Tech Tips
Ron Spomer

Careful with Bronze Brushes

Copper, steel and bronze bore brushes can cause serious problems if you're not careful. I was cleaning three rifles simultaneously the other day, a Borden Rimrock .300 Caribou, a Kimber 84M Montana 7mm-08 and a Remington Titanium Model 700 .260 Remington. As I had only two Tipton carbon rods in the shop, I had to change tips on one of them in order to get a tight fit for scrubbing with a bronze brush.

Aware of the potential for getting an oversized brush stuck in a bore, I was careful to double check sizes. Perhaps not careful enough. I pulled the brush from the slot marked 6.5mm on a new box of Tipton brushes, having already pulled the one from the 7mm slot for use in the Kimber. That one was tight, but working beautifully. I started the 6.5mm brush in the .260 slowly, feeling for tension. Again, tight, but it felt as if it would go. It didn't. I don't think it had progressed half its own length into the bore – probably just past the throat – before it stuck as if hitting a brick wall.

Fearfully I tried backing it out. If you've ever tried reversing a few bronze bristles once they've slanted back, you know how fruitless that proved. So I tried pushing it through, eventually employing a hammer and wood block to protect the handle of the cleaning rod. No go.

What I wanted was a .260 diameter steel rod to beat down the barrel. Didn't have one, but Dennis down at Sportsman's Warehouse said he did. I drove over. Dennis got to whacking that rod pretty good before it seemed to move. "We're making progress," he said. But then things locked up again. "Better take it to the gunsmith at ImpactArms," he suggested.

Long story short, gunsmith Mike Dudley hammered a steel rod until the brush finally popped out the chamber, a squat plug of scoured bronze and steel of 6.5mm! The steel spine of the brush had collapsed under the pounding, both it and the brush fibers jamming outward against the bore tighter and tighter.

We're not sure if I grabbed the wrong brush, if a larger brush had inadvertently been stuck into the 6.5mm slot at the manufacturing plant or what, but from now on I'm starting with an undersized brush and measuring carefully as I move up. I'm also going to take careful notes of cleaning times and efficiency with nylon bristles versus bronze. Given today's copper remover solvents, aggressive physical scrubbing may be superfluous anyway. And I've never had a nylon brush stick.

Oh, one more thing. I thought of filling the bore with a strong copper dissolving solvent to eat away the bronze brush before beating it out. In hindsight, perhaps I should have. I wonder how long that would have taken?