

Airgun Collector



40 years in the game: my airgun memories

The highs and lows of collecting, by leading airgun writer John Atkins

First among equals: the Webley Premier

A detailed look at the evolution of one of Britain's best loved pistols

British concentric pistols: a roundup

The world's authority on spring air pistols examines a key design

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Phillips Auction,
London, 1982

From 'old school' to t'interweb

JOHN ATKINS, one of the UK's top airgun journalists and long time collector looks at some of the highlights of the past 40 years; the people, the airguns, the triumphs and mistakes, and offers his thoughts on collecting in the internet age

Gosh, how I miss those ripping days... and the times on the farm with ruddy-faced Farmer Bunbury, and his kindly, smiling wife - her eyes like currants in her soft face... the animals and the poultry, the barns and stables, the old apple-orchard and the lovely meals! Such

thick cream, such honey and golden butter, such raspberries, cakes and pies - such appetites as we found there! Folly Lane was a favourite walk - it was a long lane, winding upwards for two or three miles and ending in their farmhouse, and on our shoot was a lovely little wood,

where flowers grew and little sweet wild strawberries in summer and blackberries and sloes in autumn...

What a load of codswallop...! It's all too easy to look back through rose-tinted spectacles when only the good times are recalled. In reality, during my times on farms, I've fallen in ponds, been chased around a hen ark by a mad ram, crushed against a tree by friendly bullocks, got plastered in mud and slipped a disc - but those bad times are soon forgotten. The past is a dangerous place to dwell.

But risking the danger, let's look back to the times when life was less complicated, slower and easier - when Mars bars, the size of loaves, were priced at four old pence and beer cost one and thruppence per pint. Airgun shooting then was a cheap hobby appealing to 'tightwads' like me. As the years passed, only one thought kept me going: 'Pellets are cheap and air is free' - but even that has changed... Inflation affects all services and items - the price of lead, water and even indirect costs for clean air - which leads me on to the actual airgun-collecting hobby. Vintage airguns, now expensive and scarce, were often plentiful and cost a fiver-or-less each in the 1970s, as a lot of mine did.

The late Dennis Commins mentioned in his *Guns Review* column an unnamed collector who was still picking up Webley Service Mark II air rifles for £15 each. Well, that was I. At that time, thanks to Dennis's writings, along with Dr. Joe Gilbert's articles about air pistols and pellets in the same magazine, interest was growing and new collectors began to seek out the more desirable items described. Inevitably, when it started to

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WRITE FOR DESCRIPTIVE FOLDER

Rooks, Rabbits, Rats, Sparrows and similar vermin can be destroyed by this extremely accurate and powerful Air Rifle

Calibre 22 or 177 With Leafsight and Peepsight.

WEBLEY & SCOTT, Ltd. 87, Weaman St., BIRMINGHAM 4

Fig. 1 This advertisement in *Meccano Magazine*, March 1934 still utilises an old printing block for the 1st Series Webley Service Mk. II. The .25 calibre version of the rifle wasn't available until later in April 1937.

become obvious that some of these were in short supply, unfortunately prices started to rise for the less commonly seen collectable airguns.

It was a different world then, but time and economics are all relative. In 1973, £15 was an appreciable amount of cash to spend on an old airgun and I had very little spare money for buying old airguns - but all the time in the world. Nowadays, it's ironic that I have a little more money yet no time to devote to looking for airguns to buy. I don't think I've added anything to my collection since at least last week!

First Stirrings

After chancing on L. Wesley's book *Air-Guns & Air-Pistols* in my local library in the early '70s, I was hooked - taking out the book time after time, until buying my own signed copy from the author. Harrington Gats, Diana No. 2s and Mark IVs, Webley pistols and BSA Cadets I'd grown up with, but

the book showed obsolete airguns I never knew had once existed. It was a real eye opener. A photograph of the Webley Service Mk. II air rifle was included in it and I recalled little advertisements (see **Figure 1**) with line drawings for these rifles in some old pre-war issues of *Meccano Magazine* I'd been given as a boy.

SHOOTING for the FAMILY

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INVITE YOU TO THE

5th NATIONAL 6 YARD AIR RIFLE CHAMPIONSHIPS

WITH WHICH IS COMBINED THE 1st NATIONAL AIR RIFLE LEAGUES BELL TARGET CHAMPIONSHIP at

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Competitions for all-comers with Trophies and Prizes to be won!

FREE ENTRY & PARKING

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An excellent outing for the family. (Sorry, No dogs allowed into the Camp)

THE R-A-F MUSEUM of HISTORIC AIRCRAFT at COSFORD is ALSO OPEN TO THE PUBLIC in the AFTERNOON.

Fig. 2. A meeting point for airgun collectors from across the UK was the NARPA Annual Championships staged at RAF Cosford.

I liked the look of so many of the older airguns pictured and wanted to handle and learn all about them. I decided it would be interesting to actually make a collection of the ones that looked fascinating. Naïvely, I thought it would be a novel and unique thing to do because I had no idea anyone else was interested – so thought I could buy them cheaply if I could locate their whereabouts. True, I had always been an airgunner and had a few rifles and pellets left over from boyhood, but it was Leslie's book that made me decide to build a small collection.

I decided to place classified advertisements in my local newspapers. Running an art studio in their offices, I was ideally placed. Being on the spot, I could insert them free of charge and fill gaps on pages with my little display

advertisements as well. On these, I included my drawings of a Cox Britannia air rifle and a Webley Mark 1 air pistol. Optimistic as I am, I didn't really expect loads of Britannia rifles to appear for sale but suspected readers might well mistake the Britannia sketch for an old Gem-type gun which I was also happy to buy at reasonable prices.

I got away with these little free adverts but I'm sure if I'd attempted to run full pages for my 'old airguns wanted' there would have been repercussions! There were no silly policy problems with enthusiasts placing harmless adverts for old airguns then as there are now with some newspaper groups. Meanwhile, all manner of other, highly dubious advertisements are now allowed to run in family newspapers. Truly, a world gone

mad... Soon replies came in and I drove around collecting all sorts of interesting items. Still thinking I was entirely unique with my new hobby, I decided to advertise nationally, so the *Exchange and Mart* was chosen for my first advertising campaign.

Replies to my small classified advertisement were few but I was astonished to get written replies from other like-minded characters also keen on collecting old airguns and enquiring if I had anything to swap? One of these enthusiasts' letters was from Alan Hamer who, at the time, was working as an accountant for a company making paper tubes – Manchester Air Guns came later! After correspondence, I soon realised that Alan was light years ahead of me, being very knowledgeable on collectable airguns. He found me some nice items over the following years ranging from a humble Limit push-in barrel pistol to a lovely London Giffard rifle. Alan told me I needed to get W.H.B. Smith's book *Gas, Air and Spring Guns of the World* and gave me other useful hints and helpful advice. More and more collectors contacted me and soon we were meeting up at places like Cosford.

Cosford Championships

Cosford, near Wolverhampton, West Midlands, was a meeting place for airgun collectors because that was where the NARPA (National Air Rifle and Pistol Association) 5th and 6th National Annual Championships were staged in the massive hangar at RAF Cosford on 6th July 1975 and 11th July 1976, both of which I attended. The contests were combined with the National Bell Target Leagues Championships. It was a massive event and took months of preparatory work by

Dennis Commins, the honorary administrator, and many others.

Figure 2 reproduces the poster used to publicise the day in 1975.

Some collectors, like Alan Hamer and Joe Gilbert were shooters too, taking part in the Championships held there. There were thirty Rifle Divisions, both league and individual, including the 'Lincoln Jeffries'; 'Boxall'; 'Newcomer'; and 'Spittle' Divisions, and so on. Among the nine Pistol Divisions, Dr. Gilbert of the Herschel, Slough club won the Individual Pistol, T. L. C. World Trading Division. I recall. I corresponded with Joe Gilbert between November 1974 and June 1981 and can say he was a really nice guy and it was so unfair that he died too early.

Webley pistol enthusiast Paul Davis would attend, as would experienced collector Alan Holmes, arriving in his NSU rotary engined Ro80. (No wonder Alan Hamer called him 'The Baron')! The 'Two Terry's' would also be there (Terry Robb and Terry Palmer – the latter carrying the first Bonehill's 'Improved Britannia' I ever saw). The duo showed us how the powerful new FWB Sport air rifle could drill .177" holes clean through the lid of a heavy-duty toolbox! We were all suitably impressed.

Alan Hamer's friend Graham Walker was carrying a good Mark I Webley air rifle. (Alan and Graham later arranged for Alan to be the air rifle collector and for Graham to stick to pistols so they didn't fall out over any future items!). Roy Valentine would be there, Alan Holmes producing his rather worn, blued Westley's 'Highest Possible' concentric pistol serial number 1055 and Ralph Denman toting a Lindner & Molo American gallery air

pistol with gunmetal cylinder – who told me of his 'Highest Possible' pistols: one blued, number 594, and one nickelled, number 87, with the serial number curiously stamped on the flat muzzle face – one digit on either side of the bore of the original 9 15/16ths inch long barrel.

This muzzle face stamping does not appear on any other early 'Highest Possible' models I've seen, recorded or owned: such as serial number 63, or the virtually mint pistol number 109, shown with wiping rod and spanner in its original leather-trimmed, waterproof, green canvas-on-wood case that cost 17/6

(87.5p) in 1910, but cost me a lot more at Sotheby's, 34-35 New Bond Street, London in 1989. See **Figure 3**. The trade card in the lid names Mr. A. H. Gale, director of Westley Richards & Co. Ltd., 178 New Bond Street – so this pistol has come full circle to be sold again in the same street. As you can see, the case very much resembles an oversize version of the lockable cases available for Webley pistols at a much later date for 12/6d (62.5p).

Figure 4 shows (centre) a later Westley Richards & Co. Ltd. blued 'Highest Possible' serial number 770 in its dustproof, close-fitted teak case lined with blue velvet. On the velvet-lined lid is a plated pistol



Fig. 4 Nickel plated and blued Westley Richards' "Highest Possible" air pistols – the centre example in a dustproof, close-fitted teak case lined with blue velvet.



Fig. 3 Westley Richards' green canvas on wood "Highest Possible" air pistol case housing serial number 109 (c. 1910) resembled an oversize version of the much later Webley lockable air pistol case.

number 1130. Below it, another blued example is included – serial number 528 in its original cardboard carton with clearing rod.

It was at Cosford '75 that I first met Jeff Hyder, Chris Winnard and Mark Newcomer. I remember Mark was carrying a dark blue box of Lincoln Jeffries 'Match' Pellets. He later gave me a lift back to Wolverhampton railway station and, years later – just before he returned to America, I ended up with all his pellets, including that carton of L.J. 'Match' and all the packets and tins shown on the colour front page of *Guns Review*, April 1976, because they wouldn't have let him on the plane with all that lead. Dennis Commins



Fig 5 This .177" Kynoch "Swift" serial number 185 once sold as Lot 1685 in Wallis & Wallis Auction Sale 164, 20th February 1970. Hammer price £2!

was always in attendance but miles too busy with running the shooting championships to talk about vintage stuff on that day, of course.

Pioneers

Dennis Commins had written the first article I read on Webley air pistols in *Guns Review* magazine, February 1973 issue, which produced useful feedback from readers but little factual information from the factory about their old pistols, so he suggested that Mark (being a lecturer in prehistoric archaeology) and a professional researcher used to collecting data, might continue



Fig.6 Serial number 185 stamping on the Swift trigger block.

the story by recording numbers and details to form a pattern to give a better picture of the early Webley air pistols. The result was to be a fine series published over three months. (*Guns Review*, August and September 1975 and June 1978).

There was a pub nearby but I can't recall the name. Collectors would meet there for lunch. Legendary, mysterious figures on the airgun collecting scene would be discussed

in awe – mainly unseen by most – but reputed to have vast collections. One that I never met – who I will just call 'Alec', had "walls black with airguns" it was said. Jeff Hyder reminds me that talk was often more about old motor bikes – as all the airgun collector guys (apart from Jeff and I) were interested in motor bikes, so often the talk would drift from guns to bikes. My own interest in motor bikes had rather faded years before, after some idiots destroyed the old BSA C11 machine my boyhood gang had purchased for £5 pounds and kept hidden in the middle of a bush in the grounds of the local church, as none of us were old enough to legally ride a motor bike on the roads. One Saturday afternoon, planning to push our BSA through the streets to an unmade private road in order to ride it, we arrived to find the fire brigade tackling a burning bush in the church grounds. It looked like a biblical scene... A rival gang of boys had set fire to our machine and it had virtually melted. All we could salvage was the magneto, which later came in handy for giving each other electric shocks and detonating fireworks electrically.

But I digress. Because we knew hardly anything in those days, each new finding of an unusual airgun or old airgun advertisement or some other appertaining paperwork by one enthusiast was met by great excitement when it was shared with other collectors. This apoplectic joy

of discovery we felt is hardly possible to apprehend now, because so many of these revelations and new discoveries are now commonplace facts among collectors today.

Later, I would visit the homes of other airgun collectors. Jeff Hyder and Chris Winnard displayed their impressive arrays of vintage air pistols on large, open sheets of wall-mounted pegboard covered in traditional green baize. Dowel pegs pushed through the wool and into the board provided the necessary support. Jeff stuck mainly to Webleys but Chris had an assortment of vintage air pistols including a blued Westley Richards' "Highest Possible", an early Abas Major finished in crackle black paint, a Lincoln (he'd bought from Alec), a vertical grip Titan and many other choice pistols.

When Jeff and I visited Mark Newcomer's house, I was startled to see Mark had a vast mounted pegboard with the biggest collection of Webley pistols I'd ever seen displayed – including many beautiful Mark II Target De Luxe Models. However, I think we all came to realize that the enemy of oiled pistols displayed in an unglazed situation is common house dust that sticks to pistols and they really need to be behind glass. Mark had a Greener air rifle and several other items I'd not previously seen.

In turn, collectors would visit my

house. My late mother's lunches and teas became legendary. Collectors would appear as if by magic on the doorstep at meal times. Norman Lane with his little shopping trolley full of old air pistols and Roy Valentine (Later 'Harvey' [RV] in *Airgun World*) tucking into ham salad on a summer's evening.

There were no UK airgun magazines or home computers then. I had a lot of demands on what I learnt – so it was frustrating that old airguns often cost more than I could afford although I had plenty of time to track them down. I recall a well-refinished Webley Mark I air rifle early serial number 21 offered to me on the 4th July, 1974 by dealer Jack Marney for £65 and a very good Mark II Service in .22 at £30, both of which I had to turn down. Some items have always been expensive during my time as a collector.

Kynoch Swift

A 43-year old Wallis & Wallis Sale 164 catalogue in front of me, lists Lot 1685 as an 'early .177 Eley Kynoch Air Rifle 43", brl 19" No. 185, the trigger having adj. tension screw...' Results of that auction were included in the following sale catalogue No.165 and show the Kynoch rifle number 185 sold for the hammer price of £2. Years later I was to buy this rifle myself from Alan Hamer but it cost me a couple of noughts on the end by then. It was, of course, a Kynoch 'Swift' and nothing to do with Eley at that time.

Figure 5 shows this Kynoch Swift, sold in auction on 20th February, 1970. The serial number stamping on the Swift trigger block is seen in **Figure 6**. I'm unsure about the originality of the trigger adjustment frontal screw, as I'd have thought

it was side-adjusting through a now vacant hole in the other side of the block – as were some Lane Musketeers about this time.

The rare Kynoch Swift air rifle was patented in Britain in 1906, Patent 11557 of 1906. The patentee being George Hookham of Birmingham. A second patent – Patent 13716 of 1906 taken out by Edward Jones, Engineer and Kynoch of Lion Works, Witton, was for a variation to the arrangement of leather breech seal and a metal sealing tube on the opposite face. I don't know if Hookham and Jones were Kynoch employees.

My Swifts and all others seen have a very similar large (2.75" wide butt marking of a flying bird with 'TRADE MARK' radially following the lower wing) to the one shown in *The Trade Marks Journal* and a roundel on the opposite side (LHS) 1.25" circle across containing 'KYNOC LIMITED BIRMINGHAM PATENT'.

The trademarks register artist seems very confused by Swifts and Swallows although the birds do not even belong to the same family. The registration says the trademark represents a Swallow rather than a Swift. A year earlier, a linen thread making merchant used a similar 'Swift' trademark so maybe this prevented Kynoch using the Swift in the register?

One example of the Swift I own once belonged in the family of the commander of The Royal Flying Corps who was the only man to tangle with the Red Baron in a dogfight and live to tell the tale... I do not know yet whether the Swift was 'got up' (to use a gunsmith's term!) on Kynoch's own ground at Witton, or elsewhere in Birmingham.



Fig 7 While rearsights and trigger adjustment arrangements differ, the massive breech jaws and faces of the Swifts appear identical for number 185 (top) and number 247 shown lower.

While rearsights and trigger adjustment arrangements differ, the massive breech jaws of the Swifts appear identical for number 185 (top) and number 247 shown lower in **Figure 7**. No 247, incidentally has no hole for a frontal trigger adjuster but one on the right side of the block above the front of the trigger.

Mixed Blessing?

The arrival of the Internet was a mixed blessing for collectors generally. It's advantageous if you are selling – as online catalogues allow such a wide audience for your goods – but not so good if you wish to buy items in my opinion. I didn't need the Internet to track down old airguns and I still don't. In a purely selfish way, I would keep quiet about any airguns I heard about coming up in country house auctions or in obscure little village hall sales, so I could drive out to bid and usually acquire them at a bargain price!



Fig. 8 This Phillips catalogue of March 10th 1982 for the auction of the collection of the late Dr. Joseph S. E. Gilbert, is now highly collectable. The early Bedford's "Eureka" sold for £40 hammer and the reissued "Highest Possible" achieved a hammer price of £220.

There were no fixed prices then and there are still none, as far as I'm concerned, although it's helpful to establish a rough price guide. Dennis Hiller's 'Collectors Guides' for both air rifles and air pistols got a lot more people interested and did give a pointer towards possible prices although these values date, of course. But in the end, it's really what someone is prepared to pay! Many other collectors were rather secretive then, too, and many still are. In some ways, it works against building a good collection if airguns coming up are widely publicised – as this means increased competition for the rarer items. But in other ways it can help too, leading you to find the item you are after via the help of friends who might spot an

available airgun you'd not been aware of.

The last thing anyone would have appreciated then was auction houses announcing on the Internet (if it had then existed) to all what was coming up for sale or a 'heads up' sort of announcement from a collector, broadcasting news on forums of the airgun we hoped to buy to everyone else. This means it's unlikely anyone gets a real bargain nowadays. When I first started writing collecting articles, a lot of 'old school' collectors asked me to avoid mentioning prices in magazines as this would inevitably push prices up; it was all very cloak and dagger!

That's not always possible or desirable. For instance, when I covered the sale of the late Dr. Joseph S. E. Gilbert's collection at Phillip's on March 10th 1982 in *Airgun World*, May, 1982, I needed to record what was achieved as a price guide for readers. Catalogues for sales such as this (**Figure 8**) are now collectors' items themselves. This now collectable catalogue was expertly compiled by Nicholas McCullough for the auction and is seen here along with Joe's .21 early example of Bedford's bolt-action breech "Eureka" number 436 with thin plunger rod and barrel surround, sold for £40 hammer. Below is the reissued Westley Richards' serial number 1081 known as the 'concentric' "Highest Possible" pistol because of the jacketed axial barrel allowing a reduced and streamlined design. This example, retaining all its nickel-plated finish achieved a hammer price of £220.

Figures 9 and 10 give flashbacks to that memorable auction day on March 10th 1982. Alan Hamer of Manchester Air Guns admires a fine boxed Webley Mk. I number 6805, 90% blued finish held by Webley expert John McCrossen in **Figure 9**. A fine .22 BSA Military Pattern Long air rifle serial number 380 is held aloft by the porter during the bidding. It sold at Phillips Auction for £360 (hammer price) appearing so low now but, remember, that was 31 years ago!

As time went on, some even accused me of inadvertently inflating prices because I said something was 'scarce' or 'rare'. Well, as I've said before, I could hardly describe a rare item as commonplace and undesirable just to keep its price down! I don't want prices to rise any more than the next man.

Collectors being online talking to one another as cyber buddies is a good thing as it makes obtaining answers to questions and getting the opinions of others very immediate, with no waiting for slow postal correspondence or expensive telephone calls. While deals can be made that way, there's no substitute for seeing airguns 'in the flesh' – as it were – by being out and about meeting sellers and doing deals face-to-face, which is far more exciting than sitting in front of a computer communicating with people you may never meet.

Anecdotal stories

Now I can look at my collection and recall the adventures behind the acquisition of many of them and some of the unusual characters I purchased old airguns from. A French Diane ring trigger airgun reminds me of the very old gentleman owner, who gave me a cup of tea in a glass jam jar and had all his dusty paper chains and other Christmas decorations up. Puzzling, as this was the middle of August... But he wasn't daft – as he drove a hard bargain telling me the

Diane was 80 years older than it really was and I ended up paying far more than I'd wanted to, not realizing at the time it dated from around 1939 (when it was advertised in *Le Chasseur Français*) or maybe a lot later – despite its archaic mixed construction of steel pressings and tubes, brass and alloy.

I also recall driving a long way to see a lady about an airgun I'd been told about, only for it to turn out to be a child's Mondial Italian cap pistol rather than an airgun. Also the elderly man who, after selling me two boxed Webley 'Senior' air pistols he'd bought for his daughters, long ago (who'd never used them) suddenly produced an almost mint artillery Luger from a drawer and after waving it in my face asked me if I'd like to buy it! It turned out he had no firearms certificate and failed to even realize he needed one – so it



Fig. 9 Flashback to March 10th 1982. Alan Hamer of Manchester Air Guns admires a fine boxed Webley Mk. I number 6805, 90% blued finish held by Webley expert John McCrossen.

was held illegally. On examination, I discovered it was fully loaded! He readily agreed with my proposal that I remove all the cartridges for safety. There was little else I could do but to strongly suggest I get rid of the bullets for him and that he hand his (now unloaded) Luger into the police at the first opportunity during a forthcoming Arms Amnesty – which he promised to do, and hopefully did! I dropped his eight rounds over the gunwale of my fishing boat into fifteen fathoms of water the next day, when bobbing three miles off Sandgate.

I've discovered a few things about airguns over the last 40 years and one of them is the fact I'm never going to be able to stop some collectors calling the old German airgun maker Langenhan "Langenham"; a Militia-pattern airgun a "Militia"; and a Relum Telly a "Jelly" (because of the stylised "T"), so I've rather given up on that!



Fig.10 A fine .22 BSA Military Pattern Long air rifle serial number 380 sold at Phillips Auction for £360 (hammer price) back on March 10th 1982

Text and photographs © John Atkins

Eccentric concentrics

JOHN GRIFFITHS, author of the acclaimed reference book the *Encyclopedia of Spring Air Pistols*, tackles a genre of air pistols distinguished by their novel cocking method. He examines British concentric air pistols from the first pattern Westley Richards and Edwin Anson’s Star to the original, but highly impractical, BSA/Norman fixed-barrel tap loader.

Concentric barrelled spring air pistols make up a small and select group of interesting air pistols where the barrel is located in the centre of the air chamber, and the piston surrounds and slides over the barrel during the cocking and firing strokes. The concentrics are characterized by the piston moving rearwards on firing, so that the compressed air has to make a sharp U-turn before reaching the pellet in the barrel. This is shown in

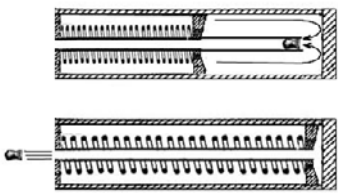


Fig. 1. The basic principle of the Anson concentric design. Upper diagram, cocked position. Lower diagram after discharge

schematic form in Fig. 1.

As this concept was first developed by Edwin Anson, I will refer to this as the Anson concentric system. The vast majority of spring air pistols (and all spring air rifles) are of the non-concentric type and normally have the air chamber immediately behind the barrel so that the piston

moves forwards on firing. There are a few non-concentric air pistols with a rearwards moving piston, the compressed air also requiring a U-turn from cylinder to breech. These have an external barrel superimposed above the cylinder – classic examples being the Webley range of air pistols, the Weihrauch HW45, and the BSA Magnum.

As can be seen from Fig. 1, the Anson concentric piston design requires the piston to make a positive seal not only with the air chamber sides but also with the barrel itself, so one might wonder what advantages there could be for such a potentially inefficient design? The answer is simply one of compactness – a concentric pistol can be half the length of a conventional air pistol and yet still have a similar swept air volume and an equivalent power. Such an advantage can be of great value to the pistol owner, where compactness and ease of carrying is often important. As this is of little use to rifle shooters, who are happy with full length guns, it is not surprising that manufacturers have never bothered to produce a concentric air rifle.

