Don't Blow Your Head Off!

by GERALD R. HUNTER

HE HAD A hang-dog look when he brought the shotgun into my shop, and I didn't ask him *what* happened to his freshly bandaged left hand that was swung in a sling. Instead, I asked: "How many?"

"Three," he answered simply.

He was talking about fingers, not birds. He had lost three fingers when his fine old shotgun blew up, earlier that morning. I hadn't been sure it was going to blow up, but I had told him it might. It was a Parker with the *best* Damascus barrels made, in which he said he had shot every kind of load including short magnums. But an ordinary, standard load of smokeless powder blew out the left barrel right in the middle of his hand. His case was typical of how misinformed gunners literally kill themselves without half trying, just another of many everyday booby traps which confront the careless shooter. As a professional gunsmith, I am appalled at the number of serious accidents which somehow *don't* happen as a result of not realizing what some guns, loads and tinkering can do to the shooter. I realize that "accident" is a very dirty word to some advertisers, but let us at least be honest; it is better to face facts now than needless tragedy later.

Nearly all self-inflicted mishaps would be avoided if shooters realized that in firing any gun they are letting off from 10,000 to 60,000 pounds of red hot pressure right in front of their noses. They wouldn't *dare* set off that much pressure so close — in those ramshackledy, misfitted, untested guns they so often shoot — unless they thought that some wonderful magic would somehow protect them.

No such magic exists. The greater number of such accidents goes unreported or misreported purely because the victim — if surviving — will not admit how foolish he was.

By way of prevention — because the list of what-to-do is so much longer than a summary of what-not-to-do — I am going to outline a very few of the strongest DON'TS, *don'ts* that will keep you alive and in one happy piece.

Damascus barrels First, since that's where we began, please don't shoot smokeless powder in guns having Damascus, laminated, twist or other composite barrels. It isn't a matter of powder volume or barrel thickness. Smokeless powder just doesn't act like black powder, nor do ancient metals act like modern steels.

Composite barrel metals are brittle, to begin with. The laminations were put together without accurate control, so the walls are not uniformly strong. Each joint of forge-welded metals is a potential pocket of rust or corrosion which holds together today but which by tomorrow may be ready to bust wide open. Such material is a sure sign that the arm was never intended for progressive-burning powder explosions. If you have a thoroughly sound, tight gun of this type, black powder loads — for which it was intended — *may* be safe enough, but no other. As a matter of fact, many — most — Damascus barrels, once thought safe with black powder, are no longer safe! They're getting older every hour and those hidden rusty — and rusting — areas are growing larger, the barrel walls thinner, and that hundred-and-first shot may blow 'em up — even with black powder.

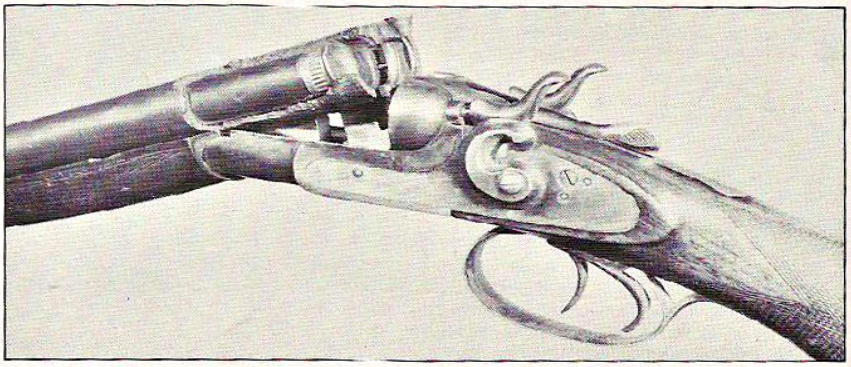
Headspace Second source of common danger, particularly just now, is from excess headspace in military rifles. Thousands of DCM Springfields are coming into the hands of relatively inexperienced shooters, and millions of assorted military rifles of all nations — some advertised incompletely as to caliber — have hit the market in recent years. NEVER shoot a rimless cartridge rifle without having the headspace checked. Firing a high pressure cartridge with extreme headspace probably will only put out an eye, but in some foreign guns, designed many years ago for relatively low-pressure cartridges, it may blow the whole firing pin or bolt back through one's head. Most rifles in original makeup will be safe, but you can never be sure the bolts haven't been switched or loused up. Make sure your gunsmith knows what he's doing when he checks this one.

