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Publisher: Routledge

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# Royal United Services Institution. Journal

Publication details, including instructions for authors and subscription information: <a href="http://www.tandfonline.com/loi/rusi19">http://www.tandfonline.com/loi/rusi19</a>

The Cavalry Division as a Body in the Fight (Die Kavallerie Division Als Schlachtenkoerper)

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To cite this article: Captain G. F. Leverson R.E (1890) The Cavalry Division as a Body in the Fight (Die Kavallerie Division Als Schlachtenkoerper), Royal United Services Institution. Journal, 34:151, 45-99, DOI: 10.1080/03071849009417962

To link to this article: <a href="http://dx.doi.org/10.1080/03071849009417962">http://dx.doi.org/10.1080/03071849009417962</a>

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France.

## OCCASIONAL PAPERS.

This portion of the Number is reserved for Articles, either Original or Compiled, on Professional Subjects connected with Foreign Naval and Military matters; also for Notices of Professional Books, either Foreign or English.

It is requested that communications or books for review may be addressed to Colonel Lonsdale Hale, at the Royal United Service Institution, Whitehall Yard, London, S.W.

THE CAVALRY DIVISION AS A BODY IN THE FIGHT (DIE KAVALLERIE DIVISION ALS SCHLACHTENKOERPER).

By the Author of "The Armament, Training, and Employment of Cavalry."

Translated by permission from the German by Captain G. F. Leverson, R.E.

## Preface.

THE following pages are intended for the German cavalry:

It had not been my intention to publish them just yet; however, two reasons have induced me not to keep them back any longer:—

1. The exceptionally flattering criticisms with which my pamphlet: "On the Armament, Training, Organization, and Employment of Cavalry" has been received, not only in Germany, but also in Austria, Switzerland, and

2. Suggestions, coming from the highest quarters in the German Army itself, to go on here and there with the matter which had been sketched out in my former pamphlet.

I at once acted on this suggestion, the more willingly as it entailed nothing more than sorting and arranging the matter, which lay in my dear old desk, the repository of my joys and sorrows. I offer this, such as it is, to my readers; possibly its style may be neither pleasant nor smooth; but it is honest and straightforward, as it was thought out and produced.

The examples, quoted from older times, have been taken from reliable sources, and have, in some cases, been more closely examined by reference to the map; those quoted from more recent wars required several tedious visits to the battlefields under consideration. When on the spot, a clearer insight can always be obtained of the episodes of a battle, even if the historical narrative of them is true, the accompanying maps are good, and both are before the mind. I do not suppose that I have invariably said and inferred the

<sup>&</sup>lt;sup>1</sup> Berlin, 1881.

right thing; but I have endeavoured to be truthful, and I beg of my readers only one thing, which is, to examine my statements seriously and fairly.

#### Introduction.

Motto.—The reason why cavalry has only at times played an important part on the battlefield must be admitted to be due, less to the existing state of the tactics of the different arms, then to the fact that but few "cavalry leaders" have existed.

We have a difficult task before us. For the pen must obtain assent to that which can only be verified under the sound of the cannon, and it must try to carry conviction amongst men, who have already heard our message over and over again, but amongst whom we have found no believers.

All controversies are irritating, but it is only in the arena of arms (in this case of tactics) that every combatant comes to the melancholy conclusion that he can never produce evidence of the absolute correctness of his ideas and thoughts, at least, not with that exactness with which it is possible to do so in other, or rather in every other, art.

An experiment, which is made as a test of a theory, always shows if the latter is right or not, and its success is nearly always surety for the soundness of the manner of proceeding adopted. With the soldier it is otherwise, for though, to be sure, no object has ever been attained in war by faulty means, yet the soundest tactical measures have often met with no success.

In spite of the knowledge possessed by the commanders and the fitness of the armies, it is not possible to exclude chance from war, and fate may defy the best tactical measures. This chance is inseparable from the soldier's profession.

The art of war changes from one war to another; thus, what is actually right and new one day, may be quite out of date and wrong the next. As a rule every war is succeeded by a somewhat lengthy spell of peace, and Goethe's words:—

"Was sie heute gelernt,
Das wollen sie morgeu schon lehren,
Ach, was haben die Armen
Für ein kurzer Gedärm!"<sup>2</sup>

must always re-echo as the torment of their existence in the ears of those soldiers, who are capable of nothing beyond a slavish *imitation* of those tactics, of which they themselves have been eye-witnesses. We must come to an understanding with these men, for they constitute the majority.

As soon as an army has brought a war to a conclusion, it finds that the conditions of warfare at once become changed, and that only a few principles remain as the skeleton of military science. And if a second or third campaign were undertaken against the same nation, even against the same Generals and weapons, and in the same theatre of war, we should never see everything occur again exactly as it did before. And yet the main task before every army is victory on the battlefield. An army without successes resembles an untested machine; it is a system of tactics without victories, a theory without value.

An army must needs have success, and must gain it with its own available means by hard fighting in open battle, where nothing can be hidden or mis-represented, and where nothing can be undone. Many eyes may see a thing

<sup>1 &</sup>quot;Die Botschaft hör, ich wohl

Allein es fehlt der Glaube."-Goethe's "Faust."

<sup>&</sup>quot;Men, who have learnt a thing one day, want to rush off and teach it on the morrow. What a quick digestion the poor fellows must have!"

at the same time, yet there are not many minds, that understand it or have the power to interpret it correctly, and, of their own accord, to make one

success the starting point for a second.

From the moment that the sound of the last shot in a war has died away, tactics enter the region of "the uncertain." Fifty years of "peace" tactics teach less than a fight of twenty minutes, and can also bring misfortune on whole nations, as we are taught by the case of Prussia in 1806, and of France in 1870–71.

After a war, those things which have been shown by the realities of war to be true, sound and necessary, and which have brought about success, are carried further theoretically and worked out practically; but theory and "peace" practice cannot alone be a complete guarantee for the soundness of any particular war tactics, because the test of this tactical problem can only

be made in actual war.

Meanwhile, this or that condition of war is changed, and a new war upsets all that prevailed before. In theory, that state which remains at peace the longest ought to get most behindhand in the art of war, the military spirit of its population would be damaged, and its tacticians would lose sight of correct tactics; but, as experience shows, this is by no means the case. teaches rather that it is on military genius that the essence of war really depends, and that it is this, which, by its wide-searching vision, can make amends for the want of war experience and can prepare future victories in This would be impossible if, amid the conflict of hypotheses and problems, which theoretical speculation matures out of the ground of war experience, there were not deduced some fundamental representation of facts as they are, which genius recognizes, seizes on, and makes use of, while it remains unrevealed to the masses. Frederick the Great justly said that the best talent bears no fruit without industry and work, and in this royal utterance are summed up the secret of victory and the task of a ruler, as well as of every genius and commander, while it also reminds every Officer in the army of his duty. War, that is to say tactics, like all branches of science and art, is only mastered by a few great minds, while the majority do not get beyond its routine, at which point they are quite content to remain.

Whoever may be at the head of an army must insist on unceasing zeal and industry in that army. We by no means include under this head merely the training of the whole machinery of an army, i.e., the efficiency of individuals as well as of the whole, or, in short, the power and knowledge which every soldier requires; but the mechanical, tactical, and mental efficiency must be the consequences of the perception of the commander, the result of his knowledge and labours, all of which are "necessaries," which may, in his hands, be the means to an end in bringing about success. This has been the case with every military genius: take, for example, Frederick the Great and

William I.

The object of tactics is to create an "organism" which will satisfy all the requirements of a fight, while the direction and employment of the organisms, i.e., of the different arms, must be the duty of commanders. All great masters in the profession of war, who thoroughly studied the nature of war, laid the greatest stress on mental training. They tried their best to diffuse the few fundamental ideas which they had formed on the subject of war, on the object of battles, and on the means whereby to win them. At the same time, by means of organization, equipment, armament, and training they raised the army organism to the highest tactical requirements of their day; they tested most exhaustively the working of the different arms, and inquired most carefully into that portion of the military machine which, by its nature, remains unchangeable as an organized body, that is to say, man and horse.

Frederick and William did not drop down from Heaven as finished

Generals, but even they had to work and struggle for years to master the real nature of war. When, as the result of their industry (deep thought) and experience, and of again weighing their experience, their views had become clear to them, they at once set to work with full vigour to impart, what they concluded to be right, to all who were anxious to learn.

In this way did these two monarchs frame the organism of their armies: one bringing cavalry, the other infantry, in a tactical sense, to the zenith of

renown.

The fundamental principles of tactics are unchangeable; it is only the means of carrying them out which have constantly changed, and will keep ou changing. Cavalry and infantry have each in turn been "the queen of battles," according to the condition of the art of war generally, and not simply according to their armament. The nature of the different arms, too,

is firmly fixed and unchangeable.

All this needs no detailed explanation. Hence the tactical rôle of cavalry must likewise be unchangeable, and only its form, i.e., its manner of execution, or actual tactical system can change. It is not accidental, but rather natural, that, from the earliest days in history, infantry should have been from the outset the principal arm. Like all human creations, armies have developed; starting from the simplest till they reached more complete and complicated forms. And yet, even to this day, when our knowledge of military history is over 2,000 years old, there has never appeared the slightest necessity for creating any arm other than what existed 2,000 years ago. The various arms have only been altered and perfected, according as their real object was more definitely grasped, and according as the technicalities of the arms began to have more effect. For the ordinary objects of a fight, infantry is sufficient; but as the human mind began to see further into the nature of the different arms, so did the objects of a fight become more varied, and tactics become more complex.

Why did cavalry do so comparatively small service when commanded by Generals who, nevertheless, are worthy of mention? Why was the nature of cavalry, as a tactical arm, unseen to the last by the eye of even a Julius Casar? Why was not cavalry perpetual queen of the battle-field prior to the introduction of gunpowder, firearms, and cannon, which might have been able to destroy it before it was ready to commence the tactical fight? Why, even when fighting against the same arm, used cavalry to dismount in order to fight on foot? Why used horse and rider to be so heavily encased in mail, that the horse could, at best, move at a slow trot? Why did the men fire at each other when mounted? Why was all this done, even after the existence of cavalry leaders (Alexander, Hannibal), who had acknowledged

and also made use of the law of speed as well as of shock.

It was not because the tactics of modern arms enforced these (mis-)conceptions, but rather because of the absence of any genius, i.e., of any commander, who understood the horse as an arm, or was capable of making the best use of him as such. It was not only 2,000 years ago that it was the case, but, even now, the supporters of that bastard arm, which eccentric persons have tried to introduce under the name of "mounted infantry," show that the horse is only looked upon as a means of transport. These errors owe their real origin to the many blunders, deceptions, and abuses to which cavalry had, unfortunately, to submit at the hands of ignorant commanders. People are apt to criticize and condemn, to lay down tactical laws, and to set aside an arm, which, when led by cavalry "leaders," has performed world-famed deeds. This is a sign of the stupidity of the masses, and a proof that ignorance is might; for, so long as the law of speed exists, and so long as no better means than the horse is found for applying that law, so long then must cavalry, as a tactical arm, be capable of achieving success.

If it is only since the introduction of the latest improvements in firearms and the change in the course and character of modern fighting, that the tactical action of cavalry has been looked upon only as a "superfluity," cavalry should then, up to that time at any rate, have always continued to be the ruling arm in battle! But such was, by no means, the case. Infantry and cavalry were engaged in a perpetual struggle for the supremacy, and the pre-eminence of either arm always depended chiefly on the quality of their respective leaders.

Has this been overlooked, or is truth so difficult to understand by reason

of its great simplicity !

How is it that the real nature of cavalry was never understood until armies had become a relatively perfect instrument, or that Alexander the tireat made a difference in his various descriptions of cavalry, suiting it to the purpose for which he wanted it, and that this difference has been preserved up to our days?

How is it that, later on, another continent produced another cavalry commander, Hannibal, who was so great a master of the strategic and tactical employment of cavalry, that we can even now refer to his way of using

cavalry?

How is it that, in spite of this, cavalry invariably retired into the background on the disappearance of these great commanders?

The answer is simple enough, namely: because genius is rare!

Things were, more or less, as they are now, during every period of war-prior to the introduction of gunpowder, and it is only owing to the want of historical 'urces that we cannot refer more to those times. At one time it was the Lans, at another the Osmanlis, the Magyars, the English, the Swedes, the Prussians, the Austrians, or the French who brought such distinction on cavalry as a tactical arm, according as fortune happened to favour one or other of these peoples with a cavalry leader, who understood the use of his special arm.

If, as theorists would nowadays try to make us believe, the tactical action of cavalry were mainly so very dependent on the condition of the armament of the other arms, cavalry could then never have achieved, what we know it to have done, after firearms had reached a comparatively high state of perfection. But it is not so, for the action of cavalry depends mainly on the

ability of its trainer and leader.

However, it must not be imagined that the principles for the employment of cavalry disappeared entirely with the decease of the various great commanders; for we can formulate most substantial lessons out of the few Even if we may have ancient histories which have been handed down to us. our doubts as to whether the cavalry Generals of the Huns, Osmanlis, and Magyars ever studied the writings of Xenophon, Polybius, Begetius, &c., still we have no right to assume that the commanders of the civilized European nations read them. Surely, although we cannot deduce either a tactical system, as we understand it, or a regulation from such a study, yet we can borrow some idea or other from it. Nevertheless, peoples of quite different times, who have in no way studied one another, and had possibly never eyen known of each other's existence, have discovered the very principles, which had already been known at some earlier date in some other country, and have employed their cavalry in accordance with them. This is a proof that truth and facts are indestructible, and that the intellect is inexhaustible. Of course, one cavalry leader may have succeeded in employing his arm with more skill than another, and we cannot accurately trace the progressive development of cavalry as an arm further than from the days of Gustavus Adolphus, Wallenstein, and Cromwell.

But although it must be presumed that, amongst more modern civilized

European nations, there existed a knowledge of the fundamental conditions for cavalry, and although various armies made strenuous efforts to raise the status of cavalry, yet this arm, as a rule, remained in the background. It was only at times, that is to say, when it had a real leader, that cavalry came to the front, and by its successes filled the military world with amazement. This is the simple truth.

## II. Characteristics of Armies and of the Combat in the present Day.

My statements may not meet with the views of some people, for every one has his hobby, and man will sooner believe in 100 improbabilities than in one truth, however simple this latter may be, or however irrefutably it be proved

by history and fact.

There is one thing, however, which remains an undeniable fact in the midst of all this confused mass of hypotheses and shams, and that is, that the horse still possesses the greatest possible speed and power of shock, exactly as he did in the days of Alexander, Hannibal, Bajazet, Charles XII, Gustavus Adolphus, Cromwell, Wallenstein. Frederick, and Napoleon Certainly our armies differ most completely from those of past ages; the war machine is built up of millions of short-service men, and, on account of the mass of men passed through the ranks and of the shortness of their service, no arm can be brought to such a state of perfection as was the case in the days of Frederick the Great, and even of Napoleon I, up to the Battle of Wagram. Many as were the nations of which the latter commander was master, yet he had lost so much in that battle (Wagram) that, in spite of his onceasing plans, he was never again able to bring the same tactical efficiency into the field. His further wars and battles consumed too many men, and never ceased swallowing them up. Consequently the war machine could never regain its high degree of efficiency.

The immense number of horses which have to be broken, and the short time that there is for training horse and rider, necessitate moderation and reason. Armies, therefore, no longer contain so many well-broken horses and firm-seated troopers as formerly. The perfect horsemanship of former times has disappeared from every cavalry with the exception, perhaps, of the Cossacks. But the deficiency in technical and tactical efficiency is, or at any rate should be, compensated by the fact that nowadays the intellect is far more cultivated, and that armies now receive a raw material whose mind has

been much better trained.

Armies have changed just as radically in their training and manner of fighting as they have in character and numbers. The armies of former times fought in more close and connected order, either in line or in column; but, owing to the destructive effects of firearms, our armies are, for the most part, driven to fighting in extended order. But this latter need not, on that account, be disconnected, although it is unquestionably looser than the formation of earlier days. The soldier has to rely more on himself, lines of battle are much longer and thinner, extending indiscriminately over any sort of country and remaining stationary for hours, during which neither opponent succeeds in gaining any significant advantage over the The damage to the combatants consequently is not only material, but Those earlier and smaller is morally far greater than in former times. armies could, undoubtedly, be led in more united form, and brought in a compact body to the desired point with more rapidity and precision. Napoleon I put an end to this era, and yet in his new system of fighting he did full justice to the tactical action of cavalry.

The great condition for the tactical success of cavalry, and one which can never be neglected with impunity, is its adaptability to manœuvres of every kind. In the days of Cromwell and Frederick, when the opposing forces were seldom stronger than 1½ army corps of the present day, the execution of manœuvres was easier; firearms did not then force cavalry generally to keep so far back as now; but we must not overlook the fact that, although the range of firearms was but short, still the admirable Austrian artillery, for example, always kept the Prussian cavalry Generals about 1,000 metres from the fighting-line. At that time, too, fights took place from preference in perfectly open country; but, after the Austrians had begun to study the advantage to be got out of ground with cover, the Prussians found the management of their cavalry more difficult, and their successes became less

frequent and important than before.

If, on the one hand, improved firearms compel cavalry in open country to remain in more retired situations, from which it may come into action, on the other hand, the present intersected battlefields give opportunities for placing even fairly large bodies of cavalry comparatively near to the righting-line. Furthermore, the devouring fight lasts so long and remains for many hours so stationary about the decisive points, that cavalry might keep for half a day in one position without being exposed to any danger, as happened, for example, at Gravelotte. This is no disadvantage, but rather a decided advantage, of modern fighting for the tactical action of cavalry. In the last century, in which Frederick the Great showed cavalry the path of success, a fight did not present nearly the same stubbornness and steadjustness, as have been given to it by the present firearms. After a short but sharp fire an energetic assault would be made, and during this, or after it, the cavalry would deliver its attack, generally from the flanks. attack succeeded the battle was, as a rule, decided. Battles such as, for example, Vionville, Mars-la-Tour, and Gravelotte, in which the two opponents, so to say, scarcely moved forward at all for six or eight hours, are unknown in the cavalry's century. All actions were then over more speedily, ending either in victory or defeat.

The last century can hardly have seen infantry so morally broken, as this arm cannot fail to be after any serious action nowadays. In fact, infantry was then never charged except when it could be surprised and taken in flank, as at Hohenfriedberg and Rossbach; it was exhausted and shaken at every opportunity, so that such a cavalry charge was never without favourable results. But infantry is now far more exposed to the decomposing power of the fire-action, and the very circumstance that the actual duration of a fight is attended with great physical exertion, must, in comparison with former times, turn the scale in favour of cavalry. A man has pretty well used up all his strength after marching under arms for eight or ten hours in a scorching heat; and he is practically exhausted both in mind and body if he has been engaged in a fluctuating fight for six or eight hours, if his nerves have had to stand the roar of the firing for so long, if he himself has all this time been filled with those strong emotions which are produced by the phases and incidents of every battle, and if he has had no opportunity of fortifying himself, of recovering his breath, or of having a moment's peace during all these hours. Larger units fare no better. Some men are able to store up a surplus of physical and mental energy, but they are only the minority; other troops, again, remain more or less intact until it is time to bring up the last man, but it is only a comparatively small proportion of the infantry which remains intact. It is true that the material and moral loss of the infantry is not the same along the whole line, but there must always be sections in which the infantry gets completely worn out, and it is here that the cavalry's most favourable field lies. Infantry will very naturally suffer the greatest material and moral losses in attacks or forward movements across open ground, as happened, for example, to the 33th Brigade at Mars-la-Tour and to the Guards at St. Privat, and these are the opportunities for cavalry coming into action in masses. In one of these instances three German squadrons partly succeeded in riding down and putting to flight a brigade of the enemy, although the line of advance was full of obstacles; and the panic, that resulted, was so great that a whole division of the enemy felt its effect and was obliged to halt.