This article will be confined to concentric pistols utilising the

Anson principle shown in Fig. 1, but it should be noted that two other concentric barrel systems predate this design. Strictly speaking the first ever concentric air pistol system was invented by H.M. Quackenbush in 1876. This is the “push barrel” system which has been copied more than any other air pistol design and is the basis of the so-called “Gat-type” or “pop-out” air pistols. The principle of the Quackenbush system is summarised in Fig. 2. In this case the barrel is fixed to the piston head and both move forward when fired. The push-barrels essentially belong to the “semi-toy” class of pistol, as the unpredictable effect of the leaping barrel on firing

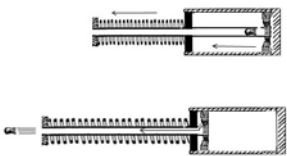


Fig. 2. Principle of the Quackenbush push-barrel system. Upper figure shows the cocked position, lower figure after discharge.

means that they could never become serious target weapons. Because of these fundamental constructional differences, this type of pistol is excluded from this article.

The second type of concentric system

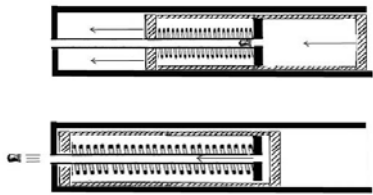


Fig. 3. Principle of the Norman/BSA concentric system. Upper figure shows cocked position with fixed barrel inside the sliding chamber. The lower figure shows the sliding chamber propelled to the left on firing.

was invented by G. Norman of the BSA company, Birmingham in 1911, although the pistol itself was never commercialised. The principle of this system bears certain similarities to the Quackenbush system, and is summarised in Fig. 3.

As with the Quackenbush design, the barrel acts as the piston and has a sealing washer fixed at the breech end. However in this case the barrel is



Fig. 4. Edwin G. Anson

fixed and does not move when the gun is fired. Instead the barrel and its washer are fitted inside a sliding air chamber and under

the action of the compressed mainspring it is the air chamber itself that is propelled towards the piston head on firing, so compressing the air contained within. This system has several design difficulties, the most notable being how to access the breech for loading a pellet, and the 1911 patent tackles this by using a rather intricate tap loading system. The Norman / BSA pistol is discussed in more detail at the end of this article. It should be noted that in both the Quackenbush and Norman systems the compression

chamber is in line with the barrel and consequently there is no gain in overall compactness, unlike the Anson system.

Over the past 90 years or so air pistol designers have come up with many unusual and ingenious loading and cocking inventions that help to take advantage of the inherent compactness of the Anson concentric system, most of these design features

pistol that have been commercialised. As you might imagine, trying to collect all of these would be a major challenge. For anyone, but fortunately some are still relatively easy to find and every airgun collector should have at least one example in his collection.

Edwin Anson (1863–1936) was a Birmingham gunsmith, son of William Anson the famous shotgun maker. His first major invention was the

Table 1. Known commercial concentric air pistols, in approximate date order.

	Model	Country of origin	Approx. production period	Cocking method
1	Highest Possible (2nd model)	England	1924-1926	Grip/trigger guard
2	Tell 2	Germany	1925-1940	Grip/trigger guard
3	Anson's Star	England	Late 1920's to early 30's	Underlever
4.	Warrior	England	1930 - 1939	Side lever
5.	Abas Major	England	1946-1949	Trigger guard
6.	Acvoke	England	1946-1956	Grip/trigger guard
7.	Excellent Mod 1950	Sweden	1946-1958	Overlever
8.	Thunderbolt Junior	England	1947-1949	Grip/trigger guard
9.	Hy-Score models 700, 800-805	USA	1947 to late 60's	Pivoted cylinder / grip
10.	Stella 551	Czechoslovakia	1947 – early 50's	Push barrel
11.	Eusta LP100 & LP210	Germany	1965-1970	Overlever
12.	Record Jumbo	Germany	1982 to ~1997	Overlever
13.	Record Champion	Germany	1987 to ~1997	Side lever
14.	Hy-Score Sporter	England	1989 to ~1994	Pivoted cylinder/grip

not being found in any other type of air pistol. Table 1 lists all the different models of Anson-type concentric air

barrel-over the cylinder design in the form of the first model Highest Possible, which was manufactured



Fig. 5. Blued version of the concentric Highest Possible (Photo courtesy of Alan Harvey)

by Westley Richards & Co. over the period 1910-1915. It was in 1921 that Edwin Anson patented the first fixed barrel concentric spring air pistol, and this was based very closely on his then discontinued Highest Possible. Theoretically it was a very simple step to convert his classic pistol into a concentric design by simply relocating the barrel from above the cylinder to a position at its centre, but it was also a stroke of genius, as no one had thought of doing this previously. Again with the assistance

THE CONCENTRIC "HIGHEST POSSIBLE"

The concentric Highest Possible, shown in Figures 5 and 6, is more elegant in appearance than its predecessor Highest Possible, and at about one kilo in weight is around a quarter of a kilo lighter. The patent diagrams in Fig. 7 show the basic construction of the pistol, which is almost identical to that of the non-concentric version. However, there are important differences, the most

important being (a) the barrel is now located within the cylinder, (b) the barrel is shorter and is flush with the end of the cylinder, (c) the barrel is made of brass and is smoothbore rather than steel and rifled, (d) the adjustable rear sight in the first model is now fixed, (e) the breech closure lever is shortened to allow for the lowered barrel, and (e) there is a general reduction in size of the trigger guard cocking link area and the grip, the overall height of the gun being reduced by over an inch. Like its predecessor,

the concentric version was furnished with black polished horn grip plates with fine chequering. These are not interchangeable between the two models. The guns were available blued or, at a premium, nickelled, these being referred to in advertising literature as the "No. 1" and "No. 2" respectively. The nickelled guns are, not surprisingly, much rarer than the blued version, and from the limited number of known examples are outnumbered by the

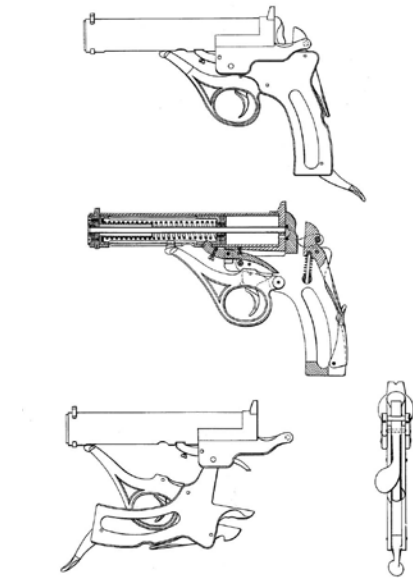


Fig. 7 Patent drawings for the concentric Highest Possible

latter by at least 5:1.

Although the sturdiness and quality of manufacture was still of the high standard found in the non-concentric model, the introduction of a fixed rear sight and a smoothbore brass barrel were curiously retrograde steps. These modifications would have put the pistol at a distinct disadvantage over the Webley Mark 1 air pistol of the time and it is difficult to understand why they were countenanced. Despite its reduced size, the concentric pistol was still significantly heavier than the Webley Mark 1 and offered no more power. In addition, the blued Highest Possible was appreciably more expensive than the contemporary Webley Mark 1, costing one pound nineteen shillings and sixpence (roughly £100 in today's money) compared to one pound ten shillings and sixpence (about £80 today) for the Mark 1. So these factors help explain why the pistol was never a commercial success. The gun was sold over the period 1924 to 1926 / 1927, and it seems that fewer than 100 pistols were produced. Survival rates do not appear to have been particularly high, and today it is now

one of the rarest and most sought after of vintage British air pistols.

Serial numbers, which are located on the heel of the grip, started from 1001 and the highest number known to the author at present is 1087. The pistol was advertised as being provided in a card box. However, no authenticated box is yet known to have survived and

at least on a par with the concentric Highest Possible.

We do know that in about 1945, some years after Anson's death in 1936, the assets of his business were sold to a Messrs Curry and Keen and in his workshop was found a number of components for the Star pistol, sufficient to make about 40 complete

in a range below 40, which would be consistent with their being newly serial numbered from unnumbered components by A.A. Brown & Sons. Known examples of these include numbers 14, 15, 23, 25, 28, 35, 37, 38. In contrast, presumed pre-War pistols often have higher serial numbers, known examples being 51, 64 and 94. In addition, the post-War assembled guns are stamped on the l.h.s. cocking lever with the name "ANSON'S STAR"; whereas the older guns may be stamped either "ANSON'S STAR" or more simply "THE STAR". (See Fig. 9)

The differently marked pistols also have slightly different barrel arrangements, and those marked "Anson's Star" have the barrel protruding slightly beyond the end of the cylinder which is retained by a small screwed bracket, whereas "The Star" pistols have the barrel flush with the end of the cylinder (see Fig. 10).

Two other intriguing features about these guns are (a) all have grip plates that were used on Frank Clarke's last model Titan (discontinued about 1926), and (b) all use a double-start breech pin that is identical in every respect to that used on Frank Clarke's Britannia pistol (discontinued ca. 1935).

Taking on board all these facts, a possible history for the Star pistol can be pieced together, although of course it is still largely conjecture, and will be until hard evidence turns up.



Fig. 8. The "Anson's Star" air pistol

discovering one of these would be a find indeed.

ANSON'S STAR AND THE STAR

The Anson Star air pistol (Fig. 8) is the most enigmatic of all the vintage British air pistols and the one we know least about. Undoubtedly the brain child of Edwin Anson, the pistol combines his concentric barrel concept with a unique underlever cocking system, and yet despite these innovative features the design was never actually patented. Because of the absence of information from the patent record and the absence of any known advertising literature, we have no definite idea of the origins or early history of this pistol. We do know that it was made in very small numbers, at least in part by Anson, and is extremely rare – if not THE rarest of the vintage British air pistols, then

guns. Under some mutually agreed business arrangement A.A. Brown & Sons undertook the assembly of these pistols, which were then sold off. This however is not the whole story by any means, and there are several puzzling aspects about this gun. Reports in the literature suggest that the pistol had already been on the market prior to Anson's death, possibly as early as 1922, and examination of known examples does suggest that this is the case. The post-War assembled pistols have low serial numbers, all falling



Fig. 9. Lettering on the two versions of the Star pistol

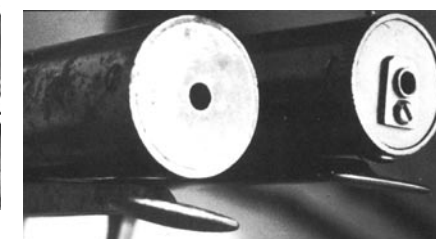


Fig. 10. Comparison of the barrel muzzles on the "Star" (left) and the "Anson's Star"



Fig. 6. Catalogue advert for the concentric "Highest Possible"

of Westley Richards & Co. his new Highest Possible concentric pistol was introduced onto the market in 1924. Unfortunately this was a time of intense competition from other very effective air pistol designs and consequently this highly innovative pistol only had a production lifetime of two years or three years.

It is most likely that Anson was working on his Star design around the time that his Highest Possible concentric pistol came onto the market under the ownership of Westley Richards & Co, and presumably Anson's intention was to produce another concentric pistol that was simpler and cheaper to manufacture, and one that he could produce himself. It is well known that Anson and Clarke were close colleagues and as Clarke had ceased manufacture of his Titan air pistol at that time, he would have been able to provide surplus grip plates to Anson to use on his pistol. This would have required suitable preplanning, as it is no accident that the Star frame is tailor-made to fit the Titan grip plates. The same would be true for the breech pin, which Clarke would have been able to supply at a considerable cost saving. The question then is, what might Clarke get out of such a collaboration? One strong possibility is that Anson gave Clarke a concession enabling him to manufacture and/or assemble and retail some of the pistols for himself. This would explain the origin of the pre-War pistols marked simply "The Star" with no reference to Anson, and why these had the slightly different barrel arrangement to the "Anson's Star" pistols. In his own workshops Anson would also have made and sold his pistol marked with his own name. One example of an "Anson's Star", serial number 14, almost certainly comes from this pre-War period as it has its original (unmarked) box, which has identical covering material to that used on Anson's Firefly air pistol box. Neither Clarke or Anson would probably have had much enthusiasm for the Star pistol because by 1929 they would have been involved in developing the Warrior air pistol, a potentially much stronger competitor for the all-conquering Webleys. This

lack of enthusiasm would explain why the Star was never patented, why it was never advertised and why so few examples were made. With the advent of the Warrior the Star would have been abandoned altogether, so explaining the unassembled Star pistols that were found in Anson's workshop after his demise.

What of the pistol itself? It is relatively pleasant to handle, weighing a few ounces lighter than the contemporary "straight grip" Webley Mark 1, and having a similar rake to the grip. The overall quality of manufacture is good, making extensive use of forged steel parts, but the gun is let down somewhat by the smoothbore barrel and fixed rear sight. The cocking system, though unique and mechanically very simple, is not the easiest to use, and the fact that the pellet has to be loaded into the breech by removal of the breech screw is also a big disadvantage. The major drawback to this design, however, concerns the power achievable, as the cocking lever mechanism permits only a relatively short piston stroke – about 4.3 cm in comparison with about 6.5 cm for the Webley Mark 1. So although the diameter of the Star's air chamber was significantly larger than that of the Mark 1, because of the short stroke and the additional lost volume from the central barrel, the Star had a swept volume of air of only about 12.4 cm³. The Mark 1, with a swept volume some 60% larger was able to generate much more power with significantly less cocking effort. No advertising literature for the Star has been found and so we do not know how much it retailed for, but it must have sold at a significantly lower price than the Webley Mark 1.

From the collector's viewpoint the Star or Anson's Star is one of the rarest and most desirable of the British

vintage air pistols, and the fact that we know so little about it gives it an additional air of intrigue. Uncovering any original catalogue or advertising literature relating to this pistol would also be extremely valuable, both historically and financially.

THE WARRIOR

It has long been accepted by most airgun historians that the Warrior was invented by both Edwin Anson and Frank Clarke in a collaborative venture, this assumption being based on the fact that the British patent (BP 351268) first applied for on July 9th, 1930, lists them both as applicants. However, if one looks more closely at the patent record you find that the equivalent US patent applied for about 10 months later paints a somewhat different picture. Here Edwin Anson is clearly stated to be the sole inventor (even the patent drawings are signed by him alone as the inventor), and the patent also makes it clear that one half of the patent rights had been assigned over to Frank Clarke. This clear differentiation between the inventor and any other owners of a patent was a common feature of the US patent system, whereas at that time in Britain the distinction between inventors and applicants (owners) was not usually made, both being treated as "the applicants". A further illustration of this is found with the 1911 Lincoln Jeffries patents for his backstrap cocking pistol designs. His British patents do not separate the inventor from the patent owners and begin with the statement "We, Lincoln Jeffries & Co. Limited and Lincoln Jeffries, Director of Limited Company, both of Steelhouse Lane Birmingham, do hereby declare the nature of the invention to be as follows...". In contrast, the equivalent American patent prefaces the patent application with the words "Lincoln



Fig. 11. The first phase Warrior (top) with rounded trigger guard and bevelled cocking lever, and the more commonly seen second phase version

Jeffries of Birmingham England, Assignor to Lincoln Jeffries & Company of Birmingham England", and then categorically indicates in the body of the patent that the individual Lincoln Jeffries is the sole inventor. Even if it is correct that Edwin Anson was the sole inventor of the Warrior and of all its novel design features, there is no doubt that Frank Clarke played a part in its early design.. Thus an early 1930's Frank Clarke catalogue depicts an artists drawing of the Warrior on its cover, showing the pistol with grip plates from the discontinued Mark 7 Titan, a cost saving exercise that had previously been used with the Anson Star pistol. The patent drawings for the Warrior also showed the gun to have a grip rake that accommodated these grips, which was no coincidence. However, by the time the Warrior came onto the market there had been a rethink and the grip rake had become more sloping and sleeker, which meant that purpose-made

grip plates were then required. It seems most likely that after Anson had invented all the principal features of the Warrior he approached Clarke with a view to its commercialisation, and he sold a half share in the design to Clarke. Frank Clarke may have made various suggestions to improve aspects of the patent, including choice of grip rake to suit the Titan grips, before the patent drawing were made.

Manufacture of the Warrior in the early days was presumably undertaken by Clarke himself, or jointly in their separate workshops by both Clarke and Anson, and these first pistols, which were made over the period 1931-1933, had no serial number. Although stamped with the name "Warrior" and the British and USA patent numbers, there are no markings of any kind to indicate who made the pistol. This is consistent with a jointly owned design, and the lack of serial numbers could also

be seen as consistent with the guns being made independently at two different locations. This also means that we have no idea how many of these early guns were actually made, but it is clear that they are very much rarer than the later serial numbered guns. By 1933 Anson must have sold his remaining 50% share in the patent rights over to Frank Clarke, as from then on the pistols were stamped with "F. Clarke's Patent Nos. Brit. 351268, USA 538057", with no mention of Anson's involvement. At the same time manufacture of the pistol was handed over to the engineering company Accles & Shelvoke, presumably because sales of the pistol had taken off

and Clarke was finding it difficult to keep up with demand using his own workshops. These second generation pistols carried the marking "Made by Accles & Shelvoke Ltd., Birmingham", and were serial numbered. Apart from these markings there are other small structural differences between the early non-serial numbered pistols and the later serial numbered version, the most obvious being the chamfering of the end of the cocking lever in the first series (Figure 11). Other differences are to be found in the muzzle area, where the early guns had a slightly protruding barrel which was enclosed in a steel block, and also in the breech area, where the wrap-around cocking lever closure was simplified slightly. Serial numbers in the second series began at 1000 and about 5000 pistols were made over the period 1933- 1939, the highest serial number yet recorded being 5816.

Continued on page 56

Walther's compression brainwave

Walther was ahead of its time when in 1974 it devised the first single stroke pneumatic match rifle. It was both ground-breaking and world-beating, so good that the target size had to be reduced. LEONARD JOE reports on the evolution of this rifle over its 14 years in production, in particular the features that make it either an 'early' or 'late' model.



The Walther LGR is a very well known 10M target rifle, which was introduced in 1974 and was produced through to around 1988. The LGR quickly gained dominance in 10M competition, eventually breaking both the individual and the team world records in 10M rifle. At the 1984 Olympics, the LGR became the first SSP rifle to take gold in the men's competition. With more and more shooters posting perfect scores, the governing body for 10M rifle competition of the day decided that changes were needed to reflect

the precision that these new breed of match rifles were capable of, and reduced the size of the rifle target, to the size that it remains at to this day.

The LGR is a single stroke pneumatic rifle, which means that it's full operating pressure is built up with but a single cycling of the cocking lever. As the cocking lever is drawn rearward, air is drawn through the barrel and into the valve, and as the cocking lever reaches the end of its stroke, the valve is allowed to close, and the trigger engages the hammer

sear. As the lever is now moved in the forward direction, the air in the compression chamber is compressed to a pressure of approximately 100 bar (1450 psi) within the valve. This pressure is adequate to propel an 8 grain pellet to a velocity of around 555 FPS, which results in 7.4 joules (~5.5 fpe) of energy – just under the 7.5 joule limit.

Upon firing, the trigger releases a hammer, that is quite light in relation to the overall weight of the gun, and the end of the hammer travel

is dampened by a resilient buffer, resulting in little or no recoil felt by the shooter, and a minimal elapsed time between the squeezing of the trigger to the release of the shot. All these factors made possible an unprecedented degree of precision shooting, never realized before the advent of the LGR.

On to the study.

Over the course of several years of rebuilding and repairing dozens of LGR rifles, I have made a few observations with regard to the evolution of their design with respect to the actions, or more specifically, the parts that make up the actions. Based upon what I have noted, there were two distinct versions of the LGR action, which I have classified as the "early" and "late" variations.



Fig. 1

The most obvious item of note on the early action, which will stand out far more quickly than the serial number, is the transverse key through the



Fig. 2

top of the main body tube, one of two such keys that retain the rear plug in place in the main body tube of the gun. (See Fig 1) The second key is located at the bottom of the tube, and this bottom key also serves to locate the trigger mechanism mounting unit. (See Fig 2).

On the late action, the upper key was eliminated, and replaced with a pair of shoulder screws, located centrally



Fig. 3

within the dovetails for the rear sight. (See Fig 03). This change resulted in a greater flexibility in where the rear diopter sight could be mounted, allowing it to be mounted further back on the rail. The late action retained the lower key exactly as was used on the early action.

While the trigger mechanism mounting units remained the same, there were numerous differences in the hammer and sear assembly between the early and late actions. On the early gun, the sear portion of the hammer assembly is a silhouette type arrangement, made from a flat stamping, which was then fastened into a slot in the hammer rod by two rivets. The retaining bracket was a simple, angled piece, which mates to the trigger mechanism mounting unit. An adjustment screw is used to set the sear engagement, and the setting is held in place by contact with the trigger mechanism



Fig. 4

mounting unit. (See Fig 4).

On the late action, the sear portion has been changed to a much more robust appearing unit, that has a half-round section stamped into it, where the hammer rod fastens. The hammer rod is now spot-welded to the sear portion. The adjustment screw on the retaining bracket has been eliminated, and the bracket has a transverse ridge formed into it to set the height of the sear. (See Fig 5).

The hammer "head", or the actual portion of the hammer that acts to open the valve, is in effect, a sliding bar, with a ramp at its forward tip, which raises a lever, which in turn, opens the valve. The lever is equipped with rollers at both ends to reduce friction, one roller acting on the



Fig. 5

hammer head, the other roller acting on the end of the valve stem. On the early action, the hammer head is a very narrow affair, of rectangular cross section, only 2.2 mm wide, and

8.5 mm high. It too is of a silhouette design, similar to the sear portion of the early hammer assembly. The collar that the buffer is mounted to is a multi-stepped affair, held in place on the hammer rod by a single spring-pin. Note the (white) polyurethane buffer that cushions the impact, and prevents metal to metal contact between the retaining collar and the face of the forward

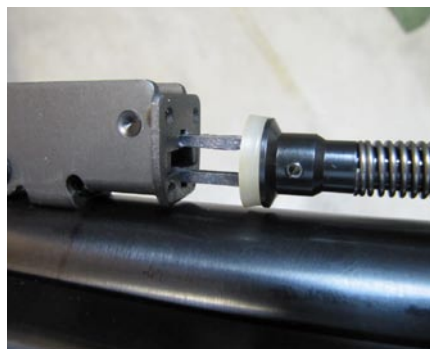


Fig. 6

hammer guide when the gun is fired. (Fig 6 – shown in the cocked position to show silhouette hammer and rectangular opening in forward hammer guide).

The late action once again appears to have been reinforced with a much more robust hammer head, which is now 10.6 mm in diameter, with 6 mm wide flats machined top and bottom, for contact surfaces. The late action shows a much simplified retaining collar, which is now held in place by a solid, staked pin. On this particular gun, the hammer buffer is black



Fig. 7

polyurethane. I have been unable to locate any data to indicate that the early hammer assemblies were prone to breakage, but when looking at the late design, it is apparent that the parts are of more robust design. (See Fig 7 – also shown in the cocked position to show the hammer profile, and round opening in the forward hammer guide).

The hammer springs on both early and late actions are the same, however, the design of the early hammer provides a slight amount of pre-load to the hammer spring. I suspect that the slightly greater mass of the late hammer head eliminated the need for the pre-load.

Moving to the internals of the gun, the change in piston design is one of the major differences between the early and late actions. The early action utilized a one piece, solid aluminum piston, which then had a steel reinforcing cap fitted to the pivot point where the cocking linkage connects to it. It is not at all uncommon to find an early action that has been retrofitted at some



Fig. 8

point in time with the late piston. Since the piston seal is an integral part of the piston, should the piston seal have ever needed replacement, the entire piston was replaced. (See Fig 8).

On the later action, the piston has been completely re-designed, now

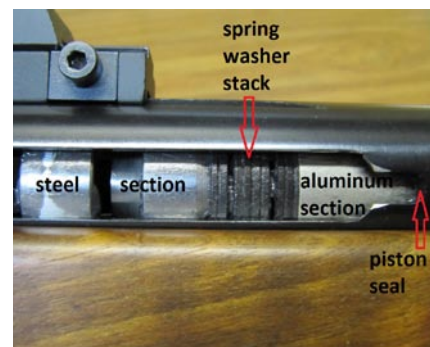


Fig. 9

being made up of an aluminum front section, fastened to a steel rear section, with a stack of spring washers between the two sections. (See Fig 9). The spring washer stack provides a small degree of compression to take place in the piston as it reaches the end of its stroke, and the cocking lever cams into place. This function serves to make the setting of the eccentric pivot pin for the cocking lever a little less critical to adjust, as well as reducing the effort required to fully close the cocking lever.

Thus far, the trigger mechanisms, the loading gates, the cocking levers, and all the other mechanical parts of the LGR actions appear to me to be the same on both the early and late versions.

It would take a much larger cross section of guns examined to try to determine at what point in the serial number range these engineering changes took place. I have seen late actions with early pistons, which leads me to believe that the rear plug mounting, and hammer mechanism changes took place much earlier in production than the piston change. I also have no doubt that there will be transitional guns out there that will be a mix of the various features. As such, this is, and will continue to be, an ongoing study.

