

Having been honoured with an invitation to deliver a lecture on Rifle Shooting, & on the advantages which are likely to be derived from the present volunteer movement, I will endeavour to do so to the best of my ability, altho' fully sensible how little I shall be able to do justice to the subject of such importance at the present moment.

Having however been engaged for some years in duties connected with training as chief Instructor [insert] of Musketry [end insert] at Hythe & Malta during the organization of the System of Instruction which is now so universally approved of, I may perhaps hope to be able to give you some little information on the subject ~~which you can set pr....ty [illegible]~~ arguments [illegible]

It will be unnecessary for me to lay much stress on the importance of increasing our [insert] the [end insert] home force of the Country or to recapitulate the ~~old & [illegible]~~ [insert] now uncontested [end insert] maxims respecting the inefficiency of the wooden walls [insert] of England [end insert, NB not positive it is 'walls could be valis?'] or the bridging of the Channel by steam. The present movement is a proof that these principles are now acknowledged & acted upon. I will therefore say only a few words on the [insert] peculiar nature of the [end insert] steps we are taking to insure ourselves from foreign aggression.

In no other country in the world would such means as we are now adopting be resorted to for the defence of a country, simply because in no other country would the attempt be attended with success.

We are a peculiar people, & one [insert] one of those peculiarities [end insert] consists is our jealousy of those who govern us. We dislike government interference in any thing and want but slight encouragement to economize our National expenditure to the very lowest limits. The spirit of Liberty pervades all our institutions, & enterprises, & produces that individuality & independence of character, which makes the Englishman a marked man amongst the rest of his species.

Our canals, our railroads our navigation all those Institutions which in other countries are regulated by Government, are with us conducted by private companies. Until very lately the largest of our Colonial possessions was governed by a private company; and now it appears we are raising a private [it is possible 'private' was meant to be deleted in an alteration] company for the defence of our homes.

I will not be rash enough to assert that the Volunteer Force which is now rising up in this country, will be found equal on an emergency to an equivalent of the regular army. I am well aware that many military officers shake their heads at the movement and say that rifle shooting is useless without discipline. Undoubtedly the want of organisation and discipline must ever be the weak point in a force so constituted, and we have a great Authority for saying that in all the operations of War the morale bears to the Mechanical a proportion of three to one. But, is not the morale greatly affected by the Mechanical, Confidence is the result of skill, and the skill of the soldier depends on his being trained to the use of his weapons. Here then we come to the strong point of our Volunteer system, for it is incontestible [sic] that in accuracy of shooting our Volunteers, being men of a superior stamp of energy, will excell any similar force of regular soldiers on the face of the Globe.

Of organization & discipline I will therefore say nothing but leave those most important qualities of efficiency to whatever occasion is destined to bring them forth. And confining myself to the third element in the Art of War, the Mechanical, I will before entering upon the most practical part of my subject briefly [illegible words crossed out][insert] glance over [end insert] the history of war, so far as your time and my imperfect information will permit me, and endeavour to discover from past history to what extent we may expect benefit, be [sic] rendering rifle shooting, the national amusement.

Commencing with the earliest records known to us, we find amongst the Egyptian frescos ample evidence of the importance they attached to Archery, & other military exercises, altho they were essentially a peaceful nation. Many of the drawings on the Walls at Thebes & other places represent men undergoing instruction in these exercises & some of the Instructors are drawn with the heads of birds which is their well known manner of representing their Gods, [illegible word] shewing that here as in Greek Mythology, [illegible word crossed out] archery, was so highly estimated as to be attributed to divine origin. The Ethiopians were celebrated archers. The Assyrian Sculptures bear ample testimony to the frequency of their military exercises. The Persians prided themselves on [illegible word crossed out] [insert] Archery

