A ROUND TABLE DISCUSSION OF AMERICAN REVOLVING LONG ARMS GIVEN AT THE ANNUAL MEETING OF THE AMERICAN SOCIETY OF ARMS COLLECTORS, DEAUVILLE HOTEL, MIAMI BEACH, FLORIDA OCTOBER 1, 1960

Participants ... Mark Aziz, James B. Smith, Frank N. Russell Henry M. Stewart.

MARK AZIZ THE ROPER GUNS

This short talk on the Roper revolving guns is not meant to be the final work on this interesting firearm. My observations and notes cover a relatively limited number of specimens but it will serve to acquaint you with the Roper family of guns. My survey will continue with the help of collectors like yourself.

THE MAN AND THE COMPANY

Sylvester H. Roper was born in New Hampshire in 1830. Most of his working life he was known and achieved considerable success as a mechanical engineer. He lived at 229 Eustis Street in Roxbury, Mass., with a shop at Magazine and Eustis Streets. Roper, as did many inventors of the day, concerned himself with the major domestic invention of the day, the sewing machine. A knitting machine, hot air furnaces, kitchen ranges and screw making machines were among those credited to him. His most interesting invention, other than his guns, was a steam powered bicycle invented in 1869. A specimen can be seen at the Smithsonian Institution and a photo in the book I have on the table. Roper also invented and marketed a steam carriage. He died at the Charles River Park in 1894 of a heart attack while making a trial of a new steam bicycle.

The Roper Repeating Rifle Company of Amherst, Mass. was formed in 1866, shortly after the granting of patent. number 53881 dated April 10, 1866. At this only a shotgun was made with calibers, or more correctly, gauges of 12 and 16. Until we actually examine specimens gauging much differently than those we call 12 gauge and 16 gauge we must ascribe reports of 13 gauge and 20 gauge as an error due to variations in barrel diameter. The cartridge collectors report specimen of the 12's and 16's only. Incidentally, it is interesting to note that Roper states in second paragraph of his original patent the following:

> "The firearm to which my invention relates is adapted to the use of the well-known metallic flanged cartridge primed with percussion (fulminate) at its base."

I wonder what he means by "well-known metallic flanged cartridge" since both the Roper rifle cartridge and the shotgun case were specific to this arm. Roper manufactured all parts of the gun except the barrel, some of which are reported to be marked "Made by Hopkins and Allen Mfg. Co, Norwich, Conn." On July 14, 1868, two years after the first Roper patent, we find patent No. 79861 issued for the familiar detachable choke. Roper claimed that his personal experiments proved that the scatter of shot depended on the shape of the extreme end of the barrel or the muzzle.

Reprinted from the American Society of Arms Collectors Bulletin 3:18-21 Additional articles available at http://americansocietyofarmscollectors.org/resources/articles/ He claimed that his detachable choke could be used on shotguns other than his own. Since these guns were made for over one year prior to the patent on the choke I wonder if any shotguns were ever made without a choke. I have never seen one and doubt that any were so made.

Guns were made by Roper at Amherst from 1867 to November 1868. At that time, due to poor acceptance of his guns, Sylvester Roper sold his patents, tools and fixtures to D.W.C. Perry, one of Christopher M. Spencer's sponsers and to Christopher Spencer. They operated the plant at Amherst for about a year. In April 1869 the production at Amherst ceased.

Perry and Spencer moved the plant to Hartford, Conn in 1869 where the name of the company was incorporated as the Roper Sporting Arms Co. You will recall the previous corporated name was Roper Repeating Rifle Co. Here both shotguns and rifles were made until 1876. During this time the guns were manufactured by Billings and Spencer. C.E. Billings was president of this company and C.M. Spencer was listed as Agent. They also manufactured forgings for pistols, sewing machines, agricultural implements, and the Billings' Patent Forged Sewing Machine Shuttle. A photostatic copy of one of their ads and a letter to the Sharps Rifle Co dated 1870, concerning forgings they were making for Sharps rifles, are also displayed.

C.E. Billings had considerable firearms experience prior to taking over the Roper gun. About two weeks after Roper was granted his patent C.E. Billings of Windsor, Vt was granted a patent on a single shot pistol much like the early Remington single shot. This patent, 54100, of April 24, 1865 was followed on Sept 22, 1868 by a combination pistol and sword (No. 82276) Patent papers on both these guns are also exhibited.