Firing pins Dangerous firing pins also can cause loss of an eye, by rupturing the primer. Whether new or old, firing pins should protrude from the bolt face only enough to properly indent the primer, and the firing pin spring should never be replaced with a weaker one. The pin must have a smoothly rounded and polished hemispherical end, one that is neither sharp nor square shouldered.

Welding More guns have been ruined by "gunsmiths" using oxy-acetylene torches than this world dreams of. When your gunsmith drags out a torch, make sure he knows what he is doing. If he's at all hesitant, grab your gun and *run*. Modern guns are made of specially heat treated metals, in which temperatures of as little as 350° may be critical. The application of heat is extremely dangerous unless the operator knows exactly what he's about. Welding, brazing or hard soldering the chamber area of barrels or action parts is invitation to disaster. If a rib or lug must be replaced, have it done by someone who knows how. Parts not subject to pressure may be heated within reason.

Triggers Never attempt to lighten the trigger pull of semi-automatic weapons, particularly those of modcrate to heavy recoil. You may find the thing suddenly gone full automatic, bouncing out of control and slaying you or bystanders. Until taught by competent practitioners, it isn't a good idea to fool with sear and hammer notches at all, for at best you'll likely cut off the hard wearing edge, resulting in a pull that soon gives trouble.

Cartridges Never fire a cartridge or shell in a gun unless you *know* that



Damascus barrels, no matter how sound they may seem to be, are slowly wasting away, rusting away where it can't be seen. This Damascus barreled gun, vintage of 1890-1900, was blown up with a *black powder* load. The shooter's left arm was badly mangled.

Top right — five examples, modern steel shotgun barrels (left to right):

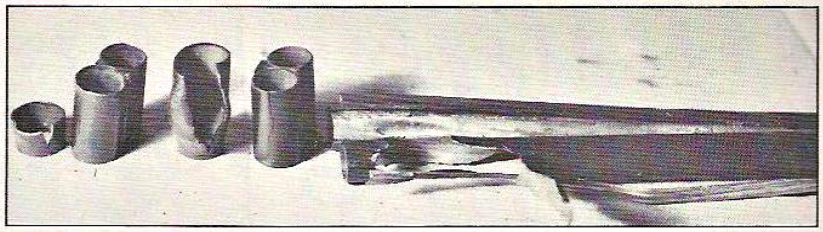
1) Tip of muzzle of long single barrel gun; small boy stuck it slightly into dirt, end ripped out when fired. No injury.

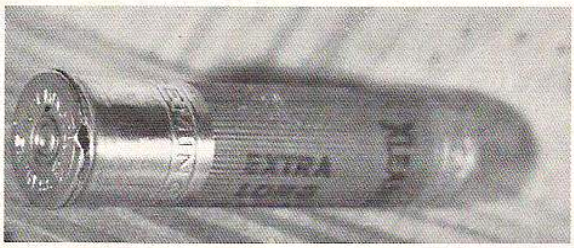
2) Choked muzzle of double gun, bulged and eroded. Owner decided to shoot charge of rough steel blasting shot. No injury.

3) "Ringing" shotshell is fairly common, foolish practice, done by cutting nearly through paper around shell just behind load. Entire front half of shell holds together as it goes out gun, making virtually a slug load. When it hits choke, this often happens. No injury.

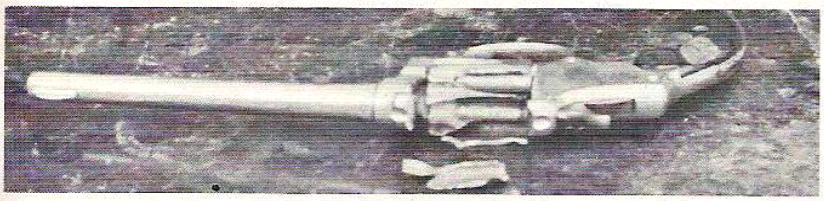
4) Shooter loaded steel ball bearing, slightly too large to pass through choke. No injury, but $30 repair and rechoking charge.

5) Fore-end lug under barrel, sweated on, kept coming loose. Garage worker welded lug on; heat annealed barrel, loosened solder holding rib, barrels and yoke (not readily obvious). When shooter fired ordinary HV shell, barrel blew out, blew fore-end off, badly damaged shooter's hand and friend standing at side.





Left — Gun was loose in breech. Shooter took it to shade tree mechanic who pounded locking lug together to take out lost motion, cracked it in the process. When shooter fired shell, locking lug snapped off allowing gun to unbreech, shell to rimcrack. Hot gas injured shooter's eye. Fragment of brass stuck in forehead.



