SNIPING REMARKS

SNIPERS' EYES

NIGEL GREENAWAY continues his investigation of Great War British sniper rifles and accessories. This month he's looking at the Aldis scope

Top: Aldis Pattern No.2 with early Holland & Holland ring mounts; middle: Aldis Pattern No.2 with Purdey ring mounts; bottom: Aldis Pattern No.4 with larger objective lens assembly and coned end for the ocular lens

THE PERISCOPIC Prism Co sniper scope, described last month, was the most prolific WW1 British sniper scope and the first to receive a 1,000+ contract as early as April 1915. The next most numerous was the Aldis: this month's subject, with a production run of 3,196 and an initial production contract for 200 in January 1915 (delivered by June 1915). For collectors there is the added complication of four different Aldis scope patterns and five or six official contractors who all fitted these scopes differently, mostly in side mounts but also in overhead mounts on the SMLE and P14.

The first contracts were placed in September and October 1915 with the famous firms of J Purdey and Sons and Holland & Holland, who together went on to fit over 1,700 Aldis scopes. The bulk of the Aldis contracts were placed in 1916 and other companies such as Atkin, Bartle and even Aldis itself were contracted to fit Aldis scopes. To further complicate matters the Periscopic Prism Co was contracted to fit a handful of Aldis Pattern No.3 and No.4 scopes in overhead mounts on the P14 rifle in 1917. The final contract placed with Aldis in October 1916 was to simply supply, but not fit, 2,254 scopes. The contract dates show that, while it is possible for the early scopes to have been fitted to 1915 and 1916-dated Enfield SMLE No.1 MkIII rifles, the majority of Aldis scopes would have been fitted to plainer SMLE No.1 MkIII* rifles (no long range sights and no magazine cut-off).

The Aldis scopes were generally rated as the best of all the WW1 sniper scopes. This accolade is certainly backed up by the fact that the Aldis Pattern No.3 and No.4 scopes were retained for possible future use when the SMLE sniper rifles were broken up and the scopes sold off to the trade in August 1921. These Aldis scopes would emerge again in WW2 when Alexander Martin was contracted to produce 421 P14 sniper rifles designated as Rifle No.3 Mk1*T(A). I only mention this because some writers have previously attributed these sniper rifles as WW1 weapons – a natural mistake considering most of the components were produced during WW1.

Generally the Aldis scopes have 3X magnification, 1" diameter tubes graduated from 100-600 yd, a sleeve for focussing and objective lenses of roughly the same diameter as the tube. The early Aldis Pattern No.1, 2 and 3 scopes are 10.5" long with a stepped arrangement in the rear eyepiece lens housing, while the No.4 patterns are just over 10.75" long with a coned eyepiece housing and different objective lens assemblies (also, many No.3 patterns were converted to have the same objective lens lateral adjustment as the No.4, so these will be a little longer than usual). Aldis did produce some commercial scopes, but these are easily distinguished because they are about an inch longer than the military patterns although, in most other respects, they look just like the No.4 pattern. The first three patterns look very similar, the external differences being the position of small screws and the elevation drum clamping screw pointing to the rear on the first two and forwards on the No.3. The Pattern No.4 was rated as the best scope, with better light gathering, because the objective lens was wider than the tube and was fixed in a housing that allowed for windage adjustment by using a special tool. None of the four different patterns are marked up as such – hence the lengthy description above.

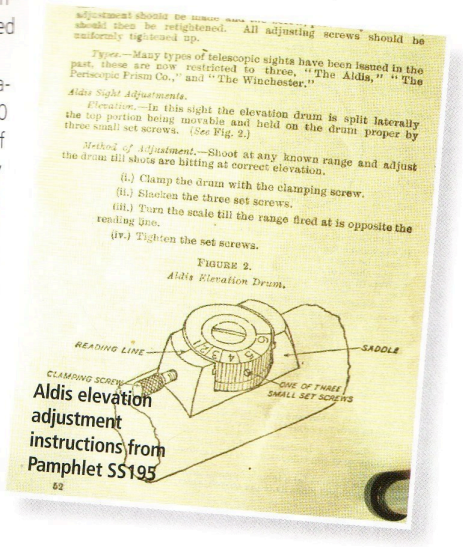
Elevation adjustment

Elevation adjustment on all four models was the same. To quote from Pamphlet SS195:

'In this sight the elevation drum is split laterally, the top portion being movable and held on the drum proper by three small set screws. Shoot at any known range and adjust the drum until the shots are hitting at correct elevation.

1. Clamp the drum with the clamping screw.
2. Slacken the three set screws.
3. Turn the scale till the range fired at is opposite the reading line.
4. Tighten the set screws.

Note: As there are three set screws, one screw will always be hidden by the saddle. Before clamping the drum, previous to moving the saddle, slacken the screw that will be hidden, clamp the drum in correct position and slacken the other screws. When the scale is adjusted, tighten up the last two set screws slackened. The scale will then be held firmly enough so that the drum can be turned and the hidden screw tightened up.'


adjustment should be made and the adjusting screws should be retightened. All adjusting screws should be uniformly tightened up.

Types.—Many types of telescopic sights have been issued in the past, these are now restricted to three, "The Aldis," "The Periscopic Prism Co.," and "The Winchester."

Aldis Sight Adjustments.

Elevation.—In this sight the elevation drum is split laterally the top portion being movable and held on the drum proper by three small set screws. (*See* Fig. 2.)

Method of Adjustment.—Shoot at any known range and adjust the drum till shots are hitting at correct elevation.

(i.) Clamp the drum with the clamping screw.

(ii.) Slacken the three set screws.

(iii.) Turn the scale till the range fired at is opposite the reading line.

(iv.) Tighten the set screws.

FIGURE 2.

Aldis Elevation Drum.

62

Aldis elevation adjustment instructions from Pamphlet SS195

Typical Aldis markings on the rear-stepped ocular lens housing, first three patterns, compared to engraving on the Aldis Pattern No.4 on the objective lens housing

Purdey mounts

Purdey used a side mounting system with the front mount, incorporating a dovetailed slide in a slot for windage adjustment sweated on to the barrel and a roll-over latch to hold a downwards projecting pin on the forward scope ring mount. A rear-mounted projecting pin on the side of the receiver engages with a corresponding hook on the rear scope ring. So the Purdey Aldis is fitted to the rifle by engaging the rear scope ring hook first before pushing the scope down into the front mount. Windage adjustment is achieved by moving the dovetailed slide in its slot by opposing flush screws each side of the slot. If the rifle is shooting off then tighten one of these screws towards the error. One complete turn is about 20" at 100 yd.

Holland & Holland mounts

Holland & Holland also used a side mounted set-up, but the front mount hooks into a slot and around a transverse pin (the block housing the pin is again sweated on to the barrel). The rear mount fixed to the side of the receiver uses a mortised slot with a rollover latch. The rear ring mount on the scope incorporates a dovetailed slide and a projecting hook. Engaging the front scope ring hook first before pushing the scope down into the rear mount is the method of fitting the Holland & Holland Aldis. You can achieve windage adjustment by moving the dovetailed slide in its slot by opposing flush screws each side of the slot. These screws are pushing screws. Tighten the right hand screw and it will push the scope ring to the left. Tighten one of these screws on the same side as the error if the rifle is shooting off. One complete turn is about 20" at 100 yd.

P14(T) with Model 1918 scope. Aldis Pattern No.3 and No.4 scopes were trialled using the same mounts

You can see that these two windage adjustment systems were pretty coarse and prone to being knocked out of zero. In addition, having one of the mounts fixed to the barrel was probably not a good idea when the barrel heated up – rapid fire would not normally be encouraged when sniping, but it wouldn't do much for accuracy either as barrel and mount became hot. To add insult to injury both mounting systems were offset to the left, which caused awkward handling and other more serious problems (as covered in last month's article, *Target Sports* February pp60-61). Following complaints from the front, alternative systems were examined.

What was needed was a robust overhead mount and windage adjustment that could be incorporated in the scope. Enter the Aldis Pattern No.4, which catered for windage by having a glass prism mounted in a circular cell in front of the objective lens. You can see in the picture above right the divisions marked around the rim of the cell, which is the same system as used in the smaller diameter Model 1918 scope shown alongside. After removing the protecting cap, loosen three small set screws and then turn the cell by lining up its reading line against the divisions. If the rifle shoots to the right, turn the cell clockwise. If shooting to the left, turn counter-clockwise. A movement of one division makes an adjustment on target of about 5" at 100 yd. Some of these Pattern No.4s were even graduated up to 1,000 yd.

The next question is: how were these No.4 Pattern scopes fitted to the SMLE? What were the Bartle or Atkins mounts? Unfortunately, nobody really knows. Even the Pattern Room does not seem to have one of these mounts currently catalogued as fitted to a WW1 SMLE, although looking at old records they once did list a SMLE No.1 MkIII with Aldis No.2 pattern with Atkins fittings (which points to an early design with windage adjustment in the mounts). They also listed a SMLE No.1 MkIII* with Aldis No.4 and Bartle fittings. There were three other SMLE No.1 MkIII* listed with Aldis No.4, two with experimental fittings and one with overhead mounts. The Aldis No.4 would not require windage adjustment in the mounts and these could have been fitted to later produced MkIII* rifles with overhead mounts.

Graduations on lens prism of Aldis Pattern No.4 for windage adjustment, next to the smaller Model 1918 scope that used the same system

Renowned expert on British sniping rifles Roger Payne has communicated with a handful of other collectors around the world who all have overhead mounts of the type illustrated, which are designed for the SMLE. Might these be Bartle mounts or an experimental type? In essence they are very similar to those used to fit Aldis No.3 (modified with the adjustable prism) and No.4 patterns to P14 rifles. The first of these were fitted as early as August 1917 and minutes from a Small Arms Committee note that 750 Aldis scopes were then on hand awaiting fitting to rifles. A minute of this committee recommended that sample P14 rifles fitted with Aldis scopes be taken to France at an early date to obtain opinion on the relative merits of the overhead mount fittings. Ultimately the P14(T) fitted with Model 1918 sight used the same type of mounts, and in WW2 the Australians used a similar mounting system on SMLEs to produce the No.1 MkIII* HT. There is a SMLE No.1 MkV in the Pattern Room fitted with an Aldis in the same overhead mounts. Obviously the design showed enough merit to have been used on a number of different rifles, but how many were produced during WW1? Nobody can say.

My thanks to fellow sniping enthusiast Dr Roger Payne for letting me photograph more of his collection of scopes and rifles. Next month I will cover the third most common scope – the Winchester A5 – along with a few of the rarer scopes.

Rare experimental or possibly Bartle overhead mounts for an Aldis No.4