



Royal United Services Institution. Journal

Publication details, including instructions for
authors and subscription information:

<http://www.tandfonline.com/loi/rusi19>

Mounted Riflemen

Captain J. R. Lumley

Published online: 11 Sep 2009.

To cite this article: Captain J. R. Lumley (1881) Mounted Riflemen, Royal United
Services Institution. Journal, 25:112, 638-656, DOI: [10.1080/03071848109418552](https://doi.org/10.1080/03071848109418552)

To link to this article: <http://dx.doi.org/10.1080/03071848109418552>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is

expressly forbidden. Terms & Conditions of access and use can be found at
<http://www.tandfonline.com/page/terms-and-conditions>

Friday, June 3, 1881.

MAJOR-GENERAL LORD CHELMSFORD, G.C.B., &c., &c., in the Chair.

MOUNTED RIFLEMEN.

By CAPTAIN J. R. LUMLEY, Late 13th Prussian Uhlans and
Lonsdale's Horse.

The CHAIRMAN: I beg to introduce Captain Lumley, who has kindly consented to give a lecture on this occasion on a subject which I think all will agree is a very important one. Captain Lumley comes before you with all the practical experience which he gained in a great campaign, he having taken part in the Franco-German war. He was present at the battles of Spicheren, Gravelotte, and Sedan; he also joined in the siege of Paris, and afterwards was with the force that operated along the Loire. Subsequently he went out to South Africa during the later phase of the Zulu war, and was employed in command of 200 or 300 colonial mounted infantry. He has thus obtained practical experience regarding the arm of which he will give us his views this afternoon. He belonged to the 13th Prussian Uhlans.

CAPTAIN LUMLEY—Though greatly appreciating the honour done me by the Council of this honourable Institution in being asked to read a paper on "Mounted Infantry," still I feel uncertain whether I shall be able to do justice to a subject of such great importance; one which, moreover, has until now only been assayed in various armies without any definite conclusion having been come to as to its practicability and organization, or the best means of carrying it into effect. Therefore, before entering on my own views regarding this,—I may say in the future—new branch of the service, I will first place before you a short outline of the past history and employment of "mounted infantry" at different periods and in various countries during peace as well as in war. By such means, I hope to give more valuable information than any I could presume to initiate.

Looking back to the earliest stages of military history, we find the necessity of rapidly moving bodies of infantry was early recognized and adopted, for we read that the Assyrian cavalry, 705 B.C., was composed with this object of spearmen and archers, the latter dismounting to fight on foot as soon as they were in close proximity to the enemy, while the spearmen remained mounted ready to follow up any success gained by their comrades.

During the Greek period, Alexander the Great, who was the first General that employed cavalry to any great extent, and whose fiery and impetuous nature led him to favour the cavalry service, as we find him, in nearly all his battles, opening the action at the head of his cavalry by attacks on the enemy's flanks, and invariably appearing at the decisive point with a victorious body of horsemen, nevertheless divided his cavalry into heavy-light and a body called "demachi," or mounted infantry, who were intended to fight both on foot and on horseback. The art of war, which had made great progress, clearly demonstrated the importance of rapid movements in anticipating an

enemy in seizing an important position, and Alexander, one of the greatest military reformers, at once recognized the advantages to be gained from a force such as described, and able to operate upon broken ground where chariots could not be used. Never has any General more fully proved the immense benefits to be derived from a mounted infantry force than did Alexander, when, after the battle of Arbela, hearing that the Persian King had fallen into the hands of his Bactrian satrap Bessus, he marched incessantly for three days, his infantry, from weariness, being unable to keep up, he dismounted 500 of his horsemen, and placing his Captain of foot with his best infantry on the horses, pushed on in pursuit, and coming up with the enemy early the next morning, totally defeated them. The energy with which this pursuit was carried out deserves great attention, for the fact of Alexander's dismounting a portion of his cavalry in order to enable him to take on his infantry clearly proves how much the great master of the art of war valued a Mounted Infantry force.

The Romans, who had imbibed Alexander's ideas as to the use of their cavalry, employed it exclusively for charging purposes, although we find an instance, during the wars of Hannibal, of the Roman knights leaping from their horses at the battle of Cannæ to fight the Carthaginians on foot. Julius Cæsar is also reported to have employed infantry mounted "*en croupe*" behind his cavalry, and on another occasion to have put 500 men of his 10th legion on the horses of his allies.

In the days of chivalry, when horsemen were mostly employed for all military purposes, no mention is recorded of mounted infantry, and it is not until the introduction of fire-arms that we read of them again as being employed by Marshal De Brissac, in 1550, under the name of dragoons. Thus the French seem to have been the first to revive the use of Mounted Infantry, and their example was soon followed by all European armies, but I may say with the same result, viz., that they became irregular, and, ultimately, regular cavalry.

During the Thirty Years' War, Gustavus Adolphus, who very much resembled Alexander in character, and who certainly adopted his ideas regarding the employment of cavalry, set about re-organizing their tactics, which were of the slowest and clumsiest type. He taught his dragoons to become famous in hand-to-hand engagements, and although they had been originally raised as mounted infantry, they were transformed into cavalry, and used solely for charging purposes. In like manner, the dragoons and carabineers of Wallenstein's army, who carried long muskets to enable them to act as infantry, seldom or never dismounted, but fired from their horses or fought as cavalry. The successes obtained by Gustavus Adolphus with his cavalry, which had been taught to depend entirely upon the keen edge of the sword and the shock of the charging men and horses, could lead but to one result, the suppression of mounted infantry, and the employment of dragoons in the duties for which they had been originally organized became obsolete, and continued so, more or less, till the end of the 17th century.

At the commencement of the 18th century a change again took place, when Peter the Great organized in Russia corps of dragoons for the double purpose of fighting on foot and on horseback. Their arms and equipment, being specially designed for the former purpose, consisted of a long musket, sword-bayonet, and pistol; a certain proportion carried axes, spades, and shovels, for cutting down abattis and throwing up field entrenchments when defending important posts. It would appear that Peter the Great perfectly understood the employment of mounted infantry, as he owed his brilliant victory at Pultova, and its subsequent results, to the masterly way he made use of this arm. I will give a brief description of the battle.

"The Czar covered his advance with 1,000 dragoons, who, coming upon the enemy, dismounted and opened the engagement, but on the infantry coming up they were ordered to form up in 'ordre de bataille' alongside of them, on the flanks. A severe struggle took place, resulting in the defeat of the Swedes, who were closely followed up by Prince Menzhikoff with a large body of dragoons and cavalry, with infantry mounted *en croupe*. Coming up with them on the banks of the Dnieper, which they were unable to cross, he compelled General Lovenhaupt to surrender with 14,000 men."