Diana 27: the rifle that kept on giving

MIKE DRISKILL looks at the post-War development of the Diana 27, a rifle whose heritage started soon after the turn of the century and survived two World Wars, before undergoing a number of small but significant evolutionary changes

I re-discovered my childhood love of airguns in the mid-1980's. Like many of us, as a newbie I began with some over-powered, under-refined spring-piston rifles! Then I chanced upon Ladd Fanta's famous article on the Diana 27, in the 1977 issue of "Gun Digest." His practical background as an airgun dealer and shooter--rare in the US in those days--and unbiased writing style, not only put my overall airgunning interests on a new path, but ignited a particular fascination with this historic Mayer & Grammelspacher "Diana" model.

The Diana 27 nameplate existed for the better part of a century. It began as a simple quarter-stocked barrel-cocker in the first decade of the 20th century. In the 1930's, it evolved into a quite different rifle with full-length stock, and was again re-designed when M&G re-started production after WW2. But "27" was always

worn by a light, medium-powered rifle that shared advanced features with Diana's larger top-of-the-line models, providing top quality and good value.

While we are focusing here on model 27's built in Germany after World War 2, it's useful to compare these with their ancestors. Here (Fig 1) is a quarter-stocked model 27 from 1926.



Fig 1

And here (Fig 2) is a 'DRP' (Deutsches Reichspatent)-marked example from the immediate pre-War years, with a 3/4-length stock and excellent but complex 2-stage trigger. Diana's pre-War production machinery famously moved to Millard Brothers in Scotland after the War, where the old 27 provided the design foundation for

many "Milbro" air rifles built up until 1980.



Fig 2

The first post-War guns (Figs 3 and 4) made an effort to duplicate the styling and features of the pre-War design. Below you can see that the overall lines are very similar, though with certain concessions to more economical production. The stock has a similar profile but simpler form, with a flat-sided butt and only rudimentary contouring on the grip, and executed in beech rather than walnut. The trigger is alloy instead of case-hardened steel, and stamped components have replaced the older forged ones.



Fig 3. Pre-War rifle at the bottom

Even though the post-War Diana guns (Figs 5, 6) were clean-slate designs with completely new powerplant components and the ingenious ball-sear trigger, the new model 27 apparently made use of remaining pre-War parts. The receiver tube – although cut-outs and attachment brackets for the trigger, action screws are different – is identical in length and diameter, with identical attachments for the breech block. Note also the



Fig 4. Pre-War gun at bottom

simple press-on end cap, with its distinctive bulge to accommodate the ball-sear mechanism, replacing the



Fig 5. Pre-War gun at right



Fig 6. Pre-War gun at bottom

heavy pre-War threaded one. The screws used for the barrel and link pivots are actually interchangeable.



Fig 7

The post-War German model 27 falls roughly into three generations, and here we can illustrate a typical example of each.

FIRST GENERATION

The new post-War model 27 rifle was introduced, per John Walter's research, in December 1951. The Diana-branded rifle below is typical.

Besides the slab-sided stock with finger-groove fore end already illustrated, it had a solid alloy trigger blade with two adjuster screws, a simple fixed-post front sight, and a stamped rear sight. The receiver has no grooves or rail for a scope or diopter sight. (Fig 8)

As with all model 27s, the trigger blade is curiously close to the grip. This is the result of its more rearward location in the receiver tube, compared to the pre-War rifle, combined with the stock's closely following the previous grip and butt proportions.

The design of the breech also owes much to the pre-War model 27. The automatic detent latch is a strong wedge design. There are no chafing washers in the joint, though the breech block does have a recessed annular grease groove on each side. The pivot bolt has one "half-moon" recess on each side of its head, to accommodate its keeper screw. (Fig 9).

There are variations in this first "solid blade" trigger design. Most have a



Fig 8



Fig 9



Fig 10

grooved face as seen above, but earlier ones are smooth (I have seen other Diana models with an even earlier variation, using differently-located small adjuster screws – again, likely surplus older components). As an aside – the classic ball-sear design

apparently stockpiled in vast numbers – they are still available new from German parts dealers. (Fig 10)

A favorite detail is the elegant breech styling on these guns, which bears some study. The top contour of the

has only one true adjustment screw, which shifts the point at which the second-stage fulcrum point is reached. There is no true pull-weight adjustment. The second screw serves only to lock the adjuster into place.

The simple stamped-metal rear sight closely resembles the pre-War one, but is different in detail. It must be drifted in its mounting dovetail for lateral adjustment, and incorporates a rather coarsely-adjusting slider for vertical movement. It's an efficient enough unit, but perhaps does not do justice to the gun's accuracy, and its light construction is, in my experience, easily damaged atop this solid rifle. The good news is, these little units were

breech block is concentric with the barrel diameter. At the line formed where this curved surface meets the block's flat sides, a perfectly-aligned, narrow horizontal surface is cut into the top of the breech jaws. Also note the twin machined slots under the front of the breech block to tightly fit



Fig 11



Fig 12

the cocking link. Finally, the front of the block and link blend into a single curved line in profile, which mirrors that of the front of the stock fore end. At a spot where most barrel-cockers are a little agricultural, Diana gives you art! (Figs 11 and 12)

The first generation rifles lack some refinements seen in later 27s, but are beautifully made, elegantly styled, very well-finished, and collectible air rifles that retain some surprising links to their pre-War forebears.

SECOND GENERATION

A major revision to the entire Diana airgun line took place in the early 1960s. Older models were discontinued, or their variants consolidated; new ones introduced,

including the remarkable Giss-patent recoilless match guns; and the larger sporting rifles – including the 27 – were changed to reduce production costs.

But some of these changes were significant improvements. Besides a much more pleasing slender and rounded stock shape, the breech design was completely revised, and superior sights introduced, along with a simple dovetail scope rail. Below is a Winchester-marked rifle illustrating these alterations. (Fig 13)



Fig 13

The re-designed stock lines are very evident in these shots. The shape is altogether more curved and comfortable, especially in the grip area for the heel of the firing hand. The rubber button on the butt, intended to help the rifle stand more securely in a corner, is a thoughtful detail that is a signature of the model 27. (Fig 14)



Fig 14

The trigger blade is shaped identically to the earlier alloy one, but has transitioned to plastic. These are notoriously fragile... a poor design decision at best. Interestingly, this design omits the separate locking

screw, as the friction of the adjuster screw against the plastic renders it



Fig 15



Fig 16

superfluous. (Figs 15 and 16)

The following photos (actually a third generation 27) show the revised breech. Most obvious is the change from a wedge detent latch to a trapped ball bearing, which seats against a small hardened cone wedge on the standing breech – very smooth in operation, and stronger than it looks, as the ball



Fig 17

is backed by a ferociously stout spring. But perhaps more significant are the greatly revised breech hinge details.

The left side of the breech block has a heavy flat washer in a deep recess (seen in place in the photo), topped by a stout Belleville coned spring washer. Note that the breech pivot bolt's head has ten recesses (instead of the previous two) for the retaining screw, which is somewhat smaller. This allows extremely fine adjustment of the breech tension against the Belleville washer. (Fig 18)

The right side of the breech has a lipped chafing washer, which fits a corresponding double recess in the side of the breech block and provides a flat bearing surface slightly proud of the softer

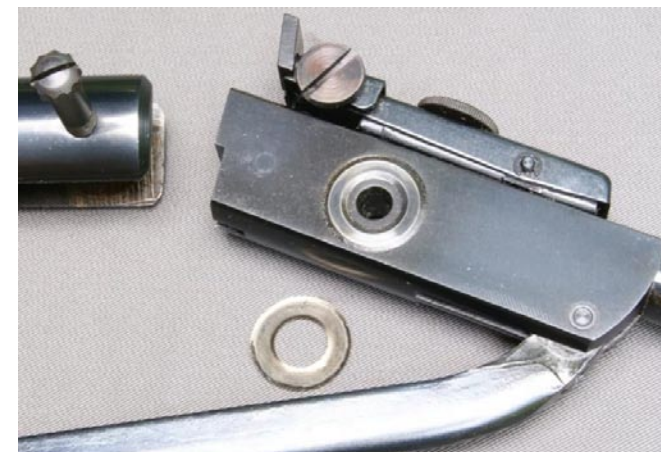


Fig 18

metal of the breech block (note, I've stuck the breech pivot bolt in 'backwards' here, for a better view of the notched head). This may be, bar none, the strongest and most finely adjustable breech design I've ever seen in a light barrel-cocking rifle – an outstanding design feature. (Fig 18)

The sights are another advance over the first-generation guns. The front has a small barleycorn blade within a fixed hood, mounted on a base that clamps to parallel longitudinal grooves, all easily removable to accommodate a scope. (Note: the turned-down muzzle on this gun is an ill-advised owner modification, not factory work). (Fig 19)



Fig 19

The rear sight is a combination plastic and metal design, with smooth click adjustments for both lateral and vertical movement. The ingenious spring-loaded rotating notch plate provides four different sight pictures,

other models. (Fig 20)

The scope rail is a simple wedge



Fig 20



Fig 21

shape, spot-welded to the receiver. It sits very low, without the "shoulder" seen on the larger model 35 and 50 sporters. The rail is designed

and was 'inherited' from earlier Diana match sights that had been paired with a front sight featuring four rotating posts of corresponding shapes.

Variations of this sight are still in use on some Diana pistols and

for use with lightweight rimfire-type scopes, and its ribbed top surface also mates with the unique downward-acting mounting 'foot' on Diana's match sights. It really is not suitable for heavy-duty clamp-type scope mounts. (Fig 21)

The breech area's appearance is a revised but still remarkably clean design. Again, look at the sculptural relationships of components; the top and bottom contours of the breech block are the same radius as the receiver tube, with the previous extra cut on the breech jaws deleted. Thus the breech block 'reads' as a flat-sided extension of the receiver itself – simpler, but no less elegant, than the previous solution. (Fig 22)

When I first dissected a second-generation model 27, the extent of the changes from the first-generation design were surprising. While perhaps giving up some minor cosmetic touches, Diana's ability to realize production economies while adding technical improvements was remarkable.

THIRD GENERATION

In the late 1970's, the model 27 saw further changes that, again, both simplified and refined it. These concentrated on the rear sight and trigger. (Fig 23)



Fig 22



Fig 23

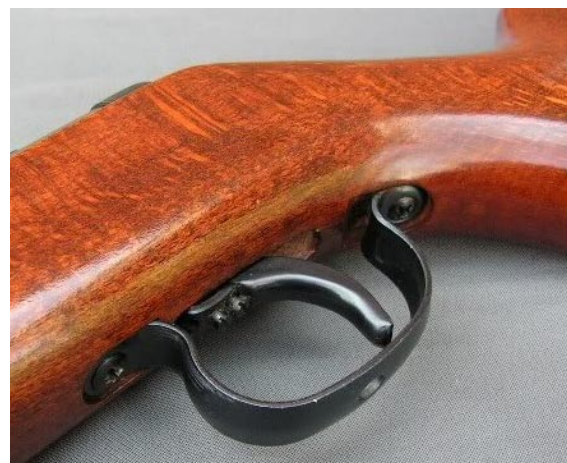


Fig 24

The trigger blade is now stamped sheet metal. If not as elegant as the early solid alloy blade, it's at least stronger than the preceding plastic one! The adjuster screws have smaller heads and stand proud



Fig 25

of the blade instead of being recessed, but work precisely the same as previously. Note that the brackets attaching the blade to the receiver tube are also changed compared to the previous generation, though the operation and pivot point geometry of the

components is the same. (Figs 24 and 25)

This trigger may have been introduced earlier than the sight and breech block changes. 27s with the stamped blade

but otherwise second-generation details are fairly common. The basic front sight remained exactly the same, but these later 27's were sometimes offered as "deluxe" or "target" variants, with Diana's globe target sight

of the day. This unit fits the same groove spacing, can be easily retrofitted, and when combined with the rear sight is wonderfully versatile and precise. (Fig 26)

The rear sight on these guns is nothing short of amazing. While generally similar to the previous mixed-construction unit, it is all steel, and consists of no fewer than 21 separate parts. Both horizontal and vertical adjustments



Fig 26

are smooth and precise. I know of no better factory open sight ever fitted to any airgun.

Another detail change in this area is the omission of the screw-and-keeper cocking link pivot, in favor of a simple riveted joint. (Figs 27 and 28)

The stock shape, while basically the same, has some minor refinements, including a slightly less raked grip angle, a more rounded form to the comb nosing, and a less abrupt curve at the fore end tip. These changes are so subtle they are hard to photograph effectively. The third-generation guns – especially for shooting with open sights – may be the best of the post-War 27s.

VARIATIONS

As mentioned above, the grouping



Fig 27

of the post-War model 27 into three variants, is really only a generalization. The number of guns out there which really meet none none of these descriptions precisely, is remarkably large.



Fig 28

It's interesting to speculate the reasons for this. Possibly the features were not introduced as simultaneously as I have implied, and no doubt there were "transitional" guns that combined surplus older or



Fig 29

non-standard components with newer ones. This may be particularly true for guns sold under M&G's many foreign-market trademarks, which included Hy-Score, Peerless, Beeman, RWS, Original, Geco, Gecado, and Condor.

It's also possible that M&G discounted "non-standard" guns to individual distributors or retailers.

Here is a model 27 that is a remarkable example. (Figs 29, 30, 31 and 32)

The beautiful stock has the distinctive 2nd-gen curvy shape, but retains finger grooves similar to earlier models, and omits the famous 'butt button' seen on later ones. It was made by Sile in Italy, the only 27 stock so marked

I've ever seen. It is really well-finished, and easily the most comfortable small air rifle I've ever hefted. The scope rail and plastic trigger are also 2nd-gen details, as is the hooded front sight. But the rear sight is the 1st-gen

stamped model. Most interesting of all may be the breech, which combines the 2nd-gen washer design and ball



Fig 30

bearing detent, with 1st-gen pivot bolt and keeper.

Whether this rifle represents a short-lived, early 2nd-generation production



Fig 31

standard, a small batch to use up parts stocks, or something else – I



Fig 32

can't say. But it is representative of the many model 27 sub-variations out there for the collector.

Falke mystery now history

The German Falke underlevers have a special cachet among collectors for their quality of manufacture and rarity. DANNY GARVIN writes about the internet forum he started to share information about this elusive brand and some of the surprising new facts that emerged – including the possibility that these rifles are not quite so rare as initially believed.

I started an internet forum dedicated to 1950s Falke airguns – the Falke Forum – in 2009, in an effort to pull together the limited number of sources available on these guns into one place and in the hope of stimulating more. There wasn't a great deal of information around, despite there clearly being quite a large number of break-barrel rifles – most of them copies of the smaller pre-War Dianas and Haenels – plus two heavy underlevers, and a single Falke-patented pistol based largely on the pre-War EM-GE Zenit.

It was the two underlevers, the models 80 and 90, that excited my curiosity. I had won a Falke 90 with a speculative bid in an online auction, knowing vaguely they were sought after, and quickly learned that there were an estimated 200 of the 90s and

400 of the 80s made. I also read that the Falke factory was in operation for just eight years or so, between 1951 and 1958, before it went bankrupt. By and large there were only snippets of information in airgun textbooks, and the only real attempt I could find to put together a dedicated body of information was by collector Vic Turner, who sold loose-leaf photocopies of Falke sales literature along with some of his own research.

If you examine a Falke 80 or 90 you quickly understand what the fuss is about and why the airgun writer WHB Smith, in his 1957 *Encyclopedia of Gas, Air and Spring Guns*, said of the model 90 that "there are no finer nor more powerful spring-air rifles made than these". Although its underlever design was almost certainly a copy of the BSA Airsporter – which came on the market

several years earlier – the quality of materials and workmanship was a cut above the BSA.

Since setting up the forum, I have been intrigued to find that Falkes – made in a former sugar factory in a small town near Hannover, capital of Lower Saxony – were sold all over the world as well as in Germany and the rest of Europe, with particularly enthusiastic markets in New Zealand and South Africa. African farmers seem to have taken to the underlevers with special fondness and there is even a press photo showing Rhodesia's prime minister, Ian Smith, posing with a Falke 80 while joking that he would be accused of "shooting at Englishmen".

One possibility that has emerged from data supplied by visitors to the forum – backed up by photographs – is that there were rather more examples of the models 80 and 90 made than the total 600 first thought of. The figure was suggested by the Kiwi author Trevor Adams and estimated according to the highest known serial numbers at the time. Since then it has become evident that the serial number stamped on the loading tap and cylinder of each underlever rifle is not unique. A number of duplicates, and even triplicates, have appeared, suggesting the overall total may be higher. But the



Model 33 pistol, patented by Albert Föhrenbach in 1952

numbers are still relatively small so the 'final total', should we ever discover it, may yet prove to be in the same ballpark.

A key revelation about Falke was recently provided by an enterprising German visitor to the forum, Volker, who tracked down and interviewed the 62-year-old son of the Falke factory's founder, Albert Föhrenbach. Volker was told that Herr Föhrenbach Senior suffered a non-fatal but debilitating heart attack at about the age of 50, in 1957, and that this was the cause of the collapse of the airgun business within a year or two, leading to the company's liquidation in 1961.

It sounds like poor management to allow a business to implode through the incapacity of one man, albeit that it was the company's enterprising owner, a former aircraft engineer. But this was no cottage industry; the founder's son said it employed 300 people in a town whose population

was only about 4,000. The breadth of Falke's airgun range, the number of rifles apparently made, the global reach of its export market, and the fact that it also branched into making powder-burning rifles, suggest that this was an ambitious, productive company.

Exactly where Falke fitted within Germany's airgun industry is hard to determine with certainty. The immediate post-War period was extraordinarily fertile for airgun production, with almost all of the effort of the surviving post-War German gunmakers focused on it, while sanctions on making firearms prevented their energies going into powder-burners. This concentration on airguns led to an unprecedented leap forward in their development in the late '50s and early '60s, mostly concentrated on the popular sport of 10m target shooting.

Restrictions on airgun manufacture were lifted in around 1950. The pre-



Falke 90 underlever serial no 148

War firearms giant Walther started producing low-powered, highly accurate air rifles in the southern city of Ulm aimed exclusively at satisfying the burgeoning demand. Only later in the decade did Walther return to firearms when it helped to equip the new West German army.

By the mid-'50s, at Rastatt in western Germany, airgun specialists Mayer & Grammelspacher had recovered from the seizure of its machinery during the post-War reparations process, and was starting to put out an increasing range of Diana sporting air rifles – no doubt

helped by the strength of its brand in Germany. Around this time, its engineers also began to focus on developing recoilless match air rifles and pistols.

Two hundred miles south of the Falke factory, Bayerische-Sportwaffenfabrik (BSF) was producing well-made rifles, including the underlever model 54. Not far away, Weihrauch was building a name for itself in the adult airgun market and, like both Falke and BSF, produced beautiful all-steel diopter sights in an attempt to satisfy the sporting/target markets

simultaneously.

Falke seems to have sold its guns at a consistently lower price than its close competitor, Diana. How it managed to sustain this with no apparent compromise in quality is not clear, although Germany in the 1950s had a surplus of skilled craftsmen grateful to have work, so wages would have been low. Meanwhile, anecdotally it is said that Diana lost much of its skilled workforce during the War, along with the loss of its machinery afterwards, so its overheads might have been high.

Herr Föhrenbach's pre-War engineering contacts, plus (as his son recounted) at least one friendship with a senior English army officer in the British Occupied Zone in which the Falke factory was located, may have helped him with obtaining the scarce materials he needed for airgun production.

As you can see, compiling the Falke story is a jigsaw that involves a lot of speculation – and history is rarely kind to those who indulge in conjecture. What is clear from the rifles that have survived and are cherished by their owners, 60 or so years later, is that this was a company that believed in building up to a quality standard and not down to a price. The big Falke underlevers are beautiful, functional objects that give much pleasure to shooters and collectors alike.

The models 80 and 90, which were both made in 4.5mm and 5.5mm calibre, are almost identical, except that contemporary advertising indicates the 90 was sold only with a walnut match stock and the 80 with an elm sporter stock. But the numbers of each model that have emerged wearing the other's stock – complete with the correct underlever for the stocks – a slight 'dog-leg' for the



Falke brochures were produced in German, English and Dutch and Falke underlevers appeared in various contemporary third party sales catalogues



Falke 80 and 90 serial numbers are found under the automatic loading tap

deeper match fore-end and straight for the sporter – suggests strongly that the customer was king in the '50s and if sir wanted a match stock on his model 80, that is what sir would have.

One painful matter for some modern Falke underlever owners is the question of rear sights – the painful part being that they are often missing. Both models were sold with an intricate, hand-built steel micrometer sight that could be fixed anywhere on a long ribbed rail above the cylinder, either locked into notches cut at intervals or by friction alone when there were none. The optional diopter sight sat on its own short rail atop the trigger block at the rear of the cylinder. Unfortunately, the designed-in ease of moving and detaching these sights has meant that quite a few rifles have become permanently separated from them.

The build quality of the sights is an example of the considerable care and attention lavished on the manufacture of the big Falkes. The elevation and windage-adjustable rear sight is a beautiful product of the gunmaker's art, with numerous

small machined parts. One skilled British machinist I know of reproduced two of these sights over about 35 hours of painstaking work. The heavy, blued steel diopter sight is no less extravagant and has an attractive design feature in that its underbody is cut out to match the graceful curved tail of the trigger block. A further option was an adjustable iris ingeniously built into the eyepiece.

These extraordinary sights and other standard features – the minimal use of steel pressings; the six stock fixing bolts; the elaborate hand-cut chequering on the walnut match stocks; the delicate falcon (Falke) brand impressions on left stock fore-end, cylinder, and moulded buttplate; and the removeable front sight elements – all add to the luxurious, no-expense-spared, feel of the rifles. They may not have been intrinsically better shooting tools than the early Airporters, or BSF's model 54, but the workmanship and materials that went into the Falke underlevers must have represented excellent value for money to 1950s consumers. Set against Diana's flagship model 50, which retailed at 20% more despite its lower power

potential, beech stock, and relatively crude pressed steel sights, the two rifles are chalk and cheese.

Questions that have not yet been answered about Falke's demise include the detailed reasons for its collapse after Herr Föhrenbach's heart attack – was it heavily in debt and was credit on loans withdrawn when bankers' confidence fell? Did the cost of the top-of-the line underlevers eat into profits and help to topple the company?

The answers may become clear eventually. In the meantime, Falke's legacy to airgun collectors is the surviving examples of the superb models 80 and 90, along with some other fine guns. Their undoubted quality and the fact that Falke's airgun production started, flourished, and disappeared all in less than a decade, will no doubt sustain collectors' interest, even if the mystery about why the company lasted so few years appears to have in the main been solved.

The Falke Forum can be found at: www.network54.com/Index/98508

Snippets from the snug

Mr D of Fife recalls an abortive rabbit hunt and the moment he first realised he had to have a gold-plated foresight fitted to his BSA Airsporter – the one with the self-opening tap

It is a fact universally accepted that every Sporting Man deserves three things; a shoot, a sympathetic wife, and a Sporting arm of the highest quality. I am blessed with all three in magnificent abundance. Three yeoman farmers allow me to hunt their lands; my dear Elspeth gratefully makes good table-meat of all my

quarry; and I own the finest of all air-rifles – the BSA Airsporter (with self-opening tap) in No.2 bore.

Through the pages of this organ it is my presumption to instruct the ignorant, entertain the enthusiast and enlighten the expert, so all can improve their Sporting prowess. I shall be writing to you from the snug – a chamber off our kitchen supplied with fireplace, slippers, pipe and Tantalus of warming spirits. It allows me good comfort in which to relax after a long day in the field or toiling at my allotment, and inspiration in the

form of Elspeth busy at her tasks in the kitchen. Even now I can hear her mashing the milled malt for Harmony's birthday beer. We decided on double the usual quantity this year, and had to buy an extra tun. An expense we can ill-afford, but Harmony's university friends are terribly thirsty and it is a principle of ours that no guest should go unsatiated from our home.

The smell of hot malt reminds me of a curious incident last autumn. I'd been lying-up late into the afternoon, field-glasses trained on a spot much favoured by 'Comrade Coney'. I was getting colder and colder, the dankness of the close-cropped sward seeping even through the untreated tweed of my hunting breeks. Only the thought of Elspeth's curried-rabbit pie kept me from fruitless retreat. The sky darkened steadily and a light breeze off the North Sea brought the delicate scent of a haar, the freezing sea-fog that rolls inland, silent as death. Then, a movement among the blue-green thistle stalks! A surprisingly plump doe tacked into view and fell a-nibbling, out of range. Long experience told me she was a good 40 paces away, 10 more than

my maximum but 15 more than I felt confident of in the available light. I use the open-sights as fitted by the BSA craftsmen, and know that the power of the heavy No.2 bore slugs at these ranges is more than enough for safe dispatch of rabbit, pigeon, rat and magpie. Provided a clear shot to the centre of vitality located in the head is made, no unnecessary suffering will attend the hunt's end. Aye, and there's the rub. Slowly creeping forward on knees, hips, and elbows, concealed by tweed and scrim-netting, in 20 long minutes I managed to close the distance to the doe to 25 yards.

Raising my BSA Airsporter (with self-opening tap) I aligned the sights and brought them to bear upon my mark. Disaster! The doe raised her nose and turned a little, presenting a square-on profile. The fading light did not allow a well-placed shot, so I breathed and held to the mark, hoping for a change of luck. Two or three minutes passed. She turned again and I prepared to take the shot. Double disaster! The light was failing, and I could not 'make out' the foresight against the mark. Rather than risk a wounding shot, I arose from the damp grass and said

out loud to the doe, 'Go in Peace!'. She dashed off as rabbits will, and I was left in the gloaming with the BSA Airsporter (with self-opening tap). My disappointment turned to pride as I remembered the words of my father 'Some of the best shots are those that are not loosed'.

