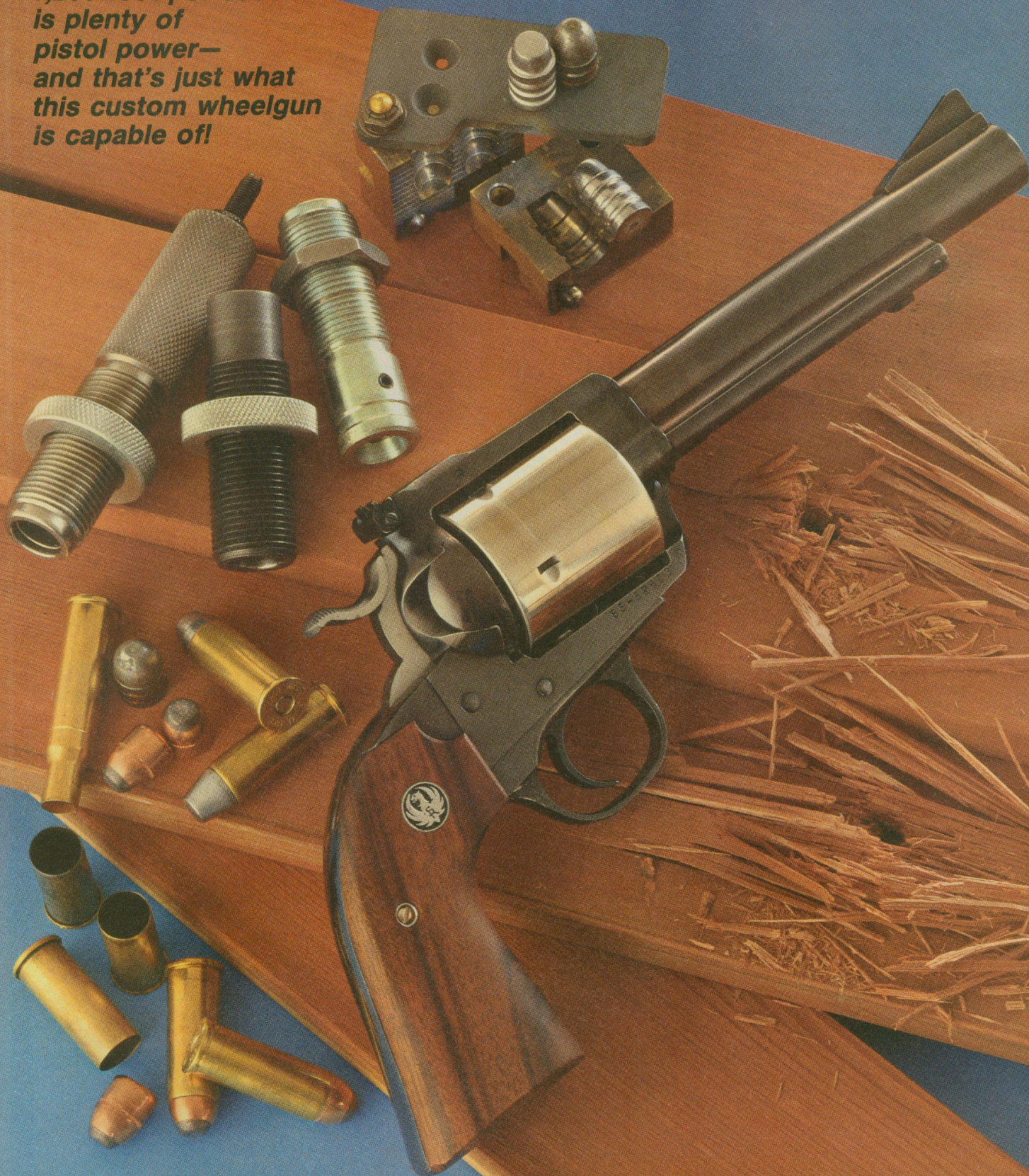


The **.500 MAGNUM**

THE "OUTER LIMITS" OF HANDGUN POWER

Slamming a 460-grain bullet out at 1,200 feet per second is plenty of pistol power—and that's just what this custom wheelgun is capable of!