[end insert] & had an [illegible word crossed out] [insert] Archer [end insert] stamped on their earliest coins as an emblem of [illegible word crossed out] [insert] power [end insert]. [illegible word crossed out] [insert] Herodotus [end insert] says that from the a 5 years old to the age of 20, they taught them only three things, to ride, to shoot & to speak the truth. The more modern Persians appear to have cultivated the cultivated the shooting part of their education at the expense of veracity, for we are told somewhere by a distinguished traveller that they profess to split a [illegible word crossed out] [insert] horse [end insert] hair with their arrows at the distance of six paces. [insert] David is a memorable example of the triumph of skill over brute force. [end insert] In the XXth chapter of Judges we are told that [insert] when [end insert] the children of Benjamin gathered themselves together to go out against Israel they had amongst their people 700 chosen men, left handed every one of them whom could sling stones at a hairs breadth & not miss. Here I may remark that this is not by any means the only example in which left handed men have been remarkable for skill in the use of arms. Some of the best shots I have seen have been men who fired from the left shoulder & [insert] aimed with [end insert] the left eye.

The Achaeans & Balearians were examples of the value of skill & were much esteemed by the Romans. Livy says that the former practiced at small circles placed at a great distance, and that not only could they hit the heads of their enemies but any part of their face they aimed at & pierce through all defensive armour. The Balearians were trained from infancy their mothers placing their food every morning at the top of a pole & only allowing them as much as they could knock down with their slings. When Metellus approached the Balearic Isles he was obliged to cover the outside of his thighs with skins to break the force of the stones thrown from the slings.

In Homers Odyssey there is a passage [insert] from [end insert] which [insert] we may learn a lesson [end insert] even in the present day. [illegible word crossed out] [insert] Ulysses [end insert] is described as shooting his arrow through a succession of small rings placed in line at some distance apart from which we may infer that they would at [several words illegible] it was not accuracy only that they aimed at, but flatness of Trajectory; as it would be impracticable to shoot through a succession of [insert] small [end insert] rings without imparting great velocity to the arrow.

This is precisely what we are striving to attain now with our small bore rifles such as the Lancaster, Enfield & Whitworth small bores. The larger Enfield now in use in the service is probably as accurate as is necessary for present purposes, indeed the shooting of our soldiers tho rapidly improving has not [insert] yet [end insert] been brought to correspond with the accuracy of the weapon at long ranges and it is probable that were a more accurate weapon placed in their hands no increased effect would result from it on service. [insert] Increased initial [end insert] velocity & the [insert] consequent flatness [end insert] of Trajectory is however a great desideratum; by it the error due to misappreciation of distances is diminished and as [illegible words crossed out] judging distance is [illegible words crossed out] one of the most difficult parts of the Musketry training to acquire, a flat trajectory [insert] becomes a [end insert] most important quality in a good military rifle. It also causes the bullet to sweep over a large portion of the field of battle without rising higher than the head of an infantry or cavalry soldier, & thereby increasing the chance of hitting in its [insert] course [end insert] some of the enemies lines or columns. No better plan could be devised for testing the merits of a rifle in this respect than by firing through rings in the manner Ulysses is represented to have done.

If it were desirable to multiply examples from ancient history much might be said of the merits of the Roman soldiers. Josephus Polybius & all who have written on the subject attribute their universal success to their skill in handling their arms. Their training, we are told was so incessant, that they looked forward to a campaign as a release from the fatigues of their ordinary duties.

From the middle ages we may collect many proofs of the good effects of encouraging shooting amongst the people.

Sir Walter Scott in Old Mortality describes the Festival of the Popinjay as practised in Scotland towards the latter part of the 17 Century.

This he says "was an ancient game formerly practised with archery but at that time with fire arms; the sport consisted in shooting at the figure of a bird suspended from a pole & decked with partly coloured feathers, so as to resemble a Popinjay or Parrot. the competitors discharged their fuses and carbines in rotation at the distance of 60 or 70 paces. He whose ball brought down the mark held the proud title of Captain of the Popinjay for the remainder of

the day, and was usually escorted in triumph to the most respectable change house in the neighbourhood, where the evening was closed with conviviality, conducted under his auspices, and if he could afford it, at his own expense.