Let us suppose that, instead of the short sighted French cavalry commanders, there had been enterprising men, who would have known how to employ the masses of cavalry at their disp sal at the moment when the attacks of the 38th Brigade and Guards were crushed. Great as our faith in the endurance of our infantry is, yet we do not believe that the Guards, for instance, would have been able to stand against a well-directed, and energetically and carefully delivered charge of Du Barail's cavalry Division. It was owing to the badly chosen time, to defective planning, and to insufficient numbers that the advance, attempted by one regiment of chaseurs, was broken up during the deployment; but it must not be assumed from this that a well and properly delivered stroke would, or must, have ended in this The reason why no advantage was taken of these situations was not, that the cavalry was not equal to the task, but that there was a lack of leaders, for we see how the 1st Guard Dragoons and Bredow's Brigade succeeded under far more difficult conditions. It may be that the French cavalry was not then altogether equal to such tasks, as may be inferred from Woerth, V.onville, Beaumont, and Sédan; but the Germans were prepared for such wo k, rs is shown by their twelve different actions against all three arms at Vionville—Mars-la-Tour.

Infantry has not overthrown cavalry "for ever" in a tactical sense, although infantrymen, and especially tacticians coming from that branch, have tried to theorise the downfall of cavalry, and cavalry has, unfortunately, allowed itself to be partially theorised into defeat, and so cannot escape reproach. It is no mere chance that this theorising has emanated chiefly from German infantry tacticians; for has not German infantry, in addition to resisting the attacks of French cavalry, also withstood those made by the Austrian, at that time considered the best, cavalry in Europe? Just so, if we do not examine the details too closely. But at Langenhof-Stresetitz the conditions were as unfavourable as they could be for the Austrians, whose cavalry had no option, but was obliged to charge down on the Prussian cavalry, and, in addition, on infantry, which was fresh with the intoxication of victory and was most certainly unbroken. A manouvre was out of the question, and nothing remained but to make a grand frontal attack, which, moreover, had to be made on ground too cramped to allow of the deployment of the masses. And who now would wish to depreciate the charge of this cavalry, knowing, as we did afterwards, how matters stood with the other arms of the brave Austrian army? Does not the army owe its escape to these heroicattacks? Did not they bring the whole Prussian line of battle to a standstill ! And was not the moral effect of this mighty charge so great that the Prossians remained overawed on the battlefield instead of pursuing? Is not this employment of cavalry, as regards its success, worthy of being accorded side by side with that of Napoleon I at Aspern on the 31st May! In one case a beaten army was rescued, in the other Napoleon's army was saved from defeat. Both tasks could only be fulfilled by cavalry, and the results obtained were certainly worth the sacrifices made.

If cavalry had the slightest doubt as to the great moral impression which is made on infantry by a skilfully and energetically delivered charge, it woul have seized, and would still seize, on its opportunities for successful action in quite another way. But the philosophy of losses stands in the way.

If cavalry knew how infantry is consumed by a fire-action, if it but

knew the A B C of infantry tactics, or if our whole cavalry had seen the state into which exhausted infantry falls, it is quite certain that the saying "the action of cavalry on the battlefield is a superfluity" would never have been tolerated.

Personally, I have not seen many cavalry attacks, but those which I have seen have strengthened me in the belief that the action of cavalry in battle can be crowned with great successes if, as the result of organization, training, and good commanders, the arm feels that it can say: I will risk it, and I will do it. I have also seen infantry which was quite played out; one squadron would then have been enough to ride down and settle the remnants of a whole brigade, while a whole division could, without difficulty, have ridden right up to the position of the Commander-in-Chief, and might, perhaps, have decided the battle on this flank. But this division was not there. Is the action of cavalry on the battlefield, therefore, to be condemned because such situations have not been turned to account?

Nearly the whole of the modern tactical literature is a glorification of infantry, but, while we unreservedly assign to this arm the place of honour which it occupies, we know perfectly well that it requires great courage to go single-handed in opposition to the general current of opinion. I say single-handed because, relatively, there are only individuals who do so. Amid the mass of tactical books on infantry we only now and then come across a Kachler, a Walter, or a Widdern; and even the last mentioned is an infantry man. In the company, in which they are, they look like wanderers. Meanwhile, our cavalry has got new regulations, and will perhaps receive a general increase in numbers and a sounder organization, at any rate, in the East. That is, certainly, one step in the right direction, but to leave off here would be equivalent to abandoning the fight and giving it up as lost, for the seed requires nourishment to enable it to bring forth fruits.

Cavalry must not allow itself to be regarded as dead, either before "the offensive or the defensive" action of modern firearms, in the future; it may strike its flag, only when facts have condemned it to hand over the battle-field, once for all, to the other arms, or whenever its best friends say: "It is all up with us." So long as these words are not spoken let it trust to its own sword and its own brains. Strange to say, tactical books say little or nothing about the demoralising effect of the present firearms. Why is this not taught! Yet it is an undisputed truth; and may it not be included in our instruction? Not till then will the inevitable consequences appear. Now, it is not an undisputed truism that "the action of cavalry on the battlefield is a superfluity." This is a hypothesis, and one that is taught. Is any further evidence wanted of the ready way in which (infantry) tacticians change to the order of the day, when treating of cavalry, or of the fact that cavalry is delivered, neck and crop, over to their doctrines, before it has been given a chance or before actual facts have had their say!

Frederick made it a rule to post his cavalry on the flanks of his infantry, and his reasons for this are well-known. Since the time when Napoleon brought tactics out of their infancy, we find cavalry posted wherever it was probable a field for its action would present itself, either on both flanks, or on one, or clse in the centre. But Napoleon invariably brought it up to that point, where he wished to bring about the decision, either to prepare the victory (as at Wagram), to prevent the enemy driving him back (as at Aspern), to bring it into action for the decision (as at Borodino), or to have it at his disposal for the decision of the battle (as at Jena and Ligny). If Napoleon decided to break the enemy's centre, he kept his cavalry massed opposite that point; if he decided on a turning movement, he posted his cavalry opposite the flank that he intended turning. The tactical motives for these dispositions were the outcome of his strategical object. Unlike

this, the posting of cavalry masses on modern battlefields is most often done without any special idea. The cavalry is told to follow the other troops; because no one seems to know what to do with it, and it is quite a rare occurrence for the cavalry commander himself to be allowed to select a suitable position. This is what has happened, over and over again, in quite recent times in the case of every nation, with the exception of the Austrians at Custozza, and, perhaps, also at the commencement of the Battle of Koeniggraetz. Everywhere else, if we look round, we find that the cavalry was placed without any reference to the points intended to be decisive. Of course, it is true that in recent years we can only record three pitched battles, Koeniggraetz, Gravelotte, and Sédan, and even in these, except Sédan, the position of the cavalry did not correspond with the tactical situation. We will not go more fully into this subject in each of these battles, because our doing so would lead us too far, and it is sufficient to state that direct profit was not drawn from the tactical success, because the cavalry was in the wrong place, or because it clung obstinately to these places in spite of the change in the course of the fight, or because it generally reached the battlefield too late. This is the real reason, the fortresses in rear of the beaten army being mere "alleged" reasons.

Even at Vionville-Mars-la-Tour, the position of the cavalry, until late in the afternoon, was not at all suited to the tactical object, nor was it at all the outcome of the strategic situation. The only reason why this was not the cause of a disaster, was that the great extent of the battlefield admitted of the manceuvring of cavalry in large masses almost everywhere. order that the cavalry divisions may be at the right places during the battle, they must know these places beforehand, and their action must be the prelude They must forcibly get touch of the whole line, obtain a thorough knowledge of it, and report their observations to the Commanderin-Chief, who would then be able to tell the cavalry off to positions, from which its action can assist the tactical object. As a rule, faulty dispositions can never be rectified during the course of a battle, and even the mobility of cavalry cannot entirely undo a fault, once committed. No example shows this more clearly than the position of the Austrian 1st and 3rd Reserve Cavalry Divisions and the Saxon Division at the Battle of Koeniggraetz. The greatest care must be taken not to crowd masses of cavalry together, as at Koeniggraetz, and so deprive them of a clear field of view and freedom of movement. Both of these are as essential to the success of cavalry, as food is necessary for men to support life.

A whole host of tacticians have based their judgment almost entirely on the principle of the Nicy method, and still we are for ever talking and writing about the value of moral qualities, about the importance of "terrain" and of commanders, and about the co-operation of the various arms. resist the temptation of calculating how many horsemen can be shot down by a battalion in a minute, or how much greater the velocity of a bullet is than that of a horse. The only value of the results, obtained with so much pains on the rifle-range, is that they teach every leader, and consequently every cavalry Officer, the destructive effect of the present firearms, so that he may not be led away into rash actions. If battlefields were simply rifleranges, then the effect, so generally attributed to firearms to-day, would be due to them, and there would then be an end to all tactics. Battlefields, however, are not rifle-ranges, but a confused mass of heights and valleys, of fields and ravines, of woods and villages, &c., which give to each arm a field for its action, provided, of course, that the arm is capable of manœuvring in such country. Moreover, the battlefield is the scene of numerous mistakes, which the tactician can at once turn to his advantage.

I am quite aware that the certain approaching arming of the great

European armies with magazine rifles will be brought forward by the opponents of cavalry as a further argument for running down cavalry and its importance in battle. But even repeating rifles will not do away with Every battlefield affords opportunities of taking up positions and cavalry. advancing more or less under cover, and of manœuvring. Every battlefield also shows now, just as much as formerly, the inevitable consequences of a stubborn fight, be they disorder, confusion, and the consequent tactical errors, or want of watchfulness, or be they the fact that the power of the infantry has sunk into complete apathy in consequence of the physically and mentally wearing effect of a long continued fire-action. The moment will mentally wearing effect of a long continued fire-action. The moment will come in the future, as it did in the past, when one of the opponents must give way, and—leaving out of consideration its numerous opportunities during the fight-this is always the time when the cavalry should win its laurels at a small cost, provided it follows up the progress of the battle so as to be in the right place at the decisive moment, and provided masses of cavalry charge into the disordered enemy. This is for the leader to see to, and the cavalry would find nothing to check it unless the enemy were able to bring up reserves, or had the sheltering walls of a fortress close in rear. In the War of 1870-71, we might frequently have shown the importance of cavalry if it had been in the right place at the right time, and if there had been enterprising, bold, and energetic "sabreurs" at the head of it. There was never such a chance as after Woerth, and, from a tactical point of view, it is and always will be the severest criticism on our cavalry leaders of that day that the defeated French Army was able to reach the Vosges passes. A pursuit, resulting in the utter rout of the enemy, would have been easier here than it was after Waterloo.

A modern battle is, certainly, mainly a fire-action, and the fact that this action clings to the same line for hours, of itself causes the troops to fall into thorough confusion. The best tactical formations are powerless to alter this. At the end of half an hour or an hour, the majority of the Officers are either killed or hors de combat and the troops themselves are left to their own individual resources. They fight on and on in their bloody duty, they wait and hold out to their last breath. Meanwhile, the gaps are continually being filled up from the rear, the fighting line is as become a confused medley of formations and troops, and this confusion is most marked at the most decisive points; here it is that the waste of strength and the disorder are greatest on both sides, and that most of the commanders are missing! Accordingly, a mass of cavalry should, as soon as possible, be directed there, in readiness to dash forward the moment that the enemy gives way and the confused remnants, breathless and exhausted, begin to retreat.

At this moment, it is quite a matter of indifference whether these remnants carry a repeating-rife, a flint musket, or a pitchfork, for the men's nerves are overstrained, and their weapon counts for nothing. This moment, certainly, does not last for ever. A few minutes suffice to get these remnants out of the zone of their enemy's fire, and for them gradually to recover their breath and to get fresh life; a new allowance of strength returns, and once more reinstates the murderous weapon—for a time useless—in its terrible power. If the cavalry allows the enemy to make use of these few minutes, it deserves to be dismissed from the battlefield with disgrace and ignominy; but, if it makes use of this time, it is doing no more than its duty, and does so momentainably at no great sacrifice.

so, unquestionably, at no great sacrifice.

This is as truthful as possible a description of the combatants immediately after their defeat, and every eavalry Officer should be thoroughly impressed with it. I have drawn it from facts, and it will apply to the armies of all nations in any hard-fought battle. Cavalry, provided it instantly seizes on the moment of the enemy's discomfiture, can dash right up to his artillery

positions, and turn infantry and artillery into one confused mass. With older tactics this was not possible to anything like so great an extent, for the rout of the defeated enemy never reached such a pitch as it does now, his moral strength never got so low, as it necessarily must now when the decision is fought out for so long, and the troops never lost such a number of leaders as they do nowadays.

Frederick used to try to bring on the decision by crushing one of the enemy's flanks, on which his cavalry would charge. The armament of to-day directs the assailant to make a turning movement; and this, whatever may be adduced against it, is the best road to victory, provided a sufficiently strong front is also kept. This is only returning once more almost to Frederick's tactics, but employing other formations and larger masses. the cavalry division the result is just the same, while the divisional cavalry

has sufficient opportunity for action against the enemy's front.

It rests with those who lead the army to direct the cavalry masses towards the decisive points from the very commencement; but they can, certainly, not do more than this, and the cavalry commanders must themselves seize upon the moment for independent action. This determination must come from personal inspiration and not from superior orders, or else cavalry would If we compare the events of our battles, in 1866 as always arrive too late. well as in 1870-71, with these demands on cavalry, we shall then see what we yet have to learn.

#### III. Can the Cavalry Division still be considered a Fighting Unit?

Before going further, I must put the above question, which, according to some, should naturally be answered in the affirmative, and, according to others, as decidedly in the negative. But, in spite of the danger that my statements may be "well-known" facts to some of my readers, I will discuss the subject.

The majority of modern tacticians speak of the action of cavalry in battle as of something secondary. They vow that cavalry can no longer decide the day, and that, consequently, its rôle on the battlefield has practically ceased to exist. The arguments of these prophets are principally as

follows:-

1st. The impossibility of posting large bodies of cavalry (cavalry divisions) so close to the fighting line that the right moment for a cavalry success could

be seized upon with certainty.

2nd. The difficulty of bringing up large masses of cavalry towards their attacking point, owing to the long-range and quick-firing arms, both of artillery and infantry, even if the cavalry recognize this object, and charge down on it at once.

3rd. The intersected nature of modern battlefields; and

4th. They declare most emphatically that, under existing tactics, cavalry has no "marked objective," by overcoming which it could have any decided

influence on the course of the battle.

I admit that there is a grain of truth in all this, but it is so small that no principles for the tactical action of cavalry can be based on it. One thing, most certainly, is true, namely, that the lungs and muscles of horses are a given definite quantity, which cannot be worked beyond a certain limit. The question resolves itself into this: was this limit reached in 1870-71, was it generally known then, is it known now? Is it allowable to evolve factical principles now out of the decided shortcomings of the "instrument," shown in 1870-717

Artillery and infantry fire carry further than the lungs and muscles of horses. That is true, but not invariably, for they do so only when the battlefield partakes of the nature of a perfect plain, or when it approximates to

Even in olden times cavalry was only ordered to cross, what was then, the zone of fire in cases of great emergency; why then should it be required

to do this under present conditions?

The performances of General Schmidt, however, have proved that cavalry's power of mobility (endurance and speed) has increased considerably from what it used to be, and this, added to the fact that modern battlefields, to a certain extent, afford more opportunities than before for finding comparatively sheltered positions and approaches, shows that there is not the least truth in that absolute superiority, so often proclaimed, of infantry fire over cavalry mobility. This superiority is relative, and the degree of this "relativeness" can vary as much as the tactical conditions themselves.

Nevertheless, it has become almost a dogma that cavalry divisions must he kept at such a distance from the battlefield that they would always be bound to miss their favourable moment, and that, should they attack, they cannot help failing. What proofs are there in support of this dogma? Where has a German cavalry division been employed as a fighting unit! Has it ever done anything greater than deliver charges, which, ocing to the general situation and special dispositions, were from the first certain to fail, and which would have failed at any period? Of course, if the command of this sensitive arm, and the solution of the always difficult tactical problems, which are set to it, are entrusted to men who are not equal to their position —as was the case with all the cavalry division commanders in 1870-71 then we must not be surprised at a fiusco. On the contrary, it would have been a matter of great surprise if, under these conditions, more had been done. To have to call up the 6th Cavalry Division at Vionville so as to bring it into action, sounds—to put it mildly—like a tactical monstrosity; and it was equally monstrous to call up the 1st Division under impossible conditions at Call up cavalry! that surely is an undeserved hit at its nature. Gravelotte. Is it supposed that, because this is publicly taught, cavalry does not feel it? A cavalry leader must, of all things, avoid being like a statue, and if the commander of the 6th Cavalry Division at Vionville had himself possessed the mobility necessary in every cavalry man, and the tactical knowledge indispensable to every General, he would have followed up the course of the light of his own accord, even if a few troopers had been shot down on the way; and then he would have been in the right place at the right time. We must, therefore, first take care to have good Generals, and, to go a step further, to see that only such men are put in command of our cavalry divisions.

With the best will, I cannot, for the life of me, understand on what special cases or events, or, in short, on what grounds the impracticability of employing the cavalry divisions on the battlefield could be assumed in these days. Where, except in the cases already quoted, has a cavalry division been even I Has a division been engaged anywhere in accordance with our present ideas and requirements for its tactical duty? Why then expect so little from the action of the cavalry division on the field of battle! The engagements quoted (at Vionville and Mars-la-Tour) were fought between brigades at the most; but cavalry divisions were not employed in any of them.

The wars of 1870-71 and 1877-78 furnish very few positive lessons. It is true that nearly every intelligently planned attack of the German cavalry met with more or less success; but these attacks were of no great size, and could not be planned on a large scale, because there was an absence of all the countiels, commanders, as well as handiness of the "instrument."

On the other hand, the lessons and proofs as to the possibility of achieving great cavalry successes, are to be found in what was not, or was incompletely,

carried out, and in the opportunities that slipped by without being utilized; and yet tacticians are very divided in their opinions about the direction to be taken by cavalry. Some entirely reject the cavalry division as a fighting body, because, as they say, it is obliged to take up its position so far from the fighting line that the favourable moment would have passed before it could reach the right place, and because cavalry can no longer decide a battle, since it never has any "marked objective" under existing tactics. This is the "Nihilist" class, which draws simply false conclusions from positive facts; but that is not all, for this class would appear to look upon our former cavalry organization, training, and leading as normal, and quite sufficient for all requirements, whereas, as a matter of fact, the exact opposite was the case in those respects. The real truth is this : that our cavalry arrived too late because it found itself at wrong places, because it was too clumsy for mobility, and because it suffered from a want of good commanders, or else that it would really have been difficult for it to take any part in such battles as Colombey, Gravelotte, and Sédan, cases such as have occurred in all ages.

What, now, can be the meaning of the phrase, "the decision and absence of 'marked objective'"? Can any one arm decide a battle by itself in these days? Can infantry—the queen of battles—do it alone now, or can

artillery?

Did the infantry decide St. Privat by itself? Who would wish to make that statement? Without the powerful support of artillery the infantry would hardly have held out, and Woerth and Vionville were similar cases! It is quite certain that no one arm can now decide a battle in the way in which it could in the time of Frederick the Great; why, this was no longer possible in Napoleon's days. Tactics have now emerged from their infancy and grown into the tactics of all arms combined; but even if these tactics saw a falling off in the artillery and cavalry at one time (as in 1866), or at another in the cavalry (as in 1870-71), it proves nothing against the particular arm in question, but rather that the various arms were not equal to their tasks. A battle may be decided if the different arms are used, as they were by Napoleon I at Wagram, by the Austrians at Custozza, or by the Germans at Vionville. But what decided these battles? Was it one arm alone? Certainly not; it was the three arms combined in the hands of their Commander-in-Chief.