By Ross Seyfried

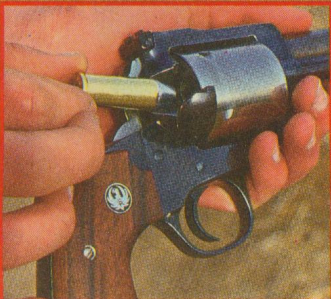


Some years ago I was bitten by the “magnum” handgun bug, drawn by the charisma of the awesome power of a gun called the Three-Fifty-Seven-Magnum. It sort of swirled up on you in a cloud of damaged elbows, smashed motor blocks and lethality that bordered on nuclear. I shot one for a week and immediately bought a .44 Mag so that I had a real gun, realizing that about all the .357 was, was noise . . . from its muzzle and its devotees and detractors. I almost lived happily ever after with a .44, using it to take all sorts of big game and to scrape a ton of unhappy bull off me after he objected to my fastening my horse onto his neck and trying to lead him into a stock trailer. My .44 Magnum horsepower bubble burst one day when John Linebaugh drove into my yard with one of his special .45 “Long” Colts. What he showed me that day in terms of accuracy, shootability and power made my .44 go to its room and sulk. Moving up the scale from a .429-inch bore to a .452-inch bore gave us a remarkable ballistic gain. The .45 would let us drive a 370-grain bullet at the same velocity that the .44 pushed a 240-grain bullet, with the same 40,000 copper units of pressure (CUP). In the hunting fields the .45 was equally superior, to the degree that it begins to take

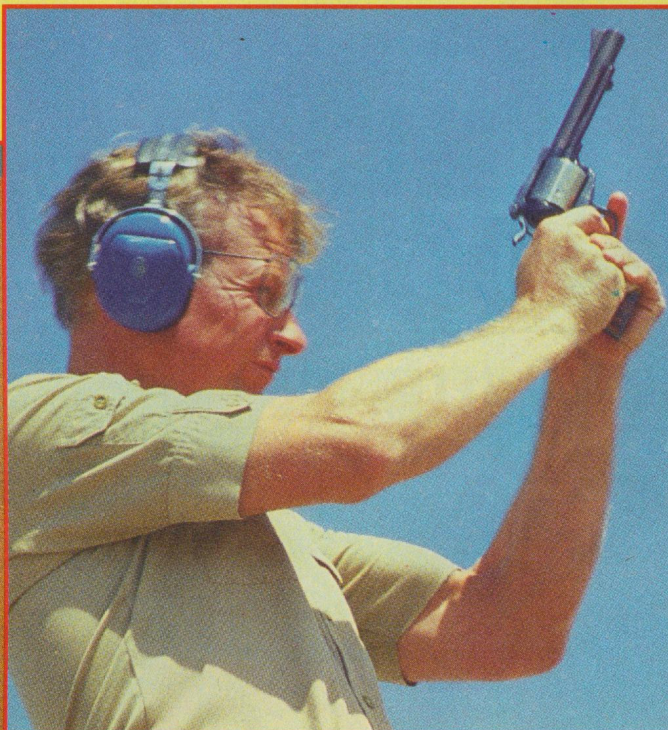
heavy game much more like a rifle than a handgun. The .45’s recoil and muzzle blast are heavy, but after some practice I have learned to apply the power accurately, and now I am totally at home with the big .45. I had all the handgun I ever wanted . . . and then John called me and asked, “What about a .500?”

I immediately doubted the possibility, but past experience has taught me that when Linebaugh talks about a single action, I should make the time to listen. John explained that a revolver with a .50 caliber bore wasn’t new. Years ago some Utah experimenters made up some .50 caliber single actions, and currently, John Crum has toyed with a .50 caliber conversion on a Ruger Redhawk. My imagination went riot; if the .50 could gain on the .45 like the .45 beat the .44, we would really have something. I also had a special reason for wanting more handgun than my .45 Linebaugh—*lions*. I am planning a lion hunt with a handgun, alone, without a rifle to protect me. I know the .45 will do the job, but you just can’t swat a lion too hard, especially if he is going to scratch and bite. The question most often

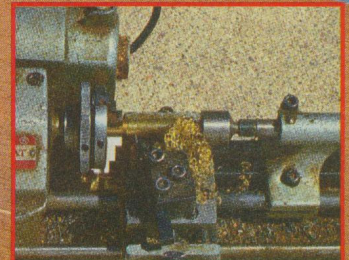
asked is why do I worry about the lion so much after successfully hunting Cape buffalo. The answer is simple: Lions eat buffalo for



The .500 Bisley revolver loads in the New Model Ruger SA manner. The cylinder holds five of these big 1/2-inch cartridges.



