

the striker. By means of a loose collar on this rod, and an ingenious arrangement which will be understood by reference to the section shown in Fig. 197, the rod is caused, after striking, to rebound into the tube, and so leave the sliding breech-block free to move up and down. This arrangement has the advantage that it places the hammer and mainspring in a closed tube, apart from the cartridge, and out of the way of wet, smoke, or dust. The rebound action removes the danger of accidental discharge in loading, to prevent which intercepting bolts are needed in most automatic guns.

The external lever is placed on the right side of the frame, and is thrown downward by the thumb of the right hand, when it is desired to open the breech, and raised again by the forefinger. A spring bears on the axis of this lever in such a way that when a part of the upward or downward movement is effected by the hand, the pressure of the spring completes it. The position of this lever presents the advantage that the rifle can be reloaded in any position of the rifleman—erect, prone, or supine—without removing the butt from the shoulder or much change of the position of the hands, and that the lever is not liable to be impeded by grass or twigs, as is the case when it is placed underneath the gun. The automatic cocking of the lock is effected by the same downward movement of the side lever. The arm on the axle, which lowers the breech, carries also, pivotted to it, a bar by which movement is given to the tumbler, and the lock brought to full cock.

An important improvement is in the striker, which plays freely in the breech-block without a spring. It is provided with a second parallel pin sliding in a hole in the block, and so placed that, should the striker from any cause fail to come back into the block after the discharge, the arm which lowers the latter comes first against the end of this pin, and

compels the striker to retire into its place before it commences to lower the block.

This invention remedies the defect to which all sliding block rifles, that depend upon a spring to retire the striker, are liable, namely, that when the striker becomes stiff or sticks in the cap, and the spring is unable to withdraw it, the breech cannot be lowered, and the rifle is useless.

The lock of this rifle, which is very simple, is fitted with a novel arrangement of the sear and trigger, which is the subject of a separate patent, and applicable to all gunlocks. Its object is to secure a safe full cock combined with a trigger pull which will be easy to the finger. The trigger when pressed moves a short distance, and lifts the spring which holds the sear pressed into the bent or notch in the tumbler; it then touches the sear, the contact being easily felt, and when the aim is perfected a slight additional pressure discharges the arm. On the other hand, when quickly pressed, no appreciable delay is experienced, but the chance of jerking the rifle is much diminished.

The extractor has an accelerated motion, which throws the fired cartridge shell clear of the gun when reloading rapidly. The block and trigger plate are easily detached from the action for the purpose of cleaning, oiling, &c.

The description of the action here given refers to the lettered figure (197).

CHAPTER VI.

MANAGEMENT OF THE TARGET RIFLE.

THE following remarks must not be taken as in any way fully covering the important precautionary measures upon which the successful use of the target rifle in match shooting so largely depends. That the soldier in actual warfare may not be able to put in practice some of the minutiae, presently to be described, is no reason why in competitive shooting these points should not receive due attention, assisting as they do in bringing out to the fullest extent, the powers of both the rifle and the man. I regret that the limits of space prevent my treating as fully as I should wish, the very interesting questions that are in this chapter only cursorily touched upon.

To proceed at once with our subject: the first point to be considered is that of

POSITION IN FIRING.—The regulations issued by the Council of the N.R.A. prescribe several different positions of the body in firing at various distances, as is well known; and it is of the greatest importance that the shooter should be able to display his ability in these various attitudes of the body, from a military point of view, which requires a considerable blending of physical training, together with skill in the use of the rifle. To thoroughly master each of these positions, those of firing standing, kneeling, prone, and supine (or "back position"), a considerable amount of time and perseverance is required, and no effort should be spared by any one desirous of obtaining the best results in his firing, as all riflemen do, to adapt himself to these positions so com-

pletely, that no perceptible change or variation in any position can be detected when firing at either one time or another. When a man, for instance, fires from the knee, upon one occasion holding his rifle in a certain manner and contorting his body in one style of position, and upon another occasion materially varies these details, can it be expected to be otherwise than that under such circumstances the firer should suffer embarrassment in consequence of what appears to him an unaccountable difference in his firing? The same remarks apply to the other varieties of position, the effects of a changing and uncertain attitude only proving more disastrous as the range fired at increases in distance.

No better groundwork can be found for the three positions of firing—standing, kneeling, and prone—than the well-known “Hythe” instructions as to position, as taught in the Army; but every man can more or less modify these rules to suit his own bodily conformation, and time spent in position drill for the purpose of discovering the little points in these positions that appear to be of value in individual cases is time well spent. Several, if not most, of our most successful rifle shots spare no pains in this particular matter, not only in acquiring their positions in firing, but in keeping up such an amount of drill as enables them to retain what has cost so much pains to acquire. With regard to the “back position” in firing, now so universally adopted at the longer ranges, there can be no question as to its great superiority in assisting accuracy of fire, though objections probably exist against its employment at the shorter ranges for military reasons.

Some time ago several varieties of the back position were in use, and occasionally some of these are seen now; but one particular style of this position seems to be likely to supersede the rest.

It is difficult without illustrations to give a thorough idea of such a position, but the one I allude to is that in which,

*
while the right hand grasps the rifle in the usual place, the left hand is applied near the "heel" of the stock, the head of the firer receiving support and steadiness from his seizing the cuff of the left sleeve with his teeth; a band or strap is generally fitted loosely over the sleeve cuff for this purpose. The forward part of the rifle is rested in a fork, formed by the legs of the firer as usual. I may give as an illustration the statement made to me by one of our prominent rifle shots "that to obtain his present kneeling position had cost him nearly two years of practice;" this shows conclusively what pains are and must be taken to acquire perfection in what appears at first sight a very subordinate detail in the art of rifle shooting.

AIMING.—The position of the firer being sufficiently perfect to enable him to hold his rifle steadily when pointed at the target as in the act of aiming, we must next consider a few points bearing on this latter process. Of course in the case of ordinary sights it is impossible for the eye to focus simultaneously, or to see with an equal degree of clearness, the three objects involved in the act of aiming at one and the same time. Any effort to do this will be invariably attended with "blurr," or want of clearness of definition, with one or more of the three objects (these being the bar or notch of back sight, the tip or cone of front sight, and the bullseye or point of aim upon the target). What actually does take place is that the sights being brought into approximate alignment, the eye, by an almost instantaneous change of focus, flashes from point to point, and satisfies the firer of the correctness of his aim. He then should be so steady in his position as to be able to get off his shot without disturbing the laying of the rifle in the slightest degree.

When the eye of the firer is incapable of this power of rapidly changing its focus, the man labours under a serious disadvantage as a rifle shot, whatever his other qualifications

in this respect may be. During the last few years it has become the fashion to assist the eye in aiming by the use of colour upon the sights. At first any colours were allowed to be used, and men were to be seen with sights painted partially red, blue, yellow, and a combination of these colours; but it is questionable if the introduction of these primaries offers any substantial advantage over mere black and white. At all events, for various reasons, none but the latter are now allowed, and considerable ingenuity is shown in painting the front sight especially with these tints; annexed is shown three of the more popular styles, but the variations in use are numerous. Fig. 198 is one of the earliest plans adopted, and

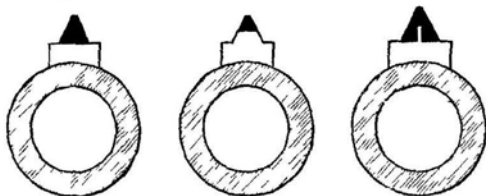


FIG. 198

FIG. 199.

FIG. 200

it will be seen that the "block" is painted white upon its front; while the whole of the cone of the sight, or "barley-corn" as it used to be called, is blackened. The object to be attained by this method of colouring the front sight is the preservation of the angle of elevation, in consequence of the assistance given to the firer in insuring the same amount of fore sight to be taken in when aiming, the cone always being taken in down to the white block, which, when the aim is complete, should be just visible. If it were not for the assistance of the whitened portion of the sight, sometimes in difficult lights some of the block might be included in the aim, thus increasing the angle of fire, and causing a high shot, while the necessity of seeing the white prevents a careless marksman from firing without seeing the cone fully, which would of course reduce the angle and lead to a low shot.

Fig. 199 is simply a modification of the former, made to suit the "fine sight" style of aiming almost imperative at the longer ranges. In Fig. 200 we find that, in addition to affording a check to variations in elevation, an aid in maintaining the lateral direction is attempted; this is effected by a small white line, often only a dot, which is painted upon the centre of the cone. In aiming the visibility of this line above the bar of the back sight checks off the elevation as in the former examples, while the line on the fore sight is made to coincide exactly with the platina line upon the bar of the back sight, thus obviating what has always been a fruitful source of error in aiming with the plain bar of the military back sight, viz., that tendency to wander with the tip of the fore sight to one or other side of the line upon the bar. Every care should be taken to aim with truth and correctness upon the identical spot of the target that it is decided in the mind of the firer is the proper point of aim under the circumstances, for a slipshod style of aiming is easily acquired and difficult to get out of. Some years ago there were many abstruse theories afloat as to the influences upon the aim in consequence of changes of light caused by passing clouds or other causes. Now, I believe, it has been pretty fairly proved that if a man, during such a change, will distinctly make an effort to *see* his sights and point of aim as in his previous shot no material difference in the position of the shot upon the target will be possible. Of course, if from the approach of darkness or fog, he cannot see what he is doing, good results cannot be expected; but many of the calamities occurring to rifle shots in their scoring, attributed to the evil influence of a change of light, may be much more fairly put down to the man's own careless habit of aiming. One thing does affect the aim to an extent not very generally known, and that is, when, from rapid firing or other causes, the barrel gets hot, the radiated heat is communicated

to the air round the front sight, causing, instead of a clear definition of it upon the target, a wavy blurr, and many scores have been spoiled from this cause. While upon this subject it will be well to notice the effect of "mirage" upon aiming with open sights; this peculiar phenomenon is due to a similar cause to the one above mentioned, except that it is the heat radiated from the sun-baked ground, mixed with the moisture that may be raised by evaporation, which produces it, instead of that of the heated barrel, and like the former it causes considerable trouble to rifle shots. Its appearance is well known, and it should be borne in mind that when drifting to the right or left, or streaming upwards, some slight allowance should be made for the effect of its current similar to the allowance made for wind influence. Of course, it does not act upon the bullet as the latter does, but its effect is an optical one, drawing the target in appearance in the direction in which it is streaming, the actual position of the target being a little behind the direction of the stream of "mirage."

LETTING OFF.—The art of discharging the rifle by pressing the trigger without disturbing the aim, would appear at first sight to be an exceedingly simple matter, and one easily acquired, but it is not so. There can be no doubt that perhaps nothing so perplexes the rifle shot during his earlier years of practice more than this particular detail, and perhaps the most difficult part of the business lies in the fact that he is seldom aware of the defect, or to what extent the jerk or tremor imparted to the rifle at the moment of discharge, may interfere with, and, to some extent, upset all the trouble he has taken in aiming, wind allowance, and other preparations for a successful shot. No pains should be spared to get the rifle off in a perfectly undisturbed manner, and much depends upon the position of the hand in firing, that is whether the trigger finger be so disposed as to freely obey the mental

intention to fire the arm; if a cramped and awkward grip of the weapon be indulged in, the free and instantaneous action of the trigger finger is interfered with—this of course may be brought about, especially when a man has a small hand, by the “grip” or “hand” of the stock being of a large and awkward shape, as in the Martini-Henry rifle. In such cases it is found to be almost impossible to use the forefinger upon the trigger in a satisfactory manner, and the second finger is used instead, which gives an increased amount of purchase upon the trigger, this finger exerting more power in this position than the other, but some people with practice, get on very well by firing in this manner. Various modifications of the ordinary trigger have been brought forward from time to time, especially those that are so situated as to be pressed by the thumb of the firer; as yet, however, nothing has surpassed the ordinary arrangement. Probably a false idea of what should be the correct manipulation of the trigger has been caused by the use of the phrase “pull off,” as describing the act of firing, there should be no *pull* by the barrel, but as the aim is completed, the pressure of the finger should gradually increase until the rifle is discharged during a moment of perfect aim. Of course the existence of mechanical defects in the lock action of the weapon, whether they be faults in construction or workmanship, will, if sufficiently pronounced, render it impossible to “let off” in a thoroughly perfect manner, and great practice, care, and mental discipline are required to fully enable the rifle shot always to perform this little but important function properly.

ADJUSTING THE BACK SIGHT for elevation and wind allowance is a most important matter with the rifleman, and could not be performed with the accuracy that modern rifle practice requires if it were not for the aid afforded by a little instrument called a “sight elevator.” There are numerous forms of this apparatus, one of the most approved being here illustrated.

It will be seen by examining Fig 201 that this instrument is constructed so that, by means of a slide to engage with the bar of the back sight and a screw to raise and lower it, the sight bar can be adjusted vertically upon the sight leaf to the desired angle of elevation required. A scale furnished with a vernier is marked upon one edge, as is shown in the engraving. This scale, as I have before explained, is constructed upon the basis of the distance

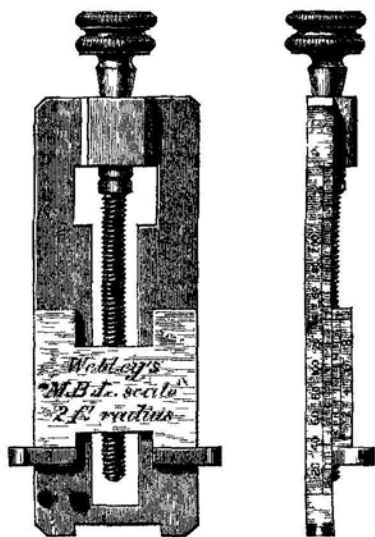


FIG 201. M.B.L. SIGHT ELEVATOR.

between the front and back sight—in this case as most suitable to the M.H. and most M.B.L. rifles the distance is two feet. The scale is so divided that with its vernier it affords us spaces practically equal to one minute of angle upon a great circle having a radius of two feet, or the distance between the sights; consequently we can move the sliding bar such a quantity as will cause a corresponding value upon the target; thus, if when firing at 500 yards, we raise the bar the amount of one point upon our sight elevator, the bullet should strike *five* inches higher than before upon

the target. If this process is applied at 1000 yards, the position of the bullet is *ten* inches higher upon the target, and so on at all ranges where the tangent leaf of the back sight is used. This mode of graduating a sight scale affords an easily remembered proportion between the movement of the sight slide and the corresponding difference of position of the bullet upon the target. A farther use can be made of this pattern sight elevator, as in the accompanying illustrations, where it is shown as applied to the sight leaf of a M.H. rifle,

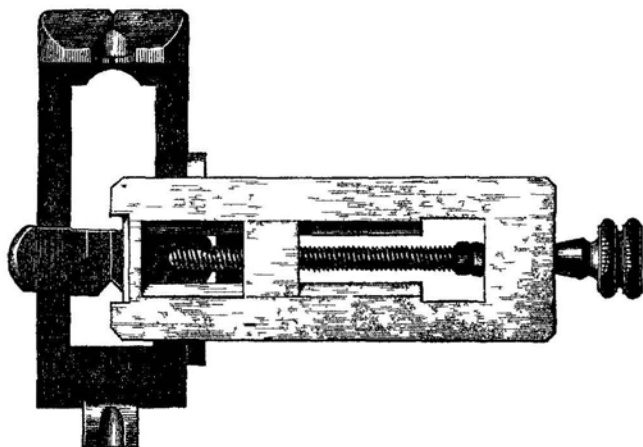


FIG 202

so as to mark on the sliding bar the amount of lateral allowance required by a certain amount of side wind.

If when the sight elevator be applied, as in the drawing, to the sight of a M.H. rifle, and set so that the lower edge of the gauge coincides with the middle line upon the bar, the scale will read about 57 or 60 points as a zero; if it is then set to 39 or 40 it will be found to coincide with the right side line, and at about 77 it will agree with the left-side line, showing that the space usually inclosed between the central and side lines with this rifle is equal to about 19 points on the scale of the sight elevator; but I have shown that these points have a value on the target according to the range at which they

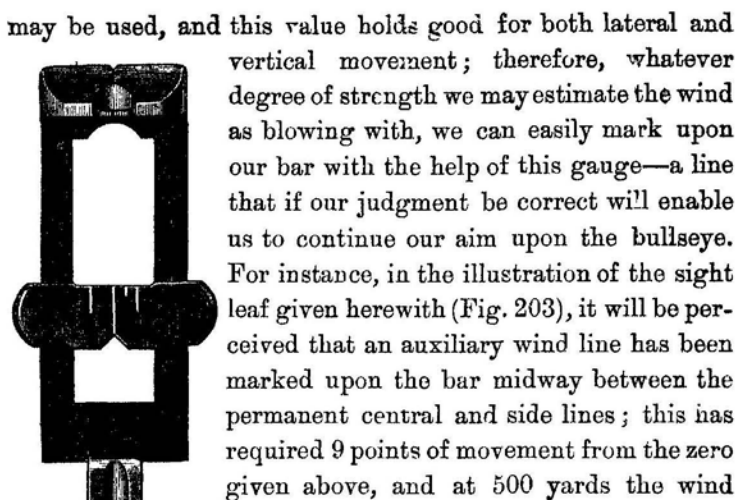


FIG. 203. MARTINI-HENRY BACK SIGHT.

vertical movement; therefore, whatever degree of strength we may estimate the wind as blowing with, we can easily mark upon our bar with the help of this gauge—a line that if our judgment be correct will enable us to continue our aim upon the bullseye. For instance, in the illustration of the sight leaf given herewith (Fig. 203), it will be perceived that an auxiliary wind line has been marked upon the bar midway between the permanent central and side lines; this has required 9 points of movement from the zero given above, and at 500 yards the wind allowance obtainable with such a line would be $5\text{ in.} \times 9 = 45\text{ in.}$, or $3\text{ ft. } 9\text{ in.}$; at 1000 yards, $10\text{ in.} \times 9 = 90\text{ in.}$ or $7\text{ ft. } 6\text{ in.}$, and so on at intermediate ranges.

This rule holds good, whatever the distance between the sights of the rifle may be, though the scale must be cut accordingly, the same scale not suiting rifles having their sights any closer together or wider apart than the radius the scale is arranged from.

I herewith give a table calculated some years ago, of the wind allowances in feet upon the M.H. rifle back sight; it is calculated for every 100th of an inch available between the central and side lines, the total space on each side being approximately one-eighth of an inch.

WIND GAUGE ALLOWANCES IN FEET.

Range.	.01	.02	.03	.04	.05	.06	.07	0 8	0 9	.10	.11	.12
500yds. .	.62	1.25	2.14	2.50	3.12	3.75	4.37	5.00	5.62	6.25	6.87	7.50
300 „ . . . .	.75	1.50	2.25	3.00	3.75	5.00	5.25	6.00	6.75	7.50	8.25	9.00
700 „ . . . .	.87	1.75	2.60	3.50	4.37	5.25	6.12	7.00	7.87	8.75	9.62	10.50
800 „	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00
900 „	1.10	2.25	3.37	4.50	5.62	6.75	7.87	9.00	10.12	11.25	12.37	13.50
1000 „	1.25	2.50	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50	13.75	15.00

Now that the sliding wind gauge bar is allowed to M.B.L. rifles, of course the graduations thereupon should be upon a similar basis, the sight elevator not applying to them for wind gauge allowance—only to plain sight bars like those upon the M.H. rifle.

It would be possible to carry this chapter to much greater length if the several important features in connection with target rifle-shooting were here investigated exhaustively; but as this volume is now much larger than it was intended to be, I must perforce leave these points until some future opportunity presents itself of ventilating them in the columns of the *Field*. I must conclude this section of my labours by again remarking that many important questions I have touched upon in connection with this subject require fuller and further investigation; and my readers must bear in mind that the columns of the *Field* are always open to temperate discussions relating to any and every thing of interest to the modern sportsman. As an appropriate conclusion to this section, I append a copy of the scoring made in the last great shoot of the Midland Rifle Club, being their annual competition for their Club trophy, shot for with M.B.L. rifles, having military sights and no cleaning out or sighting shots allowed, nor coaching, each member, of course, striving for the coveted prize. I believe this shoot is, up to its date, one of the finest exhibitions of the accuracy of the modern M.B.L. rifle that we have on record; and I am glad that, through the courtesy of the hon. sec. of the club, I am able to give it shot for shot as a standard of excellence that will not probably be easily surpassed at present.

MIDLAND RIFLE CLUB.

Date, Oct. 6, 1883. Weather, fine, moist. Light good, fading at 1000 yards. Wind, left rear, moderately fresh, variable at 900 yards. Fifteen shots at each range—shot for shot—no sighting shots.

Rifle.	Names.	800 Yards.															Total.
W. Webley	F. Osborne...	3	5	5	4	3	4	5	4	5	5	5	5	4	5	5	67
"	G. H. Hart...	5	5	5	3	5	4	5	5	4	5	5	5	4	3	5	68
"	H. Webley...	2	5	5	3	3	4	4	0	2	5	5	4	5	5	5	57
"	R. H. Jones ..	5	4	5	5	4	5	5	5	5	2	5	5	4	5	5	64
"	H. Bates ..	3	4	3	3	5	5	5	2	5	3	4	5	5	5	5	62
F. Turner	J. Foulkes ...	5	5	4	5	4	4	5	5	4	3	4	5	4	5	5	67
"	T. Turner ...	3	4	5	2	3	5	5	3	5	5	3	4	3	4	5	59
D. E. Metford ..	J. White	5	4	5	5	5	3	0	3	3	4	4	4	5	4	5	59
		900 Yards.															
		F. Osborne...	3	5	4	5	3	2	5	4	3	5	3	4	5	4	58
		G. H. Hart ..	5	3	4	5	4	5	5	4	5	3	4	4	5	4	63
		H. Webley...	5	5	3	3	2	3	5	4	4	4	5	5	4	5	61
		R. H. Jones ..	3	5	5	5	4	5	4	4	2	5	2	3	4	2	57
		H. Bates ..	3	5	2	5	3	5	5	5	5	5	4	5	5	4	61
		J. Foulkes ...	3	4	5	0	5	5	4	5	4	3	4	3	3	4	57
		T. Turner ...	5	4	3	4	5	4	4	5	5	4	3	2	3	4	59
		J. White	3	3	3	5	5	5	3	5	4	2	5	5	3	4	59
		1000 Yards.															
Aggregate	F. Osborne...	3	3	5	5	5	5	5	4	5	4	4	5	5	5	5	68
193	G. H. Hart ..	4	5	4	2	4	4	3	4	3	5	5	3	4	2	5	57
188	H. Webley...	5	4	4	5	3	5	4	4	4	3	4	5	4	4	5	63
181	R. H. Jones ..	3	4	3	5	3	4	5	3	3	5	2	5	5	2	5	57
178	H. Bates ..	4	5	3	3	4	3	3	4	2	5	2	5	3	3	5	54
177	J. Foulkes ...	3	5	5	4	2	4	0	4	2	3	5	4	4	5	3	53
177	T. Turner ...	3	5	5	5	3	4	5	5	3	3	3	5	3	3	2	57
175	J. White ...	4	4	4	3	3	4	5	5	3	3	4	4	3	2	5	56
174																	

Signed FRED. A. BIRD, Hon. Sec.

Range total	800 yards	503
Average individual score...	"	62.875
Range total	900 yards	475
Average individual score...	"	59.375
Range total	1000 yards	465
Average individual score ...	"	58.125
Average aggregate score		180.375.

GLOSSARY OF TERMS USED IN VOL. II.

BORE, LARGE.—A rifle in which the diameter of the bore is greater than .577in.

BORE, SMALL.—A rifle in which the diameter is not more than .577.

DROP OF BULLET.—The distance between the line in which a bullet is projected and the point to which it is carried down by force of gravity; in other words, the space between the straight line of fire and the curved line of trajectory (see page 131).

ELEVATION.—The extent to which the muzzle of the gun is raised in order to counteract the tendency of the bullet to drop towards the earth. The "Line of Elevation" is the same as "Line of Fire" or "Line of Projection."

ENERGY.—The amount of force or working power existing in a moving projectile (see page 233).

EXPRESS RIFLE.—(See pages 11—29).

FLIGHT, LINE OF.—Same as "Trajectory."

FLIP.—A term used by Mr Metford to indicate a peculiar movement of the barrel, which causes the projectile to depart from the line of fire in a direction different from the jump (see pages 221 and 354).

INITIAL VELOCITY.—A term for which "Muzzle Velocity" is now usually substituted as being more accurate.

JUMP.—An effect of recoil which causes the projectile to depart from line of fire, in an upward direction.

LINE OF AIM.—The prolongation of a line drawn from the back to the front sight (see page 130).

LINE OF FIRE.—A prolongation of the long axis of the barrel (see page 130).

MAGNUM—A term applied to a rifle carrying an unusually heavy bullet.

MUZZLE VELOCITY.—The speed of the bullet as it leaves the muzzle.

POINT BLANK.—An obsolete term of indefinite meaning (see page 14).

PROJECTION, LINE OF.—See "Line of Fire" and "Elevation."

SIGHT, APERTURE.—A disk with a small hole in it for the sight.

SIGHT, BACK.—An addition to the breech end of the barrel, or to the stock, intended to regulate the aim by giving the proper amount of elevation.

SIGHT, FINE.—When only a small part of the front sight is visible (see page 343).

SIGHT, FRONT.—An addition to the muzzle of the barrel for the same purpose.

SIGHT, FULL.—When the whole of the bead appears in the V of the back sight (see page 343).

SIGHT, LINE OF.—Also called "Line of Aim."

TRAJECTORY.—The curved line which the centre of the ball takes after leaving the barrel (see page 130).

TRAJECTORY HEIGHT.—The distance between the highest point of the trajectory and the line of sight (see page 130)

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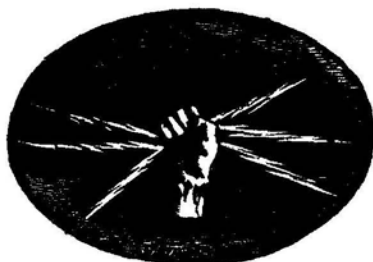
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2nd. Mr. Pearce, 28½ yards.	
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"I am, Gentlemen, yours truly,

"(Signed)

HORATIO BOSS."

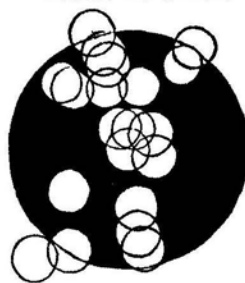
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7th Shot



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RANGE 100 YARDS.



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The Editor of the "Field" writes (see "Field," Feb. 18, 1882):

"In Punt Guns this firm (Holland and Holland) is now *facile princeps*. Their steel breechloader being generally admitted to be the best in the market. These guns are fitted with loop for rope breeching, and with Hawker's spring arrangement, or with the Booth recoil block and buffers from drawings supplied by E. T. Booth, Esq."

4-BORE C.F. GUNS.

Specially bored for Large Charges, killing to 150 yards

See letters to the Editor of the "Field":

"SIR,—Having heard that in a December number of your paper there is an inquiry as to the range of large bore shoulder duck guns, he might like to know that I have killed birds at 150 yds. range with a 4-bore gun made by Messrs. Holland, of New Bond Street. With the recoil heel-plate there is no recoil to hurt the shoulder. Signed "ELCHO."

"SIR,—In answer to J. O. respecting shooting of 4-bores, I can with confidence recommend him to go to Messrs. Holland, of Bond-street, for I have shot with many 4-bore guns, and certainly have never found any equal to the one built for me by that firm. It is a wonderful killer, as well as being a particularly light and handy gun; charge, 9 dr., and wire cartridge, killing at 100 yds., and frequently at much greater distances. I am so pleased with the gun that I am having a punt gun built by the same makers. Signed "ALEX. HATFIELD."

"Morden Hall, Morden, Surrey."

Also 8-Bore Single and Double Barrelled HAMMERLESS GUNS
and Short Barrelled 10-Bore CRIPPLE STOPPERS.

The above Guns are fitted with Recoil Heel-plates, Pistol Grip, &c.

HOLLAND & HOLLAND,
WINNERS OF ALL THE "FIELD" RIFLE TRIALS,
GUN AND RIFLE MAKERS,
By Special Appointment to H.M. THE KING OF ITALY,
98, NEW BOND STREET, LONDON, W.

HOLLAND & HOLLAND'S

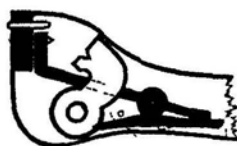
"CLIMAX"

SAFETY HAMMERLESS GUN.

SIMPLE, STRONG, AND PERFECTLY SAFE.

See the "Field," Feb. 18, 1882.

"One of the safest guns to use that we have seen; it is absolutely free from any possibility of accidental discharge unless the trigger is pulled."



CLIMAX SAFETY, showing block intercepting the fall of the hammer if jarred off

Fitted with the New Patent Gas Check, preventing any escape of gas into the locks.

One of the most perfect weapons yet made.

Being exceptionally strong in the action, they are especially adapted for any size up to 4-gauge, and are chambered for the New "Perfect" Brass Shell when required.

NEW TOP-SNAP EJECTOR

HAMMERLESS GUN.

EJECTING THE EXPLODED CASE AFTER FIRING.

Prices - First Quality, 35 guineas to £45. Second Quality, from £25.

Guns Exchanged Free of Charge if not Approved of.

HOLLAND & HOLLAND,

WINNERS OF ALL THE "FIELD" RIFLE TRIALS,

GUN AND RIFLE MAKERS,

By Special Appointment to H.M. THE KING OF ITALY,

98, NEW BOND STREET, LONDON, W.

HOLLAND & HOLLAND'S

SPECIAL £15 C.F.

BREECHLOADING GUNS.

SNAP OR LEVER ACTION.

REBOUNDED LOCKS.



These guns are plainly finished, but are really sound and well-made weapons. Shooting guaranteed in every way.

"I have, for myself and friends during the last nine years, had some FORTY-FIVE OF HOLLANDS' £15 GUNS, and can speak in the highest terms of them. I have shot my gun hard for the last nine years, and it is as sound, and shoots as well, as the first day I had it; and my friends give excellent accounts of theirs; not one of the guns has yet had to be sent to England for repairs.

"Yokohama, Jan. 20, 1879.

(Signed)

"J. J. DARR."

These Guns, fitted with Joseph Brazier's best quality rebounding locks, and better quality stocks, Price £17. When desired, they are specially bored and chambered to take the New Brass "Perfect" Shell.

Messrs. Holland have every confidence in recommending these Guns to Sportsmen requiring a really good sound, but plainly finished weapon, fitted with the very highest quality locks.

Guns Exchanged Free of Charge if not Approved of.

HOLLAND & HOLLAND,

WINNERS OF ALL THE "FIELD" RIFLE TRIALS,

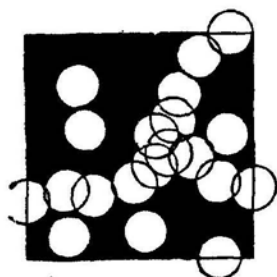
GUN AND RIFLE MAKERS,

By Special Appointment to H.M. THE KING OF ITALY,
98, NEW BOND STREET, LONDON, W.

HOLLAND & HOLLAND'S WINNING '295-GAUGE ROOK RIFLE,

SEMI-SMOOTH BORE NON-FOULING RIFLING
(REGISTERED).

ANY NUMBER OF SHOTS MAY BE FIRED WITHOUT CLEANING OUT.



FULL SIZE, 50 YARDS.

AUTHENTICATED DIAGRAM of
the 295-Bore **WINNING RIFLE** in
the great "**FIELD**" Rifle Trial, London,
October, 1883.

Twenty Shots at 50 yards **WITHOUT**
CLEANING OUT, all in a 1½ in. square. Every
shot would have struck a half-crown piece.

"An unequalled performance." — See *The Field*, Oct. 20, 1883.

"Certainly the best shooting we have ever
seen." — *Field*.

HOLLANDS' NEW PATENT '295 HAMMERLESS ROOK RIFLE, "THE ROSS."

"A Rook and Rabbit Rifle which completely fulfils all the conditions
required by the Sportsman, and may be considered an absolutely perfect
weapon." — *Field*, April 14.

MR. HORATIO ROSS writes: "Your Rifle is the most accurate weapon I
have ever had in my hands."

Each Rifle guaranteed in every way, and may be shot at our
Private Range at Kensal Green before Purchase.

PRICES 5 TO 10 GUINEAS. "ROSS" HAMMERLESS,
10 GUINEAS. DOUBLE-BARRELLED, from £25.

HOLLAND & HOLLAND.
GUN AND RIFLE MAKERS,
BY SPECIAL APPOINTMENT TO H.M. THE KING OF ITALY,
And winners of all the "Field" Rifle Trials,
98, NEW BOND STREET, LONDON, W.

HOLLAND & HOLLAND,

WINNERS OF ALL THE "FIELD" RIFLE TRIALS, 1883.

DOUBLE EXPRESS & BIG GAME RIFLES,

With Special Non-Fouling Rifling, giving great accuracy
with the flattest trajectory obtainable.

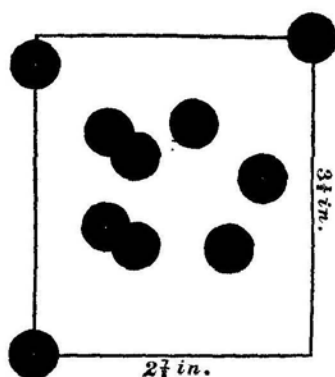


DIAGRAM MADE BY
THE
WINNING '500 BORE
**Double Express
RIFLE.**

Range, 100yds. Charge, 5drs.

Trajectory, $1\frac{1}{2}$ in.

Mean Deviation, 1.09.

Striking Energy, 3134 foot-lbs.

PRICES, BEST QUALITY, FROM 45 to 55 GUINEAS.

" **SECOND QUALITY, FROM 35 to 40 GUINEAS.**

" **THIRD QUALITY, FROM 30 GUINEAS.**

DEER STALKING RIFLES, '400 AND '450 BORE.

VISCOUNT MANDEVILLE writes:—"I shot with your Express all the season at Arran, and out of nineteen stags I fired at I got eighteen. It is the most accurate Rifle I ever handled. . . ."

BAKER '577 EXPRESS DOUBLE RIFLES (6-DRS.),

MAY BE USED WITH A SPHERICAL BALL FOR DEER SHOOTING, OR WITH
EXPRESS OR SOLID BALL FOR BIG GAME.

SIR SAMUEL BAKER writes:

"Dear Sir,
"I have just returned from a month's trip in the jungle, and can give you the practical results of the '577 6-drs. Rifle you made for me. *Without exception it is the best Rifle I ever possessed.* I have only had three shots at tigers—they never moved their own length from the moment of receiving the bullet. . . ."

"Jubblepoor, May 20, 1880.

ALL RIFLES MAY BE TESTED BEFORE PURCHASE.

HOLLAND & HOLLAND,

WINNERS OF ALL THE "FIELD" RIFLE TRIALS,

GUN AND RIFLE MAKERS,

BY SPECIAL APPOINTMENT TO H.M. THE KING OF ITALY,

98, NEW BOND STREET, LONDON, W.

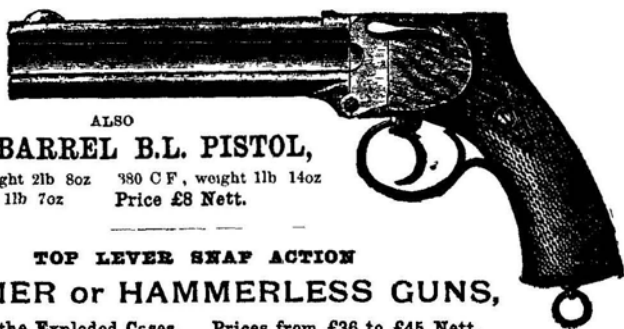
AWARDED 3 MEDALS INTERNATIONAL EXHIBITION,
CALCUTTA, 1883-4.

CHARLES LANCASTER,
INVENTOR AND PATENTEE OF THE
FOUR-BARREL
B.L. HAMMERLESS GUN,

Weight 7lb 4oz, and

EXPRESS RIFLE,

Weight 10lb



ALSO

FOUR-BARREL B.L. PISTOL,

455 CF, weight 2lb 8oz 380 CF, weight 1lb 14oz
and 1lb 7oz Price £8 Nett.

TOP LEVER SNAP ACTION

HAMMER or HAMMERLESS GUNS,

Ejecting the Exploded Cases. Prices from £36 to £45 Nett.

The "COLONIAL" Quality 12-bore, Breech-loading, Top Lever,
Snap Action GUN. Plainly finished, but good sound work Price £20.

Coloured Illustration sent on application.

Also "COLONIAL" Quality **HAMMERLESS GUN, £27.**

Strong Black Canvas Case, without fittings, £1 15s. Strong Black Canvas
Case, with fittings, £3.

TERMS, CASH WITH ORDER DETAILED PRICE LISTS ON
APPLICATION.

DEER FORESTS, SHOOTINGS, and FISHINGS to LET.

151, NEW BOND STREET, LONDON, W.

ESTABLISHED 1826

[P.T.O.]

CHARLES LANCASTER,
INVENTOR OF THE
NON-FOULING SMOOTH OVAL-BORE
FOR
EXPRESS
(360, '400, '450, '500, and '577). Prices from £36 to £56 10s. Nett.
ROOK AND RABBIT
(295, '320, '360, and '380). Prices £5, £8, and £10 Nett.
HAMMERLESS ROOK AND RABBIT RIFLES, £10 NETT.
AND
MINIATURE MATCH RIFLES,
Prices £8 plain; £10 with orthoptic sights.

The following Letters are some of those that have appeared in "The Field," and are a sample of those that I am constantly receiving from all parts of the world:

THE LANCASTER OVAL-BORED EXPRESS RIFLE.

"THE FIELD," AUG. 6, 1881.

SIR,—A friend of mine has called my attention to the correspondence which has taken place in "The Field" regarding the merit of Charles Lancaster's oval-bored Express rifles.

I have shot in various parts of the world during the last thirty-five years, with all the new improvements made by the best rifle makers in the United Kingdom, and I have no hesitation in affirming that, for sporting purposes, the Lancaster double breechloading Express is the best rifle which exists. In saying this, I do not wish to disparage other makers whose rifles are also very near perfection; but that Lancaster beats them I am convinced, and for the following reasons:

The great object to be obtained in a sporting rifle is accuracy, with the flattest possible trajectory up to, say, 250 yards. This is only to be obtained by a high velocity for the ball during its passage over that distance. The initial velocity of the ball depends upon the burning of so much powder in the barrels. The accuracy of the ball's flight depends upon its rotary motion. That rotary motion is imparted by the grooving of the rifle in most cases, and by the oval-bore in the Lancaster case.

With a given amount of powder, the smaller the resistance to the ball in passing through the barrel the greater will be its initial velocity on leaving it, and the less will be the recoil of the rifle. The grooves on the inside of a barrel naturally prove a greater resistance than a smooth surface, therefore the smooth surface of a Lancaster barrel gives less resistance than any grooved barrel, and for a given amount of powder the initial velocity of the ball must be greater and the recoil less.

The ball having left the rifle, the great object is to keep up its velocity to the highest possible pitch for the sake of a flat trajectory, and to keep up its rotary motion for the sake of accuracy. The retarding forces opposed to the attainment of this object are the resistance of the air and the friction of the air on the rotating ball. Therefore the smoother the ball the less friction or retardation there will be.

In the case of the Lancaster oval-bore, the ball leaves the barrel with a smooth surface, while in grooved rifles it is more or less jagged and indented by the grooves. Therefore, with a given amount of rotary motion on leaving the barrel, the Lancaster ball will keep up that motion longer than a ball from a grooved barrel, and would therefore give greater accuracy along the whole length of its flight.

But I have shown that for a given amount of powder the initial velocity of the Lancaster ball must be greater than that from a grooved rifle; and we have also seen that after leaving the barrel it meets with less resistance than a ball from a grooved rifle. Therefore it has a flatter trajectory, greater accuracy, and less recoil; hence its superiority.

I have made better diagrams with the Lancaster oval-bore than with any other rifle; and I have killed deer at ranges which tickled my pride both in myself and my rifle. Of late years the misfortunes of sport have obliged me to shoot with a crooked stock for the left eye; and a double breech-loading Express rifle and a smooth-bore gun, built for me on that principle, by Charles Lancaster, have given me such complete satisfaction that I gratefully bear my testimony to their merits.

AN OLD SHOT.

[SEE PREVIOUS PAGE.]

"THE FIELD," May 27, 1882.

"Bison" asks for information with regard to oval smooth-bore rifles. I have just returned from a shooting trip to Ceylon. I took out one of Lancaster's 500 smooth oval-bore double hammerless Express rifles. I found that it was very accurate, and made better penetration than other rifles on the grooved system of rifling, in some of which the weight of the bullet was not so well regulated to the charge of powder. It never got leaded, and was easy to clean, and, though roughly used in a hot, damp, trying climate, never got out of order; and by using a hollow or solid bullet, as the case required, I was able to kill every sort of game with it, from peacocks to elephants. . . . H. N. B. GOOD.

The Priory, Berwick St. John, Wilts, May 28

"FIELD" TRIAL OF OVAL-BORE EXPRESS.

In "THE FIELD" of Feb. 17, 1883, the Editor writes as follows:

On Monday morning last, after several adjournments owing to the weather, we proceeded to Mr C. Lancaster's ground at Wormwood Scrubbs, with a view to witness a trial of one of his oval-bores, which we have been requested to do by several correspondents. The morning was by no means favourable to good shooting; indeed, the wind was so high as to tax the strength of the shooter in keeping the barrel steady. It blew from the right front of the range, and occasionally with great force, with a few drops of rain, which necessitated an umbrella being held over the front sight.

The rifle was a single 500 oval-bore, with Mr. Field's action, weight 10lb. 6oz., length of barrel 26in. We began with a series of ten shots, with 160gr. C. and H. No. 6 and 600gr. pure lead bullet, having a cavity in front, 1-16th in. in diameter, and half the depth of the bullet distance 100 yards.

First eight shots were grouped in a space of 5in. by 4in., the ninth 1 1/2 in., and the tenth 4in. to leeward of the group.

Second series.—Powder, 160gr.; lead 440gr pure soft lead, with a cavity in front filled with wax. Eight shots were fired, of which the first six were in a group 3 1/2 in. square; the seventh was 5in. from the centre of this group to the top right. Mr. C. Lancaster, having previously stated that he was hitherto making no allowance for wind, now declared to make a bull (1 1/2 in.) by allowing for wind, and did so.

This performance, even without taking into consideration the gusts of wind which were blowing, is a very good one, but, making allowance for this drawback, our readers will, we think, agree with us that it was highly satisfactory to Mr. C. Lancaster, who, besides being the maker, shot the rifle himself.

The initial velocity of the heavy bullet was about 1620ft. per second, and that of the lighter one 1750ft., as taken by the chronograph belonging to Messrs. Curtis and Harvey; consequently, there should be a difference of about 1in. in the elevation of the two at 100 yards on this calculation, yet in practice, though Mr. C. Lancaster took the same sight throughout, they were as nearly as possible alike, which can only be accounted for by the greater "jump" given by the heavier ball. This is a very interesting fact in support of the "jump" theory.

NOTES ON RIFLES.

"THE FIELD," MARCH 17, 1883.

SIR,—Having read with much interest the various letters that have appeared in your columns respecting rifles for deer stalking, I beg to hand you return of my own shooting during the past season, with one of Charles Lancaster's Smooth Oval-bore Express Rifles, 450 bore, double barrel.

The first day of the season I killed five stags—viz., two rights and lefts, and one single. I then went on killing without a miss till I reached twenty-five, and in the afternoon of one day I killed a right, and left and a single. I then killed on up to my fortieth, when I made two misses, and then to fifty-five without a miss. I killed seventeen stags in four days, bonâ-fide stalking.

This finished the season for stags. In due time I began the hinds, and killed forty-five without a miss.

I should mention that all these alain beasts were not picked chances, but that I took them as they came at ranges varying from 40 to 200 good yards, the beasts in all positions and paces; i.e., standing in every position, walking, lying down, and galloping, and all sheer stalking.

This speaks volumes for the accuracy of the rifle, and I believe it is the best that ever was made.

In conclusion, I trust that my record may be the means of showing stalkers that a rifle can be built to give such grand performances, and with little or no recoil to the shooter, owing to the smooth interior of the barrel.

FRANK MORRISON.

8, Cromwell-houses, South Kensington, S.W., March 14, 1883.

DETAILED PRICE LIST ON APPLICATION.

151, NEW BOND STREET, LONDON, W.

ESTABLISHED 1826.

[P.T.O.]

CHARLES LANCASTER

Begs most respectfully to inform his Patrons and Sportsmen that the following are his CASH PRICES for



for this Season, viz. :

12-Bore C.F., 3drs., $1\frac{1}{8}$ oz., at 10s. per 100.

16-Bore C.F., 2 $\frac{3}{4}$ drs., 1oz., at 9s. 6d. per 100.

20-Bore C.F., 2drs., $\frac{3}{4}$ oz., at 8s. per 100.

Eley's Best Cases, loaded with Curtis and Harvey's best powder, four best wads, and hard shot, thin packing cases included.

Schultze or "E.C." Powder 1s. per 100 extra.

Stout Cases FOR RAIL, 6d. first 200, adding 2d. each additional 100.

N.B.—ALL ORDERS MUST BE ACCOMPANIED BY A REMITTANCE.

Packed in extra Stout Packing Cases, lined with tin, for India, at 10s. per 1000 extra.

C. L. delivers Loaded Cartridges at Bombay, Madras, or Kurrachee, at the following rates for freight, plus the price of Cartridges and Packing Cases, viz. —

1,000 at ...	£2 2 0	5,000 at	£3 0 0	9,000 at ...	£4 15 0	17,000 at	£7 0 0
2,000 at	2 10 0	6,000 at	3 10 0	10,000 at	5 0 0	18,000 at	7 5 0
3,000 at ..	2 15 0	7,000 at	4 0 0	15,000 at .	6 0 0	19,000 at	7 10 0
4,000 at ..	2 17 6	8,000 at	4 10 0	16,000 at	6 10 0	20,000 at	7 10 0

N.B.—Cartridges cannot be shipped direct to Calcutta, only via Bombay

Insurance charged at the rate of ONE per cent extra

C. L. begs to draw the attention of Sportsmen to the following figures, giving a return of the Cartridges he has supplied, viz. :

89,538 in 1880.

322,222 in 1881.

442,263 in 1882.

505,664 in 1883.

Clearly demonstrating that his Cartridges are yearly gaining in favour, owing to the superior quality of materials used, and the excellence and regularity of the loading.

LOADING ROOM OPEN TO INSPECTION AT

151, NEW BOND STREET, LONDON, W.

DETAILED PRICE LISTS ON APPLICATION.

ESTABLISHED 1826.

[SEE PREVIOUS PAGE.]

IMPROVED HAMMERLESS GUN,

With Rigby's Patent Vertical Grip and Safety Bolting.

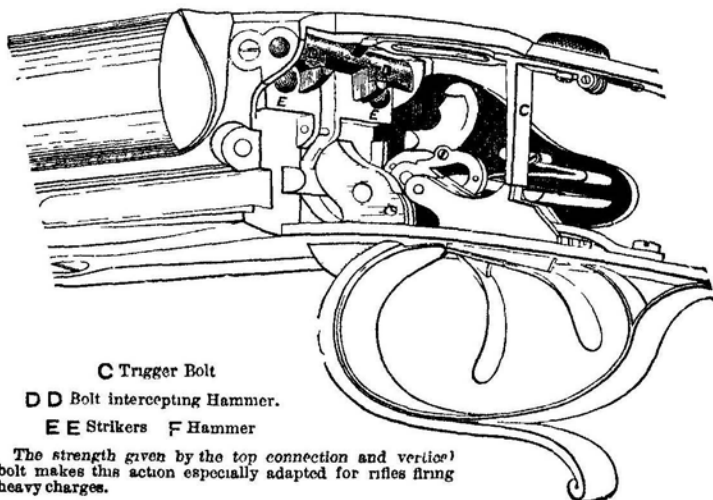
A SPECIAL MAKE OF STEEL BARRELS.

The Editor of the *Field* in his report of the Gun, January 7, 1882, says:

"In this action all our ideas are carried out to the fullest extent."

"Altogether we consider this the best safety bolt we have seen."

"In Mr Rigby's Gun the action is as strong, or even stronger than any of its rivals, the barrels being kept down by the well-known Purdey bolt and the spring at the angle prevented by a top connection, into which travels upwards a perpendicular bolt similar to that designed by us, but improved upon in a simple manner by leaving the metal of the body intact between it and the barrels, by which it is well supported as if it were a part of the action itself."



C Trigger Bolt

D D Bolt intercepting Hammer.

E E Strikers F Hammer

The strength given by the top connection and vertical bolt makes this action especially adapted for rifles firing heavy charges.

RIGBY'S EXPRESS RIFLES.

Celebrated for their Killing Power, Accuracy, and First-class Workmanship, insuring Durability.

Gauges '577, '500, '450, '400, '380; Weights from 11lb. to 5lb.

The Annual Sportsman's Contest in India was won with Rigby's 450 Double Express the last three years.

BREECHLOADING, MATCH, MILITARY, AND EXPRESS RIFLES WITH RIGBY'S IMPROVED ACTION.

ALL SPORTING NECESSARIES SUPPLIED.

PRICE LISTS, &c., ON APPLICATION TO

JOHN RIGBY & CO.,

24, Suffolk-St., Dublin; and 72, St. James's-St., London, S.W.

J. & W. TOLLEY'S

"STANDARD"

HAMMERLESS GUN.

Opening with the Weight of its own Barrels.

Fitted with Patent Intercepting Safety Bolts, Blocking Bolts, Triggers, and Tumblers, Gas-check Strikers, preventing the escape of gas into the locks, ordinary Side Locks, which may be easily removed for cleaning.

From "WILDFOWLER," May 22, 1884.

"Messrs. Tolley have made me this season a double hammerless 12-bore short-barrelled for rabbit shooting in very thick covert, and this gun has given me the utmost satisfaction. It is one of the smartest guns I have ever used, and I have shot admirably well with it."

Price £13. 13s., £15. 15s., £17. 17s., £20, £25, £30, & £35.

LONG-RANGE WILDFOWL GUNS.

Guaranteed performance of 10-Bore at 100 yards.

"	"	"	8	"	120	"
"	"	"	4	"	150	"

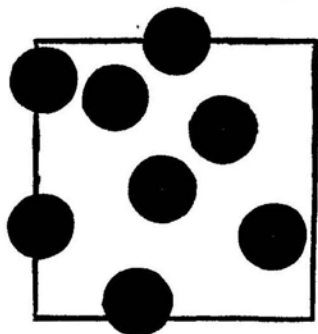
PRICES AND FULL PARTICULARS ON APPLICATION.

J. & W. TOLLEY,
 MAKERS BY SPECIAL APPOINTMENT TO THE
 PERSIAN ROYAL FAMILY,
 PIONEER WORKS, BIRMINGHAM,
 AND
 1. CONDUIT-ST., REGENT-ST., LONDON.

J. and W. TOLLEY'S EXPRESS AND BIG-GAME RIFLES.

OUTFITS FOR BIG-GAME EXPEDITIONS.

All our Rifles are bored on our non-fouling rifling system, giving the greatest accuracy with the flattest trajectory yet obtained.



Target $2\frac{1}{8} \times 2\frac{1}{8}$.

AUTHENTICATED
DIAGRAM
OF
'.450 DOUBLE EXPRESS,
At 100 Yards.
8 SHOTS WITHOUT CLEANING OUT.

From Rev. C. J. Todd, R.N.—H.M.S. "Euryalus," Tricomalie, Ceylon, Feb. 5, 1883.

"I was delighted with the 8-bore Double Rifle, killing with it five big elephants, four of them with a single ball each. The accuracy is also very great. I shot a buffalo bull at 120 yards right through the neck, which, with his head, was the only part visible. I missed with the second shot, but with a third shot at 180 yards shot him dead through the heart."

From A. H. Macartney, Esq.—Newera Eliya, Ceylon, April 25, 1882.

"The 12-bore 'Forsyth' Rifle you sent me was an excellent weapon; none could be better. It did such execution as has never before been equalled. The first time I went out I saw three rogue elephants of enormous size; one shot sufficed for each of them. Then I went out with Lieut. Hannay, R.E., now in England. We saw twenty-one elephants and killed them all between us, fourteen falling to your rifle. Once it saved our lives, a charging rogue falling dead to it within six feet of where we stood."

From B. W. Wise, Esq.—Doolahat, N. Lakimpur, Assam.

Messrs. J. and W. TOLLEY, Birmingham.

"I have much pleasure in informing you of the safe arrival of the 4-bore rifle. I tried it to-day, firing three shots out of each barrel, and at 40 yards I put the six bullets in a small envelope, and at that distance I will put as many bullets into an envelope as I can with my '500 'Express.' I must certainly give you credit for the splendid weapon you have built me. I used no rest when I fired it, and the recoil (with Anti-recoil Pad) is no more than that of a '500 'Express.'"

Express double, .400, .450, .500, and .577 bore, £25.

12-bore, double ...	£25	8-bore, double ...	£35
10-bore, double ...	£28	4-bore, double ...	£45

Specimens, Diagrams, Drawings of Trajectories, Testimonials, &c., on application.

J. and W. TOLLEY

(Makers, by special appointment, to the Persian Royal Family),

Pioneer Works, Birmingham, and 1, Conduit-st., Regent-st., London.

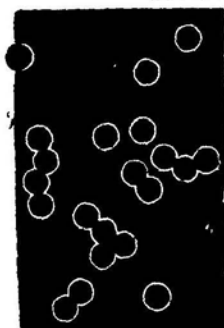
BLAND'S SPECIAL RIFLES.

NEW HAMMERLESS SELF-EXTRACTING ROOK & RABBIT RIFLE



In '230, '300, and '360 Bores.

PRICE 10 GUINEAS.
SIMPLICITY OF ACTION. ACCURACY OF SIGHTING.
SPECIAL NON-FOULING RIFLING.



SCALE: ONE-HALF SIZE.

Authentic Diagram of 21
consecutive shots made with
the above Rifle, '360 bore, at
100 yards, WITHOUT
CLEANING.

Also a SPECIAL RIFLE, on the same system, prepared
expressly for the Colonies; '440 bore, using the Winchester
cartridge, and sighted to 250 yards.

Price 10 Guineas.

The Editor of "Land and Water," before whom this Special Rifle was recently tested,
in his issue of April 12 last, writes "NOT ONE SHOT WOULD HAVE MISSED A ROOK, AND
THIS, AT 250 YARDS, IN ADMIRABLE WORK."

BLAND'S SELF-EXTRACTING ARMY REVOLVER.

CALIBRE '455.

Price £2. 17s. 6d.

"The Field," of March 24 last, says: "We have tested this revolver with nearly one
hundred rounds, without fouling so as to create any difficulty in manipulation. With regard
to accuracy, WE HAVE MADE EXCELLENT PRACTICE WITH IT: that is to say, AS
GOOD AS WITH ANY REVOLVER WHICH WE HAVE YET TRIED."

"THE CAPE GUN,"

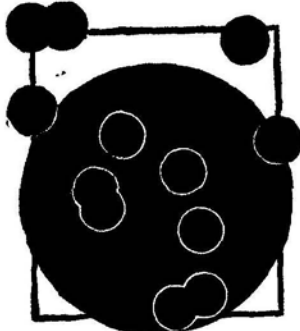
A RIFLE AND SHOT GUN COMBINED.

'577/450 Henry Rifle, and 12-bore Shot. | '450 Express Rifle, and 16-bore Shot.
'500 Express Rifle, and 12-bore Shot. | '400 Express Rifle, and 20-bore Shot.

PRICE 16 GUINEAS.

The "Field" of Oct. 13, 1877, says of the "Cape Gun."

"Selecting one at random from stock, we tried the rifled barrel, first at seventy, and afterwards at 100 yards, from an ordinary rest, and were able to PUT BALL UPON BALL AT BOTH DISTANCES, so that the truth of its shooting from the rifled barrel is good enough for any purpose, and, indeed, CANNOT BE EXCELLED EVEN BY THE MOST EXPENSIVE RIFLE IN THE MARKET."



Scale, one half size.

Authentic diagram of 12 consecutive shots made with one of BLAND'S EXPRESS DOUBLE RIFLES, 500 bore, each barrel being used alternately.

Distance, 100 yards.

EXPRESS DOUBLE RIFLES,

'360, '400, '450, '500, and '577 Bores, 20 GUINEAS.

TESTIMONIALS.

From H. Jones Bateman, Esq., Kheri, Oudh, India, Aug. 8, 1879:

"I have every reason to be perfectly satisfied with the 500 Express you sold me three years ago. It compares favourably with rifles costing double the price."

From T. Foljambe Hall, Esq., Masonic Hotel, Grahamstown, South Africa, May 18, 1882:

"I have delayed hitherto in writing to you about my rifle, as I wished to give it a thorough trial. I have now done so, and can truly say that it has more than fulfilled my utmost expectations. At all ranges I have found it most accurate, the action has withstood every test of weather, and the workmanship leaves nothing to be desired."

From R. Percy Pinder, Esq., Indian Forest Department, Nov. 8, 1882:

"My rifle C.F. 500 Express, built by you, is a magnificent weapon, indeed I have never used one that I like so well."

From Major Wilbraham Taylor, Rifle Brigade, Balgaum, Bombay Presidency, Nov. 21, 1883:

"I have received the 500 Express Rifle, and am much pleased with its shooting. It is a good serviceable weapon, and just what I wanted."

N.B.—Any of the above can be delivered free in either of the large ports of India or of British Burmah, in a tin-lined case, for £1 ls. more.

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ADDRESSES.

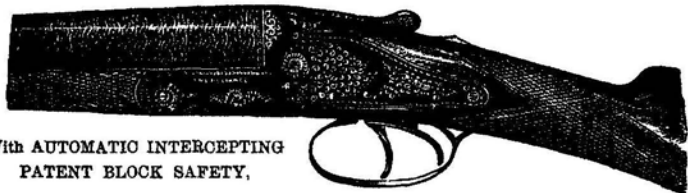
106, STRAND, LONDON, W.C. (Opposite Exeter Hall);

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And 41, 42, and 43, WHITTALL STREET, BIRMINGHAM.

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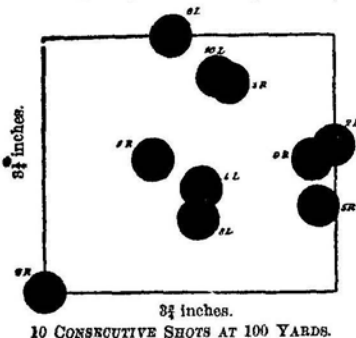


With AUTOMATIC INTERCEPTING
PATENT BLOCK SAFETY,

By which the Hammers remain perfectly blocked until the moment of pulling the triggers.
Absolutely safe against accidental discharge.

EXPRESS DOUBLE RIFLES, FROM '360 TO '577 BORE.

The diagram given below is a *fac simile* (reduced) of the shooting of one of our '577 Express DOUBLE RIFLES, and published in the "Field," July 18, 1883. It was shot from Mr. Jones's machine rest in the presence of the Editor of the "Field."



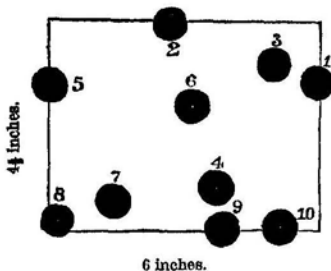
10 CONSECUTIVE SHOTS AT 100 YARDS.

The Editor remarks: "To our great astonishment we got the diagrams made, which we publish this week, in one case from a '450 bore, recently made by a well-known firm, and in the other from a '577 bore, made by Messrs. Adams, of Finsbury Pavement, about a year ago, since which it has been used in India by a well-known sportsman. The '577 diagram is a most excellent one, beating very considerably repeated trials from the shoulder. From the shoulder, the best diagram made was 6in. x 4 1/2in. From the rest, the annexed splendid diagram was obtained; the shots are numbered R. and L., and it will be seen the group is quite free from any kind of uniformity, the shots being spread indiscriminately."

"FIELD" RIFLE TRIAL AT WIMBLEDON.

OCTOBER 6TH, 1883.

Fac simile (reduced) of diagram made from the shoulder with Adams and Co.'s '500 bore Express Double Rifle, at 150 yards, being the best diagram of the class made at that range.



6 inches.

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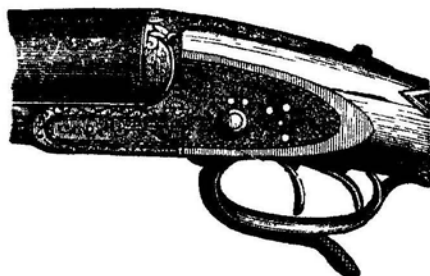
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HAVING had six years' experience with perfect success, we have the greatest confidence in recommending our Hammerless Safety Gun to our clients and their friends.

One of the numerous advantages is that the same locks and actions are used as in ordinary bar guns, with the exception that the hammers are inside instead of out; in other respects the outlines are precisely the same. The hand lever centred on the trigger plate has a lifting bar hinged to it, which bears on the arms projecting from the tumblers. It raises the locks, and at the same time moves a safety bolt over the ends of the triggers, and one in front of each hammer, so that, should the lock be jarred off by a fall, the safety bolt in front of the hammer would catch it in the throat immediately at starting, rendering it impossible for any accidental explosion to happen. The construction of the lifting bar, hinged on the hand lever, is so arranged that very little force is required to raise the locks, consequently the same weight mainspring can be used as in a gun with outside hammers, avoiding any chance of miss-fires so often complained of in hammerless guns.

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Manufactory - 1, BLUE BALL YARD LONDON.**

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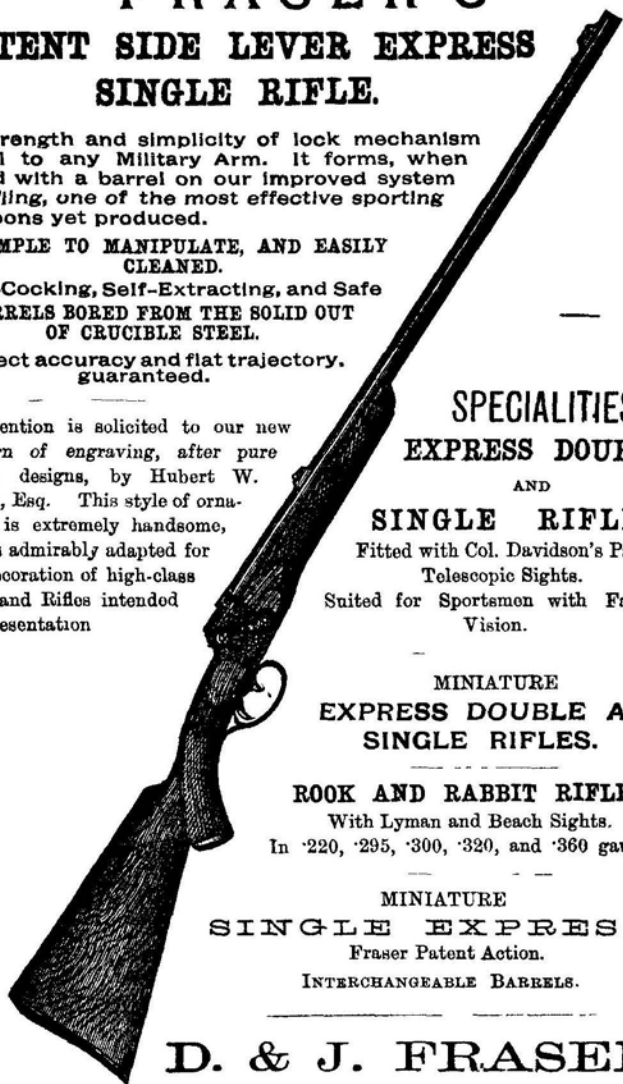
In strength and simplicity of lock mechanism equal to any Military Arm. It forms, when fitted with a barrel on our improved system of rifling, one of the most effective sporting weapons yet produced.

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**Self-Cocking, Self-Extracting, and Safe
BARRELS BORED FROM THE SOLID OUT
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**Perfect accuracy and flat trajectory.
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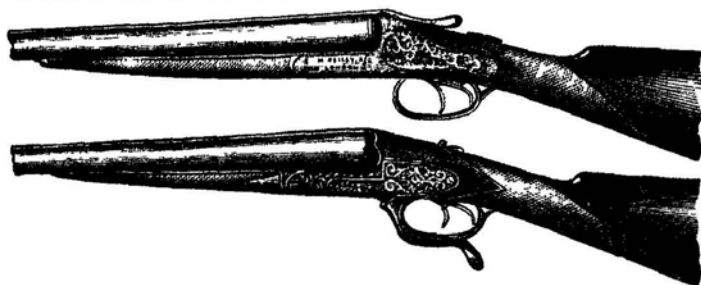
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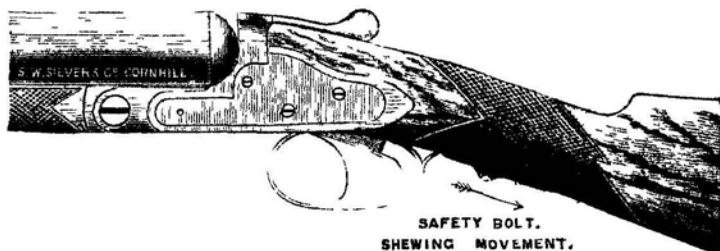
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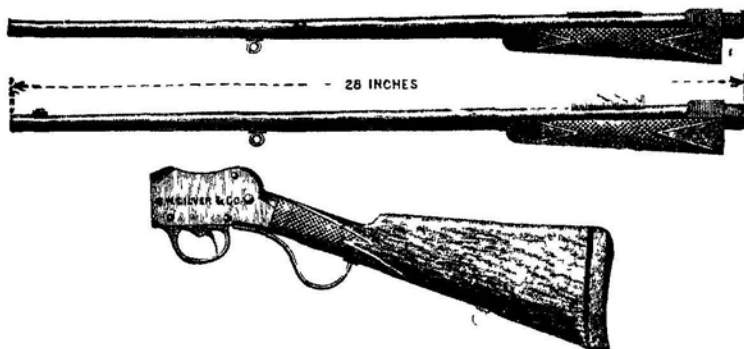


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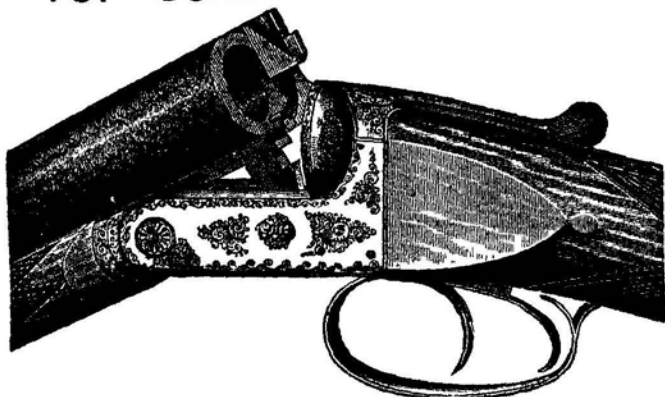
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PATENT

TOP SCREW GRIP ACTION.



The Editor of the "Field," in his review of the Gun, remarks:

"During the last few weeks we have received for notice in 'The Modern Sportsman's Gun' several novelties which there has not hitherto been time or space to notice in the 'Field.' For the benefit, therefore, of those who do not see the book, we insert descriptions of them in our columns, commencing with the above Gun, which was brought to our notice by Mr. Leeson, of Ashford in the shape of a beautifully designed and finished pigeon gun, built for a well-known performer at the traps. In this gun the chief novelty is the bolting of the top connection, which is usually carried out either by a snap-bolt, as in the Westley-Richards gun, or by a cross-bolt, as in the Greener treble-grip. In neither of these, however, is there any grip or draw, in which resides the great power of the 'double grip,' so well known to all modern shots; but in the new top grip, as introduced into Mr. Leeson's gun, an absolute grip is effected, either with or without a doll's head to assist it. On a careful inspection it will be seen that this action is full of merit, being exceedingly strong, working in all its parts very smoothly, and cocking the tumblers with remarkable ease. This last point is effected, partly by a careful adaptation of the levers, and partly by reducing the strength of the mainspring, and at the same time increasing the throw of the tumbler, by which the breaking of the cap is insured; while, at the same time, the force required to open and cock the gun is greatly reduced. In our opinion, this action is by far the more pleasant to handle than any barrel cocker we have yet seen, and we have proved by experiment that the cap is well broken by the reduced spring. The strikers are separate from the tumblers, in which respect they differ from the ordinary Anson and Dealey gun, being let in from the front and provided with shoulders, which intercept the gas escape to a very great extent. The barrels are of Siemen's steel. We congratulate Mr. Leeson on both the principle and workmanship of the gun exhibited to us."

It will be seen from the above excellent authority that this action is the strongest made, and therefore especially suitable for Rifles when large charges are used, and is equally adaptable for guns and rifles with or without hammers

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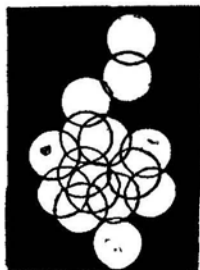
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Consecutive
Shots,
13 would
have hit
a Sixpence.



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8 would
have
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Sixpence.

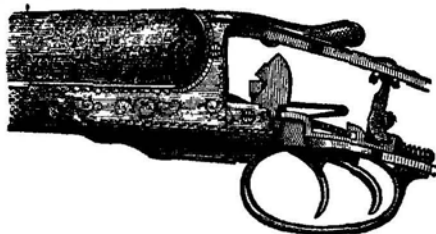
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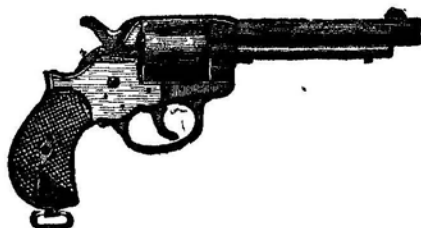
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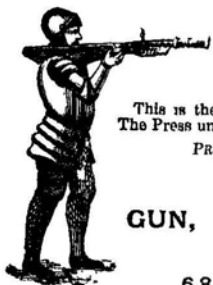
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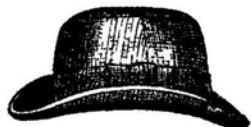
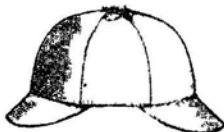
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