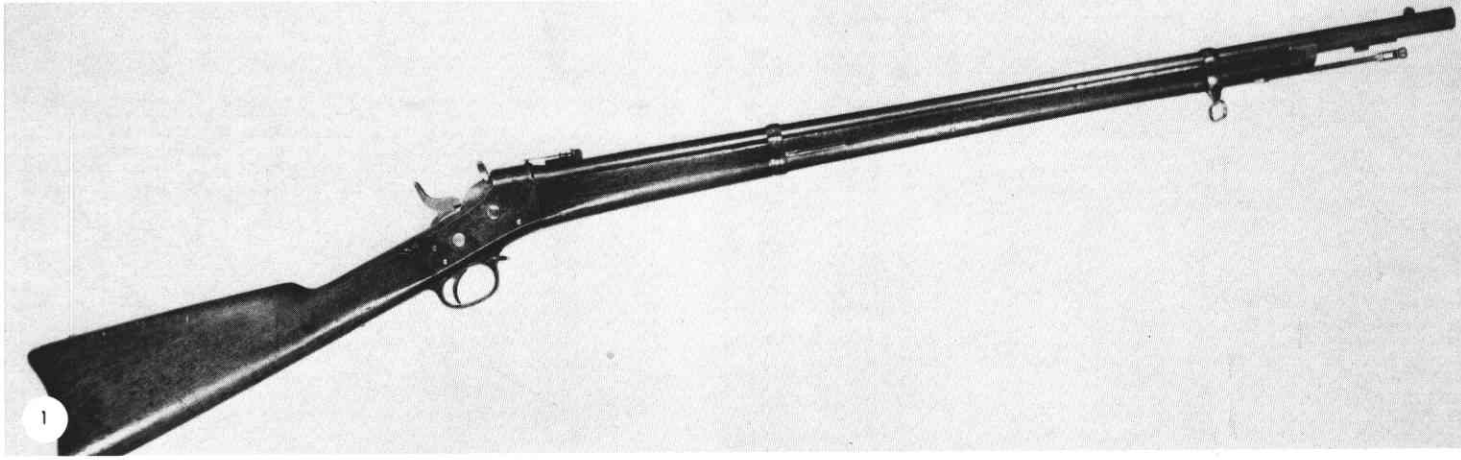


There are two distinct types of this rifle excluding the experimental pieces: there were 10,000 of the first type with the rear sight at the rear (PHOTO 1); and there were 12,000 of the second type with the rear sight in the forward position (PHOTO 2).

Correspondence from the Navy ordnance board to Admiral Dahlgren recommended that these arms were to have the barrel bright for the Marines and brown for the ship's company. The Rules for the Management of these arms state “In cleaning the exterior of the barrel, avoid bending it, or rubbing it with anything which might injure the browning.” I have found these rifles with bright barrels that show a beautiful blue when the recoil stud under the barrel is removed. I have yet to find the document that shows the number or percentage of these arms that were finished browned or bright from the armory. On February 18, 1871 there was a letter from Lt. Cdr. Robison to Commander A. Ludlow Case (Chief of the Navy Bureau of Ordnance) stating that Col. J. G. Benton had informed him (Cdr. Case) that Mr. Samuel Remington had left instructions not to brown the barrels. There is no indication in the records I have examined that these instructions were followed.

A September, 1972, article in *The American Rifleman* stated that 4,000 of the rifles had been shipped to Brooklyn, Boston, and Portsmouth Navy Yards and that they had browned barrels, while unissued arms had bright barrels. The article continues with the following statement: “So that all the arms would be alike, Poultney asked that the browning be removed and paid Springfield employees to work after hours to get the job done faster.” This was the first time such arrangements had been made at the armory.

