

This article was downloaded by: [University of Sussex Library]
On: 18 January 2015, At: 09:28
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered
Number: 1072954 Registered office: Mortimer House, 37-41
Mortimer Street, London W1T 3JH, UK



Royal United Services Institution. Journal

Publication details, including
instructions for authors and
subscription information:

[http://www.tandfonline.com/loi/
rusi19](http://www.tandfonline.com/loi/rusi19)

Russian Infantry Tactics

Captain C. [Agrave] Court ^a

^a Rifle Brigade

Published online: 11 Sep 2009.

To cite this article: Captain C. [Agrave] Court (1889) Russian Infantry
Tactics, Royal United Services Institution. Journal, 32:146, 957-1001,
DOI: [10.1080/03071848909427145](https://doi.org/10.1080/03071848909427145)

To link to this article: [http://
dx.doi.org/10.1080/03071848909427145](http://dx.doi.org/10.1080/03071848909427145)

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy
of all the information (the "Content") contained in the
publications on our platform. However, Taylor & Francis,
our agents, and our licensors make no representations or
warranties whatsoever as to the accuracy, completeness,
or suitability for any purpose of the Content. Any opinions
and views expressed in this publication are the opinions and
views of the authors, and are not the views of or endorsed

by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

RUSSIAN INFANTRY TACTICS.

By Captain C. A. COURT, Rifle Brigade.

THE INFLUENCE OF SOUVOROV.

If anyone were to take the trouble to collect the drill-books of Europe, to tabulate their information and collate all their interminable recommendations, a most striking similarity in all these polyglot regulations would, in all probability, appear as the distinguishing feature of the task when accomplished.

But it is nevertheless true that each Army of each State holds to its own particular and favoured form of development, in defiance of every strait-waistcoat constructed to crib, cabin, and confine its individuality, and, therefore, if we only carry an inquiry as far as the drill-books, we get no further advanced in penetrating the military tendencies of the infantry of a foreign army than a besieger who has only invested a fortress without having got even so far as the first parallel. And this fact is particularly true as regards Russia.

If anyone glances at the chapter on Tactics in that most admirable statistical work, "The Armed Strength of Russia," he will be struck with the similarity between what is laid down for the regulation tactics of the Tsar's legions, and what is the rule in other States. But regulations on all subjects are merely the dry bones of the military body, whose flesh and blood, breath and sinews, are derived from sources often insufficiently considered by the scientific Officers who draw up so elaborately these inanimate regulations.

Historical precedent and carefully fostered traditions have always been the main cause of the existence of a national school of tactics, and one cannot too soon and too unmistakably affirm that such a school exists in Russia in more elaborate perfection and in more active propaganda than in any other military State.

By groping about in the darkness of drill regulations one might search in vain for the password of the school, and, therefore, in order to gain a clear insight into the real tendencies of Russian infantry tactics, it is necessary to discuss the origin, rise, development, and present condition of opinion regarding this most important question.

If the secondary subjects of cavalry tactics and raids have more attraction from the brilliancy of their surroundings: if the duties of that other auxiliary, the artillery, provoke more warmth of arguments, the drill and training of infantry must ever remain the prime factor in the war efficiency of an Army and a State. "The Army—that is the infantry," says Prince Hohenlohe, with a sublime contempt for the prejudices and pretensions of his own arm in Germany: "The infantry is the Army, the Nation in Arms," says von der Goltz, and it is mainly on the worth and training of this "queen of battles" that one can base accurate conclusions upon the efficiency of an army in the field.

In Russian wars it has always been the infantry that has given and sustained the main shock of battle, nor is it necessary to sing the praises of an arm that, to a certain extent, that is to say, so far as its qualities of endurance, marching, patience, and solidity are concerned, is appraised at its right worth both by its friends and its enemies.

The founder of the Russian school of infantry tactics is none other than the immortal Suvorov, a man whose labours, like those of many another genius, were only thoroughly appreciated and acknowledged long after his death. It is true that Suvorov commanded great armies and gave much attention to all arms and branches of the Service, not excepting the Cossacks, whose value to the Russian Army in the field he fully appreciated. But, like many other great leaders, he gave most importance to the "backbone" of the Army, and the greater part of his sayings and doings, handed down to the present time, have reference to the infantry. It is with reference to the subject matter of this paper, therefore, that his influence upon Russian tactics can best be measured and discussed.

General Milutine, in his "Campaign of 1799," delineates with skill the military talents of the Russian leader.

"It is curious," he says, "that some people can only see in Suvorov's campaigns, resolution pushed to the bounds of rashness. The study of the Italian and Russian campaigns proves, on the contrary, that our great Captain knew how to weigh with care both his strategical dispositions and his orders of battle, that he always acted with prudence, and never neglected any measures dictated by necessity. Certainly Suvorov mocked pitilessly at all that passed in those days for the 'art of war,' such as demonstrations, turning movements, and manœuvres. It was for this cause that he passed for a half-savage soldier in Europe—as one who had simply a kind of instinct for war. Those who thus judged him did not know or would not believe that the great Russian Captain had sounded the depths of all military history, had extracted the best lessons from it, and had acquired more of the essence of his art than most of his colleagues—students of the old school, who were accustomed to consider demonstrations and manœuvres as the true end, or something near it. Suvorov protested, with all his strength, against this school of pedantry, and covered it with his most rigorous sarcasms, but at the same time he knew very well how to make use of demonstrations, turning movements, and manœuvres as auxiliary means to facilitate the success of his enterprises. He called Julius Cæsar, Charles XII, and Frederick of Prussia his masters and instructors in the art of war.

"If we compare him with other great leaders at different epochs, we must impartially admit that some of them may have been his superiors in strategic combinations, in the art of moving great armies and of leading them in battle—in a word, may have been more skilful in what is called to-day the mechanism of operations. But as regards insight into the human heart and the use of moral leverage, one may say boldly that Suvorov has had no equal in all time: one searches in vain for another who had an iron will equal to his, a more virile and indomitable resolution, and a more absolute and powerful influence over men."

It must be admitted that if we judge Suvorov by the light of the opinion of his contemporaries, we should only find in him an outer barbarian, favoured by luck, and, in a military sense, something in the nature of a land pirate. But, as Napoleon remarked of the Seven Years War, the Russians at this time "either did not write at all, or wrote without any regard to the truth," while of Suvorov's foreign contemporaries, the Turks, Poles, and French had suffered so many reverses at his hands, that they could scarcely be expected to give an unbiassed history of the career of this most remarkable man. It has remained for a remoter age to dispel the illusions formerly current about the Russian hero, and to paint the great soldier in his true colours.

Did Suvorov conquer only because circumstances favoured victory, or because he had been, like Carnot, the organizer of victory, and had taken his measures to compel success?

Were his peculiarities of speech, manners, and action caused by eccentricity

of character; were they the aberrations of a buffoon, or were they, on the contrary, due to a profound insight into Russian character and the motives which sway men's minds?

Were his campaigns and his conduct regulated by a sense of the importance of the political and physical difficulties to be encountered, or did he follow out a machine-like line of procedure, which never varied with the ever-varying factors in each military problem demanding solution?

Formerly all these questions were answered in a sense hostile to the reputation of the Russian leader, but history has granted at last to Souvorov those laurels denied him in his lifetime.

Born in Livonia, Souvorov was, by parentage, a Swede: in his early life his career was long unsettled, and, in consequence, when he determined to join the Army he was obliged to enter the ranks, first as private and then corporal in the Guards, in order to win the grade he coveted. The experience thus acquired ever served him in good stead; for, in the lower strata of society in which his fortune compelled him to move, he became acquainted with the national character, and was enabled to study deeply and at his leisure the peculiarities of those men he was destined so often and so brilliantly to lead to victory. He soon rose in the Service, and became remarked by that able woman, the Empress Catherine, to whose favour was mainly due that lustre which he shed on Russian arms, and to whose influence he always attributed the subsequent brilliancy of his career.

When Souvorov, receiving the Empress at Kremenchtug, on her celebrated progress to the Crimea, was asked by his mistress, scattering her favours right and left, what recompense he required, he replied, that he wished that the 3 roubles owing for his lodging might be paid for him, a caustic sarcasm on the struggles for ribbons and orders carried on by the flatterers, courtiers, and lackeys who surrounded the Empress, and never wearied of their genuflexions and adulations.

Souvorov always appealed directly to the sense of his soldiers: when in front of the beleaguered Ismail, he spoke to them, in almost the same words as Napoleon to the Army of Italy in 1796: "My friends, provisions are very dear, and we are in want; those funny fellows behind the walls have plenty, let us go and take it from them." Not less characteristic is the laconic message, "Proud Ismail is at your feet," by which he made known to the Empress the success of that sanguinary assault.

The personal ascendancy of Souvorov, and his great influence over his men, were very remarkable: he was no hot-headed blunderer, and always weighed his actions by the extent and nature of the opposition he was likely to encounter. When he fought the Turks, with their badly-served guns and unstable infantry, he took his chief measures to destroy the hostile cavalry first and foremost, and in the attack always advanced in columns. If he sometimes assailed the more disciplined Polish Army with small numbers and an equal fury, we can trace even in such action the fitting adaptation of the means to the end: in the Polish ranks he found a less brilliant cavalry, but better served guns: the latter he attacked by skirmishers.

"*Il va dessus à la débâchée*," remarked a French spectator, irritated at the temerity with which contemporary rules of war were violated; but against the French Souvorov proved, in many a field, that he was able to comprehend and utilize all the artifices of the most "scientific" and approved schools.

When Catherine died, her favoured soldier retired from active life, and lost caste with the Tsar Paul and his fashionable courtiers. It was England that appreciated him at his true worth, and demanded, at the Russian Court, that this Cincinnatus should be recalled from his fields, and be placed in command of the armies of the Alliance in which Russia counted for so much.

"Suvorov," wrote the Tsar, with some grandeur of feeling to his subject, "Suvorov has need of neither triumphs nor laurels, but the country has need of Suvorov."

Dazzled by the great deeds of the man whom Clausewitz calls the "god of modern war," military historians have not generally granted to Suvorov's campaign in Italy in 1799 the credit it deserves. In the space of five months the wise combinations, sustained activity, and vigorous initiative of the commander accomplished the destruction of four French armies, and reconquered for the Allies a country which had been in possession of the French for the preceding four years. In this short space of five months Suvorov tumbled to the dust those conquests that had been achieved by the legendary blows of the great Corsican, and threw back discomfited those legions of France which both before and after were promenading all Europe as conquerors.

Military opinion had hitherto held Suvorov cheaply, and had described him as a conqueror of barbarians, whose star would flicker and grow pale when compared with the greater light of Western militarism. But those enemies whom he had now defeated belonged to the nation which accounted itself the first military Power in the world, and opinion hostile to Suvorov's fame, refusing to admit his talents, took refuge in a sullen silence.

As if by some extraordinary process of reasoning a General who by dint of will, character, and energy had succeeded in one sphere of military activity, would by his success be debarred from succeeding in another! As if a man who had enchaind victory to the Russian eagles must be circumscribed in the activity of his genius to certain fixed climates, countries, enemies, and positions. Curious reasoning, indeed, which Suvorov was not the first nor has been the last to magnificently disprove. War is, after all, of one universal essence, which is only modified according to the infinite variety of objects and circumstances. Soldiers of real genius have in all time proved themselves capable of succeeding, no matter how infinitely circumstances might change.

It is useless to discuss the political errors which detracted so much from the solid gain of this campaign, and threw Suvorov into Switzerland, disgusted with the follies of the pettifogging diplomacy of his time. Suvorov had not spared his Russians. Of the 40,000 men he brought to the Austrian alliance, only 12,000 remained to him to accomplish that march across Switzerland, which redounds to the eternal credit and glory of the Russian arms, and crowned with the last laurel wreath the energy and genius of this remarkable man.

One episode of that campaign is worthy of mention, since it throws a strong light upon the influence of the impetuous chief upon his soldiers, and explains the methods by which the brave old leader appealed to the hearts of those soldiers whose innate loyalty he understood so well. Worn out with fatigue, losses, exposure, and exhaustion, his army had almost mutinied, and had refused to march further, being surrounded by enemies, and apparently doomed to an ignominious capitulation. Suvorov ordered a general parade, and formed his men into a hollow square. In the centre a deep pit was dug, and Suvorov came forward. "My children," he said, "you refuse to follow me. So be it. I shall not survive this disgrace to the Russian arms, and I have called you here to be present at my funeral;" and stepping forward he was about to precipitate himself into the grave, when a shout of enthusiasm arose on all sides, and the men he had so often led to victory rushed forward, and raising him in their arms vowed they would follow him to victory or death. When he returned to the Russian capital, full of years and of honour, Suvorov found himself made the scapegoat of the miserable politics of the European Courts, and retiring once more died, if ever man did, of a broken heart.

For half-a-century he had fought his country's battles against all comers and in every description of country. He had been present at over a hundred actions, and had gained over sixty battles or assaults by his own leadership. He had gained the love and adoration of his men by mere force of will, while the simplicity of his living contrasted strangely with that of Potemkin and other contemporary Russian leaders, who lived surrounded by an Oriental luxury.

He appeared to the superstitious to be the special confidant of Providence, while by his iron rule of subordinates he made them comprehend that he was the sole judge of their actions and arbiter of their destinies. Living among his men and always without a guard he associated himself with all the joys and sorrows of his soldiers; during a long and brilliant career he never knew defeat. He hated luxury; his morning bath in winter often consisted of a roll in the snow; looking-glasses were his particular aversion, and he would constantly break them, exclaiming that they were shameful furniture for a soldier's room.

Souvorov set the example of discipline with the same quaintness that characterized all his actions. He caused himself to be ordered to sit down to dinner, rise, sleep, or get up. Sometimes he affected to be astonished at the command, and asked "By whose order?" "By order of Marshal Souvorov," the Aide-de-camp replied. "Ah! his orders must be obeyed," the General would answer.

When he gave the order "Forward against the Poles," each man in the ranks had to give a thrust with the bayonet; when the same order was given "against the Prussians," the soldiers had to thrust twice with the bayonet; when "against the French," this had to be done three times.

Many writers have scoffed at his cock-crowing, which took the place of *réveille*, but the origin of this curious custom has generally escaped notice. In the first Polish war a spy was discovered on his personal staff, and Souvorov was urged to have him arrested and shot; he determined, however, to make use of him first, and published an order to his troops that they were to march at cock-crow. The spy duly sent word of the order; at eight the previous evening, however, Souvorov ran round the camp crowing like a cock, and within a few hours routed the surprised enemy, sarcastically thanking the spy when he returned for his good services. Few great leaders have been better instructed than was this man, whom it pleased certain jealous military contemporaries to apostrophise as a "savage." He spoke Turkish, Polish, Italian, German, and French fluently, and could address his Austrian allies in a slang German which was familiar to them. Like Napoleon, he excelled in conversation; he could talk theology to priests, jurisprudence to a judge, and anatomy to a surgeon. He detested parvenus, who with their ridiculous pretensions and airs became the favourite mark for his ironical shafts. The Tsar Paul, for instance, had elevated his valet-de-chambre, a Turk of very low degree, to the rank of Count, and on one occasion was so deficient in tact as to send him on a mission to Souvorov. He was received with much state and ceremony, and then Souvorov surrounded by his Officers asked to what foreign potentate he was indebted to the honour of the mission of the stranger. When informed that the Count came from the Tsar, he feigned great doubt and surprise, and asked to have the name repeated. "Kutaijov—Count Kutaijov," replied the unblushing ex-valet. "Ah! yes, I remember," said Souvorov, and sent for a list of the nobility, scanned it carefully, and then appeared to be again troubled with doubts. "Perhaps your Excellency's patent of nobility is so old that it is not mentioned in the list," he hazarded, and so continued morally castigating the unfortunate emissary until he had blurted out the whole story of his lineage and former position. Then turning to his own valet Ivan, Souvorov bade

him remark to what honours he might always aspire by the faithful performance of the most menial office.

Souvorov hated and abhorred nothing more profoundly than being answered by "I can't" or "I don't know," and should any unfortunate subaltern reply with one of these proscribed phrases, he was sure to come in for a severe wiggling. Once he demanded of a young cavalry Lieutenant what a "retreat" meant. "I don't know," replied the young Officer. "You don't know," replied Souvorov, aghast at having the phrase slung back at him so unceremoniously. "I don't know," repeated the subaltern, "I have never heard the phrase in my regiment." "You don't know . . . you have never heard the phrase in your regiment?" then, after a moment, Souvorov saw he was beaten, and rode away, murmuring, "Good regiment, excellent regiment!" Where the Russian leader particularly excelled in his strategy was in the firm conviction he so strongly held and practised, that it is armies which gain successes and form the most important element in war, and not fortresses, magazines, or money bags, and that success depends upon energy and movement, and not on the occupation of positions; like the great Frederick, he considered that the defensive should never be the premeditated plan of campaign, and that the adoption of such a plan was a sure sign of the decadence of an Army and a State.

