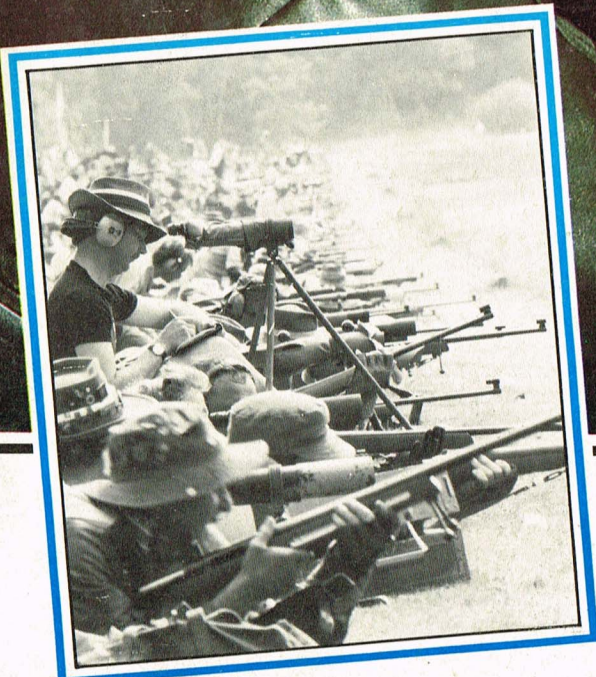


TARGET Gun



TESTED
the
Smith & Wesson
Model
559

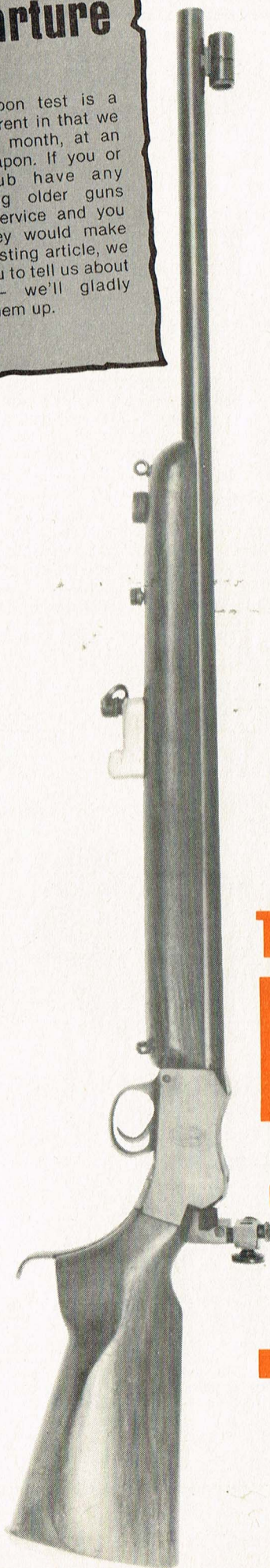
October 1982
No 34 70p



**More from Bisley • Camera winner
Club Profile • The BSA 12/15 Rifle**

Departure

This weapon test is a little different in that we look, this month, at an older weapon. If you or your club have any interesting older guns still in service and you think they would make an interesting article, we invite you to tell us about them — we'll gladly follow them up.



The BSA 1215 .22 Target Rifle

WITHOUT the aid of a launching device, target shooting would probably never have come into existence. The history of the firearms industry, although veiled in the mists of time, started about the mid 1360's when 500 hand cannon, made wholly from metal, with 4 inch barrels were made by the 'smiths' of Parugia. These 'smiths' subsequently became a guild so monopolising the firearms trade on the continent. Subsequently the centres of the gun making trade were to be found either at arsenals such as those found at St Etienne Brescia, etc, or at more localised areas in a country where the 'smiths' gathered, like Bilboa and Eibar in Spain, Liege in Holland and Suhl in Germany.