Using DuPont 4227 powder and a 460-grain bullet, a muzzle velocity of 1,200 feet per second was attained. According to author Seyfried, this powerful handload has “all of the recoil anyone wants to handle.”



A Unimat lathe was used to trim the .348 Winchester cases to size for the .500 Linebaugh.

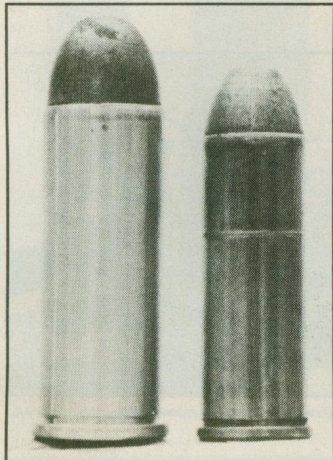


In a demonstration of power, Seyfried smashed four solid bricks with the .500 Linebaugh and the 460-grain bullets.

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breakfast! A .50 would be perfect for the task—a heavy bullet that was already “expanded” when it left the revolver’s muzzle.

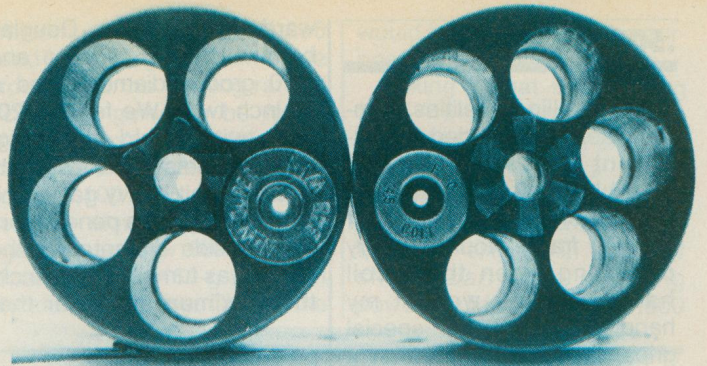
John already had the cartridge designed. The basic case would be the .348 Winchester, cut to 1.4 inches long. “On paper” we had a round that should function around a bullet weighing in excess of 400 grains, with a muzzle velocity in the 1,200 feet per second (fps) range.



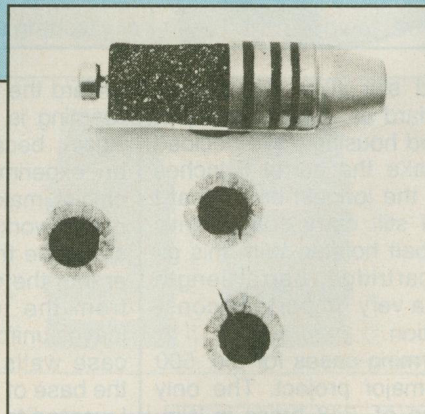
A .500 cartridge, using a 405-gr. NEI bullet, stands left of a factory .45 Colt.

Top: 1¼-in. three-shot 50-yd. group, shot with NEI 385-gr. bullet and Winchester 296 powder. At right is cutaway of cartridge.

mathematical formula that would rate cartridges in a way similar to the rating given them by the thousands of elephant, Cape buffalo and other big-game animals Taylor shot in his career. The tables aren’t perfect, but they seem to give us some realistic index. For instance, Taylor K.O. gives the .220 Swift 6.2 points and the .600 Nitro 150. An independent poll of Cape buffalo gave the .220 Swift “Say what?” and the .600 was rated “Kerflatten!” by a majority of those surveyed. By some chance, the heaviest loads for



Gunsmith John Linebaugh custom made these cylinders for his “wildcat” revolvers. At left is the big five-shot .500 Linebaugh cylinder. The .45 Colt cylinder at right is a six-shooter. Both are of stainless steel.