Pondering the physics of sighting in low light, I must have fed something into the animal or indeed vegetable moiety of my brainstem, for during the night I had a peculiar dream. In it I took the form of a badger pushing and snuffling through a blackberry thicket looking for beetles, displaced fledglings and the odd lost juvenile rabbit. It was most realistic, probably because my prone stalking style puts me at about the height of a badger's head.

What was not realistic was when I pushed past an elderberry stump and spied before me an extraordinary insect. From my time in North Africa I recognized it to be a dung beetle; like the fat knight Falstaff rolling and scuttling about its earthy business – yet instead of its customary dull back coat, this gentleman had a sheen of perfect blacking, like a Purdey shotgun. More

strange was the great ball of dung which it tapped and started to roll, for as it did it burst into the orange and white flames of the morning sun. It burned bright against the gloom of the thicket. Then it seemed to grow dull and became as it were entirely matte, as if it had grown the skin of a mole. I lunged forward, digging my rear paws into the earth and snarling. Elspeth woke me with a jab in the ribs with her elbow (as is her custom) and told me, in her absurd way, that I was having a nightmare and that I should go back to sleep. This I did, but not before I wrote the dream down.

As I sat down to my morning fry the meaning of the dream came to me – as I plunged a folded rasher into an egg yolk – I realized I must get my foresight bead gold-plated. There is only one man in the Kingdom of Fife who I will allow to touch my BSA Airsporter (with self-opening tap) and that is Shuggy Biancini. I went to my writing desk and penned a brief note to him requesting an interview at the earliest opportunity.

© Mr D
Fife



Photograph by Paul Morris

Webley Premier: end of an era

JOHN MILEWSKI describes the impressive lineage of the Premier, a pistol which was heir to a famous heritage that went back to the 1920s. It embodied the struggle the company had to incorporate cost savings into its production, with the use of new finishes and materials.

The Premier was introduced in 1964 as a replacement for the Mark 1 and Senior air pistols and took its name from the shotgun side of the business, namely after the Premier Gun Works. Although the pistol was produced for a period of only 13 years, there are numerous variations for the discerning collector to seek out and it can be seen how a well produced almost hand made steel pistol evolved into a mass produced cheaper version of

its father. As manufacturing costs and competition increased, cheaper materials were introduced and Webley experimented with a number of different finishes to produce a cost efficient product.

The new Premier combined the double jointed cocking linkage and fully adjustable sights of the Senior with the trigger adjustment facility of the Mark 1. The cocking link for the Premier was marginally shorter

than the Senior's and the two components do not interchange easily.

Assembly numbers were used instead of true serial numbers and these were stamped on the front bung, by the barrel pivot. This number was also stamped under the left stock side, near the top of the grip. Webley's have stated the purpose of these numbers was to trace an individual assembler from his assembly number and to keep a batch of pistols together whilst being "jobbed" around the factory. There does not seem to be any chronological sequence with these numbers and factory sources suggest once four figures were reached, the numbers started again from scratch. As these numbers were not chronological, they cannot be used to date a pistol. I.e. a higher number does not necessarily mean the pistol was produced after a lower number.

A further series of numbers appear



Senior and Mk1 pistols: predecessors of the Premier

stamped under the left stock side. These are about half way down the grip and appear either side of the stock side screw hole. It seems these were date stamps. Early Premiers carry single figure numbers e.g. "4 5". This could mean the pistol was produced in April 1965. Later versions had more complete stamps e.g. "7 71" meaning the pistol was produced in July 1971. The numbers I have encountered to-date suggest these are chronological date stamps, although it should be appreciated I have not examined factory records to substantiate this likely explanation.

The calibre was stamped on the left side of the barrel pivot, under the foresight. Inspection stamps were stamped behind the trigger guard, at the front of the grip. Webley inspectors only placed their stamp on a pistol if they were satisfied with the assemblers work. Curiously, not all pistols encountered carry this inspection stamp, suggesting Inspectors looked at random samples.

In January 1965, a system of code letters was introduced as an aid to ordering spare parts. As subtle changes and modifications were made to the pistol, a new code letter was introduced. Letters used were from A to F. The suggested dates below have been supplied informally by Webley but their accuracy has been difficult to substantiate as true production records were unavailable during the preparation of this study.

A SERIES - Jan 1965

The first of the Premiers prior to and including the "A" Series used the leather piston washer from the Mark 1 air pistol, although the piston itself was a new item, unique to the Premier. The breach washer was the



Premier A series

standard patented leather washer with brass insert. The left side of the air chamber carried the instruction "OIL " near to the cocking slot to encourage owners to keep the leather piston washer regularly lubricated. Unusually, the A series was only available in .177 calibre.

The left side of the pistol carried the following trade stampings "THE WEBLEY PREMIER MADE IN ENGLAND" upon two lines. Trade stampings on the right side consisted of "WEBLEY & SCOTT LTD BIRMINGHAM" and "WEBLEY PATENTS". The latter was stamped nearest the muzzle end of the air chamber on this early series of pistols only as by 1964, Webley's original patent for the classic barrel over cylinder design had expired.

The breach screw/end plug was stamped "DO NOT REMOVE" and the lettering filled in with red paint. The whole assembly was then secured by a peg to stop owners from removing this component. The last two digits of the assembly number were stamped at the rear of the stirrup catch on series A to C. On D series and subsequent versions, this stamping was omitted. These

stampings remained the same on later blued pistols, only the "WEBLEY PATENTS" being omitted. As with any production line manufacturing, changes could take time to take effect, so variations and oddities which appear to be out of sequence will be encountered. The features described in this study are therefore a general guide on those one expects to find on the Premier air pistol but please keep an open mind and expect to encounter the odd pistol with unusual or out of sequence features or markings.

The bakelite stock sides were brown as on the post war Seniors with the WEBLEY trademark moulded at the top, above the chequering.

The pistol had four "trigger pins". Two secured the guard whilst the other two held the sear and trigger in place.

The barrel fulcrum or the raised block on top of the air cylinder near the muzzle, over which the long link rides during the cocking process was identical to the Senior's on the A series Premiers but modified to a narrower and higher type for the B series and subsequent pistols.

The card cartons for the earliest Premiers were a revised version of the last of the Senior "Design Centre" labelled boxes. The lid featured a picture of a three pin Senior but the word "SENIOR" was replaced with "PREMIER". The sides of the box were coloured black and the whole carton was more solidly constructed than later card versions. I have been told about an early boxed Premier having a "Premier" label stuck over a "Senior" label, which reinforces the belief among collectors that Webley never threw anything away. Instructions for the use and maintenance of the pistol were pasted to the inside of the box lid and were coloured blue.

A Webley catalogue from 1964 featured an illustration of the Premier on the cover and was a revision of the 1950's company catalogue, which originally carried an illustration of a Senior air pistol shooting at a target. Unusually, the illustration was amended fully from the Senior to the Premier and not just by substituting the model name on the air pistol's side as was the case with the box lid cover on these earliest of Premiers.

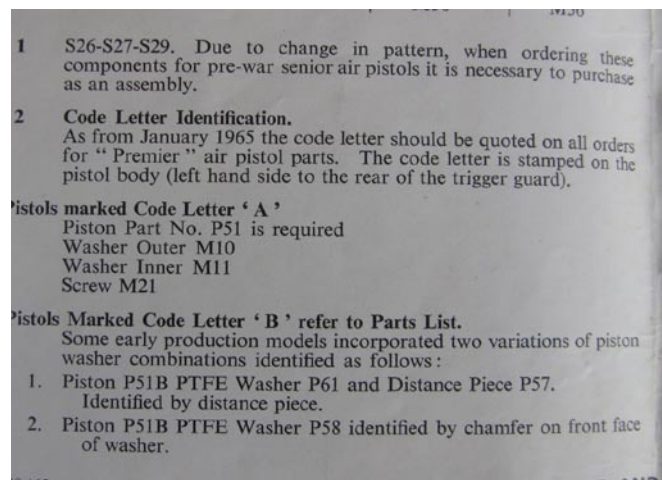


B SERIES – 1965 – 1966

These and all subsequent models were available in both .177 and .22 calibres. The .22 being the more common of the two.

This series saw the introduction of a PTFE piston washer, making the old leather component redundant. The left side of the air chamber no longer required the instruction "OIL" as the new washer was self adjusting and did not require lubrication. Early B series pistols still carried the instruction whilst later pistols of this series did not.

Two versions of the piston washer were made. The earliest had a distance piece set behind the washer to add length to the piston stroke whilst the other had a chamfer, the purpose of which was to prevent the washer fouling the end plug's screw thread. Some were blue in colour whilst later versions were white. The



colours determined the grade of the PTFE used to make the washers, the blue being of higher grade.

Three styles of box have been noted for the B series. The earliest came in the same box as the A series. Later versions have been noted with the same Design Centre Label stuck onto a plain brown card box and the final type carried a new design, also stuck onto a plain brown card box. The label had a cream background and featured a picture of a four pin Premier pointing upwards. The four pin designation identifies the four trigger pins found on early Premiers. The picture appears to be of a pre A series pistol and I assume this style of box was intended for the B series. The B series box I have does not carry the full postcode, quoting only B21. Other versions of this box were printed B21 8LU. The side of the lid also carried the name "PREMIER" along with the relevant calibre and stated the pistol must not be sold to anyone under the age of 17, which was the law in the UK at the time.

Box contents included a sample envelope or tin of pellets, warning sticker (telling owners to ensure the barrel is secured before firing and not to fire the pistol without a pellet in the barrel), Design Centre award label (only on the earliest

versions) and a dated instruction sheet. The latter details changes up to and including the B series and amendments were added to subsequent series as and when a new code letter was introduced.

C SERIES – Nov 1965 – July 1966

Although being available from November 1965, Webley sources indicate the C series was not due to be launched until March/April 1966. The delay was down to stocks of the B series pistols having to be sold first. I have a boxed example which is stamped 7 6 on the frame, under the left stock side. If this is a date stamp, this must be one of the last C series pistols to have been produced.

A new pattern of trigger and sear were introduced for this model. Both parts were now sintered rather than blued steel. The four trigger and sear pins had by now, flat rather than rounded ends as these were easier to manufacture. A new longer trigger adjusting screw was also introduced for this series. Internal differences included a new piston (part P60) and washer (part P61) which replaced the earlier versions. The C series was otherwise identical to the previous model.

This series came in the green Design Centre labelled box. The box itself is made of the light brown card, which was standard at this time. However, the lid label is the older Design Centre version on a green background. The side label is also on a green background and in keeping with the style on the lid. It seems old stocks of "green" labels were used up before or even alongside the newly printed ones used for the B series. A component parts list along with an exploded diagram of the pistol was included in the box and



Premier D series

this detailed all changes to pistols up to and including the C series. It is interesting to note at least two C series Premiers were bought in New Zealand at the time of their production. As this series seems to be the rarest of all Premiers, perhaps the majority were exported. Alternatively, the short production run may explain the pistols rarity today.

D SERIES – 25th June 1966 – July 1968

As previously mentioned, all series up to this point had four trigger pins. A fifth pin was introduced as a trigger stop pin with this series. It seems curious this modification was considered necessary at a time when Webley were looking at reducing production costs.

A neoprene breach washer replaced the old leather washer of previous models and could also fit all other previous Webley pistols. The tool used for replacing the old washer (M36) was no longer required as the

neoprene version did not need to be punched into its housing. A new mainspring (P1032) replaced the previous Mark 1 (M7) version. The spring interchanged with all other Webley pistols apart from the junior and genuine factory replacements were tagged with the company trademark and the initials PAP (Premier Air Pistol).

The stirrup barrel catch was by now a sintered casting, another modification introduced to cut production costs and the last two digits of the assembly number were no longer stamped on the component.

Most D series pistols were supplied in the cream labelled box described previously but I do have a "green" version, which is identical to the box my C series came in. It is probable factory assemblers used whatever labels were at hand at the time.

A revised components parts list was included in the box. The sheet detailed the various differences between the premier variants to

date and recommended the use of Webley accessories. There was also a sticker explaining trigger adjustment and a label warning owners not to fire the pistol without a pellet in the barrel and to ensure the barrel is properly secured prior to firing. A sample packet of Webley pellets completed the set.

E SERIES - 18th July 1968 - 1972

Several variants of E series Premiers were manufactured with blued and enamelled finishes.

E SERIES – BLUED - 1968 – 1971

The internal depth of the piston was reduced in an attempt to increase the power of the Premier. Strangely, several of the blued E series Premiers I have encountered have not been quite as powerful as earlier or later Premiers.

A new stirrup catch was fitted with a cross hatched thumb piece. Previous catches had vertical grooves to aid

thumb placement.

This series came in the brown box with the picture of the pistol pointing upwards. It was the last version to have this style of label, although “transitional” examples do exist and should not be considered as incorrectly boxed. At around this time, a hard foam lined lockable case was advertised by Webley & Scott as an accessory for the Premier. The case did not carry a trade label and accommodated the pistol, a tin of pellets and a cleaning brush. A craft knife could be supplied in order to cut around a template of the pistol for an individual fit.

E SERIES – SUNCORITE COATED & STAMPED - 1971 – 1973

During the early 1970’s, Webley experimented with various finishes as an alternative to bluing in order to save costs in the time and skill required to hand polish and prepare a pistol prior to bluing. The finish used on this series was Suncorite.,

a paint originally developed for use on aircraft. The resin was sprayed onto a pistol and then heat treated. This resulted in a non rusting hard wearing finish that was difficult to touch up if damaged. The body of the pistol was not polished prior to coating and should the suncorite ever be removed from a pistol, a rough finish will become apparent.

The left side of the air cylinder was stamped as mentioned previously but the right side did not carry any trade stampings at all as another cost saving measure. The stock sides were now black (as on the older Mark 1 pistols). A larger E (than the earlier blued version) denoting this series was almost hidden under the left stock side. Although the body of the pistol was covered in suncorite, the barrel, linkage and sights were traditionally blued. The trigger guard was fitted prior to spraying whilst the sear, trigger and their respective pins were added afterwards. This gave the impression of a three pinned action as the two trigger

guard pins were coated.

A change in packaging occurred upon introduction of this version. After the supply of the previous cream coloured labelled boxes ran out, a corrugated carton which was hinged at one end and had two ears securing the lid at the other was used. The lid carried a picture of a youth with a “Beatle” haircut shooting the Webley air pistol on an orange background. The top of the flap holding the securing ears was marked with the word “PREMIER” and also stated the calibre. A card handle at the top could be used for displaying the box on a retailers stand or for carrying the boxed pistol. The instructions were still pasted to the inside of the lid and a separate sheet was included in the box, which carried an exploded diagram of the pistol.

On later boxed sets, a separate loose sheet was included which had the component parts list on one side and instructions for use and maintenance (as pasted to the lid of previous versions) on the reverse. An example of this sheet was coded C48/74. The 74 was the year of production and the sheet belonged to a later “Transitional” model dealt with later. The exploded diagram on the components list, incidentally is of a blued “5” pinned all steel Premier. Webley presumably did not think it economical to update their printing blocks at the time and this economy can also be encountered on pre war literature.

F SERIES – BLUED - 1971 – 1973

This series seems to be a bit of an anomaly. Four pistols were examined and at least one of these dates from 1972 according to the date stamp under the brown left

SERIES CODE	DATE STAMP	ASSEMBLY NUMBER	INSPECTION STAMP	DATE OF MANUFACTURE
A	4 5	49	F	April 1965
B	5 5	222	R	May 1965
B	5 6	394	A	May 1966
C	7 6	1815	F	July 1966
D	7 7	2072	-	July 1967
E – Blued	1 1	749	-	Jan 1971
-	-	808	L	1971
Undecipherable	2 72	410		Feb 1972
E – Suncorite	10 73	473	F	October 1973
F	11 72	286	L	November 1972
TRANSITIONAL	7 74	608	D	July 1974
TRANSITIONAL	12 74	647		Dec 1974
MK2	-	680	Undecipherable	1976 – 1977

stock side. Another had no date stamp under its black stock side. The latter pistol was blued in the traditional manner and otherwise as the previous stamped E series. The third pistol had black stock sides and standard stampings as for previous models. I have been unable to determine whether a date was stamped under the left stock side as I noted the pistol on a dealers stall at a busy arms fair. The pistol was complete in its original carton, with the cream coloured label, which would suggest early seventies. The final F series Premier was advertised by Dennis Hiller in November 1998 with brown grips and a date stamp of 1973. The F, denoting this series was stamped in the usual place but smaller than previous code letters.

Sources from the Birmingham gun trade indicate the F series pistols were sold at the same time as the suncorite coated E series pistols, the F stamp denoting a blued finish. The reason for the suncorite pistols was, as previously mentioned an economical one as this finish did not require polishing beforehand and file marks could be hidden under the baked on finish. However, Webley noted that some of the pistols were still suitably well finished for bluing and these were set aside by an inspector who sorted them into batches suitable for coating with suncorite and others for bluing.

Gordon Bruce suggests in his book, Webley Air Pistols that another reason for the marking of blued



Premier E series





Premier transitional model with black epoxy enamel finish

pistols as the F series at this point was due to the introduction of 12 groove rifling to replace the former 7 groove pattern. However, the only 12 grooved Premier barrel I have seen was on a later Mark 2 pistol.

Several Premiers have also been noted without code letters and with brown grips. The example illustrated does not carry a date stamp and is coated in Suncorite. The coating is a lighter, almost blued shade of black than the E series previously mentioned and the trigger guard pins have not been coated over. "WEBLEY & SCOTT LTD BIRMINGHAM" is still stamped on the right side of the air cylinder.

The box label illustration is of the pistol pointing upwards and other than a tin of pellets, the only accessory is a spare parts envelope with ".22" printed on the label. As Webley did not produce different spares for .22 and .177 pistols, it is possible this empty envelope originally carried a sample envelope of pellets. There is also a price tag on the side label of £16.02.

From the above, I would guess the pistol dates from after 1971 (post

decimalisation). It was probably made after the blued E series and before the Suncorite coated and stamped E series/F series was introduced. Perhaps Webley & Scott stopped using the code letter system after the blued E series were discontinued and then reintroduced the F series when a decision was made to continue bluing selected pistols. It is worth mentioning here, the font style of series code letter was altered after the blued E series.

TRANSITIONAL MODEL – ENAMEL FINISH - 1973 - 1975

A new black epoxy enamel finish was used on this series. This was thicker than the previous suncorite coating and because of the new finish and the later date stamps under the black grips, this may not actually be an E series run. The large E (larger than previous code letters) stamped almost entirely under the left stock side may be a clue to the finish (E for Enamel, perhaps?). The main visual difference between this model and previous Premiers is the lack of any body stampings. The right side of the air cylinder had a recess near the breach for a sticker which read "WEBLEY & SCOTT LTD THE

WEBLEY PREMIER MADE IN ENGLAND" upon three lines. The barrel, sights and linkage were still blued and the only stamping anywhere was the calibre on the barrel pivot. The stock sides, by this time were all coloured black.

The pistol was presented in the same orange "Beatle Haircut" cardboard carton as the late E series (unstamped laquered version). Two examples I have been told about did not have any

instructions pasted inside the lid, the sets instead having a sheet with instructions for use and maintenance on one side and an exploded diagram of the pistol on the other. One of these examples was encountered by Gordon Bruce, author of Webley Air Pistols and curiously the card carrying handle appears to have either been omitted or removed. There is also no flap on the end of the hinged lid and the lettering that was usually printed on the flap (PREMIER .22 in this instance) was instead found on the end of the box, where it would usually be covered by the flap. The pistol is date stamped 7 75 and must have been one of the last Premiers of this type produced. Incidentally, a minor difference between this and other models of this series was all 5 pins were uncoated suggesting the trigger guard was added after coating.

PREMIER MARK 2 - 1975 – 1977

A new fatter body profile identified this final version of the Premier. There was a pronounced step in the air cylinder above the trigger guard and once again the pistol was finished in a black enamel, rather than blued. Two versions of blued

barrels have been noted. The earliest being identical to previous versions, whilst the later style had a barrel shroud near the muzzle, rather like the later Tempest.

The right side of the air cylinder was recessed for a sticker which read "WEBLEY & SCOTT LTD PREMIER MK2 MADE IN ENGLAND" upon three lines. Stock sides, like for the previous variant, were coloured black and the trigger guard was now part of the moulding and fixed to the frame. Three pins secured the trigger and sear, which seem to have been added after finishing as the pins were not laquered over. The stirrup catch return spring was moved from its previous location on the right side of the breach assembly to a bulbous housing on the left side of the air cylinder.

The corrugated carton was identical to the previous style other than the top flap was marked PREMIER MK2 along with the calibre. All boxed Premier Mk 2s examined came in orange coloured boxes, whilst contemporary Junior Mk 2 pistols have been seen in primarily green coloured boxes. A few Juniors have been encountered in orange boxes and it has been suggested the difference in colours was originally intended to signify green for .177 and orange for .22. However, the considerable number of near mint sets of Premiers encountered with orange boxes in both calibres and the existence of boxed Junior Mk

2s in both colours suggests this never happened to any great degree. A card outer sleeve slipped over the carton and carried an updated photograph of the MK2 Premier along with other information stating this was now the MK2 model. The use of this sleeve saved Webley having to redesign the Premier's box again and it now seems to be quite rare as it is easily removed and therefore lost.

An instruction and spares list coloured green and white was included in the box along with a sample envelope of Webley pellets in the correct calibre for the pistol, a guarantee card, sample Webley card target and sticker warning owners not to fire the pistol without a pellet in the barrel and to make sure the barrel is properly secured prior to firing.

The following table lists the stampings found on pistols examined during the course of this work and is provided as an example and not a definitive chronological list:

VITAL STATISTICS AND PERFORMANCE

A Parker Hale catalogue dated September 1966 quotes a price for a Premier as £10 13/3. Post decimalisation, a July 1971 Webley catalogue gives a price of £13.88+ £2.55 purchase tax whilst a Webley advert for the Premier MK2 in the July 1976 issue of Guns Review magazine quotes £22.77 including VAT.

Webley catalogues and leaflets of the late 1960's and early 1970's quote the following statistics:

Weight : 37oz Length Overall : 8 ½
Length of barrel : 6 ½

Velocity figures were advertised as 350 FPS for the .177 and 310 FPS for the .22 pistols during the same period. Accuracy was advertised as being capable of grouping within 1 inch at 30 feet.

Accuracy tests were carried out by myself on a randomly selected Premier from my collection (F series) and a 5 shot group at 6 Yards measured just under an inch, centre to centre. The shots were





taken without using a rest, with a two handed grip. I am sure with the appropriate practice, these group sizes can be reduced further still. Nevertheless, advertised accuracy is not far wide of the mark. The recoil of the Webley air pistol is different to most other air pistols in that the piston recoils backwards, towards the shooter. Contemporary pistols had their pistons recoiling away from the shooter and the effect was not as natural as on the Webley, as the latter feels more like a firearm in recoil. The power output of the Premier was similar to previous Webley models and certainly adequate for the pistol's size. A test on modern knockdown targets proved the pistol will drop these reactive targets when hit.

A rather special Premier (above) was examined during preparation for this work, which was engraved at the point of original sale. The original box, its contents and importantly the receipt survived with the pistol, which give the pistol its unique provenance. The engraving was carried out by the well known London firm of Cogswell & Harrison. A handwritten price of £15.36 can

be seen on the carton's lid and presumably relates to the pistol when new. The receipt is dated 5th May 1972 and states "Webley air pistol engraved". It is for a total of £25.30 which tells us the original purchaser paid just under £10 for this work to be carried out. A green sector of 500 Webley Special pellets and a folded instruction leaflet completed the set. The scroll engraving was probably carried out by an apprentice before they were let loose on the firm's shotguns and was applied after the pistol had been blued. This makes sense as the Premier would have been supplied new by Webley & Scott, then engraved at the original purchaser's request by Cogswell & Harrison. When the left stock side is removed, a date stamp of 2 72 can be seen, which ties up with the receipt very well and suggests the pistol would have been some three months old when first sold.

Master airgun engraver Don Blocksidge once worked for Webley & Scott and Don has engraved a number of Webley pistols including Premier models. Don will not engrave a pistol in pristine condition

but has worked on worn examples. The remaining finish was polished off, the pistol hand engraved and Don then arranged for the pistol to be blued. Some early examples of his work were polished over the original finish but most will be encountered with a reblued or chromed finish over the engraving. Don also polished the internals of his pistols and they are certainly capable of accurate performance, if you are brave enough to test fire a pristine example today.

This completes the story of the Webley Premier, a model which underwent many changes during its thirteen year life span. Webley and Scott continued to produce a well made solid and dependable air pistol in the face of rising production and labour costs. The style of the carton the Premier came in also underwent several changes during its brief life, more so than those belonging to any other Webley air pistol in fact. In 1977 the frame was redesigned completely and what was initially intended as a Super Premier model eventually evolved into the Hurricane and Typhoon air pistols.