Souvorov's funeral was a lasting disgrace to the Tsar Paul and the Russian Court; he had been out of favour, and his corpse received no honours; all courtiers, flatterers, diplomatists, and ambassadors avoided the grave of the dead hero, with one exception. The British ambassador, to his lasting honour be it said, was the only official present when the body of the great chief who had carried the Russian eagles so victoriously from the banks of the Borysthènes to the sources of the Po was consigned to its last resting-place.

Such, briefly told, was the life of the man who was the founder of the modern school of infantry tactics in Russia, and without this brief sketch of his career, the following remarks on his writings and their later interpretations would be incomprehensible.¹ It is unnecessary to add that Russian annalists have gathered from Souvorov's campaigns, sieges, and battles a host of tales, maxims, and orders, but the spirit of his teaching can be learnt without entering into long and wearisome details: "Bayonet, bayonet, bayonet," said the old Marshal to General Chastelar, when interrogated on his plan of campaign in 1799. "As for reconnaissances," he wrote to the same Officer, "I will have none of them; it is only cowards who send out reconnaissances to warn the enemy; whoever wants to come to blows with the enemy will find him without all that. Columns, the bayonet, the cold steel, the attack, the charge, these are my reconnaissances, and especially one should not overburden oneself with vain manœuvres, counter-marches, and so-called ruses of war, which are only good for poor academicians."

The essence of Souvorov's teaching will be found best expressed in what has been called his "catechism," namely, an order written in his usual familiar style after a Turkish campaign. Extracts from this order are occasionally given in works on infantry tactics published in Russia. In France and Germany the one catch phrase which occurs early in the order has been seized upon and made the motto of the Souvorovian school. This phrase is, "The ball's a fool, but the bayonet's a hero," and to the remembrance of this saying half the errors with regard to the tendency of Russian infantry tactics may be attributed. In particular certain French military papers are always quoting the saying, but before pressing this point, and explaining the com-

¹ An admirable Life of Souvorov by Colonel Spalding is now appearing in the "Illustrated Naval and Military Magazine."

mentaries on Souvorov's method by later writers, it is necessary to read the order referred to.

"Keep your bullet," it says, "for three days, and if you can't buy lead keep it all through the campaign. Fire seldom, but surely. Forward with the bayonet. The ball's a fool, but the bayonet's a hero. Strike the Turk with the bayonet, and then strike him again. Even when nearly dead he may still tumble you over with his sabre. If his sabre is near your neck, draw back a step and then advance. Run the first man through, and then the second; a hero will run through half a dozen men. Make sure that your bullet is in your musket. If three men attack you, run the first man through, shoot the second, and then run through the third. In the attack there is no time to reload. When you fire, aim at the body, and fire twenty rounds. To buy lead is to be economical of one's life. Lead costs little. We only fire when we are sure of hitting. We don't lose one round in thirty.

"If you see the quick-match is in the gun, dash up to it; the shot will pass over your head, and the guns are yours, the gunners too! Overturn them, pursue them, run them through. Give quarter to the rest. It is a crime to kill without reason. They are men like yourselves. Die for the honour of the Virgin Mary, for your mother, for all the Imperial Family. The Church prays for those who die. Honour and rewards are for those who survive. Do not offend peaceable inhabitants. The soldier is not a robber. If you take a camp, it is yours. If a fortress, it is all yours. At the capture of Ismail, the soldiers divided gold and silver by handfuls. But without orders never pillage.

"In the open there are three forms of attack: (1) Attack on a wing. This is the easiest. If the flank is covered by a wood it doesn't matter. You can't pass a river, but you can pass over every kind of entrenchment; (2) Attack on the centre. This is not advantageous except for cavalry. You must cut them in pieces, or they will crush you; (3) Attack from the rear. Very good against a small body one can turn; in the open field against regular troops vigorous charges are required.

"Against the Turks form squares. The French are light-headed people who don't think of God. If we ever have to fight them, we must attack them in columns.

"Attack of field entrenchments. The ditch is never deep, the parapet never high. Throw yourselves into the ditch, climb over the parapet. Work with the bayonet, run them through, break them, make prisoners. If cavalry be present, make sure of cutting it to pieces.

"In the assault of a fortress, break down the obstacles, run as fast as possible, jump over the palisades, throw your fagots into the ditch: fire! Cross the rampart, devour the enemy in rear, extend your line, place a guard on the powder magazine, open the gates for the cavalry to enter, turn the cannon against the enemy. Keep up a rapid and sustained fire into the streets. This is not the time to rush on the enemy. When the order is given to enter the town, kill the enemy in the streets, and let the cavalry sabre them. Don't enter the houses, attack the enemy in the open places where he is assembling. Form a strong picket here, and others at the gates of the magazines. When the enemy surrenders give him quarter. When the interior walls are occupied, off and pillage!

"There are three military qualities: (1) The *coup d'œil*. Learn how to lay out a camp. Learn to march and attack. Learn to pursue and beat the enemy; (2) *Rapidity*." Here Souvorov goes into details, so that his "children" may be as little fatigued as possible. "The enemy," he continues, "does not expect us; he believes us to be 100, 200, perhaps 300 verstes off. We all fall on him together like snow upon the head. His brain reels. Attack him on the spot with any troops to hand, with all that God sends us.

Cavalry begins the work at once. Cut and slash! Pierce and break them! Cut them in pieces! Don't give them a moment's peace! (3) *Energy*. One leg helps the other, one hand strengthens the other. By fire many are killed. The enemy has hands too, but he doesn't know the Russian bayonet. Form line at once. Attack with the cold steel. The cavalry arrives; commonly it makes the first attack, and the infantry follows. In general, the cavalry must attack like infantry except in marshy ground; then they must lead their horses by the bridle. The Cossacks will pass everywhere. When the battle is won, the cavalry pursues and sabres the enemy, and the infantry must not be left behind." Then follow some excellent sanitary rules.

"But," continues Souvorov, "there is a greater enemy than the hospital, the detestable 'I don't know.' Indecision, conjecture, lies, fraud, equivocation, false delicacy, and the absurdity of the 'I don't know,' are the source of a thousand ills. It is shameful to sputter or to mince one's words. A soldier must be healthy, brave, firm, decided, true, honourable. Pray to God! From Him come victories and miracles. God leads us! God is our General!

"For the 'I don't know' arrest for Officers. Instruction is light, want of instruction darkness. The work knows its master. If the peasant does not know how to dig, corn will not come. A wise man is worth three fools, and even three fools are little. Give us ten, and a brave lad will beat them all, topple them over, make them prisoners. In the last campaign, the enemy lost 75,000 men, perhaps not much under 100,000. He fought well, and with the courage of despair, and we did not lose 10,000 men. Children, you see the effect of military instruction! Gentlemen, what a triumph!"

Such was the nature of the instructions Souvorov issued, and more worldly wisdom underlies these curious phrases and ejaculations than his contemporaries were prepared to admit. Almost every phrase in this curious order might be taken as a maxim on which to found a military essay, and one can understand after reading it why the French never quote it at length.

With this order read, it will be understood that to attribute to Souvorov the idea of making brute force, represented by the bayonet, the sole means of gaining victories would be entirely to misinterpret the whole tradition his personality represents. What is most important to realize is that the bayonet, of which we heard so much in the Crimea, is in reality an emblem of that energy and rapidity which form two of the three great military qualities of Souvorov's catechism. When the teachings of the master's disciples are noticed, this fact will appear more vividly.

To impress his troops with the conviction that they were invincible at close quarters was to Souvorov the most certain way of hastening an attack, and of avoiding those hesitating tendencies, those long skirmishings which so often form the prelude to a total cessation of movement. No doubt, had Souvorov been a German pedant, and his soldiers highly-educated Pomeranians, he would have impressed upon them the "defensive-offensive" or the "pure offensive," or some other cant phrase by which the German military critic characterizes the different kinds of forward tactics. But as Souvorov was no pedant, and his men only illiterate Russians, he took particular pains to inculcate by homely phrases, and by expressions which appealed to the poorest intellect, that devouring activity and daring which consumed him, and the lessons he taught are in fact none other than the very best of the German recommendations clad in a more homely garb, and divested of all academical embroidery. It was the Souvorovian idea that conquered Central Asia for Russia: that undoubting, unhesitating, cheerful acceptance of events, that dashing valour regardless of numbers that places the deeds of the Army of Turkestan on a level with those of Yermak and the legendary heroes of Russian antiquity. It may be said that it was the Souvorovian idea that lost many assaults in the war in Bulgaria in 1877, and

this fact was proclaimed from the house-tops by the many anti-national writers who made their voices heard from the time of the failure of the first attack on Plevna, as well as by those caustic German critics who seldom lose a chance of sowing discouragement in the ranks of their possible antagonists.

But, as Souvorov himself wrote, "Instruction is light, want of instruction darkness;" if lessons are misread or misinterpreted, if the leading is bad, disasters must ensue no matter what nature of tactics are adopted.

"This is not the time to rush on the enemy," remarks Souvorov, when the outer line of rampart of a fortress is captured. If he could have lived to see the developments of military science in these later days, and have seen a Turkish army surrounding itself with ditch and parapet, vowing itself to a certain destruction, none the less thorough because it was slow, he would have repeated the same phrase, and would not have said that the time had arrived to "work with the bayonet." All depends on leadership; if this is wanting, superiority of numbers, perfection of armament, excellence of material are all useless.

It is a fact that before the war of 1877 the military instruction of the Russian infantry was at a low ebb; barrack accommodation was very deficient, the system of training was not on a level with the requirements of the situation, few opportunities existed for the assembly and manœuvring of all arms, the true comradeship of battle did not exist, a great number of Officers had not the training or intelligence demanded by the increasing importance of individual initiative.

After the discouragements and wranglings caused by the Russian disasters there was a time when it seemed almost probable that the anti-national school would prevail, that Souvorov's memory would be relegated to oblivion, that long-range fire, a glittering and useless cavalry, with instruction based upon a *réchauffée* of Franco-German regulations, would be foisted upon the Russian Army, and that the Tsar's legions would be nothing but a third-rate copy of the German pattern. But, after a brief interval, the national voice resumed its protestations, and, guided by a few men of talent, opinion began to accept once more the spirit of Souvorov's teaching, modified and transformed so as to be acceptable in all the varying conditions of the infantry fight. It is General Dragomirov who is mainly responsible for turning back the current of opinion into its former channels. It is true that Russia has many another able military writer: Generals Leer, Levitzki, Gourko, Kaulbars, Zeddele, Todleben, and many others; but Dragomirov, by the brilliancy of his writings, by the great common sense that pervades all his work, and the intensely Russian vein of his humour, by the masterly manner in which he has explained and developed Souvorov's teachings, appears to be not only the best of the Russian military writers, but a man unsurpassed in the difficult task of military criticism and explanation. "Ecrivain original," wrote of him the *Revue Militaire de l'Etranger*, "plein d'humour, Slav renforcé, le Général Dragomirov est bien le digne disciple de celui qu'il a pris pour maître, 'l'illustre Souvorov,' le coryphée, le porte-parole de cette école nationale par excellence qui a toutes les sympathies de l'Armée Russe, parcequ'elle lui répond à ses aspirations les plus irrésistibles." Severely wounded at Shipka, Dragomirov, already notable as a man who combined in a happy manner the best habits of thought and of action, was on his return to active life placed in command of the Staff Academy, and has, by his influence upon military training and thought, done more for the Russian Army than any other man in history, excepting Peter, Souvorov, and Milutine.

That Souvorov is great, and that Dragomirov is his prophet, sums up the opinion of nine-tenths of thinking Russians, and it becomes of the greatest importance to know how this writer contrives to shape the teachings of his master into harmony with modern conditions of war.

It has been remarked that it is perfectly useless to attempt to gather information from Russian drill-books, which are conceived in the usual formal style, and only afford certain general indications, and give recommendations and examples that are the daily bread of every well-disciplined force.

But General Dragomirov, foreseeing that this levelling of all individuality and initiative would inevitably lower the Army to the same cumbersome machine which it has been reduced to at several periods of its history when guided by incapable hands, determined to do his utmost to foster habits of initiative in all ranks, and to this effect brought out his "Manual for the Preparation of Troops for Battle," a series of instructions well worthy of close attention.

It is unnecessary to say that the General has written much valuable work of every kind, but, like Suvorov, his main efforts have been directed to train and improve the infantry first and foremost, and if it is required to understand what are probably the true tendencies of the Russian infantry, the system he inculcates must be carefully considered, since it is a system warmly and fanatically adopted by the Army, showing how deeply the Suvorovian tradition has touched the hearts of Russian soldiers.

In these works it will appear more clearly how baseless is the generally accepted idea that Russian infantry tactics and training consist of undiluted cold steel, invigorating tonic though steel may be.

Before analyzing this valuable work it is necessary to notice a few of the salient points of the regulations for infantry tactics which Drygalski¹ and others have fully described, and to see how far they harmonize or contrast with the teachings of the national writers.

THE NORMAL ATTACK FORMATION.

Many essential changes took place in the Russian field exercises in 1869, 1874, and 1875, while lastly the higher committee on the organization and instruction of troops took the whole subject in hand again after the war, and elaborated an entirely new programme by the light of the experiences of that arduous campaign.

The regulations for the instruction of the company and battalion in extended order begin by noticing that the company is formed in 2 half-companies, 4 sections, and 8 groups or squads (in peace), 16 in war (*vide* Fig. 1). If the battalion is drawn up in two lines, each of 2 companies, the closed part of the first line forms the company reserves or supports of the skirmishing line and the second line forms the battalion reserve. Formerly the firing line was split up into groups of 4 men, but these have been now suppressed, and the squad made the lowest unit, while it is laid down that the sections are to be kept united as long as possible. Two sections per company are usually extended for attack. When the chain is reinforced the supporting fraction arrives if possible on a flank, and at all events keeps grouped together under a single control. There is no attempt to make men in the firing line "close to a flank," perhaps the most absurd and pernicious of all practices. Patrols guard the flanks during an attack. Bugle sounds can only be ordered by the battalion chief, except the "charge" and the "prepare for cavalry." Whistles are used to give warning of an order or signal. The company chief has four intelligent men attached to his person as a guard and to carry orders.

Regarding the fire discipline of the chain, the regulations say that the rifle

¹ "Die Neu-Russische Taktik, 1860, Drygalski; *Russlands Wehrkraft*, 1887, E.S.; "Tactics of the Russian Infantry," Dupon.

FIG. 1. A COMPANY IN LINE.

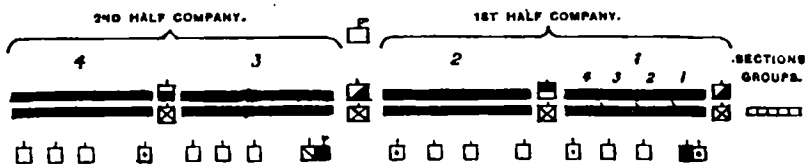
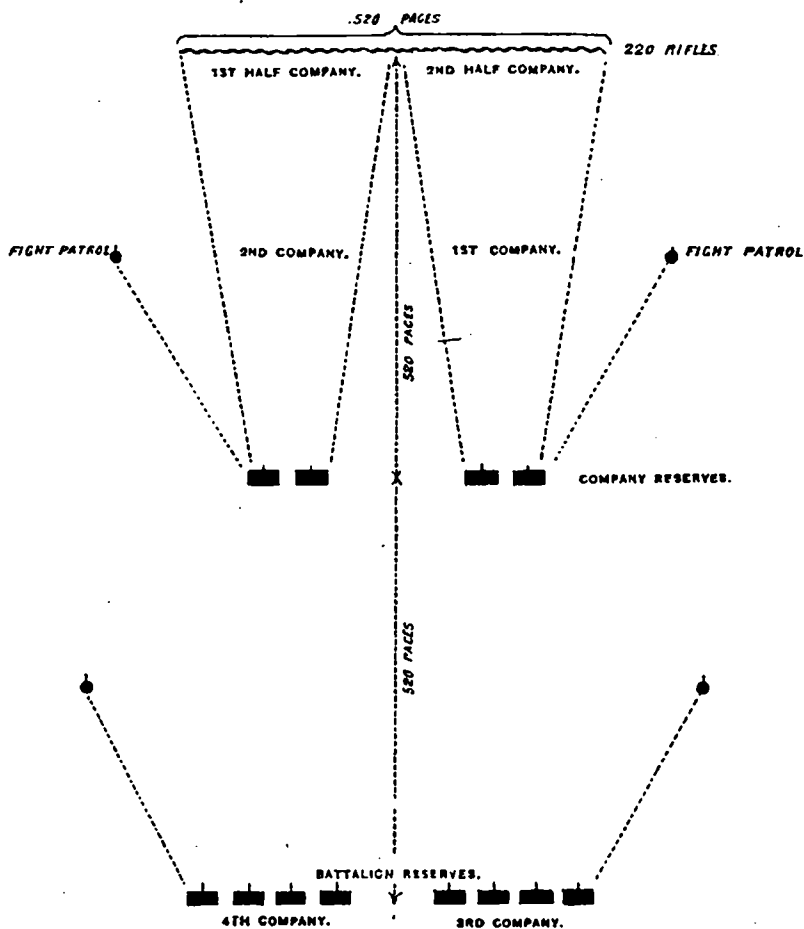


FIG. 2. BATTALION ATTACK FORMATION.



now used has great precision, and allows of rapid fire at great distances, and that it is indispensable to understand at what moment and under what circumstances it is convenient to use one or another of these properties. The precision of the arm is only valuable when the dimensions of the mark chosen are in proportion to the distance. Rapid loading is profited by in order to gain a certain definite result in a short space of time, as when a fresh body of troops appears unexpectedly just as a bayonet charge is about to take place. "Long-range firing must be resorted to with great prudence; it is only useful and advantageous when the marks admit of results equivalent to the number of rounds used: short-range fire alone has real accuracy." In the firing line individual or volley firing can be used, or a named number of rounds can be fired.