And what about the "marked objective"? In the time of Frederick the Great the cavalry was from one-third to one-fourth of the total numbers, now it is one-eighth. The fighting strength of his armies was equal to that of 12 average army corps of the present day. Omitting Hohenfriedberg and Rossbach, how many battalions were affected all at once by the shock of a charge; how many felt this under Napoleon I at Aspern, Wagram, Somo-Sierra, and Borodino? It is true that the objectives of charges are nowadays scattered, as compared to the long lines and deep columns of the past; but they are not all scattered. Cavalry does not take long to get past the line of skirmishers, and up to the columns themselves, as was shown by Pulz at Custozza and by Bredow at Vionville. How many battalions felt the effect of those charges? A whole division, or about one-third of the total infantry that Frederick could bring into a battle. Can it then still be seriously asserted that there is no "marked objective" for cavalry? Should not the inference rather be that the seven-eighths, belonging to the other branches, must, of necessity, present such objectives to it far more readily than these arms did formerly, when they only amounted to two-thirds or three-quarters? And is it only the enemy's infantry that can present a "marked objective"? May not the other arms do so just as well, as artillery did at Tobitschau, Vionville, and Orléans, and cavalry at

Viouville? Weissenbourg, Spicheren, Colombey, Gravelotte, Noisseville, Schan, Le Mans, Hallue, and the Lisaine allotlered few or no chances of success to our cavalry; but, on the other hand, golden opportunities were just as often let slip at Woorth, Vionville, Beaumont, Orléans, Beaune la Rolande, Amieas, and St. Quentin. On each occasion sufficient cavalry was on the spot, and there never was any lack of opportunity or of "marked objectives," but there always was something wanting in the leading. How can people conclude from such simple facts that "the action of cavalry on the battlefield is a 'superfluity'"?

Next to these "tactical Nihilists" comes the class of "tactical Liberals," who do not subscribe to the last sentence, but modify it, while consenting to listen to argument. They do not deny historical facts; but would that they would only draw proper conclusions from them. The relatively great successes carned by "zugs" and squadrons in many battles (Vionville, Amiens, Bapaume, Orléans)—we might also include the success of General Bredow's six squadrons here—induce this class to advocate that cavalry should be placed in folds of ground, but in small detachments, and distributed as much as possible behind the whole line of battle. But they forget one thing, which is, that the divisional cavalry, in its present strength,

is quite sufficient for that.

These men are opposed only to the employment of cavalry in "masses," on the ground that it would be too difficult to post and bring them up under They thus admit, without a question, that the nature of cavalry is indestructible; but, in the heat of the argument, they forget that their proposals are mere makeshifts, resulting from the want of cavalry leaders. then, should it be impossible to do with a division, what is admitted to be possible with "zugs" and squadrons? Undoubtedly, smaller detachments will be able to come into action in many places, and, perhaps, even more frequently; and they will be able to win many minor successes; but these tacticians mistake the essence of the subject, that is, the reason why masses of cavalry must be engaged, namely: to win a great stake, as was done in recent times by Pulz at Custozza and Bredow at Vionville.

Next to the "Liberals" come the "Absolutists," who are simply for charging down on everything. We may pass them by, only we should like to keep their pluck, for these "Absolutists" will achieve more than the "Nihilists." It is possible that the former may sometimes charge in vain, but they will, at any rate, be successful once; the "Nihilists," on the other hand, will do nothing but say "no" to everything. Those, who have no faith in the action of cavalry on the battlefield, will neither consider, nor dare to act.

Opposed to all of these come the "tacticians," who follow nothing but empirical teachings, and differ amongst themselves in only a few minor points. Thus, some exert themselves mainly in favour of charges not being made in too broad a front, but they insist that charge should succeed charge until all opposition is broken, while others, on the other hand, recommend charging down in as broad a front as possible on the longest possible line. We do not propose to lay down any principle for this, for cavalry must be able to do both, and their leaders must know when they can best derive advantage from one or the other method of attack. Fields for the charge of one or two deployed brigades are not by any means so very rare in most modern battleticlds. Wherever it can do so, cavalry must attack in the longest possible line, for it is only its first shock that takes the enemy mawares, and every subsequent one is no longer a surprise. The longer the evenny's line that is surprised, the better; and, to complete the rout of these troops, it may be sufficient if a second or third charge in squadron or "zug" front be made simultaneously on two or three points, provided the stroke is vigorously delivered.

Custozza shows that it is not an easy thing to carry out an attack with several brigades, even when the ground, over which the attack is to be made, allows ample space for deployment. Hence the cavalry unit (the division) must be trained in peace time to the highest possible degree of cohesion and perfection in manœuvring, and the advance to the charge must be made in perfect order, in close formation with the prescribed distances and intervals, as well as at the requisite degree of pace, so that the effect may be like that of "wave upon wave pressing on each other."

The above will always remain a law, and that side, which delivers the last blow, will break the opposition. Any one, who has seen a successful cavalry charge against infantry, must have formed the following impression, viz.— the infantry at first entirely loses its head (compare Grenier's Division, the VIth and IInd French Corps); it forgets that it carries a rifle, is scattered in all directions, by which it exposes the artillery (Vionville), and carries disorder into the rear lines, and its streaming backwards interferes with the

fire of these lines.

There is a favourable chance for cavalry in this, the first moment. In the second moment the infantry begins to recover from its panic and fires, though more from fear than with deliberation, and therefore mostly without effect; it next halts and rallies so as to form some sort of barrier. We will not go further, for this is enough. This is not merely an impression formed on ourselves personally from seeing the French infantry; but, according to many unanimous reports, it was just the same, if not even worse, in the case of the Italian infantry at Custozza.

What has now been stated is alone sufficient answer to the heading of this chapter. The second moment must be staved off; and it is only possible to do so by means of a sufficient breadth in the attacking cavalry line, and by

a second, or even a third, attack.

Nearly everywhere we see our charges against breechloaders in 1870-71 successful; however, they frequently resulted in no direct gain, because of the want of forces to secure what had been won, and to push on further. This can only be attained by having larger formations capable of manœuvring,

and the cavalry division is this formation.

Formerly cavalry was mainly required to be able to deliver a wide blow in one long line; that was all that was generally necessary in Frederick's time, the object of the 2nd lives being merely to provide wing or flanking cover. But a change set in already in Napoleon's time, for he found that he could no longer do with only one charge against the deep formations of the tactics of his day. He had to make several charges, and thus we see his cavalry, formed into a division, advance in three or four lines, one behind the other, until "wave upon wave" had broken all opposition.

If cavalry is to be successful against infantry in these days, it must make the most of the moral effect of its charge, and base its plan of attack thereon. Cavalry must especially bear in mind the condition, in which the infantry of both sides is after being under modern rifle fire for five or six hours. No tactician makes a point of this, and yet we are thoroughly aware of it after the first battle. At this time the infantry of both sides is unable to advance any further unless it is possible to bring up fresh troops; Woerth and Viouville are good examples of this. The rival "infantries" can no longer gain any advantage over each other, for they have spent their strength; it is true that they still keep up a brisk fire, but the fires have changed from men capable of being influenced, into machines. This state of affairs is repeated in every fight nowadays, only no notice is taken of it, because the exhaustion is alike on both sides; but it is a fact, all the

<sup>1</sup> Schiller's "Taucher."-TR.

same, and any reserve of infantry or smart and rapid detachment of cavalry, that may be near, will be able to drive through this "cardboard-like wall" with comparative case.

If things have happened in this way, the cavalry gains what we have shown to be the consequence of the first shock, and, here and there, perhaps even more markedly than we have made out. Hence other forces must be kept' in hand for a second blow, to keep off the rallying moment, to increase the gap and confusion, and to produce real panic and rout. The way in which this 2nd line should act is shown by Pulz's brigade at Custozza, where the charges of the two attacking brigades (Pulz and Bujanovics), led by him, were carried through with the utmost vehemence; hence their great success, which would have been much more complete and immediate still, if the 2nd line of Pulz's brigade had been 800 instead of from 200 to 300 metres off. This would have prevented the enemy rallying and recovering from his terror. This was really the Austrian General's intention, but he did not succeed in carrying out his idea.

Although the course of such a tactical action is rapid, yet this rapidity is only relative. Looking at the matter practically, an attack like this by, say two brigades, will take half to three quarters of an hour, and if these brigades are successful their formation is sure to be broken. Now, here is the dangerous moment for the cavalry, and it can only be got over by having a 3rd line, under the protection of which the two first can rally, or which will eventually have to hasten to meet any possible hostile bodies of cavalry. (See the counter-attack against Bredow's Brigade at Vionville). The 3rd line must therefore be somewhat further from the 2nd than this is from the 1st; how far must be settled by the commander. Thus we sum up: The cavalry division is tactically the most suitable fighting unit; its formation to be in three lines and each line to be as nearly as possible of equal strength; with regard to its employment and the result of its action we may lay down

the following :-

1st. For cavalry, which really has to drive the attack home, there is now, as there was in the past, a "marked objective," the only difference being that this objective is of greater depth than that offered by the line of the last century. We need only refer to Pulz at Custozza, the 1st and 3rd Austrian Reserve Cavalry Divisions at Koeniggraetz, and to Bredow, Barby, and Schmidt at Vionville. The tremendous effect of a rigorous cavalry charge on a deep formation is shown by Pulz on the left and Bechtoldsheim on the right wing at Custozza. Had the Italians been drawn up in one or two lines this cavalry would simply have ridden through them and have made a gap. But, as it was, the cavalry drove the lines pell mell into one another, and in that way produced a confusion, out of which it was not possible to restore order. It is, therefore, by no means an idle question to consider whether cavalry can produce the most lasting effect when acting against a line, or a deep formation.

2nd. Even if there might not be space enough to bring up twenty or more squadrons in one line, as was done in the 18th century, still a glance at the lattlefields of the lattest wars will show that half of them afforded opportunities, in many places, of posting brigades under cover at 1,200 or 1,500 netres from the firing line, of bringing them up to this in comparative shelter, of allowing line to be formed and of charging successfully. But that which two brigades at Custozza and one at Vionville were able to do, might have

been carried out with three brigades just as easily.

3rd. The success of cavalry, which is well led and attacks with vigour, speaks for itself, after such examples as Custozza, Koeniggraetz, and Vionville, so impressively, that there is no reason to doubt similar successes being won in the future. There will be less reason for such doubt, the more the cavalry

division is trained as a fighting body in peace time, the more the co-operation of the three arms is studied and practised, and the more the speed and

endurance of cavalry are developed.

4th. If the cavalry division is prepared in this way, and is commanded by cavalry leaders, it will then satisfy all requirements at once: against infantry, cavalry, and artillery; it will, however, have to improvise the best means of attack every time it meets the different arms, as was done by Bredow at Vionville and Auerswald at Mars-la-Tour. Hence it follows that experience is the best school for the cavalry General, as it is for every tactician. By means of empirical study he can form his ideas and develop himself after he has instered the essence of tactics. However, empiricism proper leaves off where war begins. If, during peace, the experiences of war are neither forgotten nor mistaken, and if the "organism" is trained to preserve the incontestable facts established by experience, then peace has fulfilled its mission.

Just as we have done in tactics generally, so have we speculated too much about the rôle of the cavalry division; we have overlooked the simple and eternally immutable laws of the nature of the various arms, we have gone roundabout ways to get at that end, which lies straight before us and is pointed out by experience, and we have forgotten that cavalry is mounted. Intellectual speculation is very good in its place; but it is better left to transcendental philosophers. The soldier should confine himself to the earth, on which he lives and fights, and to the experiences which it provides for him. As a tactician he should be both empirical and realistic, and in this way he will get on just as well as men of science have done by empirical

means; facts must be his guides, and nothing more.

We will now see how we can turn these facts to account.

#### IV. Considerations as to the Training of Leaders in Peace Time.

The success of cavalry in battle depends on the efficiency of its leader and on the moral condition of the arm, as well as on its opportunities; naturally, even an efficient leader will not be able to do much with a cavalry which is not up to the necessary tactical requirements of the day.

In order to be clear on this efficiency of the leader we must explain what

we understand by it.

Leaving out of consideration the indispensable meral qualities of every cavalry commander, his "cavalry nature," and his skill as a horseman, the most important things about him are his tactical qualities, and the fact, that their cultivation has been for the most part either entirely disregarded or too little attended to, is the chief reason why cavalry has only gained great successes occasionally, that is to say, only when Providence has, so to speak, provided a ready made cavalry leader, a cavalry genius, which developed and perfected itself all alone.

Natural disposition as a cavalry soldier, that is talent, is by no means sufficient by itself; in order to get the most out of its special arm, talent can as little afford to do without practice as without experience, it must thoroughly understand the arm and must know what it may claim from it, and the arm itself must feel confident of being able to satisfy all requirements. The cavalry leader must know the strong and the weak points of the tactics of his own and and of the other arms, that is to say, he must be a tactician. Without doubt more such tacticians have existed than are recorded in military history. Who knows how many of our best men have had to pine away in peace time, how many have hoped for a chance, which they never got, of showing what they could do?

To driff a regiment and a brigade well requires nothing more than a well-trained "organism," the commander cannot show more here than that he is

well up in the regulations ; he only requires pains to master them, and by dint of a certain amount of routine, naturally resulting from practice, and, being given sufficient time for training, he becomes one of those "efficient peace

cavalrymen," of whom we have so many already.

But he has not in him more than the mechanical part of his profession, and what he manages to do could be done without difficulty by every willing individual, who was a sufficiently good rider and had been through sufficient practical routine. Special abilities, or even serious study and extraordinary characteristics, are not essential for getting so far, and yet a cavalry General must possess a liberal allowance of these three qualifications. If outward appearances are the things towards getting on in this branch, in which "spit and polish," and even a certain amount of swagger, have without doubt repeatedly played no small part, then intellect and inner qualities are made subordinate to forms and outward show; and in an arm, which is as costly ns it is necessary, intellect will be turned in directions where tactics will unfortunately be forgotten, where only technical skill and accomplishments prevail, and where, instead of rearing tacticians, we get sportsmen. This is exchanging the ends for the means, because the spirit of the sportsman should be innate in the cavalryman before he puts on his spurs; and if, from that moment, he were led away to become the first sportsman, but no tactician, he would then not have advanced one step, but would only have become a

sportsman in uniform, with the privileges of an Officer.

There is no doubt that all armies have had, have, and will have amongst their cavalry Officers a greater or less number of sportsmen instead of tacticians. In all countries there, of course, are men who have been well favoured by fortune, who wish for life and enjoyment, and only find life and enjoyment in such, so called, noble passions. For these men the profession of arms is little more than a means to an end, and the one great requirement, just laid down by us, namely, that every cavalry Officer should devote his whole mind and existence towards becoming a good tactician, would be absurd if there were no such sportsmen. A high degree of outward show in conformity with circumstances, has always been associated with cavalry by all nations; but, if a mean is not struck here, a cavalry, which should be trained to be ready for any sacrifice, soon becomes a troupe de luxe, which is satirically dubbed "spur clinker" and "sword clanker." Of course a taste for splendour, luxury, and colour can be quite consistent with efficiency in a cavalry General, as Murat, for instance, proves. This parade was distasteful to sensitive men, and King Frederick William III showed that he knew when to apply the right word in the right place by the nickname of "king of the rope-dancers," which he gave to Murat, as well as by so many other of his sayings. Another class of cavalryman has all the ambition, but not the stuff, to make an efficient tactician, and yet another class confines itself entirely to its routine; this class is admirable at stables or in the riding school, but its members have mistaken their vocation, and should have been riding masters instead of Officers. I will not enlarge any further on the general standard of training; a higher standard is no absolute necessity for a tactician; yet, what may reasonably be blamed is the insufficient tactical training, which generally prevails in cavalry. Heaven forbid that any one should take this as a personal remark l

How is it that infantry is always pleased when a General comes from the cavalry and gets command of a division or even an army corps? Is the joy mere accident? By no means, for the infantry knows then that a good time is in store for it; the new General is very likely an admirable "cavalryman," but he probably is also just as bad a "tactician." Generally then, he will even go so far as to be lenient, because, being a cavalryman, he will not like to judge too severely, or he will depute one of his subordinate (infantry) Generals to carry on, "and he will, as a rule, find nothing more to add to this. Officer's procedure."

How is it that, in peace manœuvres, such remarkable clumsiness and indecision, I might also say ignorance, is so often displayed in their tactical dispositions, and in their leading by cavalry Generals, who are entrusted with a command? Why is it that the infantry will, as a rule, even before he has had time to show, even in a general way, what he is capable of, judge of such a General as follows:—"To-day we have a cavalryman at our head, so we shall be licked?" It is needless to say that this is often quite uncalled for, but it is, unfortunately, just as often too true. Why among the cavalry generally, in all grades, does so limited a degree of security for right tactical judgment prevail, why is the nature of the infantry fight for the most part a terra incegnita to them? It is not to individuals, but to the system and to the narrowness of their tactical training, that blame must be attached. Besides the above-named classes, which fortunately are only a minority among the whole body of Officers, even the majority cannot make the progress that it would so gladly do. When he is at the War school the cavalry Officer scarcely becomes acquainted with the A B C of infantry tactics; he is unable to learn more there, because the time is so short, because a young man with only one year's service is not yet sufficiently prepared to be able to take in more, and because, after all, the elements of the factics! of his own arm are the most important thing. After this time, in which the cavalryman may perhaps have learnt what a company-column is, he returns to his regiment and, if he does not of his own accord carry his studies further, or if he does not go through the "Kriegsakademie" (Staff College), his only chance then is at the manœuvres to see, here and there, the "smoke-clouds," certainly nothing more, of an infantry fight. How and whence, then, can a cavalryman so grasp the nature of the infantry combat that, in a real fight, he may know when the time for action has come? Let us, however, be just, every man is not a genius, although required to be such under our existing system. I would not be so discursive on this subject were it not that cavalrymen themselves have come to me with their grievance, and were not truth, as was stated near the beginning, so often overlooked owing to its very simplicity. Certainly the cavalry Officer of the present day can derive many little bits of information from the dismounted action of his squadron, but this is too little. Where is the remedy, and how is improvement to be made?

No one has ever thought it in any way ridiculous for infantry Officers to be attached for duty to cavalry, artillery, "juegers," and pioneers; or for artillerymen to be attached to the cavalry, or cavalrymen to the artillery. This, as a rule, is even some mark of distinction for the individual, a recognition of his relative efficiency, an incentive for him to labour on for the good of the army. Sometimes, too, it happens that an infantryman suddenly hits on the idea of spending a year's holiday with us; but we are, of course, not speaking of such gentlemen.

Now, what is the reason why, so far, a cavalry or artillery Officer has never been seen with an infantry regiment? Because they would have to do too much duty on foot! Can that possibly be a reason? How many men of both services are excellent pedestrians and good sportsmen? And ought they not, therefore, to be able to do infantry duty so as to learn to know the form and nature of the method of fighting of the principal arm, which infantry, after all, is? I have a certain presentiment that this wish will not only be scorned by the cavalry, but that it will be ridiculed by the infantry. But

<sup>1</sup> I know very well that the term "tactics" properly only applies to the combined action of the three arms; nevertheless I use the word here and in other places for the sake of br. vity.

that is of no consequence; if men will only get accustomed to the idea then it will be otherwise. It may not be pleasant for a man to have to get off his horse, but, if he wishes to get on in the service, he must not allow himself to be put off by that. Besides, we know that it is the wish that, for instance, infantry officers should be attached to cavalry;—why then, not wish what we wish?

Naturally we do not suppose that infantry is suddenly to become the school of instruction for cavalry; but, after passing through the "Kriegsakudemie," Officers should, as far as possible, go through a year's practical course with another arm, and it should be insisted upon that cavalrymen should do duty with infantry; there is some sense in this, but we are unable to see for what reasons "jaegers" are nowadays attached to infantry, and infantry officers to "jaegers." If our wish were practically examined, it would be seen that there is nothing out of the way in it. The preliminary drills, including battalion drill, would of course have to be done on foot; at field exercises the cavalryman could be mounted, but at the manœuvres he would have to go on foot once more. Of course peace cannot give anyone a perfectly learning at 30 years of age to what it is at 20. At 30 nearly everyone has given up his youthful frivolity, many have become serious and pensive through the experiences of 10 years, and the proverb that "a Suabian does not arrive at the age of discretion till he is 30" may, from my own experience, be applied to all men in general. For my own part I can assert that thing, which bored me at 20 years, now afford me material for a whole day's reflection.

Moreover, at 20 years a man rarely quite knows his own mind; he, therefore, learns "War school tactics" with no higher object than to learn just enough to get through the examination; a man of this age seldom aims any

higher.