Several questions remain to be answered. An accurate estimate of total production numbers cannot be made as true serial numbers were not used and records of production numbers have not come to light. I am unsure of the box contents for the pre A series and A coded pistols. Perhaps a common parts listing was included in the box similar to the booklet included with the Senior, Mark 1 and Junior air pistols. Alternatively and more likely, an earlier version of the single sheet included with the B, C, D and E series Premiers may have been available.

© John Milewski

Tales of a visionary

Things we take for granted now, like the modern lubes we use in our vintage guns were once exotic imports brought in by those who had the foresight to anticipate their potential. DAVID HUGHES was one such visionary, as well as being the author of the airgun guides with the blue covers, familiar to many shooters who have investigated how their HW35 or FWB Sport can be serviced at home.

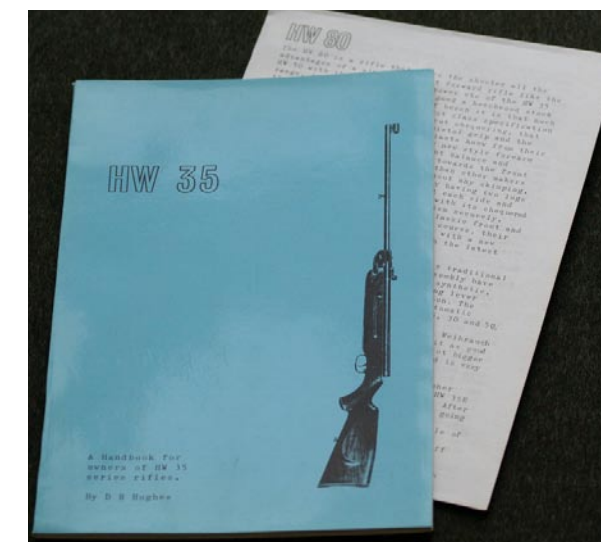
I grew up during the 1940s and '50s and, like most youngsters, wanted an air rifle. There wasn't much choice at the time and what was available was in toy shops (deservedly so in many cases). I knew about the Webley Mk3, of course, and the BSA Club and Airsporter but these were beyond my reach, even if I knew where to buy one. I also knew about the fairground air rifles (mostly pre-war Diana 27's and Haenel/Schmeisser bolt actions from the same era). Eventually it was settled on an Original model 16; made by Diana; it was rather small, had a brass inset smooth bore barrel, and fired 'Cat' slugs. For what it's worth, the only other available ammunition was expensive Webley & Scott and the IMI 'Wasp' pellets, and of course, darts. With hindsight, I guess the BSA Cadet and Cadet-Major were around but I never saw one for sale and I hunted high and low for my first air rifle.

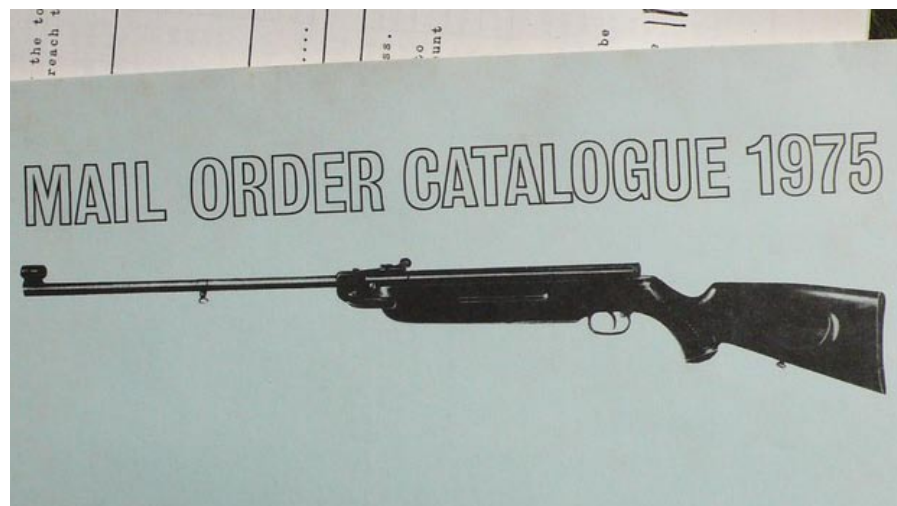
A few years later I managed to save enough for a BSA 'Meteor' and one of those 'scopes with the cross hairs that moved up and down and side to side. I had a lot of fun with it and 'Wasp' pellets –which I could now afford. Much later on, I was in the City and saw a Walther LP53

for sale, second-hand and in its case with the wooden cocking aid with the metal insert for the barrel end and a barrel weight. I had a lot of fun with that pistol and wish I had one these days. Sadly, the few I've seen for sale were in a poor state but affordable or vice versa.

I couldn't see the point of the barrel weight and so wrote to Carl Walther in Germany. Due to a slight misunderstanding, they wrote back and said that it was for one pound including postage to me in England. It started me thinking as I'd been told it cost a lot more.

Like most of us in those days I'd found and read Wesley's book and Smith's book but wondered where I could get some of these marvellous air weapons Smith wrote about. So I started digging





and discovered the Board of Trade's Export Dept's library in Ludgate Hill. In a nutshell, it was a library of catalogues from all over the world and I visited it several times and discovered most of the big wholesalers and so on in Germany and the USA. It was an eye opener. It led to me sitting down and writing a brief list of what I could get and advertising it in *Exchange & Mart* and *Guns Review*.

I'd love to say more but the memory's a bit vague about the early period, although I can remember that we sold Sheridan, Crosman, Benjamin and HyScore airguns. These were powerful air rifles we'd all heard of but just couldn't get easily. We later added a selection of BSA, Diana and W&S airguns to the catalogue. Most of these were dropped over the next few years as we began to specialise in the high quality German air weapons but the Webley Premier stayed in the catalogue for a long time. It was eventually dropped because of problems with the casting (probably white metal) of the barrel latch but we continued to offer chequered wooden pistol grips for many years. By the way, in those days many serious shooters would remove the plastic pistol grips and put a piece of shaped card, wood or metal under them to fatten the grips and improve the handling of the pistol.

By 1968 we were selling RWS, H&N, Bimoco, the Japanese diablo and Lion Jet pellets, and Wasp ammo in all grades and calibres from the small 4.4mm ball-shot to quarter inch darts. Since all these were new to the country I went to a bit of trouble and tried to make the catalogue a serious one, quoting weights, sizes and so on, with the variations from the norm quantified as a percentage. In those days, a tin of 500 diablo .25 pellets would cost you £1-15 (£1.75). H&N's Match grade pellets in the foam trays were 10/8 per refill pack of 200 (about 52-53p). The refill packs were in a cardboard box and fitted into the posher tin H&N used for the individually packed ammo.

This seemed to pay off; word must have got around and by August 1968 we'd expanded a lot and were publishing a bigger catalogue with Anschütz, the Feinwerkbau model 150 rifle and 65 pistol in it, the Original range, the HW 55s, and so on. (The HW 55T was pennies under £40 in those days). Alas, the usual

financial crisis then burst on us in late '68 and no end of import restriction hit us, although I can still remember our first brush with the Customs people in London when they very kindly smiled and made a silly mistake and let some rifles through unhindered by a 50% deposit needed. As we were importing them in half dozens it saved us for a while and new plans were then made for the 1969 season.

We survived this as the bigger agents in the UK were very helpful and we got one of two special deals when, for example, old stock had to be cleared. Needless to say, it didn't last long as the rules defining 'Dangerous Air Weapons' came into effect in May 1969. The good news was that the makers then started publishing performance figures for the air guns, saving me a lot of work. So we were back at square one again, but now had a lot of clubs interested in the more serious target air rifles and pistols and that side of the firm expanded.

We also started selling the more up-to-date lubricants that were gradually being mentioned in American magazines and so on. Even though we were a small, unknown firm in a foreign country we got a lot of co-operation from the makers of Dri Slide in America and started selling it here.



(We wouldn't be able to these days because of the postal regulations.) I also spoke to Dow Corning in the UK and got a lot of information from them about silicone oils and making unique formulations up. A specialised lubricant maker, Rocol, was a great help to us, recommending a high performance molybdenum disulphide grease that was exactly what was wanted and, more important from my point of view, came in a handy 2oz or 50g tube."

So in the late '60s we were able to offer a wide range of modern lubricants: silicone oils and greases, and molybdenum disulphide in greases and a fine base. It seems to have inspired others to follow us...

Because of all the messing around caused by the import restrictions, I had to write a short supplement to the mail order catalogue saying what was happening and softening the blow with a bit of good news like the new Feinwerkbau 300 arriving and so on. (I sold the last FWB 300T for £103.) I expanded the idea a month or two later and we then published a regular supplement to the catalogue with all the news and so on in it.

We even offered a subscription to it

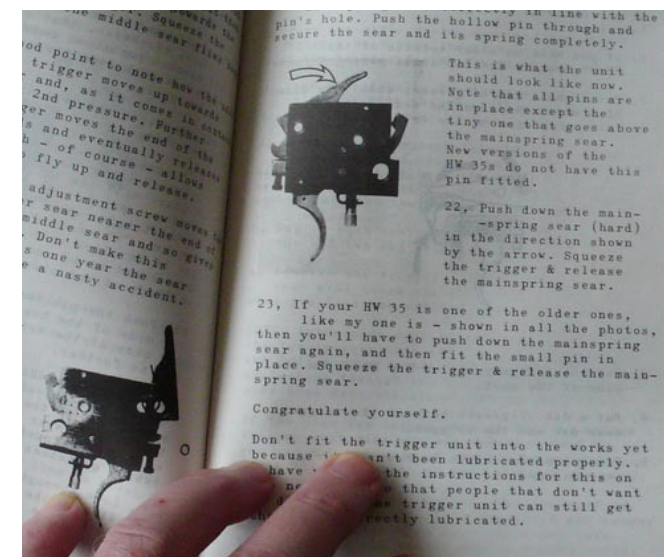
and I was amazed by the response. It started me thinking and I expanded the catalogue into a serious sort of year book and charged 10/- for it (50p), which was unheard of in those days. We softened the blow, again, by giving a 50p voucher with the catalogue that could be used with the first order. In other words, people who collected catalogues (there's lots of them about) paid for them and customers didn't. Until you run a shop you've no idea how many time wasters there are in this world. Anyway, this seemed the fairest solution to the problem and it seemed we were right.

By then the range included almost every serious air rifle that Weihrauch made, from the HW25 to the HW 55T, with all the stock variations, even left handed ones. We sold and recommended but could never get enough of the East German Haenel 302 at just under ten pounds. And the full range of BSFs, Feinwerkbau's, Walther, Anschütz

(target and fairground ones), and Original air rifles and pistols. Even oddities like the Original 25D, which had the ball bearing trigger fitted and was very popular with the members of the Prep. Schools Rifle Association. (The PSRA were also useful to me because I'd get freebies in small quantities and could pass them on to them, without having to ration them.)

Some of you may have seen and used the 25D at the NARPA meetings at Hinckley in the '70s as it was a popular rifle. Because we were on good terms with most of the wholesalers and factories in Germany we often got things soon after they were announced, even pre-production models, and so we were able to check them over and put them in the catalogue quickly; a good example being the Walther LP3 which we were selling first, long before everyone else. We even had the wooden grips for most air pistols in stock most of the time, even left handed ones – not that we sold many. And then there was the Bushnell 4 x 20 telescopic sight, the full range of Nikko ones and the special mounts made for individual air rifles, ballistic pendulums and so on.

And that led to what most people remember this old git for, because





in 1971 or 1972 I started to think seriously about writing a handbook for the more popular air rifles starting with the Weihrauch HW 35 series. I spent five months over the summer of 1972, writing and rewriting and, to my amazement, by late '72 we had to publish the second edition. I followed it with a handbook in 1973 for the Original series of sporting air rifles; the models 27, 35 and 50. This involved designing and publishing instructions for making a spring compressor from easily available components (a sash clamp modified with a part from a 'G' clamp and a ball race.)

In 1974 I started writing a smaller handbook for the Haenel 303s, which were a very pleasant and well-made, if slightly old fashioned, air rifle from East Germany. Alas, the model changed just as I'd finished the book and I'd made a handful up on a photocopier to check the spelling, layout and so on. So it was abandoned and a few lucky people who had asked about it were given the dummy copies and a warning about mistakes as it was the proof version.

I then started work on a handbook for the BSF55 and 60 air rifles but it was never completed. I'd written some notes and taken a lot of photographs

but just had to abandon things as the market was changing dramatically. When we started it was great fun and hard work running the firm. We knew the people we dealt with in Germany and the UK and got a great service from them – and often even postcards when they went on holiday. So we could phone them or write to them and get almost anything we needed.

But a lot of small shops had decided to jump on the bandwagon. The bigger agencies were changing hands, expanding the range of stuff they sold and stopping us getting items direct from Germany. Worse still, they were rationalising the range in some ways and cutting back on what they sold, especially spare parts. In addition the Home Office had proposed, in a Green Paper, a ban on mail order sales, which would have the effect of shutting us down completely since local sales were few and far between.

Soon we were selling mostly the smaller items and losing out on the larger sales, which were needed to keep us going. I can remember getting my haircut one day and seeing a small rack of air rifles in the corner of the barber's shop, for instance. And when the rifle broke, the wicked shopkeepers were telling their customers to write

to us to get it sorted out, as if we were the suppliers. In other words, they were taking the big money and expecting us to do the after-sales work. That was one of several final straws and I decided to close the firm down while I was winning.

That would have been the end of matters but four or five years later I was asked by Optima Leisure if I could produce a version of the HW35 handbook for them and one was duly published in 1979, went into another version in 1981, and then the final version in 1984, with a extra few pages in it to cover the HW 80. In 1980 I also wrote and had printed for them the handbook for the sporting Feinwerkbau 124 and 127.

From time to time we'd have problems with people copying and republishing what I had written, which was a minor irritant. One so-and-so even went as far as to illustrate his book with all the pictures of ammunition from our catalogue. Those pictures had cost me a fortune to get done by a technical illustrator and there they were in someone else's book and not a word of apology or acknowledgement. Then some years later I realised my books were being scanned and put online; so I went online to try and track them down and sort out the publishers of these pirated copies. And that was how I discovered the various airgun forums and came to contribute to them from time to time. I'd like to say I'm still shooting but I had an operation on my right hand a year or so ago and may need another soon, and it makes things difficult. So I sold the final air rifle in my collection, put some items on ebay that the burglars had missed, and that was that.

© D R Hughes

Under the hammer

Many airguns are sold at auction – in fact it's one of the main ways they find their way from private individuals and collections onto the market. PHIL RUSSELL explains the best way to buy without being caught out by the many pitfalls.

Auctions can be good places to obtain collectables; there is also a certain level of excitement present at the thought of picking up an absolute gem for little money. But beware – if you are not careful, your purchase may work out far more expensive than you expected. When I started visiting auctions I was a raw beginner but, as the saying goes, you learn by experience. So here are a few tips on avoiding a costly mistake.

- Examine the auction catalogue (online versions are common) and list the items you are interested in. Now find out what you can about them, including current prices. Google search or search airgun forums. A little knowledge is worth a lot. Good catalogues may give serial numbers for guns. Again, a search on the 'net can sometimes relate these to year of manufacture and model. Do your homework.

- Wherever possible, view the items personally or get a knowledgeable person to do so for you. Viewing is usually the day before the auction and shortly before the auction starts on the actual day. Buying online without seeing your intended purchase up close is dangerous, as many faults are not visible in an auction catalogue photo. Treat auctioneers' descriptions with care as they are rarely very knowledgeable about what they sell.

- There are several ways to

bid at an auction: in person in the auction room; by leaving a bid with the auctioneer giving your maximum bid (the auctioneer bids on your behalf); by telephone; and online via the internet. Not all auctions are geared up for online bidding.

Remember that you have to register with the auction house in order to bid. If you are attending in person, this involves filling in a form at the auction and being given your 'bidder number'. There may well be an entrance fee to attend the auction, usually in the form of having to buy the catalogue. If you are a regular attendee and buyer at such an auction, ask to be put on their mailing list. You may well then receive the catalogue free.

If bidding via the internet or telephone then you also need to register. The on-site auction details will tell you how. If you have viewed your item and it is late in the auction, and you do not wish to hang around from the beginning, remember that some auctioneers can move at up to 180 lots an hour, although a more reasonable estimate is 120. Ask the auction staff for advice on timing.

- If you cannot collect your purchase from the auction house, check the policy on posting and packing. Some auctions can charge a lot for the service, and some will not offer the service at all. Many will only

post to an RFD, so you may need to arrange this with your local RFD and pay his fees as well (typically £25).

- Remember that on top of the sale hammer price you will usually have to pay a buyer's premium plus VAT on the premium. This can add around 20% to the hammer price. If you pay by credit card this will often cost you an extra 3%. Buying via the internet can attract a similar charge.

Remember that you cannot test fire the item at the auction so will have no idea of its performance or its internal condition. You can, however, carry out a few rudimentary checks to help you decide on its condition and hence value. This is my general check list:

- Release the barrel or cocking lever. Be prepared for the barrel or cocking arm to fall away with no resistance, indicating that either the rifle has been cocked or that the cocking linkage is broken. De-cock it safely. If you cannot do this because of an anti-bear trap mechanism, call

a member of the auction staff and inform them. With their permission the only solution may be a dry fire with the rifle pointing down. Some say any potential harm can be avoided by pressing the muzzle firmly against a carpet and then dry firing. Indeed I have seen this done at auctions and arms fairs. Jim Tyler's articles in *Airgun World* indicate that dry firing may not be the 'impending disaster' we all thought, but I still prefer not to do it. Please never just replace a cocked rifle in the rack or on the table; it is asking for trouble and could give a person a nasty fright if someone just picked it up and pulled the trigger. I have seen too many rifles, particularly those fitted with scopes, plucked from the rack and waved around with gay abandon by people with their trigger finger on the trigger while they peer through the scope. It worries me.

- Are all the bolts, screws, pins present? Do any look obviously wrong? Non-original bolts are not necessarily 'a stopper' as they can usually be replaced with a substitute,

providing threads etc have not been damaged. It should, however, be taken as a warning that other issues may be present; particularly if the other bolts or screws have damaged heads.

- Look for signs of dismantling damage: vise, or mole grip, or Stilson marks on the action are not a good sign. Pins with damaged ends and damage to the action in the area of the pin head indicate careless removal or a failed attempt at removal.

- Examine the stock for damage and splits, particularly around the pistol grip area and extending into the butt. Check the underside of the stock for splits starting in the area of the cocking slot; particularly at risk in some break barrel models. Unless you feel competent in repairing stocks, replace the rifle in the rack and forget it.

- Are the open sights present? They can be expensive to replace if indeed they are available at all.

- Is the exterior finish good? Blueing wears with age and use but this is not necessarily a major issue unless you are after a mint example. Light patches of rust can be removed with fine wire wool and oil, but rust pitting is virtually impossible to remove without leaving evidence.

- Examine the barrel. By looking along the barrel from all sides with the action closed and then down the bore with the action just broken (not cocked) it can be possible to determine if the barrel is bent. If it is, walk away unless you are confident of getting it straightened. Look for a blocked or rusty barrel. Has the muzzle been tampered with? Has the barrel been shortened? If you do not know the original barrel length, tell-tale signs can be the absence of foresight mountings (bolt holes, dovetails, a stepped muzzle for a slip on sight) or a muzzle with no crown – just a crude cut end.

- Check cocking linkages for wear and sloppiness. Pivot pins can usually be replaced quite cheaply but worn pin holes may necessitate new cocking linkage parts.

- Break the action (do not cock) and look into the cocking lever slot. A dry spring with signs of rust could indicate internal problems. An action swimming in oil could indicate an attempt to provide cosmetic surgery, although I have known guns from collections to be stored in such a state and it has certainly kept them rust free. On the other hand, a clean interior and a greased mainspring may indicate a well cared for rifle. Check for play in the breech jaws of a break barrel rifle. Can the barrel unit be jiggled from side to side, front and back or up and down within the jaws? Excess play side to side can usually be cured by shims, or tightening the breech jaws, particularly if they are



This BSA Military Pattern was sold at Holts in London in summer 2007

fitted with an adjustable bolt, but up and down play, or play when you pull and push on the muzzle, could indicate wear in the pivot pin which may need replacing. For tap loaders, check the tap for looseness and play. Repairing leaky taps can be difficult and expensive.

- Check sear engagement (non anti-bear trap models): break the action and slowly attempt to cock it. Listen out for strange noises; you may even feel odd mechanical graunches. The noises could be from the mainspring being broken or grinding against the piston sides. Noises could also come from the cocking lever arm as it pushes the piston back; look for wear areas around the cocking slot. Beware raised grooves that could indicate worn cocking links or, worse, a damaged slot in the cylinder. Continue cocking to engage the trigger sears. Listen for them engaging with a nice 'click'. While keeping a firm grip on the barrel/cocking lever, relax pressure a little to allow the sears to take the strain. If they fail, this could indicate a major problem or maybe the trigger is seriously out of adjustment. This is where experience of the item you are looking at is helpful. If in doubt, slowly let the barrel or cocking arm return to rest against the spring pressure and

walk away. If the sears do hold, keep a firm grip on the barrel and de-cock it. Do not 'dry fire' the rifle, it proves nothing. I have heard some auction goers say they are testing the power. Utter rubbish! It proves nothing to hear the rifle go 'bang' or 'twang'.

- If all seems well you must now decide if the item is worth your interest. But be realistic. Do your homework before the auction to establish its market value. It can be very easy to get carried away at an auction and bid beyond your limit just to get the item. Stay calm... there is always another day. I have seen many rifles go at prices far in excess of that at which you could get a good model from a reputable gun shop or from an internet forum. Remember the hidden costs over and above the hammer price. Caution is the byword.

And finally...

If you have bought in person, remember that it is most unwise to walk from the auction house to your car brandishing your new pride and joy. Take a gun bag with you, be prepared. Finally, you have your beautiful bargain home. Well done!

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A lot to be desired

BRIAN UPRICHARD conveys some of the nervousness and excitement of a collector whose dream airgun comes up for auction and he goes all out to acquire it. There's just the matter of the other bidders to contend with...

I was a keen small- and full-bore pistol shooter up until 1995 when the government imposed the breech loading pistol ban which meant handing in my much cherished pistols. I continued shooting reproduction 1860s muzzle loading revolvers at our outdoor range, but needed something to shoot at the indoor range especially during the winter months. The first air pistol I acquired was an Italian FAS 604 single stroke pneumatic which satisfied my immediate precision needs, but lacked the "live" feeling experienced when shooting my firearms. Shortly afterwards, while attending the "Phoenix" Arms Fair at Bisley I was tempted to buy a 1960s Webley "Premier" air pistol which not only brought back memories of my youth but being a springer, might just provide something similar to firing a firearm.

This was the start of what became a very enjoyable and sometimes all consuming passion for collecting vintage and classic air pistols and air rifles. I initially confined myself to Webley and BSA products, but this soon expanded to include anything of British manufacture dating from around 1905 right up to the mid 1960s when the quality of

anything marked "Made in Britain" reduced significantly.

I concentrated on pistols as they are easier to store and over a period of years established quite a nice collection of British made air pistols including examples of the major Webley variants and other contemporary models such as "The Warrior", "Abas Major", "Titan", "Lincoln", "Highest Possible" etc. There remained however, four pistols which I thought were out of my reach due to a combination of extreme rarity and consequent high prices. They were in order of scarcity, Anson's "Star", Westley Richards "Highest Possible Concentric", "Parker Precision (Crank Wound) Pistol" and Cogswell & Harrison "Certus". All of these pistols are pre-war and were made in very small numbers, less than 100 in the case of the first two pistols. The likelihood of coming across any of these pistols in reasonable condition was extremely low and the associated price tag in excess of £1000 each, essentially ruled them out, or so I thought at the time.

Fate stepped in just two years ago when I noticed a very nice "Anson's Star" in a cabinet during a casual visit to my local dealer. He normally only sells modern

air guns but does sometimes have the odd Webley or Diana, probably taken in part exchange. I tentatively enquired about the cost of the Star and was told as it wasn't their normal line I could have it for £350. As soon as I regained the power of speech, I eagerly agreed to purchase the pistol with a £10 discount for cash. Having found one of my desired final four pistols, I felt incentivised to set about tracking down the remaining three.

Within what seemed a very short time, I managed to buy good examples of both the "Certus" again bought at Bisley and the "Parker" which I acquired from a military antiques dealer in Derbyshire. I had to pay more realistic prices for both of these pistols, but this was offset to some extent by the bargain price of the first pistol. This left just the Westley Richards "Concentric" finally obtained in 2012 at auction, by far the most enjoyable method of buying any of the pistols.

AT THE AUCTION

The "Concentric" was catalogued in the March 2012 Holts Arms & Militaria Auction held at Princess Louise House in London. Although based in Norfolk, Holts hold their

main sales four times a year in London. They also hold four sealed bid sales a year from their base in Norfolk usually just after the main sale.