This would give us somewhere between 1,500 and 2,000 foot-pounds of energy, really a very “ho-hum” number . . . but wait—muzzle energy tables really don’t apply to handguns and game animals larger than small deer. Because we have moderate velocity and bullets that probably won’t expand, we have to look at the more realistic Taylor Knock Out tables to get an idea of how a handgun cartridge will work on big game. The K.O. tables give equal merit to bullet weight, velocity and bore diameter. The mathematical formula is bullet weight \times velocity \times bore diameter divided by 7,000. The K.O. formula is the result of John Taylor’s effort to find a

the .500 Linebaugh come out on the K.O. tables at 41, the same as the .375 H&H. Take the numbers for what they’re worth; they looked good

grooves and a one-turn-in-22-inch twist. John made up a big five-shot cylinder to match the frame, and the .500 was ready to test fire. Using truncated

“If you just had to have the world’s most powerful handgun, a .500 Linebaugh with a 10-inch barrel would hold that title hands down . . .”

enough to me to pursue the .50 revolver project from the drawing board to a real gun.

We made the first experimental prototype .500 on a Seville stainless steel .454 frame. The first barrel was a .500-inch bore with .510-inch

cone bullets cast in a mould made for me by NEI and weighing 460 grains with heavy doses of W-296 powder, the .500 literally roared to life. John sent me the revolver and a few loads that he assembled in old Remington

.348 cases together with a warning: “I think it’s too much gun.” It will be a while before I forget the first time I touched off the .500; it was sort of like being invited to my own private earthquake. The recoil wasn’t heavy, it was monumental! The front of the triggerguard cut the first knuckle on my trigger finger, and the grip rotated in my hand until the hammer left a bright red impression on my wrist. It was clear that without some major modifications to defang this gun that the standard single-action frame wasn’t going to be suitable. The trigger had to be moved to the rear of the guard, and the guard itself would have to be cut and welded up to give my trigger finger more “running room.” Then the problem of grip rotation would have to be addressed. This is one of the finest qualities of the single action, allowing the grip to rotate in the hand and reducing the felt recoil considerably. Unfortunately, the .500’s recoil was so heavy that the gun rotated too much. I planned to checker the front of the triggerguard to get some braking effect from my left index finger and to use rubber or checkered grips to slow the big gun down. The Seville frame had other problems as well: It was smaller than we wanted, restricting the diameter of the cylinder, and the loading gate was too small to accommodate the huge rims. We needed a revolver frame that was designed for a six-shot cylinder, and one with better re-

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coil-controlling qualities. I immediately disregarded the excellent Ruger Redhawk. It would be perfect, except that the double-action design of the grip frame would be very punishing when the recoil hammered the web of my hand. Without some special grips, I even suspect that it might be physically dangerous, so I don't recommend it.

I am very fond of the exceptional Ruger Bisley chambered for the .44 Magnum, and so I asked John if he could fit a .500 cylinder into the Ruger Super frame. To my surprise, we found the big Ruger frame dimensionally perfect for the conversion. The Bisley model also has an excellent curved trigger set completely at the rear of the

Built on the Ruger Bisley frame, this custom "five-shooter" easily holds the title of "World's Most Powerful Handgun!" It packs plenty of recoil, yet is still manageable.

guard. The Ruger "Bisley" grip is actually almost a copy of Elmer's old No. 5 Colt grip design, instead of an actual Colt Bisley. The No. 5 grip was the mating of a Bisley backstrap to a Single Action Army frame, the best of both worlds. Elmer thought that this was the finest single action ever made, and I agree. I hoped that the grip design would be as useful in control-