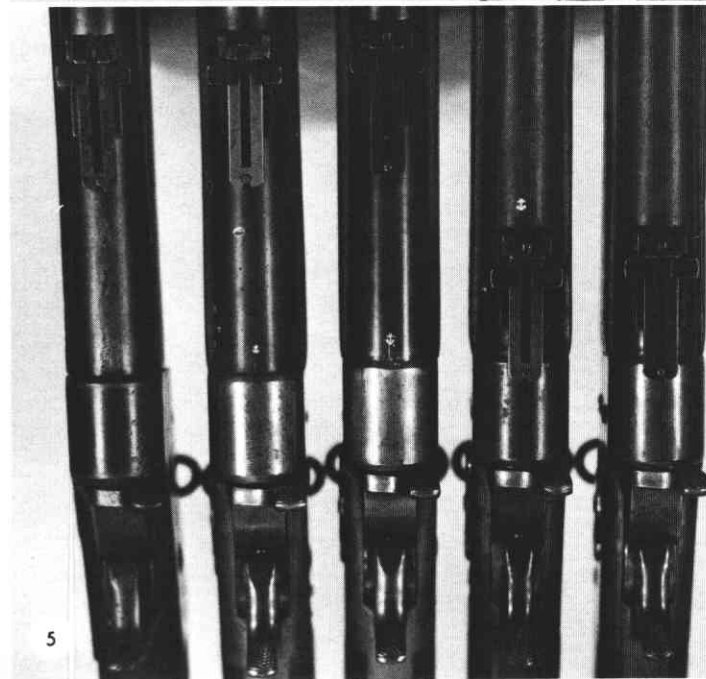
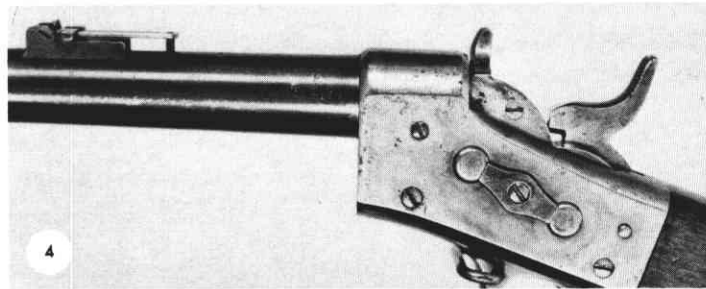
In addition to the different placement of the rear sight, i.e., 3/8” and 3-3/32” from the front of the receiver to the rear of the sight base, there is another difference that to my knowledge has only appeared in print in A.S. of A.C. Bulletin No. 36, and that is the barrels of the two types are entirely different. There is a pronounced swell of the bar-



First type Navy rifle.



Note differences in sight location, barrel contour, and hammer spur in pictures 3 and 4.



rel where it enters the receiver on the first type (PHOTO 3). Once a collector has seen the two types together side by side the difference is readily apparent (PHOTO 4).

Another very minor difference noted is in the machining work on the top of the hammer (PHOTO 5). On the second type there is a more pronounced outline on the hammer almost a shield outline with the flat or top portion towards the front. The first type has considerably less definition to it.

There is also a difference in barrel markings between the two types. On the first type there is an anchor forward of the rear sight, while on the second type the anchor is between the receiver and the sight. Don't count on this distinction to tell the difference between the two types though, as specimens with no anchor have been observed.

I have noted two different sizes of anchors. The large size appears on the earlier pieces. I am assuming that those 2nd type arms with the small anchor are of later production.

