

B·S·A
RIFLES
AND
SHOT GUNS



B.S.A.
RIFLES
AND
SHOT GUNS

The Birmingham Small Arms
Co. Ltd. Birmingham, England.

PRELIMINARY CATALOGUE

of

**Military Rifles, Target Match Rifles,
B.S.A. Patent Rifle Sights,
High Velocity Sporting Rifles,
B.S.A. Miniature Bolt Rifles,
Martini Miniature Rifles,
B.S.A. Air Rifles,
B.S.A. 12 Bore Hammerless Shot Guns,**

Manufactured by

The Birmingham Small Arms Co. Ltd.

BIRMINGHAM — — — — SMALL ARMS FACTORY, SMALL HEATH.
LONDON OFFICE — — — — 27-28 PAUL MALL, S.W.

*Also Manufacturers of the Lewis Automatic Air Cooled Machine Guns, of the Celebrated
B.S.A. Cycles and Specialities and B.S.A. Engineers' Small Tools, etc.*

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July, 1919.



MAKERS OF RIFLES FOR
H.M. WAR DEPARTMENT



AND OF THE FAMOUS BSA
CYCLES AND MOTORS

Silk & Terry Ltd., Birm.

The Birmingham Small Arms:
Co. Ltd. . . . Birmingham, England.

Introductory Notes.

The prices in this Catalogue are subject to alteration without notice.

ORDERING GUNS AND RIFLES.

As manufacturers we trade through the regular wholesale and retail gun and rifle dealers only.

PACKING AND DELIVERY.

When not obtainable locally, new complete guns and rifles are packed and delivered free by us to any place in the British Isles. Customers must pay for packing and carriage on rifles repaired, re-barrelled or converted. The delivery sheet should be marked "not examined" when parcels are delivered by the railway company. The goods should then be inspected carefully, and if found to have been damaged in transit notice should be sent at once to the carriers and to us.

ARMS BUYERS ABROAD.

Our guns and rifles are sold by retail traders in most towns in the Colonies and foreign countries. When difficulty is experienced in securing the aid of such dealers, orders should be sent direct to us with a remittance. B.S.A. Arms for abroad are delivered free on board ship at any English port. Packing (tin or pitch paper lined) is charged extra at cost price. Freight and duty are charges which must also be borne by the purchaser. Prices for arms delivered will be quoted when desired.

REPAIRS.

We repair weapons of our own manufacture only. Arms for repair should be packed securely and sent carriage paid, addressed to "The B.S.A. Company Limited, Rifle Department, Small Heath, Birmingham." When a part only has to be renewed it is best always to send the old part, or a rough sketch of it. Where possible the local gunmaker should be consulted, as he may be able to effect the repair at once, so saving time and expense. The postal regulations limit parcels to 11lb. in weight, 3ft. 6in. in length, or 6ft. in length added to girth. It will generally be found convenient to send rifles by rail.

EXCHANGE.

We have no means of disposing of second-hand arms, and cannot, therefore, take them in part payment for new ones. They should be offered to the local retailing gun dealer, who will usually be found ready to bargain.

AMMUNITION.

We do not make or supply any kind of ammunition with the exception of "B.S.A." Pellets, which are specially made for the B.S.A. Air Rifle. It will generally be found that the retail gun dealers are well informed regarding the supply of cartridges, and they should always be consulted when difficulty is experienced. When sending specimen cartridges to us, it must be borne in mind that **it is by law a punishable offence to send them through the post.** They must be sent by rail, packed in a strong box, and declared "Safety Cartridges, Division I., Class VI."

GUARANTEE—B.S.A. QUALITY.

All B.S.A. Arms are very carefully gauged and viewed in every detail, and are thoroughly tested for accuracy of shooting. Arms passed as perfect in every respect only are sent out of the factory. Should there be any cause for complaint, particulars should be sent to us at once, so that the case may be investigated fully, and, if need be, the arm returned. The B.S.A. Trade Marks illustrated constitute a guarantee in themselves when they are stamped on a rifle. "B.S.A. quality" is of world-wide fame.



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B.S.A. GUNS AND RIFLES

B.S.A. WORK DURING THE GREAT WAR

NEARLY five years of unparalleled achievements in producing the huge quantities of Lee-Enfield Military Rifles and Lewis Machine Guns required for our forces have left the B.S.A. Company with an organisation more wonderful than ever and with a modern gun and rifle making plant of great capacity. An illustrated record of B.S.A. War Work has been published. Copies may be had on application to us. All that need be said here is that 1,310,000 **military rifle component parts were produced each week** during the last two years or so of the war. The manufacture of this great quantity involved 15,050,000 machining operations each week. Much greater totals were connected with the production of Lewis Machine Guns, B.S.A. Cycles and Motor Cycles and Aeroplane Parts.

This great organisation and plant are now fully occupied with the manufacture of the various B.S.A. "Peace" Rifles and the new B.S.A. Hammerless Shot Gun, which are briefly described in the following pages. A more complete catalogue will be published shortly.

Government military rifles and machine guns are made under the supervision of a large staff of Government "viewers," whose duty it is first to test the material physically and chemically, and then to gauge every part during the manufacturing processes. The barrel, for instance, is viewed and gauged ten different times between first and last operation. A variation of one thousandth part of an inch from the correct dimension means the rejection of the whole component. In the manufacture of the present pattern British Service Rifle, 1250 different gauges—some very costly—are used to check accuracy of manufacture. The Lewis Machine Gun uses no less than 2,600 different gauges. The gauges are made true to standards, which are correct to one ten-thousandth part of an inch to given dimensions.