At 150 to 200 paces the chain begins rapid firing, and the company reserve draws near under cover of this, and in conjunction with the chain delivers the assault; if the reserve has been merged into the chain by reinforcing during the attack, it is for the battalion reserves to give the final impetus. The normal front of a battalion attacking is 520 paces.

Throughout all regulations and comments the advance of the reserves, by whatever name and in whatever formations, is looked upon with reason as one of the most difficult and important matters to bring to perfection. On this subject there may be read with interest an account of an experiment conducted by General Dragomirov a short time ago, in order to illustrate certain theories on this head.

One battalion on this occasion occupied an entrenchment, and was attacked by another; it was purely a frontal attack, made to bring out the various stages of the assault on a field work. Starting at a distance of 1,000 paces, the firing line of the attack was intended to cross as rapidly as possible the first 800 paces. The battalion reserves allowed the chain to gain 500 to 600 paces, and then advanced rapidly 400 to 500 paces. At 600 paces from the work they were only 50 paces in rear of the chain. The latter now crossed rapidly the distance between 600 and 200 paces, threw themselves down, and began a sharp fire; the reserves now came up, passed through the first line, and threw themselves into the ditch of the work; protected by the fire of the chain remaining in position, they took breath and threw themselves into the work, the chain dashing forward to participate in the final action. Without representing finality in any way, and in fact being open to criticism in at least two particulars, this experiment is not without interest.

For bodies larger than the battalion the Russian regulations wisely abstain from laying down normal forms of attack. When "many battalions" are on the ground it is recommended that they should be drawn up in one, two, or three lines, 400 to 500 paces apart.

THE SUPPLY OF AMMUNITION IN THE FIELD.

Few questions affect more vitally the efficiency of infantry in battle than the sound organization of the supply of ammunition. During the war of 1877 neither the regimental carts nor the flying parks could be depended on to replenish rapidly the ammunition carried by the men, and in consequence from 90 to 105 rounds were served out before an action, this too for men armed with a short ranging weapon and trained to reserve their fire. Skobelev was even in favour of a larger number, and declared that 130 rounds were necessary to keep up a fight. The question attracted much attention in Russia as elsewhere after the last war, and divided authorities into two opposing camps. The first, headed by the Skobelev, wished to make the men themselves carry the needed supply for action; the other, with General Zeddeler as chief exponent, was anxious to lighten the burden of the soldier

as much as possible, but to place an ample supply of ammunition within his reach by sound organization of transport, and by methodical distribution during a fight. The latter views prevailed, nor does there seem much doubt that the essential thing now is to organize the ammunition columns with care, so that what they contain, whether 20, 40, or 100 rounds a man, may be readily accessible and within reach of troops; this is the main point: the number of rounds carried by the wagons is almost a secondary consideration. In order then to make sure of success in a matter where formerly failure had been the rule, a number of exhaustive experiments were undertaken with a variety of carts and wagons proposed for regimental supply, while several methods proposed to meet the difficulties of distribution were tried in the field. Without entering into details of these trials, the general conclusion may be mentioned, namely, that two-wheeled carts form the best means of transport, and that these should be supplemented by pack animals in hilly country. As for the distribution, there was a general consensus of opinion that no system could prove satisfactory unless men were regularly trained to the work, and the duty established on a regular basis, like any other service. The instructions drawn up after these experiments lasted for some time, until they were modified by the regulations of June, 1866, about to be described.

In accordance with the recent organization of the regimental train, the supply of ammunition of an infantry regiment, in addition to the rounds carried by the men, amounts to 153,504 rounds, or 48 rounds per man for the 3,200 men in the regiment armed with rifles. These are contained by 553 zinc-lined cases, which are carried in 33 two-wheeled carts, namely, 16 company and 17 regimental carts. The regimental train forms two groups, of which the first marches immediately in rear of the fighting body, and the remainder at the tail of the column; 8 company carts march in the first group, and the rest with the regimental reserve.

The regulations of June, 1866, begin by noticing the formations assumed by the carts when troops leave the column of march. It is laid down that in this case the first group of carts should form up in one or two lines, 20 paces in rear of their troops.

When the troops pass from reserve to fighting formations the Officers commanding the several units give general instructions with regard to the positions and movements of the carts, in accordance with conditions of ground and the exigencies of the fight. In open ground the carts must not be more distant than the regimental reserve or third line of troops; if there is cover they may come up to the battalions in second line, or even in rear of the companies of the battalion reserve in first line. The arms Officer is required to keep his cart as much as possible out of fire while following out his instructions; he keeps his chief informed of his movements and position, and this Officer informs in turn his subordinates. The carts have to follow the ebb and flow of the fight, and the arms Officer is often called upon to take important decisions upon his sole responsibility. When the carts are distributed among the companies, a N.C.O. is in charge of each section of carts; the position of the carts is marked by a red flag in the day and a green lantern at night.

If ammunition cannot be brought up during an action from any cause, the troops may call upon their supports in rear for a fresh supply, and these in turn upon the reserves; rounds of killed and wounded are also collected. A body of troops requiring a fresh supply sends two or three men to the chief of the unit from which ammunition is demanded; half the supply of the latter is given over and men told off to carry it. If the supply is drawn from the carts it is carried up either in the zinc-lined cases or in bags, which form part of the equipment of the carts. Every request

for ammunition is to be immediately complied with, from whatever body of troops it may come. The carts are filled up from the second group of carts, at the head of which march the eight remaining company carts. This group is supposed to form up 500 paces in rear of the first group, but it will probably be seldom able to do so. Experience shows that once an ammunition column is separated from its fighting troops by being placed, as the Russian second group of company carts and regimental reserve are placed, at the tail of a column, the chances are against the happy discovery of this supply by the troops concerned at the crisis of the action; the train is looked upon as so much lumber by anxious combatants pressing on to the front; it gets pushed on one side, and as every road is covered with marching columns, the chances are decidedly against the reserve ammunition reaching the troops for whom it is intended.

MAGAZINE RIFLES.

In one way the question of ammunition affects Russia less vitally than her neighbours, for in the matter of repeating rifles Russia hangs back from following the lead set by Germany. Russia has weighty reasons for this determination, and one cannot but admit that her refusal to abandon a rifle of proved use on the battlefield for an untried arm notoriously defective in many technical details, is a decision to be treated with respect.

Since, on the other hand, the great military neighbour of Russia has definitely adopted the repeating rifle, known as the 1871-84 pattern, it becomes a matter of interest to inquire what this rifle is, what the tactical consequences of its adoption will be, and what reasons, other than purely financial ones, the Russians can adduce in support of their conservatism.

It may be said that the new German rifle¹ is essentially a cumbrous arm, as anyone can judge for himself by inspecting the pattern at the Royal United Service Institution, and, although no parts of the old rifle can be used in its manufacture, the new weapon is still essentially the 1871 rifle—neither the ballistic virtues nor the weight of the ammunition being changed: the arm being merely modified in a few details and provided with a magazine. The infantry field exercise book has been very slightly altered to suit the new arm, and the old regulation, namely, that “in all volleys, more importance must be attached to tranquillity and coolness than to rapidity of fire,” is maintained in all its force, being, in fact, interpolated after the new instructions on the use of the magazine, and so acting as a counterpoise to the new tendencies.

Fresh instructions for the training of the battalion in Germany codify all that can be said in favour of the repeater. “The magazine arm,” say these instructors, “gives the soldier a continual reserve of ammunition, and, thanks to this, he can be always ready to deliver his fire. This reserve can be always assured, provided that a discreet and judicious use be made of it, and that all occasions for renewing it are profited by. The firer must never forget that the new arm increases the need for the most absolute fire discipline, and that it is destined to produce not a superficially accelerated but a more efficacious fire. Officers and non-commissioned officers will, therefore, be careful that the magazine store is carefully husbanded, and only emptied at the decisive moment. At long and medium ranges fire round by round is enough. As a general principle the repeating action will only be employed at the very shortest distances. It is only in exceptional cases that it can be useful between 300 and 800 yards, to profit by the momentary apparition of good

¹ For a description and plate, see the “*Revue Militaire de l'Etranger*,” 15th March, 1887.

marks, which for tactical reasons it may be desired to cover with a violent fire."

Now, it is perfectly well known that the fundamental principle of German tactics is to seek out the decision by a vigorous offensive. The weakest portion of the Army begins the action at those medium ranges where fire is efficacious, and maintains the frontal or so-called demonstration-fight. Meanwhile the main body or reserves are collected in compact order, all irregularities of ground being profited by, so that these masses can approach closely the decisive and effective point with as little loss as possible.

Neither in principle nor in application has this general method been changed.

It may be admitted at once that, viewing the question of repeating rifles in the abstract, if an infantry makes up its mind that it gains a real superiority by adopting the magazine, it would be folly to deprive it of such a great moral leverage in action. But viewing the 1871-81 rifle, the adopted child of the German Army, it has been seen that it is only designed to utilize its fire for the final destructive lead-pumping process preceding the assault, and placing ourselves on the Russian standpoint, it is necessary to ask whether the expectations formed of the arm will be realized, and if so, whether they must therefore be decisive.

Some heretics there are who doubt this, even in Germany, for a writer in the *Militär Wochenblatt*¹ rather slightly remarks that "if the new arm gives a reserve of fire at the opportune moment it is far from guaranteeing this reserve in a sure fashion."

The adoption of what are euphemistically called *quick-loading* instead of *quick-firing* rifles in order to lay stress on a distinction with a difference, is, in reality, opposed to all the best traditions of German fire discipline, and it is not surprising that the opponents of the step are numerous, nor again that Russia stands unconvinced.

It is very right, no doubt, to say that the magazine is only to be used at the "opportune" or "decisive" moment, but when the ranks are filled with reservists who have lost the habit of fire discipline, the tendency will probably be to empty the magazine before the time, for under the present conditions of the infantry combat one cannot expect men to always judge for themselves when the "psychological moment" has arrived, nor can they always have at hand more intelligent leaders to inform them. The instinct of self-preservation seizes the most impressionable men, while the rest are not slow to make the best of occasions that will perpetually present themselves for making use of their new weapon. In short, what the Russians expect, what hostile German opinion expects, is that there will be a great waste of ammunition, and that the magazine will be emptied before the right moment. To preach peace education and to practise fire discipline is, no doubt, something, but will not this discipline pale before the irresistible emotions of the fight?

Admitting, however, that men armed with repeating rifles arrive within 300 yards of a position with magazines full, and begin a violent fire, will this be surely decisive? Hostile opinion says not; first, because the value of fire diminishes with its intensity; and next, because the reserves of the enemy are partly sheltered from this leaden hail, and remain more or less at disposal for the crisis. In fact, the superiority of numbers at the decisive point will always have to be acquired, as before, to dislodge a determined foe. Even on the defensive the new arm will not give an incontestable advantage: before Plevna the 64th Russian regiment captured two redoubts, which were held by Turks armed with Winchester repeating rifles, although

¹ 2nd "Beiheft," 1888, p. 36 *et seq.*

the advance was made from 2,000 paces in very vulnerable formations, and the attack itself took place from 500 paces.

The new armament of the German infantry will hardly produce a tactical revolution: its employment will increase the need for a strict fire discipline, and will oblige reserves to be husbanded more carefully for the decisive moment. But the original deployment and covering of the troops, the advance of the first troops and of the reserves, all the tactical methods in fact which were modified, not to say profoundly altered, by the introduction of the breech-loader, remain the same to-day as yesterday. The adoption of this rifle can only be regarded as a transitory measure until a good small calibre repeating rifle is invented.

With all these considerations held in view, the position which the Russians have taken up, even if it might not be expected from the general tendency of opinion in that country, can be readily understood. There remains then, apart from the question of solid reasoning, the question of sentiment, of feeling among soldiers that they are less well armed than their foes. If this feeling exists, it has been already noticed that it would be preferable to arm them with pitchforks rather than abandon the advantage conferred by the feeling of moral superiority. But the Russians quite understand this, and have tried to shape opinion to accord with their conservative decisions.

Thus, General von Roop, holding the important command of the Odessa Military District, addressed an order to his troops concerning the question of repeating rifles.

"Most of the armies of Europe," remarks the General, "have latterly begun to adopt the repeating rifle in order to increase the rapidity of fire of their infantry as much as possible. The news of this transformation, when propagated in the ranks of our Army, may induce men to think that the repeating arm is superior to the ordinary rifle. Consequently, I have made it my duty to have the question studied by specialists, and I now bring forward their conclusions for the information of the troops placed under my command.

"Comparisons made between the two systems have enabled us to conclude that the types of repeating rifles at present invented and partially adopted by foreign armies have very considerable defects. Loaded with all their cartridges, these weapons become much heavier than the ordinary rifle; the mechanism of the former is also more complicated and more easily disorganized than that of the latter. Passing from repeating fire to fire round by round, necessarily means loss of time. After prolonged fire with the magazine the rifle barrel grows hot, sometimes almost red-hot, and the vast amount of smoke prevents any exact aim being given to the fire. Lastly, the centre of gravity of the arm changes as the magazine is emptied, which does harm to the precision of the firing. There is every reason to seriously doubt whether the sole advantage of rapidity of fire makes up for all these inconveniences and defects. Is it not better to wait patiently for a probable perfection of the repeating rifle instead of condemning an arm that has shown its powers many a time in action?

"Even those who are prejudiced in favour of the new system recognize quite well that in an encounter between two adversaries, one being armed with any known pattern of the repeater, and the other with the ordinary rifle, victory will not actually depend upon the quality of the rifle in one system or the other, but rather upon the ability displayed in the use of the arm, upon superiority of instruction, and first and foremost, upon the worth of the troops. The order addressed to the Guard Corps, on the 28th August, 1877, before the last campaign, contained the following passage:—"It is neither by superiority of numbers nor of armament, nor by the power of defensive positions, that our valiant leaders in the past have rendered their names

immortal in their victories over the foe, but rather by their spirit of initiative, by their ability in directing movements, and by the valour of the soldiers.' These words have been justified on the battlefield. Let us, therefore, become impressed with the conviction that the time has not yet arrived to change the armament of our forces, and that while we retain the historic valour of our troops, we shall have nothing to fear with our magnificent Berdans, no matter what arm our enemies may have in their hands."

DRAGOMIROV'S MANUALS.

In his introduction to the Company Manual General Dragomirov clearly points out to what extent his writings can supplement the regulations. These latter, he says, together with instructions which have equal weight, only determine the march of instruction with regard to each separate object of military education, but the general fusion of this education and of these various elements, demanded in their practical application, is not and cannot be the aim of any regulation. He then demands that the spirit and not the letter of the Manual should be followed, goodwill and personal intelligence being preferable to plagiarism. The thing is worth the trouble, he adds, for the fate of thousands of people, victory or defeat, glory or dishonour, depend upon the more or less judicious manner in which the education of troops is practised. Success of instruction depends upon the character of the education of the soldier; that is to say, upon the extent to which he is penetrated by the conviction of his duty: it is education that dominates everything.

It is not practicable to give in full the instructions and suggestions contained in these Manuals; but their spirit can be comprehended by reading a certain number of extracts from those paragraphs which appear to disclose most clearly the system pursued and the means recommended for ensuring success.