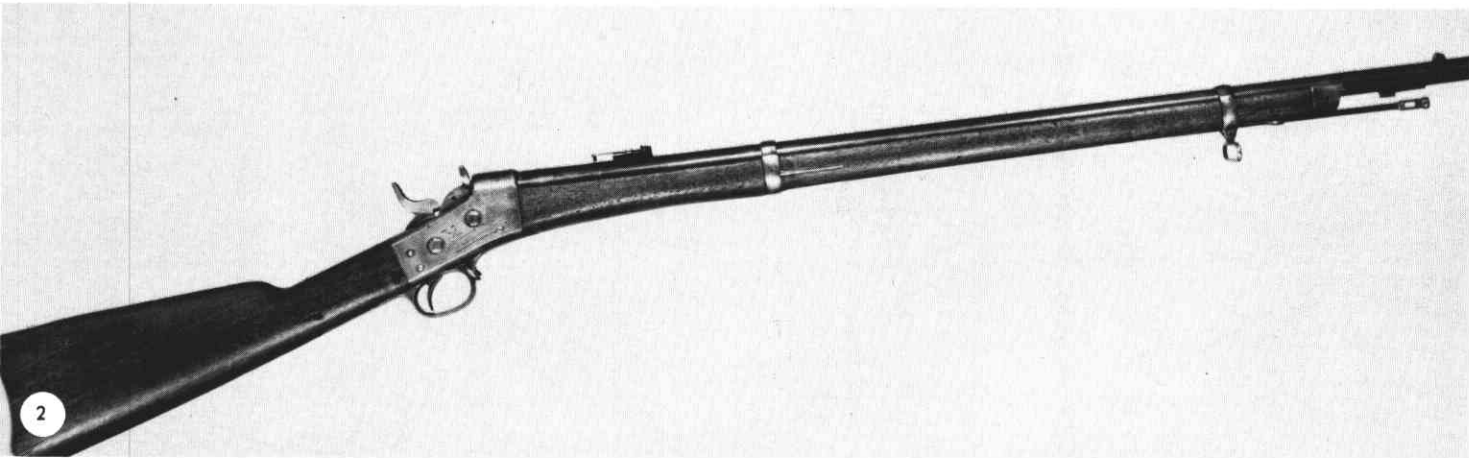
There is also a difference in the sight slide stop screw of the two models. They are short on the 1st type and long on the second.

Receivers of both types were case-hardened in mottled colors (PHOTO 6). Due to the severe service they saw, it is extremely difficult arms to find in "new" condition. Therefore, the case colors are usually very dull if encountered at all. The receiver markings shown in photo 6 are found on both types, i.e., eagle, U.S.N., Springfield, 1870.

All of the first type rifles I've been able to dismantle have numbers on the bottom of the barrels (PHOTO 7). To date the range is from 10 to 623. As few of this type have surfaced, I can't tell for certain if this is a serial number. I have only encountered one rifle of the "common" second type with a number, and that one is 294.

Early Navy correspondence stated that the ramrod was to be cupped at the end instead of solid (PHOTO 8). This was to make sure that the ramrod wouldn't strike the firing pin when cleaning the piece. In the first place, the ramrod isn't long enough to reach that far. It must be inserted at both ends to do the job intended. In the second place

Note differences in hammer contours and anchor stamps. 3 second types on left, 2 first types at right.



Second type Navy rifle.

the firing pin is spring loaded. It shouldn't protrude through the breech block at all. In any event, few specimens survive with the cupped ramrod; it is possible that this feature was changed during production.

All specimens I've seen of both types that have been in "untouched" and unabused condition have had the "ESA" cartouche of Erskine S. Allin, Master Armorer at Springfield, on the butt stock. One piece of the first type had, in addition, a small Bureau of Ordnance stamp on the butt stock (PHOTO 9). This same rifle has the inspector's stamp on the left side of the barrel, but no anchor forward of the rear sight.

Most collectors notice the Remington Patent dates of May 3 and November 15, 1864 and April 17, 1868 on the receiver tang (PHOTO 10). Not everyone notices the Joseph Rider patent date of February 11, 1868 on the lower sling swivel though (PHOTO 11). A number of Springfields manufactured during the 1870's had the sling swivels so marked. All of both types of Remington Navy Rifles that I've seen have been marked in this manner.

Various models of this rifle were made experimentally, with the thumb pieces on the left-hand side, in caliber .50 rim-fire, in .45-70 center-fire, with several different types of extractors, and at least two with Col. J. G. Benton's improvement wherein one pressed on the left thumb piece to open the chamber and pressed on the right hand thumb piece to close the chamber.

Initially these arms were to fire the .50 caliber "Martin" cartridge, but later the "cup-primed" designed was used. Examples of some common .50 caliber Government or .50-70 cartridges are shown in PHOTO 12.