Lots are offered in many different categories from modern & antique firearms to taxidermy and nearly always include 20-30 air guns. If you wish to attend an auction, the procedure is very simple and clearly explained on the Holts web site www.holtsauctioneers.com or you can give them a ring on 01485 542 822 if you want more information. The two days prior to the actual auction day are viewing days when you can inspect the lots of interest to establish condition and consequent limits you might want to place when bidding.

Viewing can also be undertaken on the day of the auction itself, if you cannot attend one of the specific viewing days. Although you can bid by telephone or on-line it's definitely worth actually handling the items you desire as sellers condition descriptions and photographs are no real substitute. Proxy bids can also be placed on viewing days following which the auctioneer will act on

your behalf on the day of the sale and try to secure the item for you at the lowest possible price.

As I live down on the Sussex coast and the lot I was interested was not scheduled to come up until around mid-day, I decided to combine viewing and possible bidding on the day of the sale. I had already conducted a considerable amount of research on the "Concentric" so had quite a good idea of what to expect in terms of a realistic price. These pistols are very rare, with just 100 or so ever made around 1924 and only dozen known to have survived. The estimated price reflected this, and was listed in the catalogue at £1,200 to £1,500. This particular example had featured in a number of air gun magazine articles and it's history was consequently quite well documented.

Having arrived at the venue nice and early, I had a couple of hours free to examine the "Concentric" and some other items of interest. These included a BSA Military Pattern, Cox's Britannia, a couple of Webley Mk2 Services and a very interesting Imperial Air Rifle Co .22 multi-pump double barreled

air rifle model 'Double-Express'. After a nice cup of coffee in the snack bar, I resolved that I would set my bid somewhere between the low and high estimates at around £1,350 bearing in mind this would mean actually paying around £1,700 after the buyers premium had been added. I took my seat at the appointed time and awaited the arrival of my lot with mounting excitement. Finally it appeared on the screen with an opening bid of £800, which thankfully meant it was not going to start at the high end of the estimate.

The bidding quickly rose to £1000 which left just one other bidder apart from myself to compete for the pistol. My bid of £1,200 swiftly followed his of £1,100 and my hand was already poised to indicate one more bid after his seemingly inevitable bid of £1,300. It's easy to see how the excitement can lead bids far in excess of originally intended limits. However, in this case the £1,300 bid never materialised and the lot was mine at the lower estimate of £1,200, well within my budget. I can only describe my feelings as similar to having just





calmed down a bit and with a bit of "aiming off," I eventually managed a group measuring 40 mm CtoC (shown below) and all within the black aiming area. Better groups could no doubt be achieved once one becomes accustomed to the specifics of the pistol and with the luxury of more practice. Although this pistol is unlikely to see much further action, it's comforting to know it is still capable of acceptable accuracy nearly ninety years after it first appeared.

won some money on a horse race being a mixture of elation and relief that I would not be returning home empty handed.

A stupid smile remained on my face for some time afterwards which must have seemed a bit strange to anybody not knowing the reason. It only remained for me to visit the administration office and pay for my purchase. Once you have paid and been given an invoice, the items can be collected from one of the representatives present in the viewing room.

Although I check any rarer items I buy for basic functionality, I would not normally shoot them very much, especially if they cost as much as this one. I made an exception for this article and decided to directly compare the performance of the "Concentric" using my regularly shot Webley "Premier" as a control.

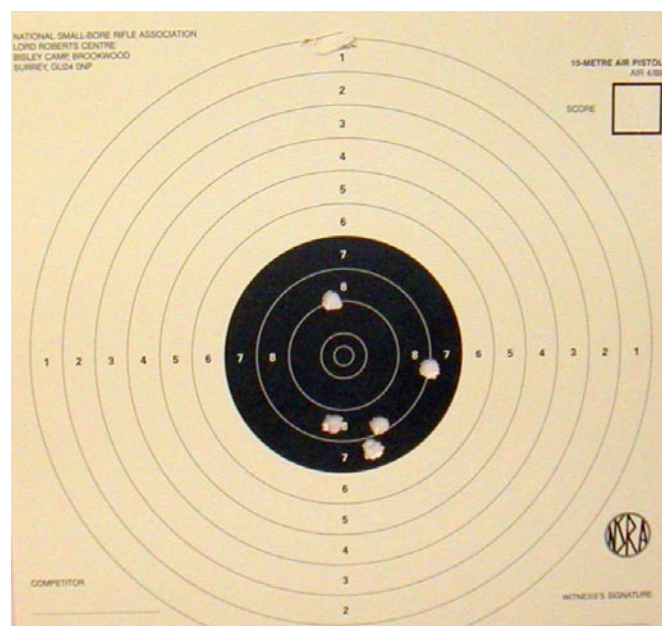
AT THE RANGE

Both pistols were tested at my local range using a single handed precision hold at a range of 10 metres. I have found H&N Match flat head pellets work very well in my older .177 pistols although the cheaper RWS "Hobbys" also perform quite well. No expense was spared for this test, so

the H&N pellets were carefully inspected and weighed before starting the test. I am normally happy to hold the black aiming area with my "Premier" on the standard NSRA 10 metre precision target which is 60mm in diameter. I easily achieved this at the first attempt with the "Premier" with a group measuring 25mm centre to centre (CtoC). I rarely do much better than this, so immediately turned my attentions to shooting the "Concentric". The pistol uses a break barrel action and has an interesting little cocking aid hinged at the base of the grip which can be extended when needed. Cocking effort was much less than that needed for the "Premier", but was sufficient to suggest enough power to propel the pellets out to at least 10 metres. The first group was surprisingly quite reasonable especially for a smoothbore, measuring about 80 mm CtoC but about 2" low and to the left of the aiming mark. Once my nerves

I have bought collectable air guns from many sources, but the auction experience has been by far the most enjoyable, being a bit more of an adventure rather than just answering an advert or visiting a dealer etc.

I also enjoyed testing the pistol and although the "Concentric" was surprisingly nice to shoot, it's easy to see how it was completely eclipsed by the first Webley "Mk1" which was the predecessor the "Premier" and also appeared in 1924, only slightly after the introduction of the "Concentric".



Haenel 311: 10m workhorse

RON GILL describes how he acquired an old Haenell 311; East Germany's answer to the impressive range of 10m air rifles that were available in the West. It was made in the 1970s but its origins were several decades earlier. But in the features that really count, this is a formidable target rifle, he reports.

This is an airgun story that is too good not to tell. In 1997 I read *Airgun World* from the UK and Tom Gaylord's *Airgun Letter* from the US. AGW had prices in British pounds which I couldn't afford even if they had been in US dollars. Tom kept us informed on where the best deals could be found in US. In the *Airgun Letter* I read that Battlefield Firearms and Relics in Georgia was selling Haenel 311 air rifles at 'fire sale' prices. I still have my Haenel and I shoot it in monthly bell target matches when



the Idaho winters drive us indoors.

These guns were well used, 10 meter target rifles. They had been in storage for years, and they came with sights. I was interested because, too often, sights become separated from their rifles. On



Haenel 311



the telephone, I spoke with Mr. Ed Puhala, a man with a sonorous voice and a southern accent you could spread on buckwheat cakes. "Yes, we still have rifles" he said. I asked about their condition. "You know," he said, "they're like bottles of wine at a wedding. The best ones go

first." "How many do you have left?" I asked. "Not a lot," he said. Well-used might be an over estimate, but the price was \$74 and \$12 for a set of inserts for the front sight. "I'll take one," I said.

When the package finally arrived, it looked like every club shooter in

German Democratic Republic had had their sweaty hands on my rifle. The stock had oil stains and traces of orange varnish. The ragged orange varnish and the sweat stained wood had to go. I stripped the finish and restained the wood to a more wood-like color.

The Haenel 311 was made in the 1970s, but its piston and cocking arm were from the 1930s. Designed by Hugo Schmeisser for the Haenel 33, it duplicates the motions of cocking and loading a bolt action firearm. The rifle's cocking lever extends vertically above the piston, but it is articulated and folds down out to the right side when not in use. It is not a bolt like a SMLE or a Mauser, but everyone uses that terminology.

The rifle cocks by raising the bolt. When it is straight up, the automatic safety is applied. Drawing the lever toward the rear, forces the piston back to engage the trigger. The lever pivots well below the cylinder giving the user some leverage against the piston spring. The force needed to cock this air gun is too much for many young shooters. When I

demonstrate the 311 to juniors, I often have to cock the rifle so the youngsters can make it through five shots.

Besides bolt action cocking, the 311 also features tap loading and a leather pistol seal. These features are distinct from current day air rifles and give the 311 its unique personality. Tap loading air guns are uncommon in America. I have learned to leave the tap closed prior to cocking. The only pathway for air into the cylinder is down the barrel for loading results in a strangling sound as air seeps through every gap in the rifle's tolerances.

Loading and firing the Haenel 311 is a complex series of steps: raise the bolt to vertical, draw back the piston, open the tap, drop in a pellet nose first, and close the tap. Then return the bolt to the forward and folded down position. Now, the safety is pushed forward and the shot can be taken.

Soldiers in the American Civil War reloaded their muskets with only a few more steps. Like those

muskets, the 311 produces a smoke cloud with each shot. The piston's leather washers need frequent oiling to maintain their seal and to prevent burning the leather. You must oil it up until you see a wisp of smoke. Without the oil you risk not only damage but loss of accuracy as well.

All's right with the 311 when there is the faint smell of combustion with each shot.

The Haenel 311 teaches us what counts in a target rifle. The stock must be ample to support a heads-up offhand position. The cheek rest must align the eye with the sights. The trigger is two-stage, and like other springers in its power class the 311 is a very mild shooter. The rear



Diopter sight: eyepiece complete with adjustable iris

sight has an adjustable aperture. These things are necessary on a good target rifle and the Haenel has them.

After refinishing my Haenel, I set it aside until the rifle found its place shooting bell target, where it has rung the bell for the last six years.



Eccentric concentrics

Continued from page 17

THE ABAS MAJOR

The Abas Major air pistol (Fig. 12) was developed by gunmakers A.A. Brown and Sons in the early 1940's as a short term venture to generate new business after the ravages of World War 2. As we have seen, the company had already been involved



Fig. 12. A fine example of the last version of the Abas Major

in assembling a small number of Anson Star pistols from parts left over in the estate of Edwin Anson, and no doubt it was this that gave the brothers Sidney and Albert Brown the idea of producing their own design of air pistol. The new pistol utilised the concentric principle of the Star, but a revolutionary new cocking system was developed which used the trigger guard as an underlever. Also, for the first time in a pistol, a tap loading system was used, giving a near perfect air seal between cylinder and breech. The pistol design (Fig. 13) was patented in 1946 and came onto the market in that year. As might be expected from a company with such a long

tradition of quality sporting guns manufacturing, the Abas Major was an extremely well made pistol, on a par with the Webley Senior of the time. However, it was not to be as successful as the Webley range, and only about 1900 pistols were produced by the time it was discontinued in about 1949. By then demand for sporting firearms had returned to its pre-war level and A.A. Brown and Sons were able to concentrate on quality shotgun manufacture, their brief venture into airguns having served its purpose. The relatively small number of pistols

produced means that examples are now rare and very much sought after by collectors.

Despite the short production period for the pistol various minor modifications occurred, the most notable being the grips. The first guns had smooth walnut grips, which were replaced by smooth brown bakelite grips somewhere between serial numbers 231 and 323. Chequering was then

introduced on these between serial numbers 1295 and 1389, the final grips bearing a marked resemblance to those used on the contemporary Webley Senior. Examples of these variations are shown in Fig. 14. The Brown brothers also experimented with different finishes and a very small number of pistols were produced with a black crackle enamel coating, as opposed to the usual deeply blued finish. At least one example is also known with a factory aluminium enamel finish.

In addition to these cosmetic variations, certain structural modifications also took place. The first guns had a secondary safety sear which engaged with ridges in the piston to ensure that if the cocking lever trigger guard was accidentally released it would not fly back and injure the user. After about 200-300 guns had been made this was changed to a single thicker sear, which served the same safety purpose but was cheaper to make. Early models had a slide button release for the trigger guard, and this was changed to a self-latching mechanism between numbers 101 and 190. The stamped lettering on

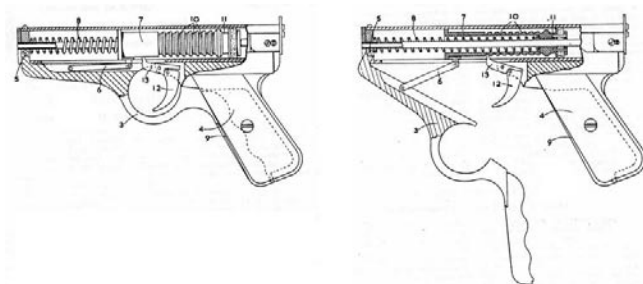


Fig. 13. Patent drawings for the Abas Major



Fig. 14. Examples of the three grip types of Abas Major

the pistol also changed during its short lifetime, beginning as "ABAS MAJOR AIR PISTOL No. 1" and then becoming simply "ABAS MAJOR" between serial numbers 317 and 369. It is popularly believed that this change occurred because of damage to the die which lost part of the lettering. However it could also conceivably have been a deliberate action, if when the gun was first introduced there were plans to produce a .22 version as the "No. 2", and when this notion was abandoned it would have been sensible to simplify the lettering. It should be noted that no .22 versions of the Abas Major are known.

The Abas Major is a real collector's item – quality engineering in every respect, heavy and powerful, and once you have got used to the cocking effort, a delight to shoot. Unfortunately it is a rare pistol and examples are becoming very hard to find, but at least they are not as rare as the concentric Highest Possible and the Anson Star. When they do come onto the market they naturally command a high price.

THE ACVOKE

At about the same time that the Abas Major was being developed, the company Accles and Shelvoke Ltd. of Birmingham was also considering introducing an air pistol of its own onto the market. Although not a traditional gunmaking company (their speciality was humane cattle killers) they had already had

experience in airgun manufacture before the war with Anson and Clarke's Warrior, and no doubt the concentric principle behind that pistol strongly influenced their choice of design. The project was largely the responsibility of John Basil Arrowsmith, an employee of the company, and his design (Fig. 15) in fact followed quite

closely that of the German Tell 2. Despite this obvious close similarity he was nevertheless successfully granted a British patent in 1949, the application being submitted on November 21st, 1946. Production began in 1946 and continued for another 10 years, by which time some 25,000 were sold. The highest substantiated serial number yet reported is 24840, making this the most successful concentric air pistol up to that time.

The pistol itself (Fig. 16) was much larger and heavier than the Tell 2 and was obviously intended to challenge the very successful Webley Senior and Mark 1 pistols by providing a full power pistol at a lower price. Of all steel construction, apart from the plastic grip plates, the pistol was well made and rugged, but did not aspire to the same quality of construction as the Webleys. Their most common fault was that with heavy use the trigger guard/cocking lever could become bent inwards and the gun would not cock. This was because the piston flange did not reach the sear and could

not engage with it, even when the grip was pushed as far forward as possible in the cocking stroke. However, this problem could be easily remedied by removing the trigger guard and opening out the bend slightly in a vice.

In its production lifetime a few minor changes took place, and for example the grip closure mechanism changed from a leaf spring to ball catch between serial numbers 12409 and 13218. Some examples are known which were fitted with a cork-firing adaptor (e.g. SN 13227 and 13858). This adaptor was factory-made, and was inscribed "Adaptor for cork shooting"). It screws into the muzzle as a replacement for the normal barrel, and the adapter "barrel" (made of copper) is smaller than 0.177 and so cannot be used to fire pellets. Two prototype pistol bodies have been reported which have no serial numbers, and which were accompanied by black and brown grip plates, a .22 barrel and a barrel with a fitted cork firing adapter. These were apparently used as demonstrators by the designer in the early days of the pistol. No production pistols with brown grips or a .22 barrel are known. Apparently towards the end of production serial numbers were dropped but I have not yet come across any examples with this feature.

The Acvoke air pistol is an essential for collectors of vintage British air pistols, and they are still relatively easy to find in good condition,

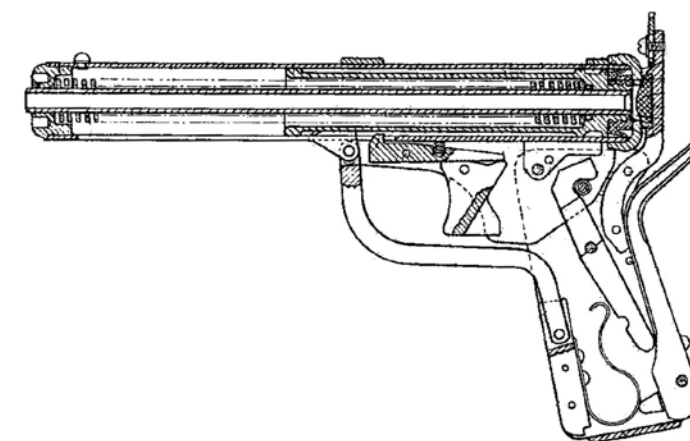


Fig. 15. Patent drawing for the Acvoke



Fig. 16. The Ackvoke pistol

although they are not as common as comparable Webley Seniors and Mark 1's of the same period.

THE THUNDERBOLT JUNIOR OR BIG CHIEF

The golden age of concentric air pistols was clearly the mid 1940's, as yet another company felt inspired to introduce a new model onto the market in that period, namely Frank Clarke (Lead Products) Ltd., Birmingham. This company had evolved from Frank Clarke's gunmaking business after his death in 1936, and this venture back into air pistols was no doubt driven by the difficult economic times in the immediate post-war period. The designer was W. Walker, and like Accles and Shelvoke he drew heavily on the pre-war Tell 2 design for his inspiration (Fig. 17). In fact, the resultant pistol (Fig.

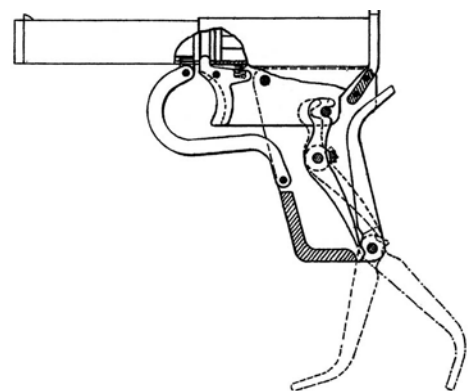


Fig. 17. Patent drawings for the Thunderbolt Junior

18) closely resembled a somewhat larger version of the Tell 2, and yet despite the similarities between his pistol and the Tell 2 and the Acvoke, a patent was successfully applied for in 1947, and was granted in 1949 (British patent 623869). The pistol had a blued steel frame and cylinder, and the smoothbore barrel was aluminium or steel, available in .177 calibre only.

Evidently in 1947 Frank Clarke (Lead Products) Ltd. had no facility for large scale pistol manufacture and so production of the gun was licensed out to Prodit Ltd., of 78 Lombard Street, Birmingham. It seems that Prodit not only marketed the pistol themselves, but also supplied it to Frank Clarke (Lead Products) for resale. Interestingly two brand names were in use for this pistol. The one sold in the UK was called the "Thunderbolt Junior" pistol, and the extremely rare second version was called the "Big Chief" (<http://www.cinedux.com/produsit-airguns.php>), which seems to have been mainly exported outside the UK. I know of only two documented examples of the Big Chief at the present time, both of which were located in New Zealand. As the trademark "Big Chief" was exclusive to Prodit it is probable that most of the Big Chief pistols were exported outside the U.K. by Prodit, leaving the "Frank Clarke (Lead Products)" Thunderbolt version to dominate the home market. Manufacture of the Thunderbolt Junior took place between 1947 and about 1949, or possibly into the very early 1950's, and approximately 8000 were made in total



Fig. 18. The Thunderbolt Junior

them. In contrast, the "Big Chief" had smooth wood grips with no markings on them. The Thunderbolt breech closure plate is impressed there with PROV. PAT. 137492, whereas that of the Big Chief is stamped with the name "BIG CHIEF" (Fig. 19). The only other difference between the two versions is that the Big Chief has a more rounded muzzle plug than the Thunderbolt Junior. No box for the Big Chief has yet been documented.

The pistol itself is reasonably well made but when compared against the Tell 2, of which it is essentially



Fig. 19. Comparison of cylinder end markings on the Thunderbolt Jr and Big Chief (courtesy of Trevor Adams)

a larger copy, the extra power resulting from the increased size is disappointing. In trials by the author, the Thunderbolt Junior turned in velocities using waisted pellets averaging about 250 f.p.s. in comparison to 200 f.p.s. for the Tell 2. The most disappointing feature of the Thunderbolt Junior is the trigger which can be painful to use. The trigger shroud extends too far forward, and given the harsh pull needed to fire the gun, this can cut into the trigger finger quite uncomfortably on firing. These negative points apart, the pistol is well finished and eminently collectable as a rare 1940's British-made air pistol.

HY-SCORE SPORTER

The American Hy-Score pistols ceased production in the 1970's and the Hy-Score company itself went into liquidation in 1981. In 1989 the English businessman Richard Marriot-Smith purchased the engineering drawings, machinery and parts for the Hy-Score pistol from the long abandoned site and shipped them to the UK. The Phoenix Arms Company in Sandwich, Kent then began production of a substantially modified form of the stub-nosed, single shot Hy-Score 803 pistol, introducing the new



Fig. 20. The single shot Hy-Score Sporter, with plastic sight

successor in 1989 as the Hy-Score Sporter. When first introduced the gun was only available with a blued finish, and had a brown grip and had the same type of metal sight as used in the American models, adjustable for elevation only. The gun was soon modified as the "Mark II" version, (Fig. 20) then having a fully adjustable plastic rear sight, and available with a blued finish and brown grip, or chrome plated with white grip. A 6-shot repeater or "Autoloader" version was introduced September 1991, based on the original Laszlo patent magazine. Pistols were rifled and available in 0.177 and 0.22 calibre.

Structurally the guns differed mainly from the 1950's American models in their length, being much shorter than the standard Hy-Score 800 Target model, but not as short as the Models 803 and 804 (the American Hy-Scores are discussed in Part 2 of this series). In addition, the cylinder and barrel housing formed a continuous unit, with the last few inches presenting a squared profile. The barrel itself was recessed some 2cm from the muzzle end, the recess being threaded to receive a custom-made silencer. Although a relatively recent pistol, the Sporter has already achieved cult collectability status thanks to its short production run, and is now considered relatively rare. It is particularly sought after by U.S. collectors because of the American Hy-Score connection, and as it was never exported to the USA (because it lacked a safety catch) it is particularly rare in that country. Cased examples complete with silencer, spare barrel, barrel changing key and pellets are the most desirable.

AND FINALLY, THE ONE THAT NEVER WAS

It would be fitting to finish this account with a brief

discussion of a unique concentric air pistol design that was patented well before Anson's first concentric pistol but which never made it into production. This was the G. Norman / B.S.A. design first patented in 1911, the principles of which were outlined at the beginning of this article. Although the system does not strictly fit into the "Anson concentrics" theme of this article, it is quite possible, given that Anson and BSA were part of the same Birmingham airgun community in the early 1900's, that Anson was

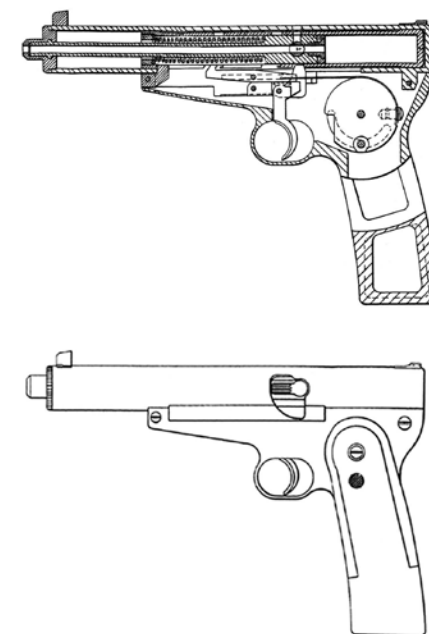


Fig. 21. Patent drawing for the 1911 Norman/BSA air pistol

inspired by the Norman patent to make his own investigations into concentric air pistols.

The patent drawings (Fig. 21) are quite complex to follow and as no known prototype exists it was difficult to visualize how the pistol might have looked or even to decide if it was a practical design or not. However, thanks to the efforts of that highly skilled re-creator of past airgun designs, Mac Evans, we can now see a fully functioning prototype in action. He was able to create from the patent drawings three working examples, one of which (serial number 3) is pictured in Fig. 22.



Fig. 22. Mac Evans' reconstruction of the 1911 BSA air pistol, serial number 3

The pistol has a completely unique cocking principle, which can be understood by looking at Fig. 3 and Figs. 22-24. With the pistol in the uncocked position (Fig. 22) pressing the small button on the left hand grip releases the grip from its locked position, and the grip can be swung almost 90° rearwards to the position shown in Fig. 23. At this point the sliding air cylinder engages with a hook on the end of a flexible steel ribbon contained within the grip. As the grip is then swung forwards to the position shown in Fig. 24 the air chamber is pulled rearwards, compressing the mainspring, until sear engagement occurs. The grip can then be returned to its original



Fig. 23. Grip in position to begin the cocking stroke

position where it automatically locks in place, as in Fig. 22. The gun is then fully cocked. It only then remains to insert a pellet into the barrel – a not inconsiderable problem. Norman solved this by inserting a small tap into the barrel breech – small enough for the moving air cylinder to ride over it during the cocking and firing strokes. The aperture cut into the side of the cylinder housing and also into the side of the sliding cylinder exposes the tap once the air cylinder is locked forward in the cocked position, as can be seen in Fig. 24. The tap lever can be thumbed upwards allowing a pellet to be inserted into a hole located on top of the cylinder, and closing



Fig. 24. Cocking stroke completed

the tap places the pellet in line with barrel. It would of course be vital to ensure that the tap was closed before firing, otherwise the cylinder moving rapidly forwards would shear off the tap handle.