This is old model S&W 38 Special, in which shooter fired 38-44 HV load. Result — blew off topstrap and top of 3 chambers. No injury to shooter, but friend nearby was hit by fragments. A double-charge of Bullseye will do the same thing to a modern S&W or Colt. So will "boring out" chamber of most modern 38's to accept 357 Magnum cartridge.

particular gun was made for the load. Literally hundreds of cartridges look "exactly" like similar but dangerously different cartridges. A careless choice may cause pressures which disintegrate the gun. If a given bullet will easily slip into the bore of a rifle at the muzzle, the cartridge will not likely cause any damage if fired in that gun — even though it is the wrong cartridge — because if the bullet is too small to fit properly, it cannot build up dangerous pressures. Note, however, that some *cartridges* which will easily enter the chamber may be loaded with *bullets* too large for the bore.

Revolvers Bystanders can be seriously injured by revolvers with faulty or worn cylinder stops. Millions of small, cheap, hard-used revolvers are still in circulation. Chambers fail to align properly, and a considerable wedge of bullet metal is sliced aside by the rear edge of the barrel. In this connection, never place any part of either hand ahead of the cylinder when firing, even with new revolvers, for gases or lead or both will squirt out sideways from between the cylinder and barrel and burn or badly cut.

Butchery "Woodshed" fitting of replacement firing pins, locking blocks, bolt lugs and rifle barrels can be a blood curdling practice. Take, for instance, replacement of the locking block in the common Browning, Remington Model 11 or Savage autoloading shotguns.

This block normally is in full engagement with the barrel extension at the time of shooting and, if it isn't, it is built so the firing pin cannot reach the primer. When fitted by the factory or their accredited service agencies, this provision makes for a very safe gun. But on one occasion, for example, a tinkerer really fixed one up. Not realizing exactly how the block should bear on its shouder, he misfitted the block and found — naturally — that the firing pin wouldn't fall. So, by golly, he simply lengthened the retainer slot in the firing pin and bent the pin so it *would* strike! In testing the empty gun, operation seemed normal. When the owner fired it, the barely-engaged block slipped and wrecked the gun.

With so many types and peculiarities of guns in the hands of such a variety of shooters, it is impossible to do more than touch on this life-or-farewell subject. But the gist is simple:

Never shoot any gun unless you *know* everything's right with it. Use only guns in sound condition, produced by a reliable manufacturer.

Never adjust or repair a gun yourself unless you know the potential results.

Never allow someone else to tinker with your gun unless you are sure of his reputation.

Never reload ammunition unless you know how, nor buy any except from a known-reliable source.

Don't blow your trusting head off.

This fine old Damascus barreled double gun, engraved and ornately decorated, probably brought down its share of ducks and geese in its day. It had also fired standard smokeless loads and some high velocity ones. But when the shooter fired this common Winchester field load, it blew out, wrecking fore-end and causing loss of three fingers of shooter's hand. These guns, when they blow out, *almost always* blow right in the middle of the hand holding the fore-end.

TELEPHONE
Area Code 607
273-0800
TELEGRAMS
GUNCO-ITHACA

SHELDON M. SMITH
President
CHARLES L. SMITH
LT.COL. AIRS (Ret.)
Vice-President
Manufacturing
I. H. WOODCOCK
Vice-President
Sales and Marketing
JAMES S. HOPE
Secretary
S. A. VAN HOUTTE
Vice-President &
Treasurer
W. E. GILDER
Assistant Treasurer

Ithaca Gun Company INCORPORATED

ITHACA, N.Y. 14851

January 6, 1966

Thane Holly
511 Hawthorn
Red Wing, Minn

Dear Mr. Holly:

Your gun number 73597 was built in 1902, and it does have Damascus barrels. This gun is a booby trap with any load you can buy today and even black powder loading is no longer considered safe in Damasus or Twist steel guns.

The conclusion that it is dangerous to use any load in a gun having Damascus or Twist steel barrels has been reached after careful consideration of accidents in which such barrels were found to have failed. The failure is due specifically to corrosion between the laminates which has occurred simply as a consequence of the passage of time. This corrosion, usually at the weld joints, is often times invisible on the surface and the bright and smooth appearance of the Damascus barrel surface gives no assurance that dangerous weakening of the interior of the barrel wall has not occurred.

Cordially yours,

ITHACA GUN COMPANY INC.
Service Department

Ed Thompson

et/m