EDUCATION.

1. "*The company chief is responsible that a good direction be given to the education of the men and all the cadres of his company:*" he has the duty of making sure that each man knows his work, and of taking measures to make good any deficiencies he may discover. An unfortunate habit, perpetuated from the time when the Officer was still 'your excellency' for the soldiers, places the company chiefs upon a misunderstood footing of equality with their subalterns, making it difficult for them to complete and verify the instruction of these young gentlemen. It is high time to give up these errors. True comradeship, worthy of men who respect themselves, is not exclusive of the obligations of the Service, on the contrary it presupposes them. He who has the authority and the duty to teach me the business on which my future depends, and who draws back from the task by a false feeling of delicacy, is no true comrade. Again, comradeship is so far from being incompatible with the exigencies of the Service that, in fact, it emanates directly from it. In reality it is familiarity that is inadmissible in the Service, because it is contrary to the interests of the Service."

2. "When it is a question of the private soldier we must remember before all else that during the fight it is not by virtue of the training we give him that his legs carry him on with more or less intrepidity, and that his arms work in a more or less sensible manner. Here everything depends in the first instance upon the way the heart beats and the head reasons. It is, therefore, head and heart we must bear in mind before all else when we think of making soldiers. The time when it was imagined that by addressing ourselves to legs and

¹ The italics are in all cases from the text.

arms one also addressed head and heart is past never to return. No doubt many people do not think so, but this is inevitable when old customs are dethroned by new ideas. But even these people become apostates little by little.

"Willingly or unwillingly rifled arms compel them day by day and by slow degrees to accept many ideas which appear to them revolting heresies before.

"It is incontestable that through legs and arms one can manage to drive a little something into the head, but to begin with this something is not enough for a man who is called on to give his life for his country, and in the second place very often we achieve the most unexpected results, directly opposed to those we have in view. It is, therefore, a great mistake in a company chief to imagine that by teaching his men bayonet work, musketry, evolutions, and use of ground, that he has done all that is necessary, and that the rest will come in the ordinary course. One may be ever so competent at bayonet practice and musketry without having any ideas of military duty. Seek, then, before all else to engraft in the soldier's heart the sense of military duty, develop in his head ideas of honour and honesty, strengthen and elevate his heart, and it is the rest that will come naturally."

3. "Our task has now become very difficult; success is only possible under the express conditions: (1) that the work is regulated conformably with the ends in view; (2) that a method is adopted capable of giving as solid and quick returns as possible."

"The first point demands (1) that a rationally elaborated plan shall guide all instruction, for if not something may be omitted or perhaps time may be given up to different branches of the instruction out of proportion to the relative importance of each; (2) that the company chief thoroughly understands the part of instruction which devolves upon him, and that which is the business of subaltern Officers, non-commissioned officers, and instructors."

"The programme is now regulated for all the army under official rules, but it is not waste of time to lay stress upon this point."

4. "It is known that the preparation of troops has two distinct branches, education and instruction. *It is the company chief who must undertake the task of confirming recruits in the first of these branches, that is to say, in the obligations rather than the duties of execution.* The ceremonial can be taught by instructors, the company chief verifying the work of his assistants."

5. "The method can be formulated in two words: *prefer ocular demonstration to verbal explanation in all cases where it is possible.* It is better to show once than explain twenty times."

6. "Never forget that you address common soldiers, and that it is necessary (1) never to give them more than one or two ideas at a time, and to require that they repeat at once what is told them; no discussions with the soldier; (2) avoid words only employed in books; (3) teach only what is indispensable; (3) seize every occasion for ocular demonstration and use as few words as possible."

8. "The recruit joins his regiment disposed to obedience, or what comes to the same thing—to execute orders received. For from his infancy he has obeyed the head of the family and, when a man, the representatives of authority who are in immediate contact with the peasant. This faculty has, therefore, only to be specialised."

9. "In order to carry out military duties we require *punctuality and promptitude* in the execution of orders, based upon a *boundless devotion*, and sustained by the *active working of the intelligence*. All these conditions are indispensable in war, since success in this depends upon the unanimous action of *masses* in accordance with the will of *a single individual*.

"We must not forget that our mission is to kill by getting killed. This is a point upon which we must never shut our eyes. To make war and kill without being killed is a chimera; to make war and get killed without killing is stupidity. We must then know how to kill while being ready to perish. The man who vows himself to death is terrible. Nothing will stop him from reaching his goal unless a foolish bullet mows him down on his way; but if one can kill a man one can't kill a whole company. In consequence the soldier must make up his mind not to fear death while learning the art of selling his skin dearly. For this devotion and intelligence are required; to aid the latter it is necessary to give the soldier as well as the Officer a well-reasoned and studied instruction in all that constitutes their speciality. Self-denial is strengthened in a soldier chiefly by education, while the development of intelligence in the sense of warlike use is mainly acquired by instruction.

"Instruction will contribute so much the more to confirm the results of education as the exigencies of this instruction are in harmony with the ends in view."

10. "It must not be thought that severe punishments can contribute to accelerate and perfect the soldier's education. Nothing of the kind. The best system of education is to be always inflexible and unchangeable in the demands made of the soldier from the first. Let him know that what is told him once has to be done always; that certain acts will infallibly produce certain punishments. In a word, let him see that his duties are the same yesterday, to-day, and to-morrow. Then he will train himself to the faithful execution of his duties, which will become for him mere routine, that is to say second nature."

The next question General Dragomirov discusses is that of the ordinary routine of service. The bases of this, he says, rest on four precepts: (1) Obey orders; (2) never absent yourself without leave; (3) if anything out of the way happens report to your immediate superior; (4) take care of your arms, body, and clothing. A soldier who thoroughly understands these precepts is a man on whom one can count.

The General then lays down the need for reciprocity in paying attention to marks of respect, and justly exclaims against the snobbishness of some Officers who fail to return salutes, showing thereby that they are less well brought up than their men, and giving a lamentable example of neglect of regulations. When, he adds, one does not execute one's obligations, one has no right of impressing this duty upon others. The General is very severe upon those who follow the letter instead of the spirit of regulations, and recounts the story of the attempted assassination of General Loris-Melikov, who himself seized the would-be malefactor, while the gendarme on duty stood by at attention in a rigid attitude with his hand to his cap. He says that it is the company chief alone who can inculcate the true sense of duty to his men; it is no use, he says, to confide this matter to the non-commissioned officers of the company; with the actual duration of colour service it is quite enough to expect the latter to carry out their own duties and supervise the way in which the rank and file carry out theirs. No doubt, he adds, there are exceptions, but we are not concerned with exceptions. By passing all the contingents through his hands the captain gets to know his men thoroughly and to be known by them, a condition of the utmost importance in transforming the company from a mere agglomeration of men to a compact organism whose head is the same company chief.

Turning next to guard duties General Dragomirov points out the enormous importance of this first step in the soldier's responsible service.

"The life and death of his fellow-beings are now left to the discernment of the sentry, without any guide at his elbow to direct him; to fulfil this most difficult and thorny task all the best qualities are required. Every

recruit without exception must be thoroughly trained to this duty, for if it is confided at a critical moment to a man who has not been thoroughly trained the greatest misfortunes may result."

The General then advises that men should be posted, and that after their duties have been fully explained to them efforts should be made to get the countersign from them, to get them to give up their rifles, &c. If they fail to fall into the trap they should be given some money to show appreciation of their cleverness; if they accept this they should be told that it is shameful to accept money when on sentry. Again, men must refuse to be relieved except by the corporal who has placed them, and attempts must be made to entrap them again in this matter. Once a man has been taken in and given a good talking to, says the General, he will not err again.

INDIVIDUAL INSTRUCTION.

The General strongly advises musketry and bayonet practice before manual exercises. He recommends the well-known parapets, palisades, and ditches of the German out-door gymnastic drill, and strongly urges the necessity for plenty of gymnastics in general. Not less does he press the importance of route-marches in full marching order, and says that infantry can call itself a good marching body when it can cover stages of 30 kilometres for several days in succession, and only leave a few stragglers. To effect this, a rigorous progression in the increase of weight and distance is essential.

20. "Bayonet practice. To accustom men to make skilful use of the bayonet in battle the following must be frequently practised: In exercises against dummy figures great attention must be paid to the vigour and precision of the thrusts; that is to say, that less attention must be paid to perfection of parade movements and more to vigorous blows well aimed at the part of the dummy designated. Bayonet dummies are cheaply made with straw and wool, &c. Men must thrust with the bayonet as they run without lessening the least in the world their pace at the moment they thrust. This is the only means of accustoming them to withdraw the bayonet promptly after a blow. As a good training for the eye it is useful to teach men to run through dummies which are waved about at the end of a rope."

"In bayonet practice of two men together the chief thing is to develop in the two adversaries *the ardour and animation of the fight to their utmost limit*, and consequently not attach too much importance to the pedantic execution of the rule 'Parry first and then thrust'! This rule is chiefly good for men of calm temperament and who possess great skill in the art which cannot be attained in the instruction of the mass. Ordinary people will only succeed in giving sound blows in battle if they have been well taught not to pay much attention to their own defence. To give the right sort of thrust the weapon must be wielded with both hands, and must never be quite let go with the left hand when a blow is delivered with the right. At the same time it must be explained to the men that the artifices employed by men in practice pitted one against another are out of place on the battlefield in the shock of masses where a straightforward thrust in good earnest and with both hands is what we want. This is why it is a useful practice to draw up men in single rank opposite a row of dummies, to make them charge at a good fast run from the distance the assault is usually given, and then to thrust straight to their front up to the hilt. There are no methodical rules to be positively prescribed for this apprenticeship. To introduce rules for this kind of business would be to prove that the whole essence of the affair is misunderstood. But special attention must be paid to the *prompt withdrawal of the bayonet immediately the blow is delivered.*"

The General next urges the necessity of acquiring a firm, free step and bearing before any dressing is sought for, and in connection with this mentions a saying of Souvorov's at a time when the pace was reduced from an archine to three-quarters. "The pace has been reduced by a quarter, so that when we march against the enemy we only do our 30 verstes in place of 40."

In the next two paragraphs we find the whole essence of the fire discipline inculcated by the national school, and the ideas formulated on this head are worth attention.

23. "Ever since breech-loaders were adopted it has become indispensable for all people to become convinced of the truth of the axiom 'Fire slowly but surely.' Starting from this one should make it the rule in peace to restrict as much as possible those practices most capable of developing in the soldier the habit of aiming carelessly and firing hastily, allowing him to gain the belief that he has the right of freely disposing of his fire, not only in open order, but even in close order too. Consequently it is necessary (1) to avoid blank firing, which aids in agitating the soldier, and makes him aim carelessly and fire hastily. (2) To keep the control of fire in the hands of the proper chiefs, not only in close order, but also partially in open order. The march of instruction should contribute to engraft in the soldier the conviction that only cowards are in a hurry to fire, and that a soldier who respects himself should always wait for the word of command. A man who fires without word of command in close order is guilty of the crime of disobedience to his superior. In open order the chiefs, whether Officers, non-commissioned officers, or chosen men, do not always determine the moment for firing, *but they should guide the skirmishers in their selection of a mark, and order them to cease fire whenever the advantages that may be gained by fire will not be likely to correspond to the probable consumption of ammunition.*"

24. "Husband your cartridges. Always fire by volleys in closed ranks, and the same for choice in open order, especially if the distance is over 800 paces. Volleys are better than individual fire. Fire remains under control; the smoke does not interfere with the aim, the point of impact of the bullets can be noticed. Firing must take place tranquilly, against a clearly defined mark, and be executed with the greatest possible care. Rapid firing obtained at the expense of care given to aiming increases the expenditure of ammunition, and diminishes the chances of hitting.

"Chiefs of squads, instead of watching men to see that the sights are altered, that firing is orderly, that all words of command are carried out, and that warnings are paid attention to, are often seized with an unreasoning agitation, and cause a lot of powder to be wasted at absurd marks. These must be taught to do their duty quietly and sensibly, and without shouting. It is the first shots that produce the greatest impression upon the adversary. This is the reason that they should be well aimed, for badly-aimed shots only embolden a foe, since they teach him to believe that our fire is worth little."

25. "At all distances it is best to aim at the foot of the object; a ricochet is worth more than a shot which flies overhead. *On the field of battle the following must be carefully avoided:* (1.) Volley firing with several sights, for the dispersion of the bullets is quite enough even when all men take the same elevation. (2.) Firing with a named number of rounds as well as rapid fire, since both one and the other easily degenerate into irregular firing, which is very difficult to stop."

In some further remarks upon this question, General Dragomirov, after showing that it is not worth the trouble to fire at single men over 300 paces, states that volley firing at long distances will be rare, and generally speaking, that an efficacious or well-aimed fire cannot be rapid. Again, he says, fire must not be rapid, because it is only by controlling the firing that men can be kept in hand, and be prevented from exciting themselves to such a state

of fever that the shooting becomes wild. This, he adds, is why we always come back to the aphorism "Fire slowly but surely," and it is a mistake to call our present weapon a quick-firing arm, it is only a *quick-loading* arm.

"The experience of the last war inspired a number of soldiers with the conviction that volley firing and the raining of lead upon certain zones might be of real advantage even at the longest distances. The Turks fired without taking aim: there was practically no limit to their supply of ammunition, since they rarely attacked, and did nothing but pass their time in positions prepared beforehand, where boxes of cartridges were freely distributed. If we also remember the absence of instruction in musketry of the majority, this will be enough to make it clear that their fire was nothing more than a disorderly wasting of ammunition, and that it would be a queer notion to make this practice an object of instruction when it comes so naturally to any army formed of semi-trained levies. But a disciplined and instructed army must not have recourse to this, for in such an army the soldier should be imbued with the conviction that efficiency of fire depends upon the accuracy, and not upon the rate of firing, and that a round fired on the off chance at a long distance is a round lost for close quarters. It is true that closed bodies may now and again appear, to be saluted with distant volleys, but this fire is rather the business of the artillery. If, again, the enemy's reserve show up 1,500 to 2,000 paces distant, it means that his first line is face to face with us. Our infantry in the fighting line will have enough to do without troubling itself about the reserves. Long distance lead pumping is rational if the supply of ammunition is quite inexhaustible, and if the army making use of it is so ignorant that no other kind of fire can be employed. But as for seeing in this kind of shooting a new opening for fire tactics and infantry, such an idea is altogether absurd and inadmissible."

INSTRUCTION OF THE COMPANY.

"The well-reasoned preparation of the company forms the base of all the military education of the infantry. If the companies are good the battalion will be good too. The programme of instruction of the company is determined by the division of the fight into two periods, that of fire or preparation, and that of the bayonet or decision; the latter shows which of the two adversaries is worthy of victory. Company instruction thus falls into three branches—

"(1.) Application of marches and formations in all kinds of ground without firing.

"(2.) The same with ball cartridge.

"(3.) Preparation of the company for the bayonet attack."

28. "*All these exercises must be conducted in a manner to impress upon the soldier and the chief the knowledge of what each will have to do in battle, and at the same time to increase the self-confidence of all, so that none of the vicissitudes of the fight may surprise either soldier or chief, or take them at a disadvantage.*"

Quoting Souvorov's example, General Dragomirov advises Officers to have frequent conversations with their men on subjects connected with their profession. "Gentlemen," he says, "do not refuse to enter into explanations with your men about your common duties in battle. Great actions and the art of getting out of the most difficult situations are only possible for him who knows the soldier, and whom on his side the soldier knows and understands."

General Dragomirov next shows at length how to apply the regulations for company drill. In this he takes for his argument Napoleon's advice, that one should constantly think what one would do if the enemy were to appear suddenly in front, rear, or on the flanks, and with any arm of the Service.

Taking a number of examples, the General then shows how to *apply the regulations*. These examples need not be discussed; they are intended to train Officers and men to meet calmly the most critical dangers, and to overcome the most unexpected difficulties.

Among various pieces of advice it may be mentioned that against cavalry the General recommends formations which bring as many rifles as possible to bear, while only exposing immediately to the hostile blow the smallest possible number of men. Cavalry will always, he believes, pass through the intervals, if intervals are left for them. He remarks upon the great importance of reducing to a minimum the time of all formations against cavalry, and of getting men in hand, perfectly calm and steady before the blow falls, *even at the sacrifice of the volley.*

TACTICAL EXERCISES.

The General recommends that the time wasted on the march to and from manœuvres, musketry, &c., should be better employed.