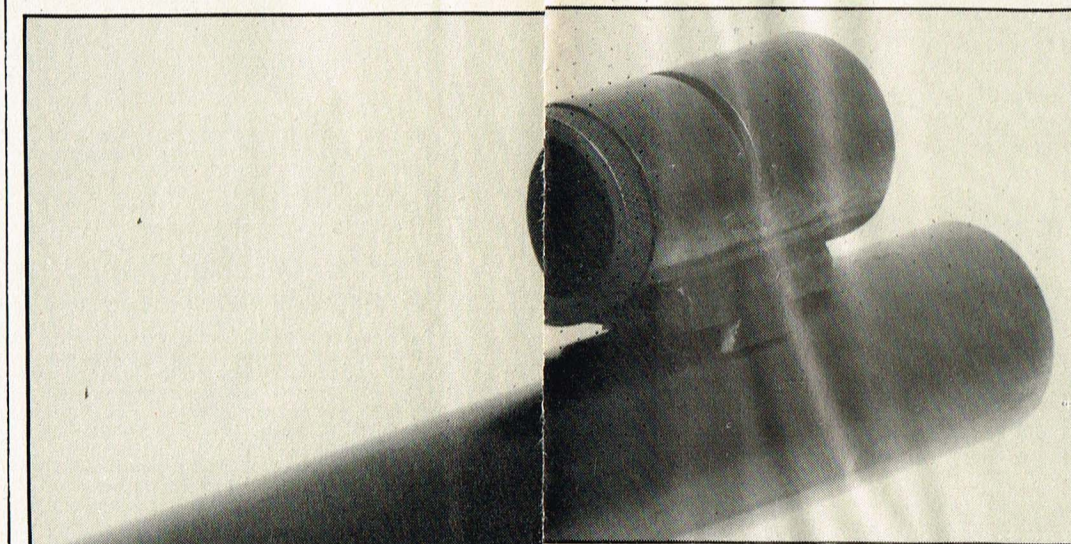
The Suhl gunsmiths obtained incorporation as a distinct craft in 1463 but it wasn't until the seventh century that the barrel welders of Liege founded their society and then only as a division of the older guild of 'smiths'. In Liege, the mounting of gun barrels was the privilege of the carpenters and anyone not belonging to their guild found to have stocked a musket was fined three golden florins and had his work confiscated.

The tyranny of the guilds caused many who had learned the craft to seek employment and freedom abroad. In 1545, Henry VIII had in his service a number of Hainaulters who knew how to make, use and repair the arquebus. These men were stationed in the Tower of London, so forming the nucleus of a craft that has been carried on continuously in this country ever since.

In the reign of Elizabeth 1, there were thirty-seven accredited gunsmiths carrying on their trade in the Minories; in 1590, Henricke, a dutchman was acknowledged head of the craft. James I repealed an Act of Queen Mary and bestowed the monopoly of gunmaking on Edmund Nicholson. From then on, the industry declined until, in 1607, only five members remained. To save the industry, they petitioned Parliament to abolish the monopoly. This was done but with little result until 1637 when the London gunmakers obtained their charter of incorporation, the provisions of which were enlarged and the privileges referring to the proof of arms bestowed in 1672.

Some ten years later, the gun-making industry in Birmingham was founded when, in 1683, Sir Richard Newdigate, the then MP for Warwickshire, procured from the Government an order for muskets which he prevailed upon the Birmingham 'smiths' to accept rendering

Globe front sight.