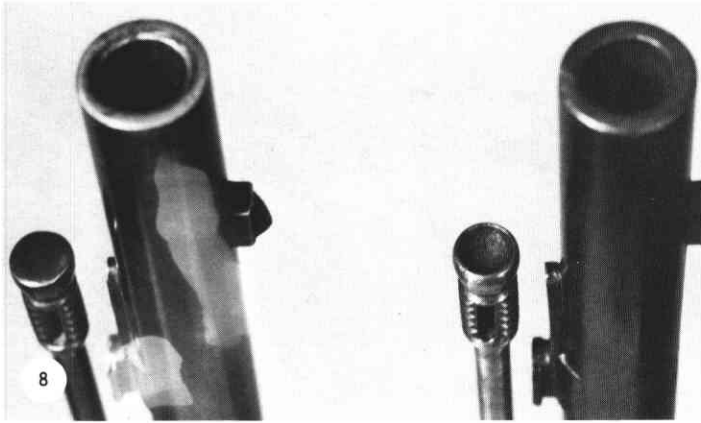
None of the various lists of government inspectors that I have seen identify H.B.R., whose initials grace most of these arms (PHOTO 13). George Moller of Denver gave me copies of correspondence showing that Lt. Commander H. B. Robison (also spelled Robeson), U.S.N., was stationed at Springfield Armory during the fabrication of these rifles. A Lt. Cdr. Frederick Pearson, U.S.N., was there also. I have observed three different sizes of dies used in the marking of either barrels or receivers. It appears that the smallest size (1/16") was used earliest and the larger sizes (up to 1/



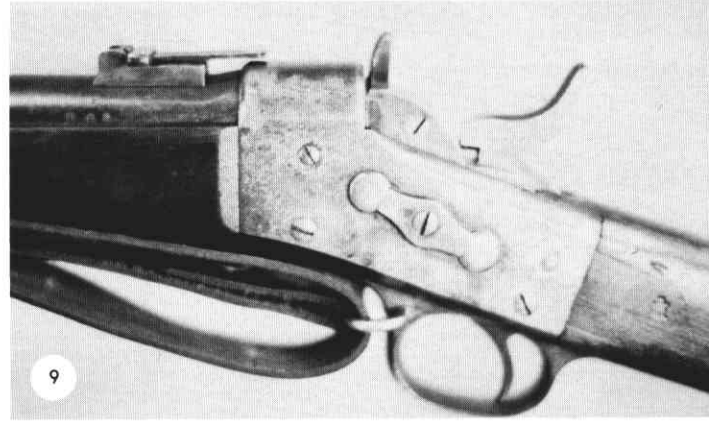
Receiver marking on both types. Traces of case hardening.



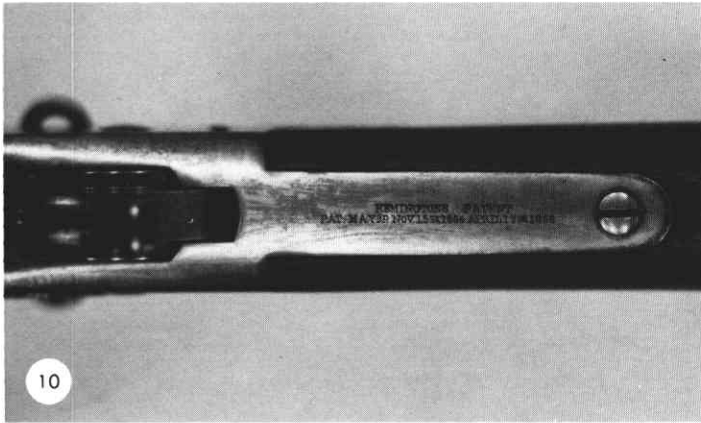
Numbers on bottom of barrels top 4, 1st type; last one, 2nd type.



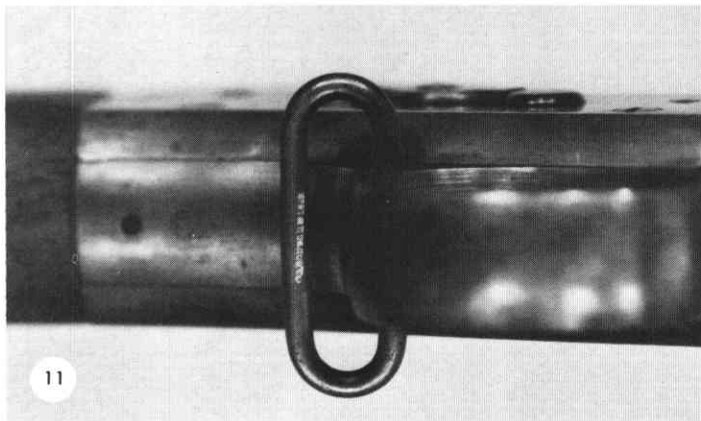
Left, solid ramrod; right, cupped type.