After that, the bulk of cavalrymen, as a rule, learn nothing more about infantry, and vice versil, the latter learns nothing more about the former. Between 20 and 30 man settles down, he solves himself, so to say, and for the first time finds out what his powers are. But how many are there, who leave the army in this time, because, they say to themselves: after all I am not qualified to be an Officer! During that time man discerns his object more clearly; noble sentiments, which are the first crowning of his position, arise and develop in his soul; he has left his immature and unruly nature behind in the storms of his younger days; the illusion is gone; many fancies have been torn asunder and yet he is still discontented; he turns away from the outer world, holds communion with himself, and puts the first noble questions to himself, the answer being: In myself only do I find real solace. His intellect begins to work in a more connected, regular, and serious manner; the brain, created for thought, can no longer do without thought, and this inner life of reason and reflection is supported by a character, now become firm. He once more takes up with the "acquaintances" of former years, having perceived that life is nothing, that all is vanity, and that only one thing gives real and lasting satisfaction, namely, work; and now that he is a man, his wings begin to flutter with that noble manly virtue, which we Ambition to be something, to do something, to live for an call ambition. ideal, with which the man identifies himself, and which, with a soldier of these days, can only be the endeavour to become a General. At this age he can see the gap between theory and practice, between knowledge and power; the gaps in his knowledge always force themselves on him uncalled, and no sooner is one stopped up than a new one opens out. This is life, and out of this self-contemplating activity springs up knowledge and love of work, of struggling and of living, for life is both work and struggle. A man who has reached this stage of understanding and maturity, will learn tactics with success, and will learn them quickly, for now he is following a definite object. But, once he is launched in the battle of life, he no longer gets rest or quiet; every day produces a new phase and, if he does not wish to give

up the fight (i.e., life), he must fight out these phases.

I have spoken to cavalrymen, who were very hard working and enthusiastic for their branch, and their confession was without exception: "If we only knew more about tactics and especially about the infantry combat!" How many good cavalry "elements" fail in the "Kriegsakademie" examination, simply because these examinations show that infantry tactics are almost an unknown world to them! Is not this result discouraging in these days? Where can our present cavalry Officer learn to know the infantry combat; how could be determine its weak points beforehand, and all at once take advantage of them? Let us be just; he cannot know infantry tactics, therefore he cannot be a perfect cavalry soldier. Every tactical success of any one arm depends on a knowledge of, and the taking advantage of, the weak points in the other arms, i.e., it depends on the momentary superiority of the one arm. This knowledge must be acquired, and this taking advantage must be practised; they are both the means and the end.

It will not do to suppose that it is of little importance for a Commander-in-Chief to be a tactician, but for those who actually lead the troops it is indisjensable. A Commander-in-Chief makes his army fight with the idea of some definite object, he ascertains if he has the necessary means at hand for the fight and if, from its position, the field of battle gives hopes of as complete success as possible. These considerations belong almost entirely to strategy. But during the fight, the Commander-in-Chief cannot, and must not, allow his view over the whole to be troubled by attention to tactical details. He gives orders for this or that; but the way in which they are to be carried out is the business of the tactician. Every cavalry leader, even if he be as great as Seydlitz, is, on the battlefield, nothing but a tactician; in every fight his duty is to take advantage of momentary situations; but when does he learn what a fight is, and where does he even learn to put together

and employ his instrument?

The cavalry Officer, who has risen to be a general Officer, has seldom, or, at all events, insufficient opportunity for this. The older he gets and the larger the forces under his command, the less assurance will he have as to how best to employ them and as to the co-operation of the three arms, or, in a word, as to tactics. Hence the impossible orders and dispositions, or, what is just as common, a laisser faire et laisser aller, i.e., a want of general direction, and unsuccessful fights follow as a natural consequence.

In modern fire-actions, which last so long and are physically and morally so destructive, there are many chances of successful action for cavalry, but certainly not for cavalry that considers its highest aim and object to be, simply to ride to a straight charge; but any lot of grooms, collected at random, can do this, and such a charge is as useless in its effect as a good

volley fire! in the air by infantry.

But cavalry, that is factically trained and commanded by tacticians, will meet with successes, and, sooner or later, the day will come, when cavalry will understand what a field must be offered to it by the long, thin and, as it were, disconnected lines of infantry, which in a hot, paralysing and nerve-shattering fire-action become powerless; and the longer the infantry is forced to hold out in the fire-action, so much the better for the cavalry, and so much easier is the task of the latter. The German cavalry, and the French too, might frequently—even in the battles of August, 1870—have been able to find quite sufficient cover for a whole cavalry regiment at 1,000 metres from the enemy. The conditions, as compared with those of the 18th century, are

therefore not entirely different, for whilst the large masses of cavalry used to be required for charging successfully on the strongly welded together masses of infantry, one or more squadrons are nowadays sufficient for relatively great successes, as we are taught by Vionville, Amiens, Bapaume, and Orléans; the conditions have thus only changed relatively, and have even improved for cavalry, and cavalry must know what these are, so that it may

shape its action accordingly.

Careful training of horses, good horsemen, good armament, riders and horses capable of endurance, smart and rapid movements, a bold and daring spirit are all fine and good things, but we must not be deceived by them; they are nothing more than the indispensable foundation of all cavalry tactics. They are the elements, and no doubt all this is important, but it can only contribute to success when employed in the service of the intellect, for tactics belong to the intellect, which must be cultivated, and must thoroughly know the nature of a modern fight; this is truer for cavalry than for any other arm, for in its case it is always a question of seconds. The foregoing applies to the other arms also, more than tacticians seem to insist on, but still not to so great an extent as in the case of cavalry.

Generally speaking, German cavalry Officers may be said to have been given sufficient knowledge; but of course they are not wanted to be professors, but Officers. In the cavalry there is, besides, a proportionately large number of deeply read Officers, whose general knowledge far exceeds the necessary average. Further, there is such a freshness about cavalry literature, that in this respect it is most advantageously distinguished from all other writings.

That enables us to conclude that the organism is sound.

The relations in the ranks of cavalry are, as a rule, more free and less constrained than in the other branches, a fact which, indeed, is consistent with the grand art of riding and the varied emotions, which the noble horse affords. This freedom from constraint is not by any means a thing to be found fault with; it is a cavalry characteristic, which is to be found in that arm among all nations. A sour-looking man, such as York, who was hard as steel, could hardly have come from the cavalry; the devout and self-reliant, though somewhat hard-headed Ziethen, the light-hearted, daring, clear-minded, and noble Seydlitz, the frank, enterprising, and undaunted Blucher, are all types of cavalry leaders; and this list might be continued down to Schill and Platen, and, still further, to V. Bredow, Auerswald, and Schmidt in our own time.

It is undeniable that the noble characteristic of frankness is extremely prominent in cavalry; it, in fact, seems to be the expression of a cavalry mind, and yet in the same heart there should be the cunning of the fox. addition to these diametrically opposite senses we require the cavalry officer to have the most heterogeneous qualities: deliberation and daring, cool calculation and emotion, calmness, endurance, perseverance, moving rapidly here, there, and everywhere; a cavalryman must sit in his saddle and always be fresh, enterprising, and daring. Of course he must be thoroughly proficient in riding, otherwise the word "cavalry" would be out of place. Hand in hand with these characteristics must go those moral and equally important ones, which can be included in the expression "grasp of the situation," in both a strategic and a tactical sense. Further, the sharpness of the senses must be very highly developed, the sight and hearing must be capable of detecting the most minute occurrences, and all this must be enclosed in a constitution of iron. The cavalryman, as he sits in his saddle, is a free man belonging entirely to his own head and heart; for him there should exist no situation, into which he cannot enter or from which he cannot extricate himself, and to this end must be be trained. The scientific as well as moral status of our cavalry Officers must be considered as a good and perfectly sufficient one, so that, with sensible tactical training and exercising, an excellent result must necessarily be produced. It is not easy to decide if the characters of our great cavalry Generals are sufficiently studied; but such study can be strongly recommended in the history of cavalry, just as it can be throughout history. Whatever may be said to this, it is a fact that nothing arges us on so much as a kindly contemplation of the great figures in history; for the decisions of the man, and his boldness in carrying them out, must ever be the most important objects of consideration.

Starting from this point of view, it might perhaps not be without good results if the biographies of great cavalry Generals were written as prize essays, so as, in this way, to place an indispensable mental food before our young cavalry Officers; what we possess up to now in this respect is extremely defective and, at any rate, insufficient. It is evident that the qualities and talents, just mentioned, caunot be found to an equal extent in each one of a number of individuals. A serious consideration of the frailty of Luman nature can rather prove that very many men do not possess them; but this is not the case with cavalry slone. Now, in addition to all these great human qualities, a cavalry leader must have just as important military (tactical) ones. Hence, it is needless to say anything more to show that cavalry leaders are but rare gifts of Providence.

Let us suppose, now, that in the cavalry there exists enough individual study, and that it is familiar with the theory of the co-eperation of all arms; but even all that will be far from sufficient. It is nothing more than knowledge, nothing but the prelude to the power of action. The organization and method of training and instruction of cavalry Officers must be more practical, more tactical, and more in accordance with the conditions of war. The long wars of past centuries cannot occur again with our armies of millions of men; and the best school—war—slips by so quickly that, he who would wait for it, would never be in time. The principal work must therefore be done beforehand, and this is very difficult, because it is carried out in peace time. This is all the more reason for the work being serious, for thinking everything out exactly, for a careful method being adopted, and for unlesstatingly making use of every means, which can remove cavalry from drill-ground tactics to the true sphere of its field of action, and which tends to the quickest possible training of horses and men. All this is a matter of practice.

### V. Necessity for Manaurres'by Divisions.

In the century of cavalry it was not the practice to leave everything, coming under this head, to war, for peace labours had to do their share as The cavalry leaders of Rossbach and Zorndorf (Seydlitz), and Torgan (Ziethen), who knew how to manœuvre and attack with sixty or seventy squadrons, are different figures to themen of Hohenfriedberg and Czaslau. Between the second and third Silesian Wars there intervened ten years of peace, which had been the real school of the tactics of the great King. Even his great masters were not "Heaven-born," but were obliged to work hard; and in those days they were sensible enough not to expect a cavalry leader to be able, in war time, to hurl sixty squadrons swiftly and unawares on the enemy's flank, without giving him opportunities in peace for learning how to Books are nowadays written to blame our peacemove such masses. trained cavalry Generals (who had, at the ntmost, previously handled a brigade for a few days) for not having succeeded off-hand in commanding a division. How unreasonable this is! By all means blame the system, but not its victims. Even if the cavalry Generals had themselves possessed the necessary efficiency, we should still have had a failure, because a division in

three lines, each two regiments strong, will not lead itself all alone. To be able to manage this sensitive organism requires many years of careful training in all ranks. Even the best cavalry regiments, if suddenly collected into a division, will, under the most favourable conditions, asquit themselves indifferently so far as manœuvring goes, because the organism is an untrained one. In the philosophical century they were not so idogical as to expect this, it was not till the technical century, in which men have learnt to calculate so accurately by logarithms, that this occurred.

How, then, have our cavalry Officers been educated, and how are the majority of them still brought up? There can be but little question of tactics or of the co-operation of the different arms, as we have already explained. But that is not all; they have had no opportunity (and this is the case now more than ever) of seeing, and still more of leading, large masses, or in other words, they do not get the instrument of war at their finger ends in peace time.

The bulk of the German cavalry has, so far, during peace time seen no larger unit than the brigade, and then at managures it performs the duties of divisional cavalry; it is only the minority, about one-seventh or one-

eighth of the cavalry, that practises in divisions.

What a remarkable thing it is that an infantry division on war strength has to manage with four squadrons (a very liberal allowance for that unit), while at peace manœuvres such a division has ten or even more squadrons! Have men then, really, never perceived what is contrary to all tactics and to the requirements of war in our system? And do they not see that, owing to this false numerical proportion of the arms, infantry and artillery also are misled in their ideas of the true character of a fight? What is the cause of our not making progress? The war of 1877-78 has not taught us a single new thing; what we now know and labour for was advocated by intelligent men immediately after the war of 1870-71. We have had experience, but foreigners have derived more profit from it than we ourselves have. at the French and Russian cavalry. We have been writing and talking for more than ten years; all that we urge is acknowledged to be good, proper, right, and necessary, and yet everything remains practically in its old state. Where is the obstruction to be found? When so little intelligence is shown about cavalry, how can we be surprised that even soldiers should recommend the suppression of cavalry so as to have more infantry in its place! Reports, to be sure, can be made with velocipedes, and there is no further need to talk of cavalry tactics because, in the opinion of such men, cavalry is superduous on the battlefield. It is sad that this evil has been able to take such deep root that every means of resisting it has been neglected, that men have remained silent and asked for nothing, and that a feeble effort has, at the most, been made in the defence of this arm. Is it supposed that cavalry, when it has to bear such things and is looked upon as little better than a fifth wheel to a coach, can continue to exist and develop; or that the arm can be self-reliant, and that the vigorous and enterprising spirit, without which it is nothing, can arise and spread?

Whence is its moral energy to come, then? You poor quilt-drivers, what is the use of your thoughts and efforts? I will tell you. You only provoke fresh opposition from those who simply pass over cavalry and go by the ideas of the day. The conviction that, as a consequence of the physically and mentally exhausting and destroying nature of a fight of breechloaders, cavalry can play a tactical part, has not become at all general, in fact we must, unfortunately, admit that even with the cavalry itself matters are not generally better. And we can scarcely think ill of cavalry on this account, for it has very rarely really seen infantry that had been in a fire-action for five or six hours. But still, should not the superior Generals, who have them-

selves come from the infantry, ask themselves whether such infantry could not be ridden down, and whether they themselves are not the very men who should consider every cavalry question most seriously ! For the weak points of the modern fire-action cannot possibly be unknown to them. Yet the great influence, that infantry tacticians, and the small influence, that cavalry tacticians can exercise, is the chief cause of our making progress so slowly. Cavalry can decide amongst themselves if the conversion into Uhlans and Dragoons is the most judicious and best, as is recommended in the pamphlet, "On the Arming, Training, Organization, and Employment of Cavalry," or if it is preferable to still retain Cuirassiers as well, depriving them of their cuirasses and arming them with rifles; it is a matter for argument whether pointing are better than cutting weapons, but it cannot for a moment be doubted that our two-handed "side-arm," made for both pointing and cutting, s the greates; conceivable mistake. It may further be argued whether lance, rifle, and sabre are not too much for our Uhlans, because our men are too clumsy to acquire the necessary skill in handling these three weapons, and because, after all, the extra weight has to be taken into consideration as well. The lance is a first rate weapon in the hands of a skilful man, but in the hands of an untrained man it does more harm than good. Frederick's cavalry, the Turks, and Arabs (once the best cavalry) were unacquainted with the lance; the Poles alone possess the natural skill for acting as lancers, and the Polish Uhlans were Napoleon's best cavalry. Why do we not form our Poles into nothing but Uhlans ! The Turks, Arabs, and Hungarians carried, and still carry, cutting instead of pointing weapons. All these things-with the exception of the necessity of arming troopers with rifles-are questions of secondary importance; but, on the other hand, there can be no difference of opinion about the principal arm, the horse. If we think consistently a little further and keep in view the mission and employment of cavalry in war, in the way that this subject was worked out in the pamphlet just quoted, the consideration, for the tactical training of cavalry in peace and its tactical employment in war, will be self-evident. Then it will no longer be possible to contest the absolute necessity for permanent cavalry divisions of the proper strength in peace. But to organize them will not do alone; an organization without training, practice, and suppleness is a machine; but the cavalry division must, on the contrary, be an organism.

It is everywhere acknowledged that its strategic employment is the principal field for cavalry's action, and all armies have so constituted their cavalry as to be able, more or less, to satisfy the requirements of strategy. The necessity for the establishment of the requisite cavalry divisions in peace follows so clearly from what has been said, that we need not say anything further about it.

But why not at once seek the tactical consequences?

As a rule the caralry will make its appearance alone, in advance of the front of an army, and will there find an enemy acting in the same way. It is impossible for it now to move, see, or get information without fighting; it will be absolutely necessary for it to break through the enemy's cavalry screen by force, and cavalry engagements of more or less importance must take place before the main army can come into action. These engagements cannot be avoided, especially by the offensive side. It cannot be argued against this, that such engagements were avoided by Napoleon I, the great master in the strategic employment of cavalry, or that they were unnecessary for the Germans in their march on Sédan. In both cases there was, so to say, no enemy; in Napoleon's time the enemy's cavalry was split up and, besides, was deficient of any talent for leading it, and in the operations against Sédan the

<sup>1</sup> Berlin, 1883, Frederick Luckbardt,

French cavalry was on the wrong flank. But a General, who wishes to fight with the best chance of success, must be well served with information by his It was because Napoleon never neglected this, that his manner of conducting battles carried with it a condition of security, which has since only been equalled at Sédan. As this way of employing cavalry will in future be found, not only on one, but on both sides, it follows that an absolute separation of its strategic and tactical action cannot be brought about, even for a The independent cavalry has to carry out strategic duties, but whole day. cannot do this without recourse to arms, without itself coming into action In these actions it must get the upper hand of the enemy's every day. cavalry, and it has therefore a quite distinct mission, from which must result an equally distinct way of training it. It would be supposed that everyone, even a layman, would understand this, but, of all habits, men stick most of all of that of "looking over the simple truth;" and this brings us to that stage, to work done during peace, which has at all times borne, and will bear fruit, and to which Frederick's cavalry owed its laurels, namely, "exercising Commanders in cavalry tactics."

It is strange that while they put aside what is nearest, and what admits of no question about what is necessary and the possibility of carrying out what is necessary, as if the way to command a cavalry division could be taught by itself (do even the higher infantry units teach that of themselves?), men rush madly on to ground which is far more difficult to cultivate in peace time, namely, that of the strategic employment of cavalry. The most important condition, which comes in here, does not exist and never can be introduced in peace time, it is the uncertainty about the position, strength, and intentions of the enemy, in fact, all that relates to the military measures taken by him. The communication that takes place in peace time cannot be so cut off, that one side would be unable to find out everything necessary, without even sending out a single treoper for it. I do not mean in any way that strategic cavalry manœuvres are not generally desirable, but only that exaggerated hopes should not be founded on them. The employment of cavalry in peace time can be of great importance, from a strategic point of view, in that it affords to the commanders opportunities for fearning to reconnoitre a wide front, and to arrive at a definite important military point, in doing which they will be obliged to employ their forces in many different ways. The cavalry itself may in this way become accustomed to a certain amount of endurance, and even if the individual trooper loses this again, still the cavalry Officers learn in this way how much can be claimed from the arm as a mass; and this is not without importance. Stratege cavalry manusures, as they have been hitherto carried out, have missed their principal object; we should like to see them carried out in combination with the other arms, as opposed to the narrow system hitherto in force.

Instead of allotting two cavalry regiments to every infantry division at our autumn manœuvres, we ought to be satisfied with one per division, or, in some cases, still less, as, in fact, is the rule in war; and the remaining cavalry, with the addition of the spare regiment of another division, should be taken towards forming cavalry divisions, of which each corps should have one. In this way we should be acting, in principle at least, as on active service; but the actual situation must, of course, always be more or less different to what it is in war. For if, for example, the IVth and XIth Corps are acting against one another, the cavalry Generals at once know one important fact, which is that they will have to look for each other in Hesse or Saxony, and that they are sure to be there. They also know each other's strength, or at any rate the marching-out strength, and that is again much. The strength may, of course, undergo change while the manœuvres are going on, but any change

can scarcely remain quite unknown to the other side. If the cavalry were employed in this way, far more progress would be made than has been hitherto, more especially as it would lead to a proper tactical use of the large cavalry units at the moment of the collision of the main forces. From all appearances it will be quite possible to keep up, and develop further, manucuvres of this kind, notwithstanding the adverse experiences that they afforded at first in France as well as in Germany. Even if the cavalry divisions are not tactically engaged in mass every day during the manucuvies of the main bodies, still there will undoubtedly be many opportunities, before the collision of the main bodies, when the rival cavalries must fight each other in mass, and if, during the fight between the main bodies, the cavalry commanders only once get an opportunity of taking part in the fight, enough will have been gained, provided they make good use of this once. Certainly Seydlitz made two attacks with masses at Zorndorf, and Napoleon I made three at Aspern (21st May) and Wagram; but the usual record of battles is only one great cavalry attack, either at the opening stage of the battle, or after the other aims have so prepared the attack, that the cavalry can break through, and thus make the victory complete. Why should it be otherwise at managuvres?