In his observations on manœuvring within the zone of fire, he has much to say of interest. "It is necessary," he says, "to show *where one is going*, and *why one is going*, and only secondly *when*, and *in what order one is going*. The two first objects, directive and objective, can only be expressed by means of orders: these must be clear, concise, and energetic. It is a great art to give these orders, and only acquired by long practice. Gentlemen, give your whole attention to this art, and do not fall back on drum or bugle; neither of these are possible on the field of battle."

67. "When the enemy is in one's front it is necessary, before everything else, and always, to think how one can take up the position most calculated to do him harm. It is only after realizing this condition that one may think of covering oneself."

68. "Starting from this, a rifleman, taken singly, is well posted (1) if between himself and the enemy there is no object concealing the position of the latter; (2) if there is a rest for the rifle; and (3) if there is more or less protection at the same time."

In discussing the duties of the firing line the General shows that its chief duties are to learn: (1) how to outflank the enemy's line; (2) how to reinforce part or all its line; (3) how to resist a cavalry attack; and (4) how to make the final assault.

What the bullet cannot do, he says, the bayonet will; and this is the reason why, when once an attack has been launched, it must be carried through to the end, that is to say to blood. No enemy lives who can stand firm in front of soldiers with a taste for the bayonet, and able to use it. Only we must not hammer the enemy in a disorderly and dispersed mob, but by masses; thrust with a will, and disengage comrades in danger.

Short rushes of the company supports are condemned. In open ground it is recommended to get what cover is available, and then advance by 300 to 400 paces at a time. The General considers that the firing line has a light job to advance compared with the march of the closed bodies in rear.

One of the peculiarities of the training of Russian infantry and cavalry is what we may call their traversing attacks—a system of field exercise only partially applied to the German and Austrian cavalry, but unknown elsewhere. The principle is that all troops attacking should be made to come to close quarters, whether infantry against infantry, cavalry against cavalry, or infantry against cavalry, and by passing through each other's ranks, become accustomed to throw themselves vigorously upon a hostile body of troops. In this action the pace has to be rapid when the moment for closing arrives; as a rule, when this is practised in the company, half awaits the attack, the

other half rapidly advances to the attack up to within 250 or 300 paces; here a halt is made to fire volleys, and the advance is continued; at about 100 paces the drums begin to beat the charge, at 50 the assailants charge bayonets, and at 20 or 30 raise a shout, and throw themselves through the intervals of their opponent's ranks; at the moment of contact arms are sloped. The defenders are advised to send a few volleys when the enemy is 300 paces off, and then to await the moment when he is 50 paces off, "so that all may pass with calm." Order has to be immediately re-established. When cavalry attacks infantry, and *vice versa*, it is believed that good is done by accustoming men to the impression produced by a line of horsemen, while it teaches the horses to affront infantry fire without fear.

General Dragomirov says that no peace practice is better than these forms of exercise to complete the education of the infantry in the matter of calmness, firmness, intrepidity, and determination. When opposed to cavalry the files are extended at 5 paces interval. Often the lines are halted in front of one another. The men "make much of the horses," and the drums and bugles sound vigorously, or the manual exercise is gone through. In this advance, as in all advances, men are told to march, not "by their right, left, or centre," but "by the foremost men." It is further believed that this procedure trains infantry to estimate the moment when volleys against cavalry should be begun, and the latter when they should begin the charge. Accidents no doubt occasionally may happen, says the General, but they will be very rare, and troops trained in this way will never be taken at a disadvantage in the fight. He quotes the fight at Lecco, in 1799, where French cavalry penetrated a Russian battalion formed in column, but never came out again; this is what we get by our traversing attacks, he says.

In the preparation of targets for field firing it is recommended to distribute the dummies at one spot wide apart, and at another close together, in order to train the subordinate leaders to point at the most favourable targets; trial shots, to determine the distance, are also advised. Field firing confirms men in the habit of seeking a support for their rifle, a matter that must be left to their personal sagacity: as for single men taking cover, this is of less importance than that they should get into a position where they can use their arm with effect.

In the attack during field firing, marks representing cavalry are placed on the flanks or in other positions, hidden at the beginning from the attack, and squads are trained to run together and fire rapidly at these as they disclose themselves: again, turning movements of the defenders are shown by lines of dummies, concealed up to a late moment, and the assailants are forced to throw forward fresh troops to oppose these. "This," says Dragomirov, "is a useful means for training troops to oppose readily movements of this nature in the field."

There is nothing very novel in this exercise, since the system was first tried at Spandau many years ago, and has been generally adopted in Germany; but it is a proof of the careful attention bestowed upon infantry training in Russia.

When the company is being trained for defensive action, it is particularly laid down that it must be carefully impressed on all that *one must defend oneself by attacking*. A series of sound practical rules follows, and it is particularly urged that superiors must not usurp the functions of their subordinates, but must rectify errors through the responsible subordinates. More particularly it is recommended that the flanks must be carefully guarded, since it is the surprise rather than the fact of a flank attack that is dangerous: it is the bayonet and not the relative position of the two adversaries that decides the victory.

126. "The most efficient stimulant to render Officers clear headed is to

read with intelligence what has been written by men who have had a finger in the pie (Souvorov, Bugeaud). For Officers devoted to their profession, this advice, I trust, will not be lost."

INSTRUCTION OF THE BATTALION.

In his Battalion Manual the General lays stress, at the outset, upon his opinion that regulations are merely a collection of typical and fundamental formations only, and that it is allowable and even obligatory to modify them in application, according to the *ground*, the *occasion*, and the *enemy*.

After discussing the duties of the battalion chief, which, he says, are those rather of a controller than a Commander, the General points out that the *role* of the company in the battalion is like that of a rifleman in a squad: in close order the independence disappears, when extended, all is left to the individual initiative; but comrades must, in all cases, be closely supported, whether they belong to the same or other battalions.

16. "The *role* of the battalion, and the companies in action, is explained as follows:—(1.) The battalion chief gives notice of the aim to which all efforts must be directed: each company chief must give his aid to the general success by all possible means, without being distracted by partial and seductive secondary objects. (2.) The battalion chief fixes the general order of battle of his command, that is to say, number of companies in the firing line and reserve: this order is obligatory, and every temporary infraction of this order must cease as soon as a change of circumstances allows."

Remark.—"It was noticed in the last war that the companies in second line, or battalion reserves, joined the firing line without orders. This must never be allowed, for in this way men get out of hand, the direction of the fight becomes impossible, and success depends on chance. This premature intrusion upon the fighting line is explained by the instinct which impels men to give up inaction, so difficult to bear under fire; but true discipline consists precisely in not allowing men to be carried away by their instincts, and in obliging them to act as success demands and as they are ordered. This premature advance into the fighting line is like the action of a nervous man, who fires away a round without a moment's thought whether it has the least chance of hitting anything, or of a chief deficient in coolness, who launches his troops to an assault without noticing that the distance from the objective is still too great."

16. "If the battalion chief gives the signal or order to attack, *every man of the battalion must march to the assault*, unless, of course, the chief orders a fraction to halt in a favourable position to aid success by fire. This being settled: (1) the company chief is fully master of the form of attack for his individual company; (2) he must not trouble his head to preserve any regulation distance between the front line and the reserve; if he sees that the losses will be less by closing up with, or even joining, the advanced line, *he may and must allow this advance*. But he must never stay behind, even to spare his company, since he must always be able to support the advance before the enemy's reserves can attack it; it is this condition that determines the maximum distance that the reserve can remain in rear. (3.) The company chief must not attempt to seek for a pedantic alignment with the companies in second line with him; (4) he is free to aid the fighting line as circumstances demand, as well as comrades right and left, and whether by fire or bayonet."

In changes of front the General exclaims against the "half right," and so forth, and says that all changes of front should take place with respect to some visible object; in the field, he says, direction does not depend upon the angle of the change of front; but the latter does depend on the direction.

Examples then follow as for the company, to impress upon all the conviction that they must be ready to confront every emergency, however different from anything laid down by the regulations; in all cases it is urged that the object of the movement must be briefly pointed out to the men, since many disasters occur in action from the ignorance of subordinates of the object in view. The majority of General Dragomirov's examples demand some formation in *échelon*, of which the writer seems fond.

The following paragraph shows clearly in what manner the General and his school regard the question of the attack.

28. "The company has become a tactical unit, which must, in certain cases only, be lost to view in the mass of the larger battalion unit. This evolution is chiefly due to the perfection of firearms. The increased accuracy and range have made it essential to find less vulnerable formations. It is also this fact which has equally modified the *role* of the chain in the contemporary attack formation. Formerly the chief duty of the chain, both in attack and defence, was to cover the battalion up to the moment of the shock; but now the capital duty of the defenders is to maintain the position of their firing line; consequently, in the first part of the action all the business has to be done by the chain, and the battalion is nothing more than a support to the chain. The necessity of supporting the chain on one hand, and on the other of avoiding losses, has led to the battalion being broken up, so as to form sections, in each of which the chain has an immediate support or a reserve, while companies are enabled to individually utilize cover, which, from its dimensions, would be lost to the battalion. This disposition is all the easier, since, thanks to the improvement in arms, the companies continue to mutually assist one another by their fire, thus preserving their union, in spite of the comparatively considerable distances that may separate them."

The General then enumerates all the many advantages of the company-formation, and finally shows how, by holding a long slender line, a weak force may create the required impression of great strength. "But," he says, "the enemy may play us the same game, and how shall we know the truth? There is only one way—the bayonet."

"Fire tells us little; ten battalions can skirmish with one for whole hours without disclosing anything, while the bayonet will disclose the truth in a moment. Before it fall in a moment all shams. Of course one may run one's head against superior force, and receive a check, but, at all events, in this case, one knows what is in one's front, and if one has not been able to work for oneself, this will assist one's comrades, and, consequently, the object is gained. Between two situations, that of allowing the enemy to show one man for ten, and that of seizing the truth, even at the price of a drubbing, it is the latter that is always the most honourable and the most useful. One cannot always win, and there is no dishonour in paying the piper when one gets hammered by superior forces, provided that one has cleared up the situation for the detachment of which the battalion forms part. I repeat it again, one must always remember in war that certain information can only be gained for the most part by taking an occasional thrashing."

In defensive positions Russian troops are taught to fire slowly and accurately; to give a last volley when the assailant reaches 60 paces distance, and then attack him with the bayonet.

47. "Everybody knows that infantry effectives in peace are much below the number in war; the difference between commanding a company of twenty-four files, and another of, say eighty, is very great. The same holds good for the other subdivisions of the company."

"For this reason the battalion chief must cause a number of company manœuvres to be executed with numbers representing the war footing."

The General advises that troops should be practised in advancing through

woods and undergrowth, and the greatest attention be paid to the general alignment; it is not a very subtle manœuvre, he says, but it is eminently useful, and he urges all Officers to have compasses, since these are very often the only means for keeping the right direction.

Among general recommendations may be mentioned one that occurs several times, namely, that as a rule, infantry near a battery—the latter meaning any number of guns united for a special purpose—have the duty of guarding the battery and of watching its unprotected flank. For this purpose a company is advised to take up the duty at once, if it appears necessary, without waiting to consult the battalion chief.

General Dragomirov is a great preacher of comradeship in the fight: all depends upon this in war, he says: with it nothing is impossible, without it even easy matters become impossible.

62. "The greatest attention must be paid to the difference between the signal to advance and that to attack. The first may carry us on for miles, but the second is the warning of a hand-to-hand death struggle. This is a reason for not abusing it; drums must beat rarely, and never begin at a greater distance than 100 yards from the point of attack. In ordinary drill it is better not to use them at all; this is the best way to husband the impression they are meant to produce."

"The attack," writes another Russian authority, General Levitzky, "is a close and impetuous bayonet charge, and differs from the advance in that, once begun, troops move rapidly without disguising their intention, without changing formation, without firing, and try to join issue with the bayonet as soon as possible. For the attack to succeed there must be a settled decision to close with the enemy: the men must be kept in good wind, taught to act by a sudden and prompt onslaught, and lastly, close up at the moment of shock. The dash and excitement in the attack creates a moral crisis, which does not last, but passes quickly, and consequently the attack must be promptly and rapidly terminated; a rapid advance, when prolonged, exhausts men and breaks the ranks."

On the defensive, the advice given by General Dragomirov is, that a bold assailant will not be discouraged by one or two failures, and that it must not be imagined that he will be repulsed for good and all in a moment. Hence a definite resumption of the offensive, after having repulsed an attack, signifies that one renounces the advantages of one's position.

Concerning field days, flying columns, and exercises of minor tactics, there are some very apposite remarks: such manœuvres are good practice, and develop initiative, but they *do nothing for will*, and may, indeed, have a pernicious influence upon it unless correctives are introduced. The General fears men may lose courage by being perpetually told that such and such an attack is dangerous, and that nothing remains but retreat if a flank is turned, &c. "What a wide field," he says, "on which to upset and overturn those moral bases upon which rest the manifestation of will during the battle—unlimited audacity, rapid decision, energy, determination. No verdict in the decision of the affair must ever be given; where there is no fight there are no victors."

74. "In 'general ideas' for manœuvres all finessing must be avoided, the great thing is to make them as simple as possible. It must be remembered that the objects of a fight, be they never so variable, can be attained by two means only, either by attack or by defence; consequently, in view of battle, there are only two things to learn—to attack with determination, audacity, and skill, and to defend oneself in the same way."

"The detachment on the defensive and that of the attack must be of equal strength, for to fancy that the assailant must be necessarily superior in number, as the German 'manœuvrists' do, is contrary to reality, since in

real business one attacks and fights not only with equal forces, but often with smaller numbers; it is, in fact, to make manœuvres not an instruction, but a game of conquerors and conquered. It is to spread abroad a conviction that the offensive is only possible with superiority of numbers."

"Chiefs must not fear to make faults, for it is this fear which leads to unfortunate habits of hesitation and indecision. Faults must be calmly discussed, not as a reprimand, but as advice to do better."

The General recommends, as a variation in manœuvres, that infantry be taught to get over ground quickly by holding on to the stirrup leathers of cavalry, or by mounting in rear of the trooper; this need not be a regular practice, he adds, but it is good to understand the method.

The outpost practice advised is as follows: "One company is posted overnight near another; each forms a large circle of double sentries some 25 to 50 paces apart. In the centre of the circles so formed a few stray objects, such as bayonets, cartridge-pouches, &c., are placed, and men are told off to try and creep into the circles during the night, and abstract the articles. Care must be taken that this exercise does not give rise to disputes, or its use will vanish; our object is to make use of what we learn against our enemies. Night duties, patrols, and patrol-ambushes are also recommended for increased vigilance."

In his conclusion to the "Battalion Manual," General Dragomirov remarks that "we live in a difficult time when many problems of destiny are being decided, problems which arise often unexpectedly. To solve such problems with success, a long peace preparation is required, together with hard labour, and many sacrifices. One does not know when the crisis will arise, and this is the reason that one should always be ready to face it with quiet mind and tranquil spirit, satisfied in conscience that one has neglected nothing to deserve victory."

"Officers!" he adds, "you must, first and foremost, know how to hold your men thoroughly under command, and this rather by force of will than by physical constraint; to so command them that they know no voice but yours; that in all difficult circumstances their eyes and thoughts turn instinctively towards you to ask what is to be done. Then, you will form with them a single body and a single soul. For this it is necessary that the soldiers *have faith* in you as a sure guide and true chief; then *they will love you*, and nothing will be impossible to our soldiers. This end will be gained by moral and intellectual superiority over men whose lives are confided to you on the field of battle. If in all situations they see in you a mentor who understands matters better and more than they do, if they see in you a man ready to be the first to do all you demand of them, they will follow you unconditionally and unhesitatingly wherever you may lead them, and they will get themselves killed rather than give up the job you have set them to do."

"Consider the soldier as a younger member of the great military family, and as an integral part of this family; do not forget the saying of Peter the Great that 'the name of soldier is a general and honourable title; that the highest chief and the last trooper are equally called soldier.' In the name of the family take care of the soldier, but do not spoil him; be attentive to his smallest needs (not for show, but for good); but chastise transgressors who dishonour the military fraternity with the inflexible arm of the law. Keep a firm hand. Learn to do your duty, and not argue about it; one does not beat the enemy by phrases."

"Serve as a model to the soldier in everything; he will then become the incarnation of punctuality when on duty, whether in sight or out of sight of his chiefs."

As for field fortifications, General Dragomirov says that in reality these

can be neither regular nor shapely on the battlefield, and that they all depend upon two leading principles: *Make the firing line at right angles to the direction you want to command most efficiently; see that the enemy is unable to enfilade this line.* "All fortification," says the General, "is contained in these two principles; no specialist will discover a third for you. Works of this kind must be limited to what is strictly necessary; they fatigue the men, and obstruct movement."