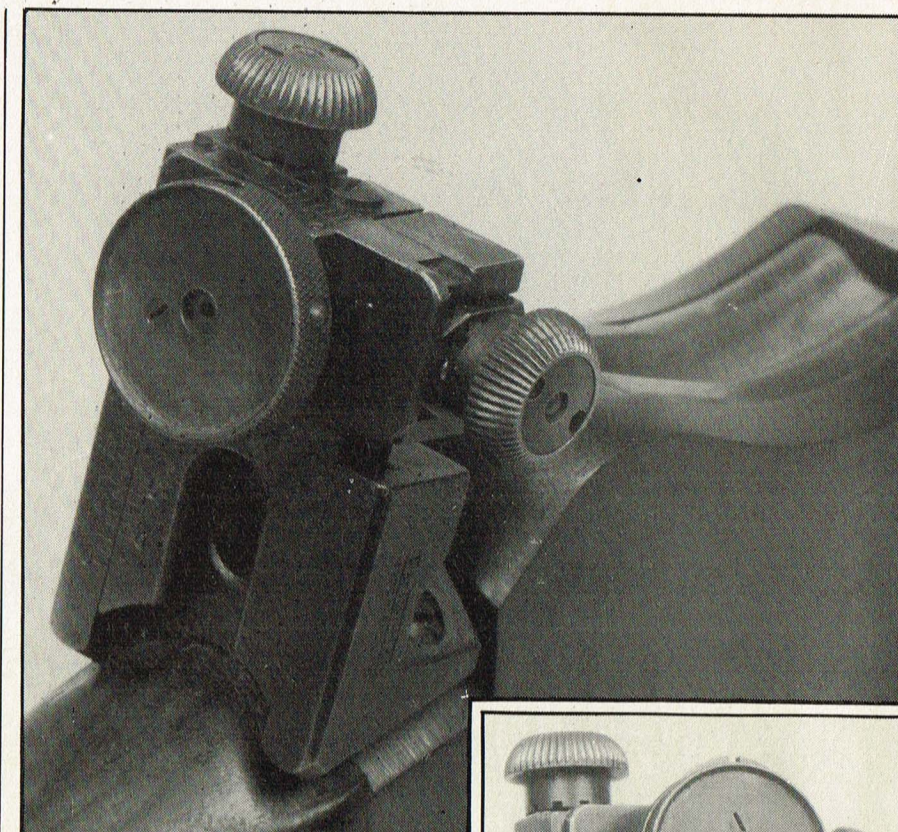


them financial assistance in order to fulfil the contract. These weapons were approved, much to the anger of the London Company who complained to Parliament, and the Board was recommended to 'compose the matter in dispute.' The Birmingham 'smiths' were able to furnish more guns than required and turned out two hundred muskets in a month. In 1692, they presented Sir Richard with a testimonial and the first gun made in Birmingham.

In 1693, the guns made in Birmingham were proved there. Five years later the industry received a terrific boost with the opening up of trade in Africa. Now the rivalry between Birmingham and London came to a head with the London Company resorting to dirty tricks in the hope of driving their rivals out of business. In early 1707, four hundred Birmingham gunmakers petitioned Parliament in an effort to stop the persecution by the London Company.

By the end of the eighteenth century, the Government had set up a branch 'tower' at Birmingham for examination and proof of arms purchased in the area. By now the city was supplying enormous quantities, not only of finished arms but also of barrels, locks and parts, a process which, to a greater or lesser degree, has continued to this present day. In 1813, in addition to the Government testing establishment, a general proof house was provided for use of the trade and the protection of the public. In the first twelve years of its operation, 1,388,725 gun barrels and 292,245 pistol barrels were proofed.

It was against this background that the Birmingham Small Arms Company was formed, in 1861, by a group of Birmingham Gunsmiths. Over the



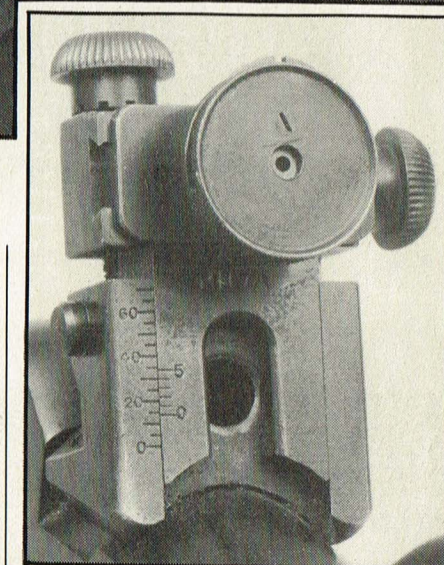
Rear sight. (A Parker Hale PH7A)

hundred or so years since the formation of the company BSA diversified into a vast combine embracing many aspects of industry, including general and specialist engineering and the manufacture of motor cycles. Throughout all these changes, BSA Guns Ltd continued to produce sporting firearms and, for some time during the period, manufactured the 1215 target rifle.

Our interest in this weapon and other early target firearms comes, firstly, from curiosity as to how they perform when placed alongside the present generation of target guns and secondly because there is still a need for good second hand weapons.

Newcomers to our sport, especially in the present economic climate, don't necessarily have to (nor should they be encouraged to) buy the latest equipment until they are absolutely sure of what they require. This advice is very often not followed because the newcomer is led to believe that the club rifle or pistol they are using will not shoot as straight as the very latest in equipment.