In Holland in the 13th Century we read of the aristocratic Guild of Cross bow men. The members of which were obliged to prove their noble descent, & to take a solemn oath to devote their whole time to shooting & allow no other pastime or exercise to take up any part of their leisure. Once a year a grand match was held under the patronage of some saint, *[insert]* to *[end insert]* whose Church steeple the bird or semblance of a bird hit by the victor was affixed. The conqueror was the Roi des Arbaletiers, for the coming year, and received a jewelled decoration, which he was entitled to wear for 12 months, after which he returned it to the Guild to be again contended for.

On the first introduction of the Harquebus into Holland in 1566 great attention appears to have been paid to training as we read in Grimstones History of the Netherlands "*[insert]* The *[end insert]* State unwilling to be without such Weapons when need should be sent for the expertest workmen in that art from all parts of Christendom, & for the skillfullest gunners, to instruct & train their youth, and because the countrie people should not be ignorant thereon; and it was decreed that in every village under their protection, two young men should be chosen to practice this exercise, and for recompence should be freed from all *[illegible words crossed out]* subsidies and impositions, and that *[insert]* these *[end insert]* young *[insert]* men *[end insert]* at a certain day in the year, should meet at the nearest castle or city to shoot at a mark, when his village that should shoot the best, was for one whole year freed from all tax and tribute."

This seems to have given a great impulse to shooting and in after years the Dutch appear to have been celebrated for the effect of their fire. In describing the battle of Malplaquet Chevalier Follard who was an eye witness of what he described, says that the French owed their defeat in a great measure to the superiority of the Dutch infantry fire, on account of their being *[insert]* better *[end insert]* trained by constant practice in the use of their Arms.

But the period which most interests us on account of the ~~parallel~~ parallel which it affords to the movement which is now going on in this country is that which *[illegible words crossed out]* *[insert]* embraces *[end insert]* the archery of our old English bowmen, viz the 14, 15 & 16 Centuries. The English Infantry says the present Emperor of the French in his "Etudes sur le passé et l'avenir de l'Artillerie" *[insert]* Artillerie" *[end insert]* "was composed of Archers who used with wonderful ability a bow the length of a man's stature. The great efficiency of our men in the use of this weapon was owing mainly to the exertions of King Edward III, who enforced the practice of Archery by every Englishman on Sundays & holidays. In the days of Edward *[illegible]* a statute was passed ordering that every Englishman should have a bow of his own height, and ordering Butts to be constructed in every Town ship, also imposing the penalty of a halfpenny on anyone who neglected the practice of archery. All those now over crowded ~~districts in the~~ districts in and about the city which we somewhat inappropriately call fields, *[illegible words crossed out]* *[insert]* were then in reality the fields *[end insert]* in which the butts were erected & Archery carried on. From this time to the reign of Henry VIII & even Elizabeth ~~Archery~~ the use of the long bow continued to be the favourite exercise of the entire population. Latimer encouraged it from the pulpit, calling it a Godly Act, a wholesome exercise and much commended in Physic. Roger Archer Latin Secretary to Edward VI Mary & Elizabeth ~~wrote~~ *[insert]* wrote *[end insert]* a book upon it which *[illegible words crossed out]* like all his writing was remarkable for the purity of its style. Previous to the embarkation of the Spanish armada, the Pope sent emissaries to ~~report~~ England to report upon the character & resources of the people. In their Report *[illegible words crossed out]* *[insert]* a manuscript copy of which is I believe in the Vatican Library *[end insert]* *[insert]* it is stated *[end insert]* that the whole nation took such delight in Archery that there was no rank or progression *[illegible words crossed out]* that did not pursue it *[illegible words crossed out]* enthusiastically and that *[illegible words crossed out]* *[insert]* children were *[end insert]* taught to draw the bow from the age of 10. *[2 paragraphs crossed out and not transcribed]*

From all this we may see what a firm *[insert]* & lasting *[end insert]* hold an institution of this kind may be expected to take in this Country ~~it~~ *[insert]* when *[end insert]* properly encouraged by the Government & by the press. ~~but~~ Fortunately all attempts which have hither to been made for the invasion of ~~this country~~ *[insert]* England *[end insert]* have been warded off by the hand of providence before ~~the arriving on~~ *[insert]* the enemy reached *[end insert]* our shores, but should a hostile force ever effect a landing ~~on the coast of England~~ *[insert]* on our Coasts, *[end insert]* there can be little doubt they will *[insert]* meet with *[end insert]* such a reception as

shall cause them to repent bitterly their rashness in attempting it. I believe that *[illegible words crossed out]* in default of a large standing army, raised as in other countries by conscription, nothing will contribute more to this object, than the encouragement of rifle shooting amongst the people. By *[insert]* this *[end insert]* means ~~of which~~ the whole able bodied population of the country will be brought half way on the road towards becoming soldiers when an emergency renders it necessary.