Cavalry Generals (i.e., cavalry commanders in general) should learn in the combined action of the three arms to know generally their opportunity for tactical action against the various arms, and therefore cavalry divisions should always be attached to the army corps at manœuvers. And it does not matter very much if one manœuvre passes off without giving this opportunity, or without its being turned to account, for all will be learnt in time, and another manœuvre, richer in these opportunities, will follow.

Infantry and artillery on their side will have to watch, and the cavalry itself will learn what an amount of attention and calmness are required for success in taking advantage of a given situation. But this will not dismay cavalry leaders; on the contrary, it will urge them on to greater moral efficiency, for men will go heart and soul at what is difficult, and most difficult; this excites them, spurs them on, and creates a lovging to fight, whereas daily routine makes them apathetic. Manœuvres, that are carried out in this way, certainly require one condition, namely, power of the combined cavalry mass to manœuvre in a body. I purposely say to manœuvre and not to drill; for drill ought to end with the regimental inspection, and

<sup>1</sup> These statements had been a whole year in print before they could be published. At that time the addition of the cavalry division in Germany and France had not realised the expectations entertained, and the general verdict was: "Cavalry divisions are superfluous; they are only spectators, as there is no opportunity for their action." This work was originated by the impression of this verdict and directed against it. Meanwhile my ideas have been strengthened by facts. At the manœuvres of the IVth Army Corps a large cavalry mass was improvised under the command of General v. Schadow. It consisted of the 7th Curassiers, 16th Uhlans, 12th Hussars, and a combined cavalry regiment. On the 15th Suprember General v. Schadow launched this mass against the enemy, at the moment when the latter was beginning to retreat, and on all sides this attack was noted as having decisively broken through the enemy. It is curious that this happened on the very field which had formerly been the scene of Scylidtz's greatest achievement, and was the work of those very regiments which had carned for themselves imperishable renown at Vionville. And why was this a great tactical success? Because General von Blumenthal was a man who knew how to employ cavalry, and General v. Schadow was a man who knew how to command it. May this peaceful Rossbach of 1883 be the cradle of fresh exploits for the German cavalry.

it should be a principle that " From this time forth the combined cavalry should be exercised against an actual, and not an imaginary, opponent." Then the exercises will naturally develop into mancuvres.

Hitherto this has not been generally required. With the exception of oneseventh or one-eighth, the German cavalry know, the brigade only as the largest exercising unit, and, should a war break out, then six-sevenths to seven-eighths of the cavalry will have had no recent experience of being formed in a division, they will not have any confidence in the line tactics of the division, and commanders, such as these tactics require, will not be forth-Even nowadays, six-sevenths to seven-eighths of the German cavalry learn nothing beyond the requirements of divisional cavalry; this is had, but not accidental; in fact, this state of things is far more the sure sign

that we are not aware of the tactical importance of cavalry.

If this importance were generally recognized, then there is no doubt that, only so much cavalry would be employed as divisional cavalry at the autumn managuvres as is actually required; the remaining mass would-so long as there do not exist sufficient cavalry divisions ready organized in peace-be combined into independent cavalry divisions, in which it would practise manœuvring as much as possible against a real opponent. These manœuvres would scarcely cost a penny more than those that have hitherto taken place, whereas men and Officers would be instructed in their true sphere; and these exercises would have to be so arranged that the whole German cavalry would have manœuvred in divisional formation once in every two years, i.e., regiments, which are divisional cavalry one year, would be put into the carulry division the following year, and so on. One day, when I was explaining these ideas to a distinguished cavalry Officer, he remarked, with a smile, "You forget that we are Germans." I could not quite grasp the meaning of his objection, and asked for a further explanation. cavalry Officer said: "Our national tendency for stickling at everything is the chief opponent to these ideas: for, in our country, before a man has had his say others break in with 'ifs' and 'ands,' which stand in the way of decisive action." What is the use of cavalry divisions if there are no leaders? Manœuvres, it is true, are necessary, but what will Parliament say to them, if they cost more than previous ones? And if they turn out a failure, what will the critics say I and so on. Yes, and what will the French, Russians, and Austriaus say? And why is there a dearth of leaders? We have every reason to assume nowadays that, if it had unfortunately to do so, our cavalry would take the field with infinitely better "tacticians" than it did formerly. But, if we had adopted vigorous measures and manœuvred in this way ever since 1871, the failure and the pence would long since have been forgotten, and the cavalry would have at its disposal a considerable number of reliable Officers fit for the higher commands. It would most probably occupy that tactical position, which was formerly reached by Frederick's cavalry before the third Silesian War. We must make up our minds to one thing or the other: either cavalry divisions are necessary (and who would still argue that they re not?), in which case a sufficient number must be established, and their commanders must be practised, or they are unnecessary, and in that case it is time to discontinue the half measures hitherto taken, for they are fragments, not a whole. But it is not possible to insist on the "either—or," because the correct views have not yet made sufficient headway. We understand well enough that the old style does not answer any longer, but we are still uncertain which new style is the correct one. On that point it may be said: the ideas propounded by us will still be of use, even if it comes to the worst, and they can never do harm; they may, perhaps, inspire some men with over rash hopes, and sometimes the wished for success will be wanting—was not this wanting at Breslau?

But it was not wanting at Rossbach, Zorndorf, Aspern, Wagram, Custozza,

Koeniggraetz, and Vionville.

It must not be at all imagined that the Prussian, French, and Austrian cavalries found their successful attacks such easy matters, as men make out nowadays. The attacking wall of cavalry was pretty often blown to pieces by infantry fire, even in those days, and, when the attack did succeed, it usually cost so much blood, that a general shudder would be raised by it in these days. Hence Frederick, especially, laid all the more stress on rapid and precise manusuring and on flank attacks.

#### VI. Some Remarks on the Cavalry Attacks of Frederick the Great and Napoleon 1.

The main strength of Frederick's army did not by any means lie in his cavalry at first, notwithstanding Hohenfriedberg and Czaslau. But the Great King made good use of his eyes for seeing, and what he had seen to be right in the first Silesian War, became the basis of his cavalry instruction, organization, training, and employment. At first the infantry was Frederick's main strength, and it was only after the second Silesian War that cavalry came on the world as an arm which could decide battles.

At Mollwitz a well-delivered attack of thirty-six Austrian squadrons fell chiefly on the Prussian infantry; at Lowositz, this model battle of the 18th century for the employment of cavalry on both sides, the Prussians had a total of sixty-nine against seventy-one Austrian squadrons. In this battle, which was pre-eminently a cavalry fight, superiority in manœuvring and weight of charge gave the victory to the Prussians. At Prague the Prussian cavalry cleared the way for the infantry, eighty Prussian fighting against seventy Austrian squadrons. At Kollin Ziethen's attack with sixty-five squadrons against sixty under Nadasdy was unable to alter the fate of the day.

At Rossbach Soudlitz routed the whole of the enemy's line of battle by his masterly flank and with forty-three squadrons. At Breslau the attack of the Prussian awalry was wrecked before the Austrian grenadiers in line. At Leuthen Driesen with sixty squadions came down on the flank of the hitherto successful attack of eighty squadrons, commanded by Luchesi, and finally, Ziethen was once more unable to gain a victory at Hochkirch, where some

forty-nine squadrons were engaged on both sides.

Do not these examples force us to reflection? Have they not their well-defined cause and effect? What cavalry commander to-day knows how to work forty to eighty squadrons together? It is true that these squadrons were about one-third weaker than those of the present time, but still they were formidable masses. And it was just in peace time that the cavalry commander had been practised in the management of this "instrument." But where have we an instance in our days of a cavalry General having in peace time attacked with forty or sixty squadrons in attack formation? How is he to be capable of doing this in war? Before he is expected to do it he should be given ample opportunity for it in peace time. Modern battlefields certainly give little opportunity for concentrating forty to sixty squadrons at 1,000 metres from the line of battle.

If such masses have never been engaged in later battles (excepting in Napoleon's time) by anyone but the Prussians and Austrians at Koeniggractz, and the French and Prussians at Vionville, it is not so much on account of the configuration of the ground and character of the fight, as of the fact that there has been a dearth of cavalry leaders on the stamp of Seydlitz, and that all armies have suffered from the same want since his day.

Napoleon himself fully recognized the value of the action of cavalry on the battletield, and had therefore given to it the formation which we have now adopted again, namely, divisions of 16, 24, or 30 squadrons with 2 or 3 horse artillery batteries; and when he wished to attain some definite object of the battle with his cavalry, he engaged these divisions with even less hesitation than Frederick II had done before him. His cavalry commanders, Bessières, Nansouty, Kellermann, Murat, &c., were, with the exception of the last-named, but mediocrities; up to Aspern his cavalry could, in a way perhaps, be considered equal to that of Frederick in rapidity and manœuvring power, but, after that time, it could not; and, after his entire cavalry had been ruined in the Steppes of Russia, Napoleon's newly-formed cavalry

always was a tactically inadequate instrument.

After that, it never got back to its old tactical efficiency, and since, in consequence of its defective tactical constitution, it could only attack at a trot and in column, and since it had even to some extent again taken to firing volleys from horseback, the successes of former years were not forthcoming, even when the cavalry was directed by the great Master of Buttles himself, and with the same gifted coup d'ail as of old. There is no arm in which tactical efficiency must be so decided and of so thoroughly and uniformly a high order as in cavalry, and our forefathers did quite right, in a tactical sense, in giving the most distinguished position in the army to the cavalry General. This was not due solely to the numerical proportion between the infantry and cavalry, but it had a proper tactical motive. But, although Napoleon's cavalry after 1812 was decidedly indifferent and numerically weak, yet the Allied cavalry, which was twice as strong, could not get the upper hand over it in the days before Leipsic (11th to 14th October); the former held its own with 10,000 sabres under Murat against 30,000 of the Allies. not be supposed that this was because the latter had shown itself tactically ineflicient, but simply because, on the Allies' side, there was not a single General who knew how to lead the combined mass at his disposal.

The "instrument," with which Napoleon I fought his battles, was entirely different to that of Frederick the Great; the former had emancipated himself from every cut-and-dried plan, and improvised the tactics of each battle out of the inexhaustible sources of his brain. He did not adhere to any general rule, and it is not true that he showed a preference for any particular plan of attack, as has so frequently been asserted with reference to his habit of breaking through the enemy's line. All the same it is going much too far to assert that—because Frederick II adopted a particular method for his line of battle—the tactical employment of his cavalry was always on the same model, and that this cavalry acted only from flanks and against flanks. Frederick the Great himself recognized the formation of cavalry in two lines, the second overlapping the first on both flanks, as the best; and, even without making a study of tactical regulations, we yet know that there are many clear-headed cavalry Officers, who even now consider this fermation the most suitable for the manœuvres before, during, and after the actual attack. Certainly the formation of Frederick's cavalry in battle never—so far as I know-took this form; the form, which the King used, was nearly always exactly the same, yet he used it when starting from the flanks as well as from the centre, in short, when starting from any point, from which he wished to win his tactical object; in this respect Napoleon was not a hair's breadth At Kollin the cavalry was employed to save above him as a tactician. what was still possible, just as was the case with the Austrians at Koeniggractz; the same thing happened at Hochkirch. And although a charge against unbroken infantry did not promise any success, even in those days, yet the Great King did not hesitate for a moment to attempt it, when it was possible for him to further the main object of the battle by so doing, as, for

example, at Breslau. And this cavalry shed its blood on the field of battle in quite a different way to the cavalry of this century, without the "philosophy about losses" ever putting its veto against engaging cavalry when the object of the battle imperatively demanded it. Napoleon acted in exactly the same way, and every tactician will do likewise, the best firearms being powerless to effect any change here. That cavalry will, in such work, non lose more men is certain; but the soldier is present so that he may be engaged when necessity orders it, and when the object of the fight requires it; it is this object that decides his fate. Thus we see Napoleon engaging his cavalry with still less consideration for it than Frederick II had done before him; with him the object of the battle was everything, hence his cavalry did not wait to come on the scene only when the other arms had been broken, On the 21st May, at Aspern, his infantry was in a decided inferiority; he had no reserves to fill the gaps, and a hostile counter-attack would undoubtedly have brought ruin on him. He then launched his cavalry against the enemy: 5,000 Cuirassiers attacked the firm Austrian lines three times; they did not break through a single battalion, and they left 3,000 troopers on the field, which is more than any other cavalry attack has ever cost. Yet we have never seen it stated that Napoleon discarded the action of cavalry in battle on that account. He blamed the defective plan and the bad delivery of the attack; he could not indeed have put himself at the head of the cavalry, and he had only indifferent (cavalry) tacticians, yet the events of this battle prompted him to demand more from his cavalry than before. For he justly reasoned that if an attack, seen coming long beforehand, can give this result in spite of bad carrying through, then the action of cavalry in battle, under more favourable conditions, cannot fail to be much more successful still. With these 3,000 troopers, Napoleon had gained his object, the Austrian offensive had been stopped, and in the night of the 21st-22nd May he was able to bring up reinforcements, which improved his chances. At Wagram, on the 6th July, he made his cavalry attack over and over again, without any consideration for it or any delay; this time he did it so as to get sufficient space for the deployment of his army.

And Wagram is just what ought to be seriously studied, because it is perhaps the battle, in which the action of the three arms combined is most completely represented under the master hand of Napoleon I. Never has a General engaged all at once, as Napoleon did here, a mass of 60,000 men; the counter-attacks of the Austrians on Chlum and the attacks of the Germans on St. Privat are all that can be in any way compared with this But Napoleon I was not equalled, at either Chlum or St. Privat, in the preparation of his attack and the tactical considerations, according to which the individual arms were employed. Napoleon I wanted to break through the line of the Archduke Charles, and afterwards to roll up the separated portions. To this end he ordered the mass of his combined cavalry, 10,000 men strong under Bessières, to make repeated attacks from the centre against the Austrian infantry and artillery. The great Master of Battles was well aware that the fight would require many victims, but he saw that this use of his cavalry was the only tactical means leading to his end. It is true that the Austrian lines were not ridden down, but their entire action was so taken up by this cavalry being let loose on them, that Napoleon I was able to carry out the projected advance of his 100 gun battery to within close range of the Austrian position. Certainly the battery lost nearly all manœuvring power in this position, but from here it was able to prepare both of the next main infantry attacks, by which the enemy's line was broken. After this had been done, Napoleon's cavalry was, it is true, not in a condition to win further successes, but when cavalry has acted tactically, as it had done here, it has fulfilled its mission. At Somo Sierra (1808) and Borodino (1812) Napoleon I

went a step further; for the cavalry there undertook the duty of the infantry. It attacked over open country, so that by its rapidity it might spare the infantry from making an attack, which would have entailed great losses, and have been fruitless. At Borodino, the French cuirassiers even captured closed redoubts.

Waterloo shows that charges could fail without gaining their object, and charges badly planned and executed took place even under Murat's command. At Krasnoë (1812), Neverovsky's Russian Division, only 7,000 strong, was able to resist more than forty charges of Murat's cavalry, thirty-five regiments strong, with a loss of only 2,000 men and eight guns. This was due to the disconnected way in which the charges were delivered, for no great success

can be secured without a great stroke!

Since that time, fighting has changed very much indeed; firearms now sweep infinitely more ground; but, at the same time, there has arisen a new field for the tactical action of cavalry as a consequence of the intimate connection between the arms and ground, for on this the power of modern tactics depends so much. It would be against all laws of logic and the actual requirements of every description of combat, to discard fighting tactics on account of improved firearms and altered tactics. It is not only an unsuccessful cavalry attack that costs a deal of blood nowadays, for infantry can tell the same tale; but has any (infantry) tactician ever asserted, for that reason, that infantry attacks are a "superfluity" in comparison with fire tactics? Has any one tried to abolish attacks on that account?

Modern fighting mows down on all sides, and mows down everything without distinction; this requires cavalry to improve its tactics to the utmost, i.e., its speed and manœuvring powers, as much as possible, so as to be able to act by surprise. Its success has always depended on this, and it

will be possible in the future, as in the past.

To refuse any action in bettle to cavalry amounts to robbing the fight of its true nature. Since the time when infantry took its stand on an equality with cavalry, the latter has never brought about the decision in a fight in any other way than by a surprise. No period establishes the truth of this more strongly than that of Froderick; and, when not acting in this way, cavalry has invariably only been able to prepare, hasten, and make good use of the decision. But every battle affords opportunities now, as in the past, for a surprise; although it may be more difficult to take advantage of this than used to be the case, yet it is a duty that no arm but cavalry can carry out; therein lie its imperishable nature and imperishable tactical action, and this has always been its tactics and its glory. Cavalry only requires to be made perfect in form and nature for it to be again held in esteem as a tactical arm.

The success or failure of cavalry attacks has always depended more on the leading than on the effect of the ucapone. On closer study this is seen to be the lesson taught by every action. The friends and foes alike of cavalry, it is true, attribute the blame to the effect of the weapons, while the tactician

makes defective leading answerable for it.

A cavalryman must never forget that he is the first, and therefore the most exclusive representative of moral energy, that the success of his arm always depends on its moral constitution, provided, of course, it is engaged under

tactical conditions, which are in other respects right.

The breechloader makes a fight more bloody at the decisive points, but it does not alter man's moral constitution, nor does it give courage to the coward. Hence cowardice and panic will now be, as they were formerly, the inevitable attendants on every fight. We know that careful training can raise the moral powers in individuals, and that all arms, not only infantry, derive benefit from that. However, it is only by cavalry that

cowardice and panic can be thoroughly taken advantage of, owing to that rapidity which is peculiar to it.

### VII. Connection between Strategic and Tactical Action.

In old days infantry was regularly brought up in terror of cavalry; now it is almost the other way, for cavalry is brought up in fear of infantry, But it has been carried too far in both cases.

Perhaps some tacticians of the present day may dispute this sentence. So much the better, for then some effort towards improvement might result

from it.

It is a fact, that before nearly every war there has reigned a dread and suspense concerning the enemy's cavalry, and this has existed on both sides, so that the cavalry has remained behind instead of being in front.

Moreover, even strong minds have been unable to suppress a certain fear of the enemy's cavalry. I may cite Napoleon's feverish suspense about the meeting of his troops with the Prussian cavalry before Jena; and Frederick the Great, too, was full of apprehension about the Austrian light cavalry, which was so good at reconnaissance and petty warfare. The same thing happened again in more modern times. In 1859 the Franco-Italians did not dare to place their cavalry in front; they, from the very first, dreaded a defeat at the hands of the Austrian cavalry. The Italians did not act any differently in 1866, nor did the Prussians during their entry into Bohemia in the same year. The same fear was shown by the French when opposed to the Germans in 1870, for a very great part of the disaster of the French arms must certainly be traced to their fear of the German cavalry. These statements do not in any way imply that the several arms themselves were afraid -for not one of the regiments was wanting in courage; it was far more the Headquarters that were always uneasy, and the employment of the arms was dictated by the faint-heated spirit of routine.

This can be accounted for, since the strategic employment and tactical leading of cavalry are extremely difficult, and an efficient body, commanded by a good man, may lose its very existence through a moment of inattention. The strategic as well as tactical duties of cavalry require a constant straining of the nerves, a continual being on the alert; conditions which can naturally only be satisfied by exceptional men. The feeling of apprehension before, and also during, a war is more or less permanent as regards cavalry, and it is easy to understand how the strongest minds have laboured under it (e.g., Napoleon I), for they know the strong and weak points of this sensitive arm and follow it step by step in their minds, without being able personally to direct its employment and leading at every time and in every place. Both must be entrusted—far away from them—to individuals who generally lack assurance at the commencement of a war. Talent for both strategy and tactics is only to be found in a man who is a born Commander, and, seeing that any independent cavalry commander may be put to the test any day in some strategic or tactical duty, every one of them ought, properly speaking, to be a Commander. It is not necessary to be a pessimist to arrive at the conclusion that, out of ten or fourteen independent cavalry commanders, who, in the event of war between Russia and Germany or between France and Germany, would be employed on either side, the majority would not be equal to what was expected from them. Hence it follows that the greatest importance should be attached to their training, and that the efforts of all, from the troopers upwards, must be continually directed towards moral qualities. The cavalryman must be callous to all feeling of apprehension, and whatever he does must be done with resolution and thorough energy; his confidence in his horse and sword must never be shaken, for he

would otherwise injure his cause at once. Even when cavalry has fought under unfavourable conditions (Custozza) its energy and vigour have reaped great successes. However multifarious the duties of cavalry in its tactical action may be, the first duty of all cavalry is, and ever will be, to overpower the enemy's cavalry, and it must do this in the first place during its strategic action. In no arm, in fact, if properly employed, is the connection of strategy and tactics so continuous, so frequent, and so direct, as in

cavalry.