"All this," says the writer, "amounts to a good deal, and all the same it is not enough; the most complete and detailed instructions are liable to misconstruction, and present gaps; this is why it is impossible to limit oneself to the learning of instructions and regulations, and that it is indispensable to read, read, read, for choice the most detailed works of military history, and the narratives of men who not only have waged war, but have written about it. In particular, plunge deeply into the masterpieces of our immortal teachers, Souvorov and Bugeaud; it is only by impregnating your mind with their spirit that you will gain the art of talking simply to the soldier in a frank and comprehensible manner. But, whatever you read, and whoever is the author, accept nothing as an article of faith. Never give in to the idea that 'So-and-so says this, so it must be right,' but rather ask yourself, 'Why did he say it?' If you discover this 'why,' or if the author gives it to you by deductions, you may surrender, and his idea becomes yours, for you will have traversed the same road as the author in reaching your conclusions. But if you do not discover the 'why,' refuse to believe what the author says, even if it is Napoleon himself. Knowledge and capacity give self-confidence on the battlefield; confidence gives strength to decide rapidly without hesitation, and to execute impetuously without looking back."

In another work, General Dragomirov says in effect: Give me soldiers who don't care for their skins, and I will promise you good tactics. Man, man, always man—this is the first of all instruments for battle. Our modern theorists, he says, forget this too often, and too willingly; the soldier in battle is guided by two instincts, one of duty, the other of self-preservation, the first of these is represented by the bayonet, and the second by the bullet. But to-day one hears nothing spoken of but the progress of mechanics, and the murderous effect of modern weapons. Science in a *pickelhaube* has taken possession of the field of battle, and all who do not prostrate themselves before this idol of the day are reactionaries, narrow-spirited, and behind the age. But all these new incarnations of the god of War only end by killing people, which is an art that dates from Cain, and with all your science and invention you can't kill more than once. It is not those who know how to kill, but those who know how to be killed that serve us in a crisis. You talk, he says, of nothing but losses, but it is not those who remain on the ground who enchain victory to our standards, but those brave lads dashing on impetuously with sound wind and limbs. Therefore, if you must have modifications and transformations, so be it, but revolutions never! There is nothing to make such a fuss about in all your pretended revelations of the science of war. Modern tactics remain substantially what they were in the days of Napoleon. Napoleonic tactics rest on a firm basis, since they consist of principles which can never be affected by changes of armament.

It is here only that we find a true harmony between the action of closed ranks and open order formations, between columns and skirmishers, between fire and bayonet, a system large and elastic enough to enable leaders to act according to their discretion and the circumstances of each case.

General Dragomirov accuses German writers of drawing general conclusions from isolated instances, and energetically exclaims that if we are to quail before the dangers of the front attack, we shall end by undertaking nothing. "The fact is," he adds, "that the enthusiasm of many modern

military writers arises from their not regarding sufficiently, and from every point of view, the first instrument of battle—man, and that in consequence they bow down before secondary instruments whose action has most impressed them during recent events. As these idols of the moment are cast down one by one, so the religion of their worshippers is distinguished by its instability. To-day it is the bayonet and deep formations that are everything, and fire nothing; to-morrow fire and open order, and the bayonet nothing. Some, too, have fallen down before the spade, which they place on a level with the rifle. There are few who, like General Leer and Kardinal v. Widdern, remember that these idols of the day are only part, and not the whole, requiring attention—fire, bayonet, spade, and all formations required in and out of battle.”

“The present arms are a novelty, but so is the system of short service, the latter being a far more complete revolution in the drill and training of soldiers than matters relating to fire and open order which provoke so much discussion. But does this mark a new epoch in tactics? No! the principles of regulations have not changed, and a mere perfection of their procedure in application cannot make an epoch.”

After saying that each new progress in the manufacture of small-arms has been coincident with the recrudescence of defensive tactics and the art of self-preservation, the General says that “these instincts give rise to those attempts made in war to reach the goal without immediate danger. But,” he says, “only those who are resolutely set upon joining issue with the enemy will joyfully approach within close range; the soldier who thinks that a bullet is enough to rid himself of a foe, is already incapable of attacking with the bayonet. All new forms,” he urges, “must aim at improving the man; the moral and intellectual side of the combatant must be paid attention to, so that he can withstand victoriously those sudden emotions which disturb and paralyze action; the man’s intelligence and spirit of initiative must be developed, so that he may never be at a loss in case of surprises and unexpected events. Coolness and self-possession are the chief qualities, and then suppleness, and the resources of intelligence.”

General Dragomirov then urges that the danger in tactics since the days of Napoleon are of quantity, and not of quality; the battalion is now formed by companies, and the chain has greater importance. Those who found their teachings upon the columns of Wagram and Waterloo have recourse to the habitual method of people who wish to justify their illusions, namely, of trusting to exceptions.

The works of many writers, such as Boguslawsky, Wechmar, and Skugarevsky, try to prove that the dispersed order is the sole battle formation for infantry. Compared with the Napoleonic epoch this formation would be no longer a progress but a decadence. The final attack demands great cohesion in every kind of ground; it demands close order imperiously: and by close order is not meant formations from the drill-book only, but all groupings, more or less dense, which so often take place under fire. “If the Prussians,” exclaims General Dragomirov, “did not make a practice of attacking in close order, this does not prove such an attack impossible of execution, and the conclusions of the Prussians must not be applied to our men, who are well known to prefer fighting shoulder to shoulder. If a great number of Prussian writers pretend that it is impossible to avoid dispersion under fire, this is their affair: they have their own reasons for saying so, since to recognize the possibility of retaining men in hand under fire, and that those who have been unable to do so are wanting in coolness and moral courage, is all one. Who would make such a confession? Success has crowned their efforts. It is agreed, they are heroes—and what is impossible for heroes is naturally impossible for the rest of the world!”

"It is a principle of wise criticism," remarks the General, "only to use, with all due reserve, the testimony of people who have played the part of actors in events; but our modern writers think differently. The Prussian, they say, has spoken; what further use is there of discussion? It must all be good and beautiful. We have been taught by the lips of masters and—*Basta!*"

The Soudan fights caused General Dragomirov to exclaim, "That savages, armed with lances and swords, should break infantry squares—*squares of British infantry, too, if you please!*" "But," he adds, "the inventors of complicated rifle sights will not understand the lesson: *oculos habent et non ridebant*. They will continue to teach that modern infantry is unassailable in front, that such acts are only allowable for savages, and that we are not savages. It will not occur to them as it does to others, that to break squares it will, perhaps, be advisable to become savages. This is the advice I give, however, and the only concession I allow is, that they may take rifles in place of swords, and need not paint their skins black."

THE COMRADESHIP OF BATTLE.

In the third and last part of his Manual, General Dragomirov discusses the "Preparation of the Three Arms for the Comradeship of Battle."

"Comradeship, in face of danger," he says, "is the indispensable and supreme condition for the success of any undertaking in war. All that troops are taught has a single object, namely, to prepare individuals, as well as the various units, to mutually assist one another with absolute devotion and a just understanding of the needs of the situation. Military education teaches the mass to obey a single impulse. In war we march separately but fight united—for mutual assistance: it is comradeship which make us at one moment march to the cannon and at another not march to it."

2. "A single man points out the object to be attained, and this object *will* be attained if the mass has been fashioned so as to strive after it like a single man, without hesitations or reservations. A check implies that the enemy has shown more unanimity than we, but who can we blame but ourselves?"

"'Forget yourself, and your comrades will think of you.' Wherever this saying is acted on the mass will act like one man, and a man for whom nothing will be impossible."

"'Think of yourself and forget your comrades.' Your comrades will perish, but you will perish with them; for if you only think of yourself, who the devil will trouble himself about you?"

"Instead of a living organism we should get nothing but a decomposing corpse, which would be insulted with impunity by all."

3. "A man of sense does not hesitate to sacrifice arm or leg to save his life. So, too, a soldier, if properly educated, does not hesitate to sacrifice his skin for the safety of his comrades, and of the army to which he belongs. Whoever loves himself better than his company is unworthy of his company; whoever loves his company better than his battalion is unworthy of his battalion, and so on to the highest units."

4. "Chiefs must know how to place individual combatants, and fighting units, of no matter what strength, in a situation where they can render one another mutual assistance, and never risk imperilling this. Herein lies the secret of all tactics in time of war, and the aim of all military exercises in time of peace."

5. "We shall not be in a position to fulfil all the obligations imposed by comradeship unless, before all else, we do not fear death; unless we have trust in our comrades and love them."

6. "In order not to fear death we must be prepared for it, and never leave out of sight the object of our mission : to kill and to die. Let us often recall the fact that we are mortal, and that death seizes us when we think of it least. How many people come out of the hottest business safe and well, while others bid farewell to life for a single false step? It is by subjecting ourselves to a moral discipline of this nature that we shall not be taken by surprise, even after a long peace, by the necessity of confronting death. He who neglects this essential point of the 'Preparation' lays up for himself the bitterest illusions. Is it not inevitable? Each year the daily round of manœuvres, musketry, marches past. And then one fine day, *pat!* bullets, shells, and bayonets. What a change! Herein lies the danger of attaching oneself to specialities, when it is a question of war, for between these elements of the thing and the fight itself, taken as a whole, what a wide gulf is fixed!"

7. "To trust our comrades we must begin by knowing them, and we shall love them afterwards if they deserve it. When we do not know people, how can we give them our confidence, still less affection?"

8. "Thus, the first step is confidence: it means knowledge, but intimate and thorough knowledge, which can only be acquired *on the ground*: it is necessary to know *what* each man can do for the common safety, and *how* he can do it. A thorough knowledge of men's characters is necessary in order to avoid a great misfortune, namely, that of mutual interference, which will otherwise certainly come about in spite of the best intentions to do well."

"In speaking of the procedure of the different arms there can only be question of their true battle tactics, and not of those engendered by peace manœuvres. These latter often destroy rather than prepare true comradeship."

Example: "At manœuvres cavalry promenades right up to the line of skirmishers, while in battle it will be held back a mile or more in rear: a fine way this of reassuring the infantry who, at the first encounter, will fancy that the cavalry has abandoned them to their unhappy fate. Yet, in real business, the cavalry cannot better serve the interest of the infantry: if it draws back, it is not only to avoid useless losses, but to get elbow room and a fair field, for if it is desirous of dealing its blow on a level with the first infantry line, cavalry must keep well back, that is to say, on a level with the divisional reserves; unless an exceptionally favourable piece of cover is available. Another example: A battery comes into action; it sees infantry alongside and thickets in advance, but sees no one in the thickets: it fancies itself exposed, limbers up, and retires. Retires—why? Because it has not acquired confidence in the infantry, because it is ignorant of its ways, and does not understand that, since closed bodies of infantry are alongside, there will infallibly be skirmishers out in front concealed by the thickets."

9. "Knowledge inspires confidence, confidence affection and the true feeling of comradeship, which induces men not to spare themselves. This feeling is so important that the most sacred duty of chiefs is to safeguard it as the apple of the eye. No efforts must be spared to keep up and fortify this virtue."

"It is as well to point out, among other dangers, that of harping on the tune of rivalry and self-love. Say to your subordinate, 'This is bad, and that good; this is an omission.' Never say, 'So-and-so does this better than you.' For with such remarks you will soon destroy all comradeship, and inspire a sentiment of hostility, all the deeper because it will be concealed, against the man who has met with your approval."

"Some chiefs have another fashion of speculating upon the frailty of human nature: they tell each one of their subordinates in turn (confidentially, of course,) that no one does so well as he in the regiment. This is of no use either, for the time always comes when subordinates compare notes, and then they find

‘that all do best!’ Confidence in the chief’s word is lost for ever, whereas it should have the strength of the law. Starting from this I am inclined to think that all classification, after the manner of elementary schools, does more harm than good when applied in the Service: it will inflame the hearts of some with an eager desire to be first, but it contributes not a jot to justify true comradeship.”

10. “The aid of one’s own people on a battlefield is a very complex matter to insure, and it can only be thoroughly guaranteed by successive stages of preparation and by time. It is precisely this complication of the business, and the length of time that has to be given up to it during peace, that causes men to lose sight of the comradeship of battle, that final and supreme end to attain which all efforts must be directed. To begin with, it is indispensable to rationally apportion the idea of mutual assistance into elementary parts: the instruction must not leave on one side any of these elements, as happens occasionally. We go to work as if it was not a soldier that we wanted for battle, but an automaton or a marksman, &c. The more passionately fervent the disciples of these false gods, the greater the harm done. Do not deceive yourselves: it is not bad men who usually fall into these errors, but the best ones. And the deeper they plunge into a speciality, the more everything else diminishes in value in their eyes. Then comes war, and it appears as clear as noonday that men are incompletely instructed: very good, perhaps, in the secondary business, but ignorant of what is most important.”

11. “Armed with the experience of our forerunners, enlightened concerning certain aberrations, and knowing the inner causes of man’s powerlessness to resist them, we still may be unable to avoid fresh mistakes. But, at all events, it is possible to avoid a repetition of the old errors, on the following conditions:—

“1st. The whole subject matter must be rationally divided into elements: in other words, tactics must be parcelled out into a series of practical exercises susceptible of being learnt on the ground, and not only by leaflets—in short, tactics must be taught by example, and not by verbal explanations.

“2nd. The relative importance of each of the elements must be borne in mind, and the time must be allowed to each in proportion to its relative degree of importance.

“3rd. Once learnt separately the elements must be grouped together in a regular progressive series of instructions, without sudden leaps from the simple to the difficult. For instance, it must not be imagined that a soldier who has learnt to shoot, drill, thrust, and assault, will be able to combine naturally all these practices. Once for all it is indispensable to remember that each combination of this nature is a *new* branch of instruction, and that it is not possible to neglect any of the special exercises demanded by it if it is desired to obtain a sensible and orderly execution free from precipitation and disorder.

“Is not the same procedure followed in a child’s education? To teach a child to read, words are subdivided into sounds and letters, and to teach writing letters themselves into pothooks and hangers. But the child cannot read when it knows its letters, nor write when he can deal with pothooks and hangers. It has to be taught to combine the letters into sounds and words, and pothooks and hangers into letters. What will be the result if we stop short when the child has acquired the art of writing, and only continue to teach calligraphy; what will happen if, instead of teaching him that writing has been taught him in order that he may express his thoughts, we consider writing as an end, and not as a means? We shall turn out a public writer, a a copyist, an automaton, all the more incapable of expressing his own ideas by writing as he is more skilled in moulding forms of writing in the absence of all thought.”

12. ". . . . Now, all elementary branches of instruction are successively taught in the required proportion. . . ."

13. "But it is quite different as regards tactical instruction. In this matter the necessity of a progressive combination of the various elements is not yet completely recognized. It is only lately that the necessity of combining evolutions and ball practice has been brought home to all, but the same thing does not rule concerning traversing attacks and applied regulations. It is the same with other exercises which are quite as indispensable, such as those for familiarizing the different arms with their reciprocal obligations, two by two, before the manœuvres, and of beginning to practise the command of the three arms combined in a lower rank to what is the rule at present."

14. "In my opinion it is only on condition of making good these defects that manœuvres can produce good results. The reason is as follows. During manœuvres marches take place as in war, but in order to carry them out well it is indispensable to learn how they are to be carried out *before* the manœuvres take place. Infantry again has to face cavalry charges; to do so properly it must learn *before* the manœuvres how to act in such a case. Cavalry has to attack infantry, another matter which must be learnt *before* the manœuvres. Infantry and cavalry have occasion to attack and support artillery; all this must be learnt *before* the manœuvres. Artillery has to take up and shift its position in accordance with the formations of infantry and cavalry; this again is a matter that must be taught *before* the manœuvres, otherwise the three arms, instead of aiding each other, will mutually interfere one with another."

Starting then with this general idea, General Dragomirov begins the third part of his manual by a table, setting out synoptically the various elements of military education, together with their gradual and progressive combination into the most composite movements of all arms combined. He affirms that the final result of this system will be a state of thorough preparation, which will enable any detachment of the three arms to be thought "fit for all the manifestations of comradeship in battle," that is to say, thoroughly imbued with its spirit and capable of deploying all its resources under the conditions most favourable for success.

It is unnecessary to dwell upon the elementary part of the proposed course; the general ideas upon this head have been already given. By far the most important part of the work now under discussion relates to the "demonstration on the ground of the reciprocal obligations between troops of different arms."

Before arriving at this stage, however, General Dragomirov has much sound practical advice to give concerning the preparation of the regiment.

The duties of the chief of the regiment and the adjutant are set forth as follows:—

1. "The chief of the regiment is a great personage; he drives the coach but does not drag it. His action is felt through the intermediary of the battalion chiefs and adjutants as concerns the personnel, through the major in administration, and through the surgeon in sanitary matters."