These rigorous conditions have formed the foundation of the wonderful B.S.A. system of viewing applied in the production of the variety of guns and rifles supplied to buyers in all parts of the world. **Strict "viewing" (examining) of B.S.A. Guns and Rifles.** for target and sporting purposes by way of "private" as distinct from "official" trade. (Incidentally it may be mentioned that it is also at the bottom of the great success of the famous B.S.A. Cycles and Motors). It has become a tradition in the B.S.A. factory that the best work only is tolerated, and it is strange to notice how quickly mechanics new to the place feel it, and endeavour—always with success if they eventually become permanent employees—to live up to it.



MAKERS OF RIFLES FOR
H.M. WAR DEPARTMENT

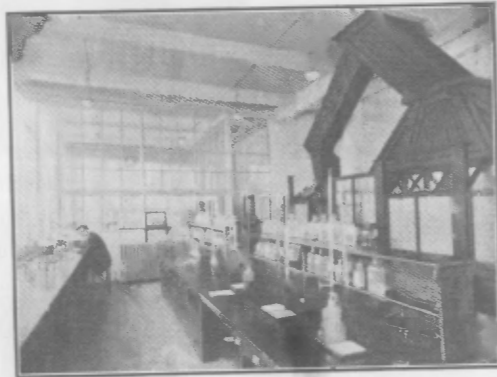
AND OF THE FAMOUS B.S.A.
CYCLES AND MOTORS.



The Birmingham Small Arms Co. Ltd. Birmingham, England

No matter what may be the price of the rifle, one class of material only is used in its manufacture—the best procurable. The different kinds of steel which have to be used according to the nature of

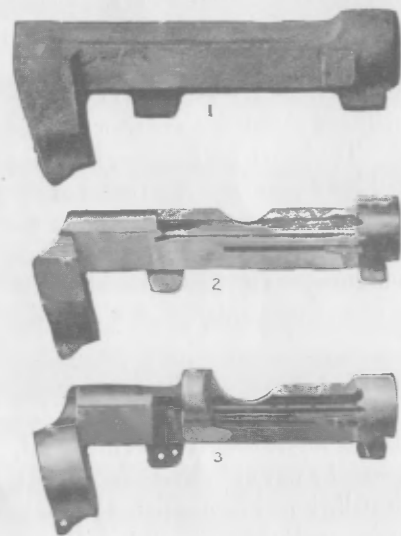
The best material only used in B.S.A. Rifles. the work the various parts in a rifle are called upon to perform, are very carefully selected by experienced experts who have the most modern apparatus at their disposal for testing the metals to discover their exact physical and chemical properties. These experts are housed in a laboratory, one department of which is here illustrated.



Part of the Main Chemical Laboratory.

B.S.A. gun and rifle users should ask for a free copy of the interesting illustrated booklet called "The Employment of Science in the production of B.S.A. rifles and guns."

The "timber" of the stock and fore-ends of B.S.A. rifles is of selected walnut. The stocks of even the lowest-priced B.S.A. rifles are all well seasoned, nicely grained, and of good colour.



B.S.A. rifles are made by means of elaborate modern "repetition" machinery, which has constantly to be renewed as improvements are made. A great quantity of machinery has to be employed, because generally speaking one machine is occupied all the time with one cut or operation. Many automatic lathes are, however, used. These sometimes do half a dozen different operations at once.

In most cases the operations on one part are so numerous that they have to be dealt with on a corresponding number of different machines. The Lee-Enfield rifle action body illustrated is a case in point. The rough forging (Fig. 1) weighs nearly 5 lb. It is reduced by means of 149 separate drilling, milling, and other machining operations to the finished article (Fig. 3), which weighs 1½ lb. only. The half-finished body is shown in Fig. 2.

The nose cap of the same rifle—the Lee-Enfield Military Pattern Short, Mark III.—is also illustrated (Figs. 4 and 5). Operations totalling 69 are necessary to convert it from forging weighing 2½ lb. to finished component of 6oz. weight.



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT

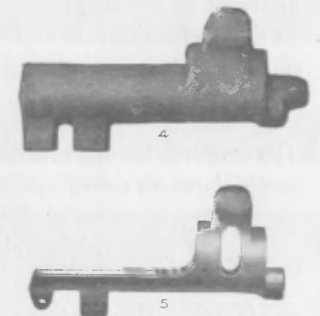
AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England

The machine plant and the machine fixings and tools necessary to make one type of rifle on the repetition principle often represent a capital outlay of several thousands of pounds. Once the complete

Comparative cheapness of B.S.A. productions.

plant is established, however, the various components of the rifle can be made to flow very rapidly from the various sections to the Assembling Department where the complete rifle is put together. Although the initial outlay is so heavy, B.S.A. rifles are placed in the hands of the user at a much smaller figure than he would have to pay for a weapon made in any other way. The arms are besides made very much more accurately than they could be otherwise.



The advantage is the B.S.A. rifle buyer's, not only in the important matter of cost, but also in the event of the necessity arising at any

The absolute interchangeability of B.S.A.'s parts.

time for the replacement of a part. A component of one B.S.A. rifle is exactly like a similar component of another arm of the same type. All B.S.A. components therefore, interchange freely. Complete bolts comprising a number of parts assembled are often interchanged from one rifle to another. An interesting incident may be quoted:—a B.S.A. Lee-Enfield Territorial Rifle user, who recently lost his bolt at Bisley, borrowed one from another B.S.A. Territorial Rifle, and straightway put up a score at 200, 500, and 600 yards of 101 out of the possible 105.

In accordance with the terms of the "Gun-barrel Proof Act, 1868," every B.S.A. rifle and gun is submitted to the severe official proof test before it is sold. The proof charge is much heavier than that used

Official proving of B.S.A. Rifles:

in the rifle in the ordinary way. One or more of the Birmingham proof marks,



of which illustrations are here given, will be found on all B.S.A. rifles—on the barrels near the breech end and on some part of the action. It is an offence to sell unproved arms in England. **Colonial buyers, in particular, are advised to look for the proof marks when purchasing arms.**

Care and cleaning of rifles.