It is worthy of remark that at one time the cavalry force of Peter the Great is said to have been 84,000 men; but it would, however, be fallacious to imagine that these were cavalry proper, as the greater portion were in reality mounted infantry, and raised for that purpose.

Marshal Saxe, who also recognized the advantages to be gained by an army having mounted dragoons, laid down a rule that they should be twice as numerous as regular cavalry, mounted on small active horses, the men being of the same stamp.

Frederick the Great, who has had few, if any, equals as a leader and organizer, like Alexander, Gustavus Adolphus, and Marshal Saxe, maintained that the strength of cavalry lay in their mobility and charging capacities, and to these qualities of his cavalry he owed the success of fifteen out of the twenty-two battles he won. Predisposed as he was in the opposite direction, still we find that after the battle of Rosbach, on the 6th November, 1757, coming up with his cavalry upon the retreating enemy, whose rear-guard was strongly posted in a country house, he ordered them to dismount, and succeeded in taking the position, carbine in hand. This use made by Frederick of his cavalry is instructive as showing that the highest appreciation for the "armes blanches" did not prevent his dismounting his cavalry and using fire-arms when necessity required it. On the accession of Frederick, cavalry had degenerated into masses of unwieldy horsemen charging at a trot, and firing when attacked from their saddles. He soon put a stop to the latter practice, by threatening to cashier any Officer receiving an attack standing, or allowing his men to fire with their carbines while mounted.

The wars of Napoleon tell us very little regarding the employment of mounted infantry or dragoons, the fact being that the latter had universally settled down into regular cavalry, and were employed as such. The only instance I find is when Suchet, in 1811, after the

battle of Valencia, having mounted his infantry behind his cavalry, successfully pursued Blake's retreating army.

I would now draw your attention to the fact that the Russians are the nation who have paid the greatest attention to the subject of mounted infantry, and consequently have gathered the most practical experience regarding it. That this should be the case is but natural, for in her wars Russia has always had vast extents of ground to get over, and has therefore been taught the urgent necessity of facilitating the movements of infantry.

Thus far, I have contented myself with placing before you solely historical facts, but I must now give somewhat minuter details of the Emperor Nicholas I's organization of a dragoon corps, to be employed in the double duties of infantry and cavalry, but principally as the former, the horses to be considered solely as the means of quickly transporting the men from one place to another. With this idea, he raised a Dragoon Corps, consisting of two divisions, each division having four regiments, 2,000 strong. The regiments were divided into ten squadrons, eight of which were armed as infantry, with long-range muskets and sword-bayonets; the remaining two squadrons, having lances, formed the cavalry of the corps. The divisions were to remain intact in time of war, and to be used for the purpose of flying columns, horse artillery being attached to them. Kaiser Nicholas so far carried out this idea, that some years afterwards when he assembled them for manœuvres at Wassnessensk, the Prussian officers on the staff of Prince August, who witnessed the operations, were most favourably impressed with what they had seen, and declared the Russian dragoons to be first-rate infantry, as well as serviceable cavalry. Their tactics were to approach, if possible unperceived, the flanks of the enemy, taking the greatest care to keep well behind any objects of shelter; dismounting quickly they would form up into battalion columns from the right or centre, and advance under cover of their skirmishers. The horses were carefully kept out of sight, and the cavalry of the corps were employed to protect them against any sudden attack from the enemy's horsemen. If the attack were unsuccessful they would retire on their horses and gallop off as rapidly as possible, and endeavour to seize a more favourable opportunity at some other point of the battle-field. They marched in sections of threes, and dismounted in front, and column formation Nos. 1 and 3 dismounting, No. 2 holding the horses, who remained under the command of the second senior Officer. The favourable impression created in Berlin by the manœuvring of the Russian dragoon corps induced Colonel von Barner, commanding the 1st Regiment of Dragoons of the Guard, to endeavour to similarly employ the five regiments of Prussian dragoons. While recognizing the organization of corps of mounted infantry, as an important element in future warfare, Colonel von Barner was not satisfied with copying the Russian ideas, but set about to perfect them by making the corps entirely independent of the Commissariat and Transport while undertaking extended operations. He provided a fourteen days' ration for the men, which they carried with very little inconvenience, but when he came to adding oat cakes and compressed

forage for the horses, it was found to be impracticable, inasmuch as the troops would be incommoded by it in their rapidity of movement. Although the Prussian dragoons remained cavalry, the failure of the scheme was principally due to the Officers, who objected to become foot soldiers. Still the experiments tried by Colonel von Barner were not without some advantage, for to them the Prussian army owes the introduction of the "Erbswürst," which proved so efficacious during the Franco-German campaign.

When the Crimean War broke out, everybody was anxious to see the practical results derived by the employment of the Russian Dragoon Corps, which at that time numbered 16,000 men. But disappointment followed, as it was never so employed in its double functions, and when the war ended, Emperor Alexander II broke it up, and distributed the regiments among the cavalry divisions; thus, as in all preceding instances, they became regular cavalry. However, I do not think that the Crimean campaign was one by which the employment of mounted infantry could be fairly tested, as the operations on both sides were more or less confined to siege exploits.

We now come to the American civil war—a war very rich in the doings of "Mounted Infantry," for it would be an injustice to cavalry to call the mounted levies raised on both sides by any other name. When we remember that the entire mounted force in America on the outbreak of hostilities was one regiment of regular Northern Cavalry, and that before its conclusion 150,000 mounted men were in the field, most of them armed with rifles, we can form some conception how much importance the American Generals attached to such troops; but we must bear in mind that neither side possessed what would be called, in Europe, a cavalry force, which, no doubt, greatly facilitated their mode of warfare, while at the same time it allowed them to show us how Mounted Infantry could advantageously be employed in similar circumstances, as well as, if properly supported, by regular cavalry, also in European warfare.

To the Confederate General Morgan is attributed the first recognition of the great value mounted men, armed with a rifle, revolver, and sabre, would be in American warfare, and he raised and equipped, as I have just mentioned, several hundred men. Although he was not himself a trained soldier, still we can but profit by his ideas, which are worthy of consideration on account of their simplicity and practicability. When mounted, his regiment was drawn up in single line, when advancing, mounted skirmishers covered his front, and if necessary to dismount, he always did so under their protection, one man out of every four remaining to hold the horses, a body of mounted men being always kept in reserve to guard the flanks and horses, as well as to cover a retreat or press a victory.

General Duke describes Morgan's manner of fighting in the following terms:—"The nature of the ground on which we generally fought, covered with dense woods, or crossed by high fences, and the impossibility of devoting sufficient time to the training of the horses, rendered the employment of large bodies of mounted men, to any good purpose, very difficult. It is very easy to charge down a road

"in column of fours, but very hard to charge across the country in extended line, and long guns were not exactly the weapons for cavalry evolutions. We found the method of fighting on foot more effective, we could manœuvre with more certainty, sustain less and inflict more loss."

It must be remembered that General Morgan very rarely fought with the army, he had to make his force a self-sustaining one, and therefore he found it necessary to have horse artillery attached to his mounted corps. It would occupy too much time to enter minutely into all General Morgan's operations, so I must only refer to one or two briefly.

"Starting from Knoxville on the 4th of July, 1864, he reached Medway on the 12th, having marched 300 miles in eight days; such was the extreme mobility of his flying column that the enemy were unable to obtain any correct information of his intentions or whereabouts. The result of this raid I had better describe in his own words: 'I left Knoxville on the 4th July, with about 900 men, and returned to Livingston on the 28th with nearly 1,200, having been absent just 24 days, during which time I had travelled over 1,000 miles, captured seventeen towns, destroyed all the Government supplies and arms in them, dispersed 1,500 home guards, and paroled nearly 1,200 regular troops. I lost in killed and wounded about 90 men.'"

Like all amateur soldiers, General Morgan, elated with success, forgot the necessity of being cautious as well as enterprising, and was finally cut off and made prisoner, with the greater portion of his command, while on a similar raid a year afterwards.

General Forrest's expeditions, General Stuart's great sweeping reconnaissances, and the cavalry operations of Grierson and Wilson, are well known to most military readers, so I must pass them over for want of time, so as to enable me to make a few remarks on the operations of General Sheridan's corps of mounted riflemen, for their operations very materially contributed to the surrender of General Lee's army at Richmond and to the termination of the American War.

On the 29th of March, 1865, General Sheridan set out with 10,000 mounted men to carry out his great turning movement of the right flank of the Confederate Army. A severely contested fight occurred on the 31st, when he successfully resisted a combined attack of all three arms with his dismounted horsemen, at Five Forks, while, on the 1st of April, he stormed and carried the enemy's position with three of his brigades, General Meritt, with the reserve brigades, taking up the pursuit, captured 6,000 prisoners, and caused a total loss of 13,000 men to General Lee's army. This battle of Five Forks virtually decided the fate of the war, for General Lee evacuated Richmond, and retreated in the direction of Danville, vigorously pursued by Sheridan's cavalry, who, seeing that the Confederates' force was too great for him to defeat by a direct attack, swept round its flank, crossing Sailor's Creek before it, took up a position across the road on the far side of the stream and, dismounting, disputed General Lee's passage of the stream. Operating in like manner at Lynchburgh, he got the Confederate Army between

his and General Grant's forces, and thus brought about the surrender of the whole Confederate Army at Oppomattox Court House on the 9th of April.

The war of 1866 does not furnish a single instance of the employment of dismounted cavalry, but "Jägers" (riflemen) were attached to some of the reconnaissances carried out by the light cavalry. There is an old saying in Austria, bearing on the co-operation of these troops: "That the left stirrup of the Hussar belongs to the Jäger," meaning that in case of necessity the latter would take hold of the Hussar's stirrup and would thus be able to get over the ground more rapidly. The Franco-German campaign opened a new era for cavalry, whose prestige had greatly suffered after the Austrian war. Officers were not wanting who were only too ready to assert that the days for its employment were passed and that it could not be of any use in these times of Chassepôts and Henry-Martinis. But the admirable way in which the German cavalry performed the outpost, reconnaissance, and advance guard duties not only proved its indispensability to any properly organized army, but the battle of Mars-la-Tour will ever bear evidence that properly trained and handled cavalry can act successfully against infantry and artillery, even in these days of long-range breech-loading rifles. It was entirely due to the noble conduct of the 5th and 6th Cavalry Divisions that Marshal Bazaine was prevented from continuing his march to Verdun and ultimately joining Marshal MacMahon at Châlons, for by their repeated attacks he was obliged to accept a battle, and thus allowed time for the German infantry to carry out their turning movement, which ended in his being thrown back into Metz.

In my opinion, the battle of Mars-la-Tour, if compared with Sheridan's movements after the engagement at Five Forks, speaks greatly in favour of the employment of mounted infantry. Although the object in view was obtained in the former battle, by the noble sacrifice made by the Prussian cavalry, still, although a cavalry Officer, I cannot help admitting that the same result would have been obtained at a very much less expenditure of life and money had mounted infantry been employed.

In the first phase of the war, I had no personal experience of the French cavalry fighting dismounted, although they had many regiments of Chasseurs d'Afrique and Chasseurs-à-Cheval intended for this purpose. On the other hand, there is a record of the 3rd Zieten Hussars dismounting and successfully attacking, on the 29th August, the village of Voucq, which was strongly occupied by the rear-guard of Marshal MacMahon's army. It was, however, during the winter campaign on the Loire and in the North, when nearly the whole country was infested with Francs-tireurs, that the Prussian Uhlans began to feel the want of a rifle, for their patrols were daily forced to retire before or give a wide berth to villages and woods occupied by a handful of men who had come out "pour faire la chasse aux Prussiens," to use their own expression. I may here be allowed to relate a small incident that occurred to myself

On the 23rd of December, the 11th Cavalry Brigade, consisting of a

cuirassier, dragoon, and Uhlan regiment, was brought to a standstill before the village of Vibray. The dragoon Officer in command of the advance guard reporting the village to be occupied by infantry, General von Barby decided, as it was getting dark, to bivouac his brigade for the night before the place. The next morning, my squadron relieved the dragoons and took the advance guard of the brigade, I being ordered to command the advance guard of the squadron. The orders I received were, Vibray is still occupied, if you are fired upon, send one man back to report, leave two to watch the road we are advancing on and gallop through the town with the remainder. We were fired on, and I galloped through the town, receiving a parting volley, fired from their horses, by a dozen Chasseurs d'Afrique, who then made off in the opposite direction. Here is an instance of a whole cavalry brigade stopped by 12 mounted riflemen, an impossibility had it been accompanied by Mounted Infantry.

What the German opinion may be regarding the utility of mounted infantry I cannot say, as opinions vary greatly on the subject, but it is certain that the experience gained during the war of 1870-71 placed beyond contention the absolute necessity of arming the cavalry with rifles, and they all now carry, in a bucket attached to the right side of the saddle, the cavalry carbine known as system M-71. It is 1 metre long, weighs $7\frac{1}{2}$ lbs., and is sighted up to 1,300 metres or 1,430 yards.

Let us now consider the lessons to be gathered from the past history of mounted infantry, and endeavour to form a clear perception of their utility, and if so, of their necessity. The outlines I have placed before you clearly show that not only in modern times, but also in past ages, all great Generals have recognized the necessity of being able to move bodies of infantry with as great rapidity as possible, as well as spare them the fatigues necessarily entailed by forced and extended marches. The Greeks, the Romans, the Persians, and, at some time or other, all the military Powers of Europe, have resorted to various means to carry this principle into effect, and the instances I have quoted bear strong testimony to the great utility mounted infantry have been whenever and wherever employed. During the American war, so admirably were they made use of, that not only did they fight, dismounted, sanguinary battles, but also most effectively performed the reconnaissance and outpost duty of cavalry.

Colonel Denison, in his admirable work on "The History of Cavalry," speaks of the American mounted levies both as cavalry and mounted riflemen, and holds forth their doings to illustrate his favourite idea that mounted infantry should be a dualistic arm, both infantry and cavalry, but I maintain that calling these American levies cavalry is a misappropriation of the word, for cavalry, to be used effectively as such, cannot be raised and trained in one or two years. The following quotation from Colonel Denison's work will, I think, bear out what I say:—

"Another reason led to the introduction of mounted riflemen, that will seem strange to the European reader, particularly to the European cavalry Officer. There is no principle more firmly established

“ among professional writers on cavalry tactics, than that the sword is
 “ the most deadly and effective weapon that can be placed in the hands
 “ of a horseman. The moral effect of horsemen charging sword in
 “ hand is very great in all European armies, and no principle is laid
 “ down more positively than the maxim that cavalry relying on fire-
 “ arms must certainly be beaten. In America, strange to say, the
 “ exact reverse is the fact. There the people had the greatest con-
 “ tempt for the sword, their small force of regular cavalry, trained on
 “ the European plan, alone placing implicit confidence in it. The habit
 “ of the individual citizen of being armed with a revolver, and having
 “ almost always a rifle of his own, gave them naturally a high opinion
 “ of their favourite weapons. At once a feeling of contempt for the
 “ sword sprang up in the Southern army, and although at the outset
 “ of the war the Northern cavalry used the sabre, the Southern troops,
 “ both mounted and dismounted, so despised the weapon that nothing
 “ could make them give way to a charge of cavalry, sabre in hand.”

He further states that when the Southern infantry saw the cavalry advancing to attack they would remark, “ Here, boys, are those
 “ fools coming again with their sabres ; give it to them ! and that the
 “ Southern cavalry, who were at first simply armed with double-
 “ barrel fowling-pieces, would charge at speed at a line of hostile
 “ cavalry, firing both barrels into the enemy’s faces, and then dash
 “ through, striking with the butts of their guns.”

Besides differing from Colonel Denison in the appellation of these levies, I must also differ from him in his opinion “ that European
 “ cavalry Officers consider the sword the most deadly and effective
 “ weapon that can be placed in the hands of a horseman,” for it is
 universally admitted that the lance is the queen of weapons and the
 most dangerous, this being confirmed by the statistics of the killed
 and wounded by these weapons respectively during the Franco-German
 War. It certainly must have been very indifferent cavalry who
 allowed a body of mounted men, armed with fowling-pieces, to dis-
 charge them in their faces and proceed to belabour them with the
 butts. I am able to bear testimony, from personal experience, against
 the American notions expressed in this quotation, for at the battle of
 Mars-la-Tour I had the good fortune to be among those who were
 present in the great cavalry charge that took place on the extreme
 Prussian left just before sunset. My regiment, lancers, was opposed
 to “ Les Dragons de l’Impératrice,” who received our attack standing,
 firing from their horses with their carbines, but long before they could
 belabour us with the butt-ends or even draw their swords, which they
 endeavoured to do, we had completely ridden them down, and those
 who were not killed or wounded were made prisoners, minus their
 horses, which had escaped, their riders having been unseated. Our
 loss in this attack was very small, and that of the French very severe.
 Not so well fared the 19th Dragoons, who were opposed to French
 lancers ; their loss, both in Officers and men, was very considerable.
 The conclusion I have formed is, (1st) that it is culpable folly to fire
 from the saddle, and that the Officer who allows his men to do so should
 be made an example of ; (2nd) that nothing is more difficult, even to

a perfectly trained trooper, than to use a sword effectively on horse-back when opposed to an enemy using either lance or bayonet. It is my opinion that mounted infantry should be solely infantry, and employed to act as such in conjunction with cavalry and if necessary horse artillery, their horses being the means of rapid locomotion, nothing more. If these ideas be strictly carried out, great benefit would accrue from the formation of mounted infantry corps, as speed in movement is one of the greatest elements of success in war. So much was the great Napoleon imbued with this idea, that he expressed the opinion that an army of 10,000 men which could average 20 miles a day would conduce as much towards the success of a campaign as one of 20,000 moving only 10 miles a day.

The reconnaissance, patrol, and outpost duties now done by cavalry can be equally if not better performed by properly trained mounted infantry, while they would be of much greater service in escorting and protecting convoys. As mounted orderlies, they would be found quite as useful and much cheaper than a trooper. I think, taking everything into consideration, there can be no question as to their utility. The necessity of organizing corps of mounted infantry is a subject which calls for the greatest attention from all military reformers and writers in all countries, but especially in England, whose wars are not usually fought in Europe or confined to European tactics, but are mostly waged in tropical climates, where the marching powers of her infantry and the utility of her somewhat heavy cavalry are greatly affected by these circumstances. I would even go further and say that the present training and organization of the English cavalry necessitates the organization of mounted infantry corps. While discussing this question, which I do from an entirely English point of view, I would bring to your consideration the following questions: 1. Who is to be our enemy? 2. Can we do without mounted infantry?

In answer to the first question, I would venture to say that the probability of England being engaged in a continental war is very remote indeed, but on the other hand, if she wishes to maintain her foreign possessions she must be prepared to defend them by force of arms, for their loss will be followed by the loss of her commerce, and by the loss of her wealth. What I would imply by the foregoing observation is, that England will encounter her future enemies not in Europe, but in Asia, Africa, and perhaps Canada. In these countries, great distances will have to be traversed and the motive powers of the troops more or less influenced by climate. What I particularly wish to do, is to call your attention to the not very remote probability of a Russian advance into Afghanistan and a subsequent invasion of India.

None but those who are blind, because they will not see, can believe that the Russian conquests in Central Asia have no ulterior object than the subjugation of the Turkomans. Were I not diverging too far from my subject, I would tell you what Russian Officers have told me regarding these expeditions, but as I am unable to go into details, I will briefly say that they acknowledge India to be their object. I will therefore draw your attention to the enemy we shall meet when

this time comes, which will show my reason for attaching so much importance to the question, "Who is to be our enemy?" as that enemy will certainly possess a very large force of mounted infantry, and it may not be uninteresting to you to hear some particulars about them. My authority, Fadiejew, whose article was published in the Russian language, and therefore is little known, begins by quoting a conversation between Napoleon and Admiral Pulteney Malcolm on the island of St. Helena:—

"If you do not take care," said Napoleon, "Russia will surpass you all; she has already so organized her forces that great conquests can be undertaken by scattering over Asia her light troops the Cossacks.

"It is impossible," replied the Admiral, "to call Cossacks good light troops." "Do not be mistaken," replied the Emperor, "they are most useful, and first-rate in guerilla warfare. They are here, there, and everywhere, attacking you to-day, to-morrow you cannot find them, finding their way through foreign countries without knowing the roads or the language. They are at home everywhere, and live on their plunder. I was never able to make Cossacks prisoners."

On the south-eastern frontiers of Russia live 250,000 Cossacks fit for military service, besides as many more horsemen of various other tribes. All these men are cunning, quick, and born riders; it is therefore unnecessary to teach them to ride. They would appear to be Nature's mounted riflemen. There are at present in Russia 20 million horses, so there would be no difficulty for her to place if necessary 300,000 mounted Cossacks in the field, the cost of which would be very small, as the law obliges every Cossack to furnish his own horse and accoutrements, although of late years they have been given breech-loading rifles by the Government. In 1875, the Don Cossacks, numbering 150,000 Officers and men, were organized as mounted riflemen, and no doubt this organization has also been adopted for all Cossacks, for in the official returns all those engaged in Turkestan are put down as mounted riflemen. It is therefore certain that, in the event of war, Russia would meet us with great numbers of mounted Cossacks, organized into flying columns, which would harass our flanks and destroy our lines of communication, if we are unable to meet them on equal terms. Now this appears to me sufficient reason for the organization of mounted infantry corps in the English army.

With regard to the question, "Can we do without them?" I say no, not only for the reasons I have already mentioned, but also because the English cavalry, as at present organized, is far too costly to be employed as mounted infantry, were it willing and capable of doing so; but putting the economical view aside, cavalry should never be asked to engage infantry dismounted, except as a surprise or to gain information, but never for offensive purposes.

Before entering on the duties and organization of mounted infantry, I must refer briefly to the often-proposed idea of conveying riflemen in carts so as to enable them to operate with cavalry and horse artillery. I must confess that the proposition finds little favour with me, for

the simple reason that I have seen it tried unsuccessfully. We found that the waggons invariably hampered the movements of the cavalry, and that moreover it was impossible to get them where most wanted. Conveying riflemen in waggons would be always a difficult matter in a country having good roads, but absolutely impossible and useless in one without them. The employment of camels is all very well on an emergency, but there are also many objections to it, such as the expense, the difficulty of mounting and dismounting, as well as the fact that camels cannot always go where horses can, nor be found in every country.

Every true soldier should be without prejudice, and although I have served in the cavalry all my life and have the very highest opinion of its capabilities if properly handled, still I am forced to acknowledge the necessity of organizing corps of mounted infantry, especially in England, for reasons I have given.

The principles on which mounted infantry should be organized are, firstly and foremost, that they are infantry pure and simple, having horses solely for the purpose of locomotion; secondly, that they should under no pretext whatsoever engage or receive the attack of an enemy otherwise than as infantry; thirdly, that they should always act as far as possible in large bodies; fourthly, that to every mounted infantry battalion should be attached a squadron of cavalry; for while advocating the employment of mounted infantry, it is far from my intention that they should in any way interfere with the offensive duties of cavalry, but rather, by co-operating together, render the services of both more effective.

Cavalry Officers should not be employed with mounted infantry, for it would inevitably lead to the destruction of the purpose for which such corps are organized.

I will now lay before you my ideas regarding the organization and employment of mounted infantry. I may be too confident in saying so, but I believe if some similar system were adopted by the authorities, it would be found of the greatest service in the English army. A corps of mounted infantry should be organized so as to act at any moment as a flying column. I would therefore recommend the following formation: four battalions of mounted infantry, one regiment of cavalry. Each battalion to consist of four companies of 240 men each, the cavalry to consist of four squadrons numbering 160 troopers each. This would give an effective force of about 4,000 men, which should in time of peace be taught to act together, and have a permanent staff, under whose direction it would act in time of war. The company and squadron should be the unit, commanded by majors, who should be responsible for the efficiency of their companies and squadrons respectively. The appellation "battalions" and "companies" should be strictly enforced, otherwise the thin wedge to the ultimate failure of the object for which mounted infantry should be organized will be inserted. A captain and three lieutenants should be the remaining complement of a company. The adjutant should be the colonel's aid in carrying on his office work and in no way be allowed to interfere with the drill and interior economy of the companies, which

should be left entirely to the major and his officers, the former being responsible to the colonel for all he does.

In every war, the side that has the best system of reconnaissance, outpost and advance guards, must have a very great advantage over its adversary. Now, for all these duties, mounted infantry can be employed equally well as cavalry, and by making use of them in such a way a very formidable screen could always be kept in the front of an advancing and in the wake of a retreating army. For escort, convoy, and mounted orderly duties they would be invaluable, answering the purpose of both cavalry and infantry. The destruction of railroads and telegraphs would particularly lie in their sphere, and I would recommend that a certain number of men in every company should be provided with the necessary tools for this purpose, as well as with hatchets, and the means of safely carrying dynamite cartridges for the destruction of bridges, &c., &c. The Prussian cavalry was, some years since, provided with all the necessary means for carrying out such operations. I do not think that entrenching tools should be carried by mounted infantry, who, being especially a mobile body, should be taught to take advantage of natural shelter and not to erect artificial protection.

On the cavalry, attached to mounted infantry, will devolve very important and responsible duties, such as protecting them when mounting and dismounting, guarding their flanks and horses from any sudden attack of the enemy's cavalry, keeping them well informed of what is going on while they are fighting dismounted and following up and gathering the fruits of a victorious and covering an unsuccessful engagement.

As I have before said, mounted infantry should be drilled entirely as light infantry, the greatest attention and importance being attached to their being first-rate marksmen, any soldier who is unable to obtain a fixed standard of efficiency as a marksman should be removed to some other branch of the service, as he would be useless as a mounted infantry man. Their mounted capabilities, beyond being able to ride and care for their horses, need be of the most primitive kind. Their drill, when in the saddle, cannot be too simple; I would therefore recommend a single rank, which has the advantage of making all movements easier to learn and carry out. In fact, their whole mounted evolutions need not extend beyond being able to mount and dismount both in front and column formation, to increase and diminish their front, to wheel fours right and left and to advance by fours and twos from the right or left; but these should always be carried out with the utmost rapidity, order, and accuracy. Three out of every four men can be conveniently dismounted, Nos. 1, 2 and 4; No. 3 taking charge of the horses; those of Nos. 1 and 2 with the right hand, and that of No. 4 on the bridle arm. I would recommend that, in dismounting, the even numbers should *advance* a horse's length and not *rein back*, the former being more natural to the animal, and easier with indifferently broken horses. It is my opinion that a mounted infantry corps, to be efficient, should be, as far as possible, independent of army transport or, in other words, able to carry its own

necessaries. To do this, every man must be mounted, and as the horses are never to be used for any purpose but that of rapid locomotion, they should be small and active, up to fourteen stone, not in a hunting sense, but in proportion to the weight carried by our cavalry. The advantage of small horses are twofold: first that they are cheaper, and secondly that they are better adapted for mounted infantry purposes on account of their being easier to mount and dismount. English Cobs and Galloways are my *beau idéal* of the kind of horse that should be given to mounted infantry, but if too expensive, Hungary and Galicia produce hardy little horses that would answer the purpose well, and could be obtained cheaply. In India and Africa, ponies such as required for mounted infantry purposes can be both cheaply and easily obtained. Two or three weeks at the outside are necessary to break them in for all the purposes requisite for mounted infantry, in fact, as soon as they allow themselves to be backed, the remainder of the breaking comes of itself. I will later on relate my experience on the subject. The horse equipment of a mounted infantry man should be as simple as possible, without any kind of polished strappings.

The saddle should be that known as the "Cape saddle," a plain hunting saddle, with fairs projecting behind. Ten "D's" should be riveted on the tree, two on each side of the seat, three at the back, and three in the front. Attached by the "D's," at the back of the saddle should be a brown waterproof canvas valise, capable of containing a change of linen, a light camp jacket and trousers, a pair of shoes, a forage cap, and the man's toilet necessities. On the right a brown canvas waterproof saddle-bag to carry the man's rations; on the left side, enclosed in a like waterproof covering, the man's cooking and eating utensils. Canvas wallets for the purpose of carrying extra ammunition and rations should also be employed. A folded blanket should be used instead of a numnah, as it is equally effective in preventing sore backs, while at night it acts as a covering for the horse, a thing as necessary in warm as in cold climates.

The bridle should be a strong, double reined one, with a plain snaffle or Pelham bit, so made as to act also as headstall by removing the latter. A good African rehm should be used for the purpose of attaching the horse to the picketing line; the latter need not be so thick as that employed by our cavalry, but similar to that used by the Prussian cavalry, which is carried attached to the saddle. To the right front of the saddle should be attached a strong leather bucket, for the purpose of taking the man's rifle.

Various suggestions have been made as to how mounted infantry should be armed, but as most of them advocate the use of the sword, carried either on the saddle or by the man, I must give my veto against its employment, as it will inevitably lead to the failure of the object for which they are organized and for which they are alone serviceable, to act as infantry. A mounted infantry man should be armed with a rifle and sword-bayonet similar to that employed by the Prussian Jägers, of which I give the principal features:—Weight—7½ lbs.; Length—1 metre; Sight—1,300 or 1,430 yards.

The sword-bayonet used by the Prussian Jägers is $2\frac{1}{2}$ feet long, and weighs $1\frac{1}{2}$ lbs. It is essential for the health of the men that the rifle should be carried in a bucket attached to the saddle, for do what you will, it is impossible to fix it slung across the back in such a manner that it does not move about. The trials made in both Russia and Prussia prove that the permanent motion of the rifle affected the men's lungs.

The equipment of the men should be similar in colour to that of rifle-men, so as not to be immediately recognised by the enemy, and moreover, I think dark green is the most practical colour. It is essential that they should be cut so as not to hinder free action, and a Norfolk jacket has both a military appearance as well as the advantage of in no way interfering with the action of the wearer. I think something of that kind would be found the most useful. Pantaloon and gaiters to be the lower garments, the former to be made loose, especially from the knee, so as not to interfere with the man's movements when dismounted. Lace boots, infantry helmet, and strong leather belt, to which should be attached a frog for the sword-bayonet, and on each side a soft cartridge pouch, capable of holding 25 rounds of ammunition. This belt should be supported by crossed straps, so as to remove the weight from the man's hips, which is essential. The greatcoat would be either strapped over the pommel of the saddle or rolled up and slung over the left shoulder.

The men should be small, active, and intelligent, and, so as not to interfere with the recruiting of other branches of the service, a lower standard than that of the infantry should be taken.

Such infantry Officers only, who shall after 3 years' service with their battalions be especially recommended by their colonels on account of their general intelligence and efficiency, should be eligible for appointment to mounted infantry corps, but they should previously be attached for six months to a cavalry regiment to learn not cavalry duties, but to ride, if they are unable, and the management of horses and stables. It cannot be too strongly impressed upon mounted infantry, both Officers and men, that their utility will greatly depend on the efficiency of their horses, which can be maintained only by the greatest attention to their management and proper saddling, sore backs being the consequences of negligence on the part of both.

Time will not allow me to go into the economical advantages which would accrue by the organization of mounted infantry corps, but I may say that if the idea had been previously acted upon, the nation would have been saved the great sums of money which it cost to raise corps of mounted riflemen (irregular horse as they were called) during the South African wars.

I had the pleasure of commanding 200 or more of these mounted riflemen during the Zulu war, and may as well give you the benefit of my experience, which I am sorry to say was very small, for just as they were beginning to become efficient, they were disbanded. Never shall I forget the day I started from Durban for the Tugela with my squadron of mounted riflemen, "horse marines" would have been a more appropriate name, as two-thirds of them were runaway sailors. They

had saddled their horses by building up a small mountain in front and behind, which led me to think that if ever they once got into the saddle there was no fear of their falling off, but in this I was mistaken, for after having with the aid of two friends got into the saddle, and the horses' heads being let loose, they capered like a wild herd all over the place, and in less than five minutes nearly the whole of them were biting the ground. After much difficulty, I managed to get them to the Tugela, nearly all the horses having sore backs, but whether the horses' backs or the men's seats were the worse I will not venture to say. What was I to do? for it was a heart-breaking position to one who had come all the way from England to try and serve his country. I determined to make the best of it, by instilling in each man a love for his horse and by showing him how useless he was as long as his horse was unfit to be ridden. As soon as it was well, I taught them to sit and saddle properly, and in this manner by little and little arrived at the result which I am about to quote, not in any way to sing my own praise but to show what can be done in a very short time in very unfavourable circumstances. General Crealock, in his despatch dated Fort Durnford, 21st July, 1879, says, "I must especially mention Captain Lumley and his Officers, for, notwithstanding the bad condition of his horses when he received them, he has succeeded in the field to get his troops into most serviceable condition, and, notwithstanding the long patrols and hard work they have performed—'no sore backs.'" Colonel Clarke also speaks in the highest terms of the services rendered by these men in the long patrols after Cetawayo and subjugation of the tribes about the middle drift of the Tugela.

Here were men, who, although they were totally unable to ride, in a few weeks became horsemen enough to perform the duties of mounted riflemen, and though they at first perfectly disgusted me, after a few months I parted with them with the greatest regret, for they had then become an efficient body.

I hope the Government will no longer act upon the "penny wise and pound foolish" principle, but see the necessity of organizing corps of mounted infantry, and in doing this, *insist that they are infantry, not a dual arm.*

While thanking you, my Lord, ladies, and gentlemen, for the kind attention you have given to my paper, I beg to express my acknowledgment to Colonel Denison for the valuable information I have obtained from his writings while preparing this lecture.

The CHAIRMAN: The lecture which we have just listened to, with, I am sure, very great interest, opens out a large field for discussion, and I hope that Officers here who take an interest in this question will give us the benefit of their opinions regarding the several points upon which Captain Lumley has touched.

Colonel Sir ROBERT LOYD LINDSAY, V.C., K.C.B., M.P.: My Lord, I have attended the lecture with great pleasure, and I observe with satisfaction that it is given at the request of the Council of this Institution. I think that, in itself, is a matter with which we may be well pleased, because it shows that the Council wishes to bring this important subject before the public and before Her Majesty's Government. I am sure that they could not have selected an Officer more capable of bringing this matter forward than the gentleman who has just addressed us. His observations are

especially valuable because they come from a man who has been in the field, and who has practised the things which he comes here to tell us of. In his lecture, he goes back to historic times, and shows us how Alexander the Great, Gustavus Adolphus, Frederick the Great, and indeed, many of the great commanders of old, attached much importance to being able rapidly to move troops under their command. It is somewhat remarkable (as mentioned in the lecture) that Napoleon, although the lecturer spoke of him as using Mounted Infantry to a certain extent, neglected to make greater use of the advantage of that branch of the service. It is perhaps difficult to say how it was that so great a General as Napoleon did not avail himself of this means of moving his infantry more rapidly. I think it must have been because the dragoons at that time grew into bad cavalry and, while endeavouring to turn themselves into cavalry, forgot their duties as infantry. That may have been the cause of failure, and Napoleon, in disgust, set them aside and did not use them as otherwise he might have done. In his lecture, the gallant lecturer has given us some details of his experience, and if time had permitted we should have been glad to have heard a few more of those interesting accounts, especially of that incident he mentions as having taken place at Vibray, where a regiment of cuirassiers, a regiment of Uhlans, and a regiment of dragoons were held in check for a whole day by twelve Chasseurs d'Afrique. It seems curious that such a practical nation as the Prussians should persevere in keeping cuirassiers in their service. I never could make out how a cuirassier could put a rifle to his shoulder; perhaps the gallant gentleman will be able to tell us. The Chasseurs d'Afrique, I suppose, were originally mounted riflemen, although I am afraid that the French have thrown away the valuable quality of riflemen which these soldiers once possessed and have made their chasseurs into cavalry. On the occasion alluded to at Vibray, they seem to have done good service, for twelve of them held in check a whole brigade of cavalry, and no doubt put the gallant lecturer and his companions to much inconvenience. The lecturer gave us an account of how he organized a corps of what I think he describes as "horse marines," and taught the sailors to ride. These are very interesting experiences, and I congratulate him on having got such a corps into good order and having taught them their duties. Sailors, I believe, would make good men to serve in this particular service, because apparently they are not fond of sitting on their horses but only desire to use them for purposes of locomotion. The great thing to aim at is that the horses or the mules or the camels should merely be used to carry the soldiers rapidly from place to place. That is the object and, having once established, as the lecturer has done, the importance of this, I think he has succeeded in his lecture. There are still matters of detail to be considered: we may wish to know whether it is best to make cavalry into mounted riflemen or to promote infantry and turn them into mounted riflemen. My impression is in favour of the latter course, placing the infantry soldier on an animal with strong legs, not caring much what the animal is, provided it has the legs wherewith to carry him rapidly along, and establish him in a position where his Officer can make use of him, placing him at the best point of advantage, where he can lie hid behind a bank with his rifle in front of him and plenty of ammunition by his side, and there use the magnificent weapon which the British soldier is now armed with. It seems to me that the mounted rifleman should never forget that his duty is to look to his rifle more than to his horse. Everybody in this room knows that the breech-loading rifle has altered the tactics of modern warfare and will alter them still further. Further, it has altered the relative importance of one branch of the service with other branches, greatly increasing the importance of the soldier whose business is to carry the rifle. I do not say anything which will detract from the value and importance of other arms of the service, the cavalry and artillery; but we are aware that the number of men who are put *hors de combat* by the branches of the service other than infantry is very small indeed. The information is within our reach, it is to be found in the Intelligence Department, and I believe it is shown that in the Franco-German war 90 or 92 per cent. were put *hors de combat* by infantry, and the remaining 8 per cent. by cavalry and artillery. Nevertheless, these services are very important, and for outpost duty and for such business as is carried on in advance of army corps, cavalry, with mounted infantry, will always be useful. I should like to make one remark with regard to what the lecturer said about the Crimea, and that

fine body of men which he tells us the Emperor Nicholas took such pride in, namely, the dragoons, who were really mounted riflemen, but who, for some reason, came to be neglected. Had such a force been opposed to us in the Crimea, I believe it would have placed us frequently in great difficulty and put us to great inconvenience. You remember, from the middle of September, when we landed, to the middle of October, when we settled on the southern side of Sebastopol, we were much subjected to attacks. During the flank march, we were especially exposed, and if there had been a strong force of dragoon infantry hanging on our flanks, occupying the Mackenzie heights, and in other ways acting in opposition to us, it would have been a great inconvenience to us, would have greatly delayed, though perhaps not altogether prevented, the operations then in hand. It is curious that the Russians have cast their mounted infantry aside, relying probably on the vast hordes of Cossacks which the lecturer has told us are under their command in some of their provinces and beyond our north-west frontier of India. Many politicians and soldiers maintain that the vast distances which separate Russia from our Indian possessions will prevent an attempted invasion, or an interference with our influence in the East; but the gallant lecturer reminds us of the great power of Russia through the vast hordes of Cossacks under the command of the Emperor, 300,000, he says, and all trained to horsemanship and rifle shooting and now being armed with breech-loaders; independent they are in a measure of commissariat, and are able to march great distances, not being stopped by want of roads. Besides these there are other tribes, equal in numbers, all soldiers born and bred, making half a million of men, trained from their youth to exercises and thinking of nothing so much as war. These reflections should cause us some anxiety and should induce us to do all we can to strengthen ourselves by adopting every well-considered military improvement for the protection and for the security of our vast Empire.

Major PARKER: I wish to ask what the size of the Hungarian horse is; and whether the Indian tatoo, which runs from 12 to 13½ hands, would be sufficient? Secondly, whether the cavalry that are to be associated with these mounted infantry should be lancers? I am of opinion, with all due deference to others, that the lance is the most powerful weapon for the cavalry, as the bayonet is for the infantry. Thirdly, whether they would not be better adapted to act with machine guns, which no doubt will sooner or later be adopted in all operations, and whether they would not be better than cavalry to mask, cover, and protect those guns?

The CHAIRMAN: It hardly seems that the two last questions have reference to the subject we are discussing of mounted infantry.

Major PARKER: I thought that as they would not take long to answer, the gallant lecturer would take them into consideration, and it bears upon the question of the Russian advance. Would not the Sikhs, the Punjabees, and the Beluchees be admirable men to try the experiment of mounted infantry upon?

The CHAIRMAN: It would be unbecoming if I did not make a few remarks on the paper, considering the interest of the subject. First of all, with regard to mounted infantry. The gallant lecturer seemed to think that it would be advantageous to associate cavalry and horse artillery with the mounted infantry. Where mounted infantry are employed in large bodies, such as he tells us are already formed under the Russian Government, I have no doubt it would be a very great advantage, and also in such cases as those he mentions in the American war; but with the small force of mounted infantry which England, as a rule, puts into the field for campaigns, like the late one in South Africa, I cannot help thinking that the employment of horse artillery would very much tend to hamper their movements. There is no question about it that in a country like South Africa it would be absolutely impossible for horse artillery to follow the mounted infantry. I think the gallant lecturer will bear me out that it would be so across such a country, with its deep dongas and difficult ground. I am perfectly aware that horse artillery can go almost anywhere where mounted men can go, at the same time I think it would hamper and delay them, and there would be practically little or no advantage in employing them. It must be understood that when used against savage tribes, horse artillery, or artillery of any description, always tends to keep them at a distance. Now with savage tribes you do not want that; you are anxious that they should come near and afford a good target for the weapons which the

mounted infantry will possess. That, I believe, was fully recognised in Algeria when Marshal Bugeaud was first employed there as Commander-in-Chief. He found that the French force had invariably been going out with artillery and consequently the result was very small indeed. The first expedition he sent out, he started without artillery. The Officers, whom he spoke very frankly to, came to him at once to remonstrate, and said, "When we had artillery, it was with the greatest difficulty we could keep the enemy at a distance from us; and what shall we do if we have no artillery?" He very justly remarked, "I know perfectly well if they come down, you will be able to give a good account of them; we do not want them far away, but near, so that you may be able to show exactly what you are made of." On that account, I would certainly deprecate any employment of artillery with Mounted Infantry, except when they are in large masses and intended, as in European campaigns, to produce great results. As regards the armament of Mounted Infantry, which is also an important point, I entirely agree with the lecturer that they should not have a sword, and I do not think they should have revolvers. I believe that in pursuit, which is the only time when the "*arme blanche*" would be used by Mounted Infantry, the sword, unless employed as a pike, is of very little use, and the natural instinct of a man unless trained to the use of a sword is to employ it for cutting. The revolver, I believe, would be quite as dangerous to the party pursuing as to the pursued. But I believe it is absolutely necessary that the Mounted Infantry should have some means of making a successful pursuit, and that was distinctly recognised in the campaign in South Africa. Major Barrow, who has taken the greatest interest in the Mounted Infantry, was so impressed with this that he got them swords, and at the battle of Ginghiloro they were used with a certain amount of effect; but at Kambula, after the action, Colonel Buller and his men could only act in pursuit by loading on horseback and firing to the best of their ability, which did not produce the same result as if they had had some kind of *arme blanche*. I think it would be advisable that they should have what the lecturer advocates, either a sword-bayonet or, what would be better still, because it would make the rifle less top-heavy, a long light bayonet. It could be used with very great effect in the pursuit simply as a substitute for a lance. I will now ask the gallant lecturer to make any observations on what has fallen from those who have favoured us with their remarks.

Captain LUMLEY: In reply to Major Parker, I would say that the Hungarian horse is between 14 and 15 hands. Everybody is prejudiced in favour of his own weapon. I was a lancer. I think the lance the best, and if I had anything to say to it I should advocate it. I was very young when I left India; therefore I could not express an opinion on the Indian horse; but I have been told by people who have been in India, that there are plenty of horses there that would suit this purpose very well. With regard to the natives, if the Russians can make use of them, no doubt we can do the same, but I cannot say whether the natives mentioned by Major Parker would be suitable, although I believe they would be. There are people acquainted with India who understand that better than I do, and whose opinion, if this idea is carried out, would be of greater value than any I can venture to express.

The CHAIRMAN: It is now my pleasing duty to ask you to pass a vote of thanks to the lecturer for his very interesting and able lecture. As you all know, it is a subject that cannot be too much thought of and fully discussed, and we are extremely indebted to Captain Lumley for having come forward and given us such a lecture.