The design has its good points and bad points. On the positive side the button release is extremely pleasant to use, and the large angle of swing of the grip makes cocking very easy. On the downside, the metal ribbon that has to pull against the mainspring pressure is fragile and prone to breakage, but most damning of all, for its size the power that can be developed is very low.

This last disadvantage is due to the fact that compression chamber is in line with the barrel rather than surrounding it, and so the design offers none of the size reduction advantages that the Anson system does.

Replacing the steel ribbon with strong piano wire solves the breakage problem. Tests by the author strongly suggest that even if fully optimized this design would only achieve power levels on a par with a good quality push-barrel pistol.

© John Griffiths

Royal British Legion Poppy Shield, 6th October 2013

The first RBL Poppy Shield competition will be held in the grounds of the Greyhound Airgun Club, Longford near Coventry, a short distance from Junction 3 of the M6 motorway. Our main aims are to raise awareness of the Royal British Legion, the oldest military charity in the UK, and the important work it still undertakes on a daily basis for serving soldiers, ex-soldiers, and their families from conflicts going back to World War 2. We also hope to raise much needed funds to enable us to carry on the good work that gives welcome aid to war veterans - whether aged 92 or 22.

We have organised what we think is a fairly unique team event based on the popular Hunter Field Target scenario of a 30-shot course with animal shaped string reset silhouette knock down targets from 8 - 45 yards. There will also be a 6 yard bell target range and an air pistol side shoot, both under cover, and all with trophies for the highest three scorers. The main competition will be a three-man team event with emergency service personnel, military, disabled, and ladies-only teams and of course teams from local and national airgun clubs, internet forums etc. There will be places for a maximum of 30 teams (90

Advertisement

shooters) and we ask anyone that would like to enter (subject to available team places) to think of a wacky name to make things a bit more fun. We already have teams entered with names such as The Screaming Abdabs, Kittens in Kombats, The Tartan Terrors, The Jackass Jackals, The Borg Collective, and many more. The main difference apart from the teams are the air rifles they will be shooting



Poppy shield made by Edward Marrian

with. At least one team will be shooting vintage BSA underlevers nearly a century old. Another team is shooting '60s BSA Airsporter's and yet another shooting '70s vintage Sussex Armoury/Air Arms Jackals.

The entry fee is £10 per shooter, with all proceeds going to the Royal British Legion.

The categories are:

- Vintage unscoped;
- Vintage scoped;
- Recoiling; and

- Recoilless

The safety brief prior to the competition's start will be at 11am. There will also be an A4 safety list of dos and don'ts along with hints and tips that will be handed out with each with each score card, bearing in mind a lot of the emergency services and military personnel have never shot air rifles. Safety marshalls will be dotted around the course in case any problems arise during the comp.

There is ample car parking on site, camping if needed and a very nice local pub.

In addition to the above HFT comp and side shoots there will also be a full hog roast on site, plus hot and cold drinks, food etc available. A mini assault course run by members of the Parachute Regiment. A band, and nine Normandy veterans will also honour us with their presence. We are hoping to add more things of interest prior to the day.

There will also be raffle tickets available on the day. The top prizes at time of writing are a beautiful bell target, an SAS print signed by regiment veterans, a bottle of wine from the officers mess of the French Foreign Legion and a signed Liverpool FC shirt. More prizes will be added closer to the date.

The Greyhound Gun Club Sutton Stop, Longford, CV6 6DF (Located at back of The Greyhound Pub)

From Boer War to bell target

The superiority of South African marksmen during the Boer Wars of the late nineteenth century was a wake-up call to Britain's colonial leaders. With their encouragement, ordinary working men took up the sport of bell target shooting in pubs and clubs across the land, most often using Lincoln Jeffries or BSA rifles like the one below. Soon there were thousands of bell target clubs, with the greatest concentration around Birmingham and the Black Country. EDWARD MARRIAN describes the origins and evolution of this phenomenon.



THE BEGINNINGS...

It is impossible to say with any certainty when, and even where, the first bell target match was held. The targets in principle have been in existence since the 1800's or even earlier, and even the early dated patent Quackenbush target of 1890 had been made for years previously by the Havilland and Gunn company.

So the first match, or perhaps just a gathering of airgun enthusiasts around a bell target may well have occurred in the mid to late 1800's, even possibly in the USA. But it was the turn of the 20th century that saw an explosion of interest in the sport in the UK.

Target shooting was already an established sport, especially for the well off and professional classes, and the Society of Working Mens Clubs also established a shooting competition as early as 1882. But the events in South Africa in 1880-1881, and especially in the second Boer War from 1899-1902, would lead to a re-assessment of the skill at arms of the British Tommy. Soon the speeches and influence of well-respected public figures, and even a hero of the British Empire, would lend their weight to a national campaign to improve the marksmanship of the nation's menfolk.

During the Boer Wars, reports reached the highest levels of the deadly

accuracy of the Boers' rifle shooting in comparison to the average British soldier, although it must be said that our men still employed older Officer-directed fire discipline tactics under a strict command structure, and did not enjoy the free rein that the Boers had. On their return from the campaign, many high ranking and notable figures decided that they would learn from their painful experiences in the field.

The Lord mayor of London, Lord Salisbury, Lord Baden Powell (lately the commander of the besieged Mafeking garrison), and the national hero, British commander in chief, Lord Roberts, as well as many others, pushed for better facilities and training for younger shooters especially. Lord

Roberts gave impassioned speeches that appealed especially to the patriotic instincts of audiences. The result was that small bore and air rifle shooting gained a huge following in a few short years. This momentum no doubt helped in the popularity of bell shooting as well, which was already taking place in Birmingham at least.

One of the earliest recorded and documented bell matches in the form that is associated with the sport – two opposing teams from different pubs – was held in 1900. It was organized by a Mr M. Hirst, and the prize was a mutton supper for the winning team, to be paid for by the losers. Apparently the match aroused great interest, and was fought out to a packed house, with word spreading quickly and the idea being taken up by others to such an extent that, within a relatively short time, there were more than 1600 air rifle clubs in Birmingham alone, and over 4000 nationwide.

However, at the start it did not go smoothly for the shooters when the Birmingham City Fathers decided they would not issue an alcohol license to any premises with airgun shooting – on the grounds of "drunkenness and gambling". We have to remember that the sport was predominantly a working man's one and the order of society and class was very much more pronounced then. So there was a suspicion that the powers that be just did not want "the lower orders" to be trained to use guns, even airguns.



Note the winners' medal fobs proudly displayed on their watch chains; a highly visible display to visiting teams that they would have a hard fought match

A petition against the magistrates' decision was launched, and was signed by 47,000 people, but was rejected. So the shooters' representatives called a meeting with the mayor at the town hall and 10,000 airgunners turned up to peacefully state their case.

In light of this impressive and well-behaved protest, the resolution was dropped and shooting re-commenced.

Birmingham and the Black Country was certainly an area of high concentration of clubs, as was the surrounding area. But in other areas, especially those with lots of industry, factory, social, Post Office as well and pub clubs flourished. The sport was also popular in Wales, where several clubs can trace their history back to those early days before WW1.

THE RIFLES

The late 1800's and the turn of the century would have seen the majority of competitors using Gem-type break barrel guns, in the main probably smoothbore, although the Belgian "Laballe" Gem type of gun was rifled from as early as 1888, as were possibly others. The Milita type

arrived at the turn of the century, and in the next two or three years the Lanes Musketeer (or Greener Lane as described at the time by R.B.Townsend), and the earliest Britannia guns, as well as better versions of the many Birmingham and London "improved" guns which had been available before 1900.

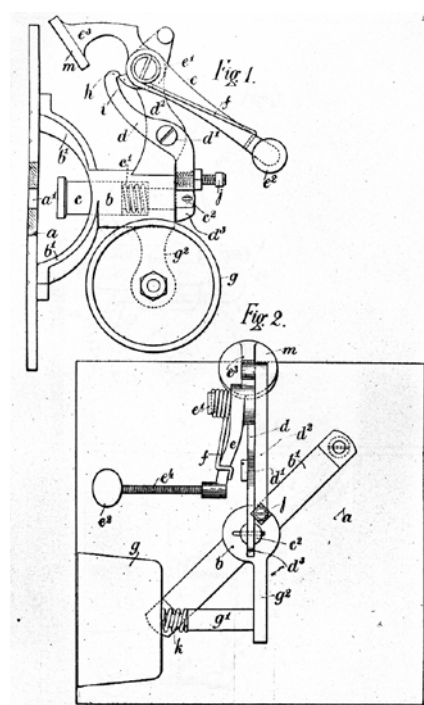
A common occurrence back then was for imported guns to be modified to varying degrees and then re-sold with British markings. This could range from a simple re-branding, to an honest attempt to improve the design – with Lincoln Jeffries in particular improving barrel latching, sights and barrels, then advertising these re-worked guns as "the most accurate airgun sold". Meanwhile, Lanes advertised that they could "rifle any smooth bored airgun".

Shooters then were no different to now, they clamoured for the latest equipment as competition experience grew. Lincoln Jeffries, whilst still selling the imported guns, was already hard at work making a series of well-received prototypes of the rifle that would shake the air rifle scene to its foundations.



The members of this team wear clothing and headgear typical of the period, with some sporting boaters from the craze started by the Prince of Wales back in 1896, plus, of course, the 'obligatory' facial hair

So we arrive in the summer of 1905; the first batch of Lincoln rifles has been delivered to Steelhouse Lane for final fettling. So much has been written about subsequent events that I feel I have nothing of substance to add – only that these guns, and other



This is on my "To Make" list!

pre-1914 BSA and Lincoln guns, soon established themselves as essential equipment and indeed the standard gun to use when finances allowed. In most pubs there would only be one or two Lincoln or BSA club rifles for the whole team to use, since they were expensive in comparison to the average working man's means. But they soon dominated the shooting scene, helped in no small part by BSA's massive advertising machine and distribution network. An illuminating insight into this was the 1907-8 national air rifle championships, where 206 teams and 940 individual entries competed, and 205 teams and 936 individuals used Lincoln or BSA rifles!

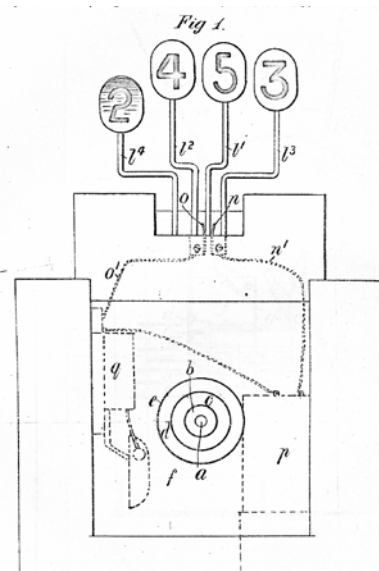
A sad aside to this is that although Lincoln Jeffries still had his patents stamped on the BSA guns, very soon BSA took credit for the gun itself in advertising copy, and the original genius was very much sidelined. It is a fact though that over 100 years later, many people refer to any pre 1939 BSA as a "Lincoln BSA", so his name has not been forgotten.

THE TARGETS

At the turn of the century, the West

Midlands was a hotbed of engineering, and the gun trade, apart from notable giants, was still very much dominated by small specialist workshops, each with a particular skill or trade. Obviously there was a new market in air rifle shooting to be supplied, so many manufacturers attempted to produce targets with varying degrees of success.

The earliest targets were a simple plate with a hole, and a bell behind, and provision for lighting in some cases – many advertised gas lighting options for rural areas (Parker Hale, as late as 1958, still advertised



Plan of a Riley's electric bell target

This was also recorded in 1906:

"Mr W.G. Porter of Tamworth has registered an electric bell target; the bell rings until stopped when the bull is hit. An example is in use in the Prince of Wales pub in Tamworth, and has not been known to fail"

the 'Club' bell target with an option for gas "where there is no lighting service").

The problem with these early targets was that a fragment of pellet (a 'splitter') may ring the bell if the shot was not dead clean, but sometimes the sound was not heard by the scorer, who would be a few feet away at a safe distance, so very soon a cocking type was introduced.

These had a plunger behind the hole, which on being struck by the pellet would move backwards releasing a sprung loaded flat or round bar. This in turn would strike the bell, and in its simplest form, would expose the previously hidden uppermost end of the bar to give a visual confirmation of a "possible". These ends were normally painted, and many had a number 5 marked on them as well.

Targets soon ranged from fairly

simple box affairs, to 25lb cast iron behemoths, with mechanisms ranging from the simple striking bar type most encountered, to elaborate sears and lever designs, and even stacks of ball bearings fed by magazine to behind the hole, and then catapulted in turn onto the bell by the pellet's impact.

Notable makers in this period were Cox's of Handsworth, Charles Ross of West Bromwich and John Stanton and sons. BSA themselves offered no less than 5 differing designs in their Book of the BSA air rifle, and also stated "other types are available on request"

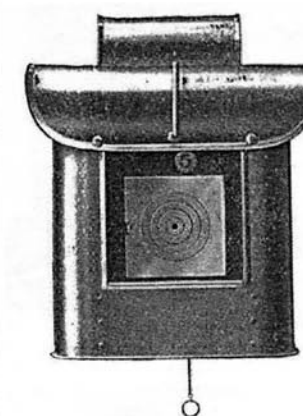
Lincoln Jeffries, patented an extraordinarily well made target in 1908, and there are many other patents filed between 1904 and 1908 on record that show the amount of effort being expended to profit from the sport.

The target face plates were covered

in non drying paint, normally titanium oxide mixed with oil, to show each strike clearly, and the shooters soon found that the new diablo pellets such as Wittons, Cox's Wonders, Astons and Villas and of course Adders etc. left a perfect central "witness" mark in the middle of the strike which made on the line decisions easy.

At the firing table or nearby would be a penny in the slot Avery, Wadkin or Howard dispensing machine to dispense a few pellets, the proceeds helping the funds of the home team.

The Great war would see many bell target and other shooters caught up in the excitement of this halcyon period sadly lost, but many who heeded the call to arms back were already excellent shots before the Army received them, and no doubt gave a good account of themselves in the trenches.



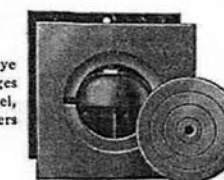
The "Reliable" Automatic Target.

Self-registering. Patent No. 3510.

This target has an interchangeable steel face, and is supplied when not otherwise specified with a face with a 1/2 in. bull's eye aperture for ranges up to ten yards. It is very extensively used on air rifle club ranges. When a shot passes through the bull's eye aperture the figure 5 shown in the illustration is caused to rise. A bell rings simultaneously. Audible and visible signs are thus given every time a "bull" is scored.

Steel Target No. 83. With Interchangeable Faces.

The standard pattern is supplied with a 1/2 in. bull's eye centre plate. Plates for 10, 15, 20 and 25 yards ranges are also supplied. They are all made of the best steel, hardened and tempered, and are fitted with rubber washers to prevent "ringing" when struck by a pellet.



"Indicator" Target No. 60. Self-registering Bull.

This has the bell over the top of the target, which rings when bull's eye is scored. The tablet bearing "Bull-5" automatically appears when the bell rings. Strongly made of best steel. Supplied with 1/2 in. bull's eye aperture for ranges up to 10 yards.



How I became a collector

ANDY LAKE, who is no stranger to bell target shooting himself and is a long-time collector of BSA rifles, explains the origins of his fascination with these guns and reveals how, many years ago, he took the first steps on the road to building a collection

I guess the seeds of my collecting passion were sown early in my life. My parents were avid collectors, and I, my brother and my sister accompanied them on their weekend trips around the antique shops and junk shops in the area. I remember sorting through piles and piles of various 'Old Stuff' whilst my parents looked at fine porcelain and other antiques eager to add to the collection. In a few of these shops there was always the odd old gun lurking in a corner, or propped up again the wall.

My very first airgun was a chrome-plated Gat pistol that came to me as part of a swap I did with a lad at school. The deal was done round his place one Saturday morning in the school holidays, and I received it in its box, with some slugs and a few very well worn darts. Being a lad of not much more than 10 or 11, I instantly dreamt of going hunting with my new side arm, bringing back the family supper in the form of rabbits or pigeons..... My dreams were soon dispelled after the first two or three disappointing shots. The gun was just not up to the task.

On or around my 12th birthday, my

dad produced a fine Webley Mk1 Air pistol from the back of a big cupboard, and after carefully unwrapping it, handed it to me. He said that it was his, and that he had enjoyed shooting it in his youth. I remember looking down at the pistol cradled in my hands, and immediately noticed the weight and the fine build quality which I later came to realise were key features of these fine pistols.

Well, thoughts of that pistol were never far from my mind over the next few months, and I never missed an opportunity of reminding my dad how much I admired the pistol.

On my next birthday, I was given a small but heavy box, which not only contained the pistol, but a box of .177 Marksman pellets and some paper targets to go with it.

Compared to the short-lived Gat Pistol, the Webley was on another planet, and I soon became practised in the art of bowling over Coke cans in the back garden. I loved that gun, and without doubt, it was my most prized possession, not to mention the envy of all my mates.



My first Cadet Major



Andy's refurbished BSA no. 2854. A 'second batch' rifle from 1906, according to John Knibbs, whose book *BSA and Lincoln Jeffries Air Rifles* (1986) carries a list of the model, month of manufacture, and month of factory despatch of pre-WW1 Lincolns and BSAs

In time the pistol eventually gave way to an air rifle. Some of my mates already had air rifles, and I was impressed with the extra range and considerable knock down power the rifles had compared to my pistol. I constantly begged my father for an upgrade to the pistol and finally he could stand it no longer and agreed to buy me a rifle for my next birthday. Finally the day arrived and I accompanied my dad down to the gun shop in town, to get their advice. Dad consulted with Cyril the gunsmith, and finally a selection was made. Following Cyril's advice, dad had settled on a new ASI Sniper, bought for the princely sum of £29.50; those were the days... Well, me and the Sniper became inseparable partners in crime, and many a plinking session took place with my mates.

A few more years passed, and I was reaching the end of my compulsory schooling. I was spending every spare minute I could in the gun shop, often out the back watching Cyril work on all manner of shotguns, rifles and airguns. As a lad of 16, I just loved standing in the shop soaking up all of the atmosphere. The smell of guns, the stories, and best of all, meeting other like-minded airgun enthusiasts.

I quizzed Cyril endlessly about airguns in general, but especially about my ASI Sniper air rifle, and I soon realised that he wasn't that impressed with modern airguns, to say the least. I remember him reaching up to the gun rack and bringing down a pre WW2 BSA under lever which happened to be there, stating that "they don't make 'em like this any more" and pointed out all the great engineering and quality materials that made up the BSA. I wasn't convinced, as I couldn't possibly

see that an old airgun could be better than a new, up to date one.

Away from airgunning, I also studied music and was becoming an accomplished drummer. That year I had been selected to play in a local 'am dram' production at the local theatre. Some of the early rehearsals took place at the orchestra conductor's house. His son, Dean, went to my school a year above me and, I was soon to learn, had similar shooting and fishing interests to my own.

Being older, he had recently made the transition to shotguns for most of his shooting but still kept ferrets in his garden, which regularly needed a steady supply of food. The family lived in a large, ramshackle farmhouse in a village just out of town with a large walled garden surrounded by large fruit trees that were the favourite haunt of pigeons and collared doves. These birds made perfect food for the ferrets and, much to my surprise, the gun he used to secure them was a fine .22 BSA Standard Air rifle, which he told me was made in the 1920's.

My eyes were well and truly opened that day, and I marvelled at the simple design, coupled together with impressive accuracy and power. Three pigeons later, the ferrets were sorted and I was allowed to have a go myself. The muzzle heavy balance took a bit of getting used to but in the end I was a convert and

came away that day with my mind made up. I had to have one!

I started to carefully check the second hand gun rack in the shop for a likely looking candidate, but nothing showed up. Apparently, even in the 1970s they weren't that common. Eventually after a few months a .177 one finally did come up for sale, for £27.50, and although it was in pretty poor external condition it fired well for an air rifle of its age. Cyril took the gun apart, gave the internals the once over, and I paid for it over the next six weeks on the 'never never', a fiver a week until finally the day came and I picked it up.

When I got it home my father could see the rather dilapidated state of the gun but also noticed my overflowing enthusiasm, so he sat me down and asked me to explain to him why I liked it. My father was good like that, always encouraging. He patiently listened to this 17-year-old, telling him all about the finer points of a gun made 70-odd years earlier. I talked about the walnut stock, the simplicity and the fine design of the sights – in fact everything that Cyril had told me.

Patiently, he waited for me to finish then without a word he got up from





the table and disappeared upstairs. He came down a few minutes later clutching a rifle shaped parcel tied up with string, laid it down on the table in front of me, and started to untie the string. Eventually there in front of me lay a BSA Cadet Major air rifle. My face must have lit up at that point as I remember my father smiling as he picked up the gun and handed it to me, saying: "It's yours if you want it – as long as you behave yourself and above all else *are safe*." Two airguns in one day... how was that for luck?!

The Cadet Major was the slightly bigger brother to the Cadet and, luckily for me, had the adjustable trigger. All in all, it was a sleek looking airgun, but definitely not as powerful as my Sniper. In those pre-chronograph days, penetration tests were the only way of comparing power and the Sniper seemed to win hands down.

Well, my collection was now up to four guns and three of those were no longer made. There seemed to be a pattern developing, and my fascination for older guns was growing by the day.

I finally left school in 1978 and joined the army the same year. I had one last summer as a teenager at home and as always spent a great deal of time at the gun shop. About three weeks before I was due to report for duty, I was stood in the gun shop when an elderly gentleman walked in with a gun bag under his arm and asked to see the gunsmith. He explained that his sight was failing and he wanted to sell the gun as he could no longer use the open sights. It was a beautiful BSA under lever, with a large amount of

original finish still present. You could clearly see the etched model details shining out on the cylinder.

Well a deal was eventually struck, Cyril bought the gun, and, once paid, the old gent left happy. No sooner was he out of the shop than I said I wanted it and I put £10 down with the rest due in instalments. It was finally paid up on my first official leave from the army, and rifle number four was in the bag.

I really loved that gun; it was my pride and joy. I still have it today, but sadly not in the near mint condition I bought it in.

About three years later, I had moved to an army camp in London, where I was part of the permanent staff. There was an airgun club nearby and after going along a few times I decided to join.

Now the official ruling from the army was that air rifles were allowed to be brought in to camp for target practice, but had to be booked in at the guardroom and kept in the armoury



Close up of BSA serial no. 2854 after restoration by John Knibbs, with deep blueing now replacing the rusty pitted finish

when not in use. I decided that I didn't servant my pride and joy kept in the armoury for all to touch and possibly damage, so I kept it in its vinyl gun bag under a blanket in the boot of my car. At first I used it every week but as autumn turned to winter my visits to the gun club became less frequent.

One day I went out to check on the gun and give it a wipe over with an oily cloth, only to find that it was rusty due to the condensation caused by the temperature changes in the car boot. I was distraught but as there was nothing I could do for a fortnight until my leave, I could only oil it and hope for the best. But the rust had done its worst, and what was a thing of beauty was now heavily scared by the rust. I learned a lesson I will never forget!

Over the years, I added more guns to the collection. Despite getting a good few guns in far better condition, I always kept the first BSA underlever that I owned – as the rifle that started me on the road to collecting.

Despite being in near relic condition, I decided to submit it to John Knibbs for a full restoration and rebuild. I still have the gun to this day, restored to most of its former glory and still take it down the club for a few shots every now and again. These days a lot of the joy of collecting comes from using the guns as well, if I can.

Sadly Cyril the gunsmith is no longer with us, but I feel that if he was he would be proud of my collecting and the deep passion I have for older airguns which he help to nurture all those years ago.

Hy-score: the pistol that crossed the Atlantic

ROB MORTON outlines the background to the Hy-Score spring air pistol; a story of Anglo-American cooperation. The pistols had their origins in pre-War America and 50 years later a version of the design ended up being made by a British company known for its glossy brochures.

The history of the classic Hy-Score pistol, one of the few proper spring air pistols made in America, is one of the most unusual and interesting stories in the history of the airgun. In several ways, it could be said to be a story of Anglo-American cooperation.