The truth of this can only be gauged when old and new are subjected to identical investigation and evaluation. In future, we hope to be able to do this while at the same time bring you information on the rare or exotic weapons used for target practice.

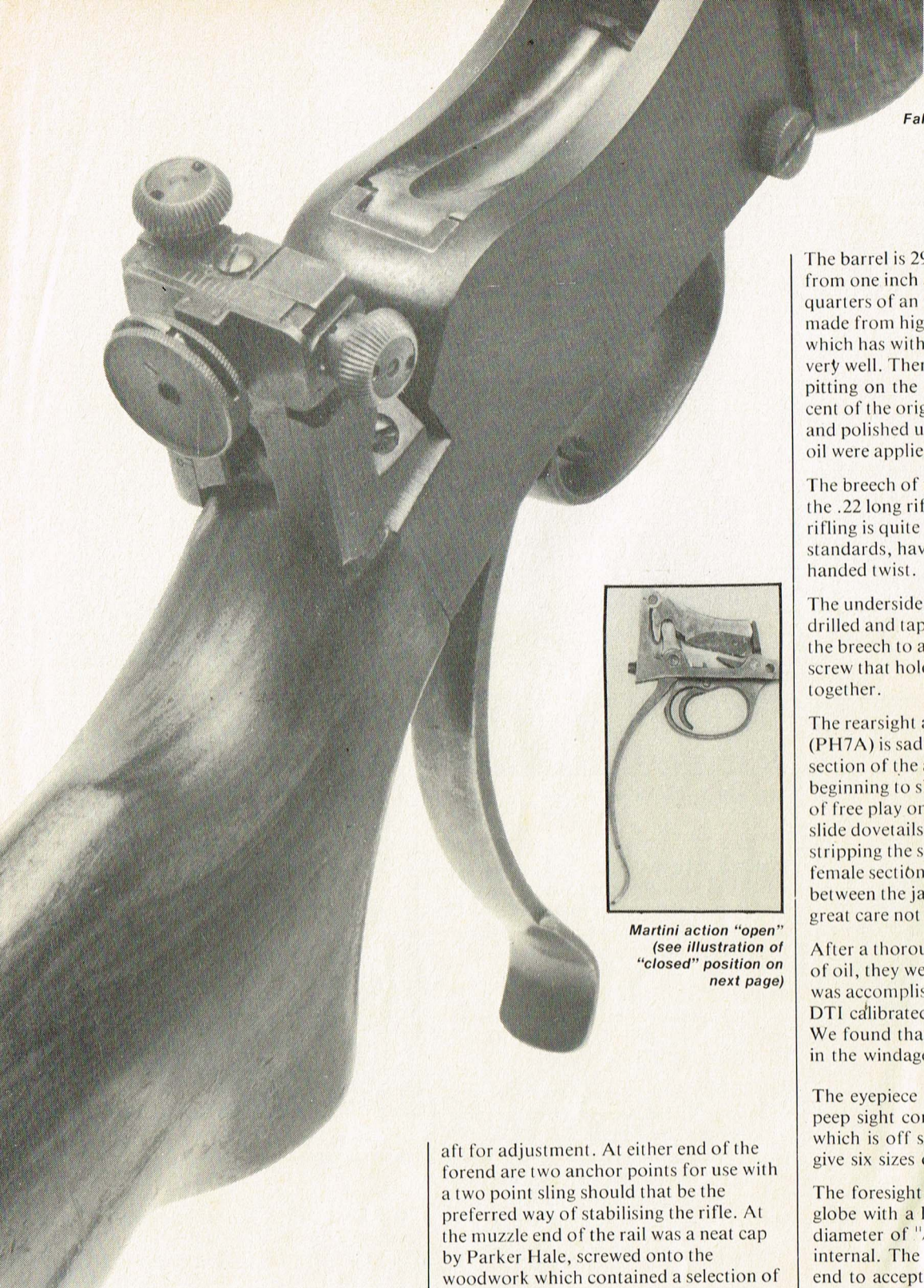


The eye piece: six different sizes of aperture by rotating the offset disc.

The BSA 1215 we looked at was kindly lent to us by the Blackpool Rifle and Pistol Club. It apparently came into their possession in the early 1960's when it was given to them by a member.