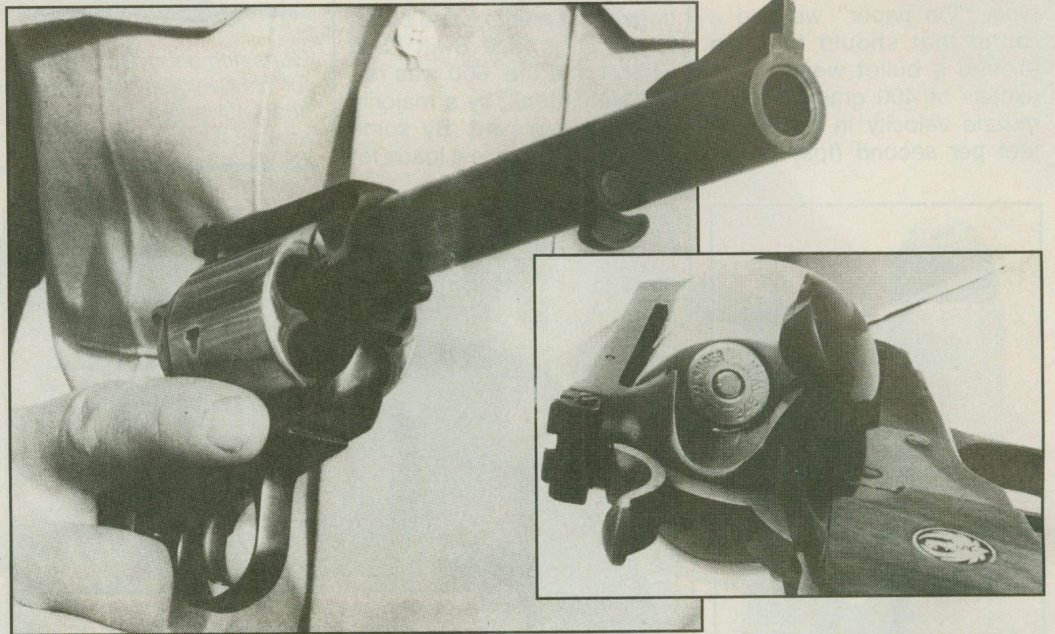
ward. John fitted a Douglas barrel with a .500 bore and .510 groove diameter and a 20-inch twist. We felt the 20-inch twist would give long, heavy bullets better stability after they hit heavy game animals, aiding deep penetration. The outside diameter of the barrel was turned to .800 inch, the maximum diameter that

inch of the case length. This makes a straight-walled case that fits the chamber on the outside. Unfortunately, the walls of the .348 case have begun to taper at this point.

Even though the case is parallel on the outside, the diameter of the inside of the case gets progressively smaller as you go from the mouth

.50-70 with the right .510-inch diameter weighing 300 grains. Thanks to the magical world of Northeast Industrial bullet moulds, cast bullets of any size or shape are easily had.

Using an existing cherry, NEI made me moulds that would cast truncated cone, flat point bullets. Using the same cherry, NEI cut two



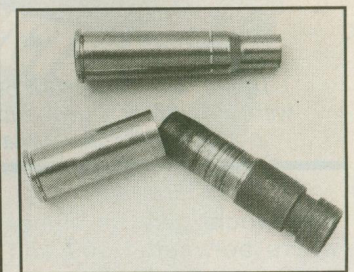
would still allow the use of standard base pins and ejector rod housings. We decided to make the barrel 6 inches long, the longest barrel that I could still carry conveniently in a belt holster. With this giant cartridge, barrel length was a very important consideration.

Forming cases for the .500 is a major project. The only source of .348 brass is Win-

toward the rim. Inside "neck" reaming is the only solution. Again, because my gun was an experiment, I had a machinist make a ream die for me. It works like a full-length sizing die that guides a reamer into the center of the case from the top. The reaming leaves uniform .015-inch-thick case walls extending below the base of the longest bullets I wanted to load. In this case, this was a 460-grain NEI truncated cone bullet that would be seated .550 inches into the case when I loaded it. Reaming the cases .600 inch deep works perfectly. You can see the ream die setup, fitted with a stop collar on the reamer to control the depth of the reaming. After all of the hassle, a final trim to the 1.40-inch length in my CH power trimmer left me with cases that are just as easy to load as .44 Mags. If you end up with an irresistible craving for one of these guns, RCBS can furnish case forming sets and three-die loading sets for about \$130 each.

With good, reloadable cases, .510-inch bullets were the next challenge. Barnes makes jacketed bullets for the

The .500 Linebaugh case, which was made from .348 Winchester brass, has the largest case head that will fit the revolver.



Here are a .348 case (top) and one that has been cut. The trimmed case is shown with the expander plug for removing case's inside taper.

moulds for bullets with the same nose shape, but one longer than the other. I had two different weights—385 and 460 grains.