2. "He is the chief of the regiment, the head of the family, the most zealous supporter of good comradeship, of love and respect for a profession which demands the greatest sacrifice for the sake of one's country. He weighs the value of each subordinate; he intercedes with higher authorities for any of his family who have got into a scrape, if they are worth the trouble."

3. "His word is law to the regiment. For this reason he never throws a responsibility upon his inferiors, but takes it upon his own shoulders, remembering that he is the head and responsible chief of the corps for better or for worse."

4. "He takes particular care of the health of men placed under his guardianship."

5. "In all matters it is for him to fix the object to be attained, to watch ceaselessly the efforts made to reach it, and to insist upon the realization of his wishes. He takes care that all is done well and opportunely, and that all occupations march abreast, that is to say that those that are most pleasant do not receive more attention than the rest. If he demands any novelty he must himself show how it is to be done. His action is felt in the companies through the battalion chiefs, but he must never usurp the functions of the latter, still less must he take upon himself the rôle of company chief. . . . In regimental work to pass over the heads of subordinate chiefs is a gross mistake. It arises because it appears in peace that no inconvenience is caused by it. It may be so in peace, but it is different in war. Then it will be too late to expect from your subordinates that initiative and sense of responsibility which you have failed to develop in peace."

"The regimental chief must take special pains in the choice of his staff, more particularly as regards the adjutant. A good adjutant must be neither partial nor an intriguer. He must be intelligent, well educated, and active. He must be on good terms with the Staff of the division; he must remember everything, but not drown himself in trivial matters. The happiness of the regimental family depends greatly upon the adjutant's tact."

General Dragomirov next takes the regiment in rendezvous formation, and sets it several problems, such as an attack by cavalry 1,000, 200 paces distant in front, in rear, from the right or left; the same by infantry and artillery at varying distances and directions. In each case he gives what he considers the best means of dealing with each case in succession.

The next point dealt with is the order of battle in the first stages of a fight.

10. "The infinite diversity of the ups and downs of a fight always lead, at last, either to *rupture* or *envelopment*. For this cause every order of battle must take a shape giving the greatest advantages: 1st, for breaking or enveloping the enemy; or 2nd, for resisting all hostile efforts to break or envelop us."

11. "At first sight it would seem as if a continuous and thick line would be the best formation for mutual assistance, whether against an attempt to break the line or envelop it. The experience of past centuries has shown this to be a fallacy. To begin with, mutual assistance is not easy in such a mass, since men get in one another's way rather than assist one another. Secondly, the adoption of such a formation completely loses sight of a principle of a moral order, namely, that to conquer the enemy it is not enough to kill the greatest possible number, *but to persuade him that he is no longer able to resist us*. It is by virtue of this that a compact and continuous line has always taken to flight when it has been broken through at a single point. The conviction of the impossibility of continuing resistance spreads with rapid contagion; the strongest cord falls if cut at a single point. The long experience of centuries has shown that the line with intervals offers a better promise of vigorous resistance than a continuous line. It has proved more efficacious in sustaining troops who are bearing the burden of the fight, since the reserves which play this part are placed at a certain distance in rear."

13. "It is clear that if it is required to increase the resistance, two or three more lines with supports may be added. But if it be borne in mind again that it is not necessary to break the line of battle throughout, and that it is enough to obtain this result at a single point, it becomes clear that a new preoccupation arises. This is to render easy and prompt the concentration of forces at the point where the shock will take place. It is for this purpose that the second and other lines are kept together as the *general reserve*, since

it is easier when they are kept together to carry them to any required point. . . . Victory is not to him who is stronger than his foe in the sum total of soldiers, but to him who knows how to be strongest solely at the point of impact, and at the moment when the shock takes place. Strongest, not only in numbers but in worth; 100 determined men may often put to rout thousands of militiamen. Success or failure depends much upon preconceived opinion, and in war every effort must be made to make the first affairs turn out favourable."

14. ". . . . Reserves only exist to join the line of battle sooner or later. It is not by their inactive presence only on a battlefield that reserves insure success."

16. "Final success remains with the side which can bring up the last reserve at the end of the battle. *The economy of reserves* must therefore be a capital preoccupation of the commander."

"But this is a double-edged blade; if one delays too long the moment for employing a reserve, the line of battle may give way, and the reserve may only be able to re-establish matters. If only part is employed a new check may result. By the end of the chapter all the reserves have perhaps been frittered away uselessly, and have not been employed to gain a success. Too much haste in reinforcing a line is no better; once all fresh troops are gone nothing can be regained. Troops employed no longer belong to you, and the direction of the fight has gone with the last reserve."

17. "The question of knowing when to let slip and when to hold back reserves is one of the most knotty points to solve. The greatest masters in the art of war have not always done it in a satisfactory manner. During peace exercises the question escapes solution, and even fails to attract attention. It is, therefore, all the more necessary to prepare the minds of troops and chiefs, even imperfectly, for facing without surprise the fatal dilemma when it arises in all its gravity implacable as destiny."

18. "Troops must constantly, persistently, and incessantly be trained to the conviction that only those who endure to the end shall be saved, and that *all troops once engaged in a fight remain in it till the business is over, that they may hope to be supported, but never to be replaced.* This is the sole possible guarantee for assuring that troops display all the energy and determination of which they are capable. If this is the case, a single one of our units may sometimes get to the bottom of two or three belonging to the adversary, and *then the preponderance in fresh troops for the end of the business will be naturally on our side.*"

General Dragomirov next speaks of orders of battle during the second period of the action. He says that at the moment of impact the order of battle becomes an irregular line, broad at the point of attack and thin elsewhere. The leaders, down to the very lowest grades, acquire an immense importance, companies, battalions, and regiments become inevitably mixed up, but sections and squads may keep together if they are well led.

He then proceeds to speak of the orders of battle of the other arms.

20. "Cavalry and artillery both possess the same properties as the infantry, but pushed to an extreme development, and consequently their orders of battle are only special instances of infantry examples. The properties of cavalry are rapidity of movement, momentary character of the encounter, vulnerability of flanks, cold steel. The momentary nature of the fight makes it useless to think of supports coming from behind, the vulnerability of the flanks renders their constant protection indispensable, local reserves, therefore, become transformed into échelons in rear of the flanks. The cold steel imposes the need of being able to repeat the blows, that is to say of a general reserve. The line of battle thus becomes a continuous line of battle with échelons in rear of the flanks and with a reserve in rear."

"The properties of artillery are long range and powerful fire, incapacity for self-defence and for acting alone; the protection of the flanks of batteries devolves upon the infantry and cavalry; these have also the task of seeing the guns safely through the business in case of attack."

After some remarks about changes of front, illustrated by examples, the General places himself in the position of a Colonel addressing his Officers in front of the regiment, and proceeds as follows:—

33. "You are aware, gentlemen, that lateral movements in sight of the enemy are highly inconvenient, since during the whole of the movement there is no fraction available to repulse an attack. The movement itself, with the flank presented to the enemy, exercises a bad effect upon men. This is not all, for lateral movements are seen by the enemy as soon as begun, and consequently they expose our intentions too soon. Now, in general, and I beg you will remember this, gentlemen, the longer you can conceal your intention from the enemy the better you will succeed. The best way to succeed, therefore, is to prolong the line in the required directions by fractions drawn from the reserve."

Examples of this action follow, together with advice to practise the withdrawal of fractions of the front line in case of overcrowding, or rather overlapping, during an advance, as well as the filling up of gaps caused during a similar movement.

The General next proceeds to speak of reinforcing the attack, and restoring order after the assault.

36. "Gentlemen, one seldom dislodges with a single blow an adversary who has made up his mind to defend himself: once must return to the charge once, twice, three times, or more, until one has gained one's object. In this matter all depends upon perseverance. So soon then as the attacking troops have been checked, fresh bodies must be thrown forward from the reserve. It is a rising tide whose waves must succeed one another without interruption. As a general rule, gentlemen, once the first blow has been given one must strike, strike, and strike again, blow upon blow, in order to give the adversary no time to recover. . . . As a general rule, upon the order to attack, the foremost lines march straight to their front without attending to signals. But to-day when I sound 'Halt,' the front line will stand fast until the second line comes up. Both will then advance together. I shall sound the 'Halt' again; the advanced line will again wait until the third line joins it, and then all will advance together. Your men must march shoulder to shoulder in earnest, that is to say, come up between the files of the units in front of them, so that the body attacking forms a compact mass. The assault must take place at a rapid pace; in an attack there must be no promenade or procession. After the attack make no attempt to restore order; I shall put out the markers and sound the 'Assembly'; we shall see then whether men have their wits about them."

37. "In order to give everybody an idea of what precedes it is quite enough to allow a single drill during the summer. We must beware of the tendency which impels us to seek perfection, and what is called 'purity of execution.' The field exercises, if thoroughly well known, that is to say, if all movements are made with order and precision, furnish the necessary means for executing the drill in question¹ with all due correctness.

"It is also necessary to keep watch against such miserable little practices as that of seeking at how many paces distance, or at what particular point, such and such movement should be begun in order to obtain a 'purer execu-

¹ Except the shoulder to shoulder of the attack. Here it is absolutely necessary to demand compactness in the mass and the intermingling of units, since this is inevitable in reality.—*Note by General Dragomirov.*

tion.' It is just this that ruins the whole thing, for the attention of men is directed not to the thing itself, but rather to the scaled pattern method of doing it, agreeable to the eye in peace but inapplicable in war."

The General then exclaims against the practice of requiring rigid formations for supports of the attack, turning the attention of the leaders from their chief duties, which are :—(1) To keep their men under cover, and (2) to be always in a position to support the front line. Nature, he says, does not take care to devise shelters for us always parallel to our front. To demand alignment for the chain, for the supports, and the reserves is a baseless pretension ; the parallel direction of fronts alone is obligatory.

Taking as his text Souvorov's saying that "Each soldier must understand his manœuvre," General Dragomirov next proceeds to direct attention to the "*importance of acquiring the habit of giving, transmitting, and receiving orders in a proper fashion.*"

40. "*The chief must give short, clear, and energetic orders, following the hierarchic scale, and indicating the object to be attained without entering into minute details of execution. The Officers charged with the transmission of these orders must be personally known to his immediate subordinates.*"

"Every Officer who is given an order for transmission should write it down word for word and repeat it. If there is something he fails to understand he should require an explanation. In case of doubt about the bearer of an order he should be detained until the point is cleared up. The Officer who receives an order must remember that in case of a misunderstanding he will not be able to justify himself by saying that he has obeyed an order unless he is in a position to indicate the name of the bearer."

41. "*It is thus impossible to proceed instantaneously with the execution of an order, as of a command ; the habit of giving, sending, and receiving orders requires careful attention ; it is difficult to form any idea of the innumerable mistakes which arise in war from neglect of this matter.*"

General Dragomirov advises laying traps for the unwary in this matter as in others. He suggests that an incomprehensible order should be given to a galloper with every sign of impatience if a repetition of the order be demanded. If the galloper rerews his demand for explanations he knows his business, if not his education is not complete ; it may, indeed, prove an utter incapacity for transmitting orders. In the same way it is suggested that an order should be sent to a company chief, without considering the "usual channels," and it should be observed whether the Officer in question acts upon the order or not.

General Dragomirov next speaks of the mutual obligations of the different arms, and placing himself in the position of the director of an exercise addressing the Officers of an infantry regiment and a battery, proceeds as follows :—

"You are aware, gentlemen, that artillery cannot defend itself alone, and that the care of its defence is the sacred duty of troops near to it. The comradeship of the fight demands it. It is in the name of this comradeship that artillery opens the way for you, whether through living walls or walls of stone. In our turn we must do something for it, for it is only on this condition that it will dare to occupy at need the most risky positions in aid of infantry, since it will be sure of never remaining unsupported and without protection. The duties of the support are as follows :—When a battery comes into action, the skirmishers clear its front, and take post right and left far enough in advance to prevent the hostile skirmishers from killing men and horses in the battery. . . . When a battery comes into action on the flank of a line, the company in reserve of the nearest battalion covers the exterior flank of the battery ; if the nearest infantry is in closed ranks the nearest company takes up the duty. If a battery changes front the

infantry follows suit, sending skirmishers in the new direction. . . . The reserve of the troops supporting the battery have the duty of watching for any hostile attempt upon the battery, and of repulsing any such attack. It may happen that the best position to take up is in rear of the battery, for it is only prejudice which repeats the formula that this must not be done; the important matter is not to keep a vacant space in rear of the guns, but to see that projectiles directed on the battery do not fall among the infantry."

"If the proper conditions of cover are realized in rear of the battery, take up your position there by all means; such position will give you the advantage of being able to fight between the guns if the battery be attacked. In general one company for a group of two batteries may be considered a fair allowance; it is needless to say that a battery remaining well in rear of our fighting line needs no immediate support."

After various recommendations for the action of the support in case of advance or retreat of the guns, General Dragomirov continues: "Do not forget, gentlemen, that the loss of a gun is an honour for artillery, because it shows that the battery has remained in action to the last extremity, and has done all its duty. But it is a dishonour for the support, because it proves that it has allowed its comrades to be sacrificed. In addition, gentlemen, let me remind you always to give place to the guns, because artillery is more dependent upon ground than we are. Lastly, I must beg infantry chiefs who have to command detachments which include artillery to limit their orders to this arm to the determination of the point they desire to make an impression upon, and of the number of guns they require for the front line and the reserve. Do not trouble yourselves about the artillery positions, nor changes of position—this is the business of the gunners. The more clearly you point out the object you wish to attain, the more you abstain from interfering in details of execution, the better off you will be. But the reservation of part of your fire, and the entry into action of this reserve, must remain absolutely in your hands. In a word, no gun must quit the line of battle without your orders, any more than one of your companies." Addressing next the gunners, the General says:—

"Gentlemen, you have no means of personal defence; it is a matter, therefore, about which you need not concern yourselves, and you must draw from this incapacity to defend yourselves, the resolution necessary to plant yourselves down in the most exposed situations whenever the safety of your own people, or the destruction of the enemy, demands it; in such a case, your friends will look after you. The battle is an affair where success is only possible for him who does not fear death. Don't be afraid of losing guns; those who lose guns are the men who remain in position to the last extremity, and sacrifice themselves for the safety of the infantry. You are completely free in your manœuvres During an offensive march you may change position or not, at your goodwill and pleasure, and I only make one reservation, which is that on flat ground you are not more than 200 yards in rear of the fighting line. In advancing, do not necessarily restrict yourselves to a perpendicular direction, as we find so often and wrongly recommended, but bear off to a flank if an advantageous position offers *No single gun must be brought up from the reserve to the position without orders from the chief, and, more important still, no single gun must be withdrawn from the position to the reserve.* This is one of the exigencies of subordination in battle, that is to say, the direction by a single will without which success becomes impossible. A battery which abandons the fighting line without orders is dishonoured as much as a body of infantry daring to do the same. No pretext can justify such action. Are your projectiles all spent, your guns dismounted, and gunners killed—no matter, stand fast. Can you fire no longer—no matter. For it is only you who know the cause of your

enforced silence; the enemy is ignorant of it. Remain, therefore, in position to keep up the moral courage of your people, and inspire the enemy with a salutary prudence. Avoid changes of position under 400-500 yards."

The General next advises that the infantry regiment should inspect the artillery material on the ground—examine the harness, and method of limbering and unlimbering, of laying a gun, and firing. Various exercises are then proposed to teach the mutual obligations of the two arms.

In much the same manner, and in the same familiar strain, General Dragomirov offers advice to infantry acting with cavalry. He begins by placing the latter a mile in rear of the infantry, and requests both arms to train their eyes to judge this distance, and to look upon it as the proper position for cavalry in open ground. The place for cavalry with a small force is, he thinks, in rear of the centre, with eyes on both flanks, that is to say, Officers' patrols ready to call up the cavalry if an occasion offers. Infantry, he adds, must make room for cavalry as for artillery. The next paragraph, although referring solely to cavalry, is too remarkable to be omitted.

55. "You are aware, gentlemen, that the weak points of cavalry are the flanks: try then to reduce, instead of to increase, the number of these. If, with two squadrons against two, you detach one to outflank the enemy, you will have four flanks instead of two, and you proportionately increase your chance of being turned in detail, quite apart from the fact that once you have given the word you will find it difficult to regain control over your detachment. Besides, by such an act, you expose your game too soon. Keep, on the contrary, all your forces well in hand, avoid being turned by échelons, and work round on the enemy's flanks without his perceiving it. If you succeed, spring upon him like a cat upon its prey, and everything will go well. Don't imagine that you absolutely must charge because you are within charging distance, but, on the contrary, give your enemy rope; he will probably expose a flank, or make some mistake—then make your spring in good earnest. In a word, take the cat for your model—I don't know a better for the cavalry fight. In reconnaissance, on the other hand, act like a fly, if you are brushed away from the nose, buzz round the ear, if brushed away from the ear, settle on the forehead, &c."