~~But I have already dwelt too long on~~

It is now time that I should say a few words on the Instruction of firing of modern armies. Ever since the introduction of fire arms the English appear to have neglected target shooting. In 1676 Lord Orrery complains of the want of it, & recommends the *[illegible words crossed out]* use of medals with *[illegible word crossed out]* *[insert]* ribbons *[end insert]* or prizes for the best shot. In 1762 & 1777 we find two works which may be considered the first attempts to introduce a uniform system of drill & discipline into our Service. It is remarkable that altho both of these works *[illegible word crossed out]* *[insert]* enter *[end insert]* into the most minute details of the interior economy and management of a Regiment, and *[insert]* includes *[end insert]* the most carefully drawn up regulations for Camp and Quarters, with instructions for parade, drill & even cleaning of accoutrements, & are apparently got up with the view of leaving no part of the soldiers education untouched yet there is not one word about instruction in firing in either of them, and as a proof how little attention was paid to accuracy of fire we find that at the word "fire" the soldiers were taught to "pull the trigger briskly" thereby prescribing the very fault which in the present day occupies so much of the Instructors time in correcting as being incompatible with any thing like good shooting. In the former of these works first published by Humphrey Bland Esqre Lieut Genl of his Majesties forces and afterwards republished in 1762, the author regrets the absence of any work of the kind since the writings of the Earl of Orrery 50 years previously, so that we may reasonably conclude that the practice of target firing, in common with the other suggestions of that general were neglected during the whole of this period. The author however speaks highly of the fire of the Dutch Infantry.

In a work on the Art of War published in 1809 some rules are given for target practice, recommending that the target should be 5 feet in diameter, & painted in circles in order that the riflemen might calculate their proficiency in firing. But by far the best work that appeared up to that time was a book *[illegible word crossed out]* *[insert]* called *[end insert]* "Twenty three years practice with rifle guns" by Ezekiel Baker Gun maker published in 1804 (here copy the first number)

In that most excellent and clever work of Dr Robert Jackson's, entitled "Formation, Discipline and Economy of Armies," first published in 1804, we find some valuable remarks bearing upon this subject; Confidence he says results from the skill which commands effect (here copy from book)

~~he~~ *[insert]* Dr Jackson also *[end insert]* complains that the point at which the drill of the soldier chiefly laboured was the superior rapidity of loading & firing in regularly measured time, and that the just direction of the fire which effects destruction scarcely appeared in the calculation, Such explosions he says may intimidate by their noise, but it is a mere chance if they destroy by their impression. The real object of the soldiers study is the discomfiture of the enemy. The justness of aim is the main & ultimate object of Instruction, and as it is the object which a rational system of military instruction might be supposed to inculcate, it is a matter of surprise it should be so little cultivated. The firelock is an instrument of missile force, it is obvious that the force which is missile ought to be directed with aim, otherwise it will strike only by accident, if the destruction of the enemy be the object of a battle, the arrangements of modern tactic and the drillings of the soldier counteract the purpose, History furnishes proof that the battle is rarely gained by the scientific use of the musket; noise intimidates, platoon firing strikes only at random, and the charge with the bayonet decides the question.

He recommends the abandonment of the three deep *[insert]* line of Infantry *[end insert]* as being incompatible with effective firing.

On the subject of Instruction ~~he gives~~ some valuable hints are given in the following passage (here copy from the book)

beginning the degree of imperfection and ending /in reality/

Dr Jackson was a man of great practical experience as well as scientific knowledge, having been attached to the Russian & other continental arms *[sic]* during the war, it is ~~therefore~~ satisfactory to know that he considers the English *[insert]* we *[end insert]* as a nation have *[illegible]* for great *[illegible, pl...]* aptitude *[insert]* for *[end insert]* the use of missile weapons.

In his own [*illegible 2 words p...*] no man contributed more towards the goal of this service but he was ill used by the Government of the day. His [*illegible*] have appeared in a Gazette & he died in poverty.

[*2 paragraphs crossed out*]

Altho the forgoing documents appear to have pointed out very clearly what were the requirements of the [*4 words illegible*] but slight improvement appears to have taken place until the year -----

[*The remainder of the text is on a separate single blue sheet, not tied to the rest of the document*]

I cannot conceal from myself that the subject which I have undertaken [*insert*] propose to bear upon discuss [*end insert*] in these lectures is one of of [*sic*] such magnitude that many far better qualified than myself would have been deterred from undertaking it. for not only is a detailed & comprehensive acquaintance with ancient & modern history essential to the proper treatment of so vast a subject but even history itself such as it is handed down to us is silent in regard to many points which have an important bearing on the gradual development [*insert*] progress [*end insert*] of a science & [*insert*] that [*end insert*] serve as the connecting links in its slow & gradual development. [*insert*] the [*end insert*] History [*insert*] of war [*end insert*] dwells chiefly ~~on~~ [*insert*] upon [*end insert*] those great struggles which have influenced the social & political condition of nations but it does not follow that these [*illegible*] [*insert*] they [*end insert*] are always or even usually those [*insert*] the ones that [*end insert*] which have had greatest influence ~~on~~ [*insert*] upon [*end insert*] the science itself. The improvement of War Engine [?] & of the military institution of a country usually takes place in peace time when the attention of the community is devoted to social matters & ~~when matters relating to~~ [*insert*] seen as a [*illegible words*] [*end insert*] warlike improvements are for the most part excluded from the records of the period [*insert*] time [*end insert*] It is not certainly from those who are prominent in [*insert*] its [*end insert*] high office & ~~in the~~ [*insert*] of [*end insert*] administration that great improvement originate but rather from those whom retirement most affords them leisure for study & reflection. Such men are entirely deficient in the arts of self advancement it is those destined to live & die in observing the unknown benefactors of their race. and it is not until the noisy struggles of their [*illegible*] have attracted public attention [*insert*] notice [*end insert*] that a great invention becomes known to the world. Nor do such improvements [*2 words illegible*] command a place in history until [*insert*] they know [*2 words illegible*] [*end insert*] there again in some important transaction upon which favourable attention of the period has been entered. If there was [*3 words illegible*] at the property of a science from its infancy & [*2 words illegible*] step of [*2 words illegible*] established [*insert*] recognized [*end insert*] institution was led by [*insert*] a [*end insert*] [*illegible*] & gradual p.. [*illegible word*] of development to the establishment of others, if we would [*illegible*] & arrange the whole part as we would and divide the art into its several branches just as we might register the growth of a tree from the seedling to its fruit bearing maturity. The course would ~~be in~~ lead in to the [*insert*] super human [*end insert*] Herculean task of searching out the records of obscure personages in all ages. we should have to invert the whole order of things & bring about in military p.... [*illegible*] would be termed rear face to the great throughout the entire time of History. Fortunately for us no such Herculean task is [*illegible*] to the accomplishment of one object, it is sufficient to have acquired by gradual experience in the field of improvement that things are never as they appear to be at the time & seldom as they are handed down to posterity. All ages & our own no less than others abound in new ideas which spring from the minds of men acting unknown to their contemporaries & which a... the period of their recognition in due season. ~~long after their~~ [*2 words illegible*] ~~they have the~~ when the world is ripe for them perhaps long after those into whose brain providence put dep... then [*2 words illegible*] to learn they will take their place.

[*This could relate to the paper on Rifle shooting, or it might relate to Primitive Warfare, a 3 part series of papers given between 1867 and 1869 at RUSI. I cannot find this text there, but the same kinds of words and phrases are employed*]