Judging from our experience with the .44 and .45 bores loaded to high intensity, Winchester 296 seemed like the obvious powder choice for the .500. The first loads we worked up were with the 385-grain bullet and magnum pistol primers. Even though we

"Thanks to the magical world of Northeast Industrial bullet moulds, cast bullets of any size and shape are easily had."

ling recoil as it was easy to shoot.

Now is a good time to point out that even though the revolver you see on the cover was made on a Ruger frame, Sturm, Ruger was not involved in the project in any way. The revolver is a one-of-a-kind wildcat that I commissioned and John Linebaugh assembled.

Converting the Bisley to .500 was relatively straightfor-

chester, and they are the usual finest Winchester quality. I chucked the original .348 cases in a lathe and cut them to 1.45 inches long. The next step in case forming is to expand the case mouths. I used a tapered expander that I made on my lathe (RCBS will make them for you) to remove the taper from the original .348 case. This expanding must enlarge the case to .545 inch outside for at least .600

were using rifle cases, the milder pistol primers would be best with the relatively fast powders. The initial loads with 31 grains of W-296 and CCI #350 primers clocked 1,300 fps with a Taylor K.O. value of 36, power well in excess of any of the heaviest .45 Colt loads I had used before. There were two even bigger

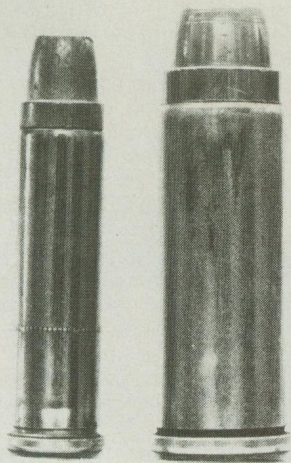
gave me 50-yard groups in the 3-inch range. Heat treating the same bullets to 20 BHN (wheelweights are about 12 on the Brinell scale) cut the groups down to 2 inches. I was almost disappointed in the accuracy after the tiny groups I shot with the 385-grain bullets, but realistically, 2-inch groups at 50 yards are better than almost any other handgun will produce and certainly are better than I can hold for in the field.

With load development using the lighter bullets behind us, the real challenge of the monster 460-grain slug looked a lot more practical. Experiments with some proof-type overloads with the 385 and 440-grain bullets left no doubt that the Ruger frame combined with the custom barrel and cylinder had far more than adequate strength. Some of the proof loads generated extreme pressures, velocities and recoil levels. We simply decided that a man's ability to stand behind the gun would run out before the tensile strength of the revolver failed. Working up gradually to

maximum loads with W-296 and the 460-grain bullets, we found that the burning rate of 296 was going to be faster than we wanted. Maximum velocity using 296 was just over 1,100 fps. A switch to slightly slower DuPont 4227 gave us another 100 fps, max loads with the 460-grain bullet running 1,200 fps. This is the

would begin to defeat the purpose of the revolver.

Asking "What is this thing for?" is a very legitimate question. John didn't produce the .500 to get in a power race with the short rifles. Instead it was his pursuit of the ultimate "sixgun" in terms of sheer, *carryable* stopping power. I didn't think the .500



The powerful .357 Magnum round doesn't look like much in this photo when shown next to the massive .500 Linebaugh.

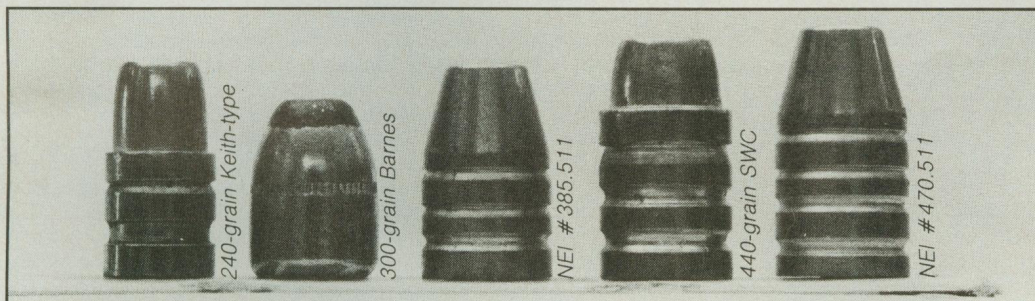
"The finished 6-inch, .500 Linebaugh Bisley is a masterpiece of balance and design. It feels better in my hands than any revolver I have held."

load with the 41 K.O. points on the Taylor scale and all of the recoil anyone wants to handle.