In a former pamphlet we laid stress on the necessity of equipping all cavalry with a rifle, but not in any way with the object of turning cavalry into a mounted infantry. Every trooper ought to be able to shoot and handle a rifle, and the instruction that he gets should be thorough, for "half measures are no measures." He must be well up in dismounted action, and be able to advance and retire properly in skirmishing order; he must also be thoroughly proficient in the use of his rifle from behind cover; in fact, cavalry must have confidence in the effect of firearms, and when once it attacks or defends itself on foot it must do so with all its might, with the energy required for gaining the object. We are of opinion that the Russian regulations, which direct their cavalry to practise the attack on foot, sword in hand, and many other things, go too far. However, it is necessary to know something of the sort in order to be prepared for it. It is not time that is wanting for realizing what we ask; it would be better for cavalry to learn musketry and skirmishing drill than to devote precious time every year to useless dismounted exercises on the barrack-square. I have, on more occasions than one, seen drill evolutions practised on foot with a thoroughness and a zeal as if it were a case of training infantry. A soundron has no business to waste a whole afternoon in going through changes of front on foot; that would be mere killing time. If, then, there ought to be no lack of time for learning the necessary portions of dismounted action, there ought still less to be any want of time for training Officers and men in larger forma-This is, and ever will be, the main thing in cavalry tactics, and, with our generally sufficient individual training of horse and rider, we can probably do more in these tactics than any other army. Let us consider for a moment what the strategic employment will be.

All armies have devoted great attention to cavalry, and, in case of war, part of this arm will act in independent divisions in advance of the front of The advantages and disadvantages of the different methods of the army. grouping the forces in advance of this front line may be disputed, but the same extension will, as a rule, he given to this screen on both sides; and consequently it will break through in one place and be broken in another. If it were merely a question of putting the greatest possible number of cavalry in the field, then victory would rest with him who had the greatest number of troops in his command. However, it does not depend on that alone, although it will not do to let the numerical proportion be distinctly unfavourable; but the tactical efficiency of the whole caralry will determine If the strategic employment is to rest on the surest possible basis, then the tactical efficiency of the cavalry must be beyond question. It is true that the independent cavalry is not always sent out directly and continually with a view to fighting, for it can also bring back important information without any such occurrence; but this will be the exception, and will only happen under conditions, such as, where there is no adversary (March on Sédan in 1870) or against opponents who do not understand the use of their forces, as was the case with the enemies of Napoleon I. Had Napoleon I been opposed by cavalry as well handled as his own, he would have had to make efforts, very different to those that he did make, in order to plan every battle with that certainty which has, up to the present, only been again equalled at Sédan. We are not the only people who have profited by his instructions on the strategic employment of cavalry; for they are now common property; they are studied by all, and all armies will endeavour to apply them properly. Hence the result must be a protracted struggle between the cavalry of the two sides, before and during the operations. Each side will want to conceal its own dispositions and to discover those of the enemy, and each side will therefore be forced into an action, without which this two-fold duty cannot be carried out. Thus the first importance must be attached to mounted combat.

Cavalry must be able to surmount obstacles, and be able to execute precise and rapid movements and to charge with dash and daring. It must know how to manœuvre smoothly, be capable of being swung round half-right or half-left with case, and of then wheeling into line and falling on the enemy's flank, while it must be able to rally quickly after its charge, for the disorder attending this is one of the weak points of its manner of fighting. Whenever cavalry has beaten the enemy's cavalry it has always been the result of some tactical superiority, of greater rapidity or of greater precision in manacuvring; it was on this account that Frederick devoted so much attention to the annual manœuvres of his cavalry, and it was because he not only criticized, but also gave instruction and advice, that the Prussian cavalry of those days in particular earned a tactical reputation, of which Napoleon 1 still stood in awe, even after the victories of this cavalry had been historical facts for fully fifty years. We must now strive to gain, not only as much as that, but still more, not merely because the cavalry of all armies is better than it was in the eighteenth century, but also because, when it is acting in combination with the other arms, its superior dexterity and speed, in which lies its power of effecting surprises, has become far more difficult to take advantage of, and the larger the masses to be moved, the greater the difficulty.

Cavalry can only cover the operations of its own army when it is master of the enemy's cavalry, and its own army will only be able to move with freedom and security when it has a clear road in front of it. This makes it imperative that one or other of the cavalry divisions should work through the enemy's cavalry screen and break the front lines so as to fall on the main body of the opposing cavalry, defeat and scatter it, and then to push further forward so as to get right up to the hostile army and, if possible, spread terror and panic in its midst. Of course this is no easy duty, and one that a cavalry General will but rarely accomplish; but it must be the object of the training in peace-time to ensure such missions being carried out, and the spirit of dash and enterprise being pushed so far. If we bear this in mind we shall have grasped the one means which permits of actions of this kind, provided they do not, at the outset, contain the germs of a defeat, from which nothing is gained! This means is to be found in the tactical efficiency of the mass, in the clear-sightedness, and in the knowledge of his object on the part of the commander, and in the "go," pluck, and devotion to the great cause, in all ranks. And, in truth, if we have remarked the cheery spirit of sacrifice of our cavalry, its love of enterprise and adventure, in spite of the imperfect peace preparation of former days, then are we justified in confidently entertaining the hope that it will master such duties when it has more careful peace-training and thorough tactical instruction. It will not do this without losses, for such cavalry can return by the way that it has advanced, only if its opponents are not wide awake; yet any apprehension about losses must certainly be dismissed from the method. The method itself must be bold, and then those who carry it out are sure to be like it.

VIII. Is there any Normal Fighting Formation for the Cavalry Division?

Every form is a means, not an end, i.e., the means to commanding and managing the "organisms." But successes are not won by any form alone, for the form is here of secondary importance it is the mind that plays

the principal part.

There can be no question about this. Notwithstanding the loosening character of the modern combat, neither the tactics of infantry nor of any other arm have been able to throw off certain definite forms; for, if they had done so, the logical consequence would be, that they would surrender their hold over the troops. Certainly the condition of existing tactics, including the cut-and-dried portion, is relatively higher than it ever was before. In peace time we practically use our troops as balls to play with; we mix them up in confusion, regardless even of their units, and then we still require from this outer shapelessness a definite form, namely, the fighting form, by means of which we wish to gain our object in battle.

However the form must give to the tactician an important further means, namely, that of seeing and taking in everything, of enabling him always to estimate numbers so as to be able to properly counteract any deployment of strength, &c. To ensure this we now form "zugs," squadrons, regiments, &c., and so as to employ the different fractions tactically, i.e., in keeping with the everchanging situation, we draw them up alongside or behind one another.

The whole formal theory of tactics has improperly received the name of tactics; but it should be mechanics. In the co-operation of the arms real tactics only commence when a definite idea is laid down as the foundation of the exercise, and when some distinct fighting object has to be gained by means of the forms used.

In order to be able to fight for a definite tactical object, the corps destined for it must first fulfil certain conditions: it must be supple and must be capable of executing rapid and sure movements, in short, it must be thoroughly

able to do what we call "exercises."

Accurate drill is the essential condition of every manœuvre, and without skilful and rapid manouvres there can be no cavalry success. Drills and manceuvres go together; by means of them both the troops must not only learn to see their way in every situation, and to conclude from every situation what will be the proper fighting tactics for that moment, but the commander must also learn from them to command his instrument in such a manner that, in action there may arise no situation for him in which he might not be able to make full use of the strong points of the tactics of his arm.

Every kind of tactics must struggle in this way, and, in order to attain this end, the arm concerned must constantly practise its principal fighting form and be complete master of all means (movements), which must precede the tactical deployment of strength. It is because the German infantry has continually kept this in view that it has reached its high state of manœuvring power and the readiness of being able to improvise the precise fighting tactics required for each case. Cavalry must act in exactly the same way, and then the general opinion will be, that there is no normal fighting formation for eavairy divisions, just as there is no such thing for the infantry brigade. Of course that cannot be called "want of system and arbitrariness;" it is rather reaching such a point by means of system, order, and practice, that, for every case of actual fighting, the tactical forms should come naturally, as it were, while the security of the organism must not be injured by any one of these forms. Naturally it is here supposed that there will be no want of space for the deployment and action of the cavalry; but even this does not imply that this space must invariably be equal in extent; it is rather the organism that must be capable of adapting itself to it, so as to act tactically with success.

The tactical forms of cavalry must, of course, vary according to the arms against which it has to fight. It can arrange its forces in any number of different ways for fighting against cavalry; on the other hand, it will choose extended lines with advantage against antillery and echelons against infantry, at least when it has to fight against large masses of either of the two last arms. However, that is only one way of looking at it, not a law that will hold good under every condition. But since the action of cavalry during both its strategic employment and the battle, is naturally, first of all, directed at engaging the enemy's cavalry, its fighting tactics against its own arm must always be of first importance. In this way we shall be following the road to success if the cavalry division is trained above all as an evolutionary body, so as to regulate its movements, to accustom it to the greatest possible rapidity, and to train the commanders of the various lines. All this can only be secured by making a start when the divisions are first formed, i.e., from the moment that a unit suitable for war exists. During this time the cavalry division must learn to be perfectly steady, and to charge in each of the following formations:—

Only after it has learnt to keep direction and intervals, to wheel into line or deploy (the latter is more difficult) with precision, and to come into the new line properly closed up, in order to deliver the actual charge at once, and to rally quickly after it, then, and not till then, will this large unit be ready for the last stage. This stage consists in changing the drills into manœuvres. and the means for doing this is supplied by an opponent, in the selection of which there will undoubtedly be some difficulty at the outset, from the fact that there must be a beginning to everything; and at first there will be a great dearth of commanders, who understand how to manœuvre against one another. This condition can only improve with time, with the increasing number of qualified men, with more careful training of commanders, and with sufficient practice. But such practices require much time, and must be based on definite, though simple, plans. Operations against an adversary are the only portion of cavalry tactics which in any way approach the realities of war; and they will show if there exists tactical intelligence, in addition to the routine required for commanding the units technically, and if the mind is able to make the most of the form. A test can then be made, not only of accurate wheeling and deploying, of commencing and carrying through an attack, and of rallying after it, but also as to whether everything happens at the right time and place, whether every advantage is taken of the ground (as was done by Bredow), whether the lines perform the tactical duties assigned to them, as to who brings up the last reserves and who is to be declared the winner. To be sure, the "finale" is wanting here; the actual shock is prevented, and its real effect is not seen, but all the same a very fair estimate can be formed of what it would actually have been like-especially by those who have followed out the manœuvres as they developed and proceeded from start to finish-if one side has succeeded in reaching the flank instead of the front of the enemy, or if (and this should be the highest tactical ambition of cavalry) one of the opponents has been so fortunate as to surprise the other before he is deployed for action.

It is only when they are carried out against an opponent that there is any vigour, meaning, and object in the factical operations of cavalry divisions, and that the falent and efficiency of the commander and the real capabilities of

the organism can be seen in their true light. Then only will men cease to cling to any normal fighting formation, but will learn to improvise the best formation for each case, as has been learnt by infantry—though not without rough experience. If the German cavalry is worked in this way, so that the whole of it goes through a course as divisional cavalry and in the cavalry division once in every two years, the arm will then make important tactical progress; we shall be training, and shall now discover, leaders; and a cavalry, in which mobility and an ambition to effect surprises have been pushed on to the highest degree, will also possess the essential qualification for acting successfully on the battlefield against infantry and artillery. For, to recapitulate, cavalry has always gained its successes by rapidity and surprise, and, as these attributes are peculiar to it, the tactical value of cavalry is still the same as ever, and cannot disappear, any more than any other force can disappear off the earth; it can only vary. That this change may not become a deterioration is the business of the cavalry, as is its striving after tectical efficiency and the maximum mobility and rapidity; to honour and bring honour to tactics is therefore nothing more than a question of will.

## IX. Sketch of some of the most Recent Cavalry Engagements.

Although the manaeuvring power of the cavalry of our days is inferior to that of Frederick the Great, although recent military history has not produced on either the Austrian, German, French, or Russian side a cavalry leader equal to Seydlitz, and in spite of improved firearms and altered tactics, yet this history contains unanswerable proofs of the imperishable tactical value of cavalry. I will not describe these, because that has been faithfully and fully done elsewhere, but will only sketch them so far as they are of importance to this work, yet they ought to be thoroughly studied by cavalry Officers.

If battles were fought out in a uniform and normal manner they would then always be opened and concluded by cavalry. Any opportunity, that may crop up in the meantime for the cavalry, is too much the action of a moment for anything definite to be said about it. As a fact, however, cavalry has just as often, or just as seldom (whichever way we take it), not opened and concluded the action, as it has done so, and the fault has nearly always been due to the defective use made of it (i.e., the way in which it was employed and commanded).

No modern battle can be compared with Custozza for the tactical action of the cavalry in the preliminary stage. There we see the Austrian cavalry, divided into unequal portions on both flanks of the deploying army, on the right in a close country with three "zugs" of Uhlans, on the left in the plain with 15 squadrons (2 brigades of unequal strength), fall on the enemy as he was in the act of passing from the order of march to order of battle and had partly formed up. All cavalry should try hard to succeed in this way; for this is the most dangerous time for infantry; to do this, however, it is necessary to be in the right place and to have an able commander. Four years later, when a similar chance of success was open to the French between Verneville and St. Privat, the separate German columns, marching along the French front, were quite unmolested because the French had not been on the look out.

The Austrian cavalry was certainly not opposed to breechloaders at Custozza, but it would be wrong to reckon the Italian infantry at a low tactical valuation because it was defeated. In both cases the attacking fields were anything but favourable; the Italian infantry was formed in several lines, the second certainly still in column of route, against three-quarters of a squadron of Uhlans. However, all the Austrian leaders, both on the right

and left, showed the same nerve, the same praiseworthy and admirable dash, in fact, the true cavalry spirit. On the right flank three-quarters of a squadron of Uhlans rode through the fighting line, and fell so impetuously on the column of route, which was in rear of it, that this brigade was hors de combat for the rest of the day. On the left the action was certainly faulty in its disposition, in so far that the attack of Pulz's brigade was divided into two groups, of which the second could only follow the first at an interval of 800 metres. However, the charges that now followed were delivered with such energy, that the Italian corps of 30,000 men, which was attacked in this way, was kept throughout the whole day at Villafranca, at a distance from the battlefield; and this cavalry displayed this impetuosity in spite of having been much harassed by outpost duty. The three "zugs" of Uhlans only numbered 17 sabres on rallying; their loss was afterwards put down at 2 officers, 84 men, and 79 horses. Colonel Pulz's squadrons suffered a loss of 19 officers, 350 men, and 487 horses. Cavalry can thus tell us of its losses against muzzle-loaders also.

No doubt tacticians (theorists) will say: if this Austrian cavalry had been engaged at the end of the battle—as the Austrian Commander-in-Chief had certainly intended—it would perhaps have done as much with less loss. I doubt it; it should rather be said: had the Italians been able to send into the battle the 35,000 or 40,000 men, who were kept far away from the scene of the fight by the Austrian cavalry, then the Austrians would probably not have gained a victory. The tactician must seize his moment and profit by what lies in front of him, applying the whole energy of his arm in doing so. This is the only certain part of his work; all that may happen afterwards is quite uncertain. Cavalry which has fought, as that just mentioned did, will not be able to do much more after the battle; that is And the General who engages it during the action, may find himself without it for the pursuit; but the results of its early use may possibly far exceed those obtained in the pursuit. Such was the case, in my opinion, in this battle, and we should not perhaps be altogether wrong were we to attribute the great tactical shortcoming of the arm on almost every modern battlefield to the idea of "not using cavalry until after the battle." "Keeping it in reserve" has in that way become almost a mania. God forbid that we should advocate the blindness of irrationalism; but blindness has generally prevailed amongst cavalry leaders, who would not see what was offered to them, and waited instead for something better, which was never to turn up. This has been their game all through history; hence the general neglect of cavalry tactics. Thinking (i.e. waiting) is equivalent to doing nothing, if it does not lead to immediate action.

In the other theatre of war in 1866 the Austrian cavalry was at the head of the army from the outset. This, however, is the very campaign which should show conclusively that it is not enough to settle on correct principles, but that they must also be carried out. What good did the Austrians derive from sending the 1st and 2nd Light Cavalry Divisions up to the enemy's frontier?

The army headquarters were certainly right in their intentions here, yet not one of the Commanders of this independent cavalry fulfilled the duty entrusted to him.

The Prussians succeeded in breaking through the semi-circles formed by the mountains which shut in the Bohemian theatre of war, and in crossing the Iser, Aupa, Trotinka, and Elbe without ever being discovered by the Austrian cavalry so early as they should have been. Apart from these faults, which come under the head of the strategic employment of cavalry, we cannot help being surprised at the inaction of the Austrian cavalry on the 3rd July, 1866, until the battle had been decided; and, when we compare

this case with the sketch just given of the successful action of the Austrian cavalry at Custozza, we see how important the quality of its leader is with cavalry, and how much depends on the cavalry being distributed by the Commander-in-Chief, not according to some fixed rule, behind the flanks and centre of the line, but at the places which are tactically right.

Faults, already committed in the assignment of the position of the cavalry may lead to such disastrous consequences that they cannot be rectified in the course of the battle. This is shown by the position assigned to the Austrian cavalry at Koeniggraetz. The disposition of the six (the Saxon division is included here) available cavalry divisions at the commencement of the battle must, it is true, be considered on the whole judicious. It was as follows:— The 1st Light and Saxon Divisions on the left flank, front towards the Bistritz, the 2nd Light on the right, front towards the Trotinka, the 2nd Reserve Cavalry Division in rear of the centre of the line, in the valley south of Briza, ready for any emergency, the 3rd Reserve Cavalry Division behind the Xth Corps, the 1st behind the HIrd Corps. The two last were the only divisions which did not belong to the positions assigned to them. Here they remained wedged in on all sides, too intent on the fight of the front line, and this fault, taking into consideration that there was no cavalry with the several army corps, cannot be excused. This could easily have been remedied on the battlefield by detaching regiments; however, instead of making tactical use of these masses in accordance with the course of the battle, they, with the exception of the 1st Light Division, stuck to these places during the whole day, almost without moving, until the time for successful interference had passed by, and nothing remained for this really excellent cavalry, but to go in and save the beaten army. The Commander of the 1st Light Division understood his duty, but he was called away from the left by a distinct order, at the very moment when he might have struck in with success against the victoriously engaged 15th Prussian Division. Then, when he arrived in rear of the centre, the fight had already been lost there, and the order had been anticipated by circumstances, and although General v. Edelsheim immediately turned about to come into action on the left, it was then too late. The 15th Division had reached the woods of Hrodek, and of Ober- and Nieder-Prim, in which it was safe against the cavalry; but with what success might not the 1st Light Cavalry Division have acted from Boharna-Radostow against Kuncitz, and from Radikovitz against Neu-Prim, if it had been in the right place at the right time! It is impossible to say what turn the battle might have taken for the Austrians on this flank in this case. may be assumed, however, that the 15th Division would have found itself in difficulties in spite of the needle gun; reference to Custozza is sufficient to show this. However, a far heavier punishment awaited the Austrians on their right for clinging in this way to their original positions, regardless of the progress of the battle.