It is then recommended, as before, that the mixed detachment should form acquaintance by mutually traversing each other's ranks. After this the drills begin, and various exercises are proposed, the main object being to insure that in each movement the three arms not only work *individually* well, but work *in conjunction*, mutually aiding and assisting one another. General Dragomirov is of opinion that cavalry regulations as applied in peace do not oblige the eye to appreciate considerable distances, since the necessity only arises when acting conjointly with infantry, and that, in consequence, it is indispensable before attempting manœuvres to point out the reciprocal relations of the three arms without troubling oneself about a tactical idea. Separate exercises of cavalry, he says, develop in the arm the habit of relying in all things upon itself, until it is by no means rare to see cavalry acting on foot in presence or in face of real masses of infantry; in such a case, an infantry company could do more good than a whole cavalry regiment. In consequence, he thinks that cavalry never expects aid from the infantry, nor thinks much about giving it.

Examples are next given of a march executed by a detachment of the three arms, in expectation of an encounter. It is advised that the Officers should be assembled before the operation, in order that the general idea may be thoroughly impressed upon all by the aid of explanations and maps.

Placing himself again in the position of director of the exercise, General Dragomirov gives various pieces of advice about the execution of the plan. Among other points, he touches on march-discipline: "Leaving the ranks is

not a necessity, but a bad habit. It is curious that a soldier who will not dream of quitting the ranks during the longest steady drill, will fall out during a march to arrange his gaiter, or for some other purpose. All this is a matter of habit, and can be avoided. All these halts destroy order, and are bad for the soldier, since while he halts his company have perhaps advanced 100 or 200 yards, and the man has to double to rejoin them—nothing fatigues a foot soldier like an uneven pace in a march. In order to put an end to this pernicious custom, I advise a halt of from ten to fifteen minutes for every hour's march; you can then demand that no one shall leave the ranks on the march. Warn your men, and see to this. It is the company Officers only who can manage this. It is they who are the fundamental pivots for the maintenance of order. Another bad habit is that of doubling up after traversing a narrow defile; if this deplorable error is made four or five times during a march, the strongest men will become stragglers. The most rigorous equality of pace must be maintained in a march. Whenever such a case occurs as the passage of a narrow defile, the head of the column should be halted, in order to give the rest time to close up without increasing the pace. I advise the same principle to be adopted in an attack through cover. It may seem to some that by following out this method the march will be slower. No doubt it will, but the question is to know what result we obtain. It is necessary in this matter to bear in mind what we want to obtain, and at what sacrifice. In the matter of marches, it is necessary to arrive as soon as possible, to preserve order, and to husband the strength of the men. What would happen if we only thought of the question of speed, and abandoned the pace of a league an hour consecrated by secular experience for infantry marches, and increased it to 6 verstes an hour, for instance? We should ruin our men, and only march 18 verstes in the day, while with a march of 4 verstes an hour we can march 25 to 30 easily. In the method I advise, the delays consist, first, in the halt after every hour for a quarter of an hour, and, secondly, in the halts of the heads of columns after the passage of a defile. Let us see how this will shorten a march of, say, 30 verstes with four defiles, admitting that we divide the march by a longer halt after marching 18 verstes. These 18 verstes will take $4\frac{1}{2}$ hours; four halts of a quarter of an hour each make another hour, or, not counting the regulation halt soon after starting, three-quarters of an hour. During the second half of the march the same halts take half an hour—total for a 30-verst march, $1\frac{1}{2}$ hours for the hourly halts. The sacrifice, to my mind, is nothing if order during the march can be obtained at the price."

"Now, let us see what delay we get by halting the head of the column, in order to abolish the inevitable tailing. If the tailing of a battalion through a narrow way equals its length, that is to say, that instead of covering 350 paces, it covers 700, it is clear that unless the head halts the tail must double for $3\frac{1}{2}$ minutes. If the head halts, the tail closes up in $3\frac{1}{2}$ minutes. Is it reasonable, in order to gain 300 paces, to make tired men double in full marching order? The sick and stragglers increase greatly by such action. It is true that with a regiment the delay becomes 15 minutes, and with a division an hour, but this only proves that we should try and obviate all causes of tailing."

The General then notes the importance of continuous and accurate reports from the head of the column. Lastly, he says:—

"For the love of God, gentlemen, don't be afraid of making mistakes, and, above all, decide without hesitation. We are here for instruction—it is impossible not to go wrong sometimes, but he who fears to make a fault will never learn. Faults have their value, since they provoke explanations, and are consequently more instructive than correct solutions."

General Dragomirov next gives a piece of advice to the *Umpire-in-Chief*.

"In all remarks and advice, speak as follows: 'Yes, it is not bad; but if you had taken into account this and that, you might have done so-and-so.' Never say, 'You did quite wrong; what you did was contrary to common-sense.' With the first method, Officers get to like the business, and, little by little, get as keen as possible; with the second method, they go about their business in a half-hearted way, secretly detesting the whole affair, since at each moment they expect disagreeable consequences."

"This method, skilfully employed, makes people very fond of tactical exercises. Everyone must understand that these observations are only in season during an academical discussion: that on the ground no discussion is possible: here there is only one law, 'Obey my bad inspiration, not your good one.'"

The next practical exercise recommended refers to scaled orders.

A column marches: its commander receives scaled orders, which are only to be opened when the column reaches a named point. This order, for instance, says that some bridge on the line of march is broken, and demands what dispositions the commander will make. Other communications of the same nature state that various unpleasant things have happened, and ask similarly what dispositions the commander of the column will make.

On the subject of marches of several columns, the importance of reports, stating the positions of the column during the march, is fully brought out.

"I also beg of you, gentlemen, to remember the saying of '*March to the cannon.*' This is obligatory upon the chief of every column, unless engaged in some special mission, but it is obligatory in a judicious and intelligent sense. If a detachment is marching in three columns, and the battle begins on the left, must the centre column at once march to the cannon? No; because this would completely isolate the right column and expose it to the risk of being beaten in detail. . . . However much one may be animated with a sincere desire to dash off to the aid of a comrade, one must not abandon one's direction hastily. If one does this the slightest advanced guard skirmish will cause a change of direction, and in the end exhaust men."

Speaking next of the "general ideas" of manœuvres, General Dragomirov offers some very sound advice.

So. "Simplicity, in the general idea, is demanded for the sake of the troops and for the moral hygiene of the leaders. A man who is accustomed in peace to consider complicated and subtle combinations as the best, will also be tempted in war to prefer them to simple plans. This is a most dangerous tendency, for in war and in battle all is done simply, and complicated schemes generally breed failure. It is only natural that it should be so, for the more complicated a plan the greater the probability of someone or other making a mistake about it, and unanimity of action vanishes. The execution of a complicated plan is particularly exposed, by its very complication, to the dangers of the unforeseen. The tendency to complicated plans shows an absence of real judgment in a man, since it proves that he expects success from his complicated combinations, and yet success depends wholly upon two conditions, namely, the resolution of the troops to sacrifice themselves, and the clear idea they have gained of the wishes of their leader."

It is recommended that all chiefs, down to company and squadron leaders, should be called together and made to rehearse, on a small scale, the general idea proposed, so as to thoroughly insure unanimity and a correct appreciation of the manœuvre. These chiefs have then to explain the plan to the non-commissioned officers, and the latter to the men, since it is only possible to execute well what is well understood, and the habit of explaining an impending manœuvre necessitates practice.

Turning next to manœuvres in general, it is laid down that these should

aim at inculcating sound habits and not at creating a military panorama. "There can be no question of victory nor of defeat; where there has been no contest there can be no victories."

96. "The first thing that the chief of a detachment should do is to pass along the ranks and receive from the troops the honours due to his grade; this is necessary in order that every man may see who is the chief."

97. "Orderlies must be chosen from the troops, so that the chief may change his position as little as possible during an affair: this is one of the fundamental conditions for maintaining union of action."

102. "During manœuvres artillery and infantry must never fire on the off-chance: shells and bullets must be husbanded. Infantry must bear in mind that volleys beyond 300 or 400 paces are so much shooting into the blue, and that it is only in the pursuit that volleys may be fired up to 600 paces. No soldier must fire a round without calculating the distance, raising the sight, and taking careful aim."

106. "In battalion exercises it is as well to know all that is going on a mile off on the flanks: in regimental exercises this will be 2 miles: if we act like this there will be no surprises."

107. "It is foolish and unreasonable to get in a fluster, because of a turning movement. It is not the turning movement that is to be feared, but the surprise, and this can be looked to, first by flankers, and next by making a careful estimate of the enemy's numbers."

108. "To be never too early and never too late is a great quality, but it is particularly important in those who dispose of the well-being of many thousands of men. This quality is a professional duty for chiefs to acquire, and can be only learnt by accustoming oneself to exact punctuality."

After advising Officers to take note of the appearance, order of battle, and probable numbers of an opposing force, the General says:—

120. "It may seem that, since the strength of each side is known, there is no need for making calculations. But, on the contrary, one can only learn with the data before one, and what is necessary to be able to appreciate, is not the composition and strength of the enemy's forces, but the impression which troops of a given effective strength produce upon the eye. It is only by taking the trouble to analyze this impression that one acquires the faculty of solving the opposite problem when it presents itself, namely, of estimating the strength of a force by the impression produced upon the eye, as well as the intentions of the enemy by the grouping of his forces. The latter data can only be learnt by constant and persevering practice."

The General next discusses alarms, false and real, and speaks of the need for calmness instead of agitation: among other pieces of advice, he proposes that the bugle sound of the "Alert" should not be a sudden blast, of a nature to excite men's minds, but something of a soothing nature.

On the subject of night marches there are a few remarks deserving of attention.

124. "On the offensive, night marches enable one to approach a foe in secret: during a retreat they allow one to retire at leisure: night actions impose on an enemy by the surprise they cause; they deprive him of the possibility of judging of the numerical strength of the attacking force, and entirely destroy the efficacy of his fire. This is the reason why great things can be done by night with a handful of men, and why the practice of marching and acting by night will gain in importance as firearms become more perfected. But night marches are hazardous: it is easy to lose one's way and mistake friends for enemies: the smallest obstacle becomes an impassable barrier, since the imagination is easily excited. For this reason it is indispensable to practise night marches, so that men may learn by experience the difficulties of the operation, and get accustomed to overcome them quietly

without losing their heads. In this matter the most detailed prescriptions are useless without practice. It is advisable for each unit, beginning with the smallest, to practise this kind of march annually, and then later on, in concert with the other arms, up to the largest units."

The following should be part of the ordinary routine in night marches:—

(1.) Men should be left at all cross-roads, to point out the road taken by the head of the column. Each larger unit takes forward the party left by the preceding column, and drops one in turn. Chiefs of units must know exactly the order of march of the column, and of other columns right and left.

(2.) Men must be thoroughly taught by means of repeated verbal explanations, and then by traps laid for them, that it is a criminal action to fire at night, not only during a march but also in an action; whatever happens the march must be silently carried out straight to the front, and if the enemy is encountered, only the bayonet must be used.

(3.) Perfect silence and no smoking must become a matter of routine.

(4.) The most rigorous order must be kept in each company. In addition to the regulation distances between battalions, some 10 paces distance between companies should be kept, so that an unexpected check in front may not be felt too suddenly throughout the column.

"The service of security during a march is carried on by parties at no great distance, and solely on the roads; the parties are always composed of several men. When the attack begins the general direction should be ordered towards some distinct object, if such exists. In consequence, it is advisable to avoid pitch-dark nights, whilst it is also advisable on clear nights to approach by keeping in the valleys."

"In an attack cavalry and artillery should be at the tail of the column; in a retreat they should be at the head. In arranging for an attack it is best, when circumstances allow it, to regulate the march so as to fall on the enemy just before dawn. If only small numbers are available for the attack, it is best to fall upon the enemy in the middle of the night."

"All this advice, however, is worthless without the habit of marching at night, and therefore my advice is practise! practise! practise!"

The last recommendations given by General Dragomirov refer to a special nature of training originated by the General himself.

146. "The present work would be incomplete without a few words on how to train men to stand fire, but the system I advise can only be applied by permission of the authorities. It is incontestably easier to teach men to fire than to keep command over themselves under fire. It is necessary, therefore, that men should acquire the habit of facing danger unflinchingly. This can be done as follows:—A man stands in front of a canvas target; a good shot with plenty of nerve shoots from a rest 50 yards distant, and fires three or four rounds into the target right and left of the man standing in front of it. This exercise should be proposed as a voluntary game of boldness, and must not be considered an obligatory test."

"The annual practice of artillery can be utilized by making infantry and cavalry drill in the zone between the batteries and the targets, taking care, of course, that the projectiles fly so far overhead that there is no danger. The same system can be carried out by two opposing artilleries, each firing at targets beyond the other."

This proposal raised an outcry against the General when he began it by having his own silhouette neatly executed upon a target during his command of a division before the last war. The fact is that this proposal, although theoretically excellent, cannot be carried out on a large scale without accidents, and that the force of public opinion, even in Russia, would oblige the abandonment of such a practice after the first mishap.

Such then are the teachings of the Russian national school: ably expounded by this original and energetic writer, they contain advice on almost the whole duty of the soldier; they are remarkable for clearness and common sense, and they appeal directly to the best sentiments of the human heart.

General Dragomirov forsakes the beaten paths of German military pedantry, and takes mainly into account the first instrument of battle—man. He studies human nature, the motives that sway men's minds, the weak and strong points of the Russian character, and, after strengthening the moral fibre of the individual soldier, attempts to establish on a sure foundation a truly national school of tactics. Nor does Dragomirov, or the school he so worthily represents, preach a blind obedience to cold steel or antiquated methods of attack in heavy columns; on the other hand, they cling tenaciously to tactics of decision, and by idealizing the bayonet, by training men practically to wield it with vigour, and by impressing upon them the conviction that at close quarters nothing can stand before them, they go far to shorten and abridge the initial stages of an infantry attack, and hurry men forward to that crisis of the affair in which they have always been taught that they are invincible.

It must be repeated that to this school the bayonet is not a god but an emblem: an outward and visible sign of that vigour and energy imparted to his troops by the impetuous Souvorov; that the lines of thought and action adopted do not necessarily impose heavy columns, and that the necessities imposed by modern infantry fire are fully understood.

It has been a great misfortune that ever since the war of 1870-71, nothing has been acceptable to the military world, whether in organization, in drill, in tactics, or even in thought, unless clad in German garb, and bearing the *cachet* of German origin. If this be the usual result of successful war, then victory brings with it a far wider expanse of conquered territory and subject nationalities than are trodden under heel by the conquering battalions. But it is time to ask, Is German organization suited to our social, political, and geographical position? Is the German galley slave drill of a nature to be appreciated by a volunteer army? Are German theories concerning tactics necessarily infallible because they are German? Are the lines of German thought, dogmatically expounded in the dull monotony of the *Bürgerschule*, followed up in the universities, and carried out in the army, suited to a nation with the inestimable advantage of a mental and physical training far more capable of combining in its greatest men the best habits of thought and action?

Certainly it is equally futile to take Dragomirov's teaching and apply it literally, since the whole nature, education, and surroundings of our men and the Russians are widely different. But Dragomirov's writings are refreshing to those who have long groaned in the tyranny of German bonds, and have refused to bow the knee before the German fetish, since they aim at replacing this uncongenial religion by a national propaganda founded on the best instincts and traditions of a great army. No one more than General Dragomirov himself would probably acknowledge the excellent qualities of the German Army, its thoroughness, remarkable organization, and splendid vitality; but an attempt to engraft German military customs, ways and means upon another nationality differing in all conditions of existence, is little less than a crime, since it acknowledges that this nationality has a barren past, a hopeless present, and a future without issue.

The Russian school preaches above all else the national idea in language comprehensible to the humblest soldier; it treats with contempt the doctrine of forms, distances, and intervals, so dear to some tacticians. To those whose whole soul is absorbed in contemplation of distances and intervals

between units in some new form of attack, the writings of Dragomirov will no doubt appeal in vain.

There are some who say, It is quite true that half the military discussions in this country relate to forms and distances of no very vital importance, but it is the only direction in which we get originality of thought, and we can't afford to do without this. But if the only advantage of this originality is to confuse the ends with the means, its particular reason for existing is not clear. Rather, it is better to guide the current of thought into more suitable channels, and to ask ourselves whether the ends and aims held so steadfastly in view by Dragomirov are not the vital essence of military training in peacetime.