Early experiments with an 8-inch barrel show signs of considerable gains in velocity. If you just had to have the world's most powerful handgun, a .500 Linebaugh with a 10-inch barrel would hold that title hands down, but that

would offer the extreme penetration on very heavy game (buffalo and elephant) that we are getting out of the .45 Colts and .454s, but on any thin-skinned animal, I figured it would offer a stopping punch unlike any other handgun. When I ran actual penetration comparisons, I was pleasantly surprised. In wet newspaper, the 460-grain truncated cone (NEI #470.511) traveling at 1,200 fps punched through 35 inches of "imitation animal." This is just about equal to the performance of my 345-grain .45 Keith bullet—the one I used to take my Cape buffalo—in the same medium when it's traveling at 1,400 fps. I can only suppose that the greater momentum of the .500 bullet offsets the higher

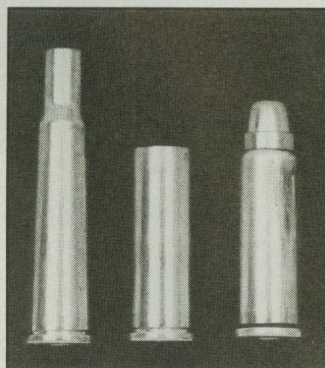
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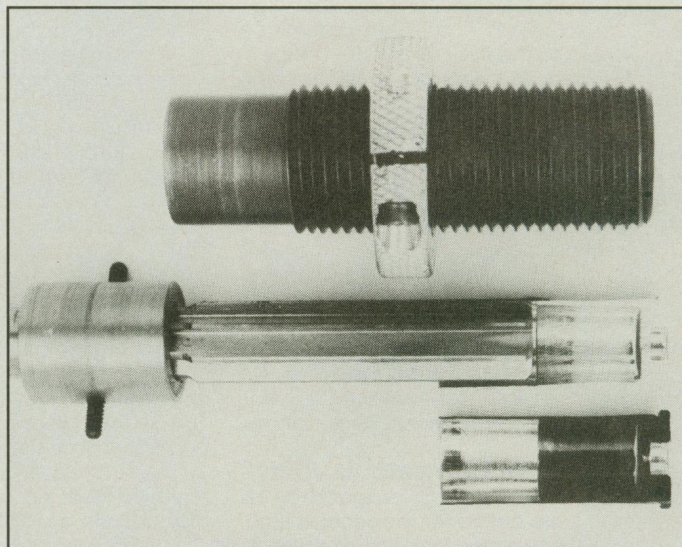
surprises. First, the .500 was going to shoot like a target gun. Three-shot groups consistently stayed under 1½ inches at 50 yards. But the best surprise of all was the way the Bisley handled the recoil. Instead of the severe pounding I had taken from the standard single-action frame, recoil with the Bisley was a pleasant, big recoil. My trigger finger went untouched, and the force of the recoil was spread evenly over my palm.

The 440-grain Keith bullet was equally pleasant to shoot, although recoil levels were definitely increasing. Top loads with W-296 pushed the big bullets at 1,250 fps. So far I haven't been able to get super accuracy with the Keith bullet. Softer alloys, with hardness similar to wheelweights,

The .44 Keith, at left, is shown with line-up of bullets used by author in the .500 Magnum—including two of his own design.



L to R: .348 brass, fire-formed .500 Linebaugh, and loaded .500 round with 440-gr. Keith-type bullet.



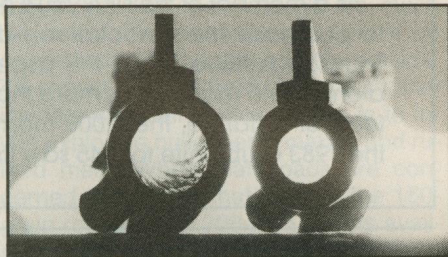
This shot shows a full-length sizer/reamer die (top), a reamer in a cutaway .500 case (middle), and a sectioned case, showing the mouth after reaming (bottom). These are necessary steps for making .500 brass.