The struggle about the Swiepwald had drawn the IVth and IInd Corps out of the lines of defence previously assigned to them. These corps had gradually assumed the offensive, had abandoned their original front facing north and east, and had wheeled round towards the north-west. This was the momentary favourable time for the Austrians. Had they acted on it, and made use of their whole available cavalry, the battle might, at about noon, have turned to a victory—whether a lasting one is an open question. But the offensive led to rain because the cavalry was innored as a tactical arm. On the Prussian side—although the leading of the cavalry was anything but worthy of imitation—we, at any rate, see Bismarck's cavalry brigade brought out on the left wing to stay there in readiness for anything that might turn up, while nothing similar was done by the Austrians. But, if by its attacks, the comparatively weak cavalry at Custozza was able to keep 35,000 to 40,000

men at a long distance from the battlefield, why should the same or a similar success not have been carned at Koeniggraetz? And yet the late attacks of the 1st and 3rd Reserve Cavalry Divisions showed clearly that this cavalry was made of the right stuff for doing great things. From the moment when the Austrians assumed the offensive on the right flank, the 1st and 3rd Reserve Cavalry Divisions ought to have been pushed forward towards the Trotinka and posted thus: the 3rd at Gross- and Klein-Bürglitz, and the 1st at Jericek-Luzan, with the 2nd Light Cavalry Division in prolongation between Racitz and Tortina. The 2nd Reserve Cavalry Division should have followed as reserve from Briza as far south as Wrchowitz, the Saxon Division moving into its place.

The Commanders of the cavalry divisions could not, it is true, do this on their own initiative. Their divisions were partly (the 1st and 3rd Reserve and Saxon Cavalry Divisions) so shut in between the corps which were in action, that they were unable to get any view of the course of the battle; but it was the duty of those at the head of the army to have supplied those cavalry divisions with brief instructions as to where they might move to and what they should do; for which there was plenty of time. The penalty followed closely on the heels of the omission. The 1st and 3rd Reserve Cavalry Divisions had been advanced, in a tactical sense, too close to the righting line, and were, besides, badly placed in the line. They would have found a better position alongside the 2nd Reserve Cavalry Division at Briza.

Without advancing unreasonable suppositions, it may safely be asserted that these cavalry masses would have given a different turn to the whole battle if an attack had been made half as energetically as that at Custozza against Villafranca. Even if the Prussians had been able to deploy southwest of the Trotinka as they advanced, they would not, in any case, have turned the battle on the 3rd July into a victory, for they would have arrived too late for that. The victory could, probably, only have been won on the 4th in a fresh battle; but the enemy could have made such far-reaching changes in the meantime (ride Napoleon I at Aspern) that the Prussian attack on Chlum might have been impracticable, and then the decision must, most probably, have taken place beyond Problus. But those at the head of the Austrian Army had not heeded the lessons taught by Napoleon I at Aspern, and the employment of cavalry for gaining time was unknown to Instructive as it is to follow out more fully such tactical "hypotheses," we will, however, not do so. But Koeniggmetz is the battle which every (cavalry) tactician should study; it is more instructive than Custozza and Vionville together, and not least so on account of the errors committed in not using the cavalry to oppose the advance of the Hnd Prussian Army.

At noon on the 3rd July, oxer the Austrian cavalry had the power of giving a more favourable turn to the day; no other arm was in a condition to do it. Owing to its speed, the cavalry could have reached the abovementioned places, and could have kept the Prussians back by impetuous attacks, such as those at Custozza; and in a case like this everything can be won by gaining time, as was done by Napoleon I at Aspern on the 21st May, and by Bredow at Vionville on the 16th August. The fact that the battle of Koeniggraetz was finally won with so little trouble on the part of the Prussians, is, and remains the fault of the Austrian cavalry. The offensive strokes made by the Commanders of the IVth and IInd Army Corps, and the consequent imperative change of front, might and should have been turned to successful account by the cavalry. But this did not happen, because there were no tacticians present who could have thrown over the regulation form and risen to the level of true tactics, i.e., "of making prompt use of any good chance." If there had been such men on the spot, then the 3rd July would probably have been a cavalry battle, and it may be safely assumed from what it did at

the end of this battle and also at Custozza, that, under these conditions, the

Austrian cavalry, if well led, would have done great service.

As soon as this battle was decided and the leading Prussian cavalry, which was taking up the pursuit, appeared, the 1st and 3rd Reserve Cavalry Divisions, which were in the act of retreating, fronted in order to charge down on the enemy in two groups. Even when riding to the charge, all the lines were exposed to a flank fire, but the Commanders did not waver for a moment. The ranks remained closed, the Prussian cavalry, which had spread out in its advance, had to stand a sharp fight, the Austrians remained in possession of the field, pressed on up to the battalions of the HIrd and Hnd Prussian Corps, and even as far as some isolated groups of the 14th Division, compelled these to form square, and only after this did they

begin to ride back again.

It is beyond a doubt that this cavalry knew the fate which awaited it, surrounded as it was on three sides by the fire zone of breechloaders. was sure to be defeated at last, but the well-delivered stroke had a tremendous tactical effect. It relieved the pressure on the retreating army and saved it from the utter rout, which would undoubtedly have followed, if the Prussian cavalry had remained master of the field or had not been attacked as it was, This is not a case for flattering national sentiment, but for reviewing the events calmly, truthfully, and justly, and any one, who considers the attacks of this Austrian cavalry in this way, will unhesitatingly conclude that it carried out most successfully one of the most difficult tactical duties, which has erer fullen to the lot of caralry. Cramped and shut in, it attacked the Prussian cavalry, in spite of a ceaseless flank fire of breechloaders, forced its way right up to the infantry line of an army already intoxicated with the assurance of its great victory, and brought the whole Prussian line to a standstill. Who can deny these facts ! Surely the deeds of this cavalry were greater than those of Ziethen at Kollin and Hochkirch! Did the breechloaders keep it from charging, or break it? Certainly not., Cavalry, then, can still go ahead even under unfavourable conditions-if it wants to; if it is tactically trained, if it goes in for the maximum speed-even without effecting a surprise-if it is commanded by tacticians, which, however, these Austrian cavalry Generals did not once show themselves to be. The Prussian cavalry leaders were still less tacticians, otherwise they could not have failed to reappear immediately after the Austrian cavalry had been sacrificed, and to pursue the enemy to the last breath of horse and rider. Nothing of the sort actually occurred, and, to be sure, it did not because such a vigorously delivered cavalry stroke—as that of the Austrians—is far more important in its moral than in its material effect. The moral effect, within reasonable limits, is a peculiarity which will always belong to cavalry alone, and a cavalry General should never disregard this advantage of his arm. This would be equivalent to being doubtful of success, and so supplying a cause of failure.

Now to review the total result: Were the 72 Officers, 1,258 men, and 1,903 horses of the two Austrian Reserve Cavalry Divisions uselessly sacrificed? Can they not boast of the same success as that which every tactician awards to the 5,000 French cavalry at Aspern on the 21st May? And can it still be asserted that the action of cavalry on the battlefield is a "superfluity"? Why, that would be a denial of military history. And, with this result before us, can anyone still doubt that this cavalry would have met with correspondingly great success if it had fallen on the advancing columns of the Hand Prussian Army? Here the cavalry was nursed during the battle, just as our fashionable "tacticians" would wish; but, after the battle, the Austrian cavalry was only able to protect its army from complete rout. Had it been used, as I have suggested, during the battle, the 3rd July could with difficulty

have ended in a defeat for the Austrian Army. The dogma of reserving cavalry is a false one; nothing but the situation can decide when it is time for this arm to come into action.

We will now take a third example: In 1870-71 we had not a single caralry General; some had learnt a good deal from the war of 1866, but what they had learnt had not given them power of action; our method had been too deficient. Nevertheless, what a brilliant general result was that at Vionville! It is true, there is no need to show that the 5th and 6th Cavalry Divisions might have opened the buttle in quite a different way to what happened. The conditions for this were far more favourable than at Custozza. Neither need it be shown that, if it had been commanded by a Schmidt or a Pulz, there would have been no necessity to have had to send for the 6th Cavalry Division (which naturally caused it to arrive too late); nor, that even Bredow's brigade could scarcely have been better led, but that it might have been better supported; that the 5th Cavalry Division hight have worked better together at Ville-sur-Yvron; that the German cavalry should have been employed quite differently after the battle, and that the leading of the 1st Cavalry Division at Gravelotte showed how cavalry should not be employed. To waste a word over this would be waste of space. But it is with perfect conviction that I set myself against the "extraordinary" method, which has deduced principles for the action of cavalry in battle out of these DEFECTS, and which is officially offered to, or forced upon, our cavalry Officers as tactical "food;" and so long as I am able to wield my pen, I will fight against this state of things, which is so pregnant with destruction, for it systematically undermines the cavalry spirit. There is no alternative for us, and we can only fight by pulling ourselves together so as to see where the method must lead us to.

Vionville contains the germs of the success or failure of cavalry, according as we look closely into the events of this day in their true nature and connection. By this battle cavalry either learns everything, or else it yields unconditionally. That is the question which we have to decide. Of course, so long as it is written and taught, and cavalry Officers have to learn, as follows: That the 5th and 6th Cavalry Divisions fulfilled their missions at the opening of the battle; that the attacks of Bredow and of the 1st Guard Dragoons, and, later on, of the Ziethen Hussars and 16th Hussars, have shown that cavalry can never again attack infantry successfully; further, that because the 6th Cavalry Division, after being successfully brought up, arrived too late, cavalry can therefore always be fetched up, and consequently would never neet with success; and that cavalry, which is used in the battle, cannot be available for pursuit, because, on the 17th and 18th August, it was not understood how to use the cavalry, which had been very active in the battle, but the greater part of which had remained effective. With such methods of instruction we inevitably court the decline of cavalry, instead of raising it to the level of its tactical efficiency; and we have already gone terribly far in that direction.

Let us return to our subject. We certainly practise attacks in three lines; but the outer mechanism lacks its true idea; it is a mechanism, not an organism. That is the case because the seed of unbelief in cavalry success is already spread at school in the heads and hearts of future young cavalry Officers; this seed will not take root in every case, but it will unfortunately, as a rule, because the majority of men are mediocrities. All these "ifs" and "ands," this quackery, which cannot even separate the consequence from the cause or distinguish between them (whether from ignorance or ill-will I don't know), must be exterminated. And when, I wonder, will some cavalryman break the magic spell in some such way as this:—

"Away with you, I will make the arm! You have had your day. You have reigned too long and have pushed your pedantry to its utmost limits;

you have brought doubt instead of belief into the arm. My business is a very simple one. We ride and drill and manœuvre with our eyes open, and with a HEART which values men at their true worth. What I require are 'sabreurs,' those men, with whom fault has till now been so unreasonably found, men who have confidence in themselves and their arm. I will be responsible for the rest."

I have written this down exactly as I dreamt it; all at once I saw everything different and transformed. What a life, what a land of freedom for cavalry; but I did not understand it any more, the spirit of the moment (nightmare) bore so heavily on me. What grand figures of cavalrymen I What eyes brimful of confidence, what cunning about those lips! These vere cavalry Officers, light-hearted and without care; and the love of adventure shone from their countenances. Truth scared the vision away. Great Dante! How did I then, in this shabby, prosaic world, feel that grief, which thou once wast sensible of, when thou clothedst it in the immortal words: Nessun majore dolori, &c.

This miserable state of things must disappear, we must escape from these disorders, and we must make up our minds as to what we want. Ideas are diametrically opposed to one another; some swear blindly by the prophets of the strategic, and others equally fanatically by those of the tactical action of cavalry. May they always fight against each other, it will do both sides good. As far as cavalry in general is concerned, all that is required is that

proper courses should be followed for its instruction and training.

We wish neither to praise cavalry above its due, nor to blame it without reason; all we want is that facts should be taken as they are. The attack of the 5,000 Cuirassiers at Aspern has already been mentioned. Now, perhaps, the six squadrons of Bredow's Brigade accomplished more. Riding off to the charge at the moment when the VIth French Corps was about to assume the offensive, to which the German Commander-in-Chief was unable to oppose any more fresh infantry, these six ucll-led squadrons, through their powerful shock, brought the fighting line of the centre to a standstill, and, so great was the moral effect of this, that no second attempt at the offensive was made here. But, whereas at Aspern not one of the 5,000 cuirassiers succeeded in getting through the lines of the Austrian Grenadiers, this German cavalry rode through several lines and artillery, cut down the gunners, forced (as even the French admit) a square, and had then to stand the attack of the French cavalry, which dashed on them in superior numbers (two divisions, Forton's and Valabrègue's, 3,100 strong, according to French accounts). But if it was possible to gain such a great result—under unfavourable conditions—against a steady line of battle, then further evidence is unnecessary to show what cavalry can do in battle, if it has made up its mind to sacrifice itself in case of need, as it must do in such circumstances. I said that the result was great; great it was and ever will be.

At Aspern, Napoleon I would have been incapable of continuing the battle without reinforcements. In order to bring these up he had to gain time; and for this, having no more infantry, he made a virtue of necessity, and sent his cavalry into action. The case at Vionville was identical. The cavalry attack took the place of the absent infantry, broke the enemy's offensive stroke, and gained time for us to bring up reinforcements, with which we were able to renew the fight. This is the tactical point of view. The cavalry fight at Ville-sur-Yvron was equally decisive for the issue of the battle of Vionville. The victorious German regiments in that action were

Out of this brigade the 13th Regiment of Dragoons was on duty on the west of the Tronville copses, and the 3rd squadron of the 7th Cuirassiers with the 1st equadron of the 16th Uhlans had been sent on reconnaissance.

the real cause of the divisions of Cissey and Grenier discontinuing their successfully commenced offensive and retreating to their main position, so as to be safe against an attack from this cavalry by occupying this ground; and are we to say that the action of a body of cavalry is a "superfluity" on the battlefield, when, after overthrowing an equal force of the enemy's cavalry, it can paralyse a corps of 30,000 men?

But let us give up trying to be clever. Otherwise we should find ourselves

admitting, defending, and trying to prove a thing to be right to-day, which we had repudiated as wrong yesterday. That is how the Greek magicians (rhetoricians) formerly helped to ruin the Roman State; the tactical magicians might ruin our cavalry in the same way to-day. We do not wish to fight for the sake of applause, but we do want to see correct conclusions drawn from simple facts. We, in fact, want nothing but simplicity, so that, putting

aside everything extraneous, the logic of the facts may be heard.

Still further proofs might be adduced to show the possibility of reaching, riding down, and breaking infantry, even if it is armed with breechloaders (e.g., 1st Guard Dragoons, Ziethen Hussars, and 16th Hussars in the same battle), and yet the infantry of the French Empire was better trained in fire

tactics than almost any other. Now, if such tremendous success could be gained in those early days, when the cavalry had hardly any idea of the tactics of three lines, when it had never manouvred as a division, when the commanders had absolutely no training and not much tactical judgment, when movements were far from reaching the present degree of rapidity, and the manouvring powers were slight, there then only one demand which can be made with fairness, namely :- \_ . . uin cavalry to the highest possible degree of speed and manauering power, for it is only by surprise that it has attacked with decisive effect, and by this it will meet with its successes in the future.

Out of an effective of 800 horses the six squadrons of Bredow's Brigade lost :---

> 7th Curassiers, 7 Officers, 189 men, 209 horses. 16th Uhlans, 200 174 ,, 363 Total, 16 400

that is to say, one half; which is certainly not much, if we consider that, without their action, the village of Vionville would in all probability have been lost, not to mention the other misfortunes that would have resulted from it. Did not the French cavalry leave 3,000 out of 5,000 men in front of the Austrian lines, when they were opposed by muzzle-loaders? The explanation of this is, that the French attacks at Aspern were unskilfully led, while Bredow's generalship at Vionville deserves to be cited as a model of improvisation. That is the very reason why this attack is so instructive, if properly investigated.

Further, as this example teaches us, cavalry also has opportunities of carefully reconnoitring the ground during the exhausting infantry combat, which keeps swaying to and fro for so long over the same points, and so in that way it finds a means of coming up comparatively screened. Why should not other cavalry Generals carry out successfully what General Bredow accomplished so ably, that his brigade leading deserves to be put on a level with Seydlitz's approach at Rossbach? This manœuvring skill in the field verily encourages us and inspires us with hope, for Bredow would have been able to send twenty-four squadrons forward, if he had had them at hand, just as well as the six which he brought against the enemy here. Thus cavalry should not look out for a drill-ground for its manœuvres in large units, but for some

district, in which it can learn—and infantry should learn this as well—the art of making use of the ground for covering its approach. How many cavalry Generals would have been unsuccessful if entrusted with the same duty, owing to their minds being insufficiently developed in a tactical direction for deriving every advantage from the situation! We ought, therefore, to insist on tactical training and manœuvring power. And may we not confidently assert that a General, who dared at peace manœuvres to deliver an attack against an intact infantry line, as Bredow did here, would be done for and put out of action at once? How can a cavalry General possibly form himself under these conditions? Is it not natural that such a man would rather make three attacks in war than one at manœuvres? Such is the fear of criticism.

Opening out the squadron columns to full interval and deploying into line of brigade in the presence of infantry is a manœuvre, which, as a rule, is considered impracticable. Nevertheless it served the purpose here, which is a proof that there is no normal fighting formation for cavalry. The way in which the line will be re-formed must be left to the judgment of its commander. In this charge it was evident at once that cavalry can ride to a charge over a distance of 2,400 metres. Our old peace cavalry soldiers, whose pride consisted in well-fed horses, would tear their hair at such "knacker's work" if they were to rise up out of their graves. But our cavalry is not intended for a royal mews. It is meant to be an arm possessing the maximum power of action; when it is that, and not till then, it will repay

its cost.

We owe much to \*1 - spirit of devotion, shown by the German cavalry at Vionville-Mars l. . ..... It saved us from a defeat, and the battle fully deserves the name of a cavalry battle. Cavalry opened it and cavalry carried the other arms safely through the crises of the battle in twelve more or less tough engagements; it was the cavalry too, which wound up the battle and was still charging down on the enemy's masses in the evening darkness, and it was this arm whose triumph it was to hear as its final reward of victory, " Saure qui peut!"

I am well aware that the whole party of (infantry) tacticians, that body of military Nihilists, who swear that the action of cavalry on the battlefield is a thing of the past, will be down on me. But I don't mind that, and follow my conviction, only asking that, if it is severely, it may also be fairly and

seriously criticised.

"We" repulsed the French charges at Woerth, Vionville, Beaumont, and Sédan; "we" never once formed square; "we" never lost a single man. That is all very fine and true; but it will not do to go to sleep on these

laurels.

These repulses show nothing beyond the faulty disposition and execution, and the poor tactical ability of cavalry leaders of the stamp of Gallifet; and yet even these repulsed charges were not entirely without effect. They, at least, postponed the defeat or ruin for a further short period, and tactically, too, they were not worthless. But, should it ever happen that our infantry has to measure its strength with a cavalry, as skilful as the German cavalry, then the result might be different, and the cavalry may then again have to stay the assault. The method of fighting of cavalry is, of course, a very simple one and always the same, i.e., the attack; but it must not be forgotten that this can be its only course in a hundred cases as well as in a single one; and, on the day of Vionville, there might have arisen some of these hundred cases, which would have handed the fame of cavalry down to the most distant times.

Why was the mass of the German cavalry not sent on to the strategic, or teft, flank of the battle from the very first? The 6th Cavalry Division would have been ample for the centre and right; the 5th, and also a large part of the divisional cavalry, should have been taken to the left flank, and their duty should have been to act from this position and check the deployment and prolongation of the French line. This was their foremost tactical object as soon as it was known, as we did know for certain as early as 10 o'clock, that we had to deal, not with a French rear-guard, but with the whole army of the Rhine.

What might have been done if this cavalry had come on the scene under the command of a Leader? How much bloodshed would have been spared, and how much greater would our successes have been? This German cavalry was not wanting in either courage or contempt of death, but was deficient of judgment and the skill necessary for its employment. We had practically learnt nothing from the shortcomings of the Austrians at Koeniggraetz on the 3rd July, although we have been studying, and, to some extent, criticising them very severely (at the Kriegsakademie) for four years. Under far more favourable prospects we committed the very same mistakes, even after the cavalry divisions had stopped the enemy. Had the German cavalry come into action in mass on the left wing it would probably not have been required to undertake "death rides" later on, and we should just as probably know nothing of the drama of the 38th Brigade, and it may safely be assumed that the IVth French Corps would not have reached the battle-field. Look at Custozza. Strategically and tactically the battle would have followed a different—and a better course. Certainly the cavalry did excellent service within a limited area later on; but, in spite of all sacrifices, it was not capable of undoing the greatest fault of the day.

We have given this sketch, because one of the foremost duties of cavalry always is that of delaying troops in their advance by means of repeated and rigorous attacks, after the manner of Colonel Pulz at Custozza. Herein lies

its decisive action on the battlefield.

## X. The Cavalry Division in Pursuit.

Any layman can preach a long-winded sermion on the capability of cavalry for carrying on a pursuit. The human mind perceives the possibility for this, in the very great rapidity and mobility attaching to cavalry above all other arms. That being the case, everyone concludes that this arm must always deal the finishing stroke to an army which has been crushed on the battlefield, for they say: The other arms have been exhausted by the battle itself; as soon as they change from line of battle to order of march there are certain to be checks amongst the exhausted masses; a long line of battle becomes a far longer line of march; now, as the horse can move faster and for longer than infantry and artillery, cavalry must therefore put an army, which has been overthrown on the battlefield, to complete rout.

Such are the words of wisdom spoken by anyone who has shouldered a musket; and, in fact, there would be nothing to say against them, if there

were no such things as tactics.

Before going further we must consider two facts: 1. In all ages and with all nations there have been extremely few very profitable pursuits; 2. For the basis of our considerations we can only take the tactics of the present day, the composition of our armies, the character of modern actions, and the nature of our civilized countries.

From the former it follows that the law of pursuit is, in general, difficult to carry out, even if its importance is fully recognized. The latter points generally to the increased difficulty of a pursuit when comparing with former

We should gain nothing by criticising the shortcomings, which have

attended the employment of cavalry as the arm of pursuit, in the most recent wars. We should be putting established facts in another form before the initiated, while our statements would be of no use to the uninitiated. It suffices to say that a pursuit, in any degree noteworthy, took place after the battle of Philippopoli alone. In other cases—and, indeed, in those in which an energetic pursuit would have annihilated the enemy, as happened to Napoleon in days gone by after Waterloo—namely after Koeniggraetz and Woerth, no cavalry was sent out with orders to pursue up to the last breath of horse and rider.

It would be easy to elaborate criticisms after the events; but this is not our way of looking at things. We suppose the faults committed in those situations, to be known, and desire nothing more than to sharpen the sword of cavalry for pursuit by means of instruction and peace exercises. Here we are at once confronted with the question: Is it then possible for cavalry to be trained in peace for its action in pursuit? The essential point depends on the answer to this question; and, as a rule, the reply is, No; however it

would be more correct to say I'cs.

By dint of industry and practice Frederick the Great raised his cavalry to the highest degree of tactical power; to this Napoleon I added an equally great strategic power. To which of them does skill in pursuing belong? To wrategy, as far as its object is concerned, and to tactics, as far as the means

for gaining the object are concerned.

For any cavalry to be skilful in pursuit it must, therefore, be a most thoroughly trained arm, and its commanders must have the talent of seeing through the chaos after the decision of a battle, so as to fix on a further, a strategic object, namely: to keep on the heels of the enemy day and night without resting, until the enemy disperses, till his organism crumbles away,

and until his army ceases to be an army.

Great commanders have had this strategic object in view in every decisive action, but it is only necessary to know that it was gained by Napoleon I only once, and by Blucher, at the most, twice, in order to understand that its execution must possess its own special difficulties. There is no doubt, too, that the commanders at Koeniggractz and Woerth recognized the resemblance between the situations in those battles and at Waterloo; they also wanted to do what was right for making the most of their victories, but . . . Yes, this "but" can be acquired in peace time to a certain extent, mainly by putting good-sized bodies of cavalry at the disposal of the corps commanders at manœuvres; and it is therefore an absolute necessity to have them on both sides. These bodies of cavalry must arrive at the right places in the course of the manœuvre, and it can only be proved during the actual manœuvre if they have done so. For although the nature of the country is of importance, yet the decisive point is the "situation," of which the ground is only the basis. This control over the position of the cavalry divisions during the (peace) fight, over their actions, their intentions, and their way of following the progress of the manœuvre, in fact the constant state of readiness-naturally at distances suited to real warfare—is the first and chief requiate for the immediate employment of the cavalry in the decisive stroke, and for the actual pursuit. This apparently self-explanatory view was, so far as I know, first applied with skill and success at the manœuvres of the IVth Army Corps this year; so far it has not received sufficient attention, in foreign countries as well as our own. If a permament interchange of ideas and plans is to exist anywhere, it must be between the Commander-in-Chief and the commanders of cavalry divisions. The communications between these two authorities must be of a permanent and direct nature. Between them there must be no intermediary, and the existing ideas must be known by, and the situation must be clear to, both. In every situation, before, during, and after

the fight, the Commander-in-Chief and the commanders of cavalry divisions must, so to say, be one being; they must be at one in their plans and decisions, and the army itself must move on the broad and sure basis of this system.

A battle, which has been properly led up to by the cavalry divisions of course with the full knowledge of the Commander-in-Chief-should take place just where they have brought the enemy to stand, as at Vionville-Mars-la-Tour for example; although there our condition was certainly not fulfilled; and the battle would have to be brought to a complete end by

them, as was the case at Vionville.

However, every victory does not necessarily lead to the break up of the enemy on the battlefield. Out of a goodly number of battles in 1870-71, we can really only quote two of this sort, viz., Woerth and Beaumont; the capitulations of Sédan, Metz, Paris, and Pontarlier do not come under this head. Such events will probably repeat themselves, but the break up of an army on the field of battle will perhaps be still more the exception than it was in 1870-71.

Thus, if the most recent military history proves the rarity of the break up of an army on the battlefield, we must base our criticism on it, that is to say, we shall then understand that cavalry—even if it had followed the whole progress of the battle in sufficient strength and in readiness for action could still only have played a small and fleeting part as a pursuing arm. Hence, our first endeavour must always be to win a decisive victory, as, for example, at Woerth; during the struggle for victory the cavalry must keep on the look out with eagle eyes so as to dash in when the battle edifice gives way. Had it made its appearance here and at Koeniggractz in sufficient strength at the right time and place, and prepared by the necessary tactical training, it is certain that history would record a second and third Waterloo,

Hence the condition for any pursuit by cavalry is-after a successful break up of the hostile army—the tactical and strategic ability of its commander; when this exists, and the structure of the fight begins to crumble away, then the cavalry divisions, trained according to our modest ideas, only need the will to carry out what is required. Then will the tactical efficiency, suppleness, and manœuvring power of the cavalry divisions pay; then will the muscles and lungs of the houses, the spirit of sacrifice, initiative, and dash of the rider, now, just as in the past, deprive the defeated army of all chance of recovering its breath, and sweep it off the field. But this result must not be expected from every battle; it can only be expected from those -and they are rare-which can be ranked with Waterloo, Koeniggraetz, and Woerth. Thus, if we would rightly estimate the action of cavalry in pursuit, we should, above all, first estimate the course of the battle itself.

The imaginary picture of the enemy's fleeing infantry, cavalry, and artillery, the wild pell-mell of the exhausted arms, madly struggling with one another, are not the result of every battle, and it has satisfied the greatest Generals if they have once come up to this standard. This is the truth, and we should teach it. Then will Generals and cavalry be shielded from unfair criticism; then shall we stand on the ground of what is real and useful. We shall not be feeding the imagination on delusive pictures, nor exposing a soul brought up in grand dreams to the rough and painful undeceiving, which every soldier must experience who has entered the profession of arms with too high aspirations.

Cavalry, which is intended for pursuit, must be on the spot and have the power to do what it wants. Peace offers plenty of opportunity for practising both of these. The tactical efficiency of individual regiments leaves little to be desired, yet we must endeavour all the more to make sure that the cavalry, from the General down to the last dragoon, clearly knows that its

mission is to be the first and last engaged with the enemy. If it is conscious of this, the pursuit itself—if tactically it is at all possible—is no longer a question, but will follow as a matter of course, provided the man does not fail in the soldier, as, assuredly, may happen from many familiar and unfamiliar, known and unknown, causes, for men are organisms and not machines. And even then we must not be hard upon them.

The necessity of having to be the first and last engaged, can and must be put to the test at all manœuvres; and, although breaking in on the retreating enemy cannot be actually represented, all the same a pursuit in the best direction, and in the tactically right formation and strength, can be practised at the end of every day of the manœuvres. This is the best school for our object, and these principles must also be put into practice—as much as possible as in real warfare—at manœuvres of cavalry against cavalry, and, in

general, after every tactical collision.

It would fill a whole book if we were to say all that cavalry must observe and be able to do in a pursuit. But this is not our object. We need only to point out that the cavalry division is just as much the fittest tactical body for pursuit, as it is the most suitable for its other strategic and tactical action. Of course it will not deliver an attack in three lines every day; but by its strength, organization, armament, composition, and tactical efficiency it will aspire to that noble sentiment of "cavalry independence," and will recognize no other master than the sword which it wields. If the cavalry divisions have been the inaugurators of a battle, then, after the battle, they will be the true masters of the situation, driving before them the enemy's crumbled organizations, just as the tempest tosses the leaves. In a pursuit the cavalry leader will be able to venture even more than before the battle. He will find himself strong enough to strike out an independent line, and in so doing will, perhaps, make the greatest demands on the endurance of his forces, so as to fall on the flanks of the enemy's ruined masses wherever he can, or even to occupy, in advance of him, important points, which the anticipated enemy must then, on his side, try to take. In this case, again, a judicious training in dismounted fighting will repay the time and labour spent on it.

## XI. Deductions.

If we compare the losses of cavalry with those of infantry in severe attacks we shall come to practically the same result. In almost all severe actions infantry has suffered almost exactly as much, and even in almost the same time, as Bredow's brigade; compare the 11th Regiment at Vionville, the 38th Brigade at Mars-la-Tour, and the Guard at St. Privat.

Considered tactically, however, such a comparison appears in a different light; those infantry attacks should have been, from a tactical point of view, defeats of the assailants; they had no direct results; whereas, against this, the material and moral, i.e., tactical, effect of Bredow's Brigade was felt along

the whole French line.

Now, the attack of Bredow's Brigade was by no means a surprise; the French, it is true, could not exactly see it during its ride through the two depressions; nevertheless, they noticed it from the commencement by the high rising dust, which kept moving nearer and nearer towards them. They were thus prepared for something unusual happening. Besides, the French infantry was, so to speak, fresh, intact and secure on its flank. Thus the cavalry attacked under conditions which would always be considered in peace as thoroughly debarring success—we may convince ourselves of this at any manœuvre. Generals Alvensleben and Bredow had also evidently had this apprehension, for they spoke of "sacrificing" the cavalry. However high hopes they may have placed on the tactical effect of the sacrifice,

neither of them anticipated the effect which was actually produced. This exceeded all expectation, and completely surprised everyone by its magnitude. It will not do to reply to us, "Oh, yes, the French infantry!" as men are in the habit of detracting from the success of the Austrian cavalry at Custozza with the words: "Oh, yes, the Italian infantry!" But they forget that we cannot attack our own infantry, so we must deal with realities and not with "ifs" and "ands" or national conceit. And was the Prussian infantry, armed with breech-loaders, so very intact after the attacks of the 1st and 3rd Austrian Reserve Cavalry Divisions at Koeniggraetz? Does any one wish to assert that? What was it that caused the sudden intimidation which seized the whole line?

In a tactical sense, Generals Alvensleben and Bredow certainly never intended what Napoleon I wanted at Somo Sierra. They did not wish to entrust to their cavalry an attack like that which Napoleon I considered impracticable for his infantry in the latter battle. But that is not so much the question; the fact remains that well led cavalry can to-day do all that Napoleon I required of his troops at Somo Sierra and Wagram. It would be natural to suppose this conclusion to be so simple and unanswerable that it could not fail to be self-evident to everybody; but exactly the contrary is the case. Because Bredow's brigade lost half of its men the action of cavalry in battle is looked upon as a "superfluity." Is it then to be supposed that cavalry can go into action without suffering any loss? For this loss is, after all, the only argument in support of that idea! Has any man ever concluded from the numerous defeats of bodies of infantry that, therefore, infantry must never attack again? Yet this would be equally good logic. Because the 6th Cavalry Division at Vionville had first to be sent for in order to profit from the momentary situation, men conclude that cavalry will invariably have to remain so far in the rear that it will always have to be called up first, and that it must invariably come up too late for success. Why not blame what really deserves censure, i.e., the fact that it stood in a wrong position, and that its commander was not equal to his work? Yes, cavalry divisions should have the ablest cavalry Generals, and nothing but ability should be considered a recommendation for their appointment. was how Frederick the Great acted with Seydlitz. He was the ablest, but also the youngest, Prussian General; yet, by selection and a recognition of his ability, he reached a position in which, even till quite recently—in the cavalry especially—other considerations have, unfortunately, placed men. But if we will entrust such a sensitive arm as cavalry to mediocrities, then we, at any rate, have no business to derive principles for cavalry's action on the battlefield out of THEIR fiasco!

That is turning things topsy turvy! Custozza, Koeniggraetz, and Vionville are the sources from which cavalry tactics must be regenerated; for in these battles the cavalry was used in accordance with true tactical principles in the preparatory stage, in the development of the fight, and at the crisis, as well as after the decision; and it everywhere gained great and substantial successes against muzzle- and breech-loaders, against infantry, artillery, and cavalry, against intact troops and against victorious infantry. Its fighting action, compared to other arms, was certainly seldom shown in other battles, yet it might have been. It was the result of many peculiar coincidences. Nevertheless, its tactical success in the battles noticed, puts the success of other cavalry of earlier days in the shade. Thus the nature of cavalry is, and remains unchangeable for the tactical co-operation of all arms, and that must never be lost sight of. If that is acknowledged, then the following can be the only requirements, viz.: Education of cavalry leaders (tacticians), training of the cavalry, maneuvring power of the units, greatest possible rapidity and precision in evolutions. All this can only be attained if the

units are composed in peace as they will appear in war, and if the Commanders get charge in peace of the instrument, which will be given to them in war. This is indisputable. It was Frederick's plan; hence the TYPICAL character of his whole cavalry; of course there was a difference even among his Generals (Buddenbrock, Gessler, Driesen, Wundsch, Ziethen, Seydlitz, &c.); but that must always be the case with even the best system; we can always bring the mind up to a general level, but genius can never be reached by means of education, instruction, and practice; and, although a sound system may not give us a Seydlitz, yet by practice, training, and education we may discover Gesslers and Buddenbrocks. According to Scharnhorst several able heads put together may make up for the head of one genius.

And we must not overlook the main thing, i.e., that cavalry can only overcome its natural adversary, the enemy's cavalry, by superior tactical efficiency.

This requirement will become more and more evident to it every day.

The strategic task is one which is impossible of execution without this tactical efficiency and without the Commander's thorough knowledge of the employment of cavalry. Here it is especially a case of always seeking a success sword in hand. This, again, is always the starting point for further strategic missions, and, although dismounted fighting will play no small part in the strategic employment of cavalry, yet the final subjugation of the enemy's cavalry will only be attained by the attack.

The cavalry, which has grasped the principles of its employment, and which has reached a high state of tactical training, will therefore be the superior in strategic respects. Only give it its head, and it will soon make a way for itself. For, as we have said, in no arm is the connection of

strategic and tactical action so frequent and direct as in cavalry.

Again, the leader who-because he is master of his instrument-has confidence in himself and in the tactical efficiency of his arm, will go on with a light heart in advance of the front of the Army, for he is acquainted with his instrument, and knows what he may claim from it. A word or two more about dismounted fighting. Expression has to some extent been given to the necessity of training cavalry in this duty, in its being armed with carbines. If too little was formerly done in his direction, we must be careful not to go too far now. It is only when mounted that cavalry is a special When arm, with all the advantages and disadvantages of such an arm. dismounted it resigns its special object. If we wish to proceed wisely in this direction, we must exercise the cavalry mainly in shooting. Of real dismounted combat it requires no more than to be able to attack in skirmishing line and to defend itself, and it will know how to defend itself when it has learnt how to shoot. This is the most important thing; till now it has been most neglected because it was thought of least consequence. But whatever may be done, and however cavalry may be trained and instructed, we must above all, foster its inclination to the offensive—the offensive mounted and dismounted. Cavalry must keep on the move, must go ahead, and must therefore do its work mounted or dismounted, as circumstances require.

We require "sabreurs," in their proper meaning; perhaps, too, they may become a counterpoise to those wiseacres, of whom we could well spare a few.

## XII. Conclusion.

"Tropfen aus dem Ozean der Zeit, Schoepft das Menschenkind mit kleiner Hand, Spiegelt doch dem lichte zugewandt, Sich darin die ganze Ewigkeit."

<sup>1 &</sup>quot;With his small hand the child of man draws drops out of the ocean of time, yet all elernity is turned in them, and reflected back to the light."

These pages are, to be sure, but drops out of the ocean of military history, yet they contain the truth, and reflect back the eternity of cavalry tactics, in so far as they show that cavalry has at all times, from Alexander the Great down to our days, won its successes on the battlefield only by the same means, suited to the principles of its employment.

I have not gone into the question of regulation formations. It is possible that some of them might be better; but those laid down are sufficient to

make cavalry rapid, sharp, and fit to manœuvre in all cases.

What hampers it is the belief held as to its action on the battlefield, which follows from insufficient instruction and tactical training of the leaders themselves. The incomplete instruction and tactical training are again the results of an imperfect organization, and of insufficient exercising of the cavalry in peace; but all I ask for can be summed up in the single word "tacticians." We nowadays look at military history, and the instruction and training of Officers in a different way to what was the case in former times. To be sure, we know that the Chinese, Greeks and Romans, Spaniards and Germans, Dutch, English, Danes and Swedes, French and Italians have had their tactics, which have been spread here and there to a greater or less extent over the earth. Yet each system had to make way for its successor. The main principles of tactics only are eternal and immutable; but the way of getting at them is the part, which is capable of being changed and forgotten. And how often has not the action of cavalry on the field been recognized and yet allowed to sink back into oblivion! In the incessant mutation of everything of this world, and in the unfavourable condition of their times, everything, which an Alexander the Great, a Hannibal, a Cromwell had been at such pains to build up, disappeared, as if it had never existed; and, until more modern times, the great masters in the art of war of all nations, and of all ages, have had to make a fresh start and evolve the whole thing out of their inner consciences. This is a brief record of the sins of the disciples of Mars, who are so often disinclined to study. More modern days for cavalry date from the age of Gustavus Adolphus and Cromwell. It was reserved for our century's taste for research to collect the few "drops of military history," and out of them to re-establish a simple medium for the study of military history. The powerful impulse in this direction originated more from Frederick II than from any other master of war; the researches of this philosophic head went into the proper connection of things; it was not only in battle that he showed himself a tactician, but he also taught others how to become tacticians, and how the arms, cavalry in particular, can be brought to the standard of their tactical duty.

It is only since Frederick the Great that, in addition to cavalry tactics, we have had instructions for learning them; and yet, in spite of the phenomenal appearance of Napoleon I, these have again sunk into such complete oblivion that, notwithstanding the lessons pointed out in modern wars, the "spirit" persists in remaining in vacillation and fear. Here again the cause is the same. The spirit slumbers in the profession, tactics are chilled in peace time into a lifeless doctrine of forms, and the agreeable form triumphs but too easily over the ever "disagreeable" spirit. The latter is disagreeable because it knows nothing but critical research, and we know that even the disciples of Mars have a strong peaceful disposition, namely: the wish not to be worried by disturbers of mental peace! Their life is so peaceful, why

These pages have no other object than to direct attention to the immutability of the nature of cavalry, to its tactical importance in battle, now as in the past, provided it receives proper training and instruction in peace. They are intended to contribute towards restoring, above everything, to cavalry that faith and confidence in its arm, which are threatened with being under-

should they torment themselves with problems?

mined (if such has not already been their fate), not through modern fireactions, but through false theoretical deductions. It is hoped that their
effect will be to make the cavalryman take the field as a thorough cavalry
soldier, and to prevent him forgetting in peace that this time ought to be for
him a school of tactics and not of sport.

We are unmistakably marching on towards fresh complications; what is done must be done quickly! We have tarried too long with words, let us

now at last see deeds.