In a few minutes we will refer to still another Billings patent -- the one that indicated that the Roper revolving rifle and shotguns were doomed. I am glad that we can show both the patent paper and a specimen gun in this instance.

THE GUNS

We have seen that all Roper guns were made for a total period of nine years, two years at Amherst and seven years at Hartford. Let's review guns made during these nine years.

THE SHOTGUNS

Considering the <u>Amherst</u> shotguns first, we find both 12 and 16 gauges. In my sampling the 12 gauge all had low serial numbers (34, 44, 97 and 238) with the inside hinge on the loading door. In the case of the 16 gauge guns we examined 9 guns, serial numbers 360 to 1275.

Here we first find a change in the hinge arrangement noted previously. Up to around serial No. 1000 the hinge is found on the outside and after 1000 the hinge is on the inside. Since the 12 gauge guns are found with inside hinges only, we can only assume that at Amherst only 16 gauge guns were made at first and later, at about the time of the hinge change, the 12 gauge guns were made available. Fewer 12 gauge guns were found and all had the low numbers, the highest being 238.

Later at Hartford we see only the inside hinge. We looked at 5 guns Serial #185 to 466, all in 12 gauge. This proved that a new number series was started in Hartford. We could not find a 16 gauge in Hartford. From the Second Annual Circular of the Hartford company, dated August 1, 1870, we find the price schedule which lists the "Re-moleled plain 16 gauge shotgun" for \$35 and the "New Model, improved plain 12 gauge shotgun" for \$55. Also a better grade 12 gauge gun for \$80. This would indicate that no 16's were made in Hartford and that those sold from Hartford were stock carried over from Amherst and carrying the Amherst address on the loading cover.

THE RIFLES

The 5 rifles examined had serial numbers from 319 to 470. Hinges are all inside, of course. They were made in 5 and 6 shot and sold for \$45 and \$58 respectively. The .41 caliber is really .40 since the catalog so identifies it.

The combination shotguns and rifles cost from \$60 to \$105 complete with loader, loading block, mold, and other accessories. One of these .40 bullet loaders is shown here by James B. Smith.

Rifle belts for 24 rounds could be bought for \$4,00 and shotgun belts for \$5,00.

THE COMBINATION GUNS

In the combination guns it was necessary to turn out the setscrew in the 16 gauge guns and turn in the screw in the 12's. When a rifle barrel and cylinder were used on the shotgun action you got a four shot rifle. One of the two in my collection #388 has a 4-shot spindle and a shotgun type butt. This obviously came from a combination set. The other rifle #470 is 6 shot and cannot be used in combination with a shotgun barrel. Only a 12 gauge barrel can be used with a rifle which would explain why the 16 gauge gun was dropped when the operation was moved to Hartford. I say this even though the catalog lists a 16 gauge shotgun and rifle combination. None of these have been found so far but they might exist and ask that anyone finding one so notify me. Barrels are found both in round and hex shapes and in many weights and with a variety of sights.

The Hartford company ceased operations in 1876 but they must have encountered sales resistance prior to that date since Charles E. Billings tried to stem to inevitable by inventing a gun designed for the regular 12 gauge shotgun case. The patent was filed on May 3, 1875 and granted on November 2 of the same year. The gun on the table is serial number 7. This was a lucky number for me since the gun got into my collection for \$28 from one of the sharpest operators in the business.

More Amherst guns than Hartford. Believe 1500 Amherst and 500 or 600 in Hartford.

In conclusion we must mention the cloverleaf types of which Henry Stewart has two specimens, both considerably different. Both are unmarked, and of superior workmanship. Henry has located an old auction catalog with a gun having Amherst markings. One is a rifle-shotgun combination and has two triggers. The forward one revolves the cylinder and cocks it while the rear one fires it. A rifle barrel screws inside the 26-1/2 shotgun barrel. I have been unable to find a patent on this or the other cloverleaf piece so am not able to state just where these guns fit into the Roper picture. We can only sumise that they are early prototypes of a gun never manufactured. We do have a copy of a real wierd gun patented by Roper on August 20, 1889 for a magazine gun. This was 12 years after the Hartford company went out of business. We have no specimen of this gun.

I hope that this has brought you some understanding of this one-oft-ignored gun. I would appreciate information on guns that you have access to.