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velocity and reduced frontal area of the .45 "Magnum." I was also surprised that my 440-grain Keith design (NEI #415.512) penetrated only an inch less. It was going about 1,250 fps. With this kind of penetration and a 22 percent increase in frontal area over the .45s, the .500 may be an even better big-game handgun than we had originally thought!

The comparison with many of the old medium-bore black powder rifle cartridges is irresistible. Ballistics are almost identical to the factory loadings for the .50 Government, and it gets right in the same crowd with the .50-90 Sharps that pushed a 473-grain paper patched bullet 1,350 fps according to Barnes' *Cartridges of the World*. This is the "real" "big-fifty" Sharps that hammered the buffalo—with the .50-140-700 Sharps cartridge arriving on the scene *after* the buffalo were gone. There just isn't a question about how well these big black powder rifles handled big game, and now we



For size comparison, muzzles of the .500 Linebaugh and a .357 Mag. revolver are shown here side by side.

have virtually the same horsepower, which we can carry in a tidy belt holster.

This isn't a gun for everyone. If you compare its recoil to a .44 Magnum, the proportion is similar if you compare the .44 to a .38 Special. Only a seasoned and dedicated handgunner will be able to apply the power with the precision necessary to secure clean kills on big game. The .500 in the hands of a bear guide who knew how to shoot it would be a wonderful tool. A serious handgun hunter who was interested in taking game larger than deer or any kind of dangerous soft-skinned animals will probably find the .500 more effective than any other cartridge.

If you think you want the biggest Bisley, contact John Linebaugh. He can tell you exactly what you're getting into, beyond the \$700 cost of converting your Ruger. Remember, these are one-of-a-kind, custom wildcats. My revolver is perfectly safe and reliable—*In my hands with my ammunition!* If you obtain one of these custom guns, the safe care and feeding become your responsibility. Write to John Linebaugh, Box 1263, Dept. GA, Cody, WY 82414, 307-645-3162.

BLACK POWDER

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the firearms illusions seen on this show.

Creating special effects for a weekly series-type of show is grueling work, with little time for the luxury of error. Bill Fannon, *Wildside's* propmaster and special effects man, informed me that his crew only had seven days to "engineer" this auto pistol. When first faced with this project, they attempted to use a "Broomhandle" Mauser non-gun; however, this proved to be unsatisfactory. With time running out, Fannon and his team decided to create their own pistol. Their final effort was what they affectionately labeled the "Stapler."

The "Stapler" was simply a wooden auto pistol-style of frame and hollowed-out handle, carved from wood, then painted black with the addition of some painted silver Victorian-style filigree decoration. A sheet metal pipe (simulating a barrel) was attached to the frame assembly, a full-length aluminum trigger was added and the gun was ready to "perform" for the cameras. Sounds disappointing, doesn't it? Well, you must remember that the film business is all illusion, and as long as the gun looks like, and appears to function like, a real firearm, that is all that counts—and it did just that. Here's how. First, let me state that this gun was not designed as a real firearm. All functions were "faked" to simulate the firing of live ammunition.

A Roman candle, inserted into the muzzle out of sight of the camera, was used to simulate the muzzle flash. Because the pistol was supposedly a machine pistol, capable of fully automatic fire, the continuous burn of the Roman candle worked well. Dummy cartridges were stacked, from the top of the pistol, in the hollow handle, and at the proper moment, were blown upward into the air by compressed air. This simulated the ejection of the empty cases. The dummy cartridges used were those that were supplied with the "Broomhandle" Mauser non-gun that had originally been purchased.

Even though the non-firing mock cartridges (bullet and casing) were used rather than empty brass, the action was so fast and appeared so small on television screens, that the viewer could not tell.

The cameraman had to be sure to film all of Lewis' scenes with the gun from carefully laid out angles, so as not to reveal the wires. Sound effects of gunfire were added to the show's soundtrack later. There you have it. Admittedly, it was not exciting to watch this 1890-version full auto pistol being fired on the set, but it looked convincing on TV. It was fascinating to watch the special effects technicians at work though, giving the illusion of a pistol that never existed being used! If you missed this or any of the half-dozen episodes of *Wildside*, all of them are now available on videotape. They have been released through Touchstone Home Video and can be ordered through your local videotape dealer.