Too much stress cannot be laid on the absolute necessity for the **most careful attention to the rifle barrel immediately after shooting is finished.** If a rifle is laid aside even for a short time, the acid products of the combustion of primer and powder are given the chance to start eating into the steel of the barrel.

This acid action is very rapid, and once started it cannot readily be stopped. When pitted by erosion or rusted through neglect, a barrel is useless for accurate shooting, and should be discarded.



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B.S.A. Safetipaste described on page 18, is really remarkable stuff. B.S.A. Chemists have found out the easiest way to neutralize the acid deposits so that instead of the old laborious methods of scrubbing the bore and wiping it with flannel wads until it is absolutely "rag-clean" all that has to be done is to apply a thin coating of Safetipaste to the bore and then leave it. This material fights all the devil out of the steel-eating acid fouling and besides gives the bore protection from moisture in the atmosphere and so prevents rusting.

The length of life of a rifle barrel depends mainly upon the amount of care taken of the bore (see paragraph above on the preservation of bore polish). High velocity weapons, in which .303 and similar ammunition is used, are generally regarded by expert target shots as good for the highest class of competition work up to about 2,500 shots. This does not however, alter the fact that many B.S.A. .303 rifles, which have had in some cases as many as 5,000 shots through them, still group well enough for work of the keenest competitive kind. B.S.A. Miniature Rifles will, with care and the use of good ammunition, last out 25,000 to 30,000 shots quite easily. We have no record of the wearing out by fair means of a barrel of the B.S.A. Air Rifle.

All B.S.A. Rifles are carefully tested and shot before they are allowed to leave the factory. Although our own shooters may be able to group the shots in the centre of the "bull," the sights may need a little adjustment for variations in ammunition or to suit the peculiarities of "holding," or difference in the sight of the buyer. Adjustments may quite easily be made. When testing, use a table rest and a sand-bag support for the barrel of the rifle. If the rifle groups a little high, lower the backsight: if a little low, raise it slightly. Scratches may be made on the sight to indicate the altered elevation adjustment. If the shots group to the right, tap the foresight over to the right or, when possible, the backsight over to the left, using a piece of hard wood as a punch. If the shots group to the left, tap the foresight over to the left or the backsight over to the right. The sights fit in dovetail slots in the barrel and drive out from left to right, and in from right to left viewed from the breech. When adjusting rifles, use the brand of ammunition which will always be used.



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LEE-ENFIELD RIFLE

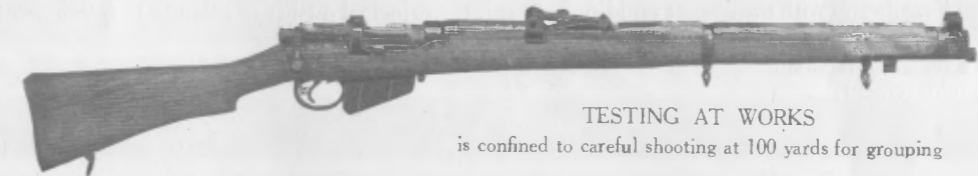
BRITISH SERVICE PATTERN

.303 BORE :: SHORT :: MARK III.

DESCRIPTION

THE L.E. Mark III Short Pattern Service Rifle, as illustrated, is that with which the British Armies in the field were equipped, and it should be well known how quickly it proved its superiority over all others for the trench and short range system of Warfare. At the first battle of Ypres, when our line was held so thinly, the rapid firing was so marvellously effective that the Germans imagined they were opposed by large numbers of machine guns.

One of the outstanding features of the L.E. Mark III Service Rifle is its remarkable immunity to interference from mud, dirt or sand.



TESTING AT WORKS
is confined to careful shooting at 100 yards for grouping

SPECIFICATION

LENGTH Over all 44½ in.
With bayonet 61½ in.
Of barrel to breech 25½ in.
Of stock from trigger to centre of butt end 13½ in.

WEIGHT Of rifle 8 lb. 11 oz average.
Of rifle with bayonet and scabbard 9 lb. 11 oz.

MAGAZINE 10 shot.



Showing Charging of Magazine



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AND OF THE FAMOUS B.S.A.
CYCLES AND MOTORS.

The Birmingham Small Arms
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THE NEW B.S.A. TWELVE BORE -- HAMMERLESS SHOT GUN

THIS new B.S.A. gun is undoubtedly the finest ever offered. It carries no elaborate decoration, but it is the equal in all that conduces to good shooting to the best hand-made gun ever produced. It has the perfect balance, crisp trigger pull, wear-resisting power, sweet functioning and beautiful lines of the best gun.

There are many years of the high-class London gun-making experience behind it. The best features of all types of guns, and several B.S.A. improvements, have been embodied in its design.

The metal is massed where it is wanted—that is, in the action and breech ends. There is plenty of it to give an ample margin of safety, but nevertheless it is so well distributed that the gun “comes up to the bird” easily and with the utmost rapidity. That is the principal quality of balance, the attainment of which in an inexpensive gun is a remarkable engineering achievement.



The most skilful of gun engineers and the most perfect repetition machine tool plant are employed in manufacturing the gun, and as the material for each part is of the highest grade and is most carefully selected for the work

that has to be done, the total result is far and away better than anything of the kind hitherto offered to the shooting public.

Every part is strictly interchangeable, and each gun is tested with heavy nitro proof charges by the officials of the Proof House run under Government regulations. The B.S.A. Guarantee accompanies each gun. Parts damaged except by fair wear and tear are replaced free of charge.



