

The thinking man's guide to

There are enough hazards in the shooting field: why invite more of a risk to life and limb

RECOIL is something that Guns must put up with, but to what degree is largely up to the individual. There is no real need to suffer excessive recoil, because it will damage your gun, your shooting and your health.

Recoil is caused by the cartridge head slamming back against the breech as the shot departs. The one action causes the other, a fact of life and a rule of physics. W W Greener stated that for comfortable, sustained shooting, the shot charge should not exceed one-ninety-ninth of the weight of the gun through which it is being shot. This still holds good in modern times, Mr Greener being one of the greatest innovators the gun

trade produced, and whose knowledge and experimentation still benefit us today.

The easiest means of demonstrating the Greener theory in practice is to shoot a 28-gram load through a side-by-side 20-bore. The recoil from this is decidedly uncomfortable, being a very sharp, short smack. There is also the fact of generally ruining the pattern, because there is not enough room in the barrel tube for this much lead.

Another reason for excessive recoil can be something known as 'headspace'. This is when the cartridge sits too deeply in the receiver, which, in turn, allows a degree of slop between the cartridge head and the breech face. The short answer to this is to buy a

better quality cartridge with a thicker rim, which allows it to sit flush with the ejector.

A French gunmaker named Darne produced a gun with recoil in mind. It did not break or drop down, but rather, when the longish top lever was pushed over, the side-by-side barrels slipped forward on the barrel flats. When it was loaded the top lever was pulled back in line with the barrels, pulling the cartridge heads very tightly against the breech face. The gun was extraordinarily light, and even with the French ammunition I was given to use, the recoil was minimal.

As a shooting coach, I have to stand quite near a pupil when the gun is being used, so I need to know that it is safe. Sometimes they



All Guns have reason to limit recoil, whether shooting a single walked-up grouse near Inverness, as here, or on a 200-bird pheasant day in North Devon.

reducing recoil in shooting

by ignoring a major problem that is easily solved? Rod Brammer, leading coach, tells how

are not. One day a Gun arrived at the shooting ground with one of our established clients. I did not know him personally, but his reputation as the owner of one of the biggest shoots in the country and a very keen shot preceded him. I was therefore surprised to discover that his gun was unsafe.

The barrels were away from the breech face to the tune of the thickness of a piece of card from a cartridge box. The middle joint was very worn, even to the point where the ejectors were not working properly. As tactfully as possible, I pointed this out and told him I did not want to give him a lesson with that gun. To qualify what I had said, I remarked that the gun must kick like a mule.

He was not pleased. The gun did recoil badly, he replied, but that was due to his age and modern cartridges. Again I gently explained to him that his gun was in a dangerous condition, and that I was unwilling to let him use it on our shooting ground. This threw him into a proper old bate, and he slammed out of our gunroom and went to the car. I gave his friend a cup of coffee and suggested we postpone the lesson to another day

as he would be too upset to shoot properly.

Two months later, the bately fellow telephoned, apologised for his behaviour and told me he had had his gun repaired. His gunsmith had told him he was lucky not to have been injured. We are now firm friends, he shoots very well, has a safe gun, buys proper cartridges, and shoots comfortably. Through the shooting grapevine, though, I know he refers to me as 'an assy whipper-snapper'.

A re-joint costs little, and the need for one

I think the most uncomfortable sort of recoil is when the gun seems to hit you in the face. It rattles your teeth and leads to a condition known as gun headache. The continual slamming of the comb into the side of your face is much like a boxer becoming punch drunk, and should never be tolerated. Causes for this vary. It could be as simple as bad mounting, which a shooting coach will sort out for you. Mounting the gun too low in the shoulder causes the

Pain is not confined to shoulders: some will even rattle your teeth

does not happen often. Frequency will depend on how many cartridges are shot and how heavy a shot charge you use. If you have your gun serviced regularly your gunsmith will tell you when it needs doing.

Recoil is not only a problem for your shoulder; sometimes we see people with a great lump on the first joint of their second finger, caused by the trigger guard coming back and hitting it. This again can be caused by putting too heavy a shot charge through the gun. Another cause could be the gun being a bad fit for length. This is easily solved by going to your gunsmith and being measured on a try gun (the only way to have your measurements taken accurately).

shooter to drop his head into the comb, instead of bringing the comb up high enough to keep his head more or less upright.

Lastly, we come to the effects of choking and forcing cones on recoil. Obviously a gun that is tightly choked will have more recoil than one more loosely bored. To what degree, I am not certain, but a tightly-bored gun certainly suffers from more muzzle lift than a loosely-bored gun. A recent fashion is to have forcing cones (the ends of the chambers) lowered or even removed. This allows the cartridge crimp to open flatter against the barrel walls, in theory letting the shot out of the cartridge more smoothly. It does work. But what one is doing, in effect, is removing the restriction of what the gun was built to stand, as regards pressure. Such drastic measures are probably best avoided. □