Bureau of Ordnance stamp on first type buttstock.



Receiver tang marking of both types.



Lower sling swivel showing patent date of Feb. 11, 1868.

10") (PHOTO 14) were used later. This is pure conjecture, but is borne out from my limited observations.

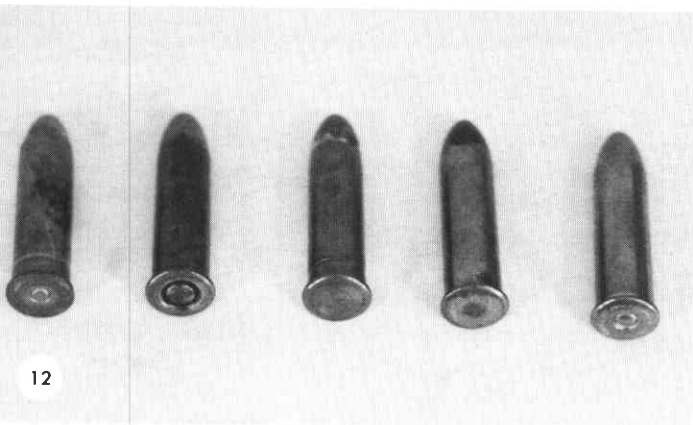
A number of the stampings of the inspector's initials on these rifles give the impression that three different initial stamps were used, instead of just one stamp, as the initials do not appear to be exactly in line.

Several times I have encountered these arms missing the bayonet stud and have been told that this is the "rare" model issued to marines which took the standard Model 1855 socket bayonet (PHOTO 15). I have yet to see the primary source material which mentions the lack of the bayonet stud. The Rules for the Management of the arm only show one type of bayonet, and the illustration shows the stud on the bottom of the barrel. We also know that by February 20, 1871, 9,000 of the sword bayonets had been delivered by the Ames Manufacturing Company of Chicopee, Massachusetts. There are dealers in military surplus goods who can furnish the bayonet stud for those who might like to add one to a rifle missing the same. (PHOTO 16) One rifle of the first type in my collection has the key to the bayonet stud removed and this piece will accept either the sword bayonet or the angular one. Coming from a military background, I'd heard there was a right way, a wrong way, and a Navy way. In this case the Navy way is the most ingenious, if in fact that was where the modification occurred.

I don't know whether the bayonet stud was left off at the time of manufacture, but from the specimens I've seen most appear to have had the stud affixed at one time. Other rifles have been "cleaned" severely enough to have obliterated any tell-tale markings. I believe most of the removal work was accomplished subsequent to the arms leaving Springfield Armory.

Reports of the Chief of Ordnance are not always the most accurate. However, I would like to show the quantities of Remington arms manufactured at Springfield Armory for several years as disclosed by those reports and make a few comments on them.

Fiscal Year ending June 30, 1870
 3 Remington muskets
 1 Remington carbine



12

.70-70 cartridges procured by the Ordnance Dept. Rodman-Crispin, Mar- in. inside primed. USCCo Farrington primed, 1892 Winchester contract.

Fiscal Year ending June 30, 1871

- 1,008 Remington muskets
- 313 Remington carbines
- 1 Remington rifle
- 22,013 Remington Navy rifles

This last entry is what we're talking about today. The number includes the 10,000 of the first type and the 12,000 of the second type.)

Fiscal Year ending June 30, 1872

- 1 Remington Navy rifle
- 5 Remington rifle-muskets

The one Remington Navy rifle shown here could be the one that was manufactured in .45 caliber.)