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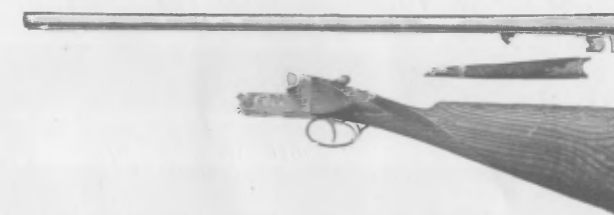
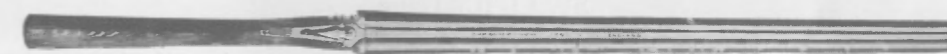
The Birmingham Small Arms
Co. Ltd. · · · · Birmingham, England.

B.S.A. TWELVE BORE -- HAMMERLESS SHOT GUN



SPECIFICATION

- BARRELS.** 28 or 30 inches long. Jessop's fluid compressed steel. Lumps formed solid with the barrels. Right cylinder. Left choke.
- ACTION.** B.S.A. special pattern (Anson & Deeley type). Sears, tumblers and other action parts of chrome vanadium steel. Body of nickel steel. Top lever. Automatic safety. Double bottom lock. The B.S.A. shot gun action is the strongest in the world.
- FORE-END.** Snap-on type. Nicely checkered.
- STOCK.** Straight hand or half-pistol grip. Nicely checkered. Bend at heel 2in., at comb 1½in., length 14½in.
- WEIGHT.** About 6½lb
- BALANCE AND TRIGGER PULL.** Specially attended to, to give this B.S.A. Gun the superb handling qualities of the best hand-made gun.
- INTERCHANGEABILITY.** All parts will be strictly interchangeable.
- PROOF AND TESTS.** Every gun is nitro proved at the official proof house and is carefully tested.



MAKERS OF RIFLES FOR
H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A.
CYCLES AND MOTORS.

B.S.A. No. 4 SPORTING RIFLE

LEE-ENFIELD PATTERN—.303 BORE

THIS rifle is extremely accurate and reliable and is confidently recommended as an inexpensive weapon for shooting medium and big soft-skinned game. The ballistics of the Mark VII .303 cartridge are set out below. This was the cartridge with which the soldiers of the Empire did so much execution in the war. It was shot out of the Lee-Enfield military pattern rifle, nearly two millions of which were made by the B.S.A. Company during the war, and out of the Lewis Machine Guns, many thousands of which were also made at the great B.S.A. Works.

The stock now available of these Sporting Rifles will not last long, so therefore orders should be sent for them without delay.



SPECIFICATION

LENGTH	Over all 44in.	STOCK	Nicely figured walnut, with chequered grip. Length from trigger to centre of butt, 13in.
WEIGHT	7lb.	FORE-END	Walnut, with chequered grip.
BARREL	25in. long, Enfield Rifling	SIGHTS	BACK—100 yards fixed; folding leaves for 200 and 300 yards and tangent leaf for 400 to 1,000 yards. FRONT—Bead. Fitted with Cole's Patent Foresight Protector.
ACTION	Lee-Enfield Bolt Pattern with Safety Catch on Cocking Piece.		
MAGAZINE	Takes 10 cartridges.		

THE .303 MARK VII. HIGH VELOCITY CARTRIDGE

Bullet weight 174 grains
Muzzle velocity of bullet 2450 feet per second.
Striking power of bullet at the muzzle 2317 foot-lbs.



NOTE.—We do not manufacture or supply cartridges

The .303 cartridge is obtainable in practically all parts of the world.



THE BACKSIGHT



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

B.S.A. AIR RIFLES

FOR TARGET AND SPORTING WORK

BORES .177 (No. 1) and .22 (No. 2)

The Utility of Air Rifles

MORE regular enjoyment and more positive pleasure are to be obtained from the casual use of an air rifle than from all other arms put together. To the man who must live within easy reach of his daily work, the air rifle is the only weapon with which regular practice can be obtained without going outside the limits of an ordinary suburban garden.

Problems of Design

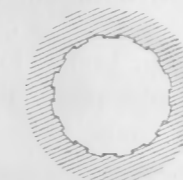
The mechanical problems involved in designing and manufacturing a satisfactory air rifle, have been completely solved in the B.S.A. Model. Its use is accordingly unhesitatingly recommended to those who have in the past stood aloof from air guns on account of their reputation for frequently needing repair, and their hitherto incurable lack of accuracy.

The Only Good Design

The "fixed" barrel system of the B.S.A. Air Rifle involves the use of the patent lever mechanism for compressing the piston spring (see page 13). In practically all other systems the barrel is used for this purpose. Such unfair and violent treatment of the part that actually has to direct the pellet is obviously greatly detrimental to accuracy. The breech joint of the break-down pattern is, besides, bound to become loose sooner or later, and compressed air, which should help to give velocity and energy to the pellet, escapes aimlessly at this joint. The barrel



A longitudinal section of the barrel showing pellet lying in the rifled bore.



Transverse section showing rifling grooves.

and air cylinder of the B.S.A. Air Rifle are fixed rigidly together. Between them is the air-tight pellet chamber consisting of a rotary plug similar to the familiar gas cock. The barrel is "rifled" with the same care and extreme accuracy as is exercised by the Company in the manufacture of their highest-priced target rifles. The rifle is built as well in every respect as the British Service Rifle, many thousands of which are made by The B.S.A. Company yearly. The B.S.A. Air Rifle will, therefore, with reasonable care last a lifetime. The material is of the highest class, and every joint screw is held against accidental movement by a "keeper screw." Every rifle is carefully shot and passed for accuracy by experts before it is allowed to leave the factory.

Summary of Advantages of the B.S.A. System

The most important features of the design of the B.S.A. Air Rifle may be summarized as follows:

1. It has no breech joint through which compressed air can escape.
2. It has an accurately fitting air-tight breech plug, which forms the pellet chamber.
3. "The rotating breech plug has many important advantages, chief among which is the great uniformity of result from round to round." *Arms & Explosives*.
4. The patent separate lever is used instead of the barrel as a spring-compressing lever.
5. It has improved forms of back and front sights.
 6. An aperture or peep backsight can be properly fitted and used on it (by reason of the rigidity between barrel and cylinder)
 7. The barrel is rifled with greatest engineering skill specially to deal with the specially shaped B.S.A. pellets, see page 14.
 8. Every part is interchangeable.
 9. The piston (or main) spring is very easily replaced.
 10. The highest class of steel only is used. The life of the rifle is thus practically everlasting.



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



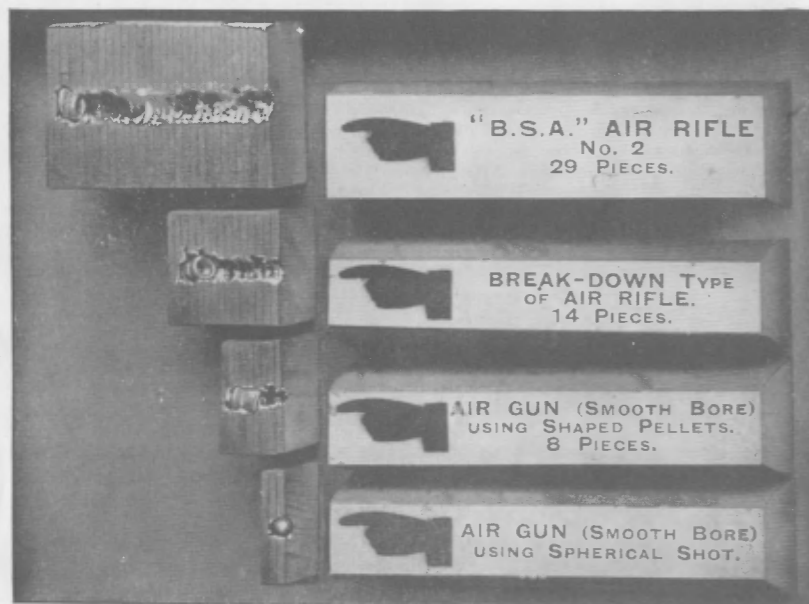
AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England.

B.S.A. AIR RIFLES

WONDERFUL PENETRATING POWER

THE illustration set out below offers convincing evidence of the remarkable penetrating power of pellets shot from the B.S.A. Air Rifle as compared with those discharged by the ordinary air gun.



"B.S.A." AIR RIFLE
No. 2
29 PIECES.

BREAK-DOWN TYPE
OF AIR RIFLE.
14 PIECES.

AIR GUN (SMOOTH BORE)
USING SHAPED PELLETS.
8 PIECES.

AIR GUN (SMOOTH BORE)
USING SPHERICAL SHOT.

A number of lath-like pieces of wood, each $\frac{1}{16}$ th of an inch thick, were arranged in rack form with a space between each. The pieces were, after the shot, placed together for the purpose of illustration. The pictures speak for themselves. The most powerful air gun of other make is, as will be seen, less than half as effective as the B.S.A. rifle.

REMARKABLE ACCURACY

Diagrams made at 10 yards and 50 yards ranges with the B.S.A. .177 bore Air Rifle are reproduced the exact sizes on familiar coins so that the areas occupied by the groups may be taken in at a glance.

50 yards—Prone Position.

A target, 11 consecutive shots, made at 50 yards by an air rifleman at Forest Hill, London. Exact size. Prone position. Shown on a crown piece.



10 yards—Standing Position.

A target made in London in open competition at 10 yards, standing position. Reproduced on a six-penny piece.



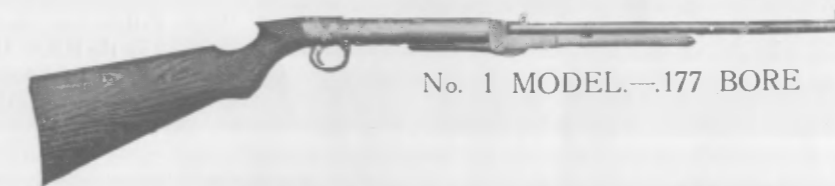
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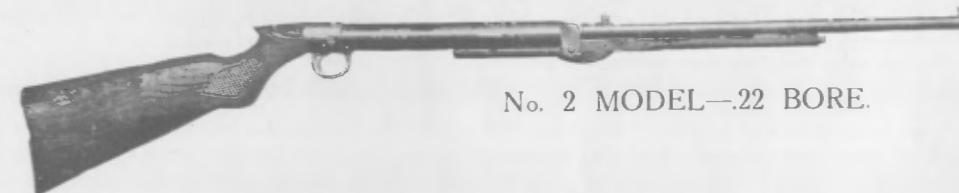
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B.S.A. AIR RIFLES

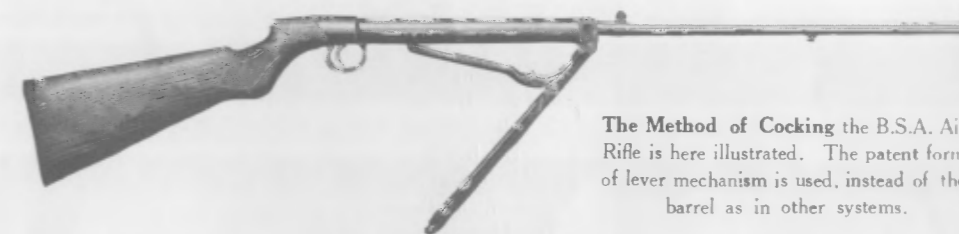
PATENTED IN AUSTRALIA, CANADA, U.S.A., FRANCE AND GT. BRITAIN



No. 1 MODEL—.177 BORE



No. 2 MODEL—.22 BORE.



The Method of Cocking the B.S.A. Air Rifle is here illustrated. The patent form of lever mechanism is used, instead of the barrel as in other systems.

SPECIFICATIONS

No. 1 MODEL		No. 2 MODEL	
BORE177	BORE22
WEIGHT	6lb. 4oz.	WEIGHT	7lb. 10oz.
LENGTH	Over all 39 $\frac{1}{2}$ in. Of stock 14in. Of stock from trigger to butt-end 14 $\frac{1}{2}$ in. Barrel 18in.	LENGTH	Over all 45 $\frac{1}{2}$ in. Of stock 14in. Of stock from trigger to butt-end 14 $\frac{1}{2}$ in. Barrel 20 $\frac{1}{2}$ in.
RIFLING	12 grooves.	RIFLING	12 grooves.
EFFECTIVE RANGE	30 yards.	EFFECTIVE RANGE	50 yards
DISTANCE BETWEEN SIGHTS	15in.	DISTANCE BETWEEN SIGHTS	17in.



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B.S.A. AIR RIFLE PELLETS

Pellets are actually half size of illustrations.



B.S.A. Pellets are made specially for the B.S.A. Air Rifles, and the combination consequently gives the best results.

THE "waisted" form of pellet is the most successful. The B.S.A. is made very accurate despite its wonderful cheapness. It does not vary more than one thousandth of an inch (.0010in.) on the nose, or one and a half thousandths (.0015in.) on the base, either side of the mean dimensions laid down.

The nose is made slightly smaller than the base. The former engages merely with the lands of the rifling. The base is driven to the bottom of the grooves so that the rifling may spin the pellet as it passes through the barrel. Friction in the barrel is practically nil, but the pellet is spun truly on its longer axis. It flies steadily and straight when it leaves the barrel, just the same as the bullets of scientifically designed high velocity rifles.

The corrugations at the waist have no special object, being merely the result of the process of manufacture.



Reproductions half-size of the .177 and .22 Pellet Boxes. The .177 box has the white ensign in the corner, and the .22 the blue ensign.

Imitations should be avoided.



PRICES

For .177 (No. 1) Bore Rifle—1,000 in one box ...

For .22 (No. 2) Bore Rifle—1,000 in two boxes ...

No. 1 pellets are supplied in boxes holding 1,000 each and No. 2 pellets in boxes of 500 each only.

PELLETS FOR BRITISH ISLES.

The inland postages on more than one box of pellets are as follows—

Two boxes 6d. Four boxes 9d. Six boxes 1/-
Three " 9d. Five " 9d. Eight " 1/-

Larger numbers than eight boxes are sent by rail, carriage forward. Packing cases are charged for, but full credit is given when they are returned.

PELLETS FOR ABROAD.

For the use of those abroad who desire to order, the following weights of boxes of pellets are given—

.177 (No. 1) one box of 1,000 .. 1lb. 3oz.
.22 (No. 2) one box of 500 .. 1lb. 2oz.

Weight of packing should be allowed for in estimating the amount of postage to be remitted. The maximum weight carried by parcels post is 11 lb. 8,000 No. 1, or 4,000 No. 2 pellets, boxed, weigh 11 lb.



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England.

B.S.A. No. 1 MODEL

.22 BORE RIFLE

BOLT ACTION—SINGLE SHOT

Patent No. 1944/19.

Registered No. 668490

DESCRIPTION

IN producing and selling the B.S.A. Miniature Rifle, No. 1 Model, all but a very small amount of profit is sacrificed in order to give the large number of users of Miniature Rifles the benefit, at a very low rate, of a properly constructed British arm, substantial in dimensions, safe in use, accurate even for the finest of target competition work, and amply powerful for killing rooks and small ground game. It is admitted by everyone who has handled or used this arm that it is very much in advance of other rifles at about the same price. We must warn intending purchasers not to be induced to accept cheap imitations, because dissatisfaction only can result. See that the piled arms trade mark and the British proof marks appear on the rifle.



SPECIFICATION

WEIGHT 4lb. 1½oz.

SIGHT RADIUS 17in.

LENGTH OF RIFLE Over all 37in.
Barrel 19½in.
Bolt 4in.
Stock, over all 24in.
From Trigger to butt-end 13½in.

DROP Heel 2in.
Face (comb) 1¼in.



Illustration showing action with a cartridge in position ready for pushing into the chamber with the closing of the bolt.



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England.

B.S.A. MARTINI RIFLE

No. 12 MODEL .22 BORE

SUPER-ACCURATE TARGET PATTERN

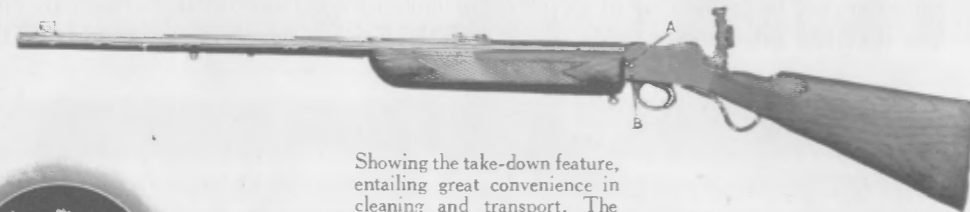
DESCRIPTION

FOR several years past, practically every prize winner in club and open meeting competitions, both at home and abroad, has used none other than this famous rifle fitted with the special B.S.A. No. 8 peep backsight and No. 19 combination foresight.

Its accuracy is phenomenal and it retains this accuracy even after it has shot many thousands of cartridges, providing the barrel is properly cared for.

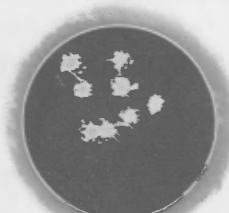
To be successful the short range match rifleman must use this rifle, upon the design and manufacture of which so much special thought and skill has been lavished. Even our American cousins prefer this pattern to any that can be obtained in the U.S. or elsewhere.

It is consistently capable in the hands of a good shot of grouping within a two inch circle at 100 yards or a four inch circle at 200 yards. B.S.A. 22 Target Rifles are not allowed to leave the works unless they conform to a very high standard based on these performances.

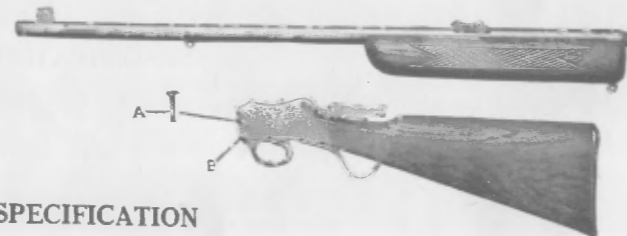


Showing the take-down feature, entailing great convenience in cleaning and transport. The taper pin A forces the barrel into position.

The pin B holds the detachable action in place.



A very fine 10 shot group made at 100 yards with this rifle and U.M.C. ammunition is here illustrated $\frac{1}{2}$ size.



SPECIFICATION

LENGTH . . . Over all 45 $\frac{1}{2}$ in.
Of Barrel, taken down 29 in.
Stock from trigger 14 $\frac{3}{8}$ in.
Fore-end 12 in.

WEIGHT . . . 8 lb. 9 oz

DISTANCE . . . Between Foresight and open Back-sight 19 $\frac{1}{4}$ in.
Between Foresight and aperture Backsight 32 in.

BALANCE . . . 6 $\frac{1}{4}$ in. in front of trigger



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England.

B.S.A. No. 8 APERTURE SIGHT

Patent No. 26943/07

For all kinds of MINIATURE and MID-RANGE RIFLES

THE B.S.A. No. 8 Aperture Backsight illustrated is adapted for practically every type of miniature and mid-range rifle made. It is by far the most popular sight of its kind. Its design and manufacture are perfect and its cost is low. Many thousands are in use, mainly on rifles used for the most accurate of target practice.

The vertical and lateral movements are controlled by very accurately manufactured screw movements. Each $\frac{1}{100}$ th of an inch of movement is clearly indicated by an audible and feelable click. With a sight radius (distance between sights) of 36 in., a movement of $\frac{1}{100}$ th of an inch of the backsight gives a corresponding adjustment of the shot group on the target at 25 yards of $\frac{1}{4}$ in. Such minute corrections may be made with the B.S.A. sight with absolute certainty.

There is no other sight in existence that works with anything like this fine mathematical accuracy. Imagine the microscopically accurate manufacture that permits of the splitting up with absolute sureness an inch of movement into 200 perfectly equal parts. Adjustments are read off on the finely cut vernier scales clearly illustrated on the left hand side of the stem.

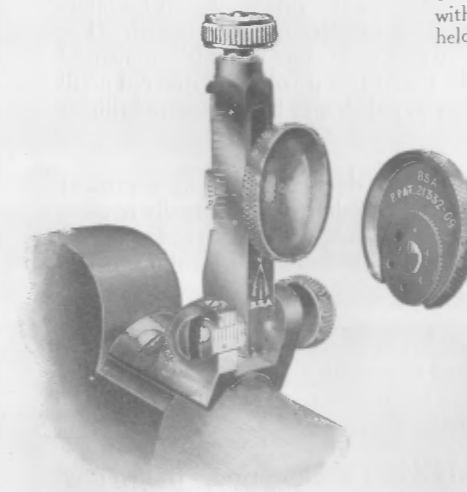
The vertical adjustment may be locked by merely screwing the eyepiece up tightly with the fingers. The sight is as rigid as a rock when in the firing position, being held there by a spring controlled plunger.

INSTRUCTIONS FOR ORDERING.

When ordering, the name of the rifle the sight is intended for, and the measurement, taken carefully as follows, should be given.

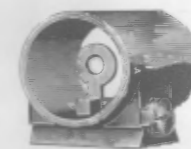
Depress the ordinary open backsight to its lowest position. Then stretch a piece of cotton from the tip of the foresight to the position above the grip of the rifle at the point where the No. 8 sight is to be fitted. The cotton must pass through the V. of the open sight. The measurement required is the height of the cotton above the top of the grip or part of the rifle where the sight is to be fitted.

PRICES—No. 8 Sight, with wind-gauge
No. 8a Sight, i.e., fitted with 6-hole eyepiece
Patent 6-hole eyepiece only
Spare single-hole eyepiece



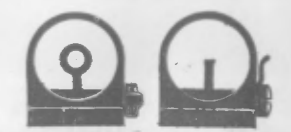
B.S.A. No. 19 SPECIAL FORESIGHT

For TARGET and SPORTING RIFLES of all kinds.



This wonderful little sight is used chiefly in conjunction with the B.S.A. No. 8 Aperture backsight, but it can be used with advantage on any kind of sporting or target rifle.

When using this sight the shooter has a choice of either a broad blade or thick ring (see as illustrated). The alternative angle may be brought into position by means of the external lever shown on the sight.



Thick ring up
Blade up



MAKERS OF RIFLES FOR H.M. WAR DEPARTMENT



AND OF THE FAMOUS B.S.A. CYCLES AND MOTORS.

The Birmingham Small Arms Co. Ltd. Birmingham, England.

B.S.A. FIREARM "SAFETIPASTE"



THE arduous process of scrubbing out the barrels of modern high velocity firearms is a thing of the past now that science has been employed by the B.S.A. Company to such effect in the invention of the new substance which is called the B.S.A. Firearm "Safetipaste." Immediately after firing, the bore of the barrel has merely to be coated thoroughly with this preparation, and by reason of the proved fact that it renders the acid and other products of combustion quite harmless, the rifle may then be safely put aside for any period, no matter how protracted. The bore has simply to be wiped out before firing is commenced again. It will then be found that it will have suffered no ill effects, and indeed that its polish may be even more brilliant than before.

B.S.A. Firearm "Safetipaste" does not make a nasty mess of the hands. Its saponic and alkaline nature actually renders it a fit medium whereby the hands may be washed. It will also keep any bright steel article bright—just a thin coating does it.

ABOLISHES LABOUR. Safetipaste immediately kills the erosive fouling that spoils the bore if left therein. No arduous scrubbing is necessary. The bore has merely to be coated with Safetipaste.

ABOLISHES ANXIETY. Firearms so treated may safely be left for any length of time. There is no need for occasional examination. The bore will be as brilliant as ever when the Safetipaste is wiped out.

FOR PRESERVING BARRELS OF RIFLES, SHOT GUNS AND PISTOLS

B.S.A. FIREARM "SAFETIPASTE" is also sold in 1/2 lb., 1 lb. and 5 lb. tins for the convenience of Rifle Clubs, Armourers, etc.

Sold in collapsible Tubes, size as illustrated. Inland Postage extra.



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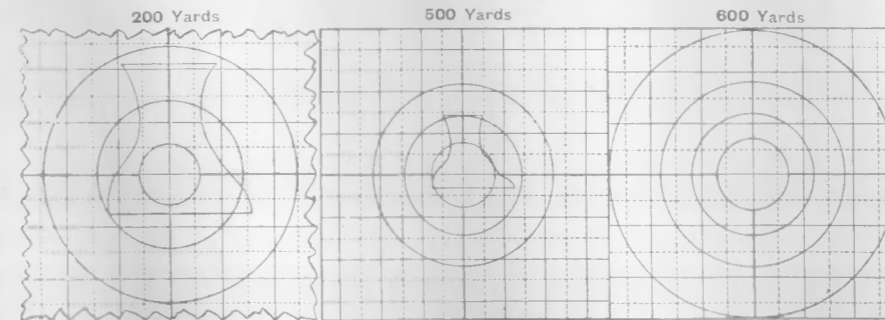
B.S.A. RIFLEMAN'S SCORE REGISTER

1919 Edition.

Specially designed for use with Long L.E. Rifles with aperture sights, and Short L.E. Rifles with open sights.

BISLEY competition conditions are not altogether like those of the years immediately preceding the war. The most important competitions—The King's, St. George's and Queen Mary's—must this year be shot with the military pattern short L.E. rifle as issued, and they are—quite rightly—thrown open to everyone who is serving or has served in His Majesty's forces. In other competitions the long or short rifles fitted with aperture sights may be used.

The B.S.A. Score Register has consequently been redesigned to facilitate the registration of shots and correction for those out of the bull with either long L.E. rifles fitted with B.S.A. No. 9 aperture backsights or with short rifles and open sights. Not only are all the old scientific features based on the minute of angle retained, so that no matter where a shot not of the highest value may be marked the correction will without calculation at once be apparent, but instructions are also included whereby the sighting of a short rifle may easily be checked, and its throw allowed for.



A Score Register containing these details is absolutely necessary this year, because sighting shots are not to be allowed. Now that the first shot counts it is necessary that the utmost help should be accorded the rifleman to help him to gauge every factor that may affect the flight of the bullet. This the B.S.A. Register does. A bad first shot may ruin an otherwise excellent shoot.

SHORT RIFLE WITH OPEN SIGHTS

The following shows the effect on target of various slight adjustments at the respective distances. Rises between ranges will be found on page 13.

200 to 250 ... 3 ins.	400 to 450 ... 4 ins.	500 to 550 ... 5 ins.	600 to 650 ... 6 ins.
250 to 300 ... 3 "	450 to 500 ... 5 "	550 to 600 ... 6 "	650 to 700 ... 7 "
300 to 350 ... 4 "	500 to 550 ... 5 "	600 to 650 ... 6 "	700 to 750 ... 7 "
350 to 400 ... 4 "	550 to 600 ... 5 "	650 to 700 ... 6 "	750 to 800 ... 7 "

Target divided into 2 inch squares Target divided into 5 inch squares Target divided into 8 inch squares

ELEVATION																															GRAND TOTAL
WIND																															
BORE																															
EVENT	500 YARDS TOTAL										500 YARDS TOTAL										600 YARDS TOTAL										
DATE	TIME	PLACE	WEATHER										TARGET NO.																		
			200 YDS					500 YDS					600 YDS																		

200 (1 Min. of Angle = 2" - Normal Elev. 6 Mins. Rise from zero 9 Mins. 500 (1 Min. of Angle = 1/2" - Normal Elev. 26 Mins. Rise from 300 yards 17 Mins. 600 (1 Min. of Angle = 1/2" - Normal Elev. 37 Mins. Rise from 300 yards 9 Mins.

PRICE : IN GREEN CLOTH BINDING CONTENTS :

NOTES BY MAJOR J. BOSTOCK (K.O. Yorks. L.I.), School of Musketry, Hythe. **Foundation Principles of Shooting.**—Position, Holding, Slings, Aim, Trigger and release, Details of importance, Rapid shooting. **The King's Prize, 1919.**—A National Skill at Arms Movement, Local Rifle Organisations. **Altering on the Target.**—Elevation Tables, Exact Reproductions of all N.R.A. Targets, Illustrations of N.R.A. Marking, Digest Page for Recording Shoots or Practices **Sighting.**—Zeroing, Elevation, Direction



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