In 1938, in New York, there were two brothers of Hungarian descent, Steve Laszlo, and Andrew Lawrence. Andrew was an industrial designer and engineer who had anglicised his name, while Steve was a businessman, who specialised in importing sporting goods to America. His business was known as "Lazlo's House of Imports", and the sporting goods he sold included shotguns and revolvers made in Europe. Possibly on his trips to Europe, Steve noticed that spring airguns were popular over here, while in America, pump-up pneumatic pistols and rifles were common. Steve would certainly have known that the "Stoeger" company (who later sold Hy-Score airguns to

the American public) were importing some European airguns, including the famous Webley overlever air pistols, and this could have been what gave him the idea to market a spring air pistol in America. He felt that American airgun shooters would appreciate a pistol that was cocked in one stroke rather than the ten pumps that some American air pistols needed. Andrew also understood from his engineering experience that compressing air by hand like that is very inefficient as so much effort is lost as heat as pressure is generated.

Steve and Andrew bought a few classic European air pistols to evaluate, including a Diana break-barrel, a Haenel that was cocked by

pushing the grip towards the back of the pistol, an Em-Ge Zenit overlever, and finally a Webley Senior. Later, the brothers also owned an Abas Major, and an Acvoke, but that was not until after they had designed the Hy-Score.

Andrew used his engineering knowledge to appraise the pistols. He did not like the fact that the first three had short barrels, due to the barrels being in front of the cylinders. He felt that the Diana was not powerful enough. He considered the Haenel too hard to cock and



One of the pistols the brothers evaluated: the EM-GE Zenit

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STOEGER ARMS CORPORATION, 507 FIFTH AVENUE, NEW YORK, N. Y.

HY-SCORE AIR GUNS

NEW 6-Shot REPEATER

MODEL 802

Powerful 1949 model. Completely different from any other air pistol. Loads six Hy-Score pellets in new patented magazine mechanism. One "break" between each shot. Delivers higher muzzle velocity than any other air gun. Looks and feels like a Luger. Rifled barrel for pin point accuracy at 30 feet. Stock colors, Walnut, Petrified Wood, Ivory, Onyx. Shoots .177 and .22 cal. Hy-Score pellets, darts and BB's

Model	Price
802B Blue finish col. .177, col. 22	\$24.95
802BB—BB size	22.95
802C Chrome finish col. .177, col. 22	29.95

Weight each 33 oz., overall Length 19 1/2"



6-Shot Loading Mechanism

The 1949 model 6-shot repeater

didn't like the way that the cocking linkage was in compression during cocking rather than in tension as in the Webley. The Zenit design was discounted because, although it was easy to cock, he felt that the short barrel limited power. Of the four airguns, the Webley was his favourite, so he was obviously a man of good taste! However, he even criticised that, feeling that the trigger pull was too heavy. That was the Hy-Score's first British connection.

He felt that the people that had designed these guns were people raised in the traditions of classical gunsmiths and gunmakers, rather than modern engineering practices. This was evident in the use of forged and cast parts, which required expensive machining and hand finishing operations to complete them. He decided that by using stampings and drawn steel tube it would be possible to make a strong, long-lasting air pistol that would be very competitive with the European air guns.

They settled on a set of criteria for their design. It was to be comparatively easy to cock, yet more powerful than the pistols they had evaluated. It was to have as few parts that would require replacement as possible, so they decided to not employ leather washers like those used in all of the evaluation pistols except the Webley. It was to have a light, crisp trigger pull, proper rifled barrels and be available in both calibres. It was to have the appearance of, and the

balance in the hand of a standard firearm. Finally, it was to be cheaper to manufacture than the European airguns. This would be achieved by using stampings, parts that could be made on automated machine tools, and modern materials such as plastics and synthetic seals.

To make it powerful, it needed a strong spring, and a long barrel, so Andrew designed it with a concentric barrel that was almost the full length of the pistol. To make it easy to cock, even with the powerful spring, they needed a long lever moving through a large angle. He decided to use the whole action of the pistol as the cocking lever. To make the most of the power, he designed a breech that gave a perfect seal despite having no wearable rubber or leather seals. The breech design is unusual on these pistols, with some saying that it is reminiscent of a camera shutter. It is an excellent design, it works well, it is convenient and easy. When the breech is open, you can see right down the barrel, and know for certain that the pistol is unloaded and safe.

To make it accurate, as well as a rifled barrel, it has what Andrew described as a "servo" trigger, designed to lighten the pull. Basically, fully opening the pistol cocks the main spring, while closing the pistol cocks a hammer

(part 'C' below) which, when released by the trigger, strikes the sear. The powerful spring in these pistols makes the sear quite hard to move, which would be bad for accuracy if the shooter had to move the sear manually, so the energy that moves the sear is contained within spring 'D', rather than coming from the shooter's trigger finger, which only has to overcome slight friction and the relatively light pressure of the trigger spring. This also means that if you want to practise dry-firing the pistol, you can just open it an inch or so, and close it to set the hammer alone.

In the prototype pistols, a metal piston ring was tried, but was found too brittle to cope with the shock. The metal piston ring was discarded in favour of a modern neoprene synthetic rubber O-ring which proved reliable, efficient and much cheaper than the metal ring.

They also experimented with pistons that had a seal between the inside of the piston and the barrel, however, provided the pistol was reasonably lubricated, the gains in power and efficiency were so small they felt this unnecessary.

The transfer port design was also extensively researched. They eventually came up with a port design that allowed optimal power transfer to the pellet while still creating enough of a cushion to prevent the pistol damaging itself if fired without a pellet.

Andrew also constructed a

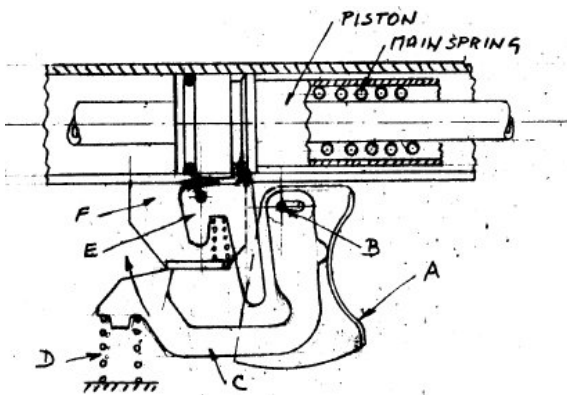


Exhibit 7. Trigger Mechanism

chronograph machine to measure the muzzle velocity, which consisted of two paper discs set twelve inches apart on a shaft that spun at a set rate, enabling him to calculate the speed of the pellet from the angle of the two holes in relation to each other. By testing the pistols on this machine they deduced that they were rather powerful. Later, the pistols were actually advertised as "The World's most Powerful Air Pistol".

All of this research and development was continuing as America entered the second World War, until the brothers had to temporarily shelve development of the pistol for some time from 1942 onwards as the US Government's War Production Board cut off supplies of raw materials that the brothers needed.

The design was almost finalised in 1946 and American patents were granted. Production of the 700 Target Model started soon afterwards but in 1947 the design was revised slightly. The 700 model had a step between the cylinder of the pistol and the barrel just ahead

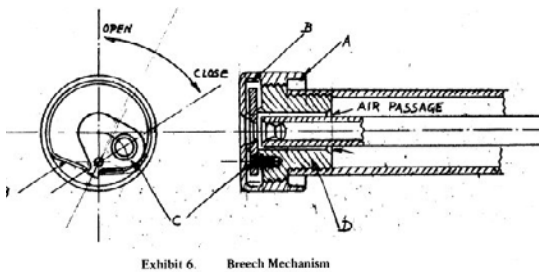


Exhibit 6. Breech Mechanism

of the hinge point, this was a plug machined from solid steel and brazed into place. Also, on the 700, the rifled barrel actually ends in this 'plug', with the 'barrel' ahead of this point being a dummy for the sake of the pistol's appearance and balance.

From 1947 onwards, Hy-Score produced the model 800. This was more true to the original idea of using pressings wherever possible rather than solid parts, with the cylinder and barrel shroud being pressed from drawn steel tube. It should not be inferred that the use of pressings reduced the quality in

any way, the pressings used are of high quality, heavy gauge steel and very strong. On this pistol, the rifled barrel does go all the way to the muzzle.

Hy-Score model 800s

When the Hy-Score model 800 pistols went on sale, they were immediately popular and commercially successful. Andrew went on to develop a 'repeater' version of the pistol, the model 802, which had a six-shot magazine added to the breech of the pistol. It is an ingenious mechanism, with individual chambers for the pellets which rotate past the breech hole like a caterpillar track or conveyor belt. It is well made, and fun to use because it is so unusual and quirky, but in practise it is slightly fiddly. Pistols with this repeater feature went on the market in 1950 and are more sought after by collectors and so command higher prices.

The Repeater Breech: A pellet is inserted in the "LOAD HERE" hole, then the lugs are used to rotate the back of the breech, which causes cams on the inside to move the seven chambers around one position. When this has been repeated six times, the first pellet drops into the breech, and the other six pellets contained in the chambers will be held until needed, visible through the other holes. Use of the repeater mechanism in optional as, even when the

HY-SCORE AND JGA AIR PISTOLS

MODEL 804 6-SHOT REPEATER 7 3/4" BARREL \$17.95

Model 804-B—either .177, .22 or BB bore, fixed bbl., six shot repeater, 7 3/4" bbl. \$17.95

Model 804-C same as above with Chrome finish. \$22.95

MODEL 802 TARGET MODEL 6-SHOT REPEATER 10 1/4" BARREL \$22.95

Model 802B .177, .22 or B.B. \$22.95

Model 802C Same But Chrome Finish \$27.95

Wt. 33 oz. Length: 19 1/2"

Model 803 SINGLE SHOT 7 3/4" bbl. \$14.95

(Add \$5 for chrome finish)

Model 803B (gun only) (with either .177, .22 or BB barrel) \$14.95

CHROME FINISH Model 803C (same as Model 803B chrome \$19.95

No. 8031, Barrel only, .177, .22, or BB) ... \$3.95

MODEL 800 TARGET MODEL SINGLE SHOT 10 1/4" bbl. \$19.95

(Add \$5 for chrome finish)

Similar to Model 802 except in single shot. NO PUMPING! Rifled barrel. Extremely accurate. For small game and targets. ALL STEEL with TENITE stock. Model 800 will only work with Hy-Score pellets. Models available for cal. .177, .22 pellets and darts or BB shot.

Model 800B .177 cal. \$19.95

Model 800C .22 cal. \$24.95

Model 800D BB shot \$4.95

"NEW 1952 MODELS" 5 IN 1 "SPORTSTER" Same Gun for Target and Small Game

with 4 interchangeable barrels, as illustrated, Abolish:

1. Hy-Score .177 Lead Pellets

2. Hy-Score .22 Lead Pellets

3. Hy-Score .177 Steel Darts

4. Hy-Score .22 Steel Darts

5. Hy-Score BB Shot

Single Shot. Barrels changed quickly. Single knock, NO PUMPING! Rifled barrel. Automatic like piston mechanism. ALL STEEL with TENITE handle. 18000 barrel. No. 808 BB (Blue) \$19.95

No. 808 BC (Chrome) 24.95

BLUE FINISH Model 808B .177 cal. Model 808C .22 cal. Model 808D BB shot

CHROME FINISH Model 808C .177 cal. Model 808D .22 cal. (Add \$5 for chrome finish)

Possibly from a Stoeger's catalogue of the middle '50s

mechanism contains pellets, it does not prevent other pellets being loaded directly to the breech.

In 1952 and 1953, Hy-Score introduced the model 803 and 804 "Sportster" pistols. These pistols are rather different, having a shorter barrel, which can be unscrewed by hand from the muzzle end and swapped; Sportsters were sold with both .177 and .22 barrels, and I have read that a .177 smoothbore barrel magnetised at the breech end was available for shooting BBs. Some catalogue pictures from the time show the knurling on the barrels being colour-coded red and blue but I've never seen, even in photos, a pistol showing coloured barrels.



The breech end of the barrel 'floats' in the piston; a clockwise twist of this knurled outer seals the breech.



Use of the repeater mechanism is optional as, even when the mechanism contains pellets, it does not prevent other pellets being loaded directly to the breech

The swappable barrels are a really nice feature, and the compactness of this design makes the pistol very "pocketable".

All of these pistols were available with different coloured grips, made of a plastic called "tennite". Colours offered were walnut brown, ivory, something called "Petrified Wood", and onyx. There was also a whitish mottled or marble-like option which is quite rare. General Electric made the machinery and tooling for the manufacture of the grips, a fact that they were proud of and actually used in their advertising!

Another connection with British airgun industry came when Hy-Score began importing their own branded pellets, which were actually the classic British-made Eley Wasp in a Hy-Score tin.

That was the end of the development of the Hy-Score pistol,



Sportster with spare barrel

for the time being at any rate. From this point onwards, Andrew Lawrence and Steve Laszlo didn't alter the design, and the pistol continued to be popular, selling well over the following two decades. Unfortunately, in the early seventies the American government decided that all pistols, including airguns, being made in America had to have safety catches. Rather than redesign the Hy-Score, the brothers opted to cease production. I have heard

conflicting stories about the date that production ceased. Some say 1974, some say 1970, some even think that production may have ceased in 1969. The pistols were still on sale in American shops towards the end of the 1970s. For a short time in the 1970s, there was another British connection: the pistols were imported to the UK by BSA Guns, before they began production of the BSA Scorpion.

Hy-Score continued as a business until 1980. Steve Laszlo became acquainted with the famous American airgun authority Dr. Robert Beeman. Steve had continued to import airguns made in Germany by Mayer and Grammelspacher, more commonly known as Original Diana, but also Em-Ge, Moritz and Gerstenberger, both of whom had made pistols that the brothers had bought many years previously to evaluate. Steve repeatedly offered to sell the tooling, parts and everything else to Beeman, to no avail.

Sadly Steve passed away in 1980, the Hy-Score Arms Corporation was wound up in 1981.

That was the end of the Hy-Score story until 1989, when we come to the final British connection: A businessman called Richard Marriott-Smith of the Phoenix Arms Company bought the drawings, machinery and stocks of parts necessary to make the Hy-Score pistol, shipped it all to Sandwich in Kent, and restarted production.

In some ways, the British Phoenix Hy-Scores were better than the American originals. The cylinder was made from solid steel and very finely polished and blued. Phoenix Arms also redesigned the muzzle, doing away with the long barrel of the 800 Target model and going instead with the shorter swappable barrel of the "Sportster". The barrel screws into a deep recess in the muzzle which gives the pistol the appearance of a large-bore firearm. Phoenix Arms named this pistol "the Sporter" which often causes it to be confused with the original "Sportster". This pistol was sold in single calibres, but also with both .177 and .22 barrels, with a key to enable them to be screwed home. They were also sold in a cased set, with both barrels, the key and a simple (no baffles) moderator. The British Hy-Scores were also available with black grips which I think look better than the brown ones common on the American pistols.

The first Sporters had a simple blade foresight which was push-fit into a slot over the muzzle, similar to the foresight on the American Sporter, though eventually this was discarded in favour of a cast alloy foresight secured by a screw into a threaded hole.

The first Sporters had the old-fashioned American style rearsight but this was not liked by British buyers. Phoenix then began making the Sporter with a dovetail for rearsights and for a short time, a Weihrauch rifle rearsight was fitted. They then followed that with their

own, simpler rearsight made from alloy. These rearsights can be easily distorted by over-tightening the mounting screws. Phoenix even offered these pistols with scopes and even, amazingly for 1990, a laser sight, it cost £295. Ouch!

Some of the early Phoenix Sporters were rumoured to have been recalled by the factory due to being too powerful and exceeding the six foot pounds legal limit. This was possibly due to Phoenix using American parts. It seems that in America, Hy-Score did offer mainsprings in 'standard' and 'strong' varieties. Possibly some of these 'strong' springs found their way into some Phoenix Sporters resulting in higher than usual power. It seems that the power was somewhat variable though, as one



One of the last Phoenix Sporters; this one has a repeater breech and lacks the superfluous 'engraving' stamped into the right hand side of the frame above the trigger

reviewer criticised the Sporter for only giving about 3.5 ft/lbs.

A friend of mine was given a tour of the factory in 1990 and told me that the build quality of these pistols was just superb. Sadly that had a downside, which was that these pistols were very expensive compared to other airguns of the time. The Sporter was selling for £75 with one barrel while the cased sets with both barrels, moderator and key were priced at £110. At the time, Webley Tempests and BSA Scorpions could be bought for around £50. Webley Vulcans and BSA Mercuries also costed less than £75, so it is understandable that people found the Sporter expensive.

Although some people loved them, they were just too expensive to sell in high enough numbers, and sadly, production ceased again for good in 1991.

The last of the British Hy-Scores were sold with the six-shot repeater mechanism, probably sourced from the stocks of American made parts that came with the tooling. They also lacked the unnecessary engraving on the side of the trigger housing, which I have never liked. Having said that, it is about the only



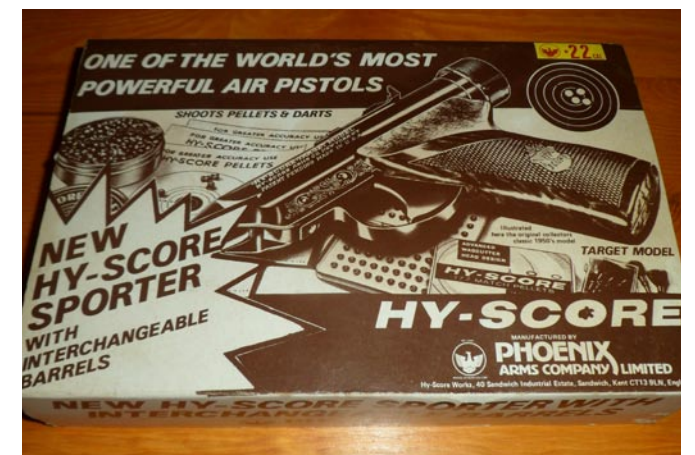
A detail of the Sportster muzzle showing the knurling on the barrels

thing about these pistols that I don't like! I'm lucky enough to own two American Hy-Score Target models, a Sportster and two Phoenix Hy-Score Sporters. The Phoenix Hy-Scores in particular are definitely among my

favourite pistols. Hy-Scores in general are great fun to shoot, they are robust, long-lasting and well-made air pistols, but the British-made pistols have the edge, having all the benefits of the American models, but also a better finish. They are all quite sought after amongst collectors. The 'Target 800' models are much more common, with the Sportsters

being quite rare outside America. The short production run of the Phoenix Sporters gives them rarity value, while their reputation for high build quality and good looks also add value. A good or excellent Phoenix pistol will be worth upwards of £80 while a mint and complete cased set could well be worth more than double that.

So there you have the unusual story of the Hy-Score, an American air pistol partly inspired by a British design, sold with British pellets, and finally made in Britain. A possibly unique story in airgun history, but there is one more thing that makes the Hy-Score unusual: Andrew Lawrence wrote a detailed account of the research and development that led to the design of the Hy-Score pistol. It is recommended reading if you are interested in airgun history, design and manufacture.



The Phoenix Hy-Score box recycled the old American artwork

When collectors meet

The Melbourne Marksmen's (Royal British Legion) Airgun Fayre in the British Midlands was held on Sunday 16th June 2013. Apart from raising a significant sum for charity, the event was a rare chance for UK collectors to meet, sell and swap airguns, as well as shoot bell and paper targets. One of the organisers reports.

Melbourne Marksmen is a bell target club that was formed three years ago by a number of air rifle collectors who were interested in the sport of six yard bell target shooting. The club has 30 members

who meet weekly at the Royal British Legion (RBL) Club on Derby road at Melbourne (Derbyshire) and organise club and interclub competitions on a regular basis.

Three airguns fayres have been organised in the recent past. The first one was at Leicester and District Small Bore Rifle and Pistol Club's ranges at Groby six years ago and then Sutton Coldfield Rifle



Club ran two of these fayres more recently.

This fayre was organised by the members of Melbourne Marksmen to raise money for the RBL Poppy Appeal and to generate interest in collectable air rifles from the pre-WW2 era to the more modern rifles used today and also to provide some target shooting on the day for visitors to take part in.



Fourteen tables were purchased by airgun collectors to sell part of their collections of airguns and spares and the club also ran a 'bring and buy' stall for visitors to sell their airguns and accessories.

Shooting on the six yard range

began at 11 am and the fayre continued until late afternoon. In addition to the buying and selling of airguns/airgun spares, the club held air rifle competitions for young and old, in fact for ages seven to 80. The 7-12-year-olds competed outdoors using a toy type plastic rifle,

shooting soft sponge missiles onto a target and the 12-18-year-olds shot low-powered air rifles adapted for use by youngsters. Prizes were awarded to all the 40+ youngsters who took part.

For the more mature shooters





(over 18), bell target competitions were organised throughout the day on the club's six yard indoor range with prizes kindly donated by several very generous sponsors, including Solware Ltd, T. W. Chambers, Uttings, and Pellpax.

Visitors were encouraged to bring their own air rifles to compete for the many prizes on the day but club guns were made available for those without a rifle. The shooting was supervised by experienced club members and was carried out in

accordance with the club's safety rules.

The bell target competitions were organised for different classes of air rifle. All rifles were .177 calibre and were fitted with open or diopter

sights. There was a bell target class for pre-War spring powered air rifles, a class for classic spring powered air rifles (that included the early recoiling 10 metre match German air rifles such as the Weihrauch break-barrel 55 models and the Walther LG55 variants) and an 'open' competition for any air rifle. The 'open' class included the more modern match single stroke pneumatic rifles and pre-charged dedicated 10 metre target guns. These competitions proved very popular with both experienced shooters



and with the general public visiting the fayre.

There were many positive comments on the day regarding just how well these competitions were organised and enjoyed and this was appreciated by those involved in managing the events. Prizes were awarded throughout the day to the shooters achieving the best scores.

The main attraction on the day was the sales section and it was the huge selection of vintage, classic and modern airguns that most people attending were interested in. The number of air rifles and pistols on display for sale exceeded all our expectations and the fayre was very busy during the day. Our experienced caterers carried out their duties providing BBQ food during the day and the whole event went very smoothly, with numerous people commenting on how they enjoyed the event. What was obvious was the interest many people have in collecting and using the older type of airguns that perhaps some owned in their youth.

The types of guns for sale included most of the popular British Webleys (including two very nice Service Mk11's), some superb examples of BSA break barrel and underlever airguns covering 100 years of production, and custom British rifles by Venom and John Bowkett. A very rare .25 cal Improved model D sold on the day and at least 2 air-canes sold, one straight and one cranked, with pump, key and ammo mould. Another star BSA on sale was a rather special Light Pattern priced at just under £2,600.

There was a big choice of German airguns such as Weihrauch rifles, Walther spring air rifles, Original/Diana break barrel and sidelever rifles. Anschütz, Feinwerkbau and a number of BSF's were also up for sale. In fact there were many rifles and pistols that I did not even recognise.

I saw several superb American, Spanish and Japanese pneumatics that were for sale and more modern

pre-charged rifles by Air Arms and Daystate. Rarer guns included Giffards.

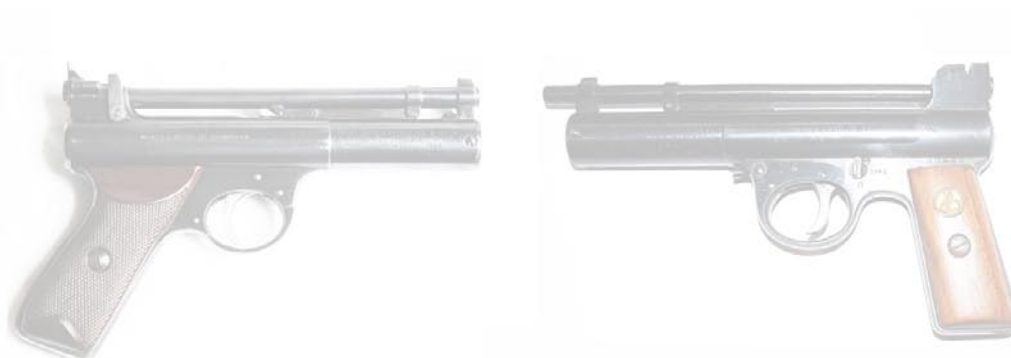
Pistols again included many of the Webley range including Juniors, Seniors, Premiers, Mk1's and the more modern Tempests, Hurricanes, and the ever popular BSA Scorpions. A good choice of superb Walther LP53 spring pistols were on display including boxed examples, a mint boxed Walther LP3 SSP, HW 45's, various Crosman and Hammerli pistols, a boxed Hy-Score model 800, and many others.

In addition to the takings on the day by the RBL staff, the fayre itself raised £700 for the RBL Poppy Appeal and a presentation of the cheque to the local representative was carried out at our weekly club meeting on Thursday 20th June.

The feedback from those who attended has been fantastic and

demonstrates a demand for similar events in the future. Many of the visitors left the fayre with air rifles and air pistols they purchased and hopefully this will boost our club membership and increase interest in airgun target shooting. A number of enthusiasts have in fact stressed that they have never seen such a collection of airguns for sale and have requested a repeat of this fayre next year. We hope to oblige and the club would like to offer our sincere thanks to the sponsors and everyone who had a part in this event.





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The sport of airgunning is under threat from many quarters in several countries and this is likely to have an impact on collectors since it will inevitably involve restrictions on airgun ownership. The hobby will shrink and die if new collectors are unable to come on stream. Please get involved in whatever efforts are ongoing near you to protect freedoms to own and shoot airguns. It is in everybody's interest that you do this!