Considering the tens of thousands of rounds the rifle has fired, it still appeared to be in excellent condition. The woodwork had, of course, collected a number of bumps and bruises but these are only visual defects which have little bearing on the way the rifle shoots. The stock consists of two pieces separated by the martini action housing.

The forend is bolted to the barrel by a screw 3 1/2 inches in front of the breech. The barrel makes contact with the woodwork of the forend for some five



Falling block open with lever forward.

The barrel is 29 inches long, tapering from one inch at the breech to three quarters of an inch at the muzzle. It is made from high quality ordnance steel which has withstood the ravages of time very well. There was a slight trace of pitting on the metal's surface but 99 per cent of the original blue was still intact and polished up well when brass wool and oil were applied to the surface.

The breech of the rifle is chambered for the .22 long rifle cartridge. The barrel rifling is quite deep cut by today's standards, having six grooves with a right handed twist.

The underside of the barrel has a hole drilled and tapped 3 1/2 inches forward of the breech to accept the single anchoring screw that holds barrel and forend together.

The rearsight assembly by Parker Hale (PH7A) is saddle mounted to the rear section of the action receiver. It was beginning to show its age with quite a lot of free play on the windage and elevation slide dovetails. This was remedied by stripping the sights down and giving the female section of the dovetail a gentle nip between the jaws of a vice, while taking great care not to over tighten them.

After a thorough clean and a light spray of oil, they were tested for backlash. This was accomplished by using a G clamp and DTI calibrated in thousandths of an inch. We found that there was one to two clicks in the windage and two in the elevation.

The eyepiece on the PH7A consists of a peep sight containing a multiholed disc which is off set and can be rotated to give six sizes of peep holes.

The foresight consists of a short tube or globe with a length of 1 3/8 inches and a diameter of 1/16" external and 1/16" internal. The sight is threaded at the rear end to accept a knurled thumb screw which holds the sight elements in place. Cut into the tube is a slot which aligns the sight elements, the spares of which are stored, as we have already said, in the very neat cup screwed to the forend. The sight itself is attached to the barrel via a dovetail cut into the barrel at right angles to the bore line, so making the assembly a permanent fixture, only the elements being interchangeable. The sight itself is very low to the bore line, the bore centre to sight centre being seven eighths of an inch.

The action housing, which is attached to the breech end of a barrel, is



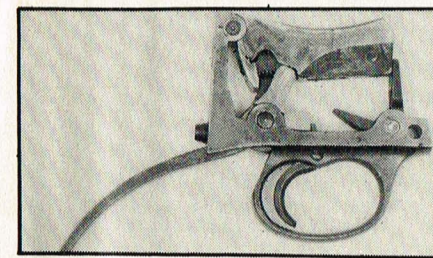
Martini action "open" (see illustration of "closed" position on next page)

aft for adjustment. At either end of the forend are two anchor points for use with a two point sling should that be the preferred way of stabilising the rifle. At the muzzle end of the rail was a neat cap by Parker Hale, screwed onto the woodwork which contained a selection of foresight elements.

The butt is held against the receiver by a long bolt that passes through the centre of the butt. This part of the stock has been shortened by some three inches to enable junior members of the club to shoot the rifle. Where the butt has been cut, a new butt plate, made from a piece of aluminium had been fitted. This shortening of the stock made shooting the 1215 a little more difficult than the normal length butt and probably accounted for the fact that we didn't quite manage to attain the magic 100 mark in our grouping.

inches before it becomes free floating. The gap between forend and barrel is, however, very small and although there was no sign of touching on the rifle we looked at, it might be a problem should the wood have distorted in any way.

Let into the underside of the forend was a homemade equipment rail which consisted of a strip of steel, drilled and tapped at intervals along its length. This addition allows a hand stop and single point sling swivel to be moved fore and



Martini action "closed".

manufactured from a single piece of steel. Drilled into its rear face below the rear sight is a 1/16 inch hole through which a cleaning rod can be passed. Beneath this is another hole which receives a tapered dowel on the action so holding this firmly in place at its rear. The front end is secured by a large steel spigot bolt. This passes right through the action housing, continuing through the action from right to left. The housing is well made, retaining almost all of its original bluing.