Fiscal Year ending June 30, 1873

- 10,001 Remington rifles locking

These are the "Army" rifles which have a longer barrel and take a socket bayonet. They have the Smoot patented locking feature and are quite different from the "Navy" rifles.)

As it is not the purpose of this talk to go into the details of development, specifics of construction, or description of the accoutrements for these arms, I have been brief in that area, trying not to bore those who are knowledgeable of the background, but still trying to add some new information for the martial collectors here.

Based on my observations, the following chart shows what has been or may be encountered in the way of minor variations on these rifles. This listing does not go into the various sizes of the inspector's stamps used, nor does it include all of the marking variations for those arms found missing the bayonet stud. I have seen those arms with an "X" to the left of their description. I don't know if all of the other variations shown here exist, or if there may be some other variants I haven't encountered.

For all practical purposes a collection which includes an example of the first type and an example of the second type of these rifles should be considered complete in that area. Procuring an example of the first type is not easy. I have heard of one person who searched diligently for several years trying to get a picture of one. I believe the picture he finally ended up with showed a fake. However, the quest for that one piece we don't have is an integral part of what collecting is all about.



13

Small inspector's initials on left side of barrel — 1st type.



14

Large inspector's initials on left side of barrel — 2nd type.



15

Top, Ames contract regulation sword bayonet, bottom, M1855 bayonet for arms without stud.

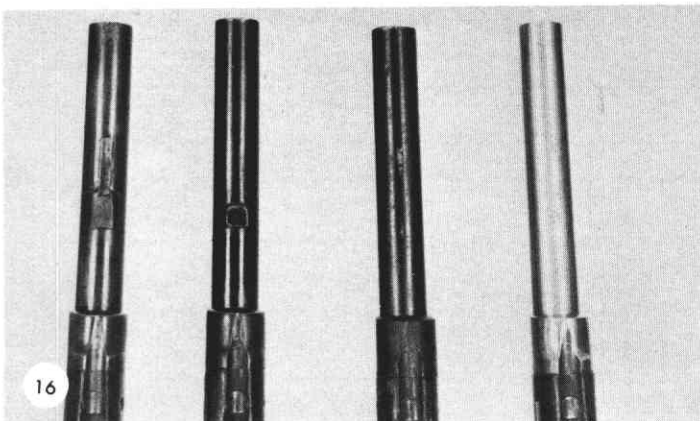
FIRST TYPE

Blue Barrel

- X With Inspector's Marks on Barrel (See Photo 3)
- With Inspector's Marks on Receiver
- X Without Inspector's Marks (Photo 17)
- X Without Bayonet Stud (See Photo 16)

Bright Barrel

- X With Inspector's Marks on Barrel (See Photo 13)
- With Inspector's Marks on Receiver
- Without Inspector's Marks
- Without Bayonet Stud



Bayonet studs: full, partial, none (once there), none but cleaned.

SECOND TYPE

Blue Barrel

- X With Inspector's Marks on Barrel (See Photo 14)
- X With Inspector's Marks on Receiver (Photo 18)
- X Without Inspector's Marks (Photo 19)
- X Without Bayonet Stud (See Photo 16)

Bright Barrel

- X With Inspector's Marks on Barrel
- With Inspector's Marks on Receiver
- Without Inspector's Marks
- X Without Bayonet Stud (See Photo 16)



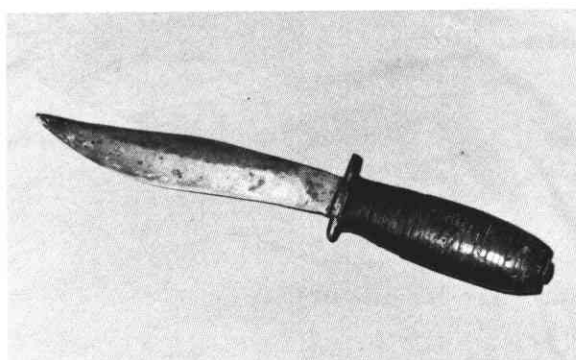
First type, no inspector's marks on receiver.



Second type with inspector's marks.



Second type, no inspector's marks.



Another look at the Ben Lilley knife.