Dear Colleagues

**The double-point sling with the Bisley twist**

**Problem:**numerous rifle shooters who have used the double-point sling with the Bisley twist, appear not to have understood the principle and benefited from it. The purpose is to support the weight of the arm and rifle so that the foresight remains dead still for the full period of aiming and shot release. Most shooters found the foresight was still accompanied by small movements, which even occurred at the moment of shot release.

The difficulty for most shooters is to use a sling which supports the rifle at a position mid-way along the forearm, i.e. where there is no perceptible movement of the foresight. Instead, many shooters support the rifle with the forward hand so close to the front swivel that the sling is across the back of the hand. It is common to find the forward hand has slipped forward a few mm with each shot, finally coming to rest against the sling swivel or a hand stop. This results in a high-left to low-right diagonal group, as wide as from a 10 o’clock magpie to a 4 o’clock magpie. To overcome this, many shooters attempt to tense muscles to hold the forward hand well behind the front sling swivel, which results in varying tension of the hand during a shoot. The result can be occasional shots above and below the bullseye.

This article describes a development made before WWII by shooters of the United Kingdom, who devised a variation of the double-point sling, known as the Bisley twist. It enabled a shooter to hold the sling with no perceptible movement of the foresight for the full time required leading up to and including shot release.

**Discussion**:the principles that enable a shooter to support a rifle dead still include:

* location of the sling at the upper arm and around a mid-position of the forearm, where it is used to provide a support for the total weight of arm and rifle
* positioning the sling so that the hand supporting the rifle is placed several cm behind the front sling swivel, remaining at that position throughout a shoot, i.e. without slipping forward toward the sling swivel and absorbing rifle recoil
* use of the skeletal structure, i.e. bones should bear the weight of the rifle and arm, without muscle tissue under tension as well.

A shooter who uses a double- or single-point sling, without ensuring the forward hand remains at the same position on the rifle stock during recoil, inevitably finds that it comes to rest closer to or even against the front sling swivel. In this position, the changes in tension of the sling can be shown to result in considerable difference in the vertical shape of the group. This most commonly occurs when the sling fits around the back of the hand or at the complex pattern of wrist bones. There is however, a point midway behind the wrist along the forearm where the tension of a supporting sling is minimal. As a result, fluctuations in unwanted muscle tension are also minimal. The rifle can then be held dead still. These shooters are able to achieve better scores because of smaller groups with fewer error shots.

Despite the fact that some shooters are able to produce excellent groups, the vast majority are unable to understand how this happens. As a result, many shooters choose to use the single-point sling in the mistaken belief that the rifle can be held dead still. In fact, success is obtained with both sling designs when the shooter has pulled the sling down from the wrist toward the middle of the forearm, i.e. over the cuff of the shooting coat. This optimal sling position can be calculated mathematically.

**Practical:**shooters who have experimented in the use of the double-point sling with a Bisley twist, find they are able to effortlessly support the weight of the rifle dead still, even though the forward hand is located several cm behind the front sling swivel. They do not experience minute movements of the rifle because there is no need to try to hold it still enough for shot release. The rifle appears to remain still because of the solid support it receives while resting upon the sling located around the mid-forearm

The RH shooter sets up this sling position by first holding the rifle in the semi-prone position. The sling is rotated 180 degrees anti-clockwise as seen from above the rifle. The shooter then inserts the left hand and arm through the loop of the sling. The right hand is then used to position the loop of the sling right up the left arm. The left hand is then looped around the sling so that it is around the back of the hand. Then the most important step by the shooter, while the butt is still on the mound, is to use the right hand to pull the sling well down the forearm, i.e. over the cuff of the shooting coat. Finally, if the shooter’s left arm is uncomfortable due to sling tightness, the butt may again be brought down onto the mound for the right hand to take hold of the sling at the upper arm. The sling should then be rotated slightly to ensure it is not tighter on one side of the arm than the other. This will relieve any pulsation due to uneven sling tightness, which causes blood in the upper arm to be pumped at greater pressure down one side of the bone than the other. The butt is then raised to the shoulder using the right thumb as a shoe-horn, so that the rifle is aimed with arm muscles consciously relaxed and under no tension, which tends to complement the tension of the sling. A conscious mental command to loosen arm muscles must be made.

The feature of interest here is that the rifle is felt by the shooter to rest upon the web of the thumb, while the mid-forearm rests upon the sling wound around the arm. The Bisley twist can be seen by the shooter, the forward part of the sling crossing over the rear part connected in front of the trigger guard. The designers of the Bisley twist considered the crossover point to assist the stability of the resting forearm. That is,the forearm is prevented from moving forward by the sling, whereas a shooter with the sling across the back of the hand receives recoil from the sling swivel or a hand-stop.. For this reason a shooting glove has no function when used with a double-point sling. On the other hand, the Bisley twist arrangement gives the shooter a sense that the rifle on the forearm is absolutely still.

The proof of the effectiveness of this sling position is really felt at long range, where each shot departs with a sense of follow-through at the moment of release.

**Conclusion:**a sling set up to enable the shooter to support the total weight of arm and rifle close to the mid-point of the arm, supported by the crossing of sling components, may result in the smallest possible group of particular value at long-range. Note that the writer has used a single-point sling and pulled it as far down the forearm as possible, enabling the rifle to be held dead still. There is no cross-over of sling components, but the same principle still exists with the loop at mid-forearm.

Best regards

Geoff