The 1215 uses a falling block martini action which is one of, if not the strongest actions on any rifle. It consists of the loading, cocking lever, falling block, firing pin, trigger and trigger guard and extractor claw. All this is contained in one unit and removal from its housing is accomplished simply by undoing the steel spigot bolt on the right hand side of the action.

The operation of the martini action is simplicity itself for both right and left handed shooters. To the rear of the trigger guard is a long lever. When this is pushed forwards it drops the breech block, so exposing the breech. At the same time, the extractor claw moves upwards and to the rear, pulling the spent cartridge case with it and throwing it to the rear of the shooter. The top of the falling breech block is hollow ground, leaving a channel which assists in the aligning and the loading of cartridges. Once the round is in the breech, the under lever is drawn back to its rear-most position, snug against the pistol grip. As it moves backwards, the action is cocked ready for firing.

We stripped the action down to see how it had fared over the years. On close inspection, there was very little sign of wear but we did find a small crack in the sear. The action was extremely dirty so we took the liberty of cleaning it with the aid of paraffin, thinners, a tooth brush and much elbow grease. Once the cleaning fluids had dried out, the metal parts were given a light coating of oil before the assembly was functioned to see that all was well.

One point that did occur to us when we had the action out was that the rifle could be secured with a chain through the empty housing while the action is

stored somewhere else. This is something you can't do with a bolt actioned rifle and, since trigger guards can easily be broken, there is little point in attempting to secure them with a cord or chain through the guard.

The trigger, which is very curved and grooved, works directly upon the sear with no provision for adjustments on this model, other than any modifications that can be carried out with a stone and which should be left to the craftsmansmanship of a gunsmith. Inside the falling block is the firing pin which is withdrawn as the cocking lever is pushed forward. This then engages on one end of the sear which is a bell crank lever. Forward of this is the extractor, which again is a bell crank lever, being struck by the downward movement of the falling block. The entire mechanism is worked from the one forward and one rearward movement of the loading lever.

With the rifle in as good a working condition as we could get it, we test fired the rifle after sling and handstop positions had been sorted out. Apart from some compromises in shooting position owing to the shortened stock, the first most noticeable item was the trigger which, at 2 1/4 pounds of pull, was somewhat heavier than some of us were accustomed to. This however didn't compromise anyone's shooting and, once used to the pull, it was appreciated for its very crisp clean break.

To give the rifle its best possible chance at grouping, we chose to use Tenex, RWS 50 and Eley Match as opposed to less expensive ammunition. Once we had

grown accustomed to shooting the 1215 we found tight groups were the order of the day with the best coming from the RWS 50 with scores in the high nineties, Tenex and Match both came a very close second with groups showing scores only a point or so behind.

Throughout the course of the test we encountered only two problems. Firstly, not every round was ejected cleanly out of the chamber. Secondly, there were occasions when loading was difficult, with the result that if a round didn't go fully home into the breech it more often than not became damaged as one attempted to close the breech.

Considering the rifle's age and usage it performed very well and this must surely be a credit to the craftsmen who built it. Those rifle shooters accustomed to the many refinements found on the modern generation of target weapons would miss them on the 1215 for there were no stock or butt adjustments, nor could the trigger be set up in any other way than that dictated by the factory. This, however, should not deter shooters just setting out on their career from starting with such a rifle. We realise that there will be variations in examples of the 1215 depending upon its use (and, of course, abuse) but if they perform in anything like the same way as our example did, then the few pounds spent to acquire one would give the novice shooter excellent value for money.

One thought did cross our collective minds while shooting the 1215 and that was when would BSA put their excellent adjustable martini action and accurate barrels into a fully adjustable UIT stock?

SPECIFICATION	
Manufacturer	BSA, Armoury Road, Birmingham
Calibre	.22 long rifle single shot
Action	Martini falling block
Weight	9 3/4 ILBS
Overall length:	
(Before modification)	44 1/2 inches
Barrel length	29 inches 6 grooves RH twist
Sights	Parker Hale 7A. Fully adjustable for windage and elevation.
Trigger	Foresight - Globe with interchangeable elements.
Modifications	Non adjusting 2 1/4 lb pull Addition of an accessory rail in the forend and